

MILWAUKIE PLANNING
 6101 SE Johnson Creek Blvd
 Milwaukie OR 97206
 503-786-7630
 planning@milwaukieoregon.gov

Application for Land Use Action

Master File #: DEV-2020-005;

Review type*: I II III IV V

TFR-2020-004

CHOOSE APPLICATION TYPE(S):

Development Review

... TRANSPORTATION FACILITIES REVIEW

...

...

...

Use separate application forms for:

- Annexation and/or Boundary Change
- Compensation for Reduction in Property Value (Measure 37)
- Daily Display Sign
- Appeal

RESPONSIBLE PARTIES:

APPLICANT (owner or other eligible applicant—see reverse): [REDACTED]

Mailing address: [REDACTED] State/Zip: [REDACTED]

Phone(s): [REDACTED] Email: [REDACTED]

Please do not include my contact information on public notices or on the City website:

APPLICANT'S REPRESENTATIVE (if different than above): Mildred White

Mailing address: 7350 SE Milwaukie Avenue State/Zip: 97202

Phone(s): 503-253-4283 Email: mildred@bamadesign.com

SITE INFORMATION:

Address: 9391 SE 32nd Avenue Map & Tax Lot(s): 11E25BD07700

Comprehensive Plan Designation: C Zoning: NMU Size of property: 10,800.00 Sq Ft

PROPOSAL (describe briefly):

Type I Development Review for new three-story, mixed-use building.

SIGNATURE:

ATTEST: I am the property owner or I am eligible to initiate this application per Milwaukie Municipal Code (MMC) Subsection 19.1001.6.A. If required, I have attached written authorization to submit this application. To the best of my knowledge, the information provided within this application package is complete and accurate.

Submitted by: [REDACTED] Date: July 30, 2020

IMPORTANT INFORMATION ON REVERSE SIDE

*For multiple applications, this is based on the highest required review type. See MMC Subsection 19.1001.6.B.1.

WHO IS ELIGIBLE TO SUBMIT A LAND USE APPLICATION (excerpted from MMC Subsection 19.1001.6.A):

Type I, II, III, and IV applications may be initiated by the property owner or contract purchaser of the subject property, any person authorized in writing to represent the property owner or contract purchaser, and any agency that has statutory rights of eminent domain for projects they have the authority to construct.

Type V applications may be initiated by any individual.

PREAPPLICATION CONFERENCE:

A preapplication conference may be required or desirable prior to submitting this application. Please discuss with Planning staff.

REVIEW TYPES:

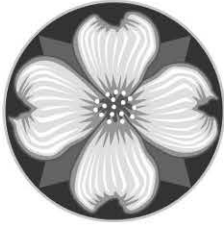
This application will be processed per the assigned review type, as described in the following sections of the Milwaukie Municipal Code:

- Type I: Section 19.1004
- Type II: Section 19.1005
- Type III: Section 19.1006
- Type IV: Section 19.1007
- Type V: Section 19.1008

Note: Natural Resource Review applications **may require a refundable deposit**. Deposits require completion of a Deposit Authorization Form, found at www.milwaukieoregon.gov/building/deposit-authorization-form.

THIS SECTION FOR OFFICE USE ONLY:

FILE TYPE	FILE NUMBER	AMOUNT <small>(after discount, if any)</small>	PERCENT DISCOUNT	DISCOUNT TYPE	DATE STAMP
Master file	DEV-2020-005	\$ 150	25%		
Concurrent application files	TFR-2020-004	\$ 1,000			
		\$			
	TOTAL	\$ 1,150			
Deposit (NR only)				<input type="checkbox"/> Deposit Authorization Form received	
TOTAL AMOUNT RECEIVED: \$			RECEIPT #:	RCD BY:	
Associated application file #s (appeals, modifications, previous approvals, etc.):					
Neighborhood District Association(s): ARDENWALD					
Notes:					



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Submittal Requirements

For all Land Use Applications
(except Annexations and Development Review)

All land use applications must be accompanied by a signed copy of this form (see reverse for signature block) and the information listed below. The information submitted must be sufficiently detailed and specific to the proposal to allow for adequate review. Failure to submit this information may result in the application being deemed incomplete per the Milwaukie Municipal Code (MMC) and Oregon Revised Statutes.

Contact Milwaukie Planning staff at 503-786-7630 or planning@milwaukieoregon.gov for assistance with Milwaukie's land use application requirements.

1. **All required land use application forms and fees**, including any deposits.

Applications without the required application forms and fees will not be accepted.

2. **Proof of ownership or eligibility to initiate application** per MMC Subsection 19.1001.6.A.

Where written authorization is required, applications without written authorization will not be accepted.

3. **Detailed and comprehensive description** of all existing and proposed uses and structures, including a summary of all information contained in any site plans.

Depending upon the development being proposed, the description may need to include both a written and graphic component such as elevation drawings, 3-D models, photo simulations, etc. Where subjective aspects of the height and mass of the proposed development will be evaluated at a public hearing, temporary onsite "story pole" installations, and photographic representations thereof, may be required at the time of application submittal or prior to the public hearing.

4. **Detailed statement** that demonstrates how the proposal meets the following:

A. All applicable development standards (listed below):

1. **Base zone standards** in Chapter 19.300.
2. **Overlay zone standards** in Chapter 19.400.
3. **Supplementary development regulations** in Chapter 19.500.
4. **Off-street parking and loading standards and requirements** in Chapter 19.600.
5. **Public facility standards and requirements**, including any required street improvements, in Chapter 19.700.

B. All applicable application-specific approval criteria (check with staff).

These standards can be found in the MMC, here: www.qcode.us/codes/milwaukie/

5. **Site plan(s), preliminary plat, or final plat** as appropriate.

See Site Plan, Preliminary Plat, and Final Plat Requirements for guidance.

6. **Copy of valid preapplication conference report**, when a conference was required.

APPLICATION PREPARATION REQUIREMENTS:


- Five hard copies of all application materials are required at the time of submittal. Staff will determine how many additional hard copies are required, if any, once the application has been reviewed for completeness. Provide an electronic version, if available.
- All hard copy application materials larger than 8½ x 11 in. must be folded and be able to fit into a 10- x 13-in. or 12- x 16-in. mailing envelope.
- All hard copy application materials must be collated, including large format plans or graphics.

ADDITIONAL INFORMATION:

- Neighborhood District Associations (NDAs) and their associated Land Use Committees (LUCs) are important parts of Milwaukie's land use process. The City will provide a review copy of your application to the LUC for the subject property. They may contact you or you may wish to contact them. Applicants are strongly encouraged to present their proposal to all applicable NDAs prior to the submittal of a land use application and, where presented, to submit minutes from all such meetings. NDA information: www.milwaukieoregon.gov/citymanager/what-neighborhood-district-association.
- By submitting the application, the applicant agrees that City of Milwaukie employees, and appointed or elected City Officials, have authority to enter the project site for the purpose of inspecting project site conditions and gathering information related specifically to the project site.
- Submittal of a full or partial electronic copy of all application materials is strongly encouraged.

As the authorized applicant I, (print name) Mildred White, attest that all required application materials have been submitted in accordance with City of Milwaukie requirements. I understand that any omission of required items or lack of sufficient detail may constitute grounds for a determination that the application is incomplete per MMC Subsection 19.1003.3 and Oregon Revised Statutes 227.178. I understand that review of the application may be delayed if it is deemed incomplete.

Furthermore, I understand that, if the application triggers the City's sign-posting requirements, I will be required to post signs on the site for a specified period of time. I also understand that I will be required to provide the City with an affidavit of posting prior to issuance of any decision on this application.

Applicant Signature: 

Date: 07/30/2020

Official Use Only

Date Received (date stamp below):

Received by: _____



PLANNING DEPARTMENT
 6101 SE Johnson Creek Blvd
 Milwaukie OR 97206
 503.786.7630
 planning@milwaukieoregon.gov

Development Review Application Worksheet

This worksheet is intended to assist you in determining if a development review application is needed. If a Type I development review is required, this form can be used to complete the application. Not all information requested on this form may be needed for your project. Please discuss your project with Planning Department staff prior to completing this form.

Step 1: Review Type

Exempt from Development Review	Type I Development Review <small>Excludes single-family structures/ accessory structures</small>	Type II Development Review
<input type="checkbox"/> Single-family detached or attached structures (new or addition). <input type="checkbox"/> Single-family residential accessory structures. <input type="checkbox"/> Modifications to interior of existing buildings with no change of use.	<input checked="" type="checkbox"/> New development. <input type="checkbox"/> Expansions or modifications to structures. <input type="checkbox"/> Change in primary use (with or without development or expansion). <input type="checkbox"/> Parking area expansion/ modification of 5 or more spaces.	<input type="checkbox"/> New construction in BI Zone >1,000 sq ft. <input type="checkbox"/> New construction in M Zone >1,000 sq ft AND within 120 ft of residential zone. <input type="checkbox"/> New development reviewed against discretionary criteria/standards. <input type="checkbox"/> Large-scale projects/approval criteria not appropriate for Type I review.
<i>Development review not required. Project can proceed to obtaining building permit.</i>	<i>Development review application required. Application can be made by completing a land use application form, along with this form, and submitting development permits for review.</i>	<i>Preapplication conference is required prior to submitting a development review permit. Please discuss the preapplication conference with Planning Department staff.</i>

Step 2: Information for Type I Development Review Application

Site Address: 9391 SE 32nd Avenue

Previous Approval Land Use File #(s): _____

Overall project description:

New three-story, wood-framed, mixed-use building. First floor to include covered parking, commercial tenant spaces, and lobby for multi-family residents. Second and third floors to be residential units.

Description of use(s): List characteristics of uses that are or will be present on-site. Relevant information will vary depending on zoning. Commonly required information includes good/services provided, items manufactured or stored, and number of employees. *M Zone uses: refer to Milwaukie Municipal Code (MMC) 19.309.1. BI Zone uses: refer to MMC 19.310.2-4.*

Building to be mixed-use.

First floor commercial shell.

Second and third floor residential units.

Floor areas: Floor areas are needed for evaluating parking ratios and M Zone use standards per MMC 19.309.1.

Use	Existing Sq Ft	Proposed Sq Ft	Total Sq Ft
Commercial	0	2,537	2,537
Parking	0	5,600	5,600
Multi-family	0	16,986	16,986

Other information: Provide other information needed for review of the project. Examples: uses that base parking on something other than sq ft, zoning overlays, other existing uses on multitenant sites.

18 Residential Units under 800 Square-feet

As the authorized applicant I, Mildred White (print name), attest that all required application materials have been submitted in accordance with City of Milwaukie requirements. I understand that any omission of required items or lack of sufficient detail may constitute grounds for a determination that the application is incomplete per MMC 19.1003.3 and Oregon Revised Statutes 227.178. I understand that review of the application may be delayed if it is deemed incomplete.

Mildred White, BAMA Architecture and Design

Applicant Name/Business



Applicant Signature

07 / 30 / 2020

Date

THIS SECTION FOR OFFICE USE ONLY:

Date Received (date stamp below):

Received by: _____

BAMA Architecture and Design LLC

09/17/2020

Project Narrative

Applicant: Aurn White
BAMA Architecture and Design
7350 SE Milwaukie Avenue
Portland, OR 97202

Below is a narrative for a Development Review for a proposed Three-Story Mixed-Use Building at 9391 SE 32nd Avenue Milwaukie, OR 97222.

This proposal includes a Type I Development Review application per MMC 19.906.

Description of Proposal:

This is a new construction of a 25,058 square-foot, three-story, mixed-use building with commercial tenant spaces and 18 residential dwelling units. Development to include first floor covered parking, public right of way upgrades, site landscaping installation, and demolition of existing auto repair establishment.

This proposal will create a vibrant, attractive, mixed-use structure consistent with the standards and purposes of the MMC. This proposal will allow the continued development of the NMU zone located on 32nd Avenue and will allow for a pedestrian-centered building with a multitude of benefits to the residents, neighbors, and city at-large.

Existing Site Conditions:

The site in question is located along the west side of SE 32nd Avenue at the intersection of 32nd Avenue and SE Olsen Street. The site is approx. 0.22 acres in size (9,660 square-foot), with street facing eastern and southern facades. The property is relatively flat with an overall grade change of approximately one foot and the most recent previous use was an automobile repair establishment. The current structure on site is proposed to be demolished. The site has no existing trees or landscaping that require protection.

Type I Development Review:

Section 19.906.4.A-F

An application for Type I or Type II development review shall be approved when all of the following criteria have been met:

BAMA Architecture and Design LLC

- A. *The proposal complies with all applicable base zone standards in Chapter 19.300.*
- B. *The proposal complies with all applicable overlay zone and special area standards in Chapter 19.400.*
- C. *The proposal complies with all applicable supplementary development regulations in Chapter 19.500.*
- D. *The proposal complies with all applicable off-street parking and loading standards and requirements in Chapter 19.600.*
- E. *The proposal complies with all applicable public facility standards and requirements, including any required street improvements, in Chapter 19.700.*
- F. *The proposal complies with all applicable conditions of any land use approvals for the proposal issued prior to or concurrent with the development review application. (Ord. 2161 § 2, 2018; Ord. 2036 § 3, 2011; Ord. 2025 § 2, 2011)*

Response:

This proposal will comply with all criteria listed above. Please see individual section responses below for chapter specific criteria and standards.

Development Standards:

Base Zone Standards:

Section 19.303 Commercial Mixed-Use Zones

This proposal is for uses permitted outright in the NMU zone.

The use for this development is *Mixed-Use*. The uses within the mixed-use structure are commercial tenant spaces and parking on the first floor along with mostly one-bedroom residential dwelling units on the second and third floor.

The lot utilized as part of this development currently meets development standards per *MMC Table 19.303.3*.

The total building area proposed is 25,058 square-feet. This is above the minimum floor area ratio of 0.5:1 (lot area is 9,660 square-feet, with a minimum floor area of 4,830 square-feet).

The proposed setbacks in this development are 0'-0" on the East, 1'-0" on the South (street facing), 3'-0" on the West, and 16'-0" on the North side. The only required building setback in the NMU zone is a maximum street setback of 10'-0", and this development will meet that standard.

Maximum lot coverage for this proposal is 85% (8,211 square-feet). This proposal is requesting a lot coverage of 7,983 square-feet. This is within the development standard.

BAMA Architecture and Design LLC

Minimum vegetation for this proposal is 15% of the site area (1,449 square-feet). This proposal includes 1,535 square-feet of qualifying landscaping, therefore meeting the development standards.

All other standards of the base zone will be met as part of this proposal.

Overlay Zone and Special Area Standards:

Section 19.400

This proposal is not located in an overlay zone, and is not defined as a special area, therefore this section is not applicable to this proposal.

Supplementary Development Regulations:

Section 19.500

There are limited applicable supplementary development regulations applicable for this proposal.

This proposal asks to utilize *MMC 19.501.2.B* to allow for architectural features to extend 24" over the street setback requirements on the South and East façade.

There are no accessory structures or accessory uses proposed as part of this development.

This proposal shall meet all clear vision requirements of *MMC 12.24* for the intersection of 32nd Avenue & Olsen Street.

Neighboring properties are of the same zone designation; therefore, no additional setback is triggered.

The landscape areas will be less than 20% (307 SF) mulch or bark dust.

Compliant walkways are located to allow for easy pedestrian connections to all building entrances.

MMC 19.505.7 Nonresidential Development:

Guidelines and standards:

Building Design Standards:

1. Corners

The building is not located at a key corner, therefore this standard does not apply.

2. Weather Protection

All proposed first-floor entries are recessed at least three feet.

Proposed weather protection will meet all applicable building codes and will not fetter pedestrian signage.

3. Exterior Building Materials

BAMA Architecture and Design LLC

The street facing facades will be comprised of brick, wood siding, and window glazing.

Decorative metal panels will be utilized as a minor accent on the facades totaling less than 5 percent of the building façade.

No prohibited materials are proposed as part of this proposal.

4. Windows and Doors

This proposal has two street facing facades, on the east and south property lines. The street facing ground floor facades have openings located throughout totally more than 30 percent of the wall area. Most of the openings are located on the east facing façade and is maximized to the extent practical. The south ground floor façade area has more than 30 percent openings in the non-parking area of the façade.

Ground floor windows will be constructed with a visible transmittance of 0.6 or higher.

All commercial entries will remain unlocked during business hours and residential entries will be secured with a key fob entry available to residents only.

All first-floor glazing will be clear glazed to allow for light to project into the building.

First floor windows will be located a maximum of 32" above finished floor to allow for views into the spaces by pedestrians.

Signs will not be installed on more than 50 percent of the window area.

Windows will be slightly recessed into the façade and decorative brick detailing will provide relief and shadowing to the first-floor façade.

Building windows will not be constructed with reflective, tinted, or opaque glazing. No simulated divisions are proposed for window systems. Any metal frames proposed will be unexposed or painted.

5. Roofs

The proposed structure will utilize a flat roof throughout. 36" tall parapets will be provided along the entire roof perimeter.

6. Rooftop Equipment and Screening

All rooftop equipment will not extend over 10' in height and will be set back a minimum of 5' from the roof edge. All equipment will not be visible from public view.

7. Ground-Level Screening

No mechanical or communication equipment, storage, or garbage and recycling areas are located on the exterior of the building.

8. Rooftop Structures

BAMA Architecture and Design LLC

No rooftop structures will be constructed over 10' in height.

Off-Street Parking and Loading Standards and Requirements:

Section 19.600

This proposal includes the construction and installation of 16 standard parking stalls and 1 ADA parking stall. In totality this proposal will provide 17 total automobile parking stalls.

Per MMC Table 19.605.1 this proposal is required to provide 20.71 parking stalls.

18 Residential Units under 800 SF = 18 stalls minimum

1,356 SF of Commercial Area = 2.71 stalls minimum

The parking count minimum can be reduced per MMC 19.605.3.B.1-7.

By utilizing Reduction 2 – Proximity to mass transit in multi-family buildings the minimum parking can be lowered 20% (20% of 20.71 stalls = 4.142 stalls).

This exception lowers the minimum parking to 16.57 stalls.

Parking stalls will be utilized appropriately and will not be used for storage or other prohibited activities.

Parking spaces will be designed to the appropriate width, length, and aisle requirements.

All parking areas will be installed inside the building, therefore negating the requirement for parking lot landscaping.

The parking area will be constructed with concrete, will be striped, and wheel stops will be installed at all parking stalls.

The parking area will be well lit and pedestrian areas will be identified through changes in color and texture from parking areas.

Loading spaces are not required as part of this proposal.

Bicycle Parking Requirements MMC 19.609

Quantities:

18 Residential Units = 18 bicycle parking spaces

1,356 SF of Commercial Area = 5.42 stalls X (0.1) = .542 bicycle parking spaces

Total spaces required = 19

Total units provided = 19

Bicycle parking will be provided a minimum of 2' x 6' for the stall as well as a 5' clear minimum access aisle.

Public Facility Standards and Requirements:

BAMA Architecture and Design LLC

Section 19.700

Response: This proposal will comply with all standards set forth in MMC 19.700 and the public works standards.

The applicant will submit full engineering plans at building permit submittal for use of determining required updates to public facilities and required street improvements.

Compliance with Applicable Land Use Approvals:

Response: This proposal will meet all of the requirements or conditions of any land use approval on this site.

Prepared by: Auryn White – BAMA Architecture

SOPHIA P. APARTMENTS

9391 SE 32ND AVENUE MILWAUKIE, OREGON 97222

DRAWING SCHEDULE		RELEASES										
SHEET NUMBER	SHEET TITLE	1	2	3	4	5	6	7	8	9	10	11
		11-22-19	4-16-20	4-28-20	5-25-20							
		LAND USE	BUILDING PERMIT	OWNER REVIEW	OWNER REVISIONS							
SITE												
G1.1	PROJECT INFORMATION	●	●	●	●							
SD1.1	SITE PLAN	●	●	●	●							
SD2.1	SITE DETAILS	●	●	●	●							
CIVIL												
E0.1	GENERAL NOTES	●	●									
E0.2	EXISTING CONDITIONS	●	●									
E0.3	DEMOLITION PLAN	●	●									
E1.0	SITE PLAN	●	●									
E2.0	GRADING PLAN	●	●									
E3.0	DETAILS	●	●									
E4.0	UTILITY PLAN	●	●									
E4.1	DETAILS	●	●									
EC5.0	EROSION CONTROL	●	●									
EC5.1	EROSION CONTROL DETAILS	●	●									
ARCHITECTURAL												
A0.1	CODE SUMMARY SHEET	●	●	●	●							
A0.2	CODE SUMMARY SHEET	●	●	●	●							
A0.3	GENERAL SPECIFICATIONS	●	●	●	●							
A1.1	FIRST FLOOR MASTER PLANS	●	●	●	●							
A1.2	SECOND FLOOR MASTER PLAN	●	●	●	●							
A1.3	THIRD FLOOR MASTER PLAN	●	●	●	●							
A1.4	ROOF PLAN	●	●	●	●							
A2.1	EXTERIOR ELEVATIONS	●	●	●	●							
A2.2	EXTERIOR ELEVATIONS	●	●	●	●							
A3.1	BUILDING SECTIONS	●	●	●	●							
A4.1	ENLARGED BATHROOM PLANS	●	●	●	●							
A4.2	ENLARGED KITCHEN PLANS	●	●	●	●							
A5.1	WALL TYPES AND DETAILS	●	●	●	●							
A5.2	PENETRATION DETAILS AND WALL TYPES	●	●	●	●							
A5.3	INTERIOR DETAILS	●	●	●	●							
A5.4	RADON PLAN AND DETAILS	●	●	●	●							
A5.5	INTERIOR DETAILS	●	●	●	●							
A5.6	EXTRIOR DETAILS	●	●	●	●							
A5.7	EXTRIOR DETAILS	●	●	●	●							
A6.1	ENLARGED STAIR PLANS	●	●	●	●							
A6.2	NOT USED											
A6.3	STAIR SECTIONS	●	●	●	●							
A6.4	ELEVATOR SECTION AND DETAILS	●	●	●	●							
A6.5	DOOR AND WINDOW SCHEDULE	●	●	●	●							
A7.1	BASEMENT REFLECTED CEILING PLAN	●	●	●	●							
A7.2	UPPER FLOORS REFLECTED CEILING PLAN	●	●	●	●							
A8.1	ENLARGED UNIT PLANS	●	●	●	●							
A8.2	ENLARGED UNIT PLANS	●	●	●	●							
A8.3	ENLARGED UNIT PLANS	●	●	●	●							
A8.4	ENLARGED UNIT PLANS	●	●	●	●							
A8.5	ENLARGED UNIT PLANS	●	●	●	●							
A8.6	ENLARGED UNIT PLANS	●	●	●	●							
A8.7	ENLARGED UNIT PLANS	●	●	●	●							
A8.8	ENLARGED UNIT PLANS	●	●	●	●							
A8.9	ENLARGED UNIT PLANS	●	●	●	●							
A8.10	ENLARGED UNIT PLANS	●	●	●	●							
A9.2	ACCESSIBILITY DETAILS	●	●	●	●							

DRAWING SCHEDULE CONTINUED		RELEASES										
SHEET NUMBER	SHEET TITLE	1	2	3	4	5	6	7	8	9	10	11
		11-22-19	4-16-20	4-28-20	5-25-20							
		LAND USE	BUILDING PERMIT	OWNER REVIEW	OWNER REVISIONS							
STRUCTURAL												
S1.0	GENERAL NOTES AND SCHEDULES	●	●									
S1.1	GENERAL AND POST-TENSION CONCRETE NOTES	●	●									
S1.2	CONCRETE SCHEDULES	●	●									
S1.3	STATEMENT OF SPECIAL INSPECTIONS	●	●									
S2.0	FOUNDATION PLAN	●	●									
S2.1A	2ND FLOOR SLAB AND BOTTOM REINFORCEMENT PLAN	●	●									
S2.1B	2ND FLOOR SLAB AND TOP REINFORCEMENT PLAN	●	●									
S2.1C	2ND FLOOR SLAB AND POST-TENSIONING PLAN	●	●									
S2.2	2ND FLOOR WALL FRAMING PLAN	●	●									
S2.3	3RD FLOOR WALL FRAMING PLAN	●	●									
S2.5	ROOF FRAMING PLAN	●	●									
S3.0	CONCRETE DETAILS	●	●									
S3.1	CONCRETE DETAILS	●	●									
S3.2	CONCRETE AND CMU DETAILS	●	●									
S3.3	POST-TENSIONED CONCRETE DETAILS	●	●									
S3.4	POST-TENSIONED CONCRETE DETAILS	●	●									
S4.0	WOOD FRAMING DETAILS	●	●									
S4.1	WOOD FRAMING DETAILS	●	●									
S4.2	WOOD FRAMING DETAILS	●	●									
S4.3	WOOD FRAMING DETAILS	●	●									
S4.4	WOOD FRAMING DETAILS	●	●									
S6.0	LITE-GAGE METAL STUD FRAMING DETAILS	●	●									
MECHANICAL												
M0.1	SYMBOLS, SCHEDULES AND LEGENDS	●	●									
M1.1	FIRST FLOOR PLAN	●	●									
M1.2	SECOND FLOOR PLAN	●	●									
M1.3	THIRD FLOOR PLAN	●	●									
M6.1	DETAILS	●	●									
M6.2	DETAILS	●	●									
ELECTRICAL												
E0.01	LEGENDS AND GENERAL NOTES	●	●									
E0.11	SPECIFICATIONS	●	●									
E1.01	SCHEDULES	●	●									
E2.11	FLOOR PLAN - LEVEL 1 LIGHTING	●	●									
E2.12	FLOOR PLAN - LEVEL 2 LIGHTING	●	●									
E2.13	FLOOR PLAN - LEVEL 3 LIGHTING	●	●									
E2.21	FLOOR PLAN - LEVEL 1 POWER AND LOW VOLTAGE	●	●									
E2.22	FLOOR PLAN - LEVEL 2 POWER AND LOW VOLTAGE	●	●									
E2.23	FLOOR PLAN - LEVEL 3 POWER AND LOW VOLTAGE	●	●									
E3.01	POWER - ONE-LINE	●	●									
E3.11	DIAGRAMS AND DETAILS	●	●									
PLUMBING												
P0.0	SYMBOLS AND ABBREVIATIONS; CODE COMPLIANCE; SCHEDULES	●	●									
P1.0	BASEMENT LEVEL FLOOR PLAN - BELOW GRADE - PLUMBING	●	●									
P1.1	BASEMENT LEVEL FLOOR PLAN - BELOW GRADE - PLUMBING	●	●									
P1.2	SECOND FLOOR PLAN - PLUMBING	●	●									
P1.3	THIRD FLOOR PLAN - PLUMBING	●	●									
P1.5	ROOF PLAN - PLUMBING	●	●									
P2.0	RISER DIAGRAMS - PLUMBING	●	●									

PROJECT INFORMATION

SCOPE OF WORK
 32ND AVE MIXED USE APARTMENTS ARE LOCATED IN THE ARDENWALD NEIGHBORHOOD ON THE CORNER OF SE 32ND AVE AND SE OLSEN ST. THE BUILDING WILL BE A NEW CONSTRUCTION, DEMOLISHING THE CURRENT BUILDING THAT IS ON SITE (UNDER PERMIT 601-19-001001-STR). THIS NEW CONSTRUCTION WILL CONTAIN 21 RESIDENTIAL UNITS. THE GROUND FLOOR WILL CONSIST OF A GRADE LEVEL PARKING GARAGE WITH 17 NEW PARKING STALLS, AS WELL AS 3 NEW COMMERCIAL TENANT SPACES THAT WILL FRONT SE 32ND AVE.

DEFERRED SUBMITTALS
 BALCONY RAILINGS

SEPARATE PERMITS BY OTHERS

FIRE SPRINKLER - SEE A0.1.
 OBTAIN FROM FIRE MARSHALS OFFICE.
 FIRE ALARM WITH MANUAL FIRE ALARM SYSTEM- SEE A0.1.
 OBTAIN FROM FIRE MARSHALS OFFICE.
 UNDERGROUND FIRE LINES
 OBTAIN FROM FIRE MARSHALS OFFICE.
 ELECTRICAL
 MECHANICAL
 PLUMBING
 EMERGENCY RESPONDER ENHANCEMENT (DAS)

NOTE: THE GENERAL CONTRACTOR SHALL SCHEDULE A FIRESTOPPING MEETING WITH THE BUILDING INSPECTOR AND ALL SUBCONTRACTORS THAT WILL BE INSTALLING FIRESTOPPING MATERIALS. EACH CONTRACTOR WILL SUPPLY A LIST OF MATERIALS/ASSEMBLIES WHICH WILL BE USED. THE TYPE OF PENETRATIONS WHICH EACH MATERIAL/ASSEMBLY WILL BE USED, AND THE LISTING AND APPROVAL INFORMATION. THIS INFORMATION MUST BE SUBMITTED TO, AND APPROVED BY, THE BUILDING INSPECTOR PRIOR TO INSTALLATION.



CONTACT INFORMATION

APPLICANT AND CONTACT PERSON
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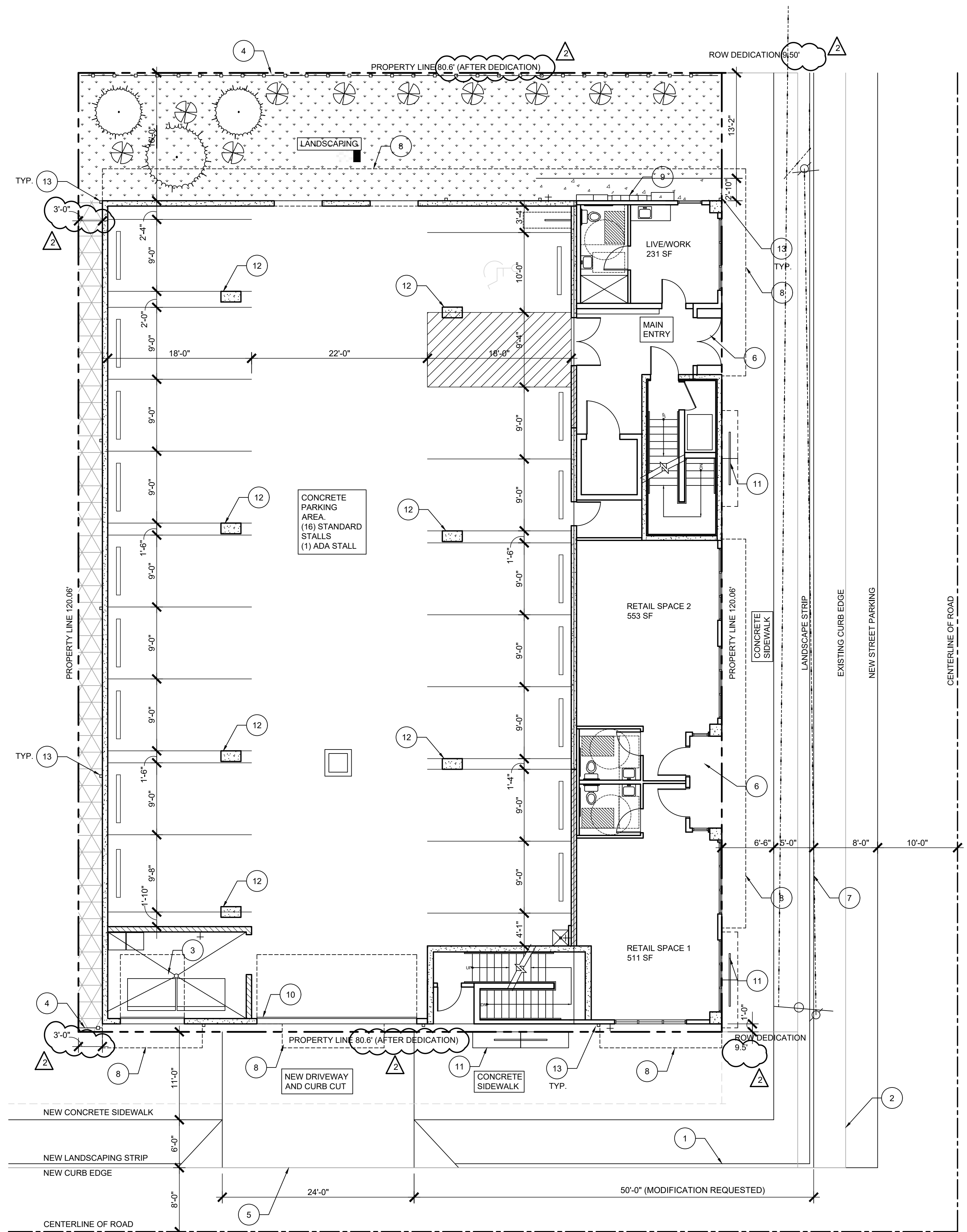
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 MILWAUKIE, OR 97222

Proj # 201931

REVISIONS:
 1. OWNER REVISION: 04/28/20
 2. OWNER REVISION: 05/25/20
 3. OWNER REVISION: 08/21/20

BUILDING PERMIT:
 DATE: April 16, 2020

SHEET NO.
G1.1
 PROJECT INFORMATION



PROPERTY INFORMATION

ADDRESS: 9391 SE 32ND AVE. MILWAUKIE, OR 97222
 PROJECT: RETAIL AND PARKING ON FIRST FLOOR, WITH 18 APARTMENT UNITS LESS THAN 800 SF.

LEGAL DESCRIPTION
 LEGAL DESCRIPTIONS: ARDENWALD, BLOCK 5, LOT 21 AND 22

TAX LOT ID: 11E25BD07700

PARCEL NUMBER: 00008547

ZONING CODE INFORMATION

BASE ZONE: NMU (NEIGHBORHOOD MIXED USE)

SITE AREA BEFORE DEDICATION: 0.25 ACRES (10,805)

SIT AREA AFTER DEDICATION: 0.22 ACRES (9,665 SF)

PROPOSED SITE INFORMATION:
 PLOT: 9,665 SF (AFTER DEDICATION)

BUILDING FOOTPRINT: 7,911 SF (81.9%)

EXTERIOR CONCRETE PAVING: 214 SF (2.2%)

PROPOSED LANDSCAPING: 1,535 SF (15.9%)

MINIMUM FAR ALLOWED: 0.5:1

BUILDING HEIGHT:

MAXIMUM ALLOWABLE HEIGHT (TABLE 19.303.3): 45'-0"

ACTUAL HEIGHT: 38'-0"

MAX SETBACKS ALLOWED:

MAXIMUM STREET SETBACK: 10'-0"

ACTUAL STREET SETBACK: 1'-0"

AUTOMOBILE PARKING REQUIREMENTS (TABLE 19.605.1):

MULTI-FAMILY HOUSING (1:UNIT): 18

COMMERCIAL (2:1000 SF): 3

SUBTOTAL: 21

PROXIMITY TO MASS TRANSIT (20% REDUCTION): -4

TOTAL REQUIRED: 17

BICYCLE PARKING REQUIREMENTS (TABLE 266-6):

BIKE PARKING MIN. OF 19 REQUIRED, 19 TO BE PROVIDED. LOCATED IN UNITS, SEE FLOOR PLANS. 1 IN EACH UNIT, 1 IN PARKING FOR RETAIL.

STANDARD BIKE PARKING (MIN OF 1 SPACE REQUIRED).

ENCLOSED BIKE PARKING (1 PER UNIT, 50% MINIMUM OF REQUIRED)

SEE SECTION: 19.609.2

FLOOR AND BUILDING COVERAGE AREA:

FIRST FLOOR COVERED PARKING AREA/RETAIL: 7,942 SF

SECOND FLOOR BUILDING AREA: 8,558 SF

THIRD FLOOR BUILDING AREA: 8,558 SF

TOTAL AREA (INCLUDING COVERED PARKING): 25,058 SF

SITE PLAN GENERAL NOTES

EXISTING INFORMATION IS BASED ON DRAWINGS PROVIDED BY AKS.

DIMENSIONS ARE TO FACE OF CURB, FACE OF BUILDING, PROPERTY LINE, OR CENTER OF PAINT STRIPING UNLESS NOTED OTHERWISE.

WHERE ACCESS TO OR WITHIN A STRUCTURE OR AN AREA IS RESTRICTED BECAUSE OF SECURED OPENINGS OR WHERE IMMEDIATE ACCESS IS NECESSARY FOR LIFE-SAVING OR FIRE FIGHTING PURPOSES A "KNOXBOX" KEY BOX SHALL BE INSTALLED IN AN APPROVED LOCATION.

PLANT KEY

SYMBOL	LANDSCAPING TYPE	SIZE	COUNT
TREES			
	MEDIUM SIZED DECIDUOUS TREE PER OWNER AND MARKET AVAILABILITY	2" CAL 4' ABOVE GRADE	3
*NOTE: MUST PROVIDE 3'X3' MIN PLANTING AREA			
SHRUBS			
	LANDSCAPE SHRUBS PER OWNER AND MARKET AVAILABILITY	1 GAL. 3" O.C.	10
GROUND COVER			
	MULCH PER OWNER (MAX 20% OR 307 SF)		
	GRASS PER OWNER (MIN 80% OR 1,228 SF)		

SITE PLAN KEYNOTES

- EXISTING CONCRETE CURB TO REMAIN.
- EXISTING CURB TO BE REMOVED.
- TRASH AND RECYCLING ROOM. PROVIDE DRAIN THAT CONNECTS TO A SANITARY SEWER WASTE LINE. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- NEW 6' HIGH CHAIN LINK FENCE WITH PRIVACY SLATS. PAINTED BLACK PER OWNER. SEE 1/SD2.1
- NEW CONCRETE OR ASPHALT DRIVEWAY WITH NEW CURB EDGE. SEE CIVIL DRAWINGS.
- NEW CONCRETE PAVING. SEE STRUCTURAL DRAWINGS
- NEW 9.5' DEDICATION AND FRONTAGE IMPROVEMENTS. SEE CIVIL DRAWINGS.
- FACE OF BUILDING ABOVE
- ELECTRICAL GEAR. SEE DRAWINGS BY ELECTRICAL AND COORDINATE WITH PGE. PROVIDE CONCRETE PAD
- 20' WIDE CONTROLLED ACCESS ENTRY GATE. SEE ELECTRICAL. PROVIDE KEYBOX FOR EMERGENCY ACCESS.
- SHORT TERM BICYCLE PARKING AREA 2x6' EACH, FOUR TOTAL. SEE DETAIL 10/SD2.1.
- CONCRETE POST. SEE STRUCTURAL.
- DOWNSPOUT. SEE ROOF PLANS A1.5 & A1.6.

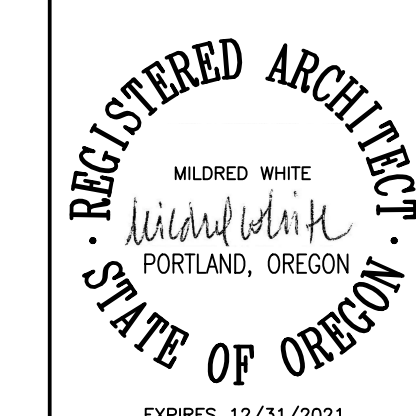
NOTE: NO EXISTING TREES OR EXISTING NATURAL FEATURES ON SITE. NO TREE PROTECTION OR TREE REMOVAL REQUIRED.

SITE PLAN LEGEND

- PROPERTY LINE
- NEW FENCE. SEE DETAIL 1/SD2.1

TRUE NORTH
SITE PLAN
 SCALE: 1/8" = 1'-0"

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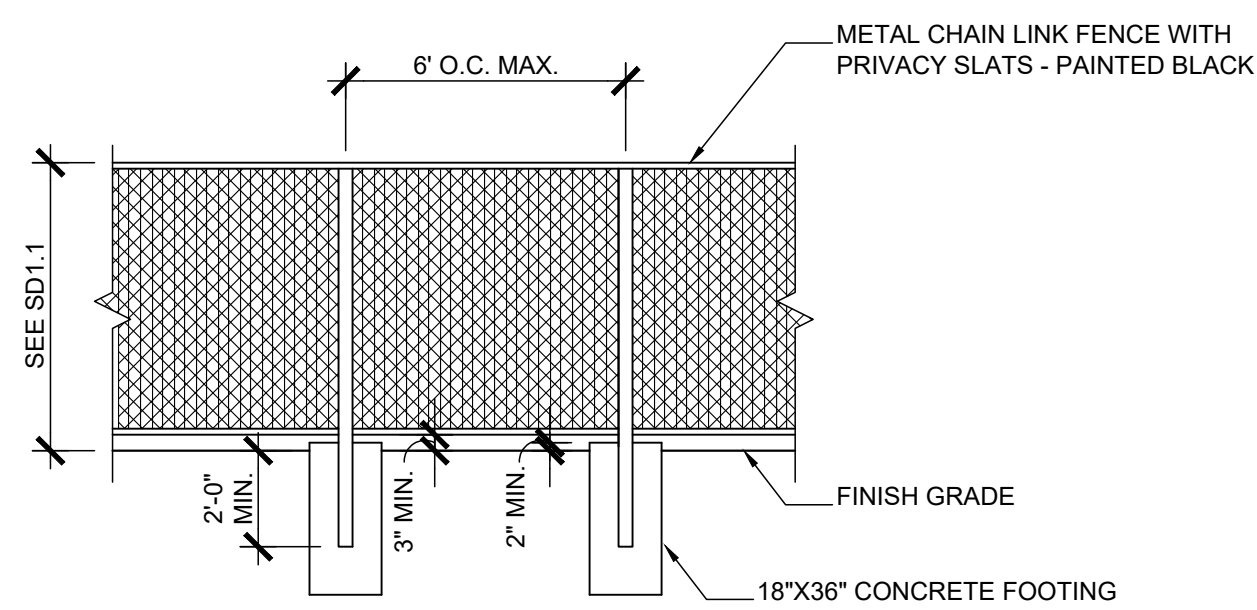
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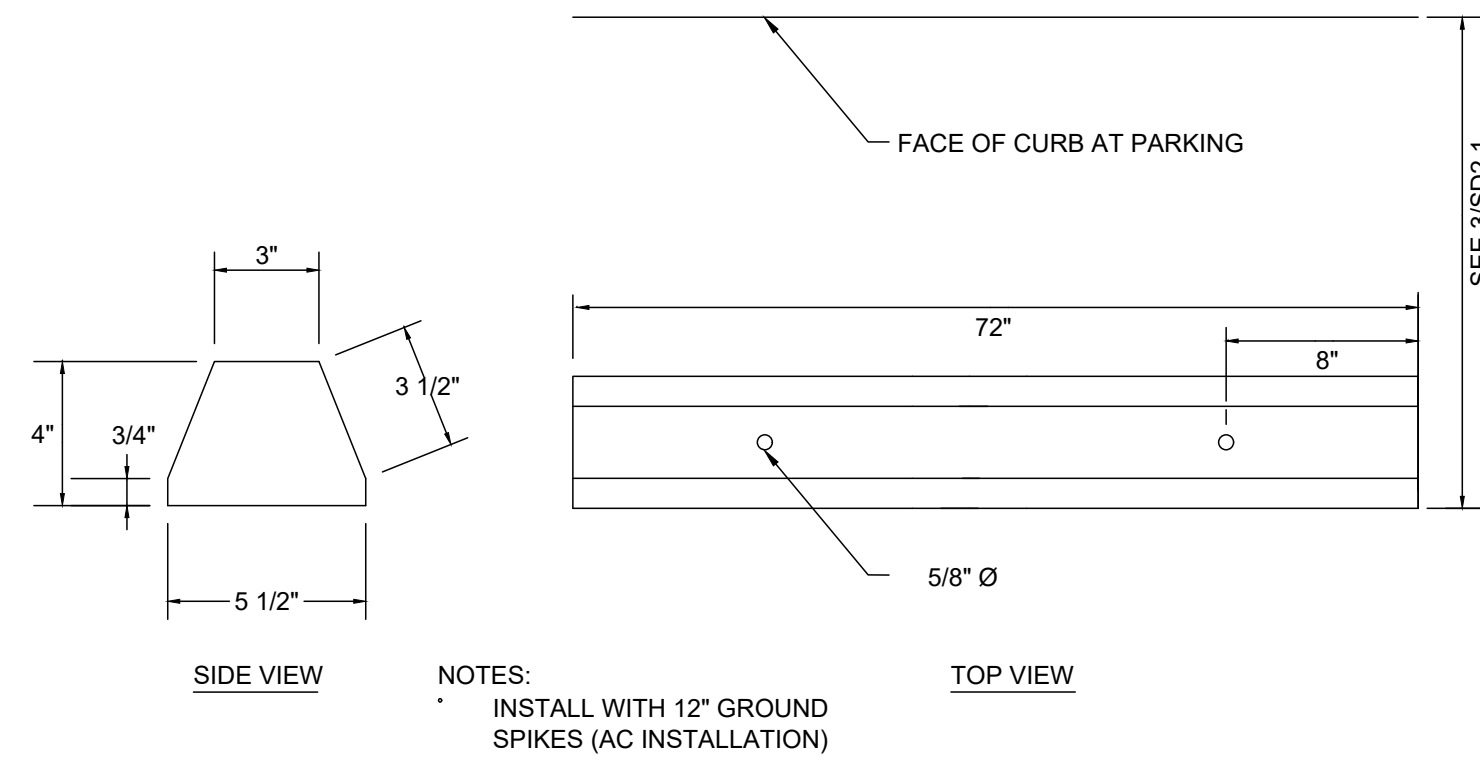
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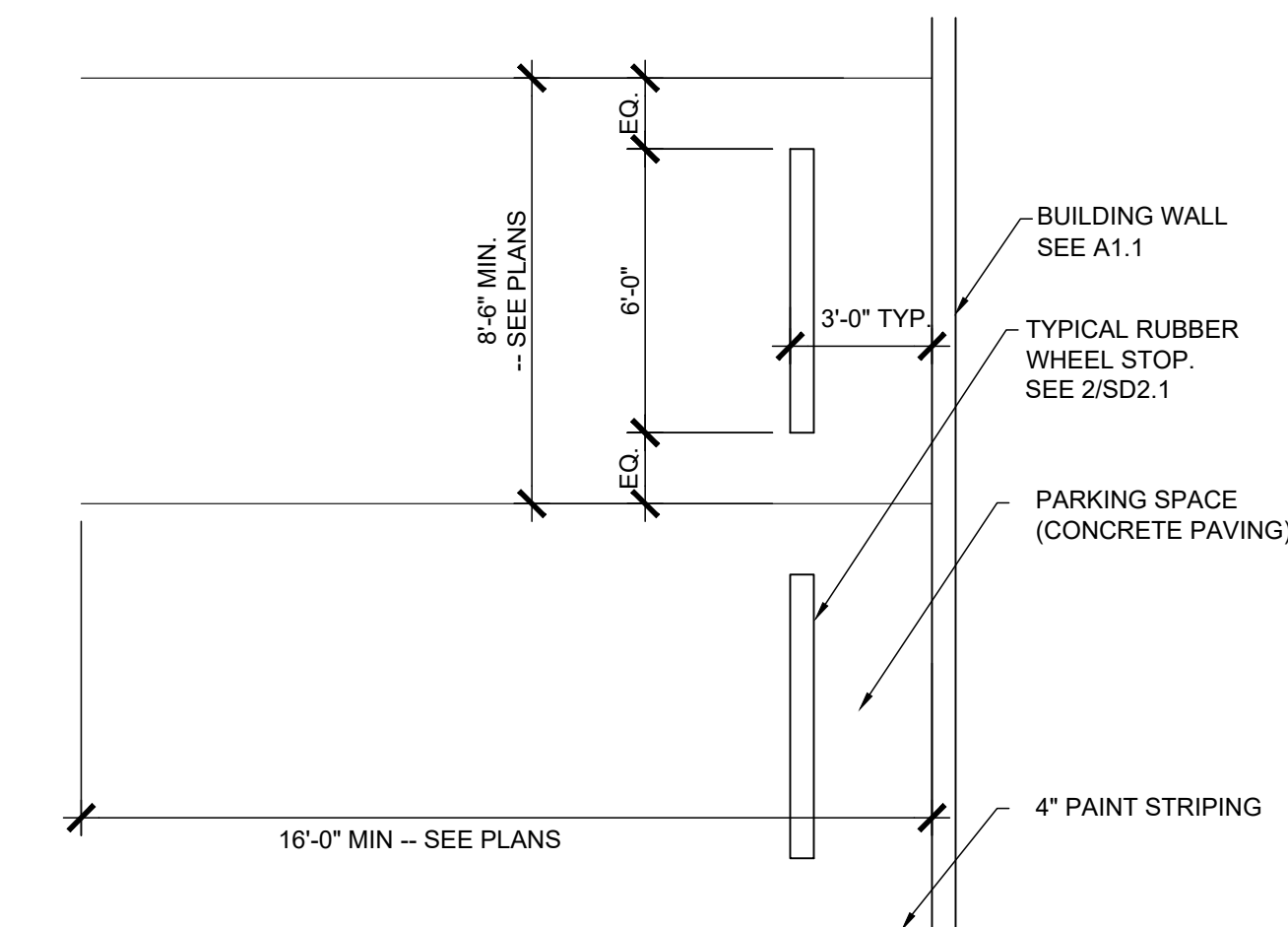
BUILDING PERMIT:
 DATE: April 16, 2020
 SHEET NO.
SD1.1
 SITE PLAN



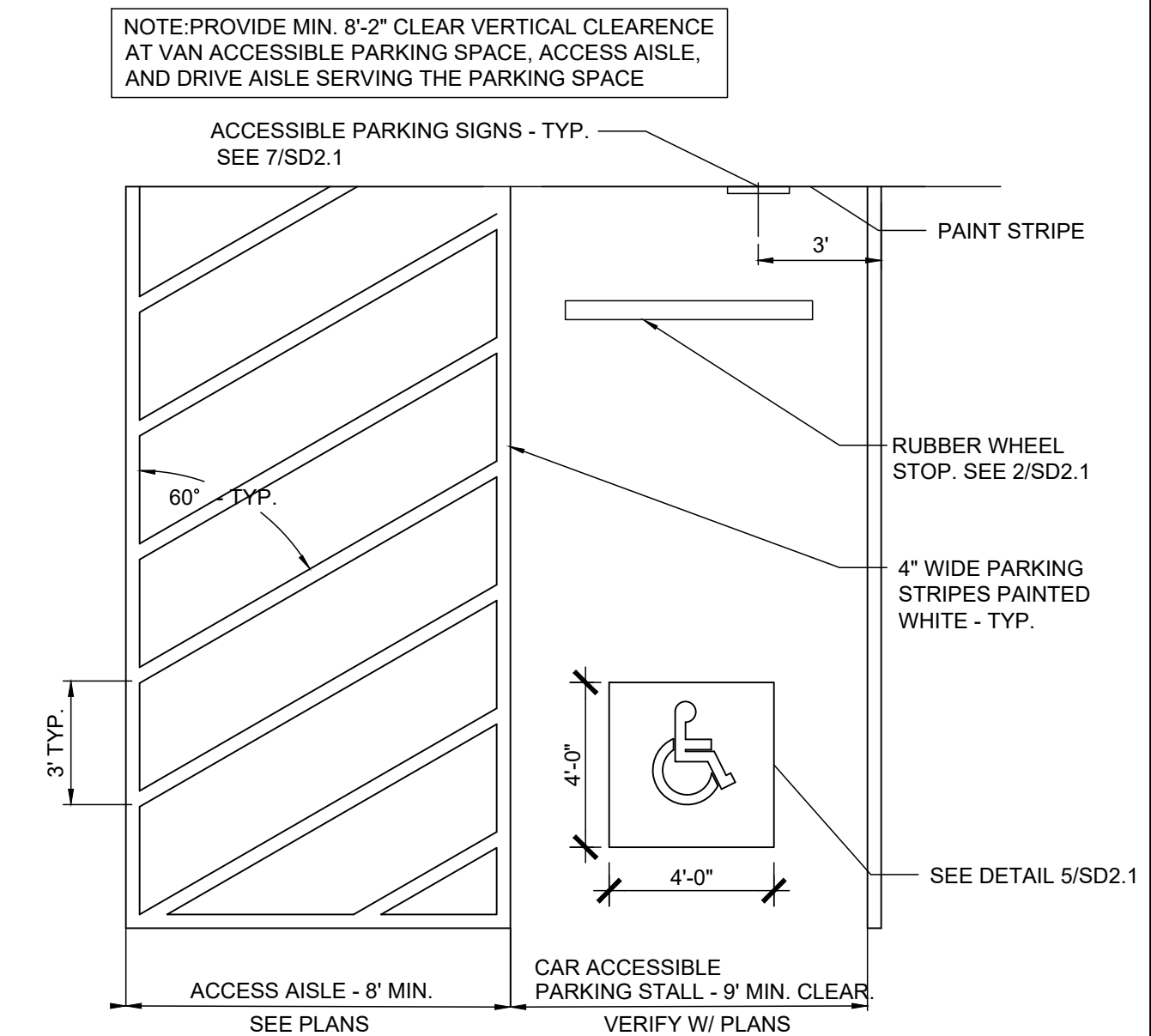
1 METAL FENCE
SD2.1 SCALE: 1/4" = 1'-0"



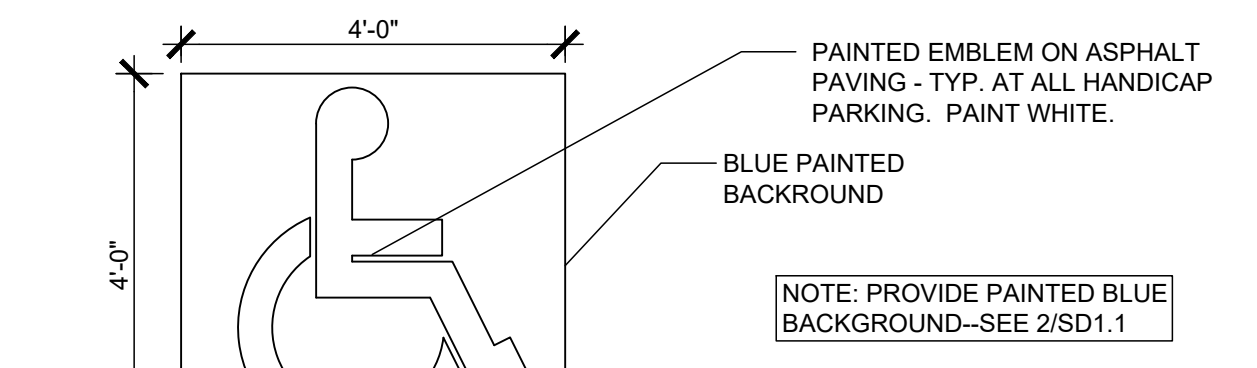
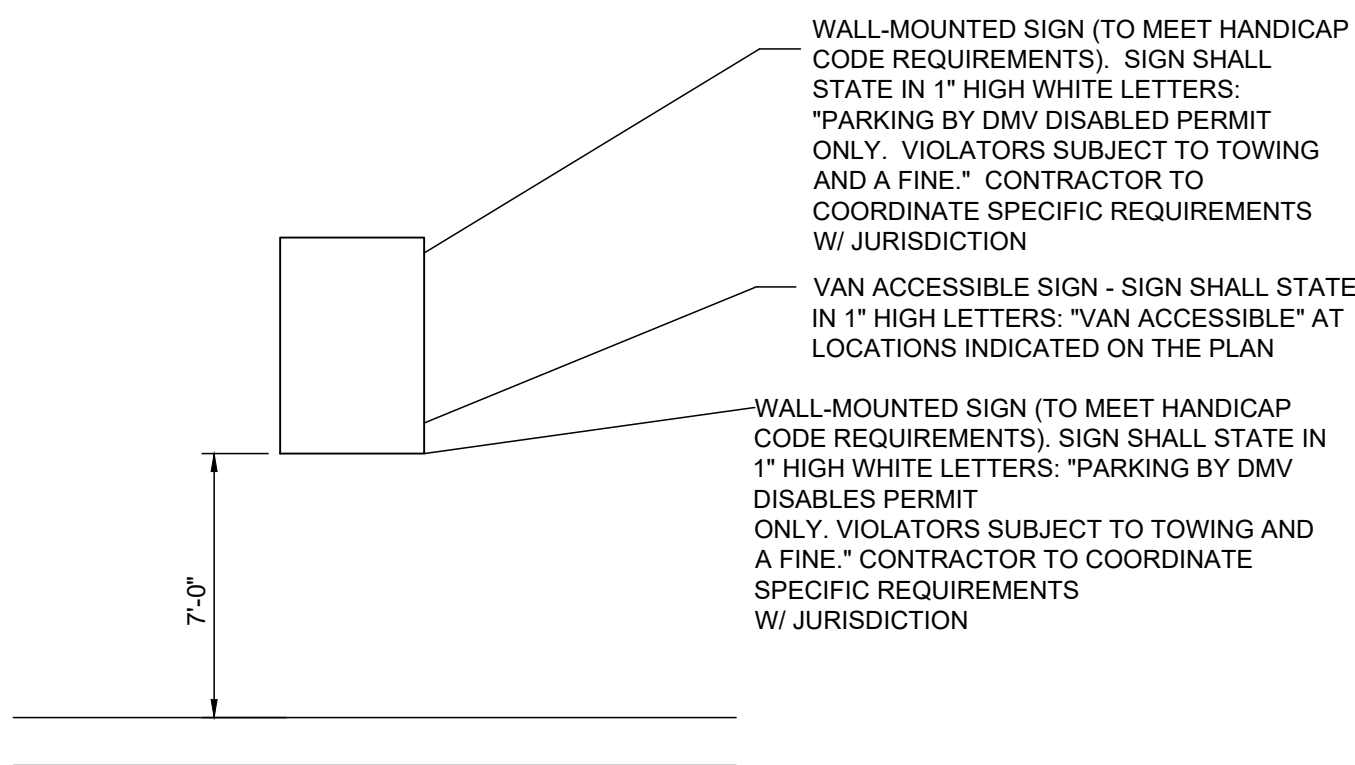
2 TYPICAL RUBBER WHEEL STOP
SD2.1 NOT TO SCALE



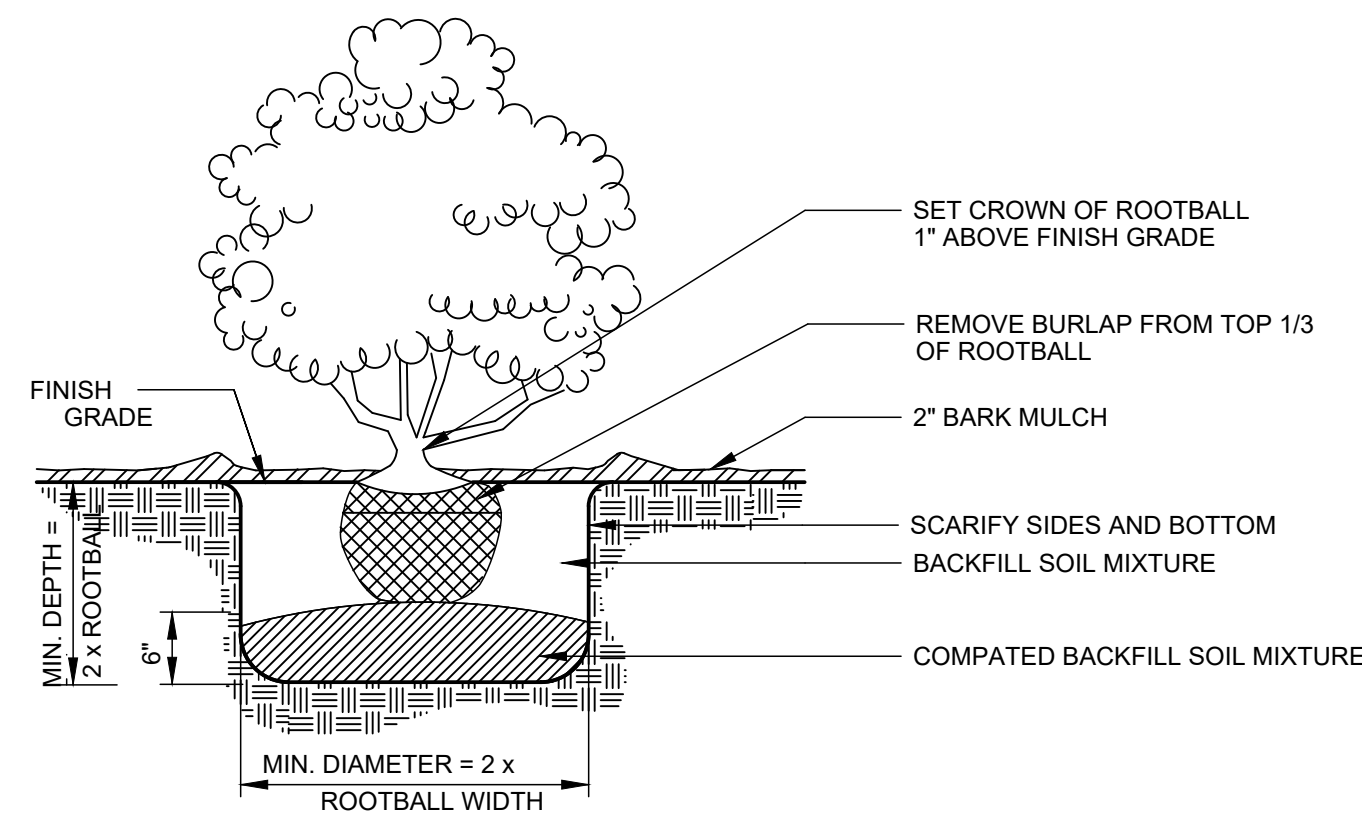
3 WHEEL STOP AT PARKING
SD2.1 NOT TO SCALE



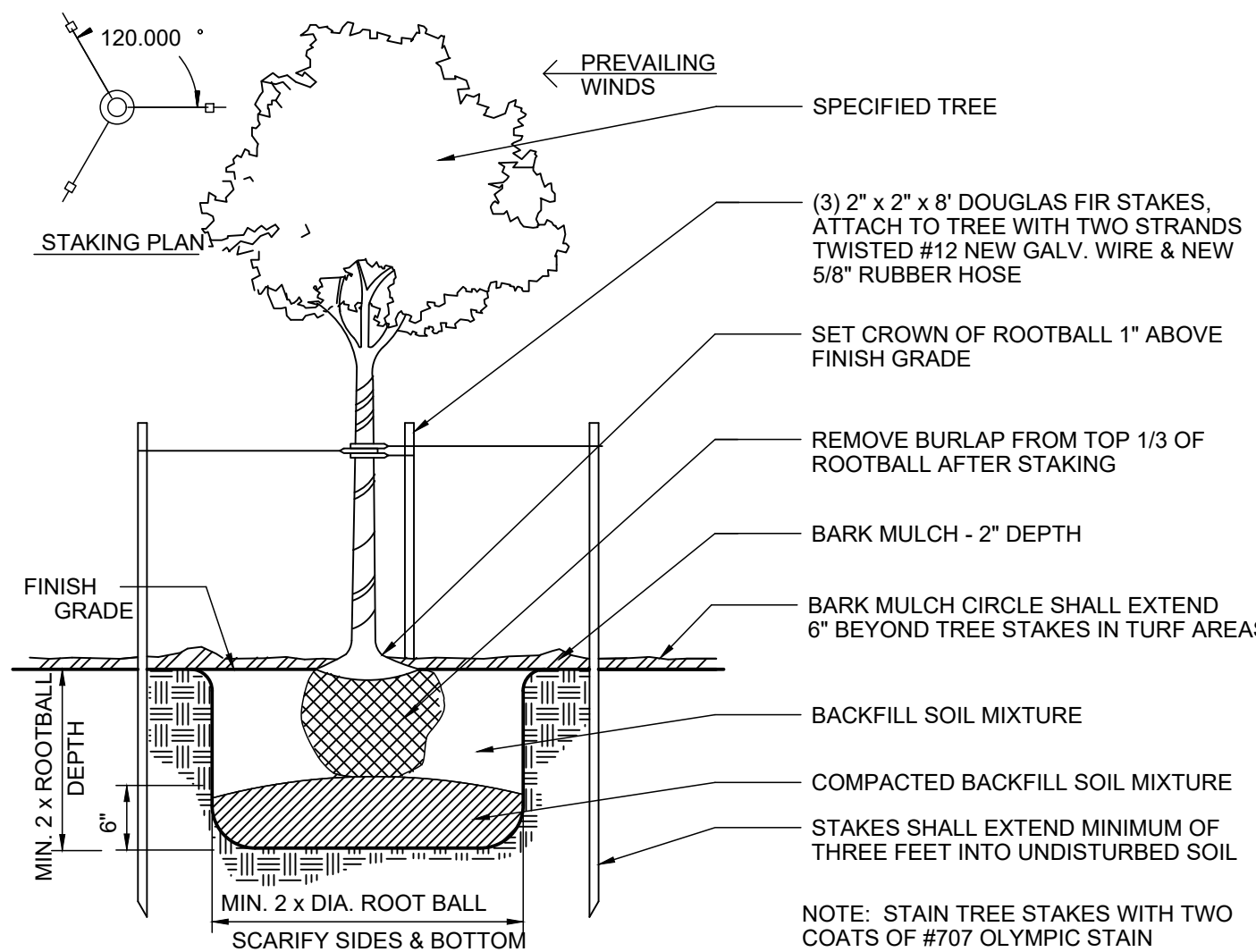
4 ACCESSIBLE PARKING STALL
SD2.1 NTS



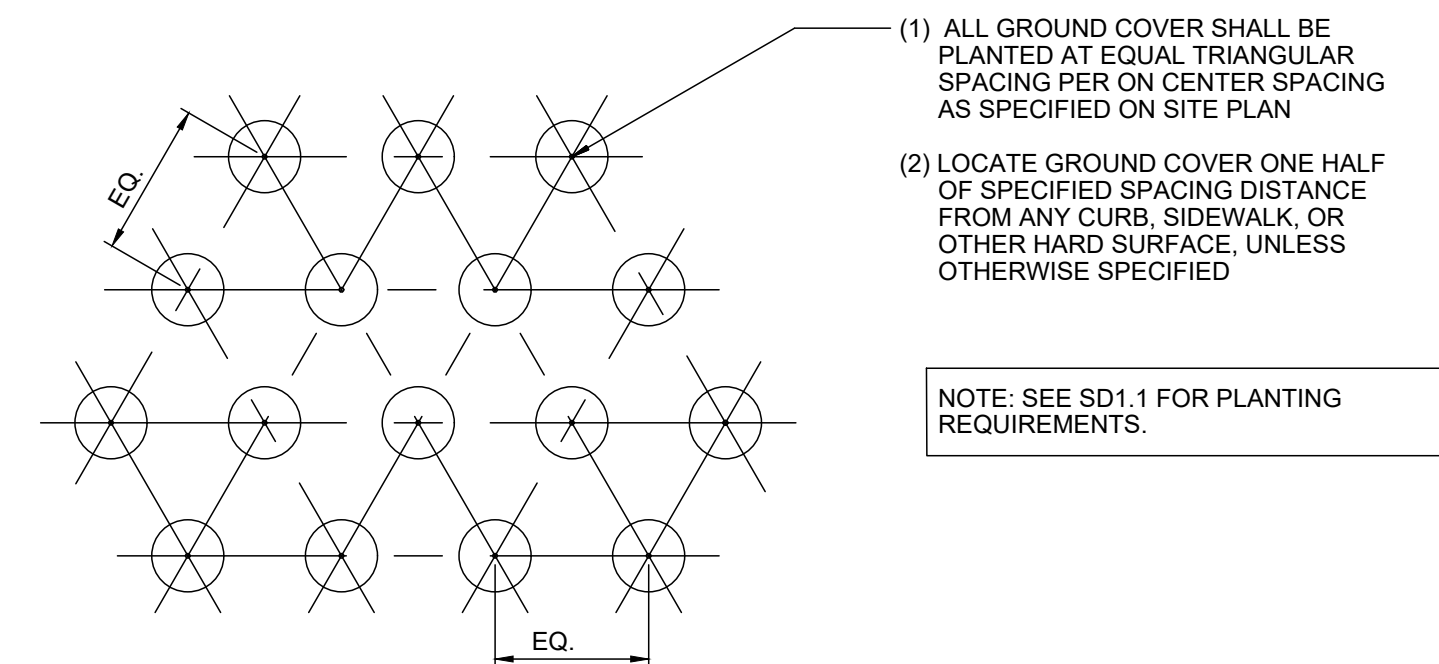
5 ACCESSIBLE PARKING EMBLEM AND SIGN
SD2.1 NOT TO SCALE



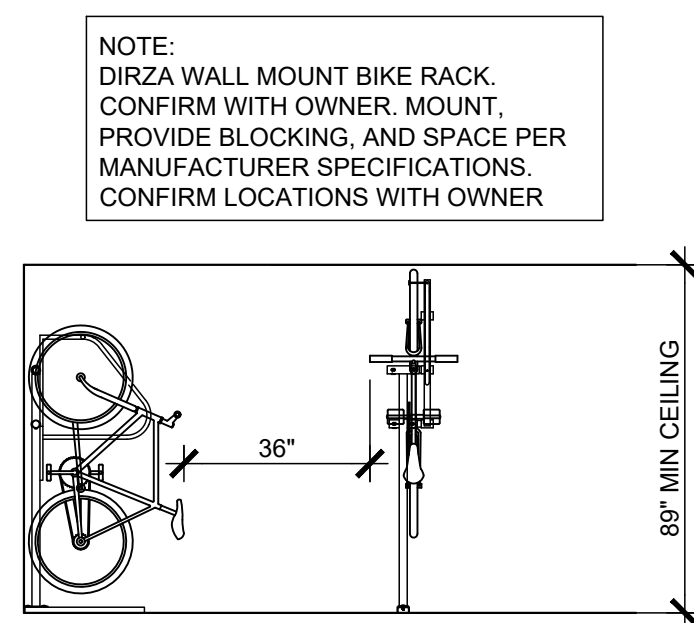
6 TYPICAL SHRUB PLANTING DETAIL
SD2.1 NOT TO SCALE



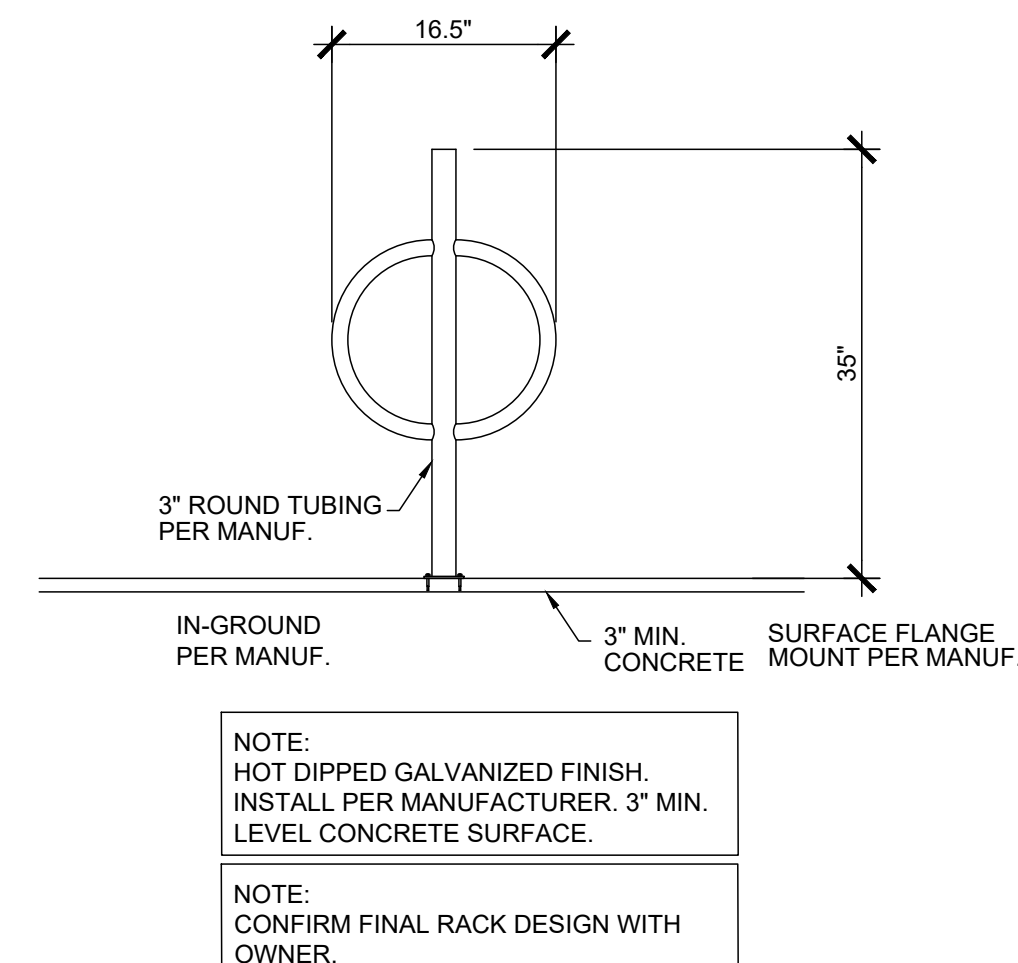
7 TYPICAL DECIDUOUS TREE PLANTING DETAIL
SD2.1 NOT TO SCALE



8 TYPICAL GROUND COVER PLANTING DETAIL
SD2.1 NOT TO SCALE



9 SINGLE-SIDED LONG TERM BICYCLE RACK
SD2.1 SCALE: 1/4" = 1'-0"

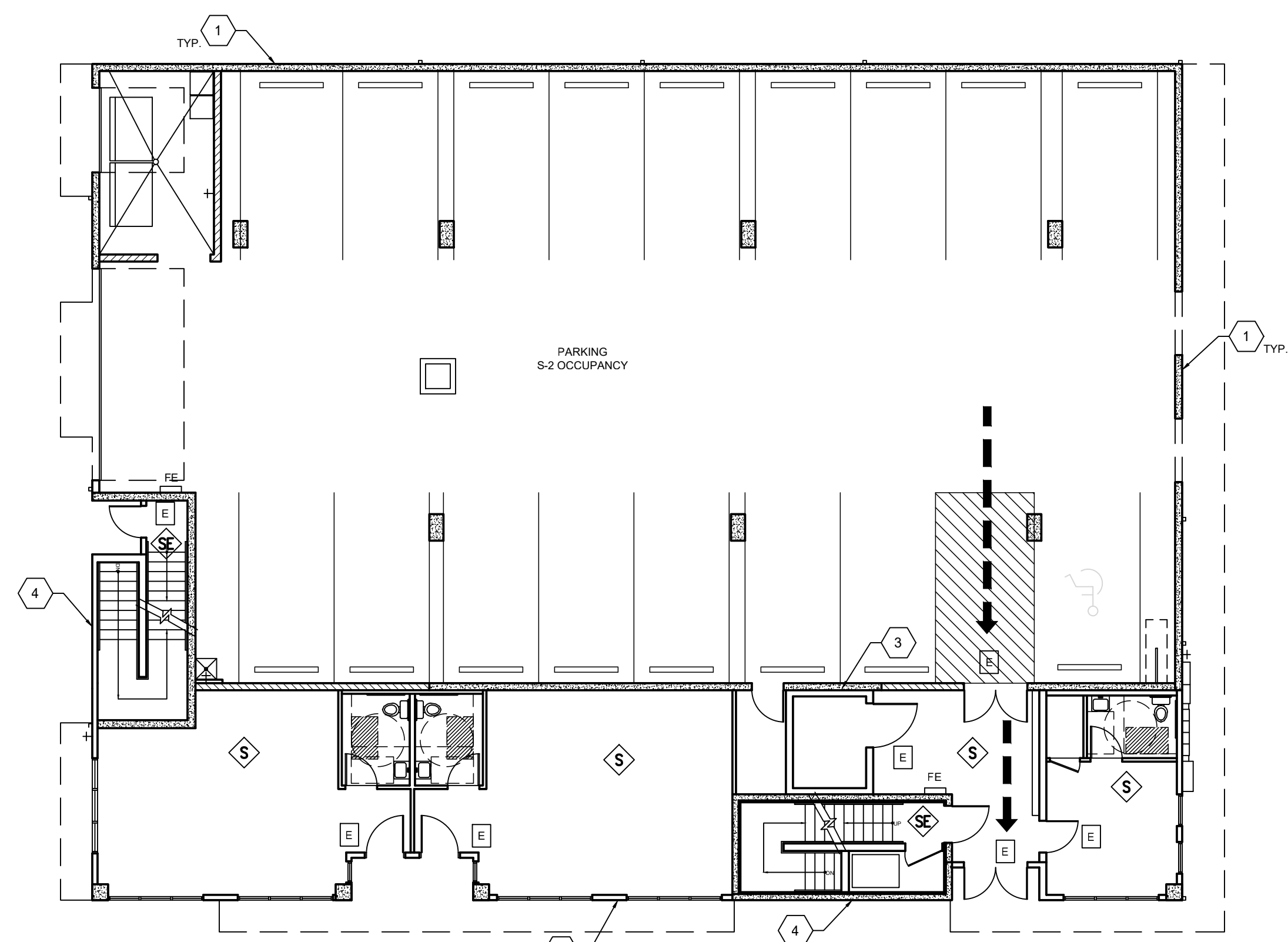


10 SHORT TERM BICYCLE RACK
SD2.1 NOT TO SCALE

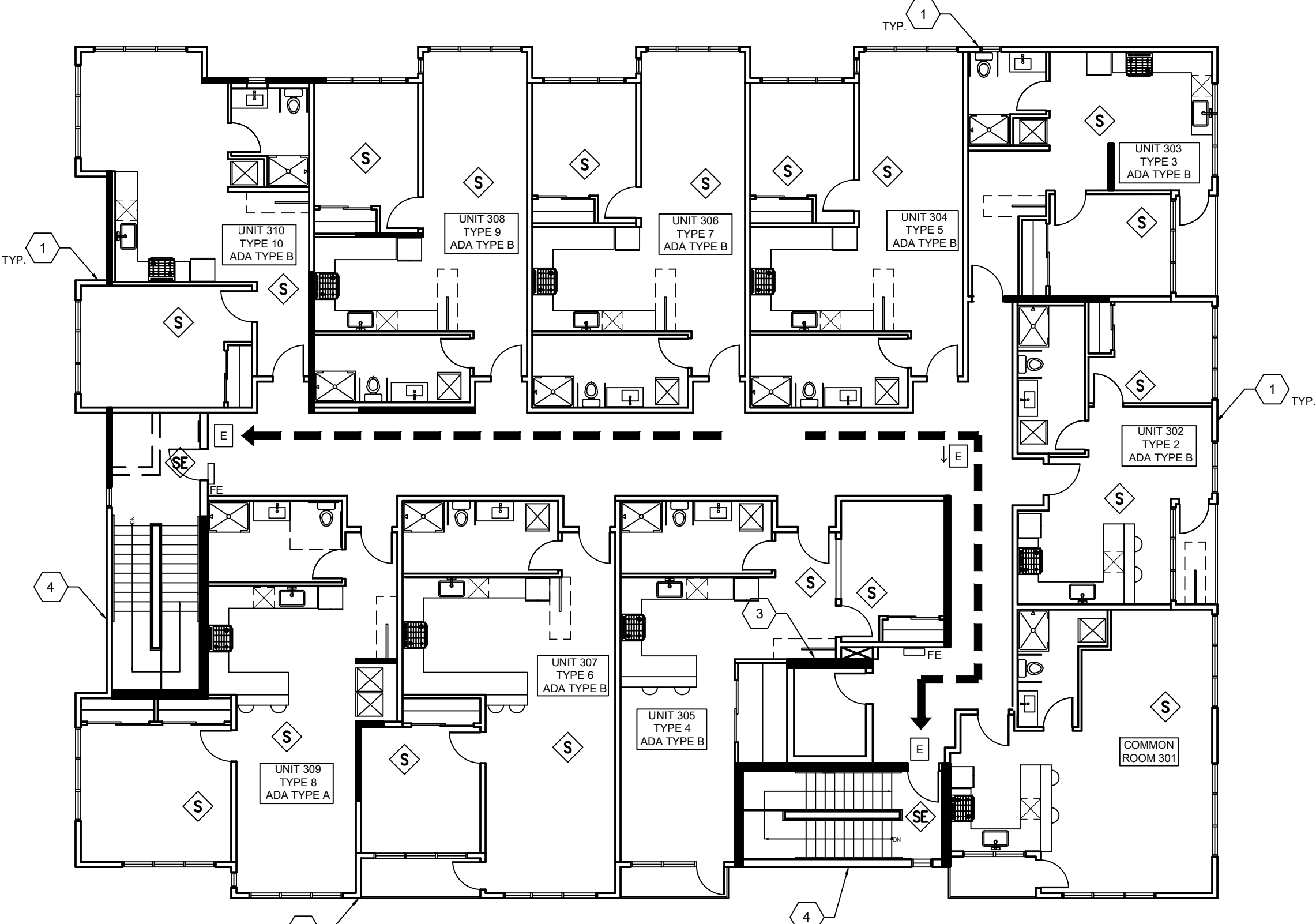
LONG-TERM BICYCLE PARKING LOCATIONS

- FIRST FLOOR (SHARED PARKING): 1
- SECOND FLOOR (INDIVIDUAL PARKING): 8
- THIRD FLOOR (INDIVIDUAL PARKING): 9

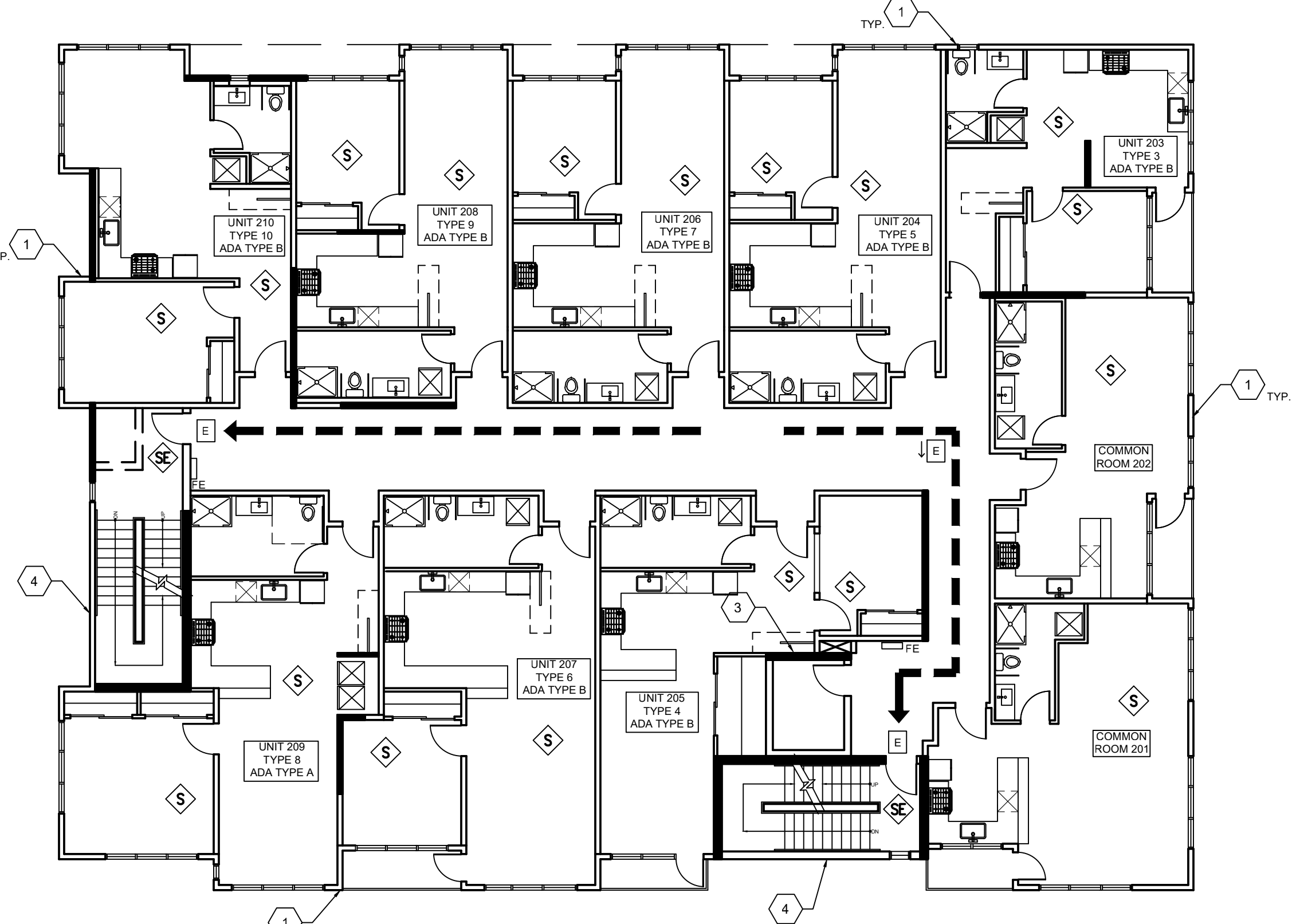
TOTAL LONG TERM BICYCLE PARKING: 19



TRUE NORTH
1 CODE SUMMARY FIRST FLOOR PLAN
 A0.1 SCALE: 3/32" = 1'-0"



TRUE NORTH
3 CODE SUMMARY THIRD FLOOR PLAN
 A0.1 SCALE: 3/32" = 1'-0"



TRUE NORTH
2 CODE SUMMARY SECOND FLOOR PLAN
 A0.1 SCALE: 3/32" = 1'-0"

CODE SUMMARY KEYNOTES

- 1** ONE-HOUR EXTERIOR WALL ASSEMBLY SEE DETAIL 3/5.1.
- 2** NOT USED
- 3** TWO-HOUR RATED ELEVATOR SHAFT SEE DETAIL 10/5.1.
- 4** TWO-HOUR RATED EXIT STAIR SEE DETAIL 8/5.1.

CODE SUMMARY LEGEND

- EGRESS PATH OF TRAVEL--MINIMUM WIDTH OF 36 INCHES
- EXIT SIGN. INSTALL IN ACCORDANCE WITH IBC SECTION 1011. VERIFY LOCATIONS WITH FIRE MARSHAL AND OWNER. SEE ELECTRICAL DRAWINGS. SEE REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION.
- SMOKE DETECTOR. HARDWIRED WITH BATTERY BACK-UP. ALARMS WITHIN SINGLE UNITS TO BE INTERCONNECTED TO ACTIVATE SIMULTANEOUSLY WHEN ONE IS ACTIVATED.
- STAIRWAY EXIT SIGNAGE AT EACH STAIRWAY AT EACH FLOOR. INDICATES UPPER AND LOWER TERMINUS OF STAIR AND IF THERE IS ROOF ACCESS.
- 2A-10BC FIRE EXTINGUISHER. MUST BE WITHIN 75 FEET OF TRAVEL DISTANCE THROUGHOUT. COORDINATE LOCATIONS WITH FIRE MARSHAL. SEE DETAIL 8/A5.3.



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- REVISIONS:
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CODE ANALYSIS	
CODE	2019 OSSC, 2019 OMSC, 2017 OESC, 2017 OPSC, 2019 OFC, 2017 NFPA 70, ICC/ANSI A117.1, CITY OF MILWAUKIE MUNICIPAL CODE
JURISDICTION	CITY OF MILWAUKIE
CONSTRUCTION TYPE: (IBC CHAPTER 6)	VA FULLY SPRINKLERED WITH STANDARD NFPA 13 SPRINKLER SYSTEM (SEPARATED PER TABLE 508.4)
OCCUPANCY: (IBC CHAPTER 3)	FIRST FLOOR: M, S-2 (PARKING) FLOORS 2 - 3: R-2
MAXIMUM ALLOWABLE HEIGHT (IBC TABLE 503)	
MAX. HEIGHT ALLOWED	50'-0"
MAX. STORIES ALLOWED	4 STORIES (INCLUDING SPRINKLER INCREASE)
MAX. HEIGHT PROPOSED	38'-0"
MAX. STORIES PROPOSED	3 STORIES
SPRINKLERS USED TO INCREASE HEIGHT AND STORIES	YES PER IBC SECTION 504.2

FIRE RESISTIVE REQUIREMENTS PER CONSTRUCTION TYPE: (IBC TABLE 601)	BUILDING ELEMENT	TYPE VA
	STRUCTURAL FRAME	1
	BEARING WALLS -- EXTERIOR	1 (SEE BELOW)
	BEARING WALLS -- INTERIOR	1
	NON-BEARING WALLS -- EXTERIOR	1 (SEE BELOW)
	NON-BEARING WALLS -- INTERIOR	0
	SHAFT ENCLOSURES	2-HOUR RATED (IBC 708.4)
	FLOORS AND FLOOR-CEILINGS	1
	ROOFS AND ROOF-CEILINGS	1
	STAIRWAY CONSTRUCTION	2-HOUR RATED (IBC 1022.1)
	PARAPETS	NOT REQUIRED PER IBC 705.11 EXCEPTION 1

EXTERIOR WALL PROTECTION BASE ON FIRE SEPARATION DISTANCE: (TABLE 602)		AREA OF OPENINGS: (TABLE 705.8)			
WALL LOCATION	DISTANCE TO PROPERTY LINE	FIRE RATING	% OF OPENING UN-PROTECTED	% OF OPENING PROTECTED	SEE AREA OF OPENINGS CHART
NORTH (FIRST FLOOR)	17'-0"	NO REQUIREMENT	75%	75%	
NORTH (UPPER FLOORS)	13'-0"	NO REQUIREMENT	45%	45%	
EAST	29'-0"	1-HOUR	UNLIMITED	UNLIMITED	
SOUTH	25'-0"	1-HOUR	UNLIMITED	UNLIMITED	
WEST 1ST FLOOR (WORST CASE)	2'-0"	1-HOUR	NOT PERMITTED	NOT PERMITTED	
WEST OTHER FLOORS (WORST CASE)	3'-0"	1-HOUR	15%	15%	
WEST (INSET WINDOWS)	5'-0"	1-HOUR	30%	30%	

NOTE: SEE SEPARATE TABLE FOR PROPOSED OPENINGS PER FLOOR

BUILDING OCCUPANCY CLASSIFICATIONS AND SEPARATIONS	
OCCUPANCY: (IBC CHAPTER 3)	(NON-SEPARATED PER 508.3.3) FLOORS 1: S-2, B FLOORS 2 - 3: R-2
OCCUPANCY SEPARATION RATINGS REQUIRED	
S-2	TO R-2 = 1 HOUR HORIZONTAL ASSEMBLY PER IBC 508.3.3 EXC 2, 420.2, 420.3, 709, AND 711
R-2	TO R-2 = 1 HOUR FIRE PARTITION PER IBC 508.3.3 EXC2, 420.2, 420.3, 708, AND 711
R-2	TO B = 1 HOUR FIRE PARTITION PER IBC 508.3.3 EXC2, 420.2, 420.3, 708, AND 711
S-2	TO B = 1 HOUR FIRE PARTITION PER IBC 420.2, 420.3, 708, AND 711

OCCUPANT LOAD BY FLOOR								
ROOM	USE	SF	SF/OCCUPANT TABLE 1004.1.1	OCCUPANTS	WIDTH CALCULATION: TABLE 1005.1	NO. EXITS REQ. TABLE 1015.1	WIDTH PROV.	EXITS PROV
LEVEL 1	S-2 PARKING	6,047	200	31	31 x 2 = 6.2"	2	--	3
	B BUSINESS	1,295	100	13	13 x 2 = 2.2"	1	36"	1
LEVEL 2	RESIDENTIAL	8,682	200	41	41 x 2 = 8.2"	2	72"	2
LEVEL 3	RESIDENTIAL	8,682	200	41	41 x 2 = 8.2"	2	72"	2
STAIRS	RESIDENTIAL			134/2=67	67 x 3 = 22" (44" MIN REQUIRED PER 1009.1)	2	48" EACH STAIR	2

ALLOWABLE AREA INCREASE: IBC 506	
ALLOWABLE AREAS AND AREA MODIFICATIONS	OCCUPANCY: R-2 (MOST RESTRICTIVE)
FRONTAGE INCREASE (I): 506.2 $I = 100(F/P) - 25$ (XW/30)(%)	
506.2 - FRONTAGE INCREASE (EQUATION 5.2) $I = 100 \left[\frac{F - 0.25 W}{P} \right] - 25$	I = AREA INCREASE DUE TO FRONTAGE F = BUILDING PERIMETER FRONTING ON PUBLIC WAY P = PERIMETER OF ENTIRE BUILDING (ft.) W = WIDTH OF PUBLIC WAY (ft.)
$I = 100 \left[\frac{182 - 0.25(200)}{364} \right] - 25$	
I = 100 (.25)1	
I = 25	

AREA MODIFICATION, ALLOWABLE AREA PER FLOOR (IBC 506.1) A + A (A+1/100)+(AxL/100)	
506.1 -- AREA INCREASE (EQUATION 5.2) $A = A + \left[\frac{A \times L}{100} \right] + \left[\frac{A \times L}{100} \right]$	A = ALLOWABLE AREA PER FLOOR A = ALLOWABLE AREA PER FLOOR PER TABLE 503 L = ALLOWABLE INCREASE FOR FRONTAGE L = AREA INCREASE FOR SPRINKLERS
$A = 12000 + \left[\frac{12000 \times 25}{100} \right] + \left[\frac{12000 \times 200}{100} \right]$	
A = 12000 + 3000 + 24000	
A = 39000	
AUTO SPRINKLER SYSTEM INCREASE (I) (%) IBC 506.2	YES -- 200%
TOTAL ALLOWABLE BUILDING AREA (A) X # OF FLOORS	39,000 SF X 3 = 117,00 SF TOTAL
ACTUAL BUILDING AREA	1ST FLOOR: 8,137 SF 2ND FLOOR: 8,682 SF 3RD FLOOR: 8,682 SF
	TOTAL: 25,501 SF

ENERGY CODE	
LIGHTING	SEE CALCULATIONS
MECHANICAL SYSTEMS	SEE CALCULATIONS
BUILDING ENVELOPE (ZONE 4C)	
EXTERIOR WALLS	R-13 + 7.5ci OR R-20 + R-3.8 ci
FURRING WALLS AT CONCRETE	R-13.3ci
ROOF	R-30 CONTINUOUS RIGID
ATTIC	R-49
FLOORS OVER UNCONDITIONED SPACE	R-30
CONCRETE FLOORS OVER UNCONDITIONED SPACE	R-12.5ci
UNHEATED SLAB	R-10 FOR 24"
HEATED SLAB	R-15 FOR 36" BELOW (PERIMETER INSULATION), R-5 FULL SLAB (SLAB INSULATION)
DOORS	OPAQUE SWINGING DOOR: U=0.37, <14% GLAZING GARAGE DOOR: U=0.31
GLAZING- FIXED	MAXIMUM U=0.38
GLAZING- OPERABLE	MAXIMUM U=0.45
GLAZING- ENTRANCE DOORS	MAXIMUM U=0.77
PF < 0.2 (NORTH)	MAXIMUM U=0.51
0.2 ≤ PF < 0.5 (NORTH)	MAXIMUM U=0.56
PF ≥ 0.5 (NORTH)	MAXIMUM U=0.61
PF < 0.2 (SEW)	MAXIMUM U=0.38
0.2 ≤ PF < 0.5 (SEW)	MAXIMUM U=0.46
PF ≥ 0.5 (SEW)	MAXIMUM U=0.61

OPEN WALL / LIGHT / AIR CALCUALTIONS									
UNIT TYPE	ADA TYPE	TOTAL LIVEABLE SF	NATURAL LIGHT REQ'D: 8% x TOTAL LIVEABLE AREA (SF)		NATURAL AIR REQ'D: 4% x TOTAL LIVEABLE AREA (SF)		NATURAL AIR THRU ADJ. RM. REQ'D: 8% x TOTAL LIVEABLE AREA (SF)		
			REQUIRED	PROVIDED	REQUIRED	PROVIDED	REQUIRED	PROVIDED	
2	B	280 SF LIVING AREA 111 SF BEDROOM	23 9	69.7 45.3	12 5	30.2 15.1	30	--	
3	B	310 SF LIVING AREA 98 SF BEDROOM	25 8	75.5 39	18 4	30.2 15.1	--	--	
4	B	423 SF LIVING AREA 120 SF BEDROOM (THROUGH ADJOINING SPACE)	34 10	41.6 41.6	17 5	30.2 --	-- 17	-- 41.6	
5	B	418 SF LIVING AREA 118 SF BEDROOM	34 10	45.3 45.3	17 5	30.2 15.1	--	--	
6	B	514 SF LIVING AREA 140 SF BEDROOM	42 12	45.3 45.3	21 6	30.2 15.1	--	--	
7	B	418 SF LIVING AREA 118 SF BEDROOM	34 10	45.3 45.3	17 5	30.2 15.1	--	--	
8	A	458 SF LIVING AREA 191 SF BEDROOM	37 16	45.3 90.6	19 8	30.2 30.2	--	--	
9	B	418 SF LIVING AREA 118 SF BEDROOM	34 10	45.3 45.3	17 5	30.2 15.1	--	--	
10	B	392 SF LIVING AREA 177 SF BEDROOM	32 15	90.6 45.3	16 8	30.2 15.1	--	--	

NOTE: PROVIDE SOUND TRANSMISSION CLASS OF NOT LESS THAN 50 PER IBC 1207 AT ALL WALLS AND CEILINGS SEPARATING DWELLING UNITS FROM OTHER UNITS AND FROM PUBLIC AREAS. PENETRATIONS OR OPENINGS IN CONSTRUCTION ASSEMBLIES SHALL BE SEALED, LINED, INSULATED, OR OTHERWISE TREATED TO MAINTAIN THE REQUIRED RATING. DWELLING UNIT ENTRANCE DOORS ARE NOT INCLUDED, BUT MUST BE TIGHT FITTING TO FRAME AND SILL.

AREA OF OPENINGS							
WALL LOCATIONS	WALL AREA	OPENINGS AREA PROTECTED	OPENINGS AREA UNPROTECTED	% OF WALL	% ALLOWED PROTECTED	% ALLOWED UNPROTECTED	MEETS CODES
NORTH - FIRST FLOOR	1027 SF	0 SF	19.5 SF	1.9%	75%	75%	YES
NORTH - SECOND FLOOR	820 SF	0 SF	281.2 SF	34.3%	45%	45%	YES
NORTH - THIRD FLOOR	820 SF	0 SF	281.2 SF	34.3%	45%	45%	YES
EAST - FIRST FLOOR	1339 SF	0 SF	384 SF	28.7%	UNLIMITED	UNLIMITED	YES
EAST - SECOND FLOOR	1100 SF	0 SF	309.3 SF	28.1%	UNLIMITED	UNLIMITED	YES
EAST - THIRD FLOOR	1100 SF	0 SF	309.3 SF	28.1%	UNLIMITED	UNLIMITED	YES
SOUTH - FIRST FLOOR	1027 SF	0 SF	65.4 SF	6.3%	UNLIMITED	UNLIMITED	YES
SOUTH - SECOND FLOOR	790 SF	0 SF	163.3 SF	20.6%	UNLIMITED	UNLIMITED	YES
SOUTH - THIRD FLOOR	790 SF	0 SF	163.3 SF	20.6%	UNLIMITED	UNLIMITED	YES
WEST - FIRST FLOOR	1339 SF	0 SF	0 SF	0%	NONE	NONE	YES
WEST - SECOND FLOOR	695 SF	97 SF	103.6 SF	28.8%	15%	15%	YES
WEST - 2ND FLOOR INSET	405 SF	0 SF	111.5 SF	27.5%	30%	30%	YES
WEST - THIRD FLOOR	695 SF	97 SF	103.6 SF	28.8%	15%	15%	YES
WEST - 3RD FLOOR INSET	405 SF	0 SF	111.5 SF	27.5%	30%	30%	YES

UNIT COUNT (FOR ALL FLOORS)				
TYPE	ADA TYPE	DESCRIPTION	AMOUNT	MARKET GROSS SF
2	B	1 BEDROOM, 1 BATH	1	516 SF
3	B	1 BEDROOM, 1 BATH	2	590 SF
4	B	1 BEDROOM, 1 BATH	2	745 SF
5	B	1 BEDROOM, 1 BATH	2	688 SF
6	B	1 BEDROOM, 1 BATH	2	665 SF
7	B	1 BEDROOM, 1 BATH	2	695 SF
8	A	1 BEDROOM, 1 BATH	2	829 SF
9	B	1 BEDROOM, 1 BATH	2	695 SF
10	B	1 BEDROOM, 1 BATH	2	721 SF
		TOTAL	18	

FLOOR	UNITS	AREA
FIRST	0	8,137 SF
SECOND	8	8,682 SF
THIRD	9	8,682 SF
TOTAL	21	25,501 SF

SEPARATE PERMITS - BY GENERAL CONTRACTOR

FIRE SPRINKLER. SEE A0.1
FIRE ALARM. SEE A0.1
EMERGENCY RESPONDER ENHANCEMENT SYSTEM (DAS). SEE A0.1
ELECTRICAL
PLUMBING
SIGN PERMIT

DEFERRED SUBMITTALS

BALCONY RAILING ATTACHED TO CONCRETE WALL

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REVISIONS:

- OWNER REVISION 04/28/20
- OWNER REVISION 05/25/20
- OWNER REVISION 08/21/20

BUILDING PERMIT:
DATE: April 16, 2020
SHEET NO.
A0.2
CODE SUMMARY

GENERAL NOTES:

DIVISION 1: GENERAL REQUIREMENTS

ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE CURRENT EDITION OF THE STATE OF OREGON 2014 STRUCTURAL SPECIALTY CODE BASED ON THE 2012 INTERNATIONAL BUILDING CODE AND APPLICABLE STATE AND FEDERAL SAFETY ORDERS, INTERNATIONAL FIRE CODE, ANSI 117.1 ADA ACCESSIBILITY REQUIREMENTS, AND LOCAL ENERGY CODES. ALL REFERENCES TO CODES, SPECIFICATIONS AND STANDARDS SHALL MEAN AND ARE INTENDED TO BE THE LATEST EDITION, AMENDMENT, AND/OR REVISION OF SUCH REFERENCE STANDARD IN EFFECT.

THE CONTRACTOR SHALL VERIFY AND CONFIRM ALL DIMENSIONS AND CONDITIONS SHOWN OR IMPLIED ON THE DRAWINGS AND GENERAL NOTES, AS WELL AS THE EXISTING PHYSICAL CONDITIONS OF THE BUILDING AND SITE. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS.

CONTRACTOR SHALL DETERMINE THE EFFECT OF CONSTRUCTION ACTIVITY BY OWNER'S PERSONNEL AND OTHER CONTRACTORS. ADDITIONAL COMPENSATION WILL NOT BE GIVEN FOR DELAYS CAUSED BY OTHER CONTRACTORS AND OWNER'S PERSONNEL WORKING AT THE SITE. VERIFY THAT EQUIPMENT AND FIXTURES ARE COMPATIBLE WITH EXISTING UTILITY SYSTEMS. VERIFY THAT SYSTEMS, FIXTURES, AND EQUIPMENT WILL FIT IN THE SPACE PROVIDED. RESOLVE SPACE CONFLICTS WITH ARCHITECT/ENGINEER PRIOR TO ROUGH-IN.

PATCH AND REPAIR ALL EXISTING WORK DAMAGED BY NEW WORK TO EXISTING CONDITION OR NEW CONDITION, WHICHEVER IS MOST APPROPRIATE. REPLACE ALL EXISTING SLABS AND PAVING REMOVED FOR NEW CONSTRUCTION.

PROVIDE AND MAINTAIN TEMPORARY FACILITIES AND CONTROLS REQUIRED FOR PROPER PERFORMANCE OF THE WORK -- COORDINATE WITH OWNER:
A. TEMPORARY UTILITIES SUCH AS WATER, ELECTRICITY, TELEPHONE AND FAX;
B. FIELD OFFICES AND SHEDS;
C. SANITARY FACILITIES;
D. ENCLOSURES SUCH AS TARPULINS, BARRICADES, AND CANOPIES;
E. ENVIRONMENTAL CONTROLS, SUCH AS DUST, DEWATERING, WEATHER AND FIRE PROTECTION.

MAINTENANCE AND REMOVAL: MAINTAIN ALL TEMPORARY FACILITIES AND CONTROLS AS LONG AS NEEDED FOR THE SAFE AND PROPER COMPLETION OF THE WORK. REMOVE ALL TEMPORARY FACILITIES AND CONTROLS AS RAPIDLY AS PROGRESS OF THE WORK WILL PERMIT.

CONTRACTOR SHALL KEEP THE AREA OF WORK FREE OF GARBAGE AND DEBRIS ON A DAILY BASIS. UPON COMPLETION OF WORK THE CONTRACTOR SHALL THOROUGHLY CLEAN THE PREMISES AND WASH THE INSIDE OF ALL WINDOWS SO THAT THE SPACE IS READY FOR TENANT OCCUPANCY.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE CERTAIN THAT ALL EQUIPMENT, PRODUCTS AND MATERIALS SELECTED BY CONTRACTOR, OR FOR CONTRACTOR BY THEIR SUBCONTRACTORS OR MATERIALS SUPPLIERS, CONFORM TO REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. APPROVAL OF MANUFACTURER DOES NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING MATERIALS AND EQUIPMENT WHICH COMPLY WITH CONTRACT DOCUMENTS.

PRODUCTS USED IN THE WORK SHALL BE PRODUCED BY MANUFACTURERS REGULARLY ENGAGED IN MANUFACTURE OF SIMILAR ITEMS, WITH A HISTORY OF SUCCESSFUL PRODUCTION ACCEPTABLE TO ARCHITECT/ENGINEER.

USE ADEQUATE NUMBERS OF SKILLED WORKERS WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.

DELIVER THE WORK TO THE JOB SITE IN SUCH QUANTITIES AND AT SUCH TIMES TO ASSURE THE CONTINUITY OF THE INSTALLATION. STORE UNITS AT THE JOB SITE IN A MANNER TO PREVENT PHYSICAL DAMAGE, AND IN A MANNER TO KEEP ALL MARKINGS VISIBLE.

USE ALL MEANS NECESSARY TO PROTECT THE MATERIALS BEFORE, DURING AND AFTER INSTALLATION AND TO PROTECT THE WORK AND MATERIALS OF ALL OTHER TRADES.

ALL WORK LISTED, SHOWN OR IMPLIED ON ANY CONSTRUCTION DOCUMENT SHALL BE SUPPLIED AND INSTALLED BY THE GENERAL CONTRACTOR EXCEPT UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR SHALL CLOSELY COORDINATE ALL WORK TO ASSURE THAT ALL SCHEDULES ARE MET AND THAT ALL WORK IS COMPLETED IN CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS.

MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED, AND CONDITIONED AS DIRECTED BY THE RESPECTIVE MANUFACTURERS, UNLESS OTHERWISE SPECIFIED.

WHEN PRODUCT DATA IS REQUIRED BY A DIVISION IN THE GENERAL NOTES, SUBMIT MANUFACTURER'S CATALOG SHEETS, BROCHURES, DIAGRAMS, SCHEDULES, PERFORMANCE CHARTS, ILLUSTRATIONS, AND OTHER DESCRIPTIVE DATA ON MANUFACTURED PRODUCTS AND SYSTEMS. CLEARLY INDICATE ON PRODUCT DATA LITERATURE WHICH INFORMATION IS PERTINENT TO THE SUBMITTAL. SUBMIT SIX COPIES OF PUBLISHED PRODUCT DATA SHEETS.

WHEN SHOP DRAWINGS ARE REQUIRED BY A DIVISION IN THE GENERAL NOTES, SUBMIT SHOP DRAWINGS SHOWING SHOP ASSEMBLY, FIELD MEASUREMENTS, CONNECTIONS, DETAILS, DIMENSIONS, FINISHES, AND FASTENERS. PROVIDE SHOP DRAWINGS TO A SCALE LARGE ENOUGH TO INDICATE PROFILES AND CONNECTIONS TO OTHER WORK. SUBMIT SIX COPIES OF SHOP DRAWINGS.

WHEN PRODUCT SAMPLES ARE REQUIRED BY A DIVISION IN THE GENERAL NOTES, SUBMIT PRODUCT SAMPLES OF SUFFICIENT SIZE TO CLEARLY ILLUSTRATE CHARACTERISTICS OF PRODUCTS AND SYSTEMS. SUBMIT ACCURATE COLOR, PATTERN, AND TEXTURE SAMPLES OF SPECIFIED PRODUCTS. SUBMIT THREE SAMPLES.

WHEN DESIGN DATA IS REQUIRED BY A DIVISION IN THE GENERAL NOTES, SUBMIT DESIGN DRAWINGS AND CALCULATIONS FOR EQUIPMENT AND SYSTEMS DESIGNED BY SUBCONTRACTORS. OBTAIN APPROVAL OF SUBCONTRACTOR DESIGNED EQUIPMENT AND SYSTEMS BY LOCAL BUILDING OFFICIALS PRIOR TO START OF CONSTRUCTION OF SUBCONTRACTOR DESIGNED EQUIPMENT AND SYSTEMS. SUBMIT DESIGN DRAWINGS AND CALCULATIONS BEARING THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE STATE OF OREGON. SUBMIT THREE OPAQUE PRINTS OF ALL SUBMITTALS AND ONE REPRODUCIBLE TRANSPARENT COPY OF SUBMITTALS LARGER THAN 8-1/2 BY 11 INCHES.

WHEN PRODUCTS AND SYSTEMS ARE TO BE FABRICATED AND INSTALLED AT THE SITE, SUBMIT FOUR COPIES OF THE MANUFACTURER'S FABRICATION AND INSTALLATION INSTRUCTIONS FOR EACH PRODUCT AND SYSTEM TO THE ARCHITECT/ENGINEER AND KEEP ONE COPY AT THE SITE WITH PROJECT RECORD DOCUMENTS.

REVIEW SUBMITTALS PRIOR TO SUBMITTING TO ARCHITECT/ENGINEER AND VERIFY THAT SUBMITTAL CONFORMS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. REVIEW FIELD MEASUREMENTS AND FIELD CONDITIONS. DELIVER SUBMITTALS WITH REVIEW STAMP AND SIGNATURE OF CONTRACTOR. INCLUDE WITH EACH SUBMITTAL WRITTEN NOTIFICATION TO ARCHITECT/ENGINEER WHEN SUBMITTAL INCLUDES DEVIATION FROM REQUIREMENTS OF CONTRACT DOCUMENTS. IMMEDIATELY INCORPORATE CORRECTIONS IN SUBMITTALS AND RESUBMIT SUBMITTALS FOR FURTHER REVIEW WHEN REQUESTED BY ARCHITECT/ENGINEER.

ARCHITECT/ENGINEER WILL REVIEW SUBMITTALS FOR CONFORMANCE WITH INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS. CONTRACTOR'S RESPONSIBILITY FOR DEVIATION IN SUBMITTALS FROM CONTRACT DOCUMENTS IS NOT RELIEVED BY ARCHITECT/ENGINEER'S REVIEW OF SUBMITTALS, UNLESS ARCHITECT/ENGINEER GIVES WRITTEN ACCEPTANCE OF SPECIFIC DEVIATIONS.

CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. HE SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY IF HE CHOOSES AN OPTION AND HE SHALL COORDINATE ALL DETAILS.

WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, AND GENERAL NOTES, THE GREATER REQUIREMENTS SHALL GOVERN.

ALL SUBSTITUTIONS SHALL BE SUBMITTED TO AND APPROVED BY A/E PRIOR TO IMPLEMENTATION.

THE CONTRACTOR SHALL WARRANT ALL PARTS, LABOR, EQUIPMENT AND MATERIALS PROVIDED UNDER THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR, UPON COMPLETION OF CONTRACT.

DIVISION 2: SITE WORK
SEE CIVIL DRAWINGS BY AAI ENGINEERING.

DIVISION 3: CONCRETE
SEE STRUCTURAL DRAWINGS BY ALLSTRUCTURE ENGINEERING.

DIVISION 5: METALS
SEE STRUCTURAL DRAWINGS BY ALLSTRUCTURE ENGINEERING.

DIVISION 6: WOOD AND PLASTICS

SEE STRUCTURAL DRAWINGS BY ALLSTRUCTURE ENGINEERING

CABINET WORK: PROVIDE CABINET WORK OF STANDARD MANUFACTURERS IN LOCATIONS AS INDICATED ON PLANS WITH ALL TRIMS REQUIRED TO AFFECT A NEAT AND COMPLETE INSTALLATION. PROVIDE SEPARATE TOPS FOR ALL BASE CABINETS OF 1/16 INCH PLASTIC LAMINATE IN SOLID COLORS OVER PARTICLE BOARD SUBSTRATE. PROVIDE 4" BACKSPLASH.

CABINETS AND COUNTERTOPS: CABINETS SHALL HAVE EUROPEAN STYLE HINGES OF GOOD QUALITY AND CHROME WIRE PULLS. INTERIOR OF CABINET SHALL BE CONSTRUCTED OF MELAMINE, COLOR TO BE COORDINATED TO EXTERIOR OF CABINET. COUNTERTOPS, FRONTS, AND SIDES SHALL HAVE PLASTIC LAMINATE. COLOR TO BE SELECTED BY OWNER. COUNTER TOPS SHALL HAVE A SQUARE FRONT EDGE WITH A 4" SPLASH. ARCHITECTURAL MILLWORK AND CABINETRY SHALL BE OF A CONSTRUCTION QUALITY EQUAL TO THAT OF THE ARCHITECTURAL WOODWORK INSTITUTE (AWI). SUBMIT SHOP DRAWINGS FOR A/E REVIEW. SITE FABRICATED COUNTERS AND CABINETRY SHALL BE AS PER OWNERS REQUIREMENTS -- COORDINATE WITH OWNER.

MILLWORK: ARCHITECTURAL MILLWORK AND CABINETRY SHALL BE OF A CONSTRUCTION QUALITY EQUAL TO THAT OF THE ARCHITECTURAL WOODWORK INSTITUTE (AWI) CUSTOM GRADE. HINGES SHALL BE WRAPAROUND FIVE KNUCKLE TYPE. DOOR GUIDES SHALL BE 150 POUND CLASS. SUBMIT SHOP DRAWINGS FOR A/E REVIEW.

DIVISION 7: THERMAL AND MOISTURE PROTECTION

THERMAL INSULATION: R-21 BATT INSULATION WITH KRAFT BACKING AT EXTERIOR. R-20 RIGID INSULATION AT ROOF, R-30 BATT INSULATION BETWEEN PARKING AND SECOND FLOOR. R-15 FURRING WALLS AT CONCRETE. R-7.5 FOR 48" AT SLAB. INSULATION TO HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 450.

SOUND INSULATION: 3 1/2" SOUND ATTENUATION INSULATION AT ALL BEDROOMS, TOILET ROOMS AND AS NOTED ON PLANS.

PROVIDE SEALANT FOR THE FOLLOWING LOCATION AS FOLLOWS: INTERIOR FLOOR, EXTERIOR CONCRETE SLAB JOINTS: ASTM C 920, CLASS 25, GRADE P, SELF LEVELING, POLYURETHANE, PLUS OR MINUS 25% MOVEMENT RANGE.

EXTERIOR WALL AND FLASHING JOINTS: ASTM C 920, CLASS 25, GRADE NS, NON-SAG, POLYURETHANE, PLUS OR MINUS 25% MOVEMENT RANGE.

EXTERIOR JOINTS WHERE MOVEMENT EXCEEDS 25%: ASTM C 920, CLASS 25, GRADE NS, NON-SAG, POLYURETHANE OR SILICONE, PLUS OR MINUS 50% MOVEMENT RANGE.

EXTERIOR WALL AND FLASHING JOINTS: ASTM C 920, CLASS 25, GRADE NS, NON-SAG, LOW MODULUS NEUTRAL CURE SILICONE, +100 TO -50% JOINT MOVEMENT RANGE.

EXTERIOR WALL AND FLASHING JOINTS: ASTM C 920, CLASS 25, GRADE NS, NON-SAG, SILICONE WITH ACETOXY OR NEUTRAL CURE, PLUS OR MINUS 25 TO 50% JOINT MOVEMENT RANGE.

INTERIOR JOINTS & PLUMBING FIXTURES: ASTM C 920, CLASS 25, GRADE NS, NON-SAG, MILDEW RESISTANT SILICONE, PLUS OR MINUS 25% MOVEMENT RANGE.

EXTERIOR CONCEALED JOINTS: AAMA 808.3, BUTYL RUBBER, PLUS OR MINUS 5% MOVEMENT RANGE.

PERIMETER AND PENETRATIONS OF ACOUSTICAL WALL & CEILING ASSEMBLIES: ASTM C 919, NON-HARDENING POLYISOBUTYLENE RUBBER, BUTYL RUBBER, CLOSED CELL POLYVINYL CHLORIDE OR OPEN CELL POLYURETHANE FOAM MEETING ASTM D 7543 WITH ADHESIVE ON ONE OR BOTH SIDES.

INTERIOR CONCEALED JOINTS: AAMA 809.2, NON-SKINNING POLYISOBUTYLENE RUBBER, PLUS OR MINUS 5% MOVEMENT RANGE.

SMALL EXPOSED JOINTS LESS THAN 1/8" WIDE: AAMA 803.3, NON-SAG OR SELF LEVELING ACRYLIC, PLUS OR MINUS 5% MOVEMENT RANGE.

JOINTS BETWEEN ADJACENT ROOF PANELS AND BEHIND FLASHING: ASTM D1056, CLOSED CELL NEOPRENE OR POLYVINYL CHLORIDE FOAM.

PERIMETER OF DOOR AND WINDOW FRAMES TO FILL OPENINGS: COMPRESSED POLYURETHANE FOAM.

FLASHING & SHEET METAL: COIL COATED STEEL SHEET, ASTM A 446, GRADE A, 33,000 PSI, 24 GAGE, G90 GALVANIZED IN ACCORDANCE WITH ASTM A 525, MANUFACTURER'S STANDARD PRIME FINISH. SUBMIT SHOP DRAWINGS.

STEEL ROOF ACCESS HATCHES: GALVANIZED AND PRIMED STEEL WITH BOTTOM FLANGE, WALL COUNTER FLASHING, LINED AND INSULATED LID, PIVOT HINGES, PADLOCK HASPS, HANDLES, SPRING LATCH, SPRING OPERATORS, HOLD OPEN, AND AIR GASKET. SUBMIT PRODUCT DATA AND SHOP DRAWINGS. ACCEPTABLE MANUFACTURERS: DUR-RED BILCO, MILCOR.

MOISTURE CONTROL: ONE-PERM MINIMUM VAPOR RETARDER TO BE INSTALLED ON WARM SIDE (IN WINTER) OF ALL EXTERIOR FLOORS, WALLS, AND CEILINGS.

WATER-RESISTIVE BARRIER: PROVIDE ON EXTERIOR WALLS UNDER EXTERIOR CLADDING. REFERRED TO AS WEATHERPROOFING OR WRB ON DRAWINGS. ACCEPTABLE MANUFACTURERS: VAPROSHIELD WRAPSMART, TRI-BUILT BUILDING WRAP C OR BUILDING WRAP PLUS, OR FORTIFIBER WEATHERSMART COMMERCIAL.

AIR LEAKAGE: ALL PENETRATIONS IN BUILDING ENVELOPE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED, OR OTHERWISE SEALED TO LIMIT INFILTRATION AND EXFILTRATION IN ACCORDANCE WITH APPLICABLE ENERGY CODES.

ALL BUILDING ASSEMBLIES USED AS DUCTS OR PLENUMS SHALL BE SEALED, CAULKED AND GASKETED TO LIMIT AIR LEAKAGE.

ALL DOORS AND OPERABLE GLAZING THAT SEPARATES CONDITIONED FROM UNCONDITIONED SPACES SHALL BE WEATHERSTRIPPED.

ALL EXTERIOR FIXED WINDOWS AND SASH IN OPERABLE WINDOWS SHALL BE TIGHT FITTING WITH GLASS RETAINED IN STOPS WITH A CONTINUOUS AIR SEAL (EXCEPT OPENINGS REQUIRED TO BE FIRE RESISTANT).

ALL EXTERIOR JOINTS AND OPENINGS SHALL BE SEALED IN A MANNER APPROVED BY THE BUILDING OFFICIAL.

SEE DETAILS.

DIVISION 8: DOORS AND WINDOWS

HOLLOW METAL DOOR FRAMES AND RELITE FRAMES: KNOCK-DOWN SPLIT TYPE, 18 GAGE ROLLED STEEL, TIMELY. MANUFACTURER'S STANDARD FINISH SELECTED BY ARCHITECT.

WOOD DOORS: QUALITY STANDARD OF THE ARCHITECTURAL WOODWORK INSTITUTE (AWI) IS, BY REFERENCE, PART OF THE DOCUMENT. 1 3/4" SOLID CORE PARTICLE BOARD (MINERAL FOR 1 HOUR DOORS) W/ BONDED EDGES, SPLIT MATCHED GRADE B ROTARY CUT NATURAL BIRCH DOOR EDGES OF MATCHING SPECIE. WATERPROOF ADHESIVE WITH CLEAR PROTECTIVE FINISH.

STANDARD STEEL DOORS, RELITES AND FRAMES: SD1 100 GRADE III, 16 GAGE STEEL, THERMAL INSULATION DOOR CORE, SEAMLESS DOOR AND RELITE EDGES, WELDED FRAME CORNERS, G60 GALVANIZED BONDERIZED, AND PRIMED. FIRE RATING AS INDICATED IN DOOR SCHEDULE. SUBMIT PRODUCT DATA AND SHOP DRAWINGS FOR DOORS, RELITES AND FRAMES.

DOOR HARDWARE: LEVER-ACTION LOCKSETS AND LATCHSETS WITH BRUSHED CHROME FINISH UNLESS NOTED OTHERWISE. HARDWARE FUNCTIONS AS NOTED ON DOOR SCHEDULE -- COORDINATE WITH OWNER. ALL HARDWARE SHALL MEET ADA ACCESSIBILITY REQUIREMENTS. ACCEPTABLE MANUFACTURER: SCHLAGE.

MECHANICAL LOCKSET: HEAVY-DUTY MORTISE LOCK HOUSING CONFORMING TO ANSI 156.2 GRADE 1, ADA COMPLIANT LEVERS, DEAD BOLT, TWO-PIECE ANTI-FRICTION LATCH, KEY OVERRIDE, LOCKOUT, PASSAGE. UNICAN 8100 SERIES.

GLASS AND GLAZING: ALL GLASS TO CONFORM TO LATEST EDITION OF THE INTERNATIONAL BUILDING CODE, CHAPTER 54. GLAZING IN ACCORDANCE WITH FGMA, AAMA, AND SIGMA RECOMMENDATIONS.

TEMPERED GLASS: PROVIDE TEMPERED GLAZING IN DOORS, ENTRANCES, OR OTHER TRAFFIC AREAS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. PROVIDE A LABEL ON EACH PIECE SHOWING COMPLIANCE. TEMPERED GLASS SHALL BE DD-G-1403, KIND FT, CONDITION A, TYPE I, CLASS I, QUARTER INCH THICK.

PLATE OR FLOAT GLASS IN ACCORDANCE WITH FEDERAL SPECIFICATION DD-G-451, TYPE I, CLASS I, QUALITY Q3.

INSULATED ALUMINUM WINDOWS AT FIRST FLOOR: CLEAR ANODIZED ALUMINUM FINISH, MAXIMUM U VALUE = 0.40, SEALED INSULATED, GLASS MINIMUM THICKNESS 1/8", MINIMUM PANEL WIDTH 1/2", AND GLASS TYPE CLEAR. ACCEPTABLE SYSTEM MILGARD BY CONAIR.

INSULATED VINYL WINDOWS AT SECOND, THIRD AND FOURTH FLOORS: VINYL, MAXIMUM U VALUE = 0.40, SEALED INSULATED, GLASS MINIMUM THICKNESS 1/8", MINIMUM PANEL WIDTH 1/2", AND GLASS TYPE CLEAR. FOURTH FLOOR SYSTEM TO BE ANDERSON 100 SERIES.

PREPARATION AND GLAZING SHALL CONFORM TO APPLICABLE RECOMMENDATIONS IN THE FGMA GLAZING MANUAL AND GLAZING, SEALING SYSTEMS MANUAL.

DIVISION 9: FINISHES

GYPSUM BOARD: COMPLY WITH ASTM C-36. PROVIDE WATER RESISTANT "GREEN BOARD" AT PLUMBING WALLS. INSTALL IN ACCORDANCE WITH ASTM C-840. PROVIDE LIGHT ORANGE PEEL FINISH AT FLOORS 1-3. PROVIDE SMOOTH FINISH AT FOURTH FLOOR.

RESILIENT FLOORING: PROVIDE RESILIENT FLOORING MATERIALS IN LOCATIONS AS INDICATED ON PLANS. PREPARE SUBFLOOR AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SHEET VINYL FLOORING SHALL CONFORM TO ASTM F1303, TYPE 2, GRADE 1, WITH A MINIMUM WEAR LAYER THICKNESS OF .05 INCH. PRODUCT AND COLOR TO BE SELECTED BY A/E.

RUBBER BASE: PROVIDE ALL RUBBER BASE IN CONTINUOUS ROLLS. AT VCT OR RESILIENT FLOOR AREAS: 4" TOP SET RUBBER BASE. TOILET ROOMS: 6" TOP SET RUBBER BASE. AT CARPETED AREAS: 4" TOP SET RUBBER BASE. ACCEPTABLE MANUFACTURER & PRODUCT: FLEXCO WALLFLOWERS, COLOR TO BE SELECTED BY A/E.

CARPET: PROVIDE 28 OUNCE NYLON LOOP CARPET FOR DIRECT GLUE-DOWN APPLICATION. PROVIDE MISCELLANEOUS REDUCER STRIPS, CARPET TAPE, ETC. FOR COMPLETE INSTALLATION. PRODUCT TO BE SELECTED BY A/E.

PAINT: INTERIOR: WALLS: ONE COAT LATEX OR PVA GYPSUM PRIMER AND TWO COATS AKLYD EGGSHELL ENAMEL. EXISTING WALLS: GYPSUM PRIMER TOUCH-UP AND TWO COATS 100 PERCENT ACRYLIC LATEX EGGSHELL OR SATIN ENAMEL. TOILET ROOM WALLS: ONE COAT LATEX GYPSUM PRIMER AND TWO COATS WATER-BASED CATALYZED EPOXY SEMIGLOSS ENAMEL. PAINTED DOORS: PRIME AND TWO COATS SATIN ENAMEL.

EXTERIOR: STEEL HANDRAILS & GUARDRAILS (EXTERIOR): ONE COAT ALKYD STEEL PRIMER AND TWO COATS 100% ACRYLIC LATEX SEMI GLOSS ENAMEL. SEE FINISH SCHEDULE. CONCRETE MASONRY UNITS: CLEAR COAT BY THUROCOAT

MANUFACTURERS ACCEPTABLE FOR PAINT: MILLER, RODDA, BENJAMIN MOORE, PRATT & LAMBERT. APPLY ALL PAINTS IN STRICT ACCORDANCE WITH MANUFACTURER'S CAN LABEL REGARDING COVERAGE, THINNING AND DRYING TIMES.

ALL WORK SHALL BE IN ACCORDANCE WITH PERTINENT RECOMMENDATIONS OF THE PAINTING SPECIFICATION MANUAL FOR THE PACIFIC NORTHWEST AS PUBLISHED BY THE PAINTING AND DECORATING CONTRACTORS OF AMERICA.

CASE WORK: ACCEPTABLE MANUFACTURERS & PRODUCTS: PIONITE, FORMICA LAMINATE

SEE INTERIOR DRAWINGS BY OTHERS FOR FOURTH FLOOR CABINETRY DETAILS AND FINISH SPECIFICATIONS.

DIVISION 10: SPECIALTIES

TOILET ROOM ACCESSORIES: VERIFY WITH OWNER

DIVISION 13: SPECIAL CONSTRUCTION

PROVIDE SMOKE/FIRE DETECTORS PER FIRE MARSHAL REQUIREMENTS, INTERNATIONAL BUILDING CODE, AND THE INTERNATIONAL FIRE CODE. SEE CODE SHEETS A0.1 AND A0.2

DIVISION 15: MECHANICAL

MECHANICAL: SEE MECHANICAL DRAWINGS AND SPECIFICATIONS BY MEP CONSULTING. ALL WORK SHALL BE DESIGNED IN ACCORDANCE WITH LOCAL MECHANICAL CODE, STATE OF OREGON AND LOCAL JURISDICTION REQUIREMENTS.

PROVIDE PORTABLE AIR CONDITIONING UNITS AND PORTS AT ALL APARTMENT UNITS.

SPRINKLERS: SEE SPRINKLER DRAWINGS AND SPECIFICATIONS. BY SEPARATE PERMIT. ALL WORK SHALL BE DESIGNED IN ACCORDANCE WITH, AND TO BE ACCEPTED BY, THE INSURANCE SERVICES OFFICE OF OREGON AND FIRE MARSHAL STATE OF OREGON, HEREAFTER REFERRED TO AS GOVERNING AGENCY, AND DESIGNED TO COMPLY WITH THE LATEST ISSUE OF NFPA PAMPHLET #13.

PLUMBING FIXTURES: SEE PLUMBING DRAWINGS AND SPECIFICATIONS BY CPCD. ALL WORK SHALL CONFORM TO ADA ACCESSIBILITY REQUIREMENTS, AND LOCAL BUILDING AND PLUMBING CODES. ACCEPTABLE MANUFACTURER: AMERICAN STANDARD.

PROVIDE A/E WITH ALL MECHANICAL, SPRINKLER AND PLUMBING DRAWINGS FOR REVIEW PRIOR TO ORDERING OF MATERIALS OR START OF CONSTRUCTION.

DIVISION 16: ELECTRICAL/LIGHTING

SEE ELECTRICAL/LIGHTING DRAWINGS AND SPECIFICATIONS BY EVANS ENGINEERING. ALL WORK SHALL BE DESIGNED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, STATE OF OREGON AND LOCAL JURISDICTION REQUIREMENTS. ALL LIGHTING SHALL MEET ENERGY CODE REQUIREMENTS.

POWER REQUIREMENTS: COORDINATE REQUIREMENTS WITH OWNER. FIELD VERIFY EXISTING REQUIREMENTS.

EXIT SIGNS AND ILLUMINATION SHALL BE IN ACCORDANCE WITH IBC SECTIONS 1003.2.7, 1003.2.8, AND 1003.2.9.

FIRE ALARM COMMUNICATION DEVICES SHALL BE INSTALLED IN CONFORMANCE WITH THE OREGON STATE BUILDING AND LIFE SAFETY CODES.

PROVIDE A/E WITH ALL ELECTRICAL/LIGHTING DRAWINGS FOR REVIEW PRIOR TO ORDERING OF MATERIALS OR START OF CONSTRUCTION.

REFLECTED CEILING PLANS AND ELECTRICAL DRAWINGS BY A/E PROVIDED FOR DESIGN INTENT ONLY.

PROVIDE SECURITY CAMERAS PER OWNER.

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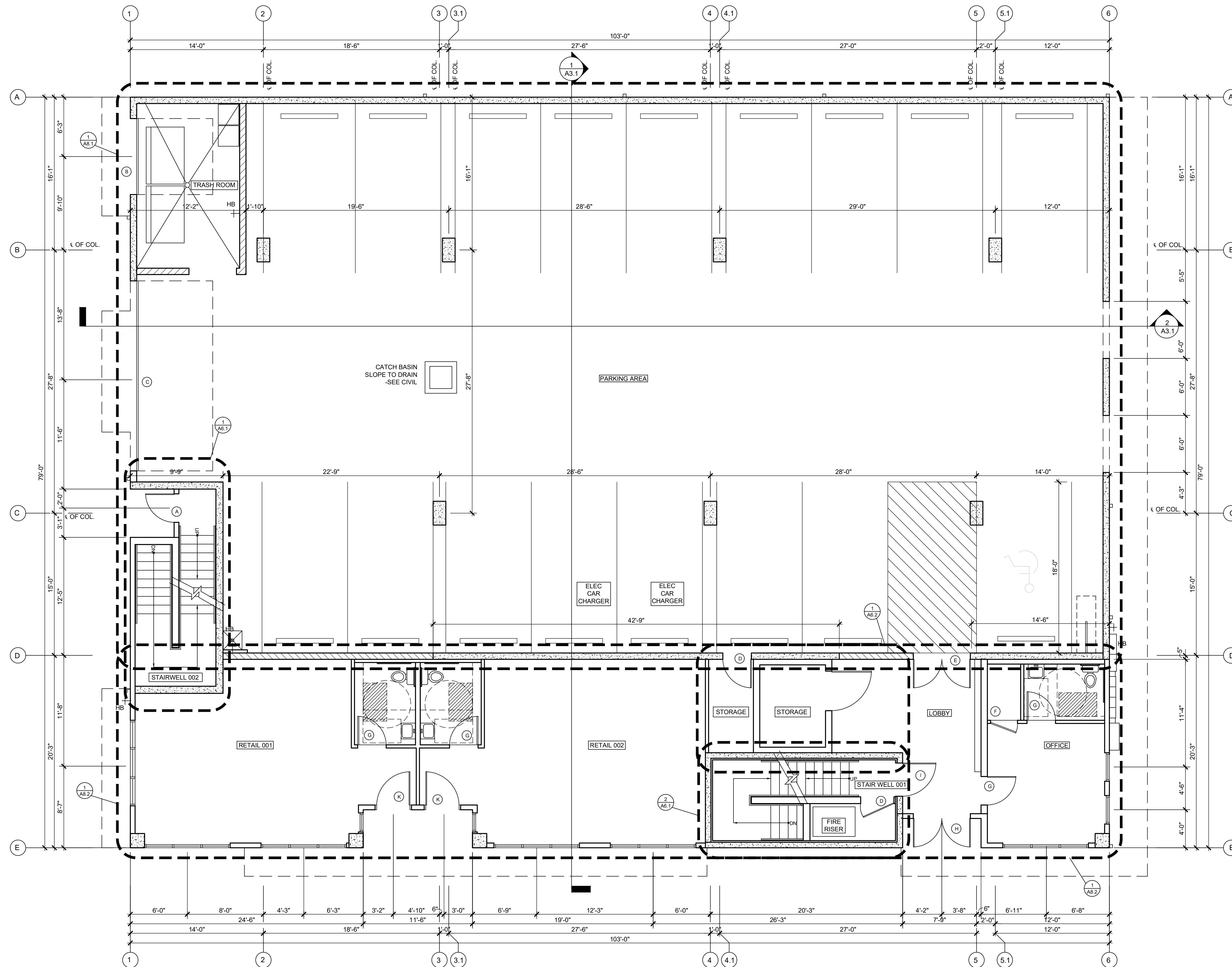
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BUILDING PERMIT:
DATE: April 16, 2020
SHEET NO.
A0.3
GENERAL SPECIFICATIONS



1
A1.1
FIRST FLOOR PLAN
SCALE: 3/16" = 1'-0"

FLOOR PLAN GENERAL NOTES
SEE ENLARGED PLANS

FLOOR PLAN LEGEND

- WOOD FRAMED WALL
- CONCRETE WALL
- BRICK WALL
- ROOM NUMBER
- ABOVE FINISH FLOOR ELEVATION
- CENTERLINE OF COLUMN
- FACE OF STUD
- FACE OF FINISH
- FACE OF CONCRETE
- FACE OF CANOPY
- WALL TYPE. SEE A5.1 AND A5.2
- 4"x4" PREFINISHED SHEET
- STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
- HOT WATER HEATER. SEE PLUMBING DRAWINGS.
- FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS.
- FLOOR FINISH. SEE LEGEND AND DETAIL 3/A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
- DOOR TYPE SEE. A6.3
- HOSE BIB. SEE PLUMBING DRAWINGS

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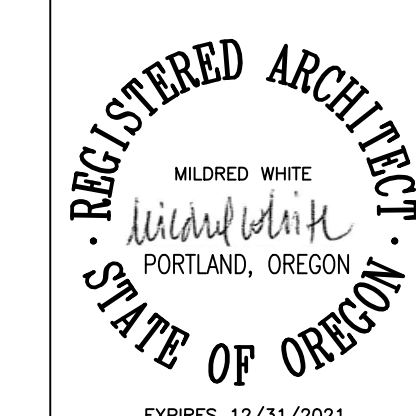
9391 SE 32ND AVE,
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Proj # 201931

- REVISIONS:
- OWNER REVISION: 04/28/20
 - OWNER REVISION: 05/25/20
 - OWNER REVISION: 08/21/20

BUILDING PERMIT:
DATE: April 16, 2020
SHEET NO.

A1.1
FIRST FLOOR PLAN



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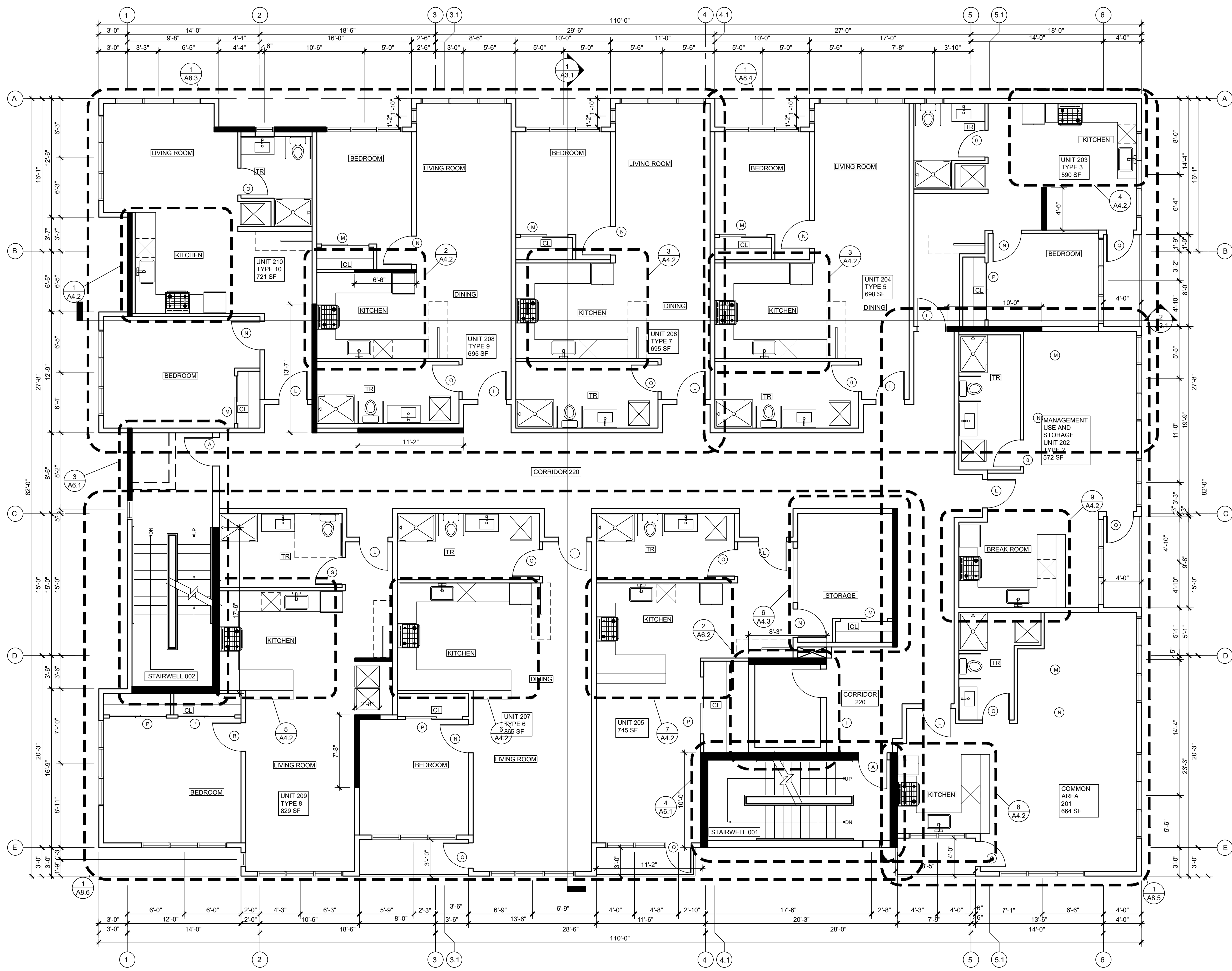
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 3 OWNER REVISION 08/21/20

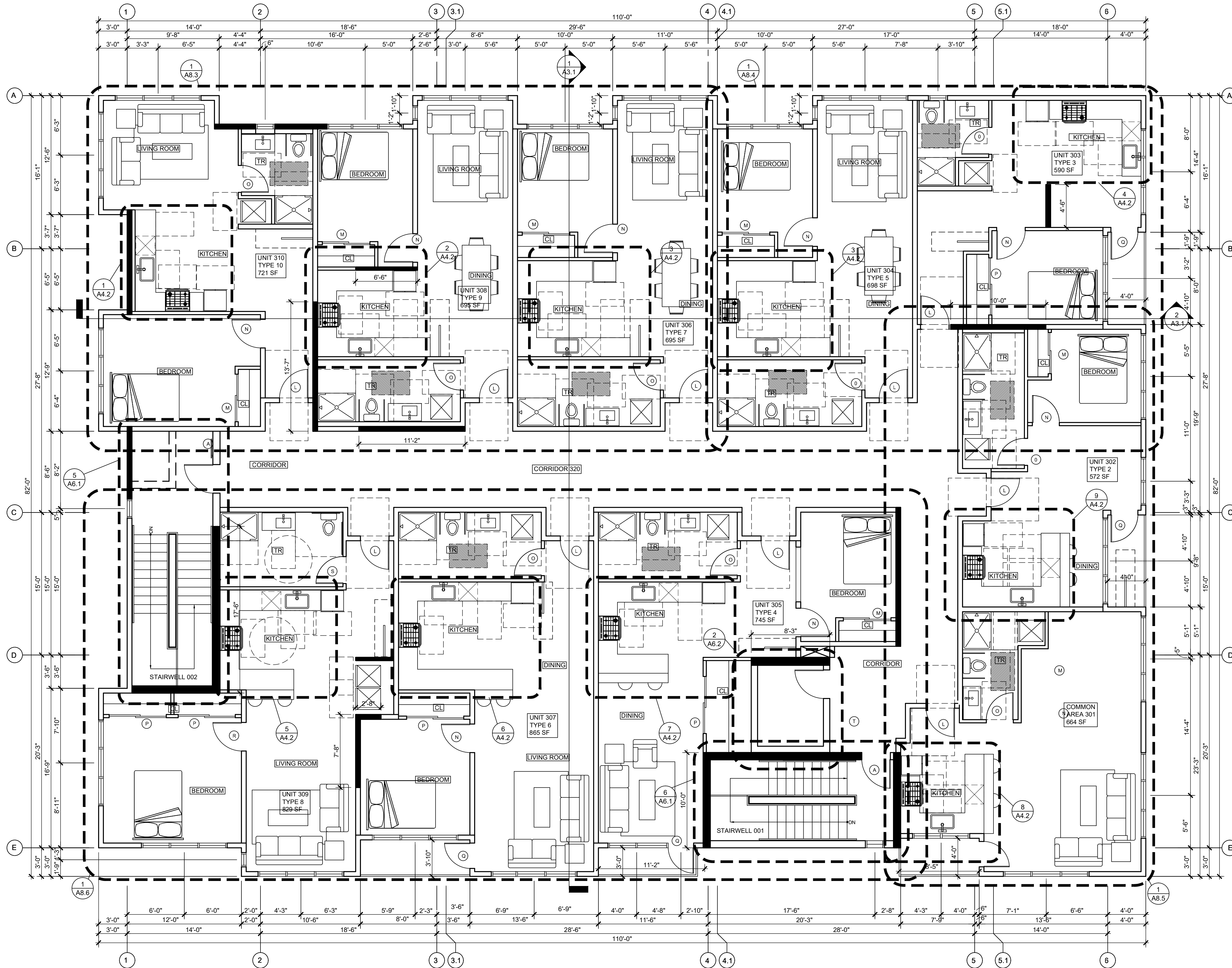
FLOOR PLAN LEGEND	
	WOOD FRAMED WALL
	CONCRETE WALL
	BRICK WALL
	ROOM NUMBER
	A.F.F. ABOVE FINISH FLOOR ELEVATION
	COL CENTERLINE OF COLUMN
	F.O.S. FACE OF STUD
	F.O.F. FACE OF FINISH
	F.O.C. FACE OF CONCRETE
	F.O.CA. FACE OF CANOPY
	WALL TYPE. SEE A5.1 AND A5.2
	4"x4" PREFINISHED SHEET
	STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
	WH HOT WATER HEATER. SEE PLUMBING DRAWINGS.
	OFD FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS.
	FF FLOOR FINISH. SEE LEGEND AND DETAIL 3/A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
	205 DOOR TYPE SEE. A6.3
	HOB HOSE BIB. SEE PLUMBING DRAWINGS

BUILDING PERMIT:
DATE: April 16, 2020
SHEET NO.
A1.2
SECOND FLOOR PLAN



TRUE NORTH
1
A1.2 SECOND FLOOR PLAN
 SCALE: 3/16" = 1'-0"

FLOOR PLAN GENERAL NOTES
 SEE ENLARGED PLANS



TRUE NORTH
1 THIRD FLOOR PLAN
A1.3 SCALE: 3/16" = 1'-0"

FLOOR PLAN GENERAL NOTES
 SEE ENLARGED PLANS

FLOOR PLAN LEGEND

- WOOD FRAMED WALL
- CONCRETE WALL
- BRICK WALL
- ROOM NUMBER
- A.F.F. ABOVE FINISH FLOOR ELEVATION
- CL CENTERLINE OF COLUMN
- F.O.S. FACE OF STUD
- F.O.F. FACE OF FINISH
- F.O.C. FACE OF CONCRETE
- F.O.C.A. FACE OF CANOPY
- WALL TYPE. SEE A5.1 AND A5.2
- 4"x4" PREFINISHED SHEET STEEL DOWNSPOT. SEE ELEVATIONS AND ROOF PLAN.
- DS
- WH HOT WATER HEATER. SEE PLUMBING DRAWINGS.
- OFD FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS.
- FT FLOOR FINISH. SEE LEGEND AND DETAIL 3/A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
- 205 DOOR TYPE SEE. A6.3
- HOSE BIB. SEE PLUMBING DRAWINGS

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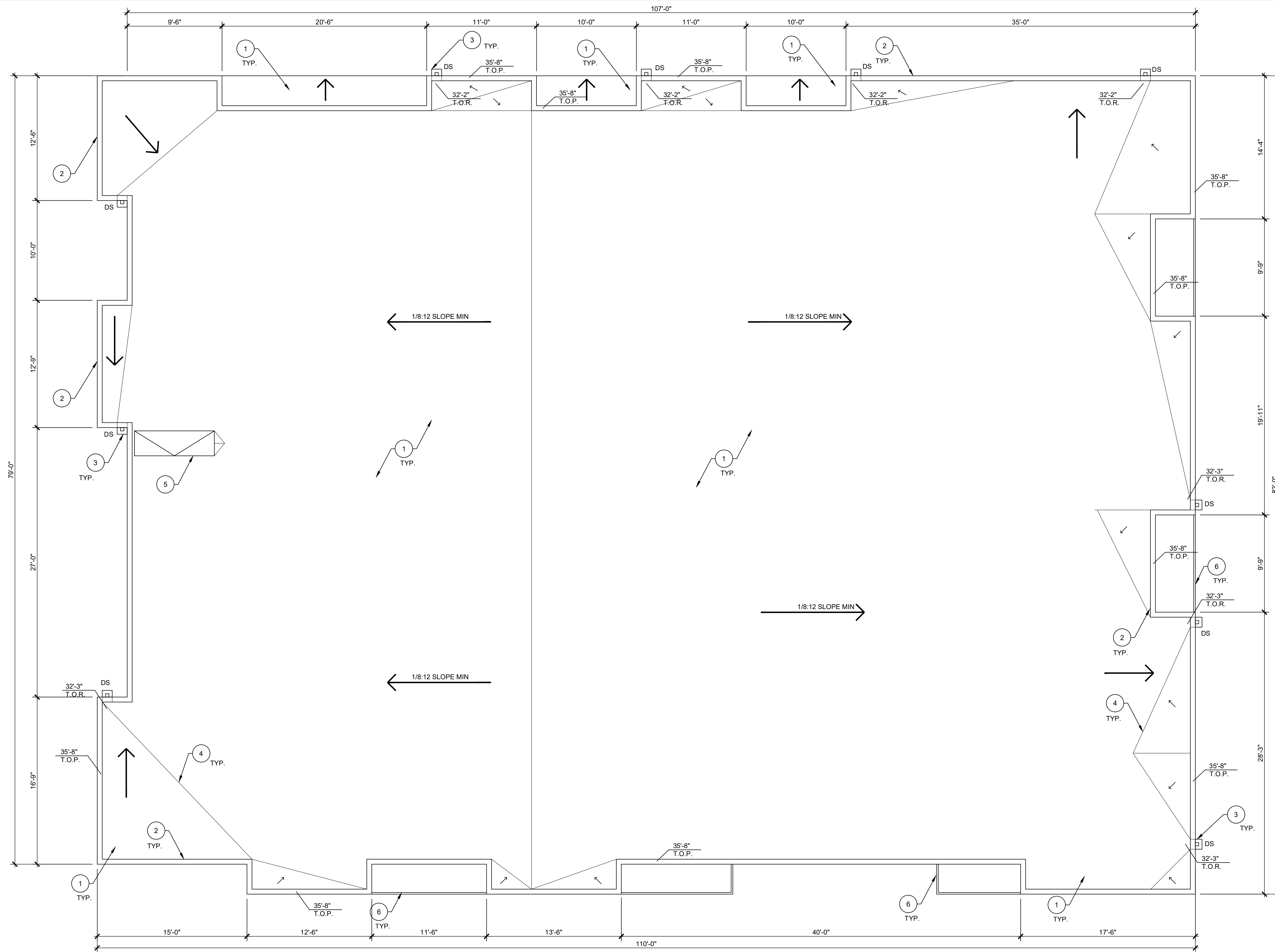
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BUILDING PERMIT:
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 SHEET NO.
A1.3
 THIRD FLOOR PLAN



TRUE NORTH
1 ROOF PLAN
 A1.6 SCALE: 3/16" = 1'-0"

ROOF PLAN GENERAL NOTES

ROOF SLOPE SHALL NOT BE LESS THAN 1/8" PER FOOT. CONFIRM MEETS ROOF WARRANTY
 ALL ROOF TOP UNITS AND PENETRATIONS NOT SHOWN – SEE MECHANICAL AND PLUMBING DRAWINGS BY OTHERS-- CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND VERIFICATION OF EXACT LOCATIONS AND PENETRATION SIZES
 SEE FLOOR PLANS FOR CANOPY LOCATIONS AND SIZES
 PROVIDE CRICKETS WITH MIN 1/8" PER FOOT SLOPE AT ALL ROOF TOP UNITS INCLUSIVE OF ANY NOT SHOWN ON ROOF PLAN
 FLASHING, WEATHER-PROOFING DETAILS, SUPPORT AND CONNECTIONS OF MECHANICAL UNITS ARE BY CONTRACTOR

ROOF PLAN LEGEND

- DS 4"x4" DOWNSPOUT CONNECTED TO ROOF SCUPPER
- ← INDICATES DIRECTION OF SLOPE. 1/8:12 MIN
- 0'-0" RELATIVE ELEVATION ABOVE FINISH GRADE. (1" BELOW FIRST FINISH FLOOR) SEE SECTIONS AND ELEVATIONS.
- T.O.R. TOP OF ROOFING MATERIAL (TPO)
- T.O.P. TOP OF PARAPET

ROOF PLAN KEYNOTES

- 1 SINGLE PLY TPO ROOF OVER RECOVER BOARD. CRICKET AS REQUIRED FOR DRAINAGE BY CONTRACTOR. SEE DETAILS 12/A5.3, 3/A5.7, AND 4/A5.7
- 2 PREFINISHED SHEET METAL PARAPET
- 3 12"x12" PREFINISHED SHEET METAL SCUPPER AND 4"x4" PREFINISHED SHEET METAL DOWNSPOUT. SEE DETAILS 1/A5.7 AND 2/A5.7. COORDINATE WITH ELEVATIONS.
- 4 BUILT-UP ROOF CRICKET WITH RIGID INSULATION BY CONTRACTOR. SLOPE 1/8" PER FOOT MINIMUM. VERIFY MIN. SLOPE WITH ROOFING WARRANTY
- 5 30" MIN WIDE X 8' LONG ROOF HATCH.
- 6 RAILING AT BALCONY BELOW. SEE FLOOR PLAN



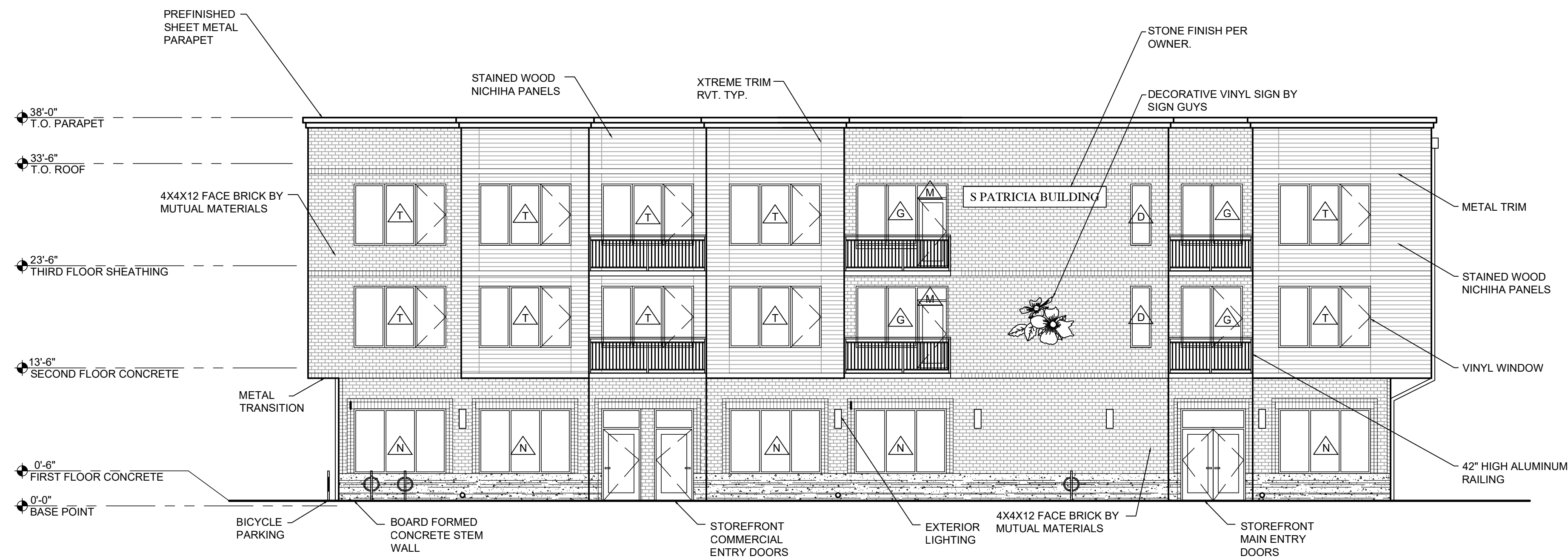
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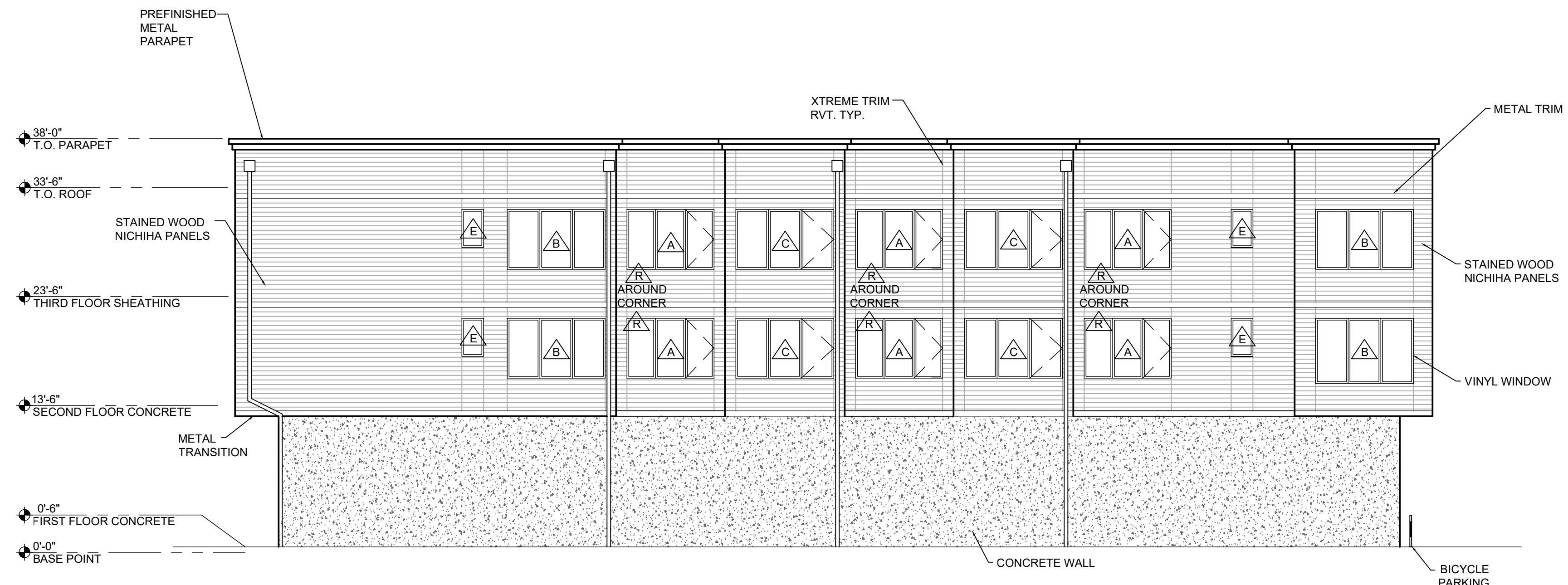


1 EAST EXTERIOR ELEVATION
 A2.1 SCALE: 1/8" = 1'-0"

EAST FACADE CALCULATIONS

TOTAL STREET FACING EXTERIOR WALL FACADE SQUARE FOOTAGE: 4,042 SF

PRIMARY MATERIALS:
 TOTAL GLAZING AREA: 808 SF (20%)
 TOTAL CONCRETE AREA: 234 SF (5.8%)
 TOTAL BRICK AREA: 1,810 SF (44.8%)
 TOTAL PRIMARY MATERIALS: 2,852 (70.6%)



2 WEST EXTERIOR ELEVATION
 A2.1 SCALE: 1/8" = 1'-0"

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BUILDING PERMIT:
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 SHEET NO.
A2.1
 EAST & WEST ELEVATIONS



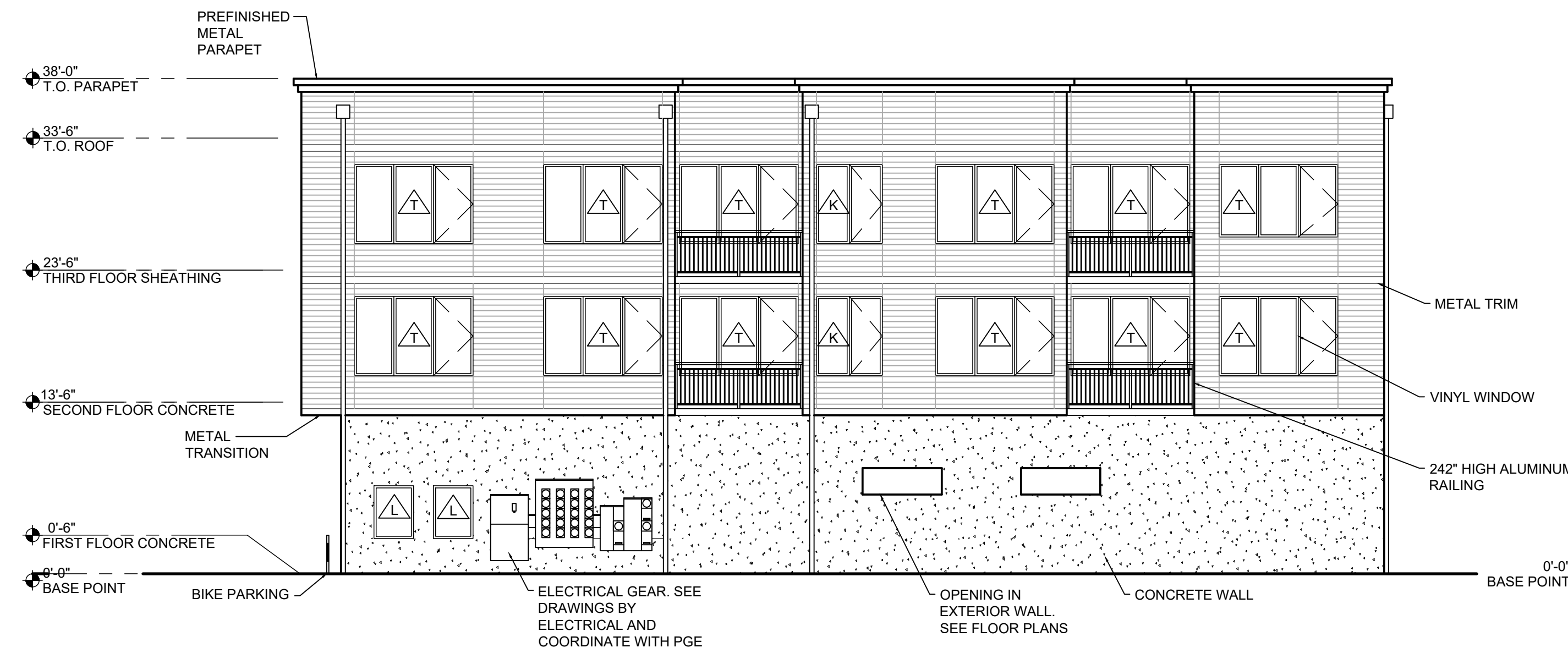
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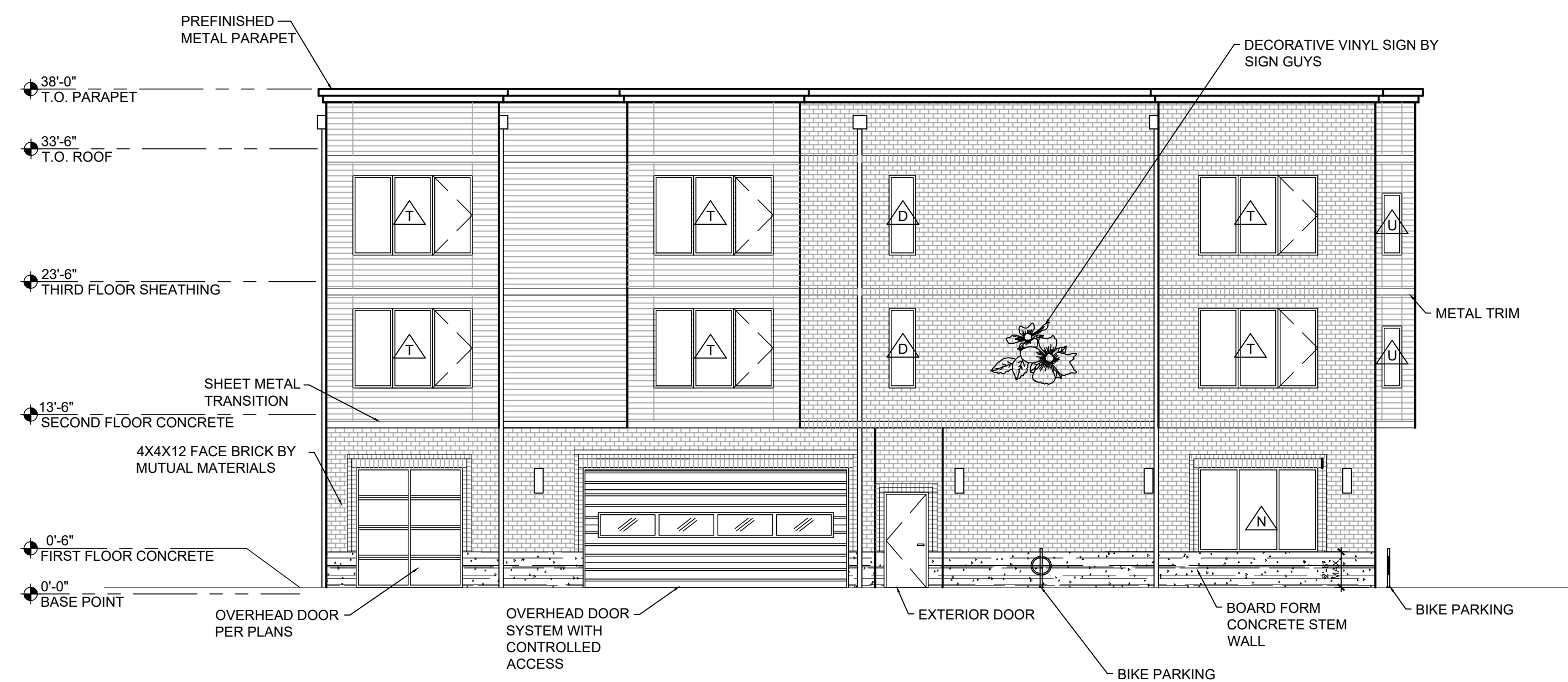
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 - △ OWNER REVISION 08/21/20
 - △ DEVELOPMENT REVIEW: 09/21/20



1 NORTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

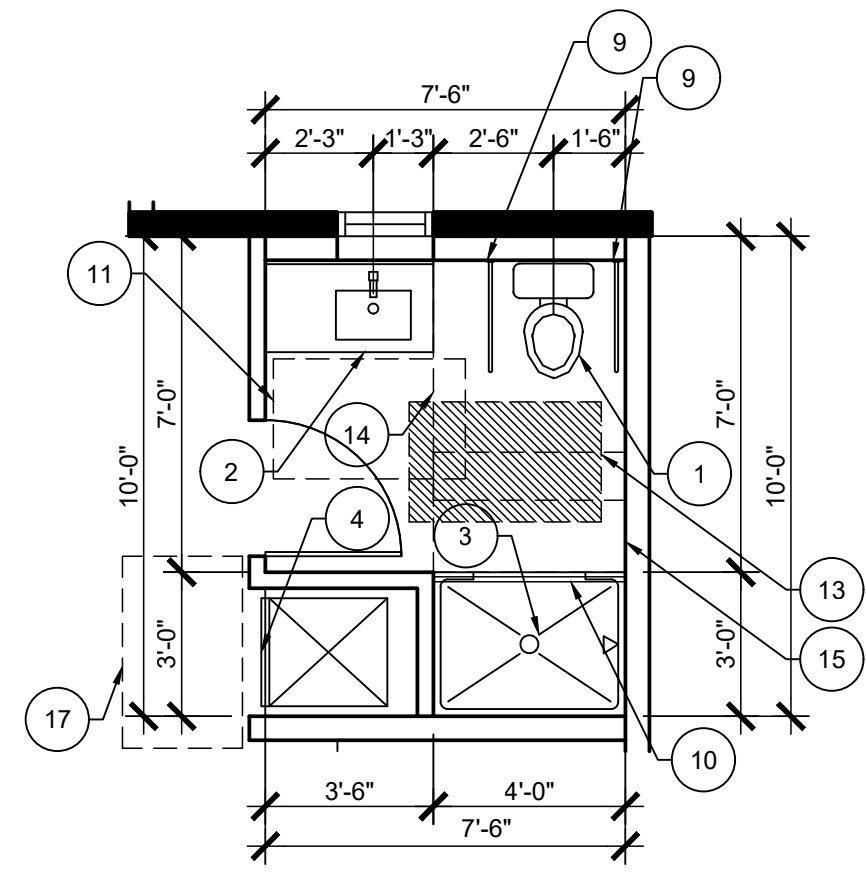


2 SOUTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

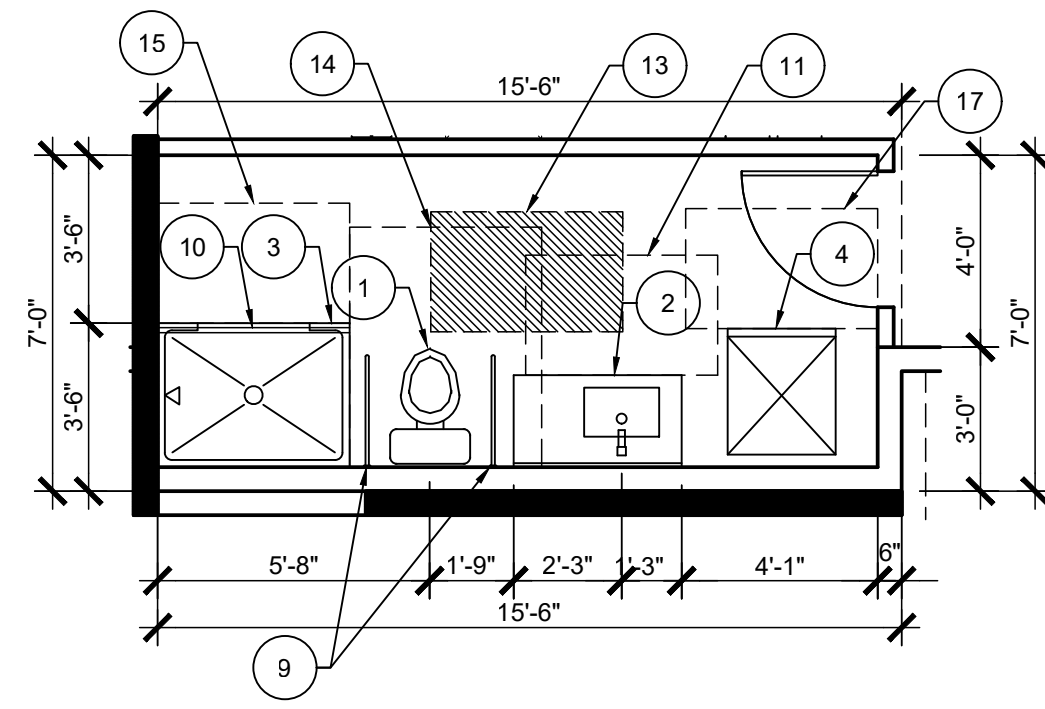
SOUTH FACADE CALCULATIONS

TOTAL STREET FACING EXTERIOR WALL FACADE SQUARE FOOTAGE: 3,040 SF

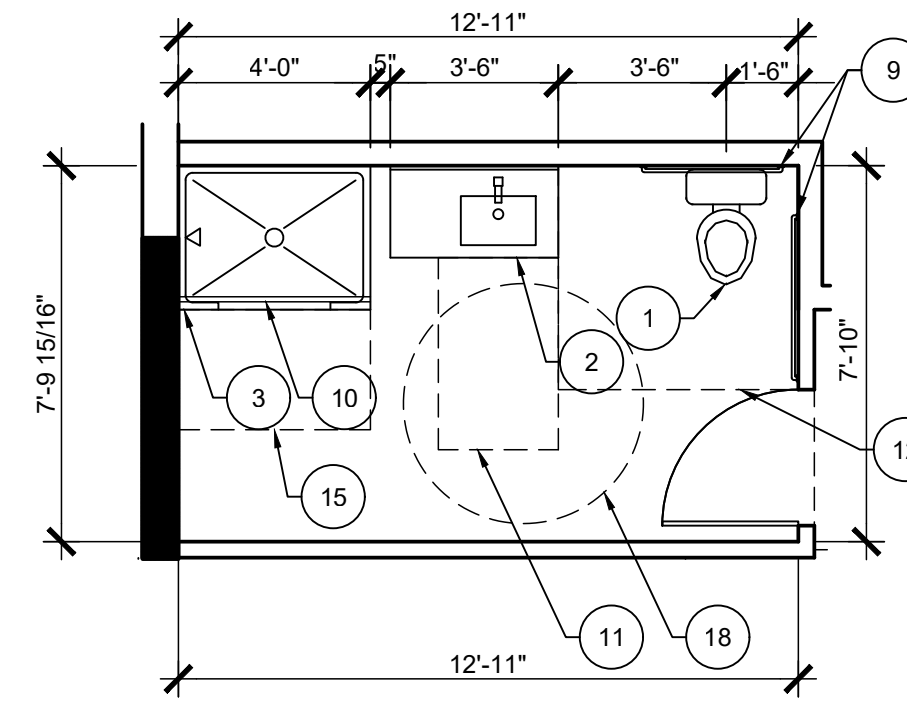
PRIMARY MATERIALS:
 TOTAL GLAZING AREA: 419 SF (14.0%)
 TOTAL CONCRETE AREA: 127 SF (4.2%)
 TOTAL BRICK AREA: 1,526 SF (50.8%)
 TOTAL PRIMARY MATERIALS: 2,072 (69.0%)



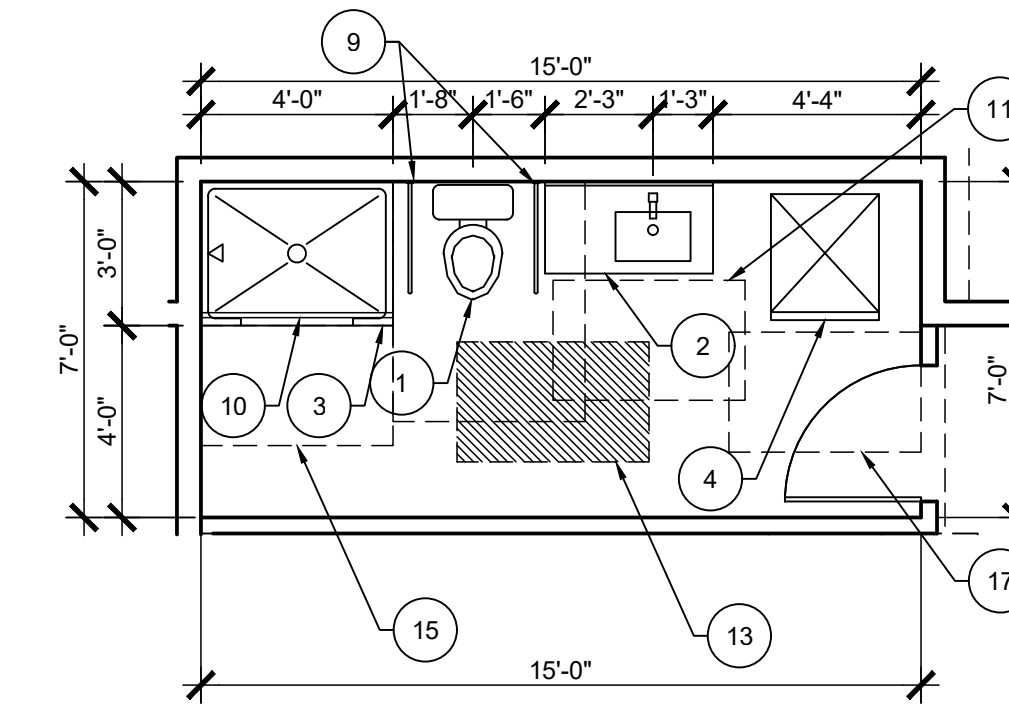
1 SECOND/THIRD FLOOR BATHROOM PLAN
A4.1 SCALE: 1/4" = 1'-0"



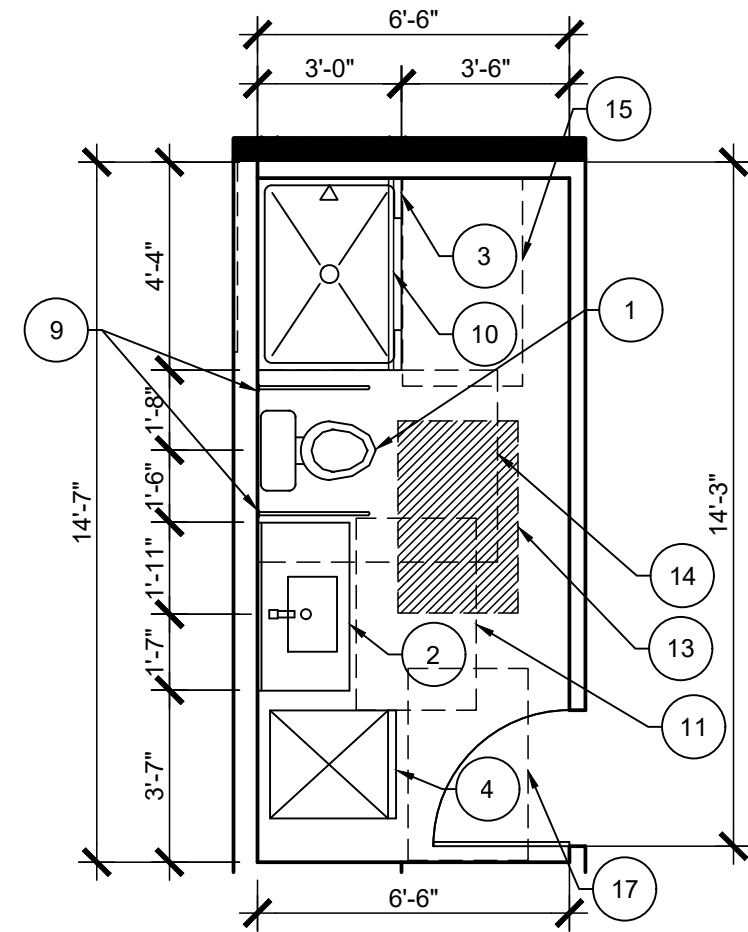
2 SECOND/THIRD FLOOR BATHROOM PLAN
A4.1 SCALE: 1/4" = 1'-0"



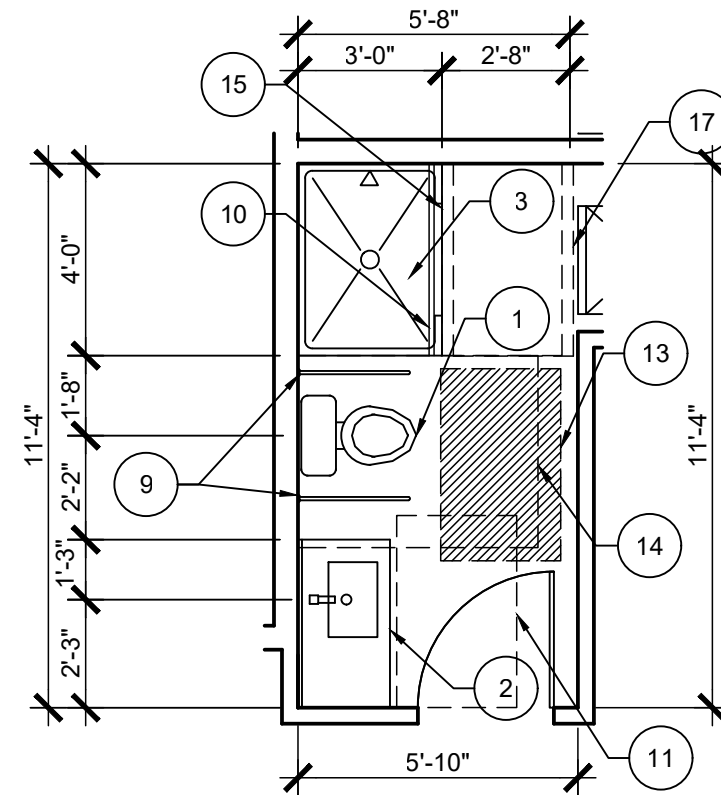
3 SECOND/THIRD FLOOR BATHROOM PLAN- TYPE A
A4.1 SCALE: 1/4" = 1'-0"



4 SECOND/THIRD FLOOR BATHROOM PLAN
A4.1 SCALE: 1/4" = 1'-0"



5 SECOND/THIRD FLOOR BATHROOM PLAN
A4.1 SCALE: 1/4" = 1'-0"



6 SECOND/THIRD FLOOR BATHROOM PLAN
A4.1 SCALE: 1/4" = 1'-0"

KEYNOTES

- 1 ADA COMPLIANT WATER CLOSET SEE DETAIL 7/A9.2
- 2 ADA COMPLIANT COUNTER LAVATORY WITH CABINET BELOW. SEE DETAIL 6/A9.2
- 3 3'-0" X 4'-0" TRANSFER TYPE FIBERGLASS SHOWER. SEE DETAIL 1/A9.2
- 4 NOT USED
- 5 NOT USED
- 6 NOT USED
- 7 NOT USED
- 8 NOT USED
- 9 PROVIDE REINFORCEMENT AS REQUIRED FOR POTENTIAL FUTURE GRAB BAR. SEE 2/A9.2 AND FIXTURE PLANS
- 10 BATH/SHOWER CURTAIN ROD PER OWNER
- 11 2'-6" X 4'-0" CLEAR FLOOR SPACE AT LAVATORY. LAVATORY MUST BE CENTERED ON CLEAR FLOOR SPACE.
- 12 5'-0" X 4'-8" CLEAR FLOOR SPACE AT TYPE 'A' TOILET
- 13 2'-6" X 4'-0" CLEAR FLOOR SPACE
- 14 4'-0" X 5'-0" CLEAR FLOOR SPACE AT TOILET WITH PARALLEL APPROACH
- 15 2'-6" X 4'-0" CLEAR FLOOR SPACE AT SHOWER
- 16 WATER CLOSET PER OWNER
- 17 2'-6" X 4'-0" CLEAR FLOOR SPACE AT WASHER/DRYER CENTERED ON APPLIANCE
- 18 5'-0" TURN RADIUS AT TYPE A BATHROOM



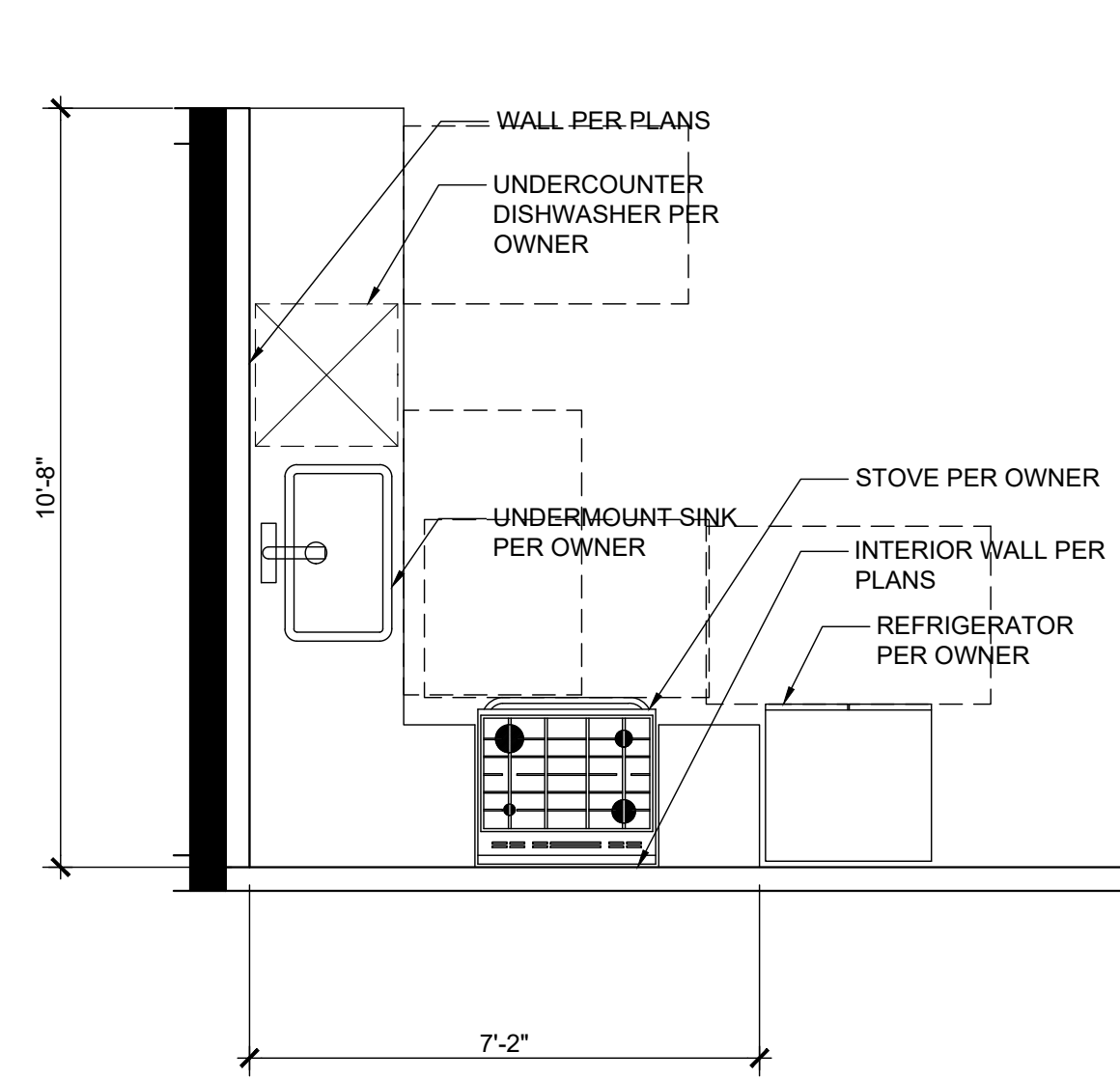
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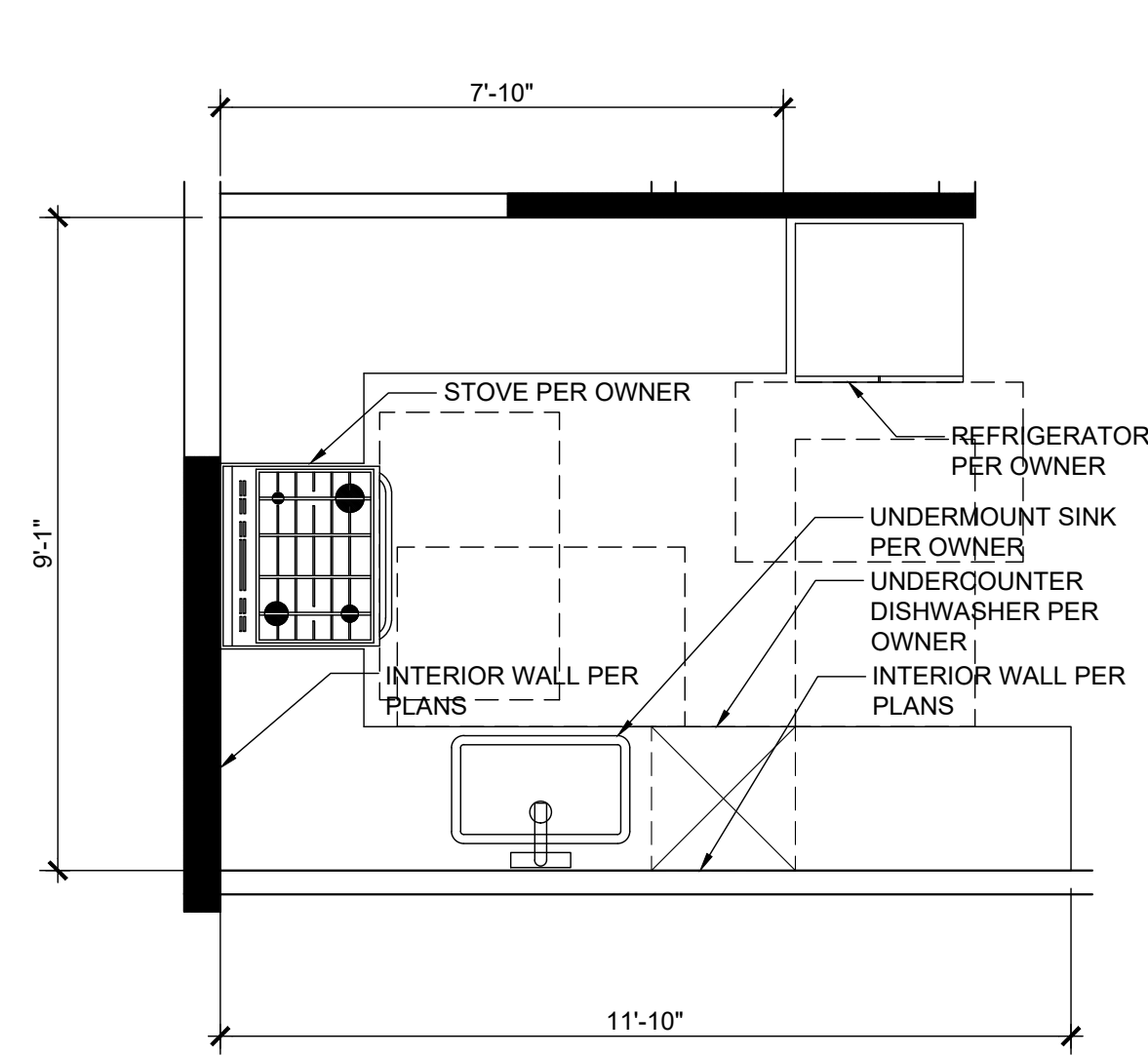
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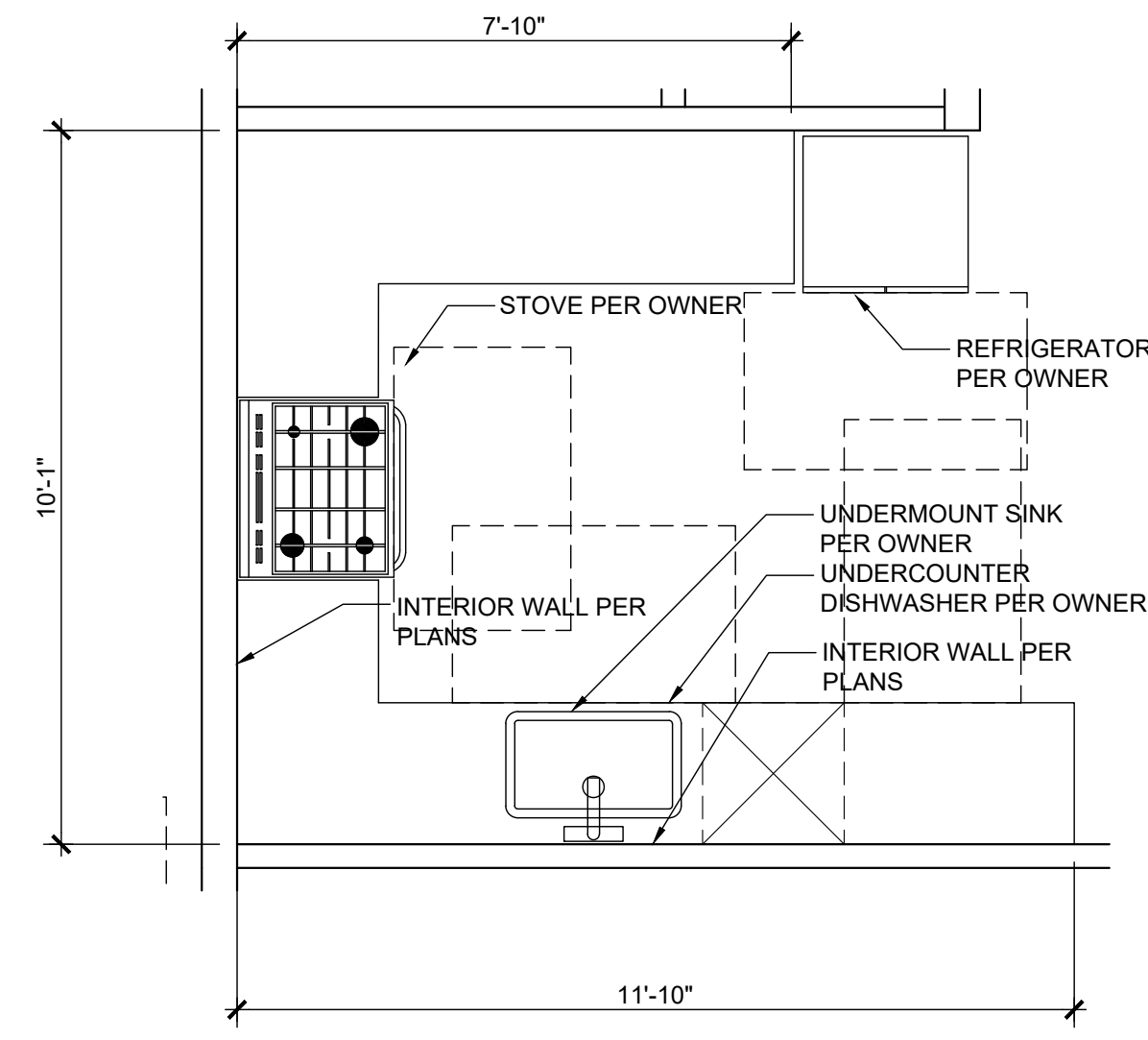
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 1 OWNER REVISION:04/28/20
 2 OWNER REVISION:05/25/20
 3 OWNER REVISION:08/21/20



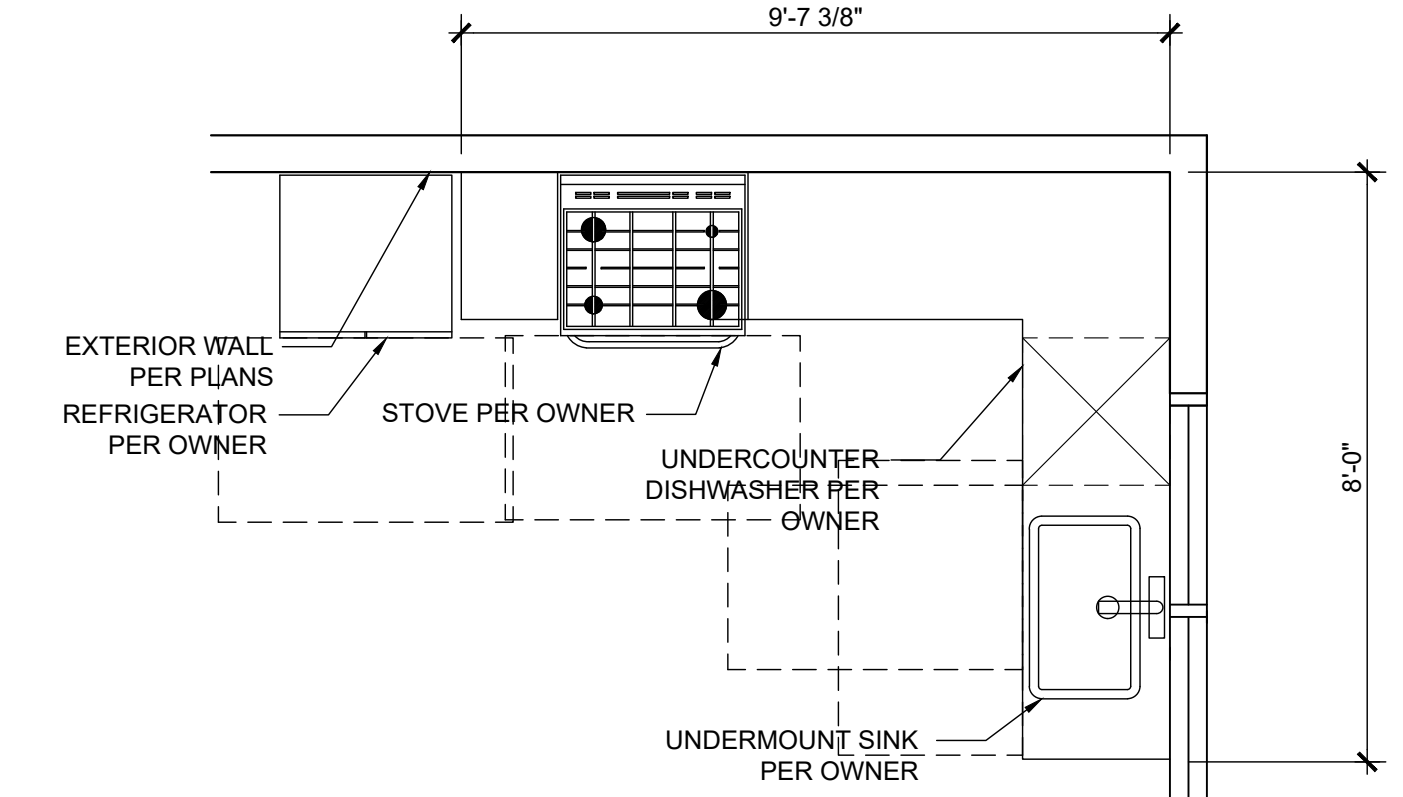
1 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



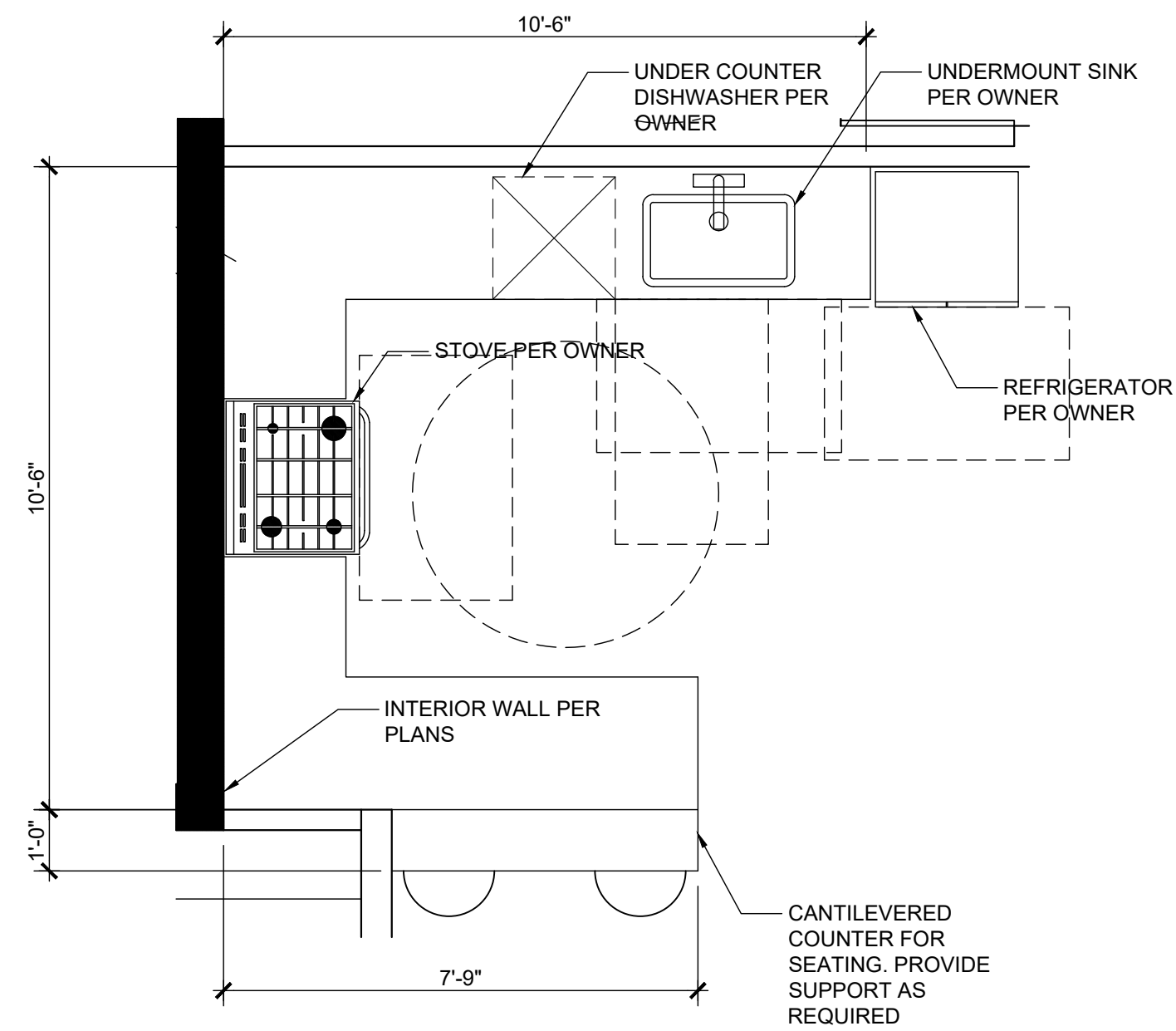
2 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



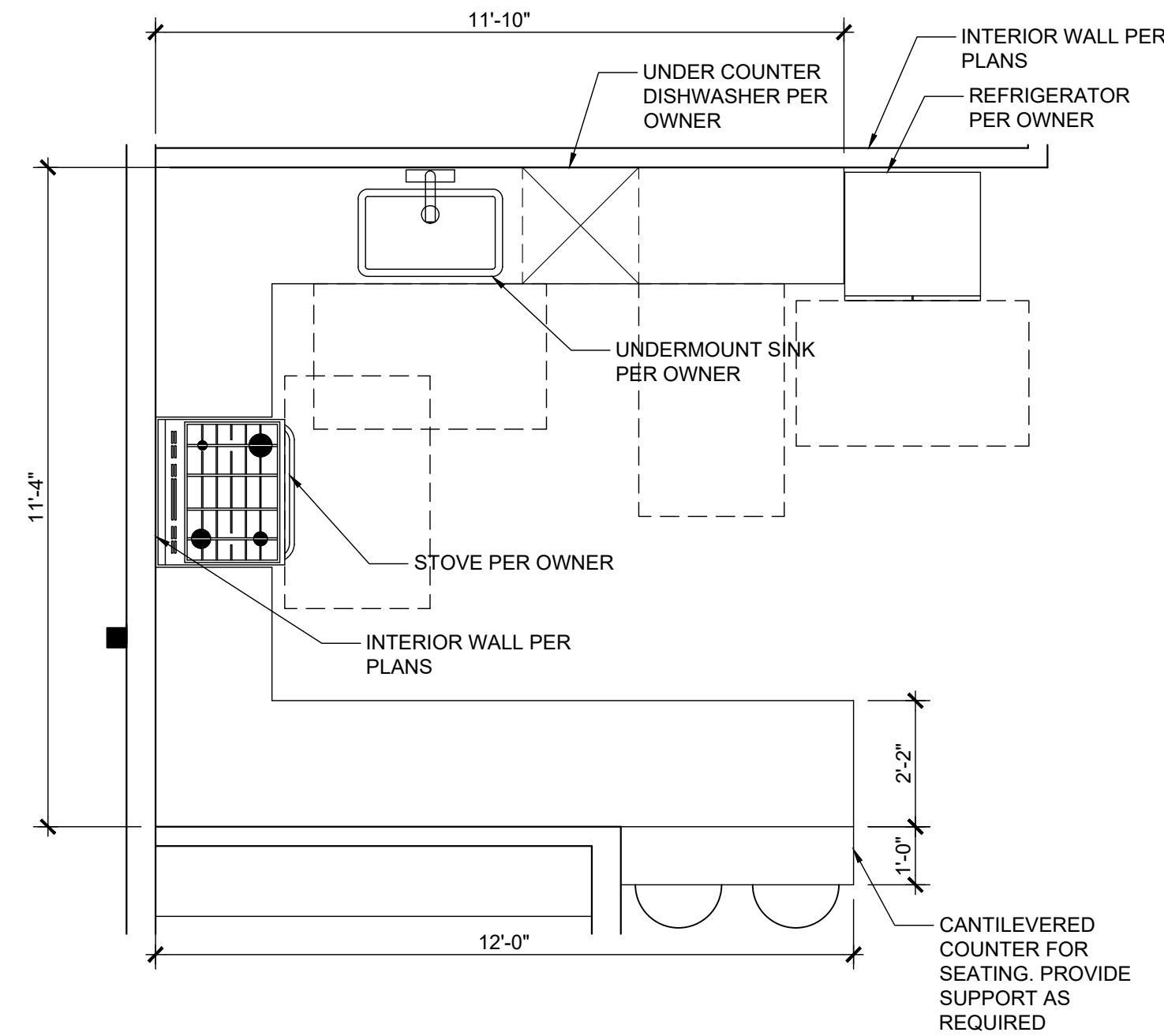
3 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



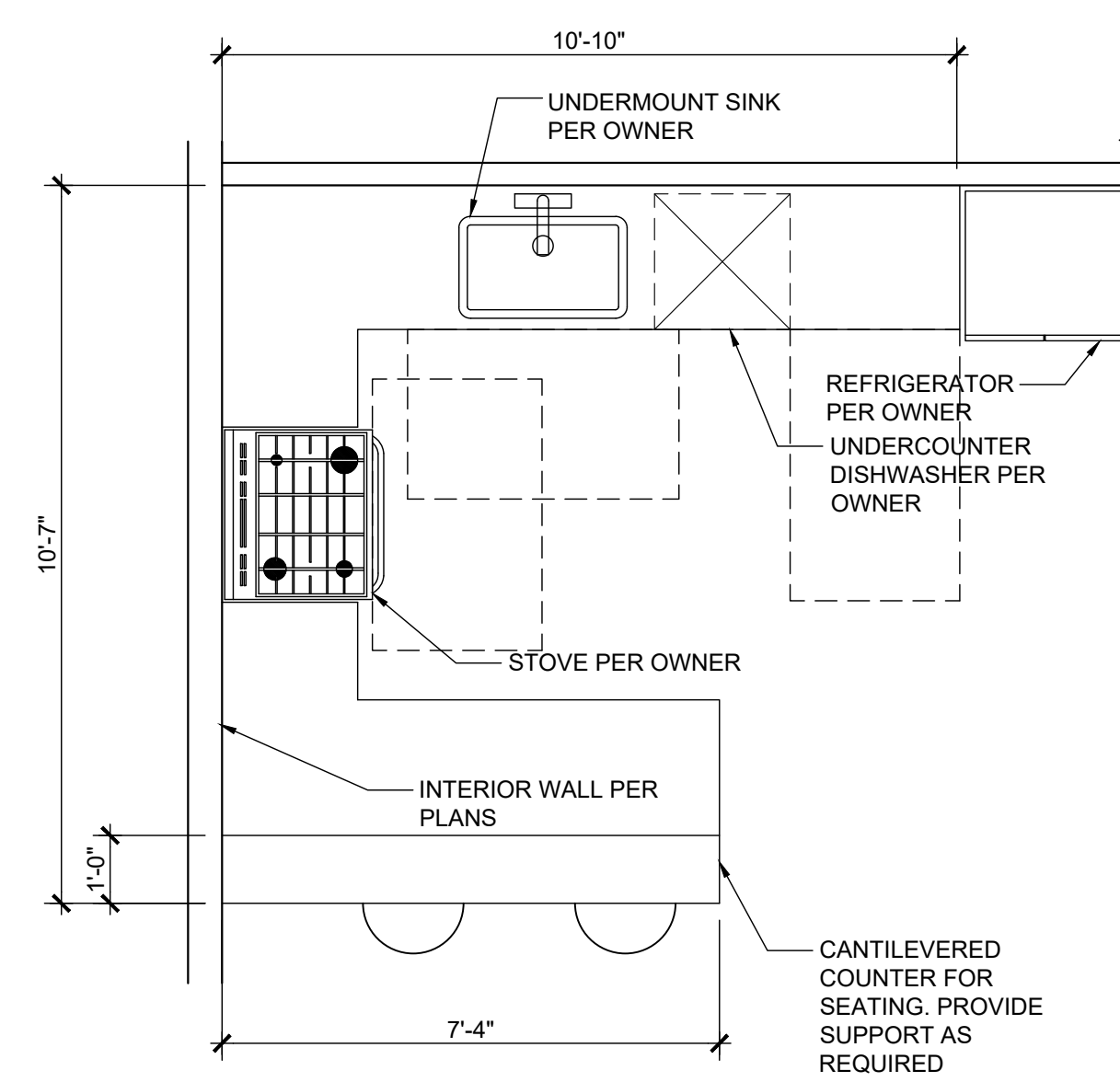
4 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



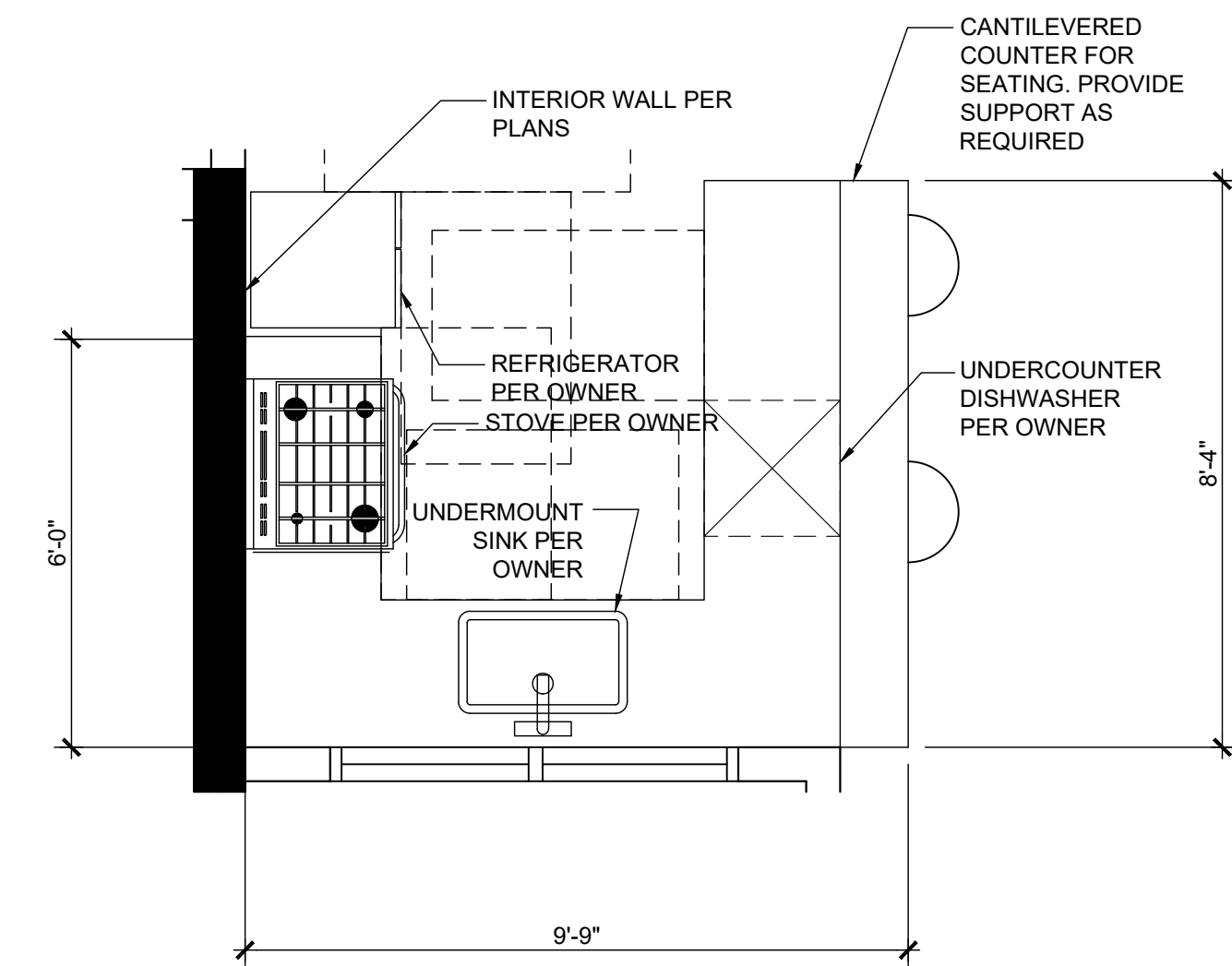
5 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



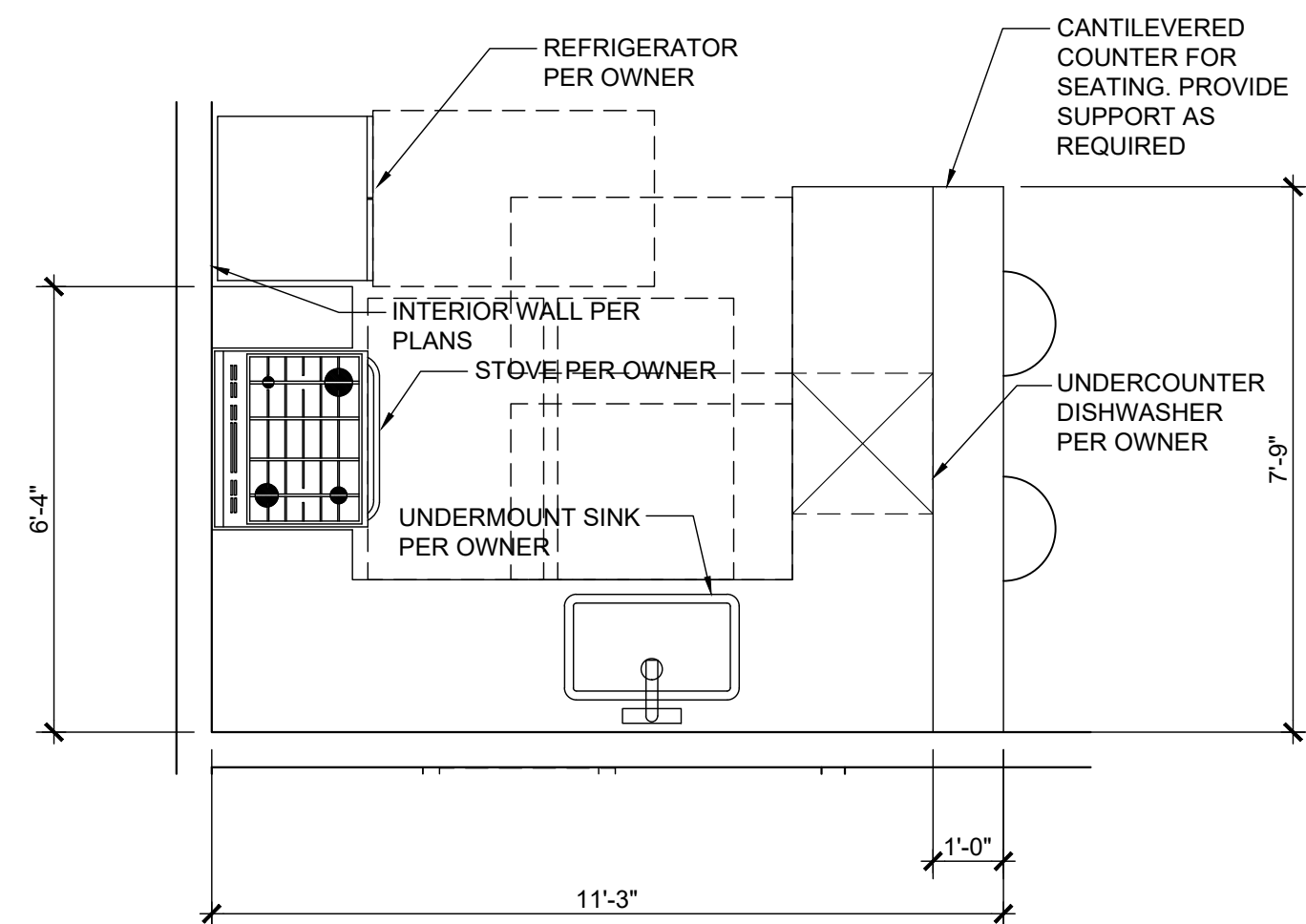
6 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



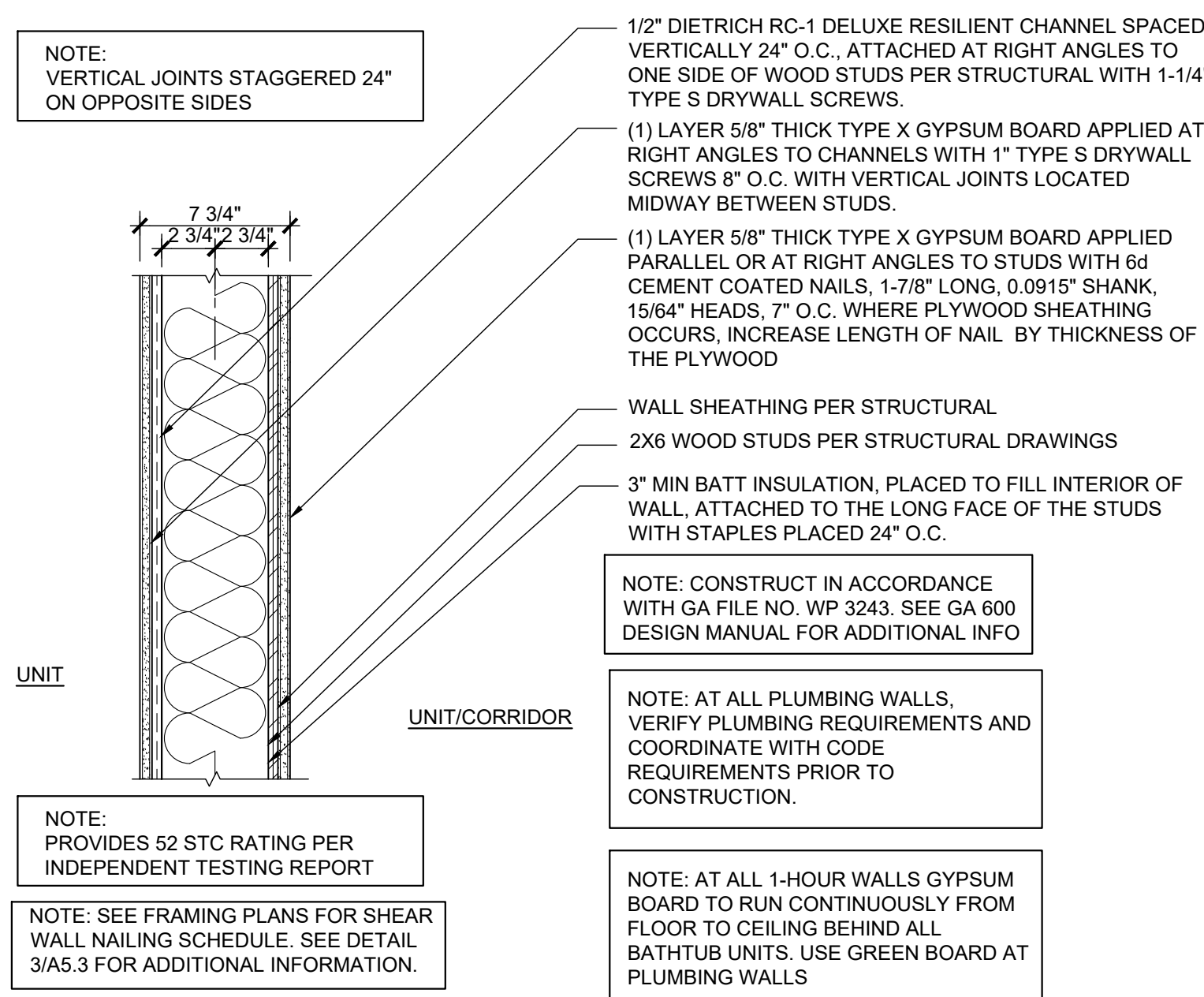
7 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



8 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"

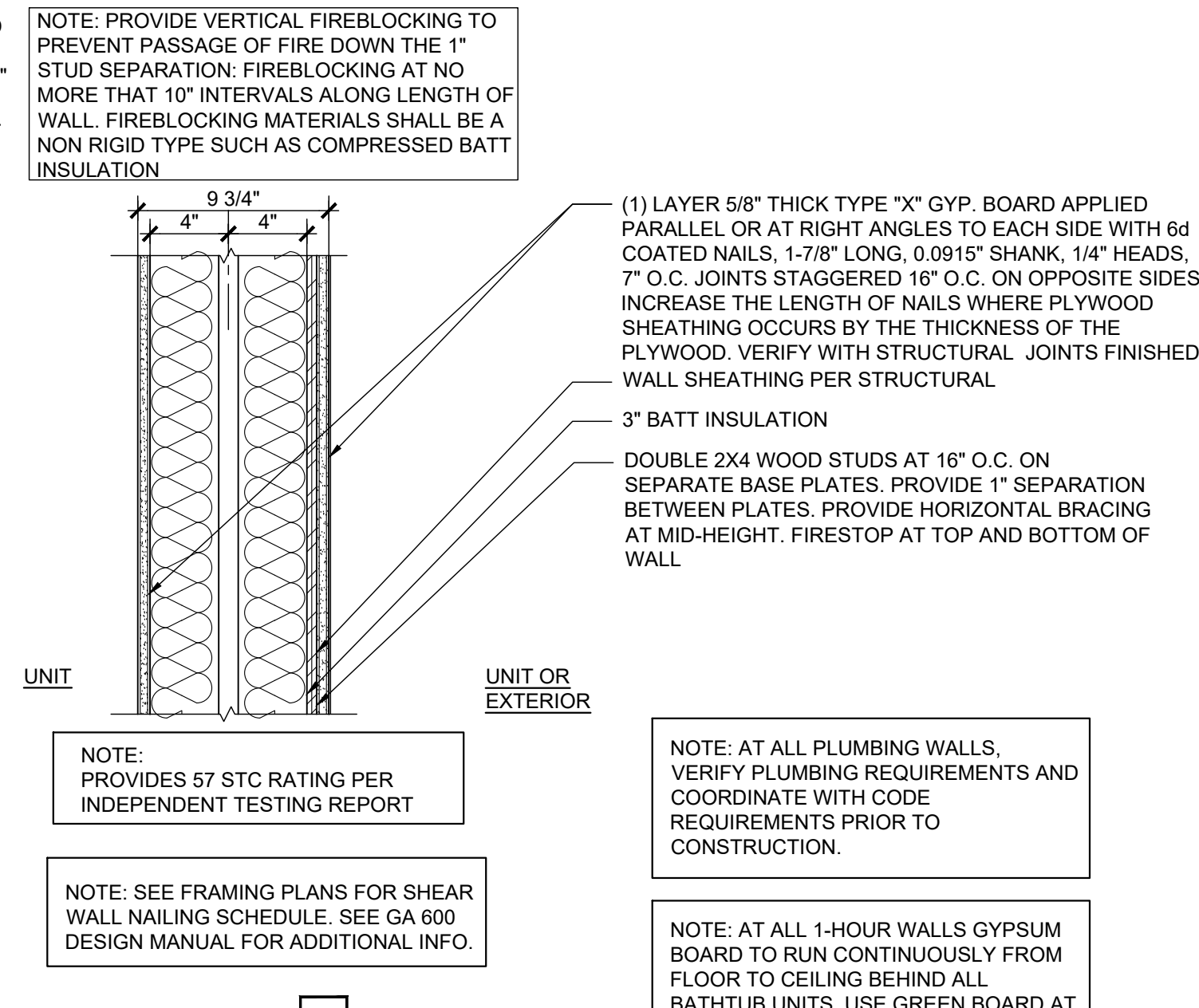


9 SECOND/THIRD FLOOR KITCHEN PLAN
A4.2 SCALE: 3/8" = 1'-0"



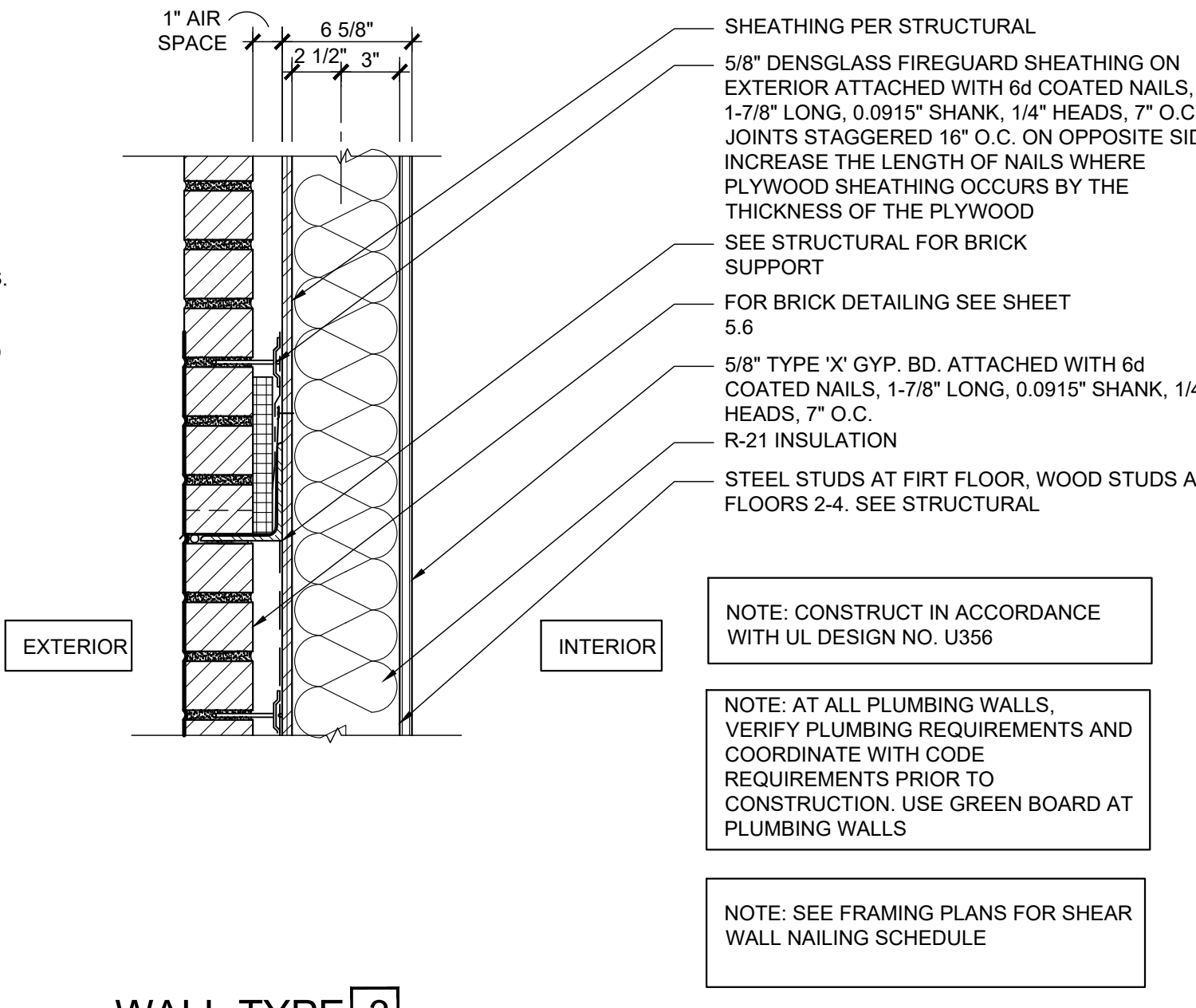
WALL TYPE 1
ONE-HR. RATED INTERIOR BEARING WALL

1
A5.1 1 1/2" = 1'-0"



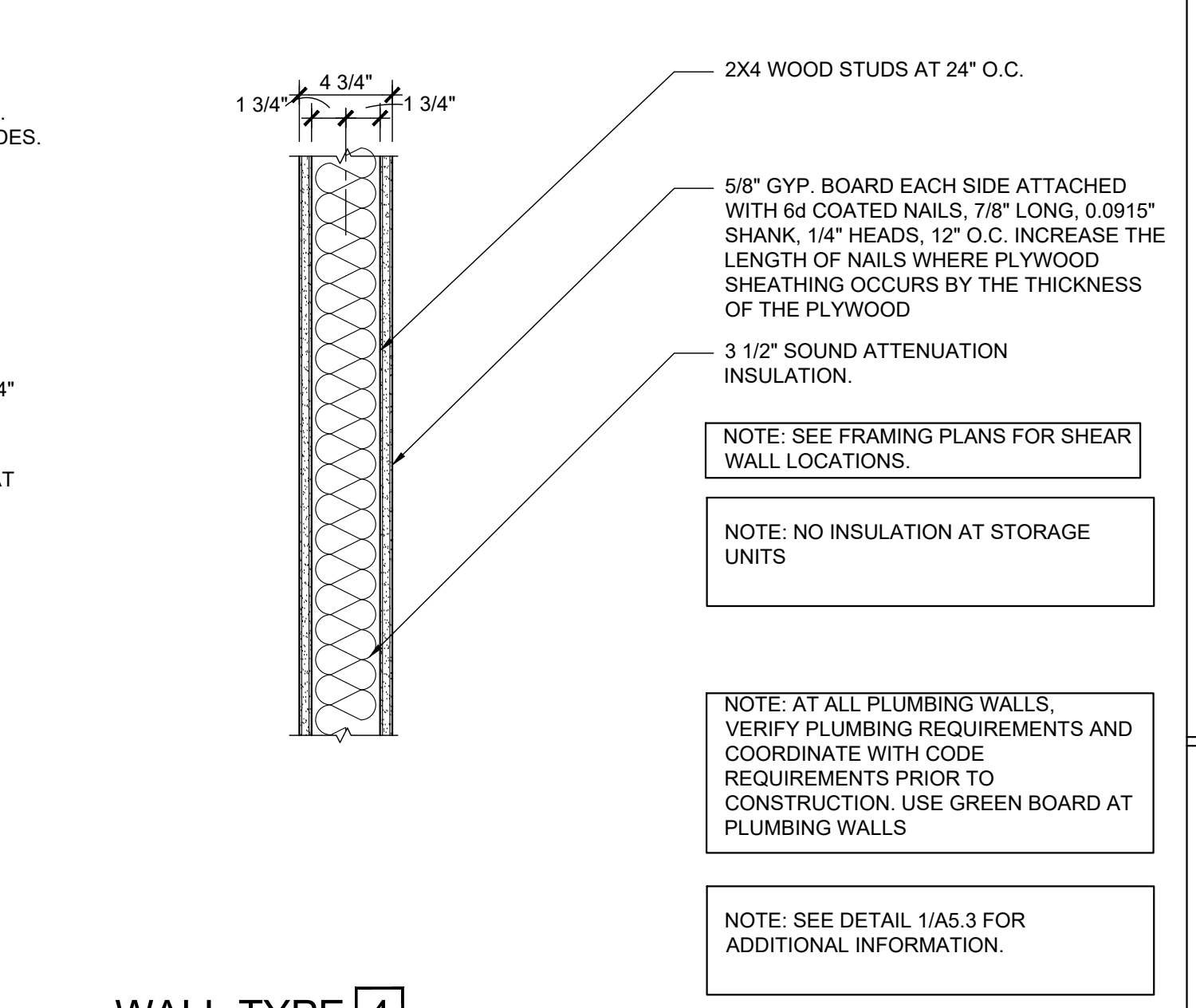
WALL TYPE 2
ONE-HR. DWELLING UNIT DEMISING WALL

2
A5.1 1 1/2" = 1'-0"



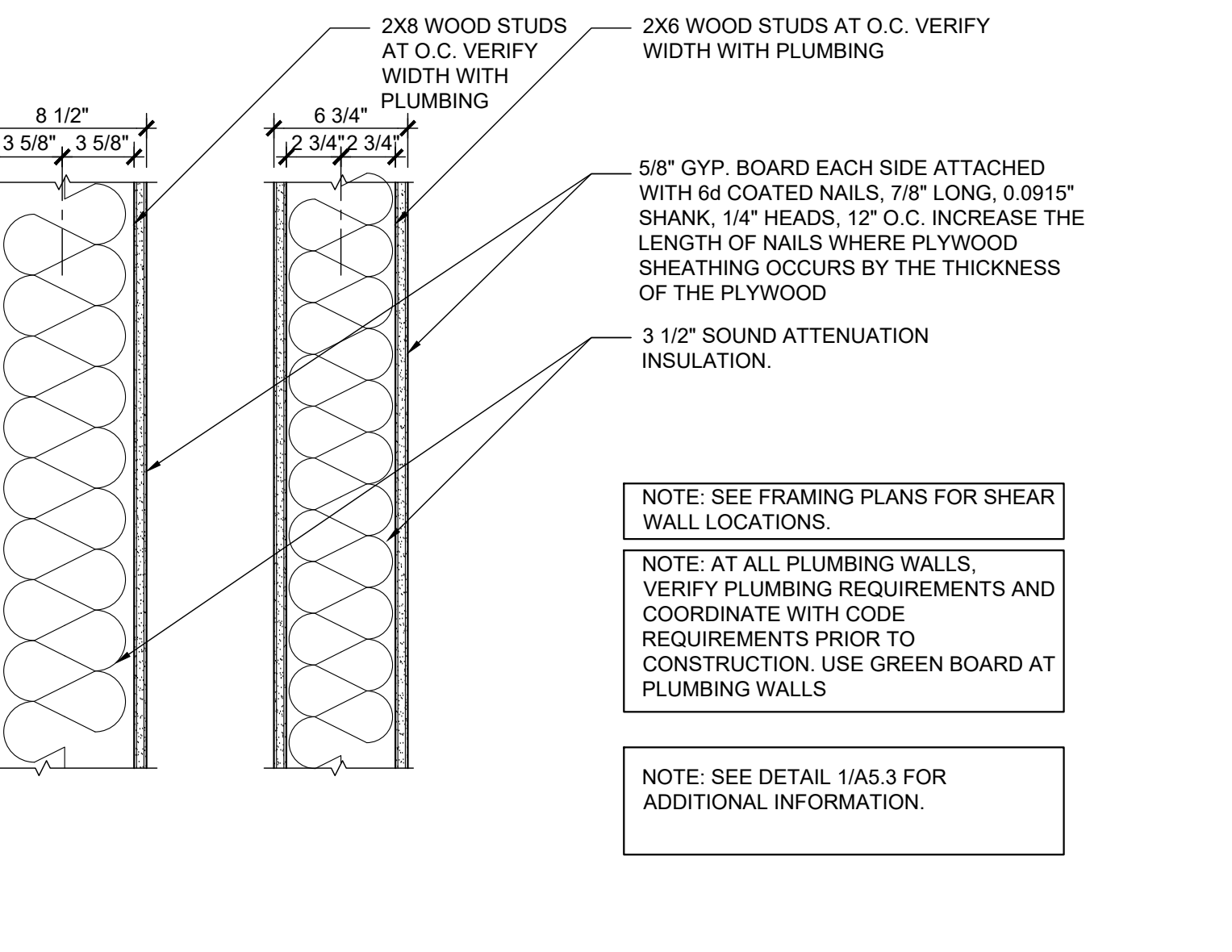
WALL TYPE 3
ONE-HR. RATED EXTERIOR WALL

3
A5.1 1 1/2" = 1'-0"



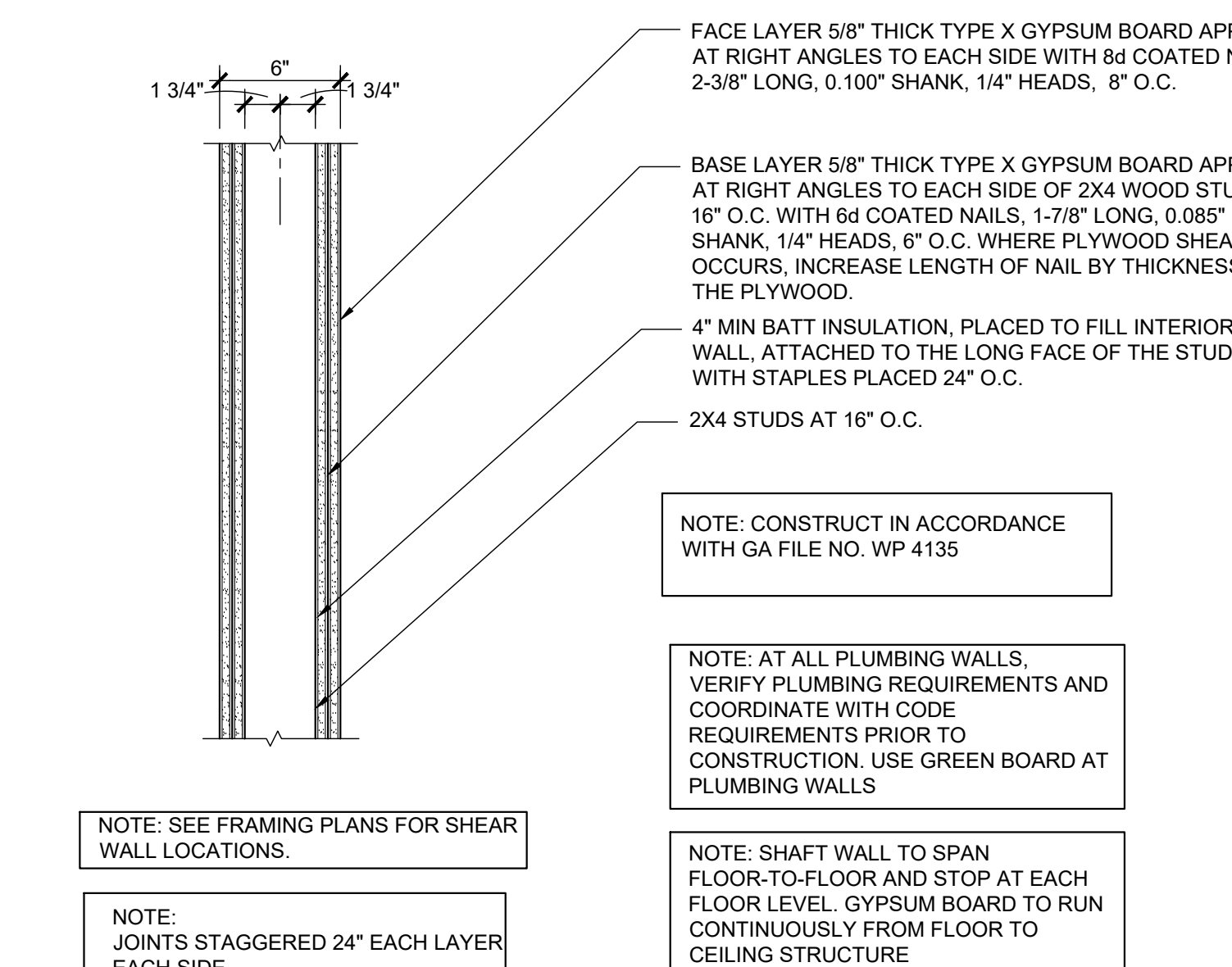
WALL TYPE 4
NON-RATED INTERIOR PARTITION WALL

4
A5.1 1 1/2" = 1'-0"



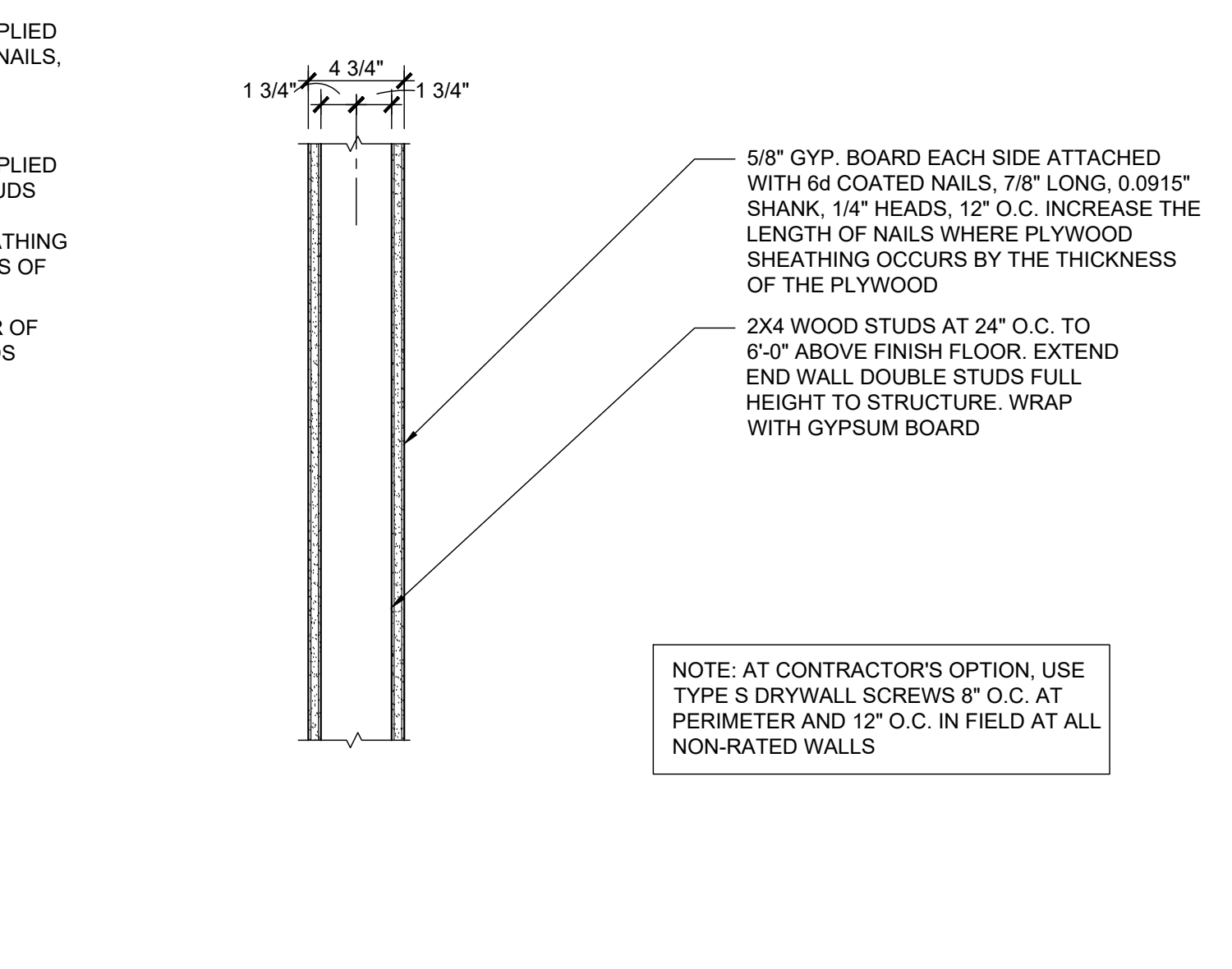
WALL TYPE 5
NON RATED INTERIOR PLUMBING OR STRUCTURAL WALL

5
A5.1 1 1/2" = 1'-0"



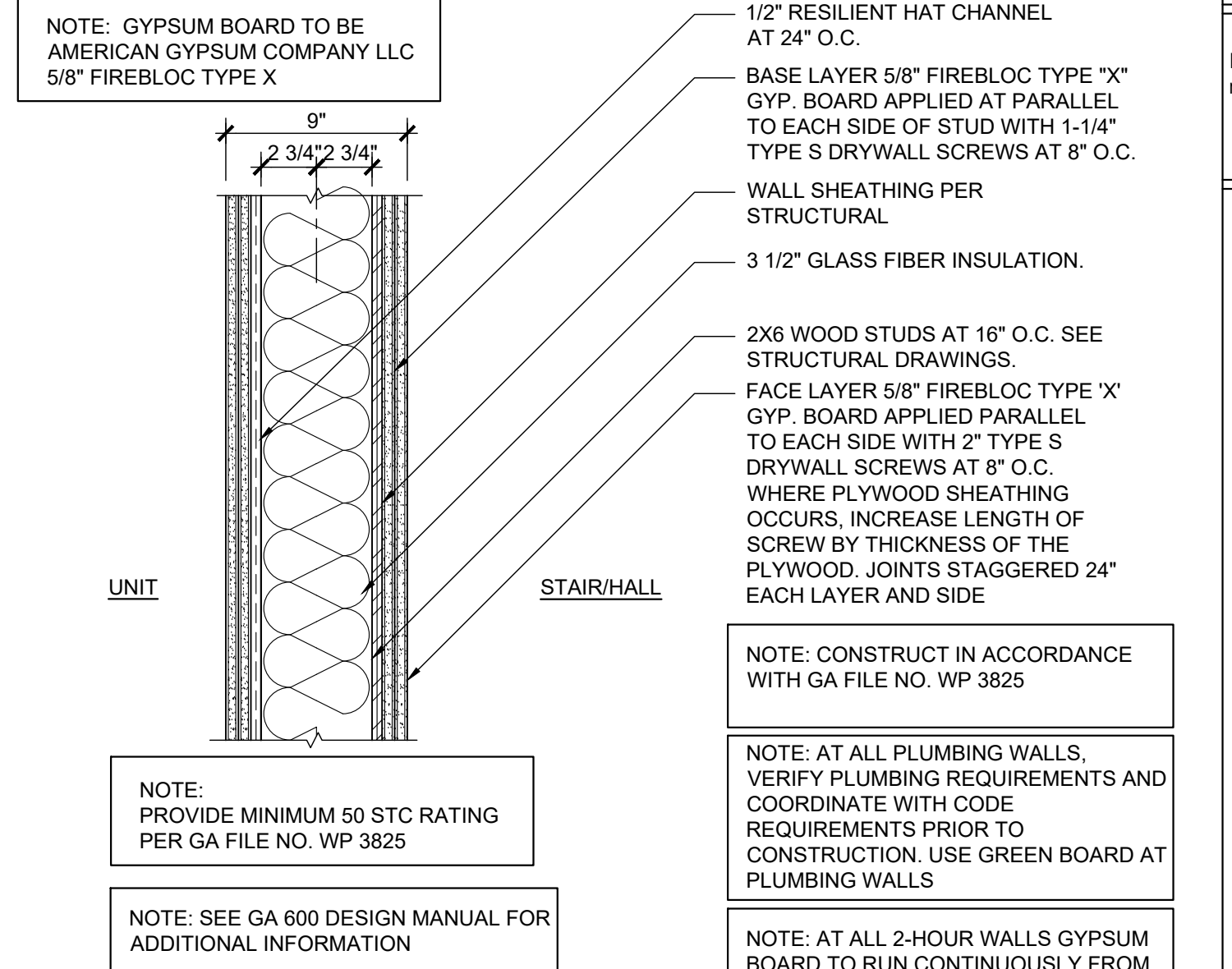
WALL TYPE 6
TWO-HR RATED SHAFT WALL

6
A5.1 1 1/2" = 1'-0"



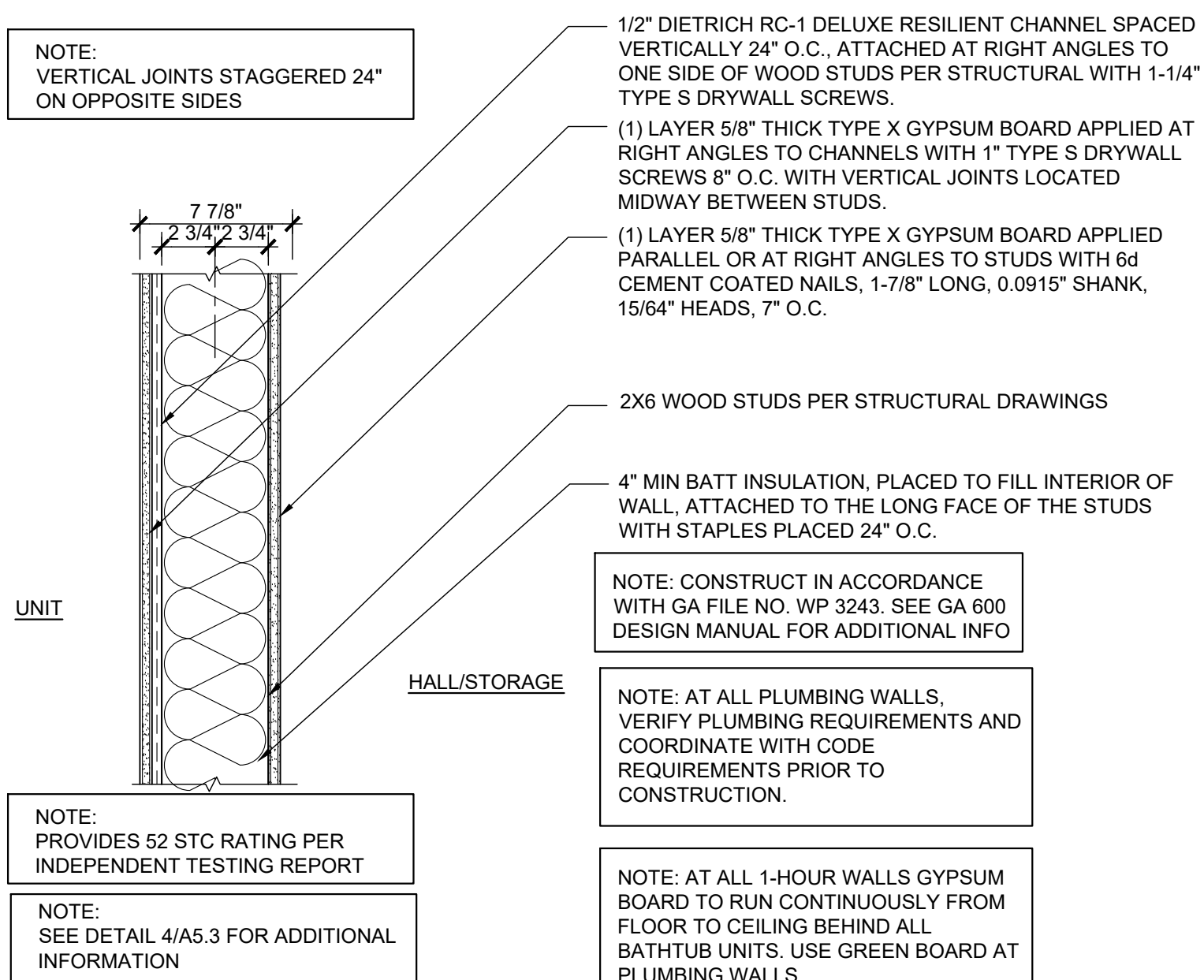
WALL TYPE 7
PARTIAL HEIGHT INTERIOR WALL

7
A5.1 1 1/2" = 1'-0"



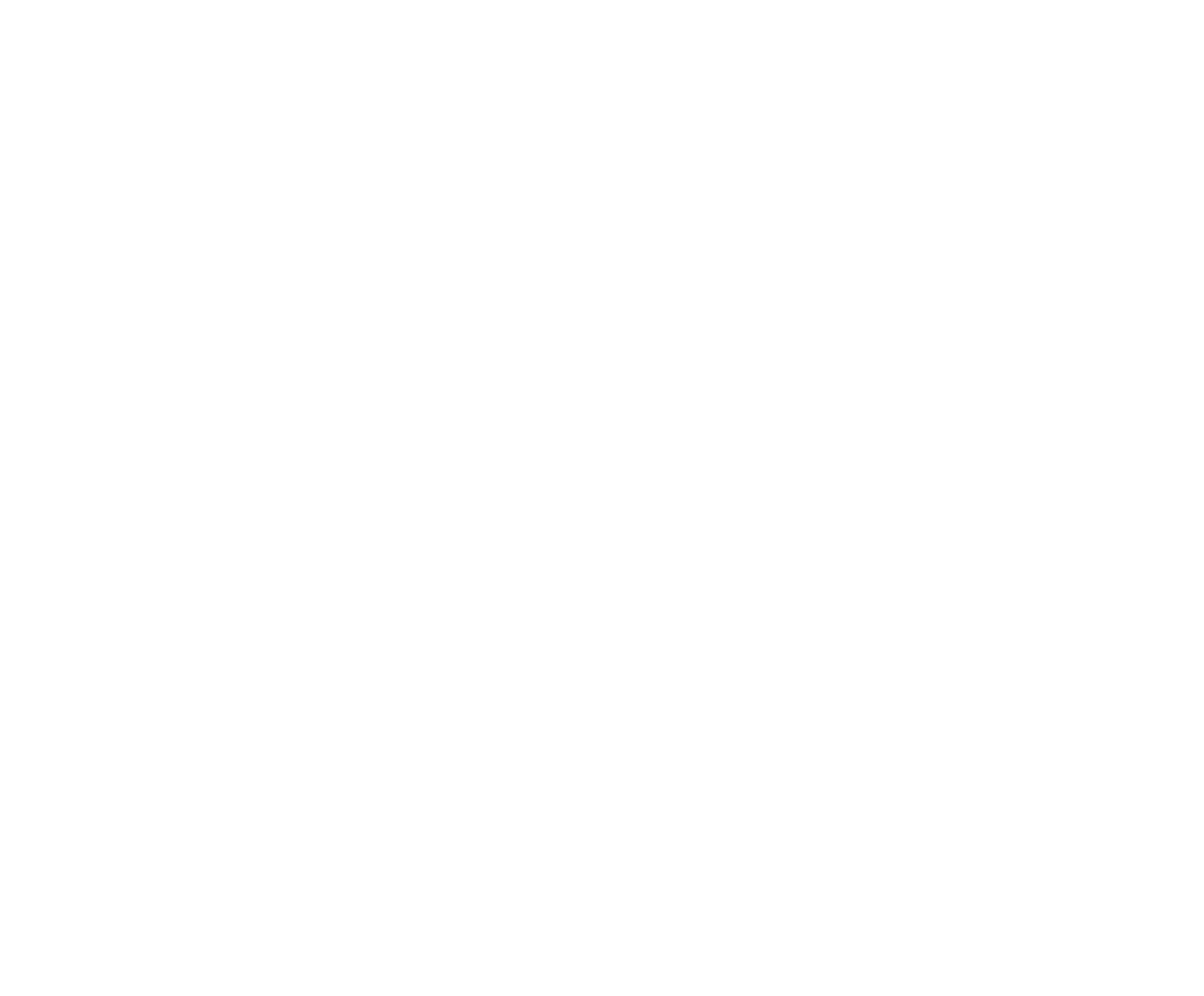
WALL TYPE 8
TWO-HR. RATED STAIR ENCLOSURE

8
A5.1 1 1/2" = 1'-0"



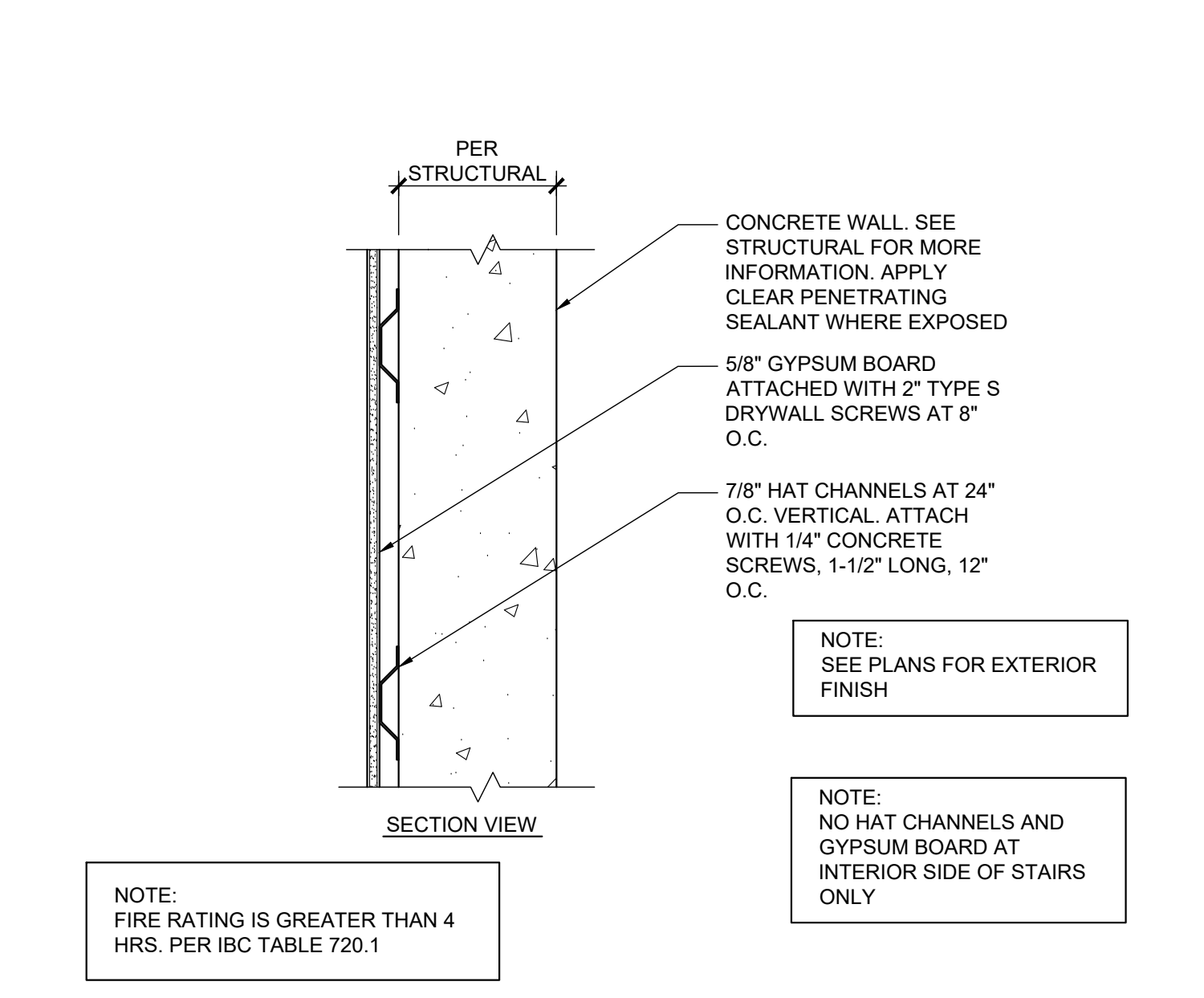
WALL TYPE 9
ONE-HR. RATED INTERIOR WALL

9
A5.1 1 1/2" = 1'-0"



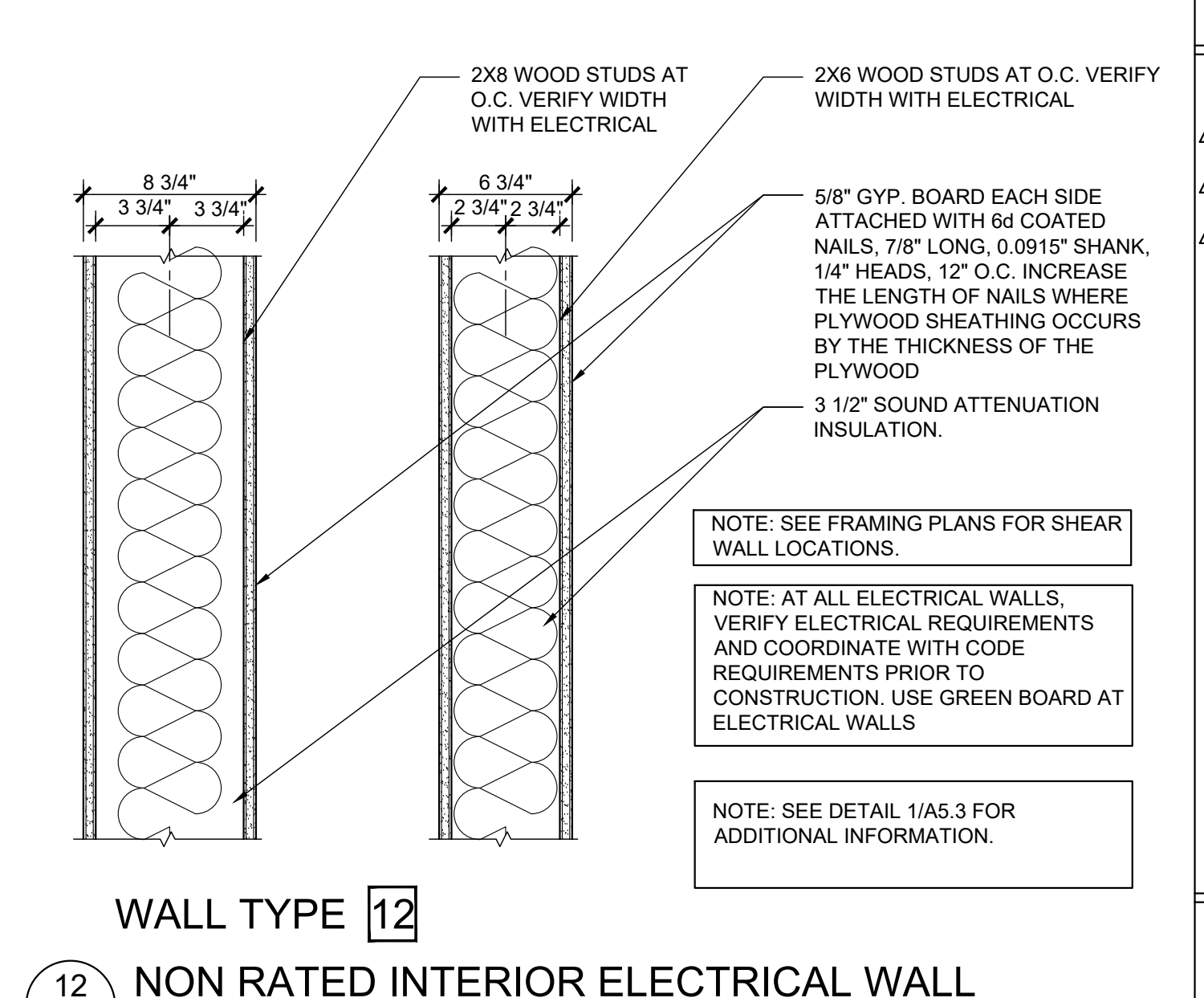
WALL TYPE 10
NOT USED

10
A5.1



WALL TYPE 11
CONCRETE WALL

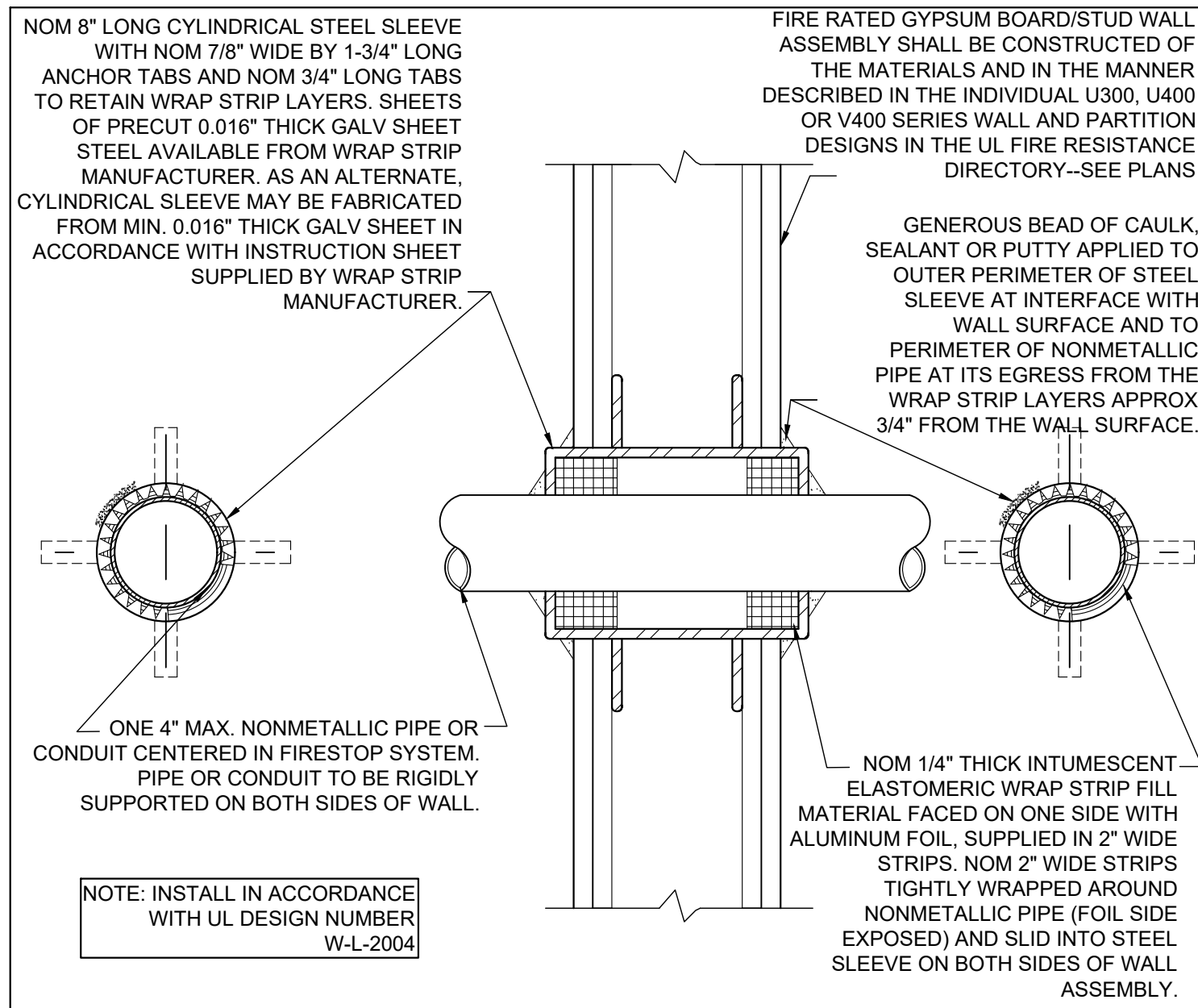
11
A5.1 1 1/2" = 1'-0"



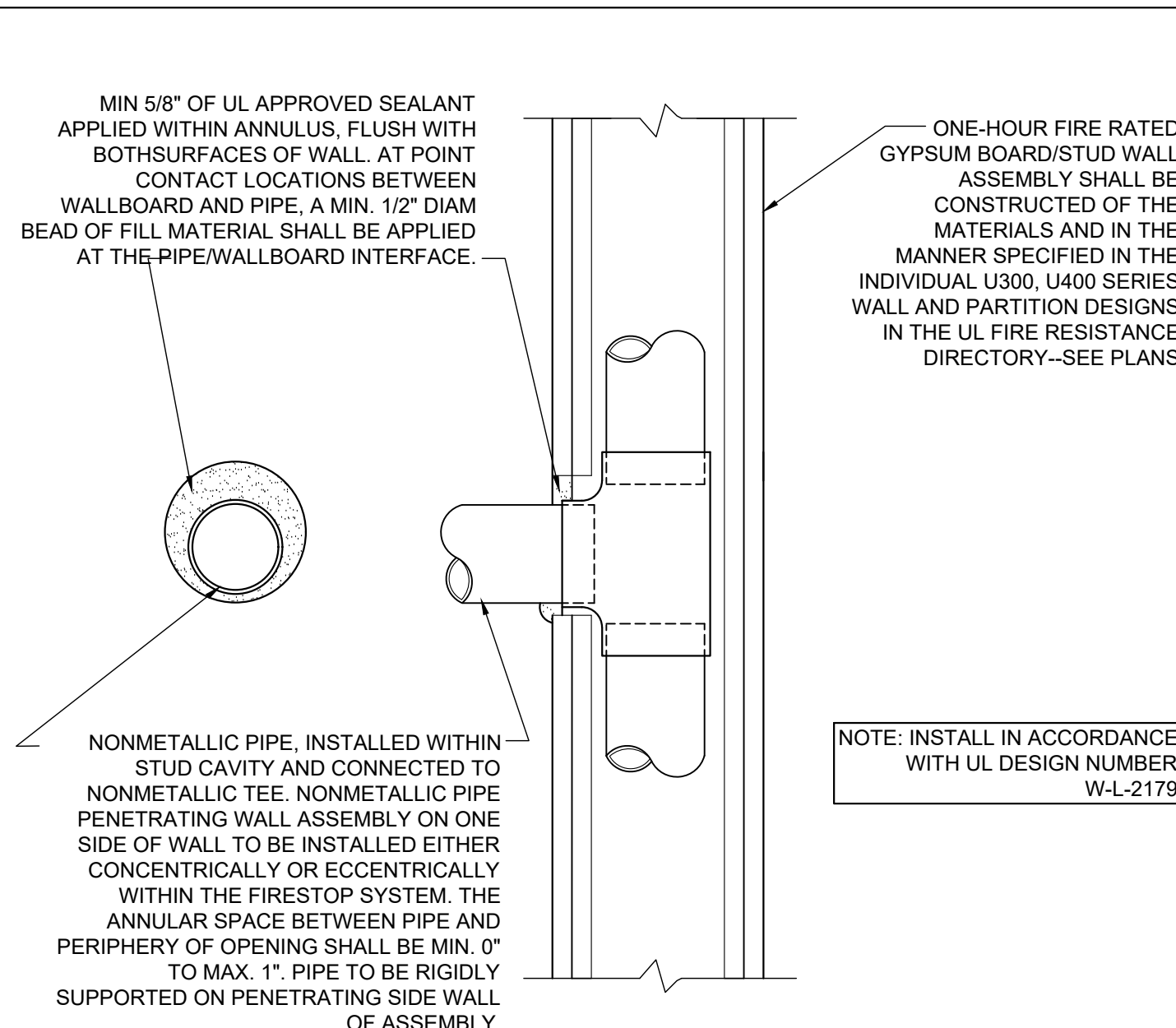
WALL TYPE 12
NON RATED INTERIOR ELECTRICAL WALL

12
A5.1 1 1/2" = 1'-0"

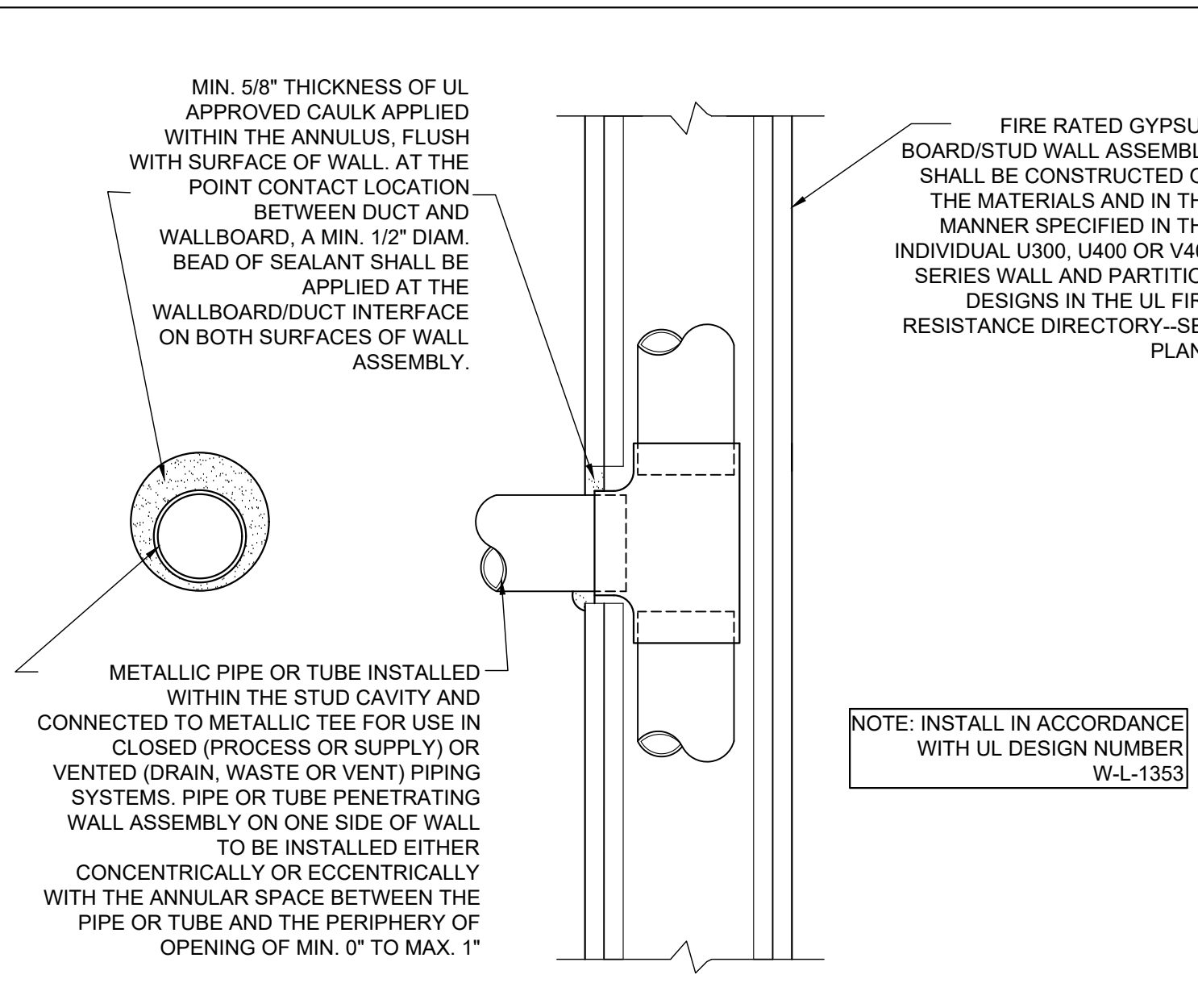
REFER TO 11/A5.2 FOR WALL TYPE 13,
12/A5.2 FOR WALL TYPE 14, AND SHEET
A5.5 FOR WALL TYPES 15 AND 16



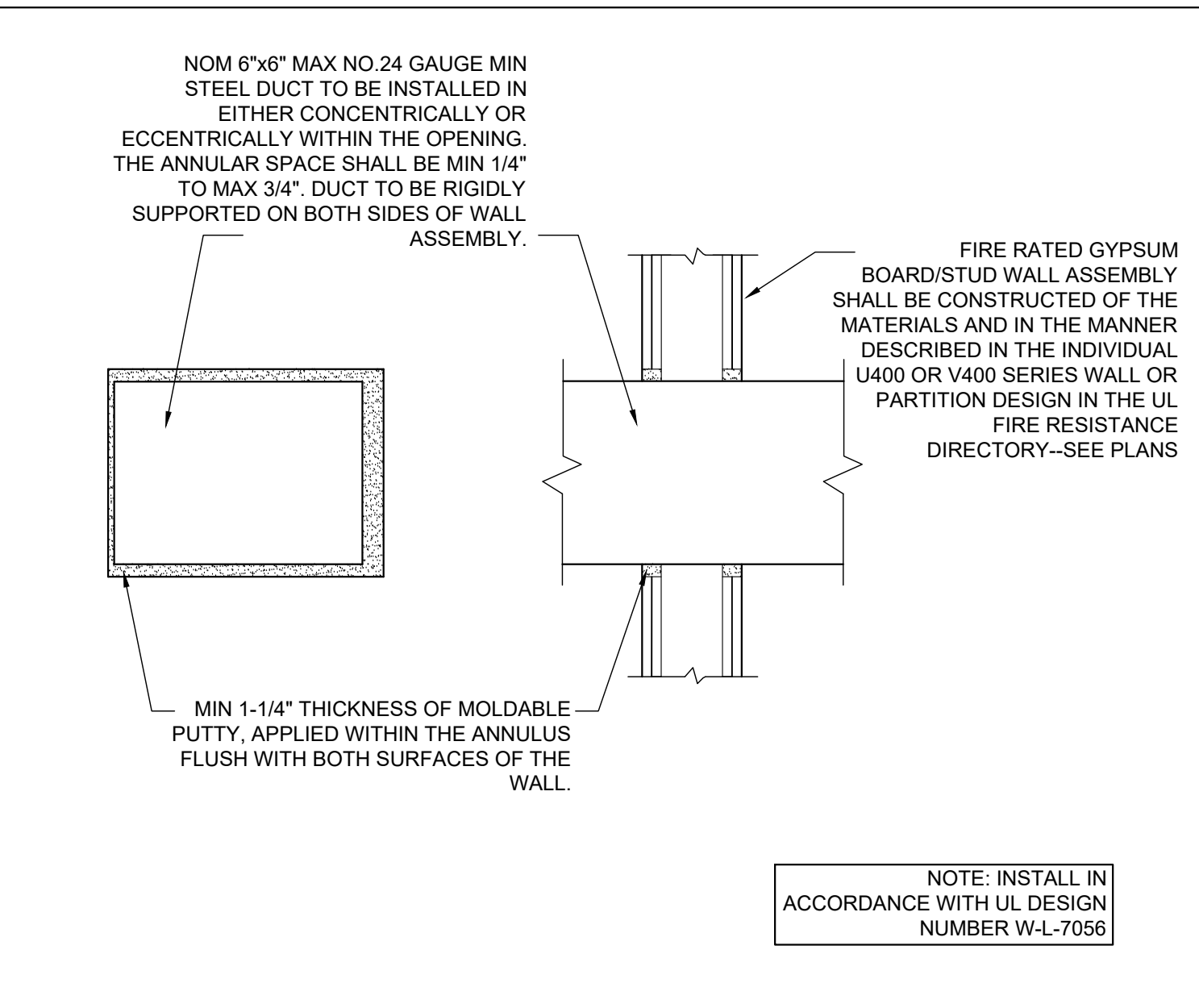
1 A5.2 3" = 1'-0" NON-METALLIC THROUGH PENETRATION AT ONE OR TWO HOUR FIRE WALL



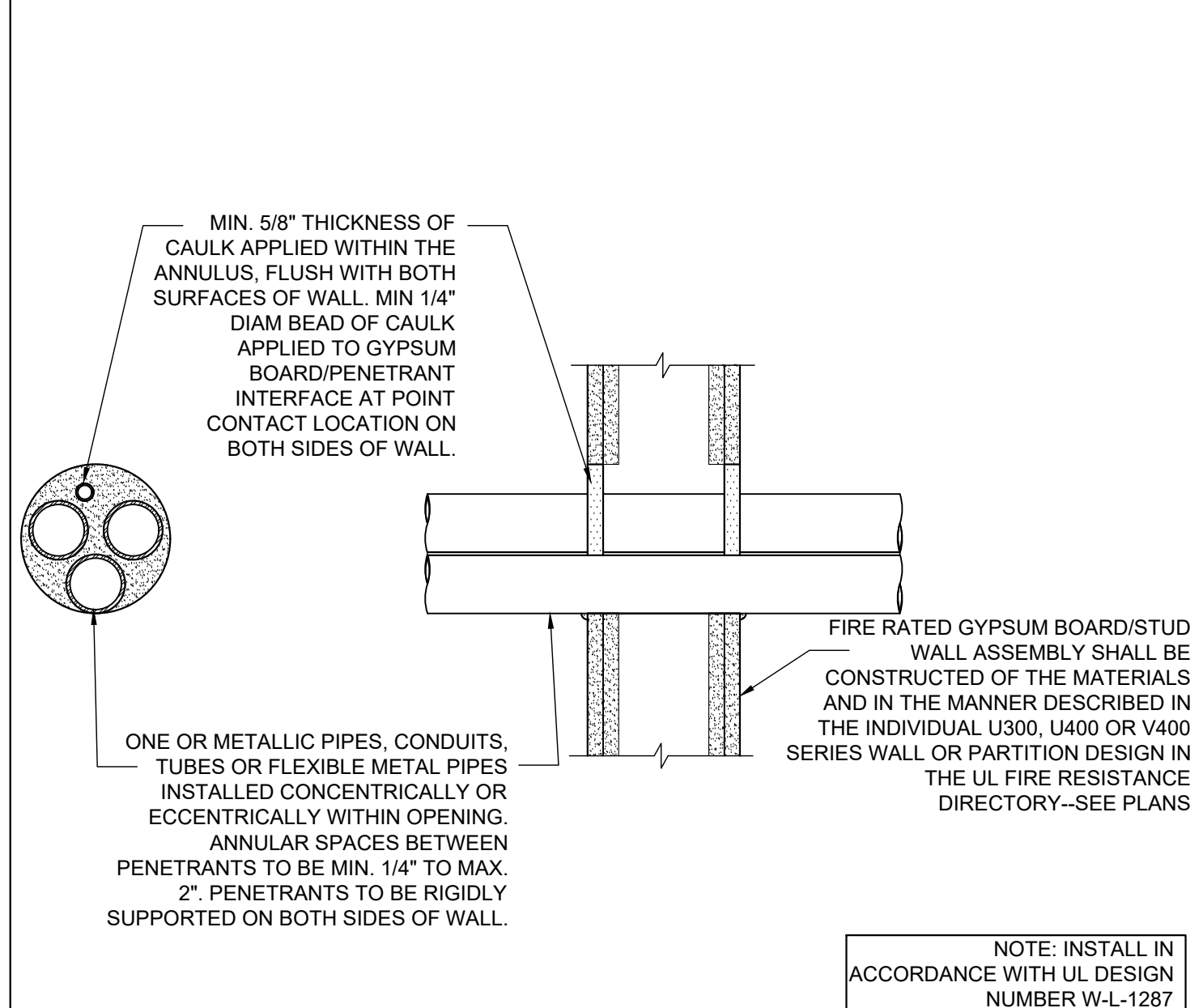
2 A5.2 3" = 1'-0" PVC PIPE ONE-SIDED PENETRATION AT ONE OR TWO HOUR WALL



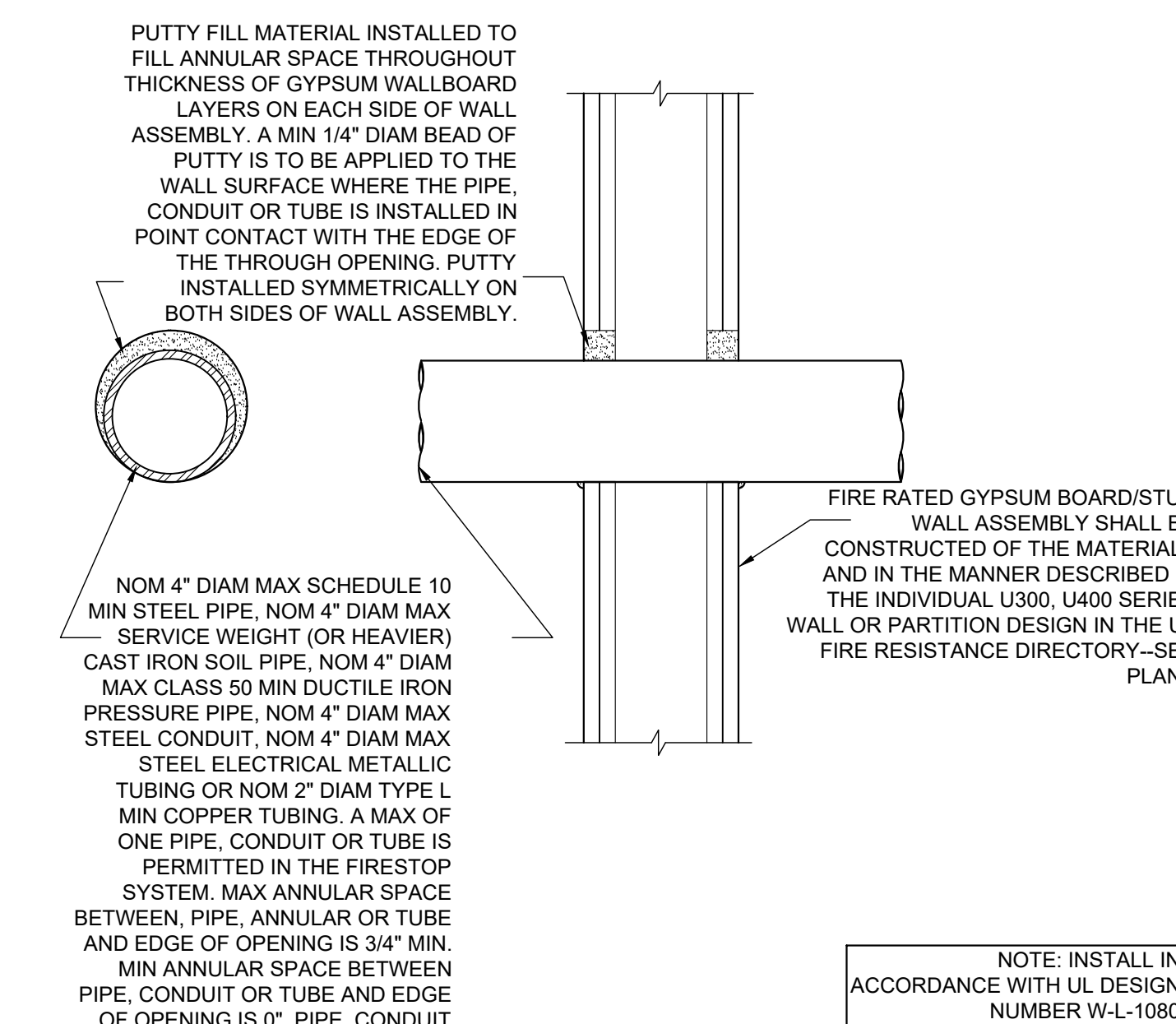
3 A5.2 3" = 1'-0" METAL PIPE ONE-SIDED PENETRATION AT ONE OR TWO HOUR WALL



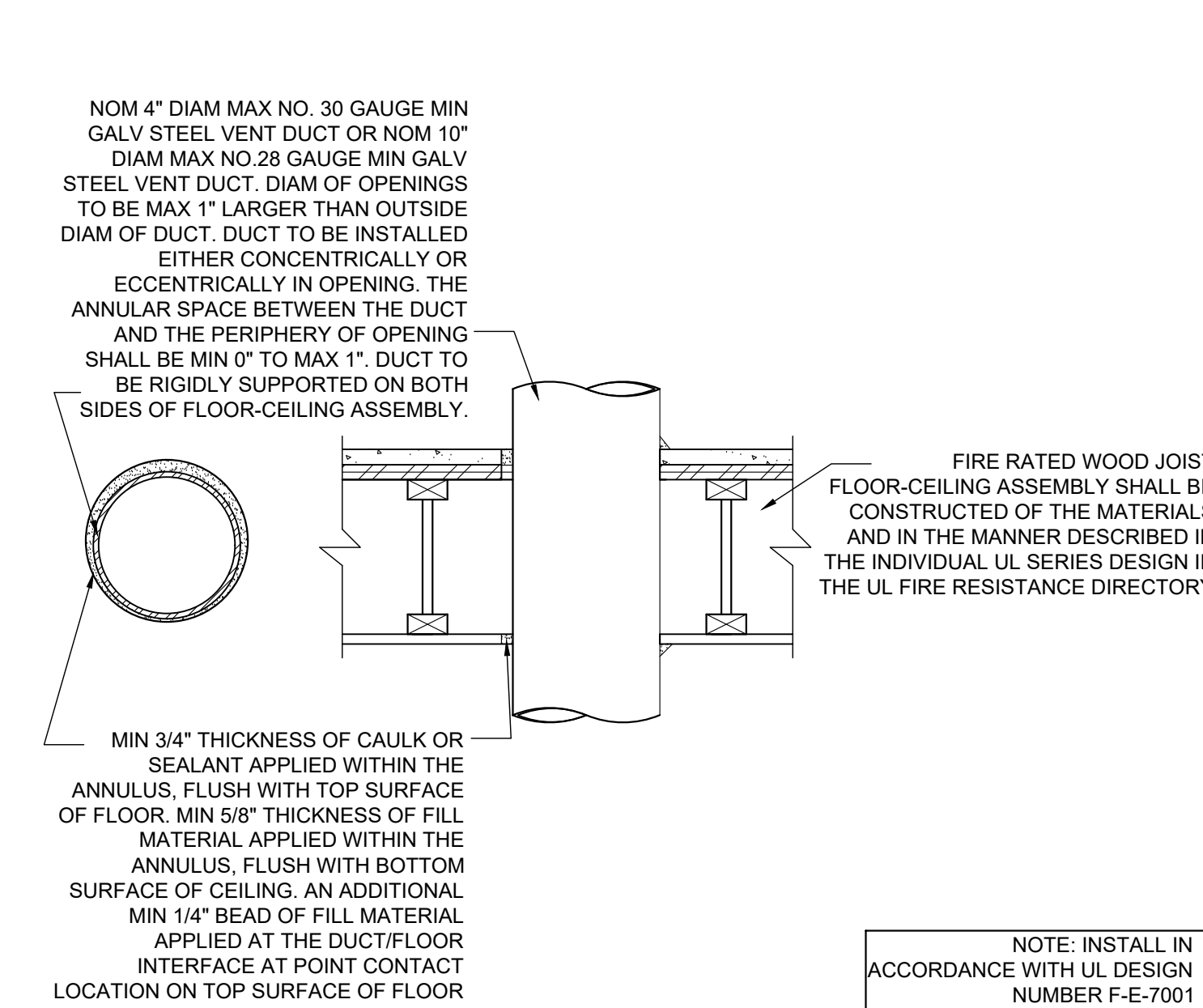
4 A5.2 1 1/2" = 1'-0" HVAC DUCT PENETRATION AT ONE OR TWO HOUR FIRE RATED WALL



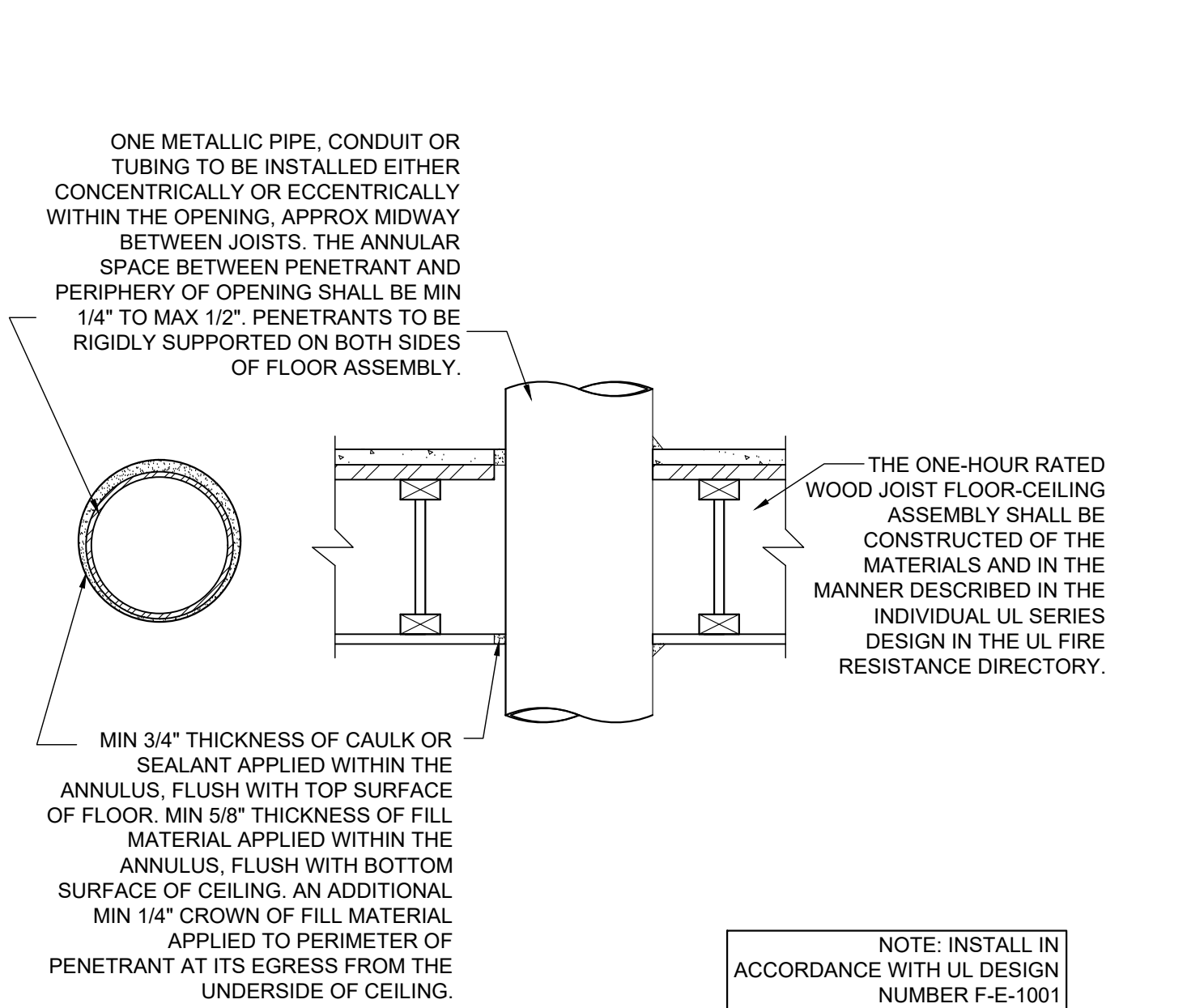
5 A5.2 1 1/2" = 1'-0" MULTIPLE METAL THROUGH PENETRATIONS AT ONE AND TWO HOUR WALL



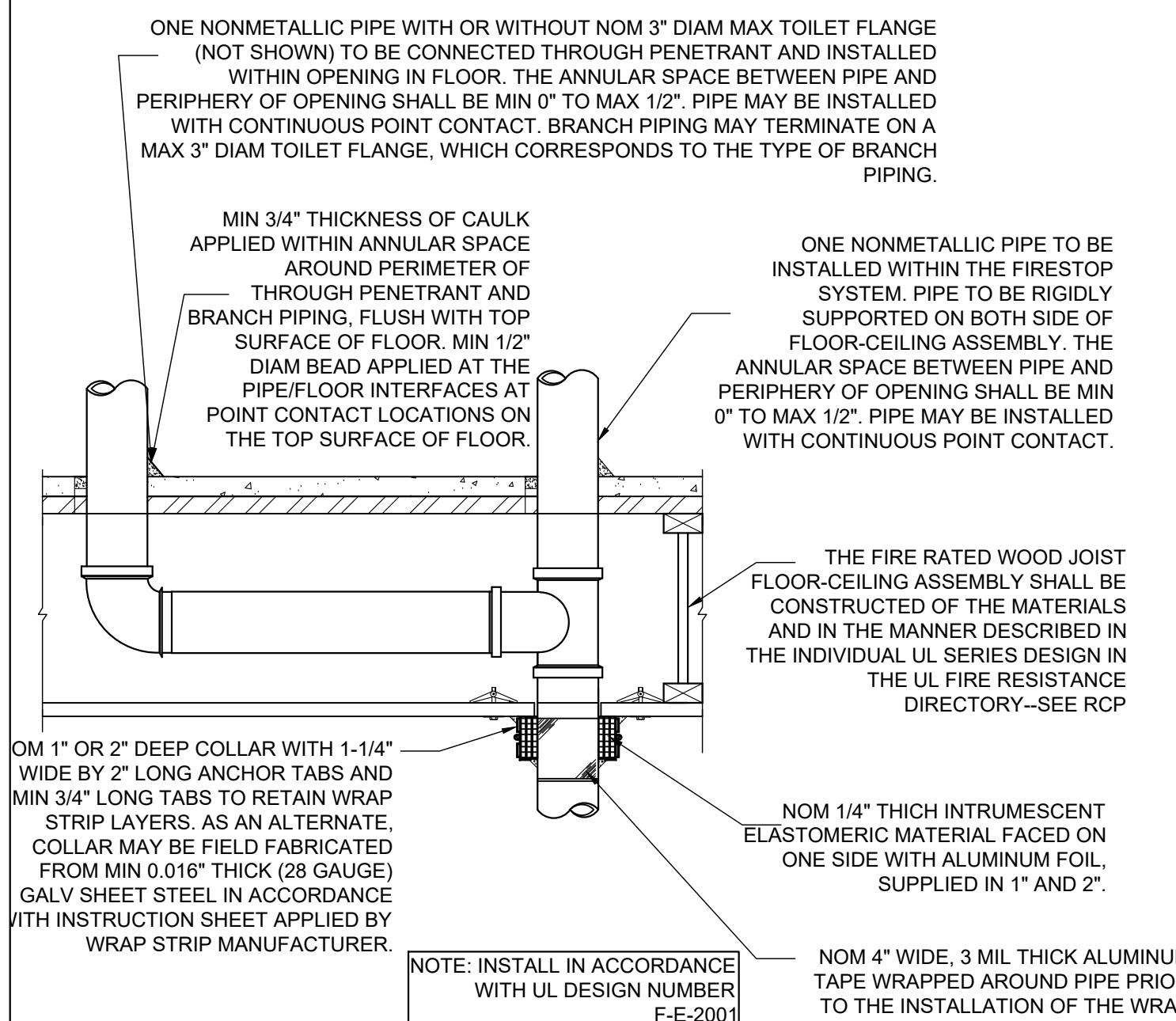
6 A5.2 1 1/2" = 1'-0" METALLIC THROUGH PENETRATION AT ONE OR TWO HOUR WALL



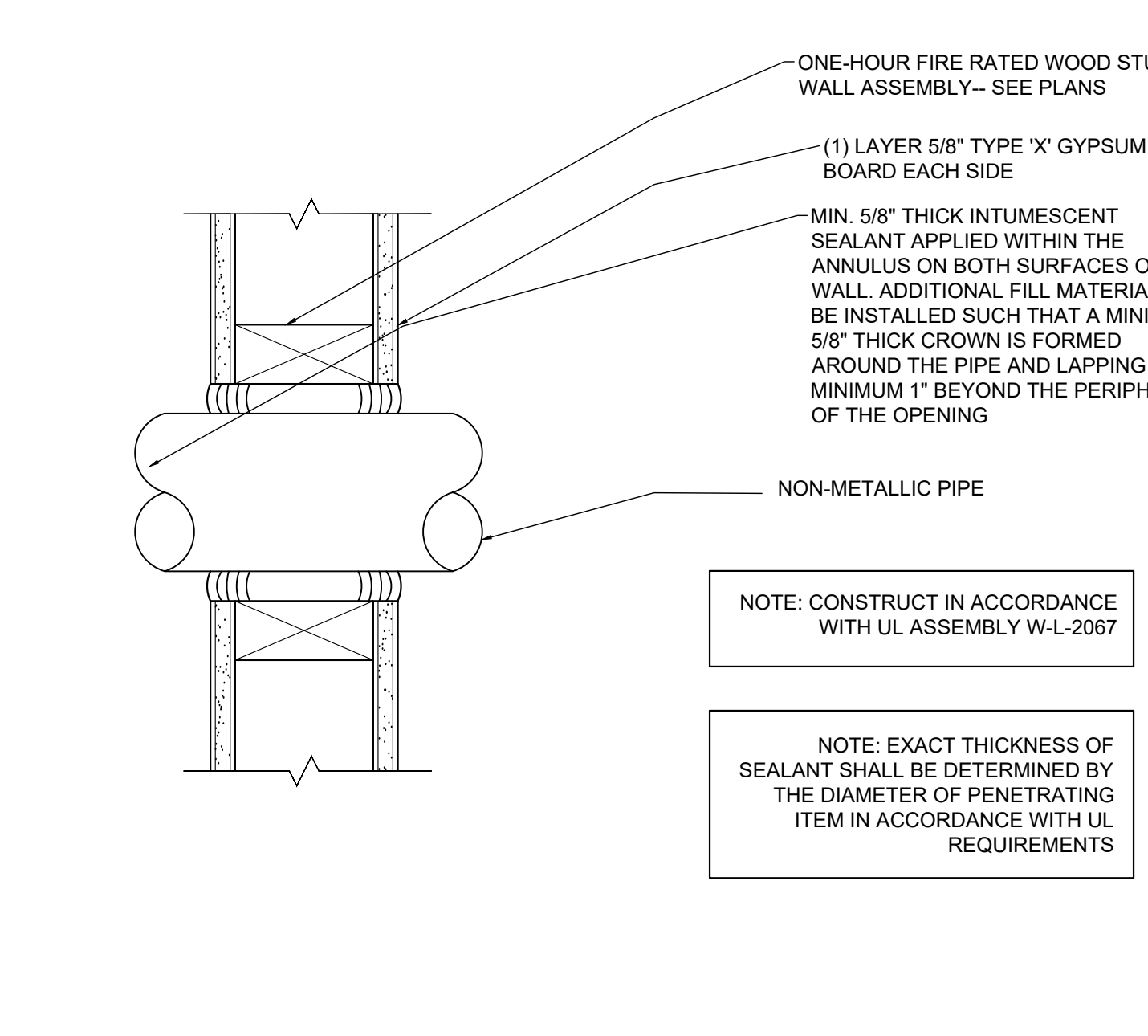
7 A5.2 1 1/2" = 1'-0" VENT PENETRATION AT ONE-HOUR RATED FLOOR



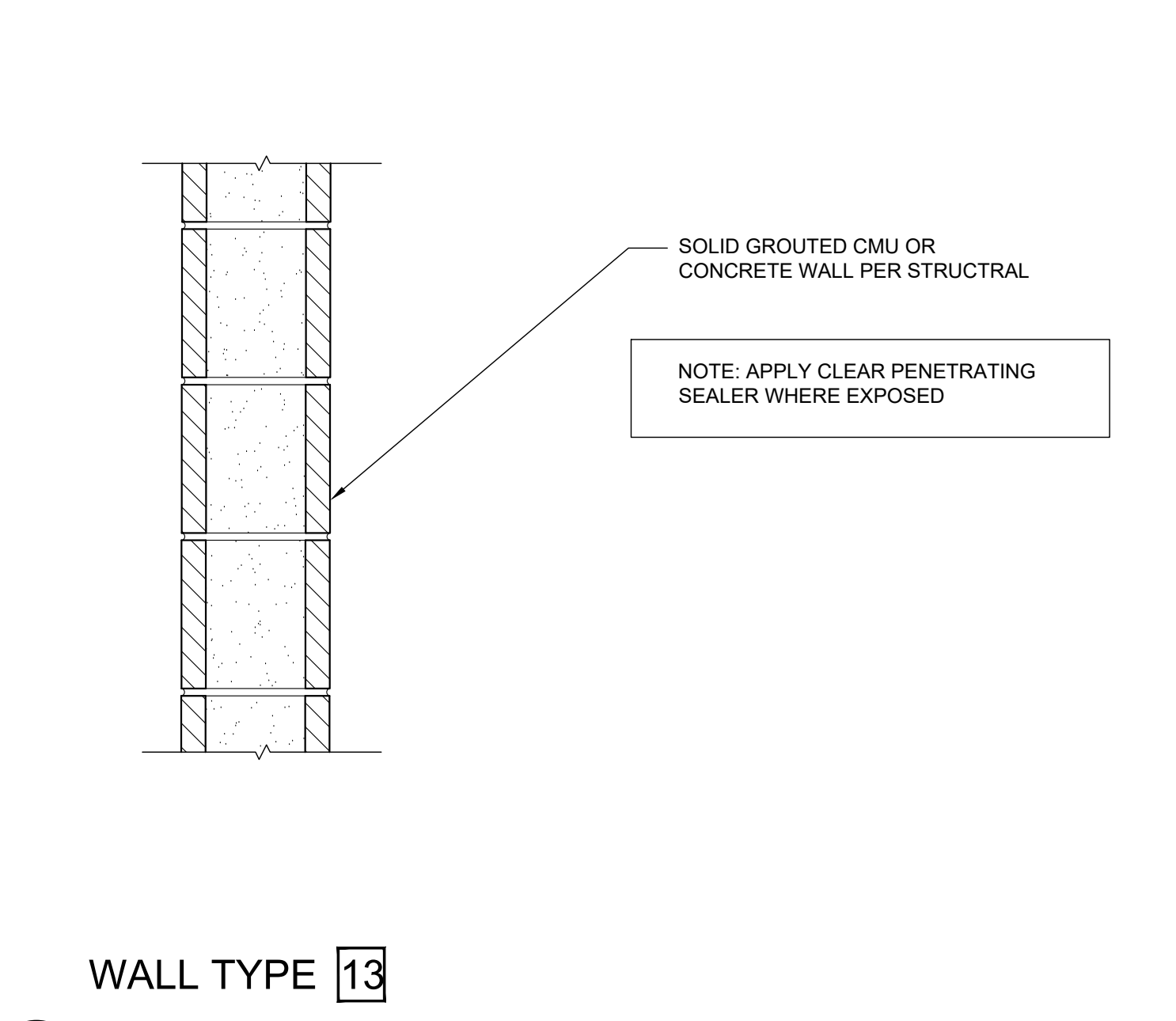
8 A5.2 1 1/2" = 1'-0" METAL PENETRATION AT ONE-HOUR RATED FLOOR



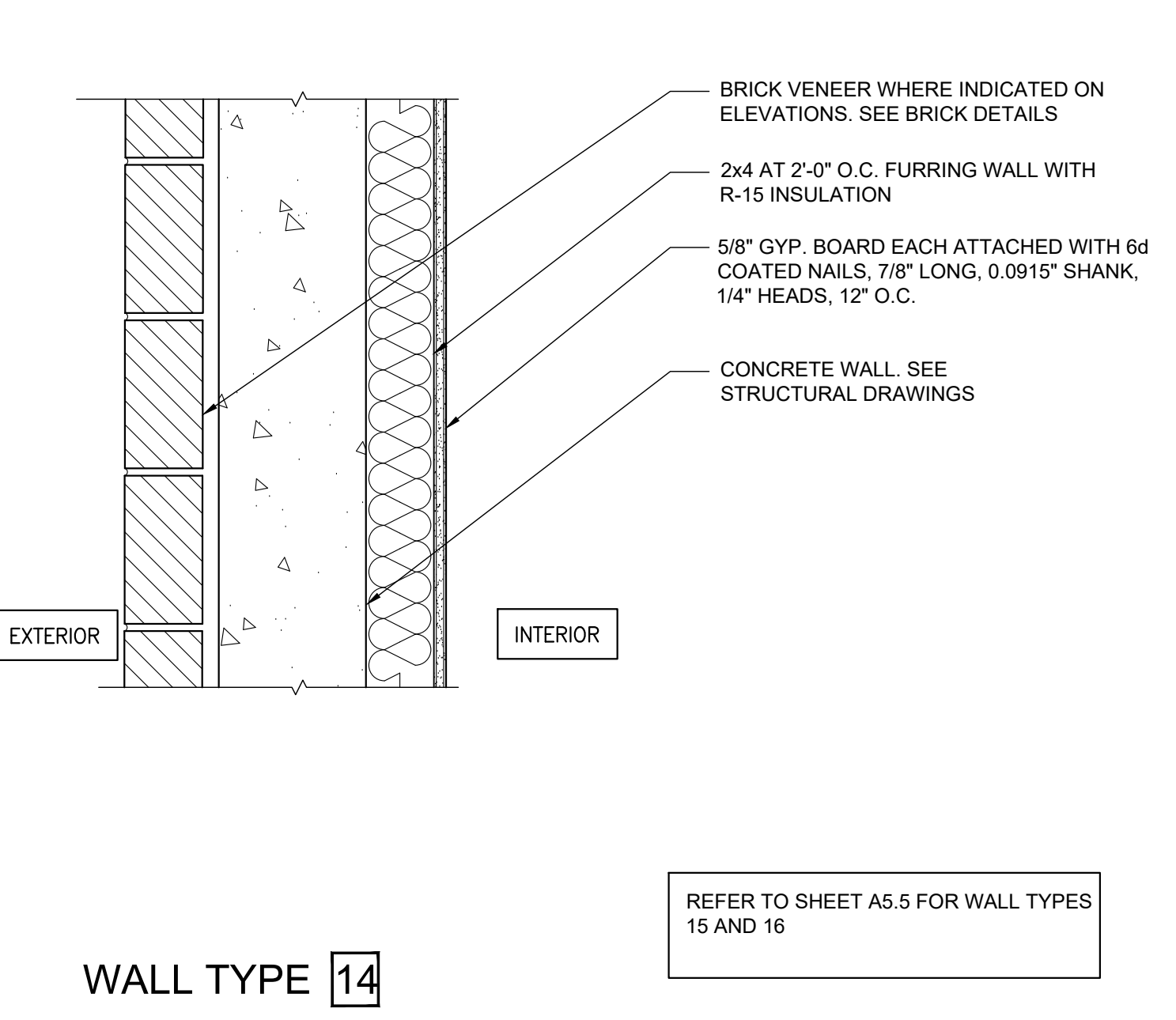
9 A5.2 1 1/2" = 1'-0" NON-METALLIC PENETRATION AT ONE-HOUR RATED FLOOR



10 A5.2 3" = 1'-0" ONE-HR. RATED WALL PENETRATION



11 A5.2 1 1/2" = 1'-0" WALL TYPE 13 CMU WALL



12 A5.2 1 1/2" = 1'-0" WALL TYPE 14 CONCRETE WALL @ EXTERIOR WALL

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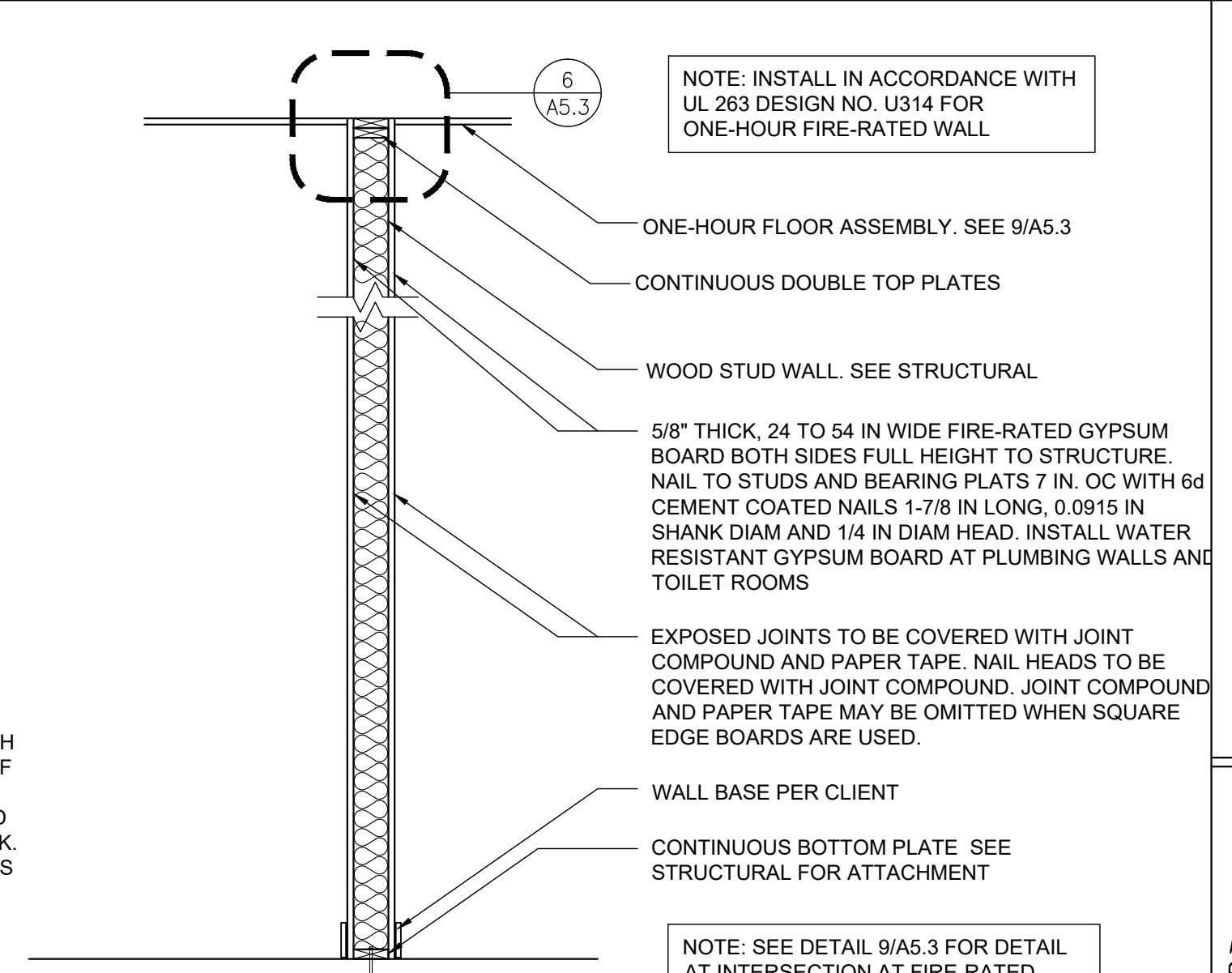
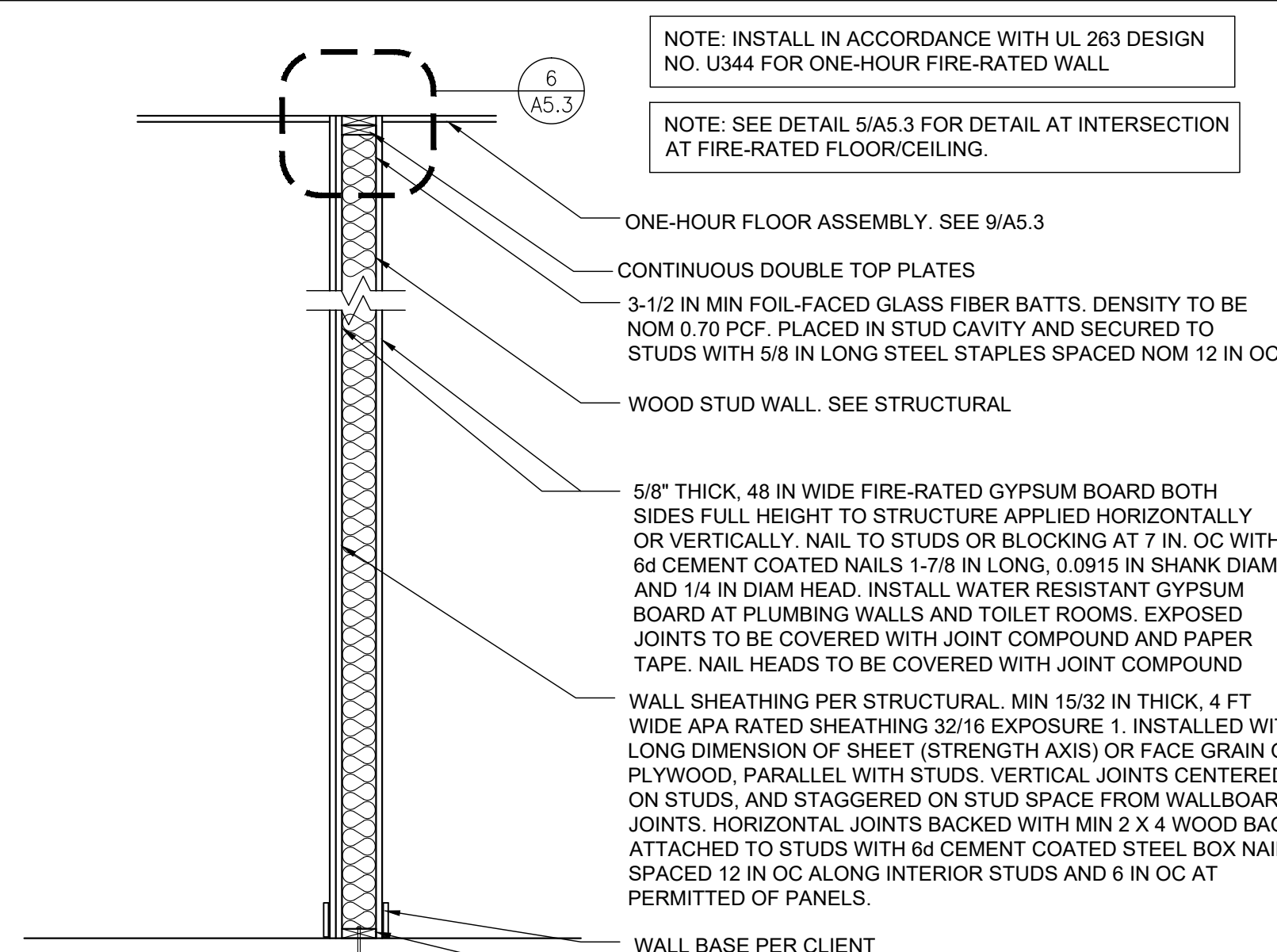
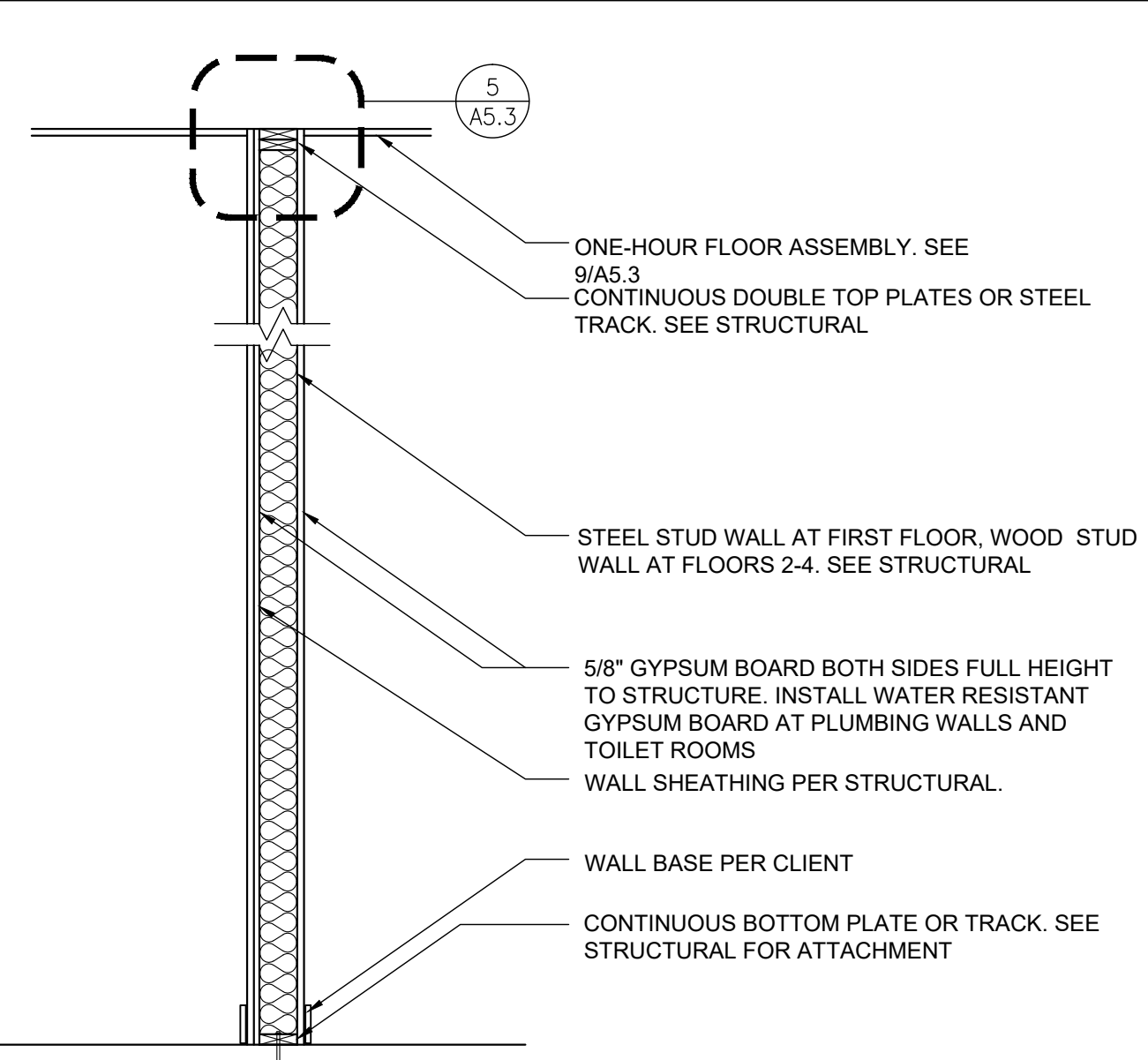
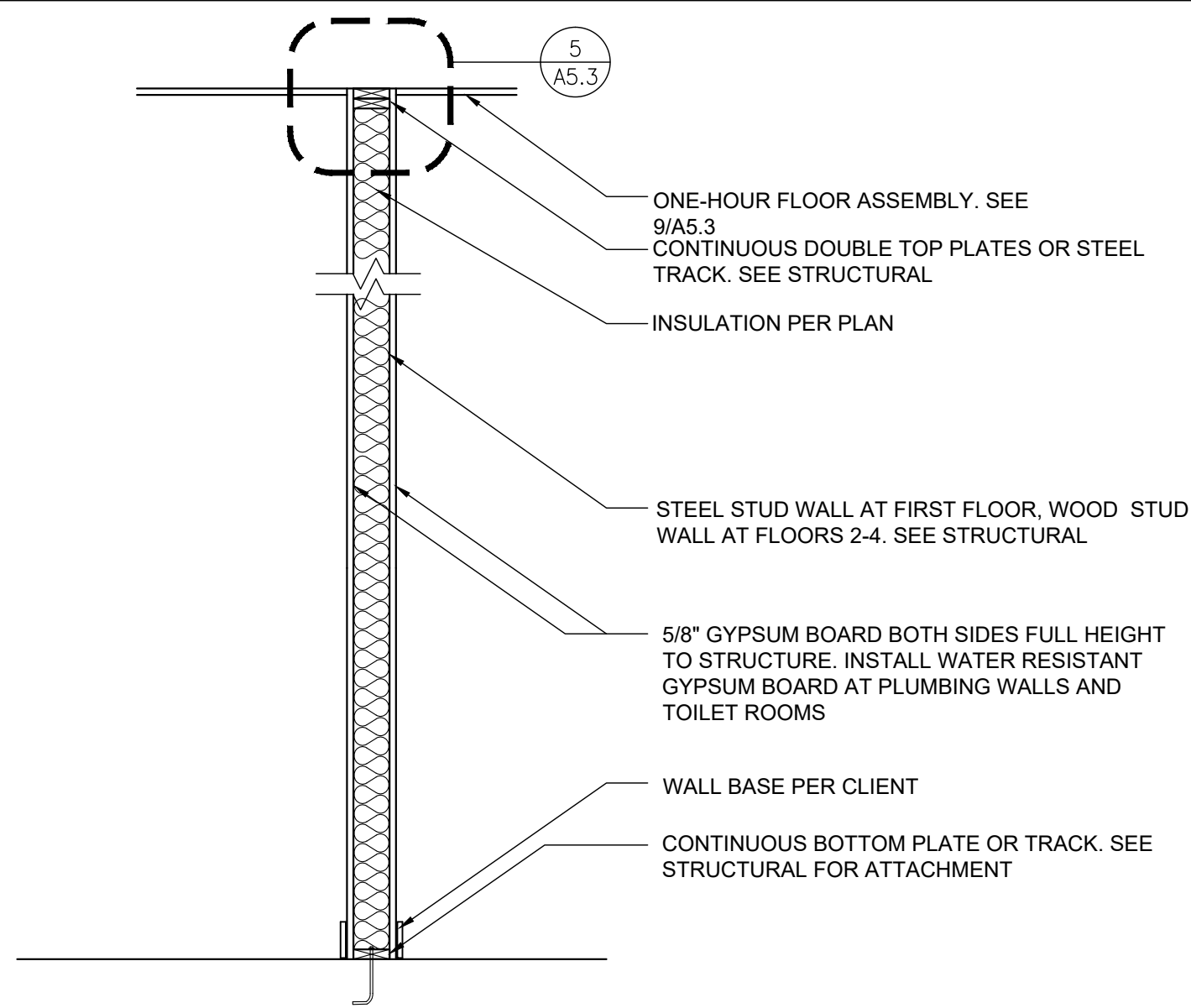
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PENETRATION DETAILS
AND WALL TYPES

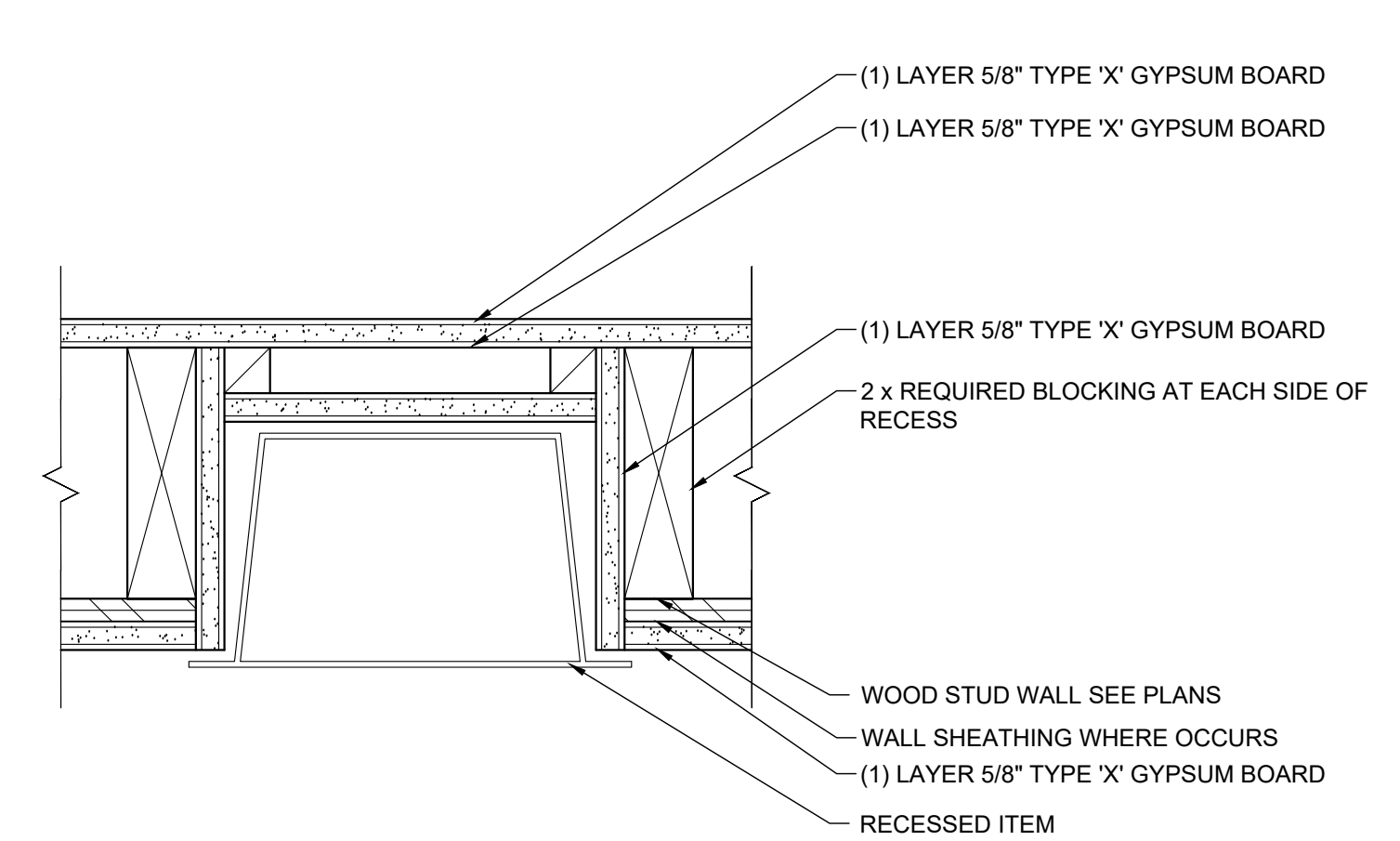
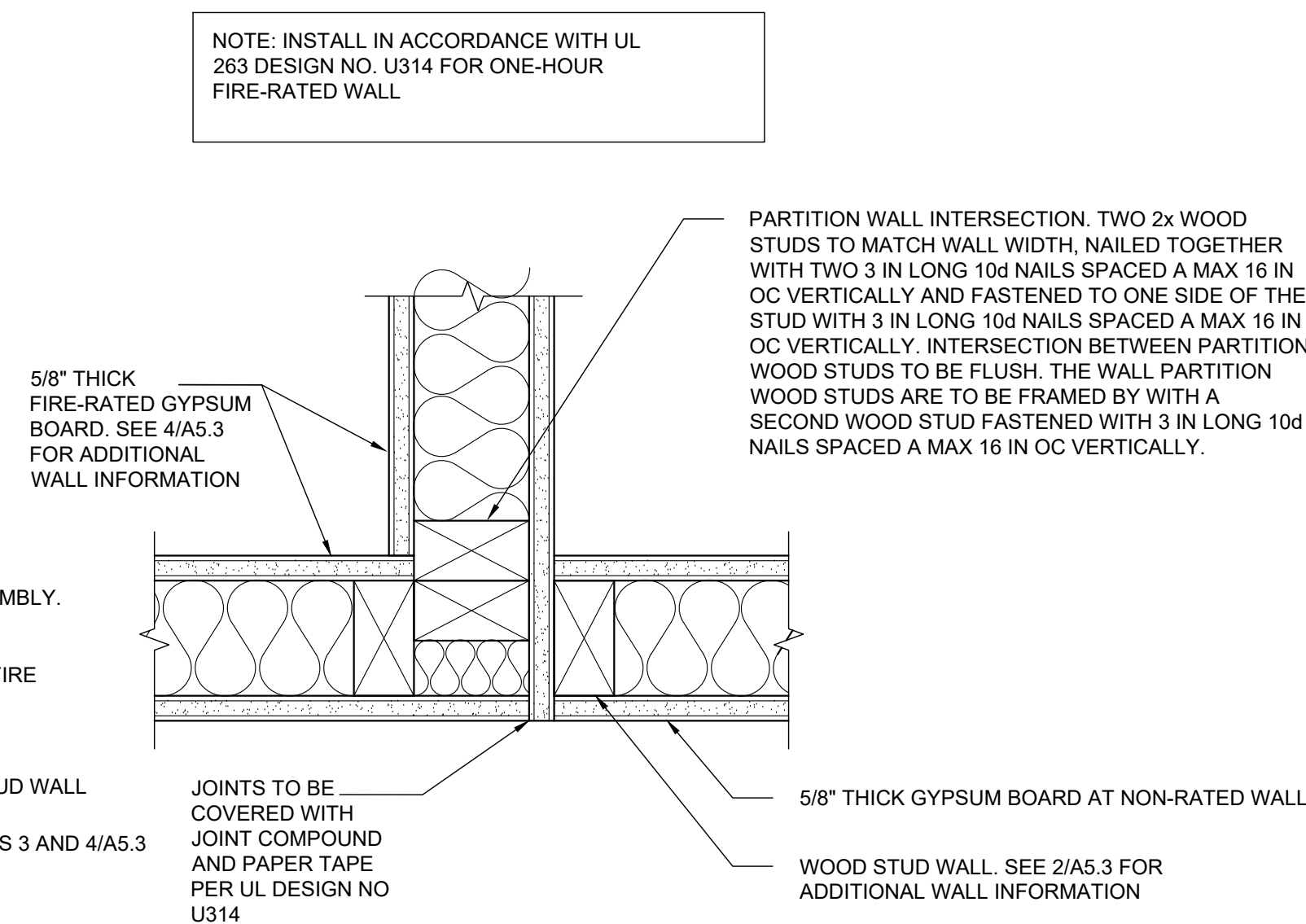
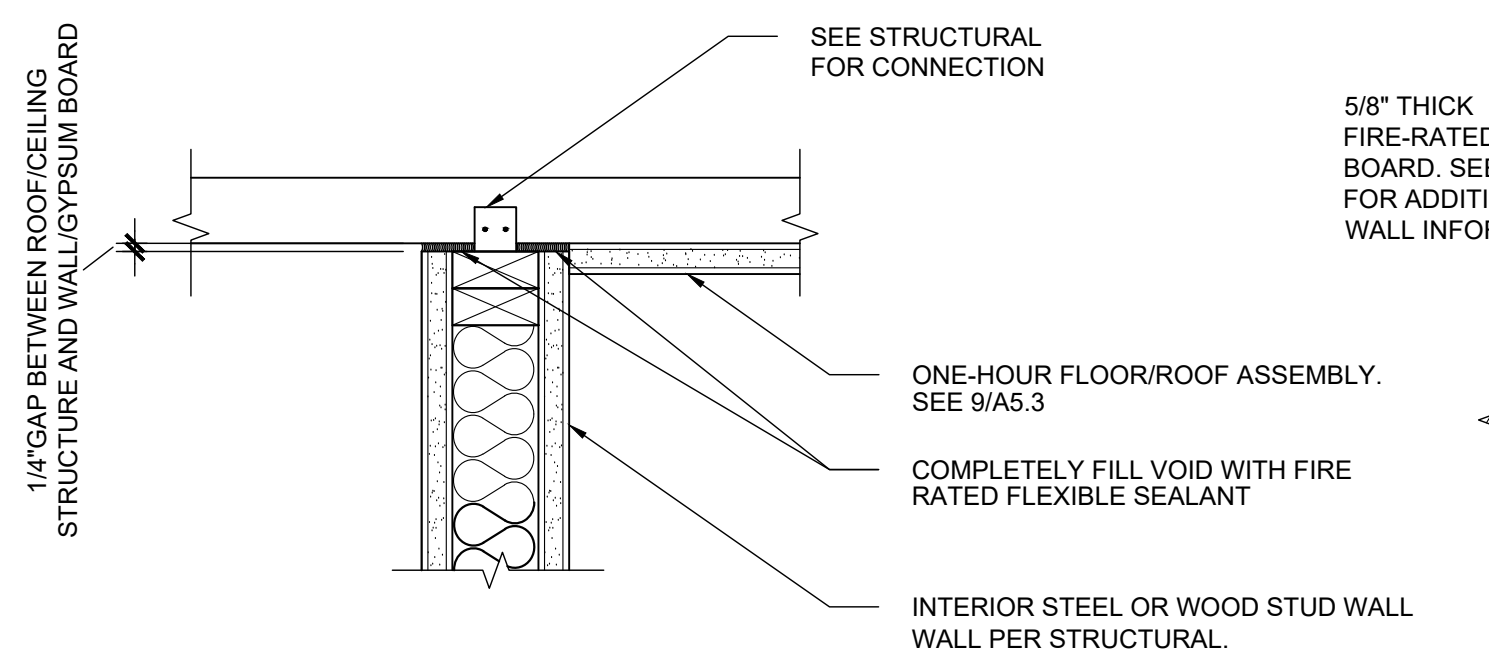
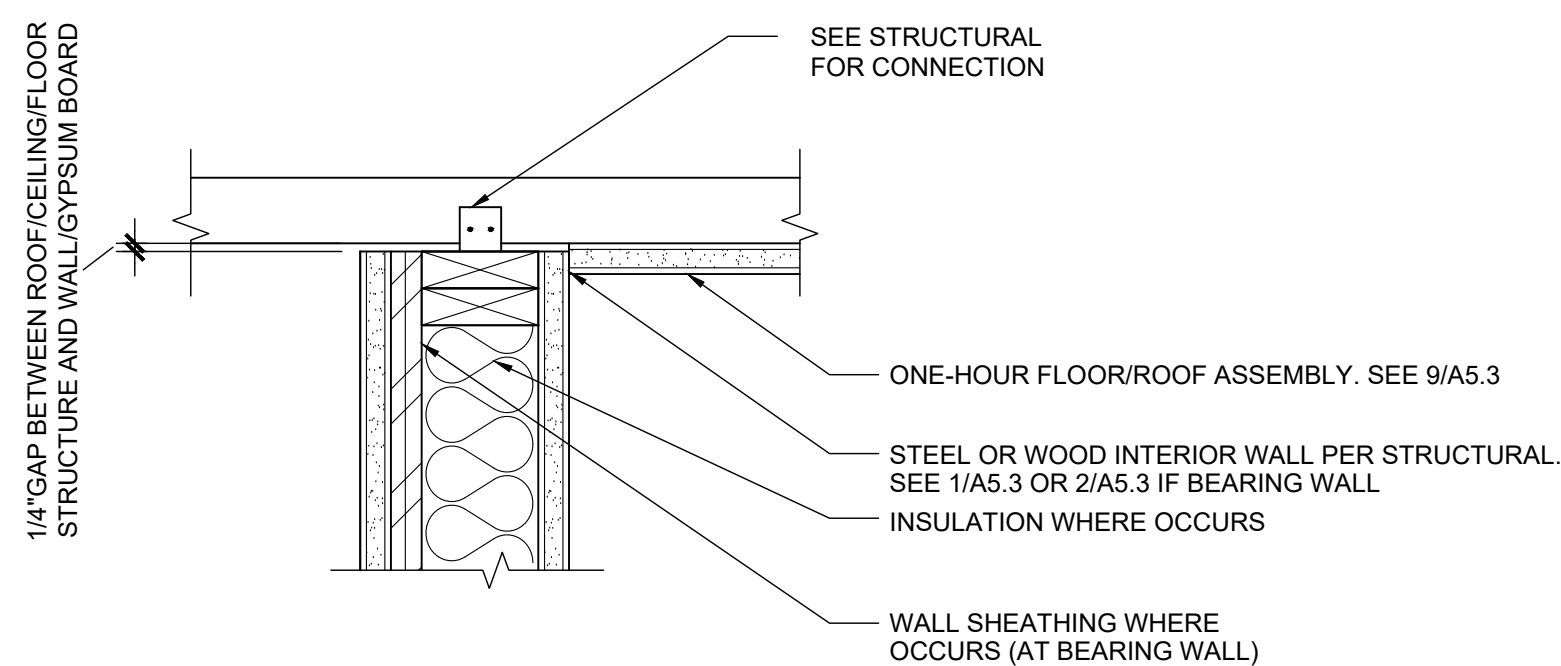


1 FULL HEIGHT WALL
A5.3 3/4" = 1'-0"

2 FULL HEIGHT BEARING WALL
A5.3 3/4" = 1'-0"

3 FULL HEIGHT FIRE-RATED BEARING WALL
A5.3 3/4" = 1'-0" OCCURS AT FLOORS 2-3 ONLY

4 FULL HEIGHT FIRE-RATED NON-BEARING WALL
A5.3 3/4" = 1'-0" OCCURS AT FLOORS 2-3 ONLY

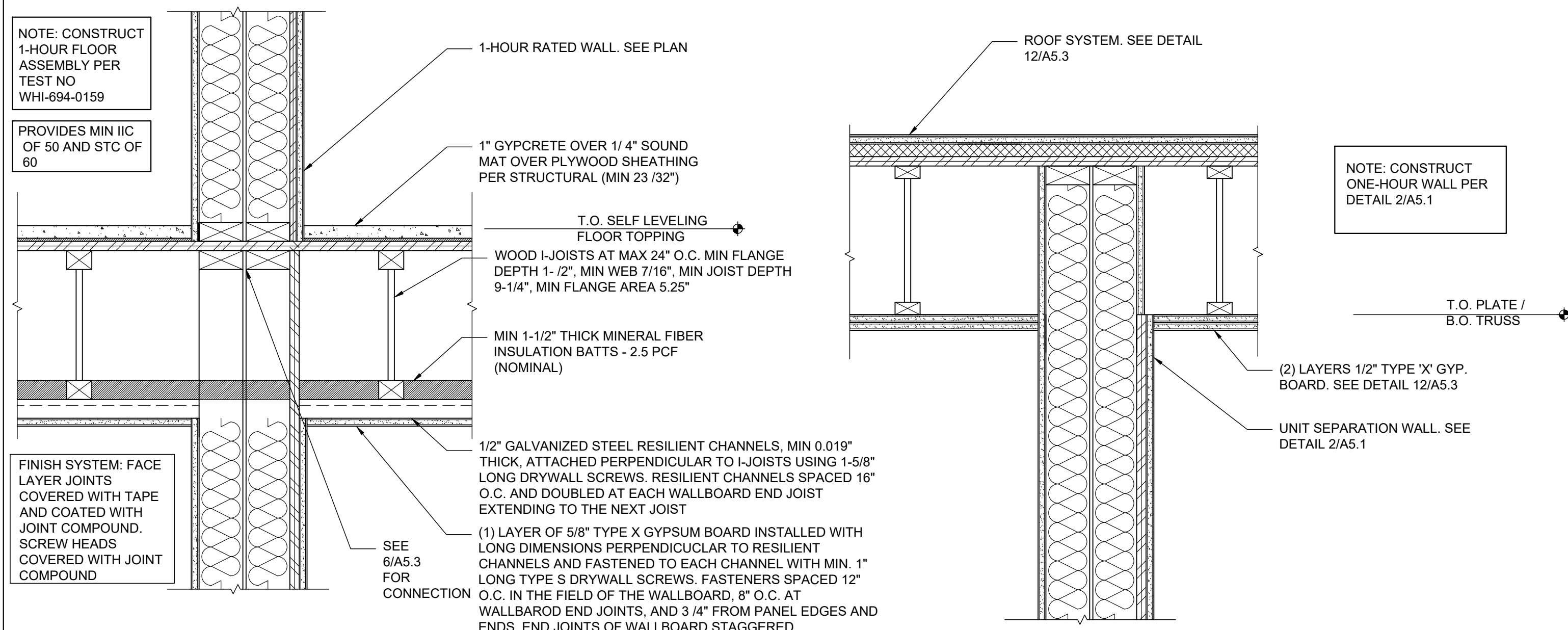


5 DETAIL AT TOP OF WALL
A5.3 NOT TO SCALE

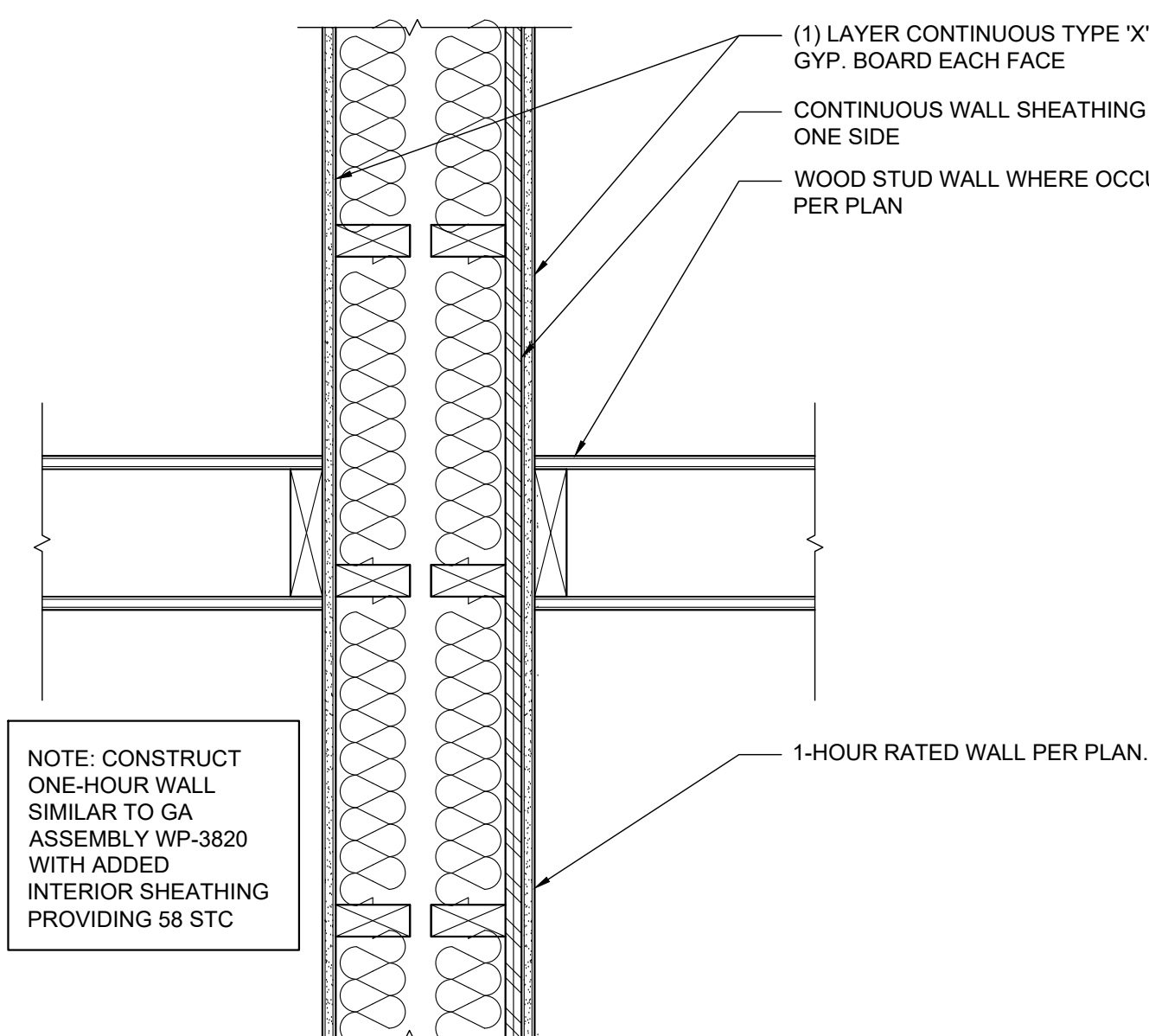
6 DETAIL AT TOP OF FIRE-RATED WALL
A5.3 NOT TO SCALE

7 FIRE-RATED/NON-FIRE RATED WALL INTERSECTION
A5.3 NOT TO SCALE

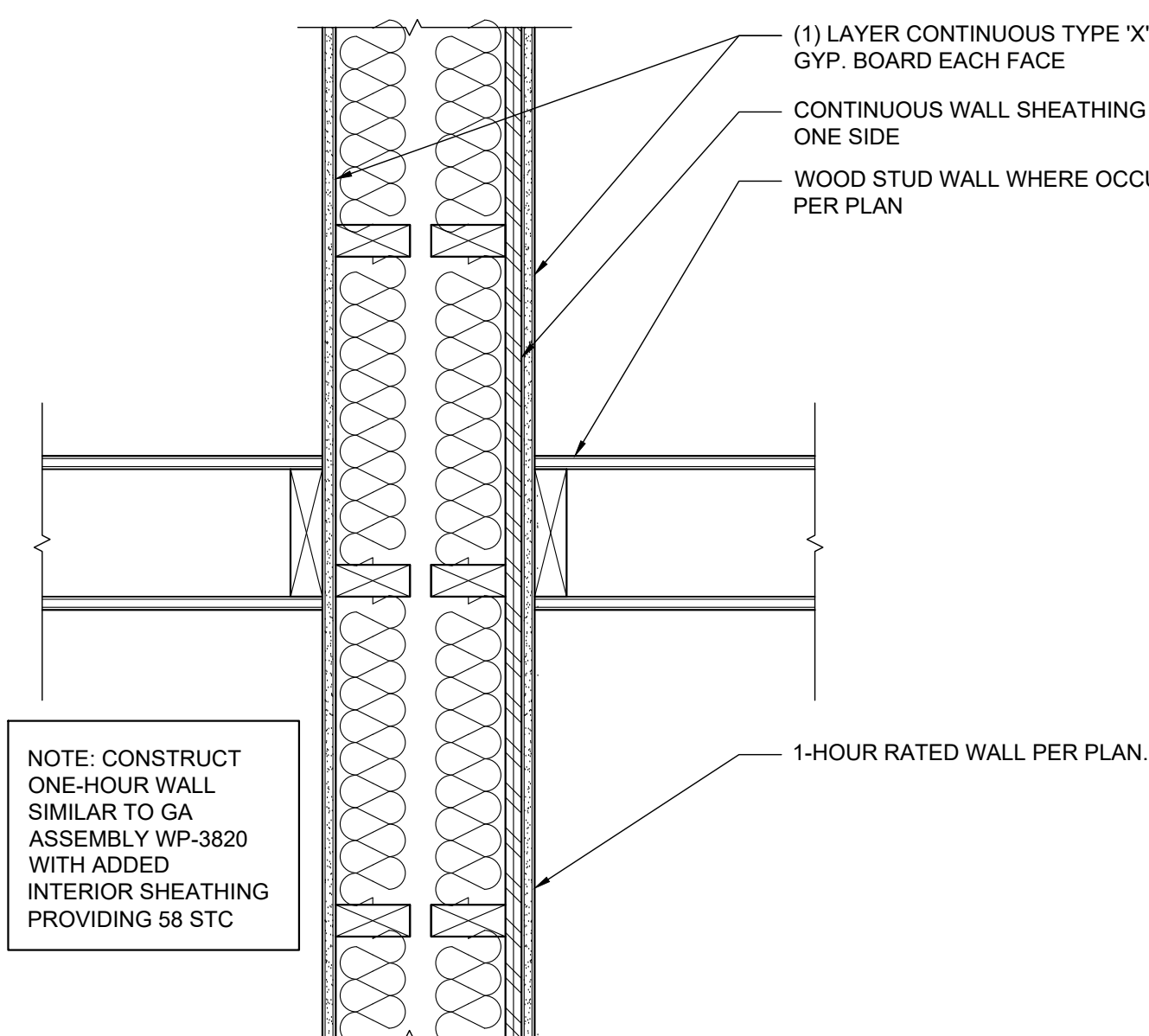
8 RECESSED ITEM AT ONE-HOUR WALL
A5.3 3" = 1'-0"



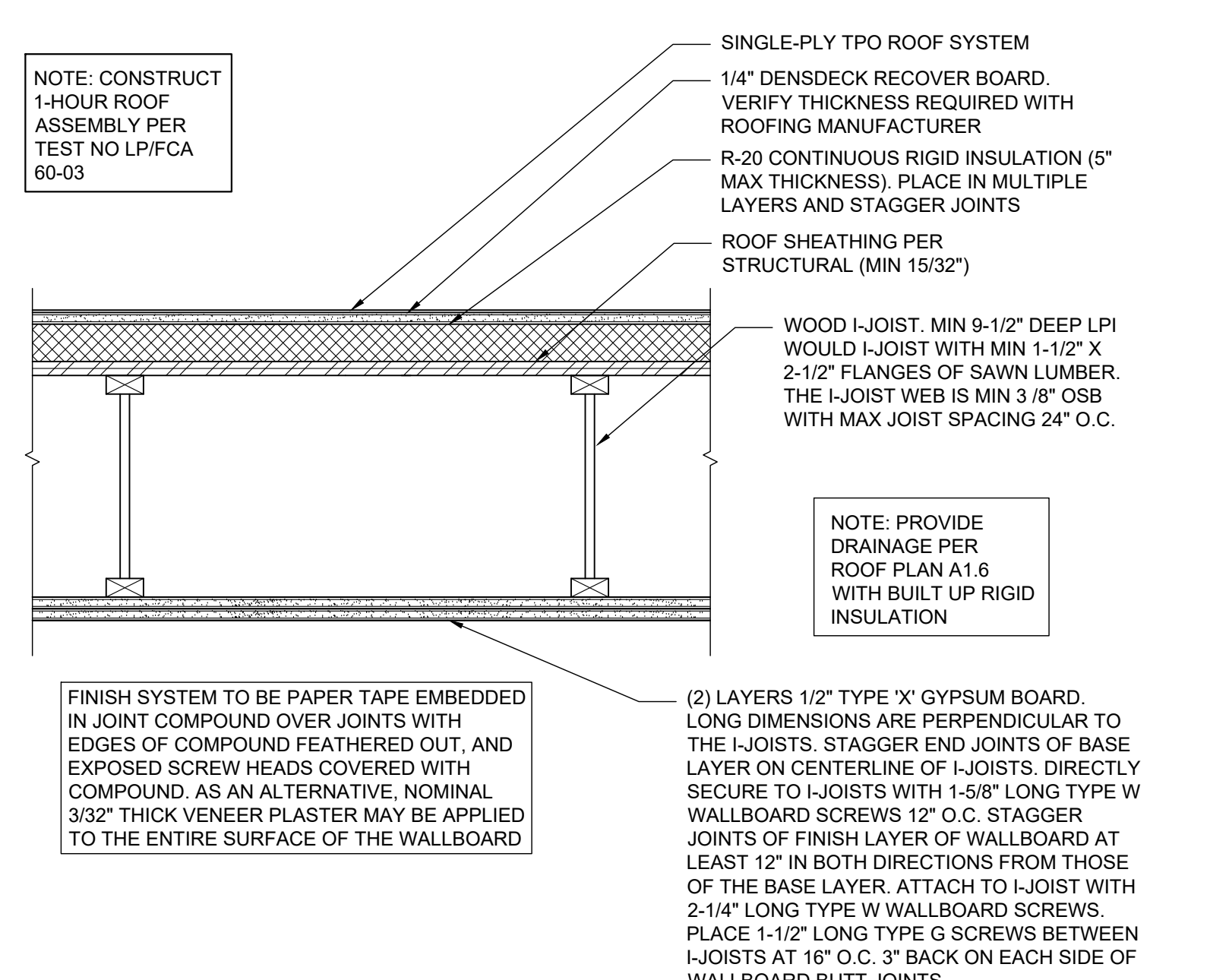
9 SECTION AT 1-HR. FLOOR/CEILING ASSEMBLY
A5.3 1 1/2" = 1'-0"



10 SECTION AT ROOF/CEILING ASSEMBLY
A5.3 1 1/2" = 1'-0"



11 PARTITION WALL INTERSECTION PLAN
A5.3 1 1/2" = 1'-0"



12 SECTION AT 1-HR. ROOF/CEILING ASSEMBLY
A5.3 1 1/2" = 1'-0"

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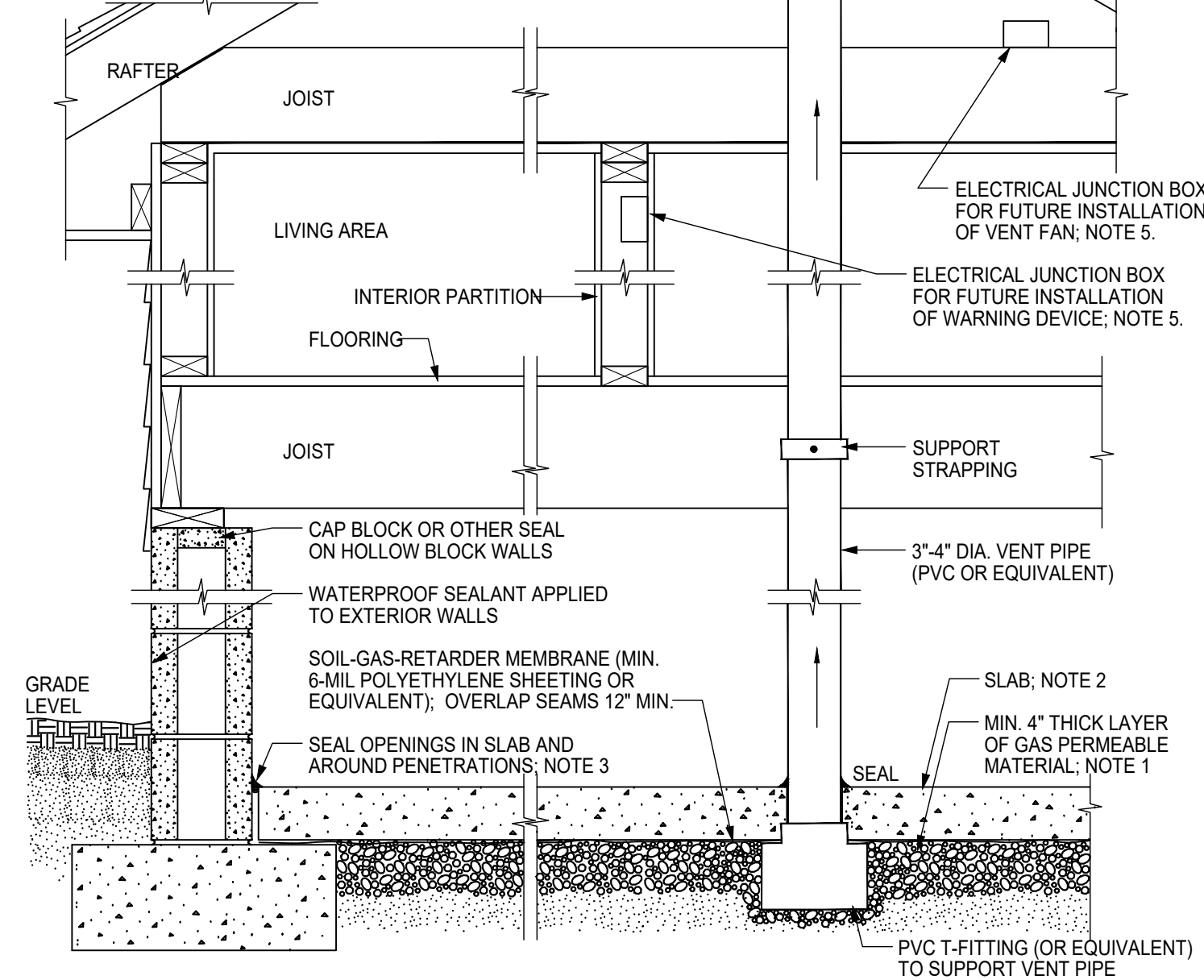
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INTERIOR DETAILS

PASSIVE SUB-SLAB DEPRESSURIZATION RADON CONTROL SYSTEM FOR NEW CONSTRUCTION

NOTES:

1. ALL CONCRETE SLABS THAT COME IN CONTACT WITH THE GROUND SHALL BE LAID OVER A GAS PERMEABLE MATERIAL MADE UP OF EITHER A MINIMUM 4" THICK UNIFORM LAYER OF CLEAN AGGREGATE, OR A MINIMUM 4" THICK UNIFORM LAYER OF SAND, OVERLAIN BY A LAYER OR STRIPS OF MANUFACTURED MATTING DESIGNED TO ALLOW THE LATERAL FLOW OF SOIL GASES.
2. ALL CONCRETE FLOOR SLABS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL BUILDING CODES. ADDITIONAL REFS: AMERICAN CONCRETE INSTITUTE PUBLICATIONS, "ACI302.1R" & "ACI332R", OR THE POST TENSIONING INSTITUTE MANUAL, "DESIGN AND CONSTRUCTION OF POST-TENSIONED SLABS ON GROUND".
3. ALL OPENINGS, GAPS AND JOINTS IN FLOOR AND WALL ASSEMBLIES IN CONTACT WITH SOIL OR GAPS AROUND PIPES, TOILETS, BATHTUBS OR DRAINS PENETRATING THESE ASSEMBLIES SHALL BE FILLED OR CLOSED WITH MATERIALS THAT PROVIDE A PERMANENT AIR-TIGHT SEAL. SEAL LARGE OPENINGS WITH NON-SHRINK MORTAR, GROUTS OR EXPANDING FOAM MATERIALS AND SMALLER GAPS WITH AN ELASTOMERIC JOINT SEALANT, AS DEFINED IN ASTM C920-07.
4. VENT PIPES SHALL BE INSTALLED SO THAT ANY RAINWATER OR CONDENSATION DRAINS DOWNWARD INTO THE GROUND BENEATH THE SLAB OR SOIL-GAS-RETARDER MEMBRANE.
5. CIRCUITS SHOULD BE A MINIMUM 15 AMP, 115 VOLT.



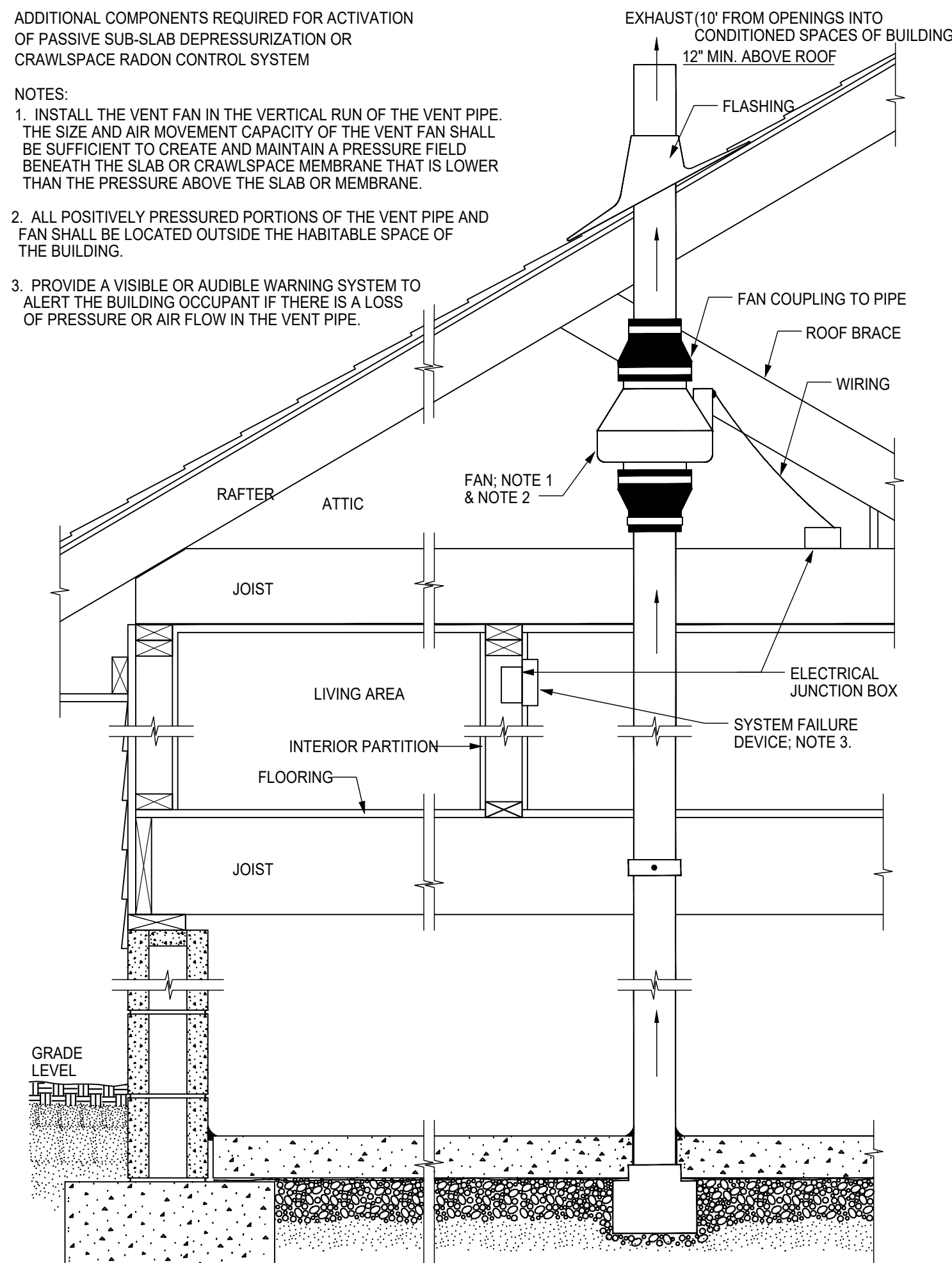
1 TYPICAL DESIGN FOR A SUB-MEMBRANE DEPRESSURIZATION (SMD) SYSTEM

A5.4 NOT TO SCALE

ADDITIONAL COMPONENTS REQUIRED FOR ACTIVATION OF PASSIVE SUB-SLAB DEPRESSURIZATION OR CRAWLSPACE RADON CONTROL SYSTEM

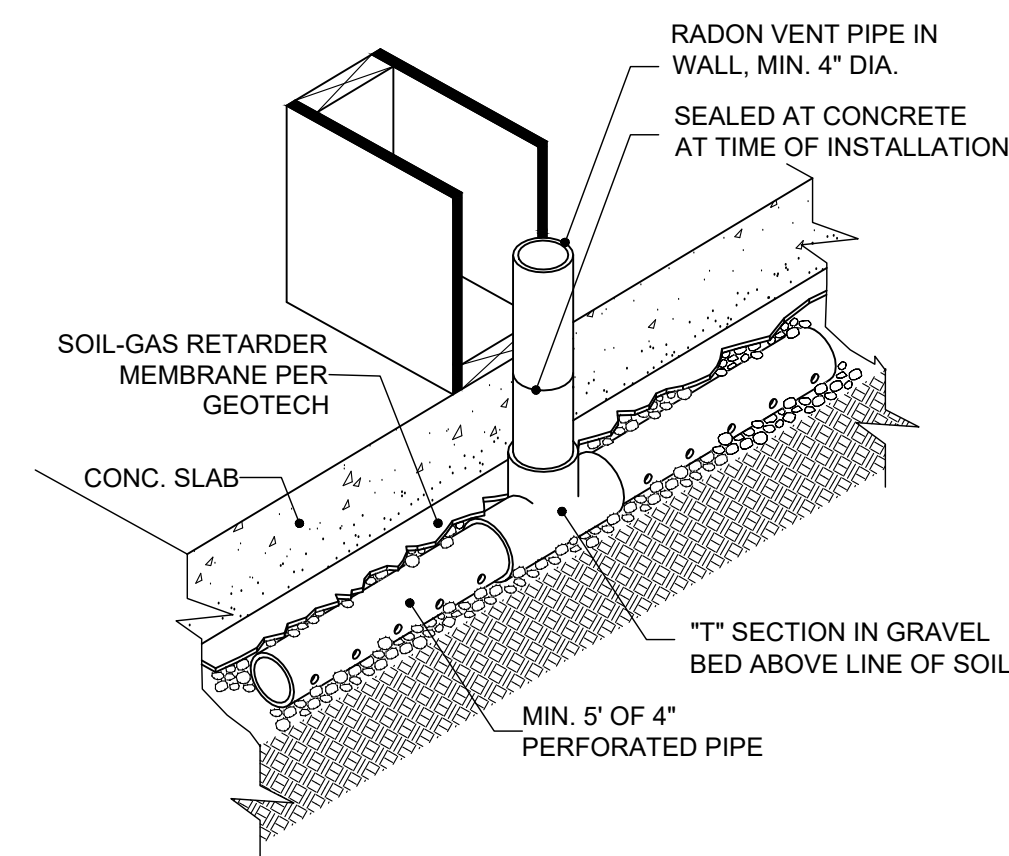
NOTES:

1. INSTALL THE VENT FAN IN THE VERTICAL RUN OF THE VENT PIPE. THE SIZE AND AIR MOVEMENT CAPACITY OF THE VENT FAN SHALL BE SUFFICIENT TO CREATE AND MAINTAIN A PRESSURE FIELD BENEATH THE SLAB OR CRAWLSPACE MEMBRANE THAT IS LOWER THAN THE PRESSURE ABOVE THE SLAB OR MEMBRANE.
2. ALL POSITIVELY PRESSURED PORTIONS OF THE VENT PIPE AND FAN SHALL BE LOCATED OUTSIDE THE HABITABLE SPACE OF THE BUILDING.
3. PROVIDE A VISIBLE OR AUDIBLE WARNING SYSTEM TO ALERT THE BUILDING OCCUPANT IF THERE IS A LOSS OF PRESSURE OR AIR FLOW IN THE VENT PIPE.



2 RADON VENT DETAIL

A5.4 NOT TO SCALE



SUB-SLAB DEPRESSURIZATION GENERAL NOTES

1. SEE STRUCTURAL FOR FOUNDATION DETAILS, FOOTING SIZES, ETC.
2. SEE FLOOR PLANS FOR DIMENSIONS AND ADDITIONAL INFORMATION
3. SPREAD FOOTING SHOWN. SEE STRUCTURAL FOR MONOLITHIC POUR OPTION.

SUB-SLAB DEPRESSURIZATION LEGEND

- FOOTING
- 4" PVC SLEEVE THROUGH THICKENED SLAB FOOTING
- 4" PVC PIPE, VENT THROUGH ROOF. SEE SPECS THIS SHEET.

SUB-SLAB DEPRESSURIZATION SPECIFICATIONS

1. AGGREGATE: A LAYER OF AGGREGATE 4" MINIMUM THICKNESS SHALL BE PLACED BENEATH CONCRETE SLABS. THE AGGREGATE SHALL BE CONTINUOUS TO THE EXTENT PRACTICAL.
2. GRADATION: AGGREGATE SHALL:
 - A.) COMPLY WITH ASTM STANDARD C-33 STANDARD SPECIFICATION FOR CONCRETE AGGREGATE AND SHALL BE SIZE NO. 8 OR LARGER SIZE AGGREGATE AS LISTED IN TABLE 2. GRADING REQUIREMENTS FOR COURSE AGGREGATE; OR
 - B.) BE SCREENED, WASHED PEA GRAVEL FREE OF DELETERIOUS SUBSTANCES IN A MANNER CONSISTENT WITH ASTM STANDARD C-33 WITH 100% PASSING A 1/2" SIEVE AND LESS THAN 5% PASSING A NO. 16 SIEVE. SIEVE CHARACTERISTICS SHALL CONFORM TO THOSE ACCEPTABLE UNDER ASTM STANDARD C-33
3. SOIL-GAS RETARDER MEMBRANE: A SOIL-GAS RETARDER MEMBRANE, CONSISTING OF AT LEAST ONE LAYER OF VIRGIN POLYETHYLENE WITH A THICKNESS OF AT LEAST 6 MIL, OR EQUIVALENT FLEXIBLE SHEET, SHALL BE PLACED DIRECTLY UNDER ALL CONCRETE SLABS SO THAT THE SLAB IS IN DIRECT CONTACT WITH THE MEMBRANE. THE FLEXIBLE SHEET SHALL EXTEND TO THE FOUNDATION WALL OR TO THE OUTSIDE EDGE OF THE MONOLITHIC SLAB. SEAMS SHALL OVERLAP 12" MINIMUM. THE MEMBRANE SHALL ALSO BE FITTED TIGHTLY TO ALL PIPES, WIRES AND OTHER PENETRATIONS OF THE MEMBRANE AND SEALED WITH AN APPROVED SEALANT OR TAPE. ALL PUNCTURES OR TEARS SHALL BE REPAIRED WITH THE SAME OR APPROVED MATERIAL SIMILARLY LAPPED AND SEALED.
4. SEALING OF PENETRATIONS AND JOINTS: ALL PENETRATIONS AND JOINTS IN CONCRETE SLABS OR OTHER FLOOR SYSTEMS AND WALLS BELOW GRADE SHALL BE SEALED BY AN APPROVED SEALANT TO CREATE AN AIR BARRIER TO LIMIT MOVEMENT OF SOIL-GAS INTO THE INDOOR AIR. SEALANTS SHALL BE APPROVED BY THE MANUFACTURER FOR THE INTENDED PURPOSE. SEALANT JOINTS SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS. THE SEALANT SHALL BE PLACED AND TOOLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. THERE SHALL BE NO GAPS OR VOIDS AFTER THE SEALANT HAS CURED.
5. RADON VENT: ONE CONTINUOUS SEALED PIPE SHALL RUN FROM A POINT WITHIN THE AGGREGATE UNDER EACH CONCRETE SLAB TO A POINT OUTSIDE THE BUILDING. JOINTS AND CONNECTIONS SHALL BE PERMANENTLY GAS TIGHT. THE CONTINUOUS SEALED PIPE SHALL INTERFACE WITH THE AGGREGATE IN THE FOLLOWING MANNER, OR BY OTHER APPROVED EQUAL METHOD: THE PIPE SHALL BE PERMANENTLY CONNECTED TO A "T" WITHIN THE AGGREGATE AREA SO THAT THE TWO END OPENINGS OF THE "T" LIE WITHIN THE AGGREGATE AREA. A MINIMUM OF 5' OF PERFORATED DRAIN PIPE OF 4" MINIMUM DIAMETER SHALL JOIN TO AND EXTEND FROM THE "T". THE PERFORATED PIPE SHALL REMAIN IN THE AGGREGATE AREA AND SHALL NOT BE CAPPED AT THE ENDS. THE "T" AND ITS PERFORATED PIPE EXTENSIONS SHALL BE LOCATED AT LEAST 5' HORIZONTALLY FROM THE EXTERIOR PERIMETER OF THE AGGREGATE AREA. THE CONTINUOUS SEALED PIPE SHALL TERMINATE NO LESS THAN 12" ABOVE THE EAVE, AND MORE THAN 10 HORIZONTAL FEET FROM A WOOD STOVE OR FIREPLACE CHIMNEY, OR OPERABLE WINDOW. THE CONTINUOUS SEALED PIPE SHALL BE LABELED "RADON VENT". THE LABEL SHALL BE PLACED SO AS TO REMAIN VISIBLE TO AN OCCUPANT. THE MINIMUM PIPE DIAMETER SHALL BE 4" UNLESS OTHERWISE APPROVED. ACCEPTABLE SEALED PLASTIC PIPE SHALL BE SMOOTH WALLED, AND MAY INCLUDE EITHER PVC SCHEDULE 40 OR ABS SCHEDULE OF EQUIVALENT WALL THICKNESS. THE ENTIRE SEALED PIPE SYSTEM SHALL BE SLOPED TO DRAIN TO THE SUB-SLAB AGGREGATE. THE SEALED PIPE SYSTEM MAY PASS THROUGH AN UNCONDITIONED ATTIC BEFORE EXITING THE BUILDING. TO THE EXTENT PRACTICABLE, THE SEALED PIPE SHALL BE LOCATED INSIDE THE THERMAL ENVELOPE OF THE BUILDING IN ORDER TO ENHANCE PASSIVE STACK VENTING.
6. FAN CIRCUIT AND WIRING AND LOCATION: AN AREA FOR LOCATION OF AN IN-LINE FAN SHALL BE PROVIDED. THE LOCATION SHALL BE AS CLOSE AS PRACTICABLE TO THE RADON VENT PIPE'S POINT OF EXIT FROM THE BUILDING, OR SHALL BE OUTSIDE THE BUILDING SHELL; AND SHALL BE LOCATED SO THAT THE FAN AND ALL DOWNSTREAM PIPING IS ISOLATED FROM THE INDOOR AIR. PROVISIONS SHALL BE MADE TO ALLOW FUTURE ACTIVATION OF AN IN-LINE FAN ON THE RADON VENT PIPE WITHOUT THE NEED TO PLACE NEW WIRING. A 110 VOLT POWER SUPPLY SHALL BE PROVIDED AT A JUNCTION BOX NEAR THE FAN LOCATION.
7. SEPARATE AGGREGATE AREAS: IF THE 4" AGGREGATE AREA UNDERNEATH THE CONCRETE SLAB IS NOT CONTINUOUS, BUT IS SEPARATED INTO DISTINCT ISOLATED AGGREGATE AREAS BY A FOOTING OR OTHER BARRIER, A MINIMUM OF ONE RADON VENT PIPE SHALL BE INSTALLED INTO EACH SEPARATE AGGREGATE AREA. EXCEPTION: SEPARATE AGGREGATE AREAS MAY BE CONSIDERED A SINGLE AREA IF A 4" MINIMUM DIAMETER CONNECTION JOINING THE SEPARATE AREAS IS PROVIDED FOR EVERY 30' OF BARRIER SEPARATING THOSE AREAS.

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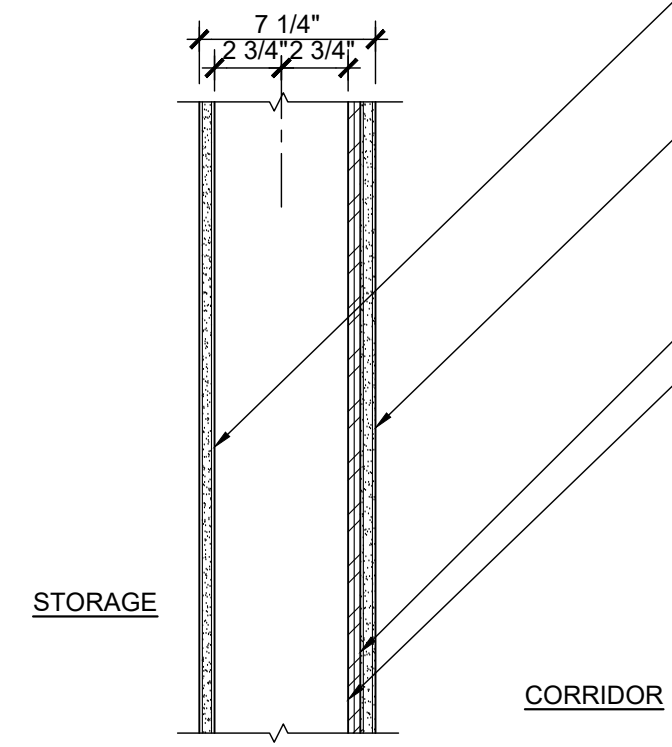
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A5.4

RADON VENT DETAILS

NOTE:
JOINTS STAGGERED 24" ON
OPPOSITE SIDES



(1) LAYER 5/8" THICK TYPE X GYPSUM BOARD APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF WOOD STUDS PER STRUCTURAL WITH 6d COATED NAILS, 1-7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O.C.

(1) LAYER 5/8" THICK TYPE X GYPSUM BOARD APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF WOOD STUDS PER STRUCTURAL WITH 6d COATED NAILS, 1-7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O.C. WHERE PLYWOOD SHEATHING OCCURS, INCREASE LENGTH OF SCREW BY THICKNESS OF THE PLYWOOD.

WALL SHEATHING PER STRUCTURAL

WOOD STUDS PER STRUCTURAL DRAWINGS

NOTE: CONSTRUCT IN ACCORDANCE WITH GA FILE NO. WP 3510. SEE GA 600 DESIGN MANUAL FOR ADDITIONAL INFO

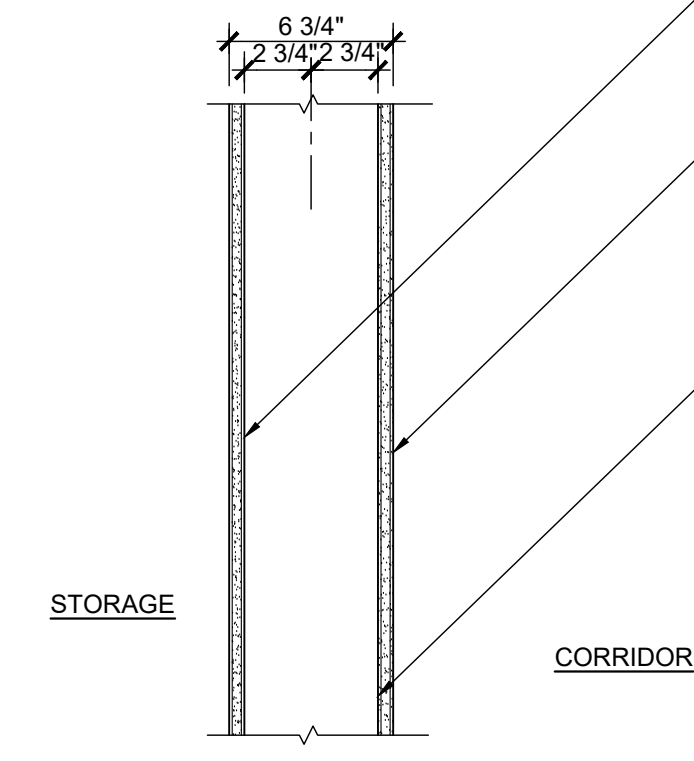
NOTE: AT ALL PLUMBING WALLS, VERIFY PLUMBING REQUIREMENTS AND COORDINATE WITH CODE REQUIREMENTS PRIOR TO CONSTRUCTION.

NOTE: AT ALL 1-HOUR WALLS GYPSUM BOARD TO RUN CONTINUOUSLY FROM FLOOR TO CEILING BEHIND ALL BATHTUB UNITS. USE GREEN BOARD AT PLUMBING WALLS

NOTE: SEE FRAMING PLANS FOR SHEAR WALL NAILING SCHEDULE. SEE DETAIL 3/A5.3 FOR ADDITIONAL INFORMATION.

1 WALL TYPE **15**
A5.5 ONE-HR. RATED INTERIOR BEARING WALL
1 1/2" = 1'-0"

NOTE:
JOINTS STAGGERED 24" ON
OPPOSITE SIDES



(1) LAYER 5/8" THICK TYPE X GYPSUM BOARD APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF WOOD STUDS PER STRUCTURAL WITH 6d COATED NAILS, 1-7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O.C.

(1) LAYER 5/8" THICK TYPE X GYPSUM BOARD APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF WOOD STUDS PER STRUCTURAL WITH 6d COATED NAILS, 1-7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O.C. WHERE PLYWOOD SHEATHING OCCURS, INCREASE LENGTH OF SCREW BY THICKNESS OF THE PLYWOOD.

2X4 WOOD STUDS AT 24" O.C. UNLESS NOTED OTHERWISE PER STRUCTURAL

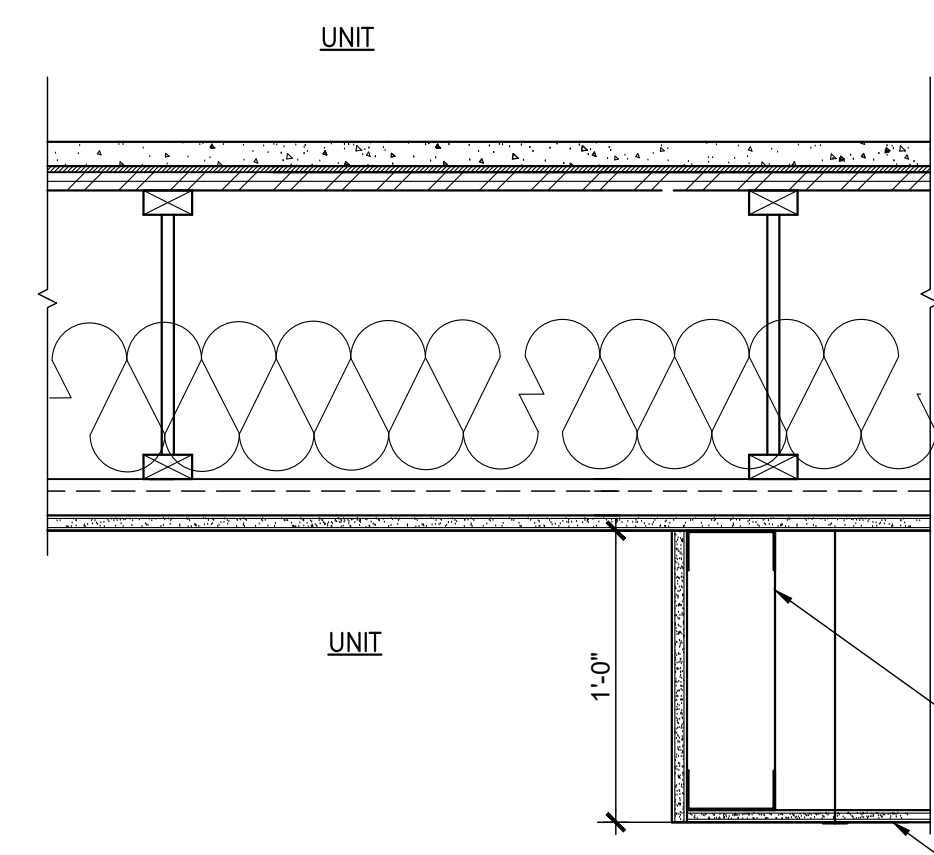
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NOTE: AT ALL PLUMBING WALLS, VERIFY PLUMBING REQUIREMENTS AND COORDINATE WITH CODE REQUIREMENTS PRIOR TO CONSTRUCTION.

NOTE: AT ALL 1-HOUR WALLS GYPSUM BOARD TO RUN CONTINUOUSLY FROM FLOOR TO CEILING BEHIND ALL BATHTUB UNITS. USE GREEN BOARD AT PLUMBING WALLS

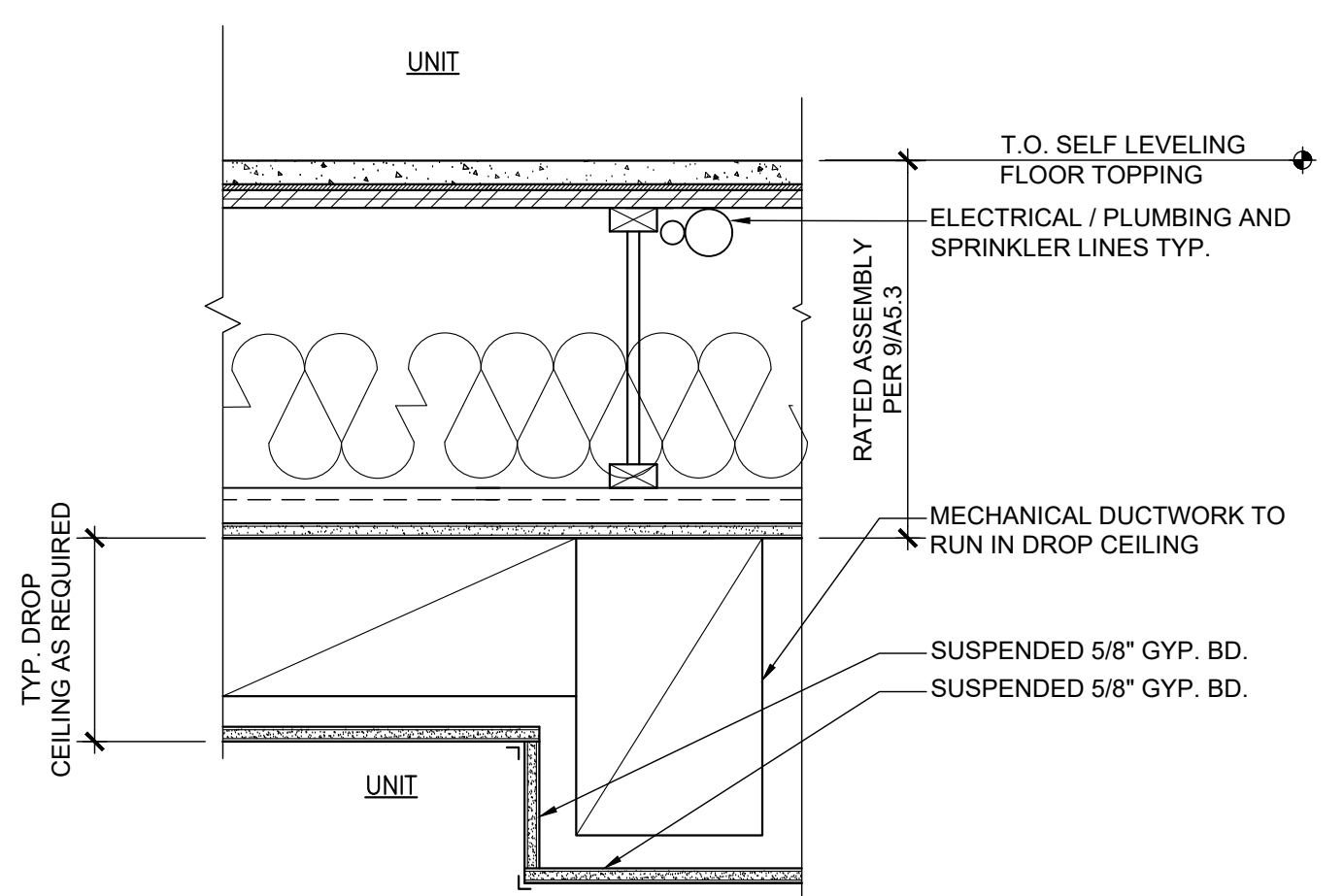
2 WALL TYPE **16**
A5.5 ONE-HR. RATED INTERIOR WALL
1 1/2" = 1'-0"

NOTE: CONSTRUCT
1-HOUR FLOOR
ASSEMBLY PER
DETAIL 9/A5.3



3 SECTION AT SOFFIT
A5.5 1 1/2" = 1'-0"

NOTE: CONSTRUCT
1-HOUR FLOOR
ASSEMBLY PER
DETAIL 9/A5.3



4 SECTION AT MECHANICAL SOFFIT
A5.5 1 1/2" = 1'-0"

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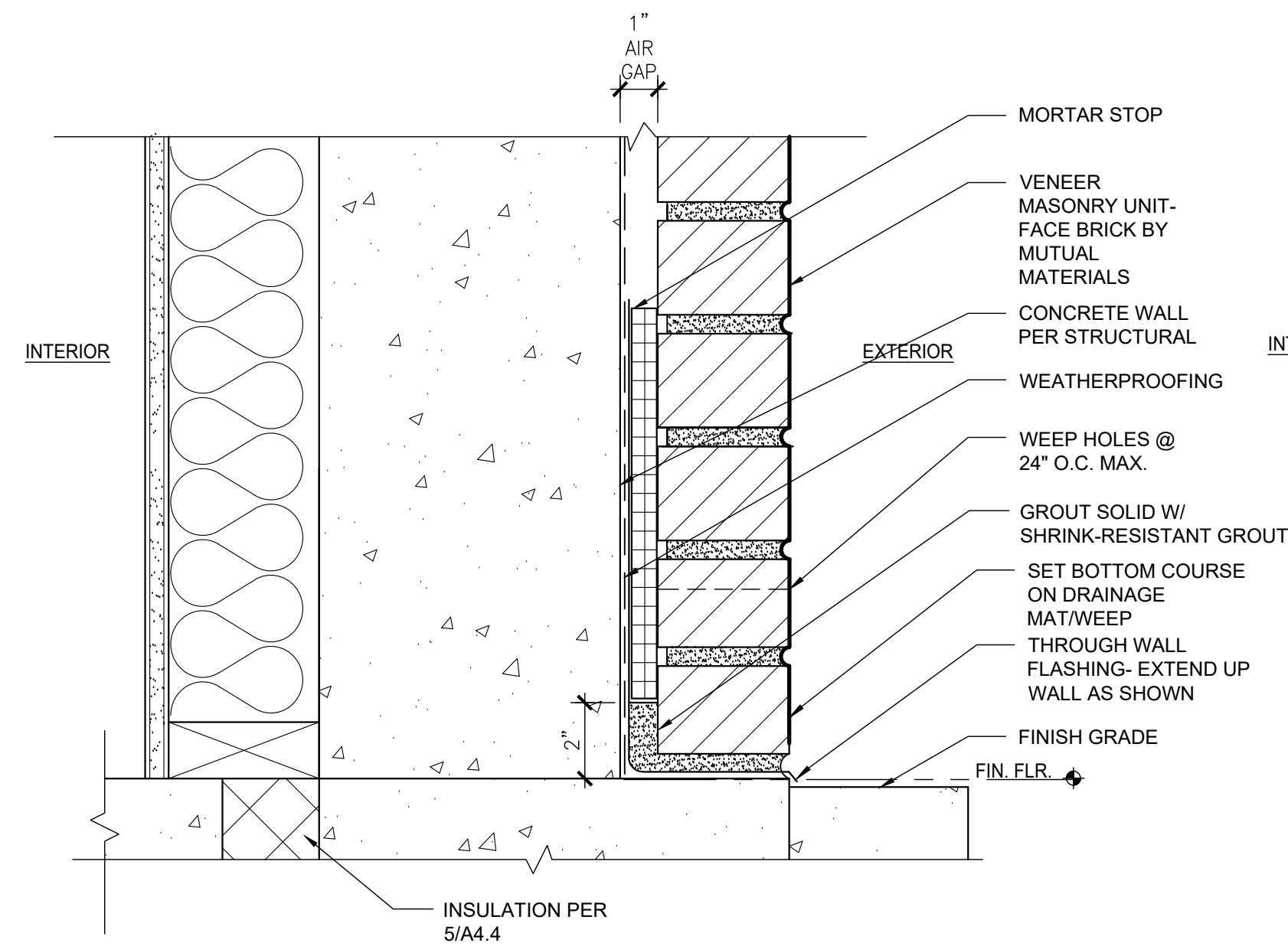
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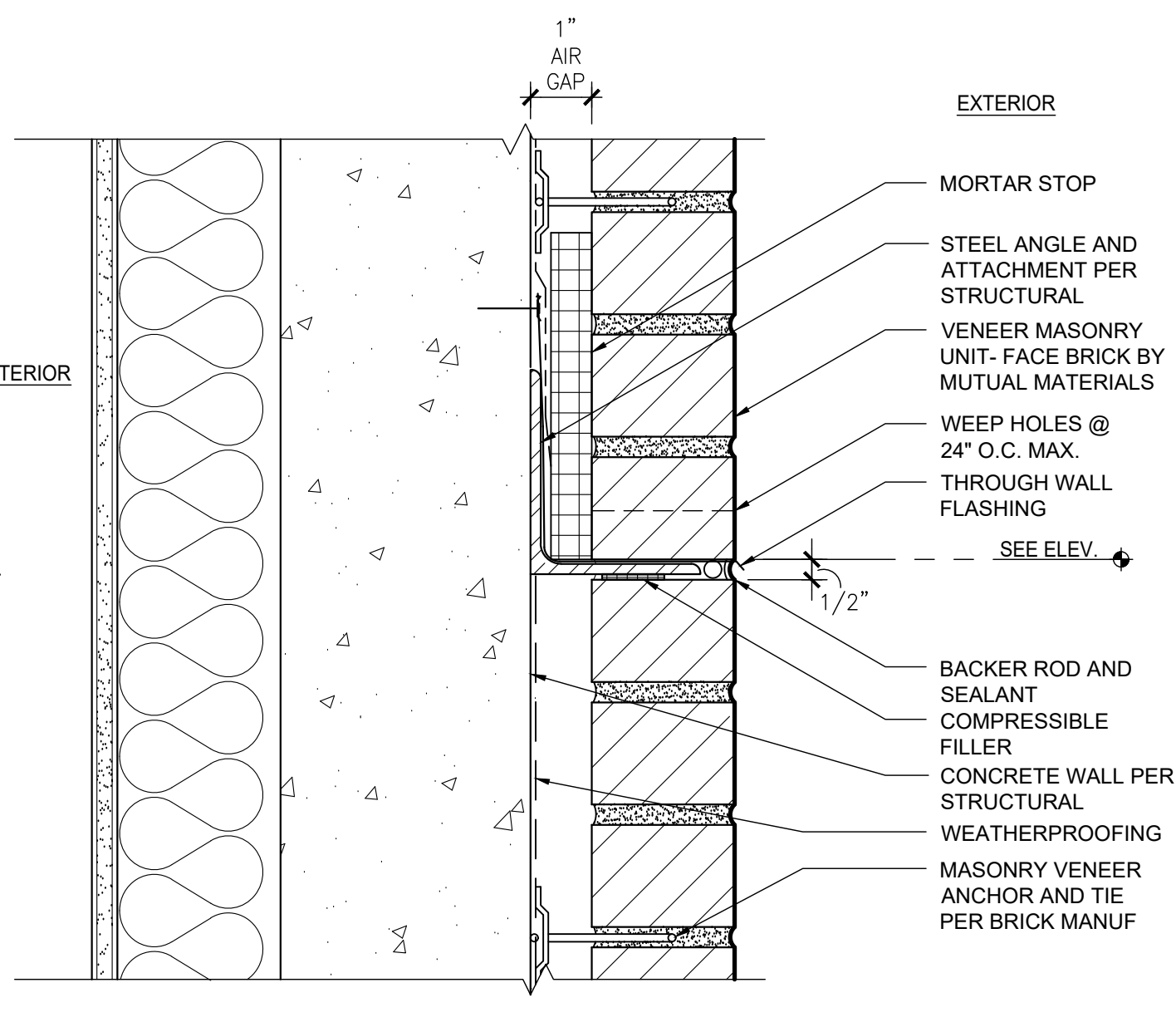
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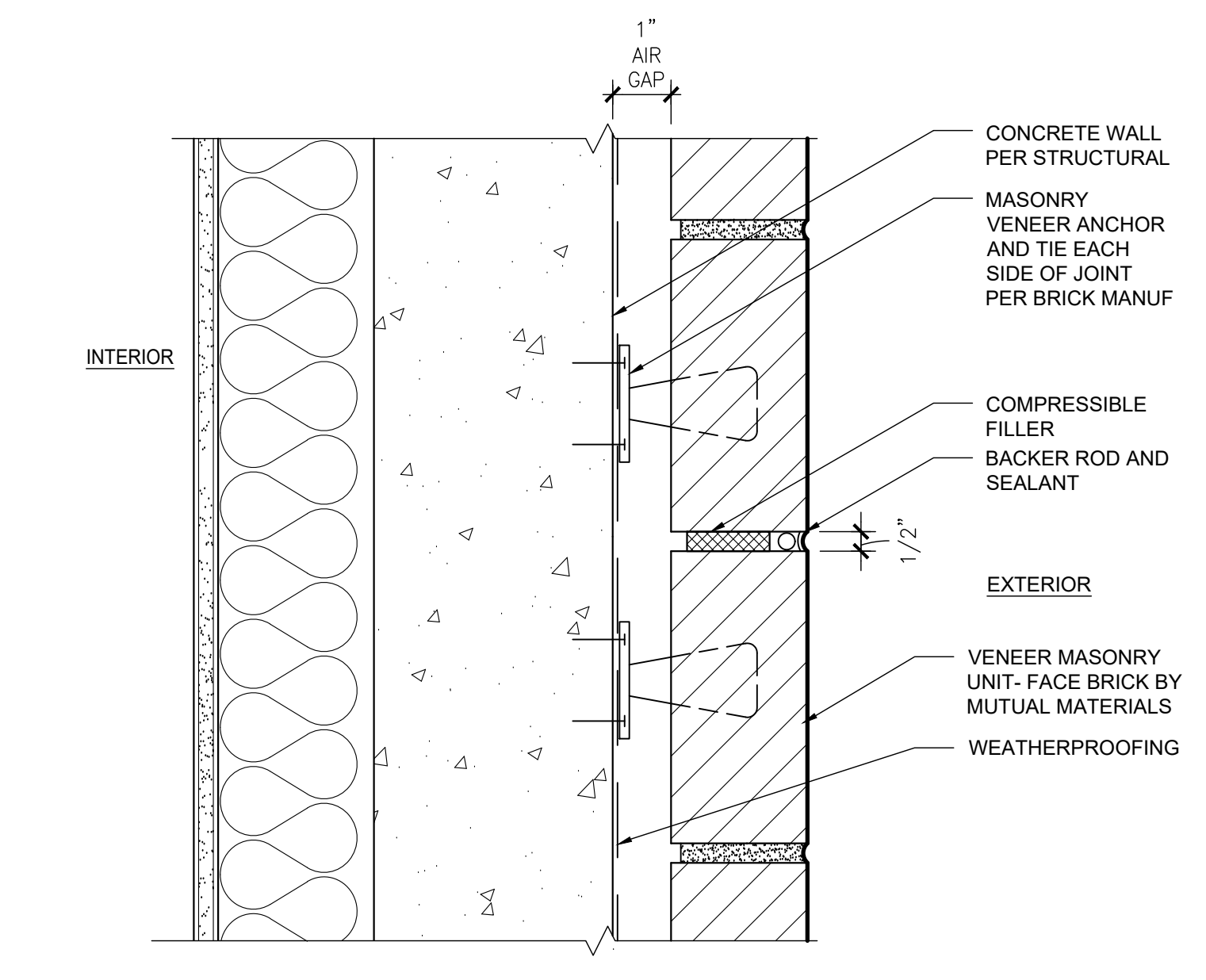
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A5.5
WALL TYPES AND DETAILS



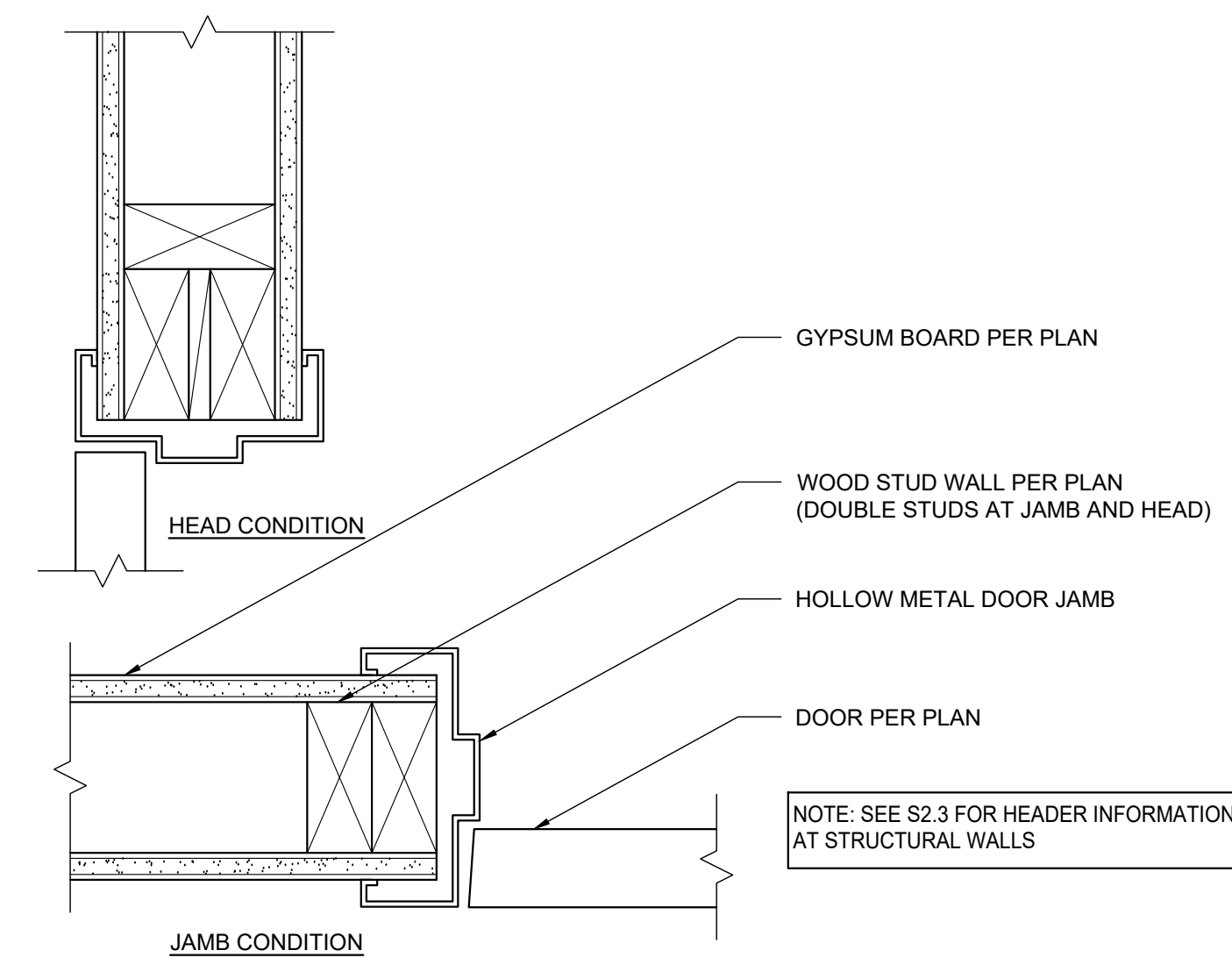
1 SILL FLASHING @ BRICK VENEER
 A5.6 3" = 1'-0"



2 HORIZ. CONTROL JOINT @ BRICK VENEER
 A5.6 3" = 1'-0"



3 VERT. CONTROL JOINT @ BRICK VENEER
 A5.6 3" = 1'-0"



4 H.M. INTERIOR DOOR DETAIL
 A5.6 SCALE: 3" = 1'-0"

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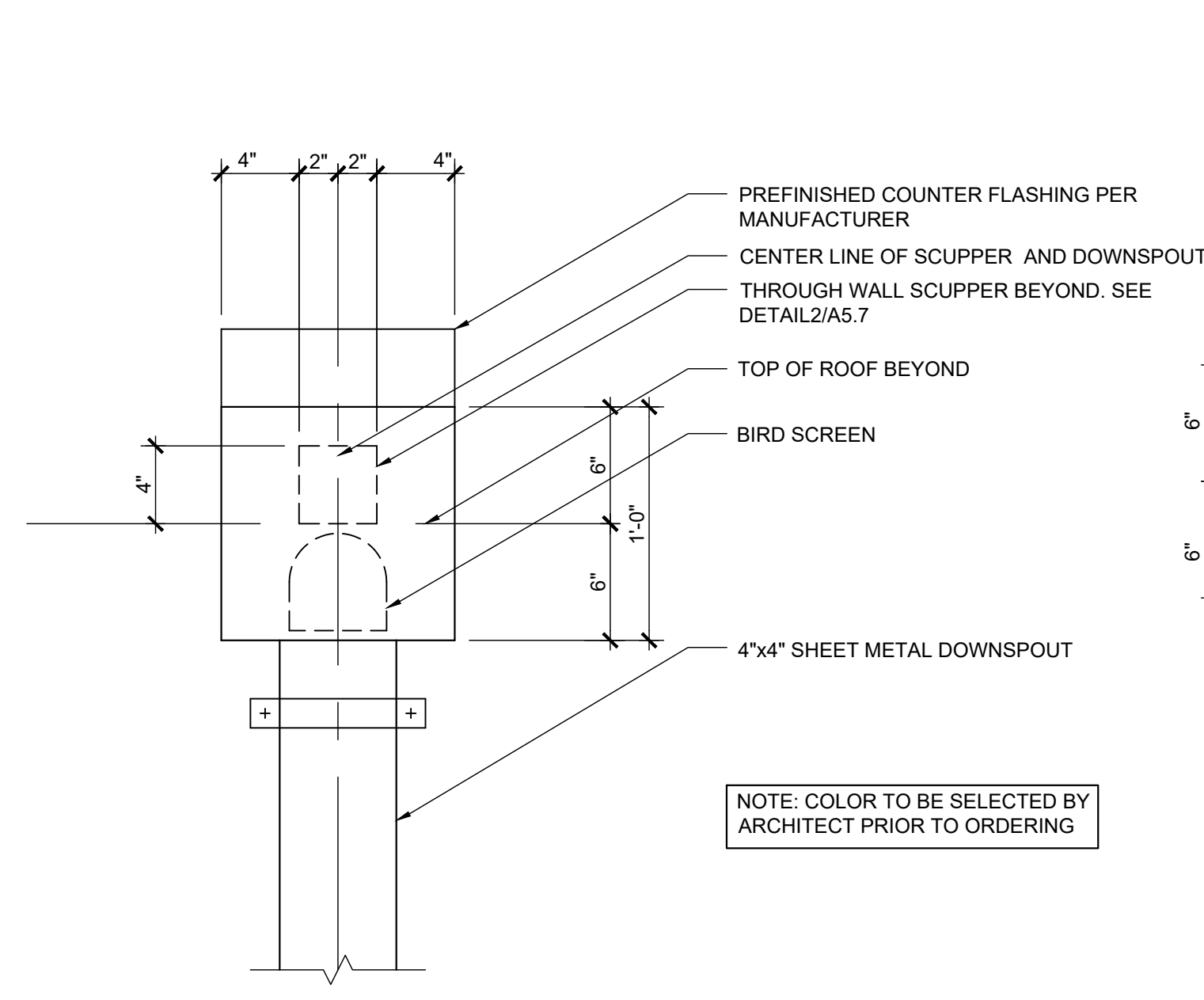
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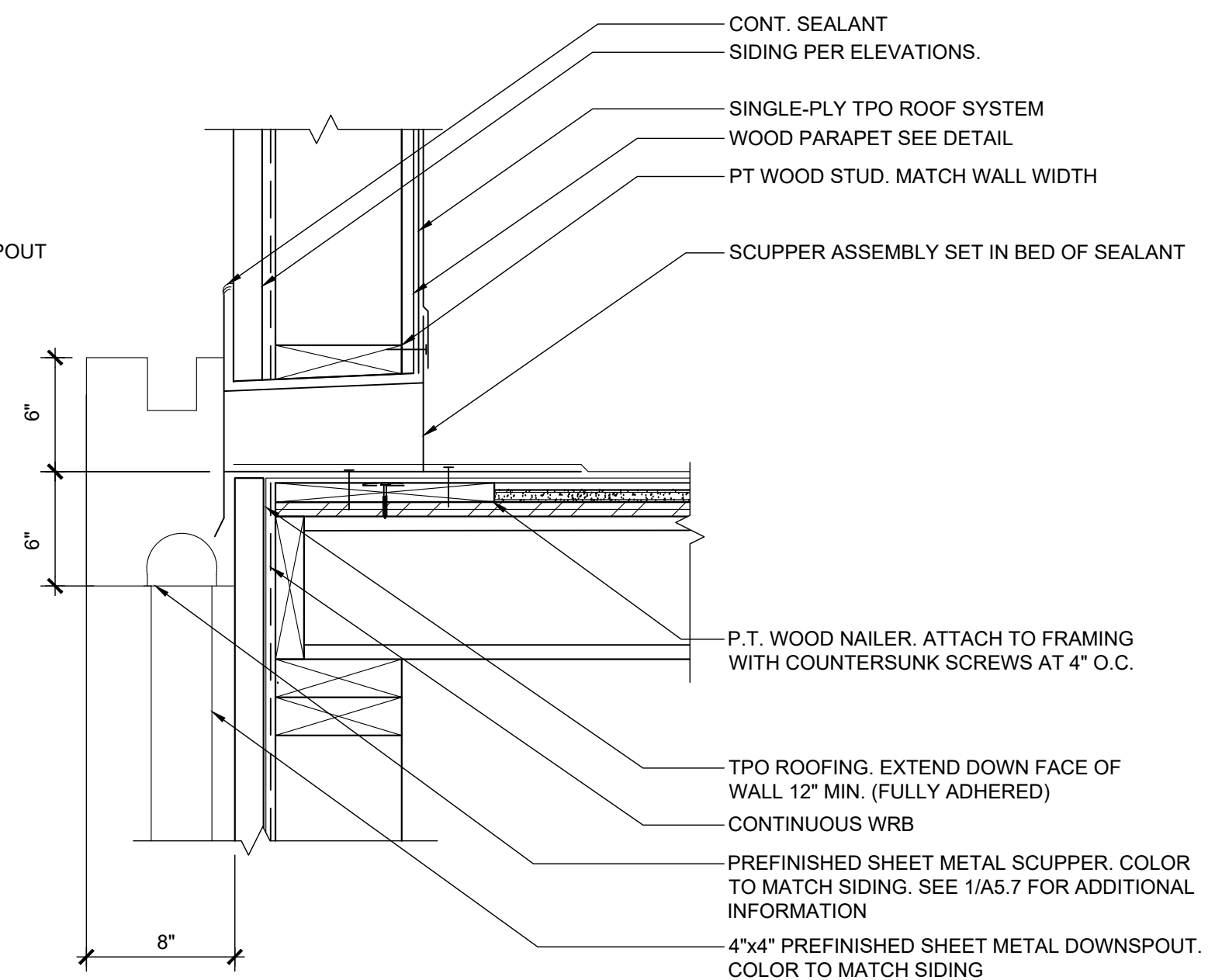
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A5.6
 MISC DETAILS



1
A5.7 SCUPPER AND DOWNSPOUT ELEVATION
1 1/2" = 1'-0"



2
A5.7 THROUGH WALL SCUPPER SECTION
1 1/2" = 1'-0"

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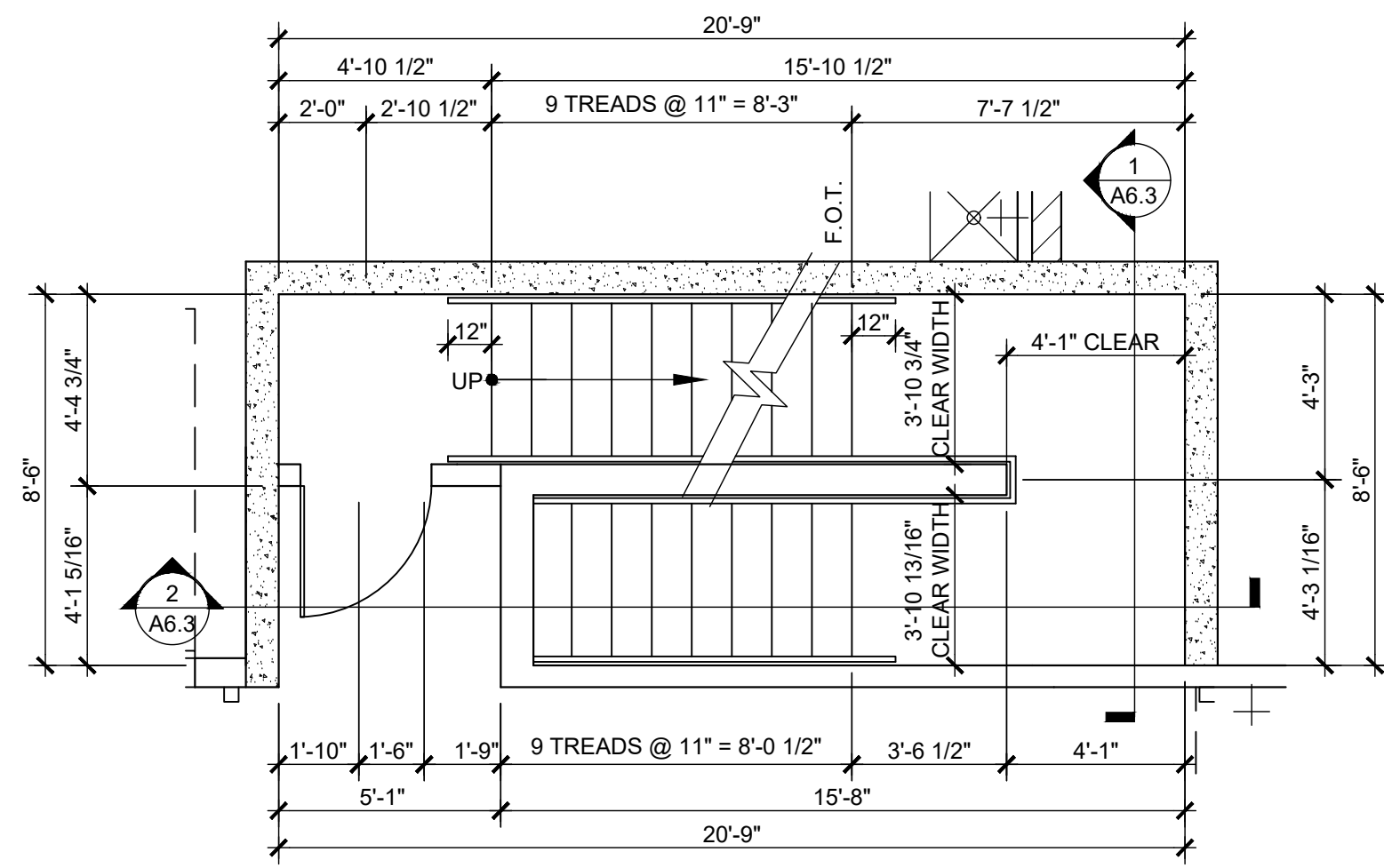
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Proj # 201931

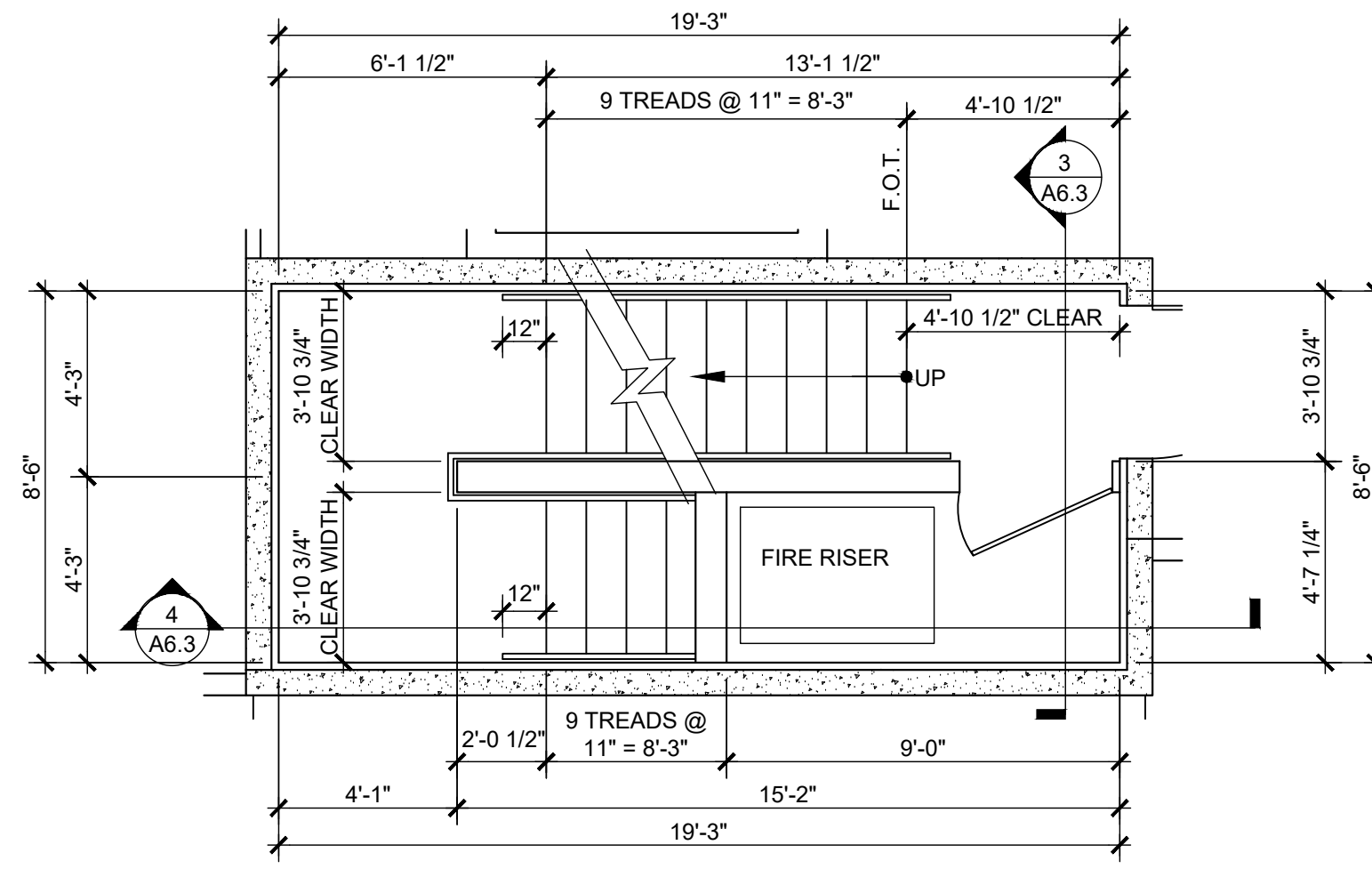
- REVISIONS:
- 1 OWNER REVISION: 04/28/20
 - 2 OWNER REVISION: 05/25/20
 - 3 OWNER REVISION: 08/21/20

BUILDING PERMIT:
DATE: April 16, 2020

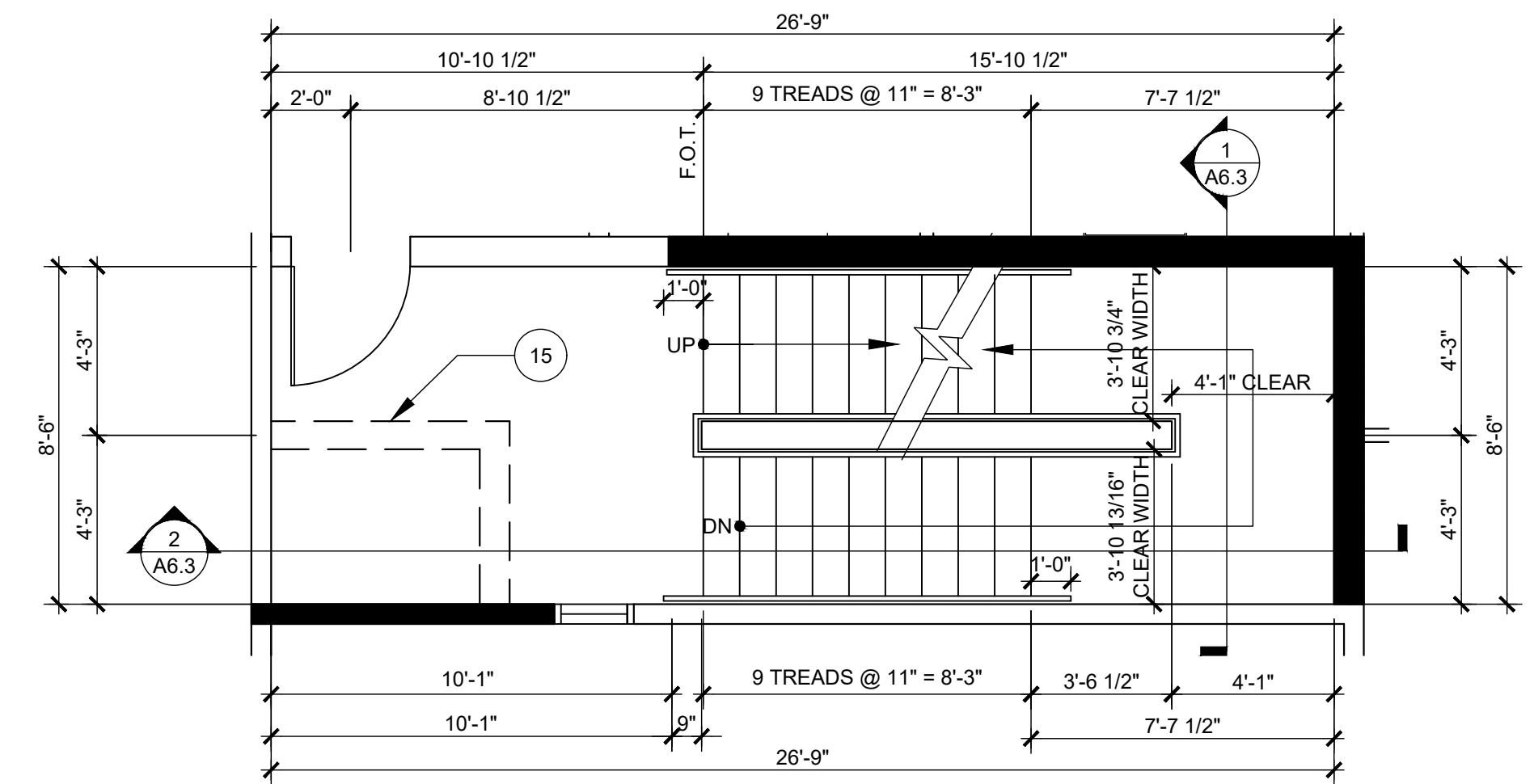
SHEET NO.
A5.7
EXTERIOR DETAILS



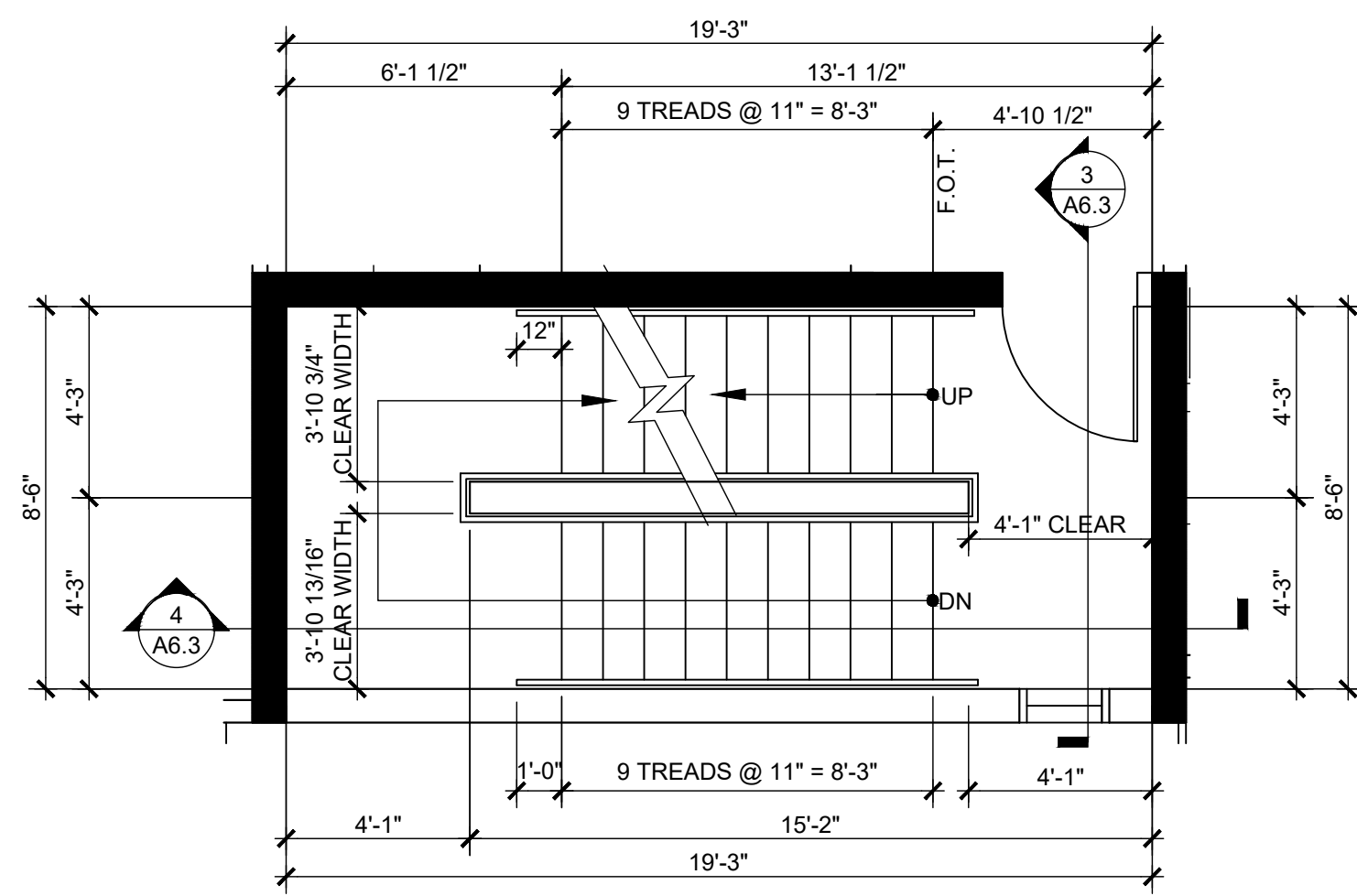
1 FIRST FLOOR ENLARGED STAIR 002 PLAN
1/4" = 1'-0"



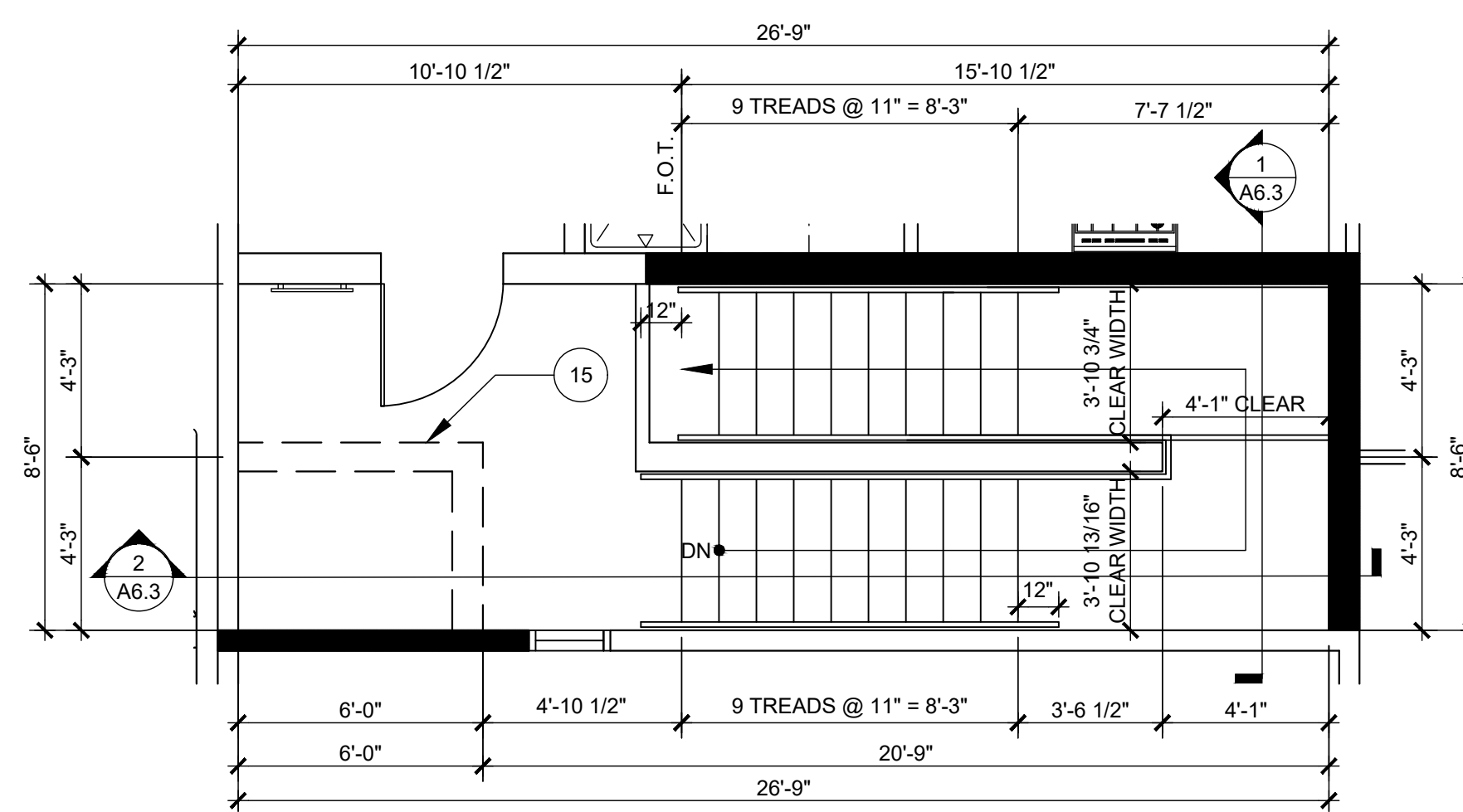
2 FIRST FLOOR ENLARGED STAIR 001 PLAN
1/4" = 1'-0"



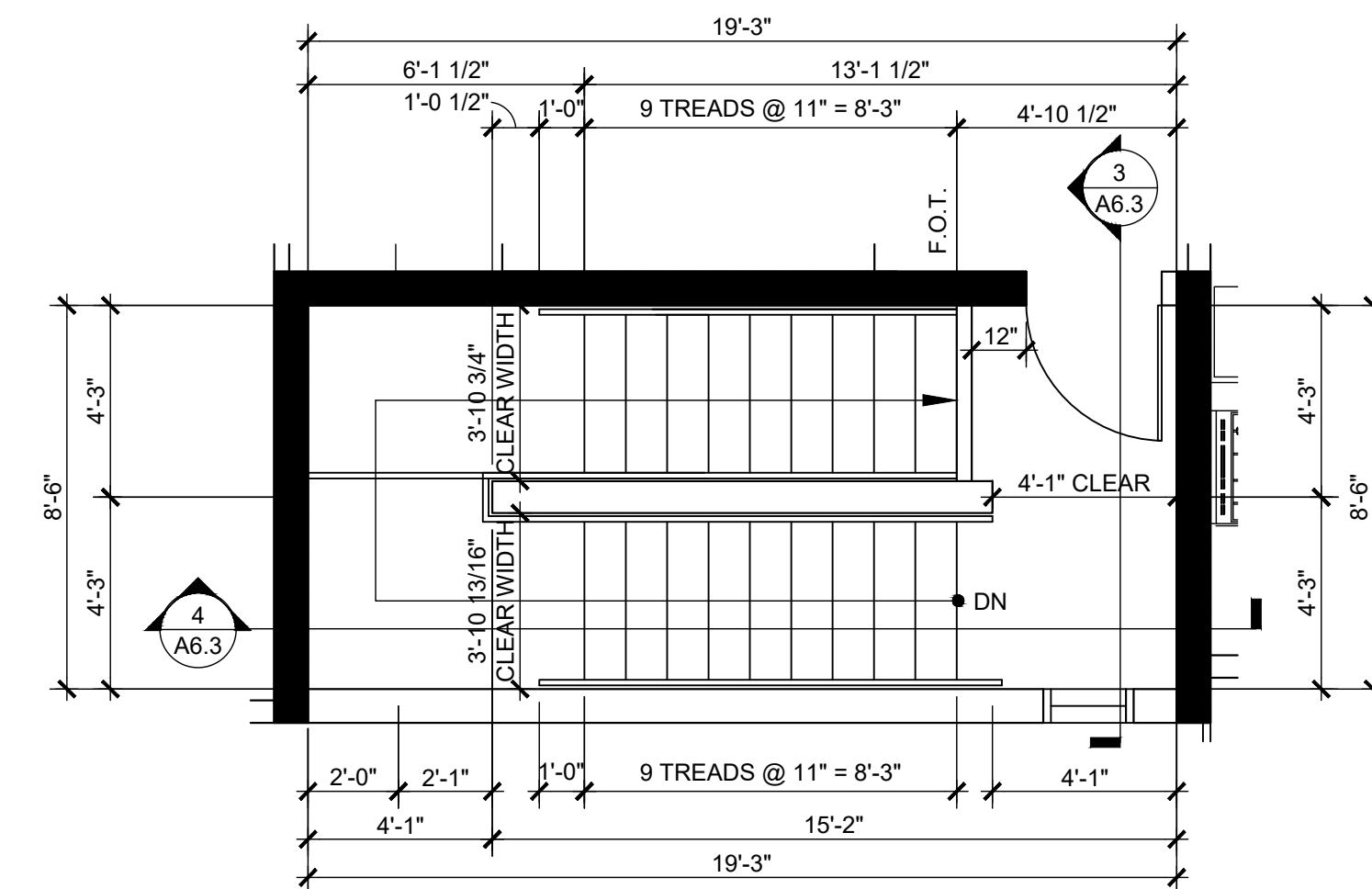
3 SECOND FLOOR ENLARGED STAIR 002 PLAN
1/4" = 1'-0"



4 SECOND FLOOR ENLARGED STAIR 001 PLAN
1/4" = 1'-0"



5 THIRD FLOOR ENLARGED STAIR 002 PLAN
1/4" = 1'-0"



6 THIRD FLOOR ENLARGED STAIR 001 PLAN
1/4" = 1'-0"

STAIR LEGEND

F.O.F. FACE OF FINISH
F.O.T. FACE OF TREAD
A.F.F. ABOVE FINISH FLOOR
F.O.L. FACE OF LANDING

KEYNOTES

- 1 TWO HOUR WALL. SEE PLANS AND STRUCTURAL
- 2 WOOD STAIRS WITH CARPET TREADS AND RISERS. SEE DETAIL 3/A6.3.
- 3 STEEL HANDRAIL AT 3'-0" A.F.F. SEE DETAIL 4/A6.3. EXTEND 12" MIN. BEYOND THE TOP RISER AND 11" BEYOND THE BOTTOM RISER
- 4 CARPET OVER LANDING. SEE STRUCTURAL
- 5 DOOR TO ROOF FOR MAINTENANCE ONLY. PROVIDE ACCESS CONTROL DEVICE
- 6 WOOD WALL TO 3'-6" ABOVE STAIR AT 4TH FLOOR
- 7 STAIRS ABOVE
- 8 CONCRETE WALL. SEE STRUCTURAL
- 9 WOOD WALL. SEE PLANS
- 10 CLASS 1 STANDPIPE PER OFC 905.3.1 AND 905.4. SEE A0.1 FIRE PROTECTION NOTES AND DRAWING BY FIRE SPRINKLER CONTRACTOR
- 14 ELEVATOR SHALL ACCOMMODATE A 24" X 84" AMBULANCE STRETCHER WITH 5" RADIUS CORNERS
- 15 AREA DEDICATED TO FIRE MAIN

DOOR SCHEDULE														
TYPE	OPENING			DOOR				FRAME				ASSEMBLY		NOTES
	TYPE	WIDTH	HEIGHT	THICK.	MAT'L	FINISH	MAT'L	FINISH	HEAD	JAMB	SILL	HDWR	FIRE RATING	
A	1	3'-0"	7'-0"	1 3/4"	H.M.	PRE	H.M.K.D.	PRE	--	--	5/A6.3	E	90 MINUTE	2, 5, 6, 7, 8
B	4	8'-0"	9'-0"	--	ALUM.	ANODIZED	--	--	--	--	--	--	--	16
C	6	20'-0"	9'-0"	--	STEEL	PRE	--	--	--	--	--	--	--	17
D	1	3'-0"	7'-0"	1 3/4"	H.M.	PRE	H.M.K.D.	PRE	2/A6.3	2/A6.3	--	E	--	--
E	1	3'-0"	7'-0"	1 3/4"	H.M.	PRE	H.M.K.D.	PRE	2/A6.3	2/A6.3	--	E	--	1, 2
F	1	3'-0"	7'-0"	1 3/4"	WD.	STAIN	TIMELY	PRE	2/A6.3	2/A6.3	--	E	--	--
G	1	3'-0"	7'-0"	1 3/4"	WD.	STAIN	TIMELY	PRE	2/A6.3	2/A6.3	--	B	--	9, 13
H	7	6'-0"	7'-0"	1 3/4"	ALUM.	ANODIZED	ALUM.	ANODIZED	5/A6.4	--	6/A6.4	C	--	1, 2, 3, 4, 5, 6, 8, 17
I	1	3'-0"	7'-0"	1 3/4"	S.C.	STAIN	H.M.K.D.	PRE	2/A6.3	2/A6.3	--	E	90 MINUTE	2, 6, 7, 8
J	4	9'-0"	9'-0"	--	ALUM.	ANODIZED	--	--	--	--	--	--	--	--
K	8	3'-0"	7'-0"	1 3/4"	ALUM.	ANODIZED	ALUM.	ANODIZED	5/A6.4	--	6/A6.4	C	--	2, 3, 4, 5, 8, 18
L	1	3'-0"	7'-0"	1 3/4"	S.C.	STAIN	TIMELY	PRE	2/A6.3	2/A6.3	4/A6.3	F	20 MINUTE	2, 7
M	2	5'-0"	6'-8"	1 3/4"	WD.	PAINT	--	--	--	--	--	G	--	1
N	1	2'-10"	6'-8"	1 3/4"	WD.	PAINT	W.D.	PAINT	3/A6.3	3/A6.3	--	B	--	--
O	1	2'-10"	6'-8"	1 3/4"	WD.	PAINT	W.D.	PAINT	3/A6.3	3/A6.3	--	B	--	--
P	2	6'-0"	6'-8"	1 3/4"	WD.	PAINT	--	G	--	--	--	G	--	1
Q	3	3'-0"	7'-0"	1 3/4"	F	PAINT	--	PAINT	--	--	5/A6.3	A	--	5
R	1	3'-0"	6'-8"	1 3/4"	WD.	PAINT	W.D.	PAINT	3/A6.3	3/A6.3	--	B	--	--
S	1	3'-0"	6'-8"	1 3/4"	WD.	PAINT	W.D.	PAINT	3/A6.3	3/A6.3	--	B	--	--
T	1	4'-0"	8'-0"	1 3/4"	H.M.	PRE	H.M.	PREFINISHED	8/A6.5	8/A6.5	--	20 MINUTE	--	14
U	3	3'-0"	8'-0"	1 3/4"	F	PRE	F	PRE	--	--	5/A6.3	A	--	5
V	5	6'-0"	8'-0"	1 3/4"	F	PRE	F	PRE	--	--	5/A6.3	A	--	1, 5
W	1	3'-0"	8'-0"	1 3/4"	WD.	STAIN	WD.	STAIN	3/A6.3	3/A6.3	--	A	--	--
X	3	3'-0"	8'-0"	1 3/4"	WD.	STAIN	WD.	STAIN	3/A6.3	3/A6.3	--	A	--	--
Y	2	5'-0"	8'-0"	1 3/4"	WD.	STAIN	--	G	--	--	--	G	--	1, 20
Z	2	7'-0"	8'-0"	1 3/4"	WD.	STAIN	--	G	--	--	--	G	--	1, 20
AA	9	3'-0"	8'-0"	1 3/4"	WD.	STAIN	--	G	--	--	--	G	--	--
BB	10	8'-0"	8'-0"	1 3/4"	WD.	STAIN	--	G	--	--	--	G	--	1, 15

ABBREVIATIONS
S.C. SOLID CORE WOOD DOOR
H.M. HOLLOW METAL (WELDED FRAME)
H.M.K.D. HOLLOW METAL KNOCK DOWN FRAME
ALUM. INSULATED ALUMINUM STOREFRONT SYSTEM
WD. HOLLOW WOOD DOOR/WOOD FRAME
F. FIBERGLASS
V. VINYL
PRE. PREFINISHED
CLAD. ALUMINUM CLAD
WOOD. WOOD DOOR

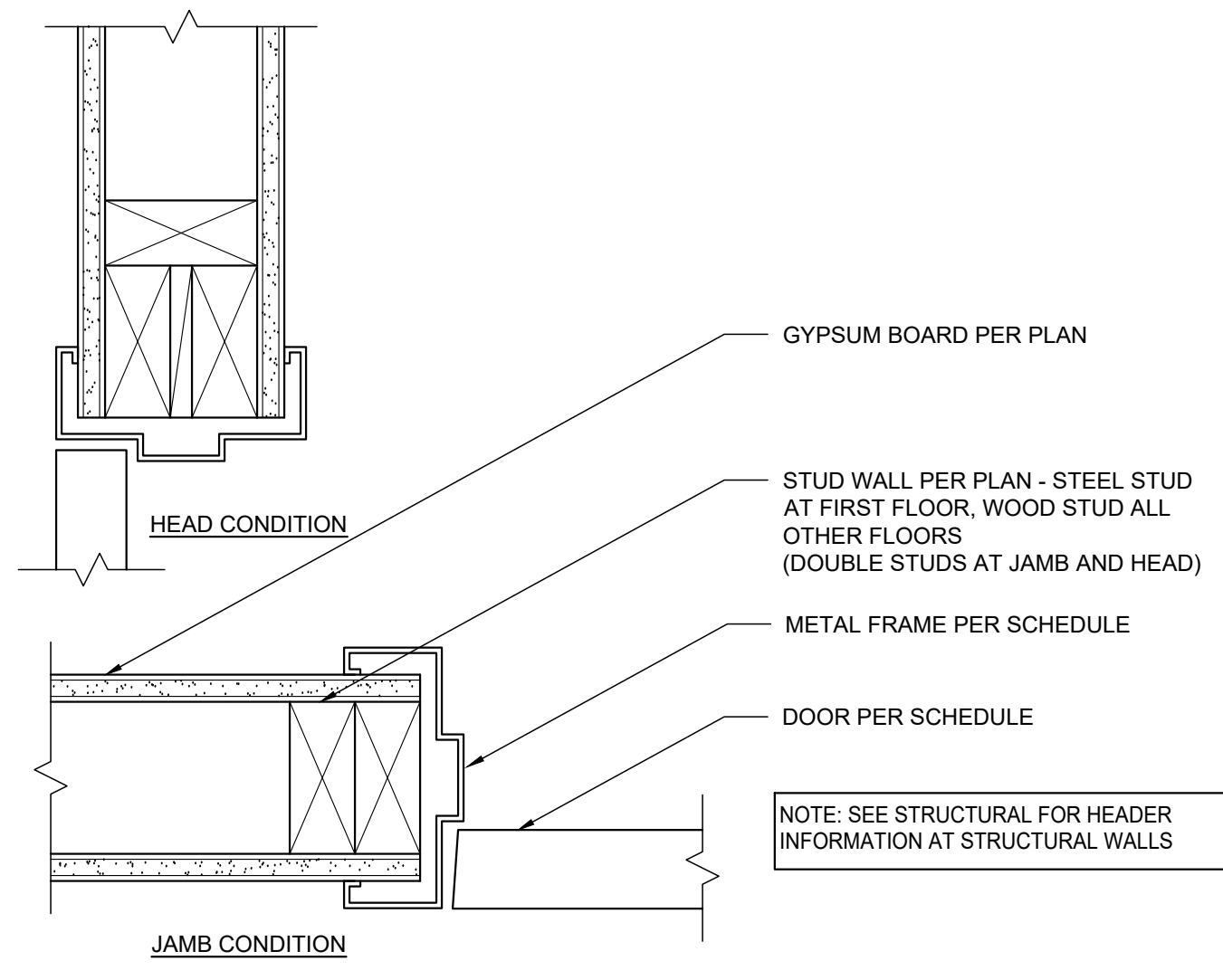
DOORS AND GLAZING MUST MEET REQUIREMENTS AS LISTED ON A0.2

NOTES
1. PAIR OF DOORS
2. PROVIDE CLOSER
3. PROVIDE PUSH/PULL PLATES
4. PROVIDE KICK PLATE
5. PROVIDE WEATHER STRIPPING AND RAIN DRIP AT EXTERIOR
6. PROVIDE PUSH-PAD TYPE PANIC HARDWARE PER IBC 1008.1.9 - THE ACTUATING PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEAST ONE-HALF OF THE DOOR LEAF WIDTH AND THE MAXIMUM UNLATCHING FORCE SHALL BE 15 POUNDS
7. PROVIDE SMOKE GASKETING
8. PROVIDE ADA COMPLIANT PULL HANDLE
9. PROVIDE ADA SIGNAGE PER DETAIL 5/A6.2
10. PROVIDE KEYBOX FOR EMERGENCY ACCESS
11. PROVIDE PLAINLY VISIBLE AND LEGIBLE SIGN STATING "ELECTRICAL ROOM"
12. PROVIDE LOCK AT BATHROOM ONLY
13. PROVIDE OCCUPIED INDICATOR
14. SMOKE AND DRAFT CONTROL DOORS AT ELEVATOR. SEE DETAIL 8/A6.5
15. CONFIRM STYLE AND HARDWARE WITH OWNER PRIOR TO INSTALLATION.
16. INSTALL TRANSLUCENT FILM PER OWNER. PROVIDE KEY CODE ACCESS.
17. PROVIDE FAB AND CODE ACCESS. COORDINATE WITH OWNER.
18. INSTALL SIGN STATING "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS"
19. ANDERSEN A-SERIES. CONFIRM FRAME WITH OWNER.
20. INSTALL MIRRORS ON BEDROOM SIDE.

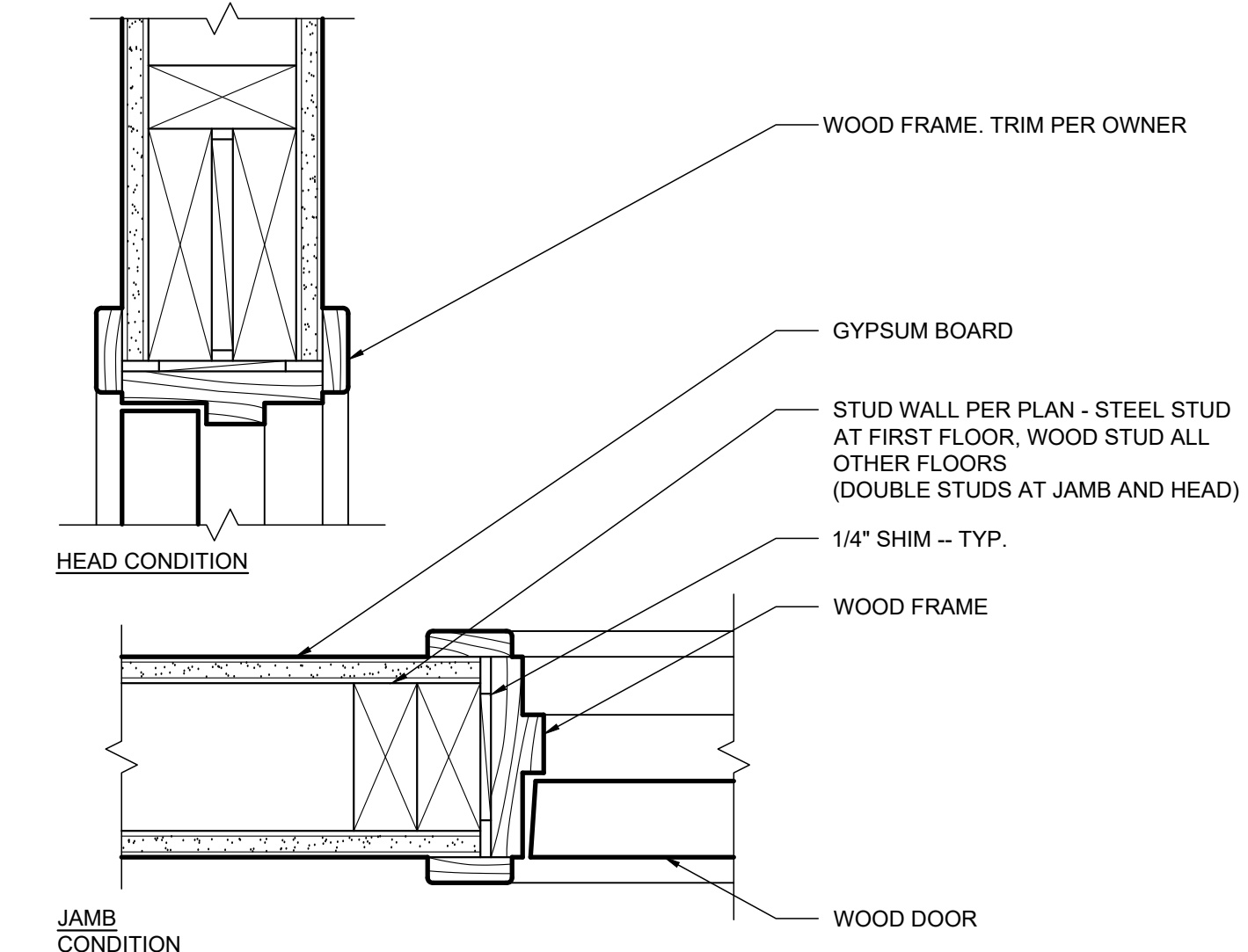
NOTE:
ALL DOOR HARDWARE AT THE BUILDING AND UNIT ENTRIES, AND ALL DOORS IN UNITS 214 AND 314 SHALL MEET REQUIREMENTS OF THE ADA FOR BARRIER-FREE ACCESSIBLE ROUTE

LOCK FUNCTIONS

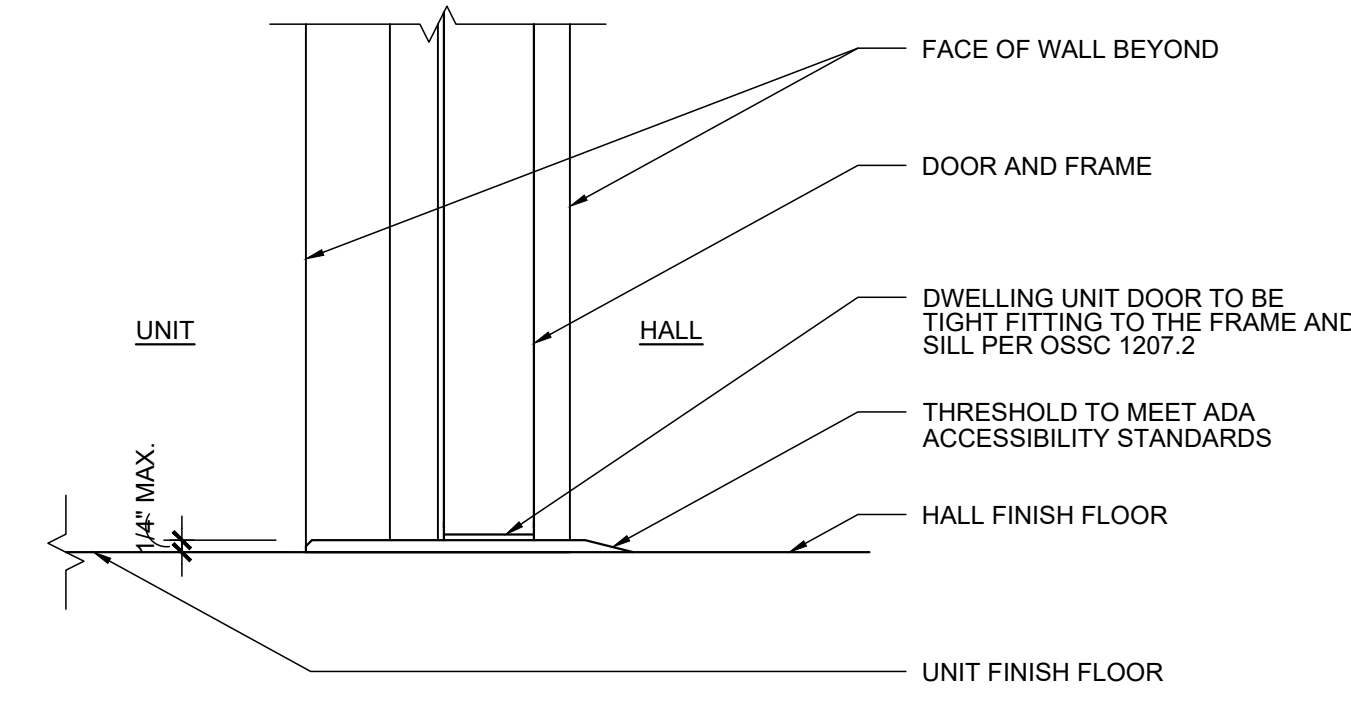
TYPE	PASSAGE	PRIVACY	ENTRANCE	DORMITORY	STOREROOM	EXTERIOR	CLOSET
HARDWARE	A	B	C	D	E	F	G
DIAGRAM							
DESCRIPTION	BOTH KNOBS/LEVERS ALWAYS UNLOCKED.	PUSH-BUTTON LOCKING INSIDE. TURNING INSIDE KNOB/LEVER RELEASES PUSH-BUTTON. CAN OPEN FROM OUTSIDE VIA EMERGENCY RELEASE.	KEY LOCKS BOTH SIDES.	KEY LOCK OUTSIDE. PUSH-BUTTON LOCKING INSIDE. KNOB/LEVER RELEASES PUSH-BUTTON.	KEY LOCK OUTSIDE. INSIDE KNOB/LEVER ALWAYS UNLOCKED.	DEAD BOLT INSIDE ONLY. KEY LOCK OUTSIDE.	PULL BOTH SIDES. ALWAYS UNLOCKED
SPECIFICATION (SCHLAGE)	AL10S/GRADE 2	AL40S/GRADE 2	AL53PD/GRADE 2	AL50PD/GRADE 2	AL80PD/GRADE 2	AL80PD/GRADE 2	--



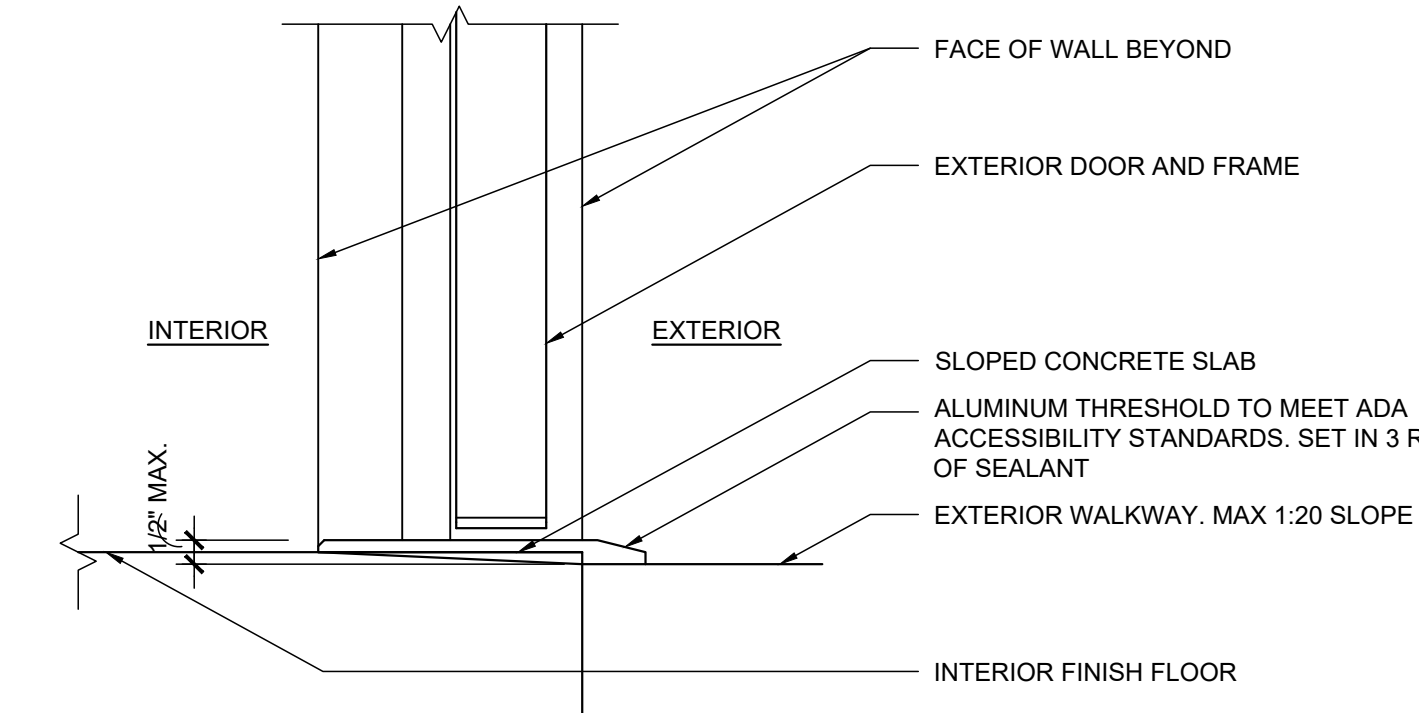
2 H.M. INTERIOR DOOR DETAIL
A6.3 SCALE: 3" = 1'-0"



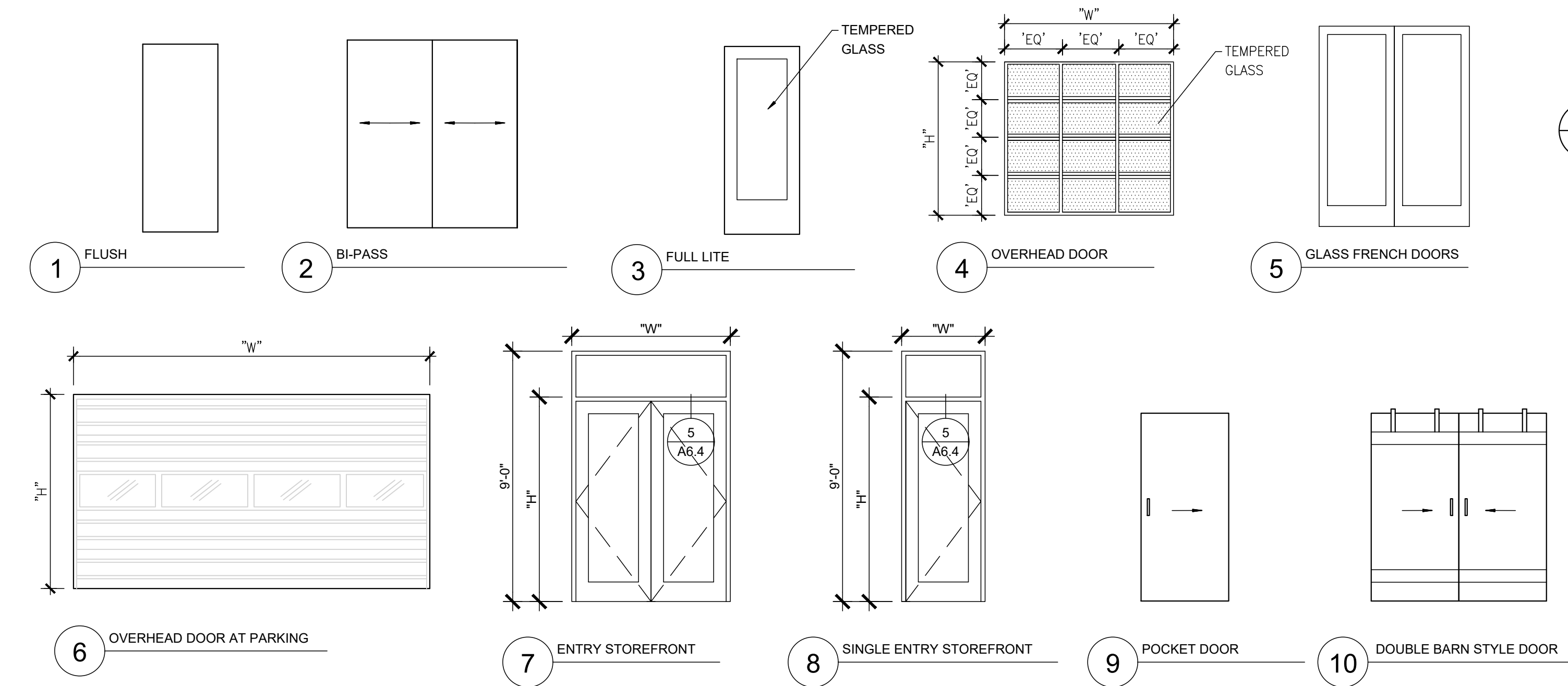
3 TYPICAL INTERIOR DOOR DETAIL
A6.3 SCALE: 3" = 1'-0"



4 THRESHOLD AT UNIT ENTRIES
A6.3 SCALE: 3" = 1'-0"



5 EXTERIOR FLUSH DOOR AT THRESHOLD
A6.3 SCALE: 3" = 1'-0"



1 DOOR SCHEDULE
A6.3 NO SCALE

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REGISTERED ARCHITECT
MILDRED WHITE
Portland, Oregon
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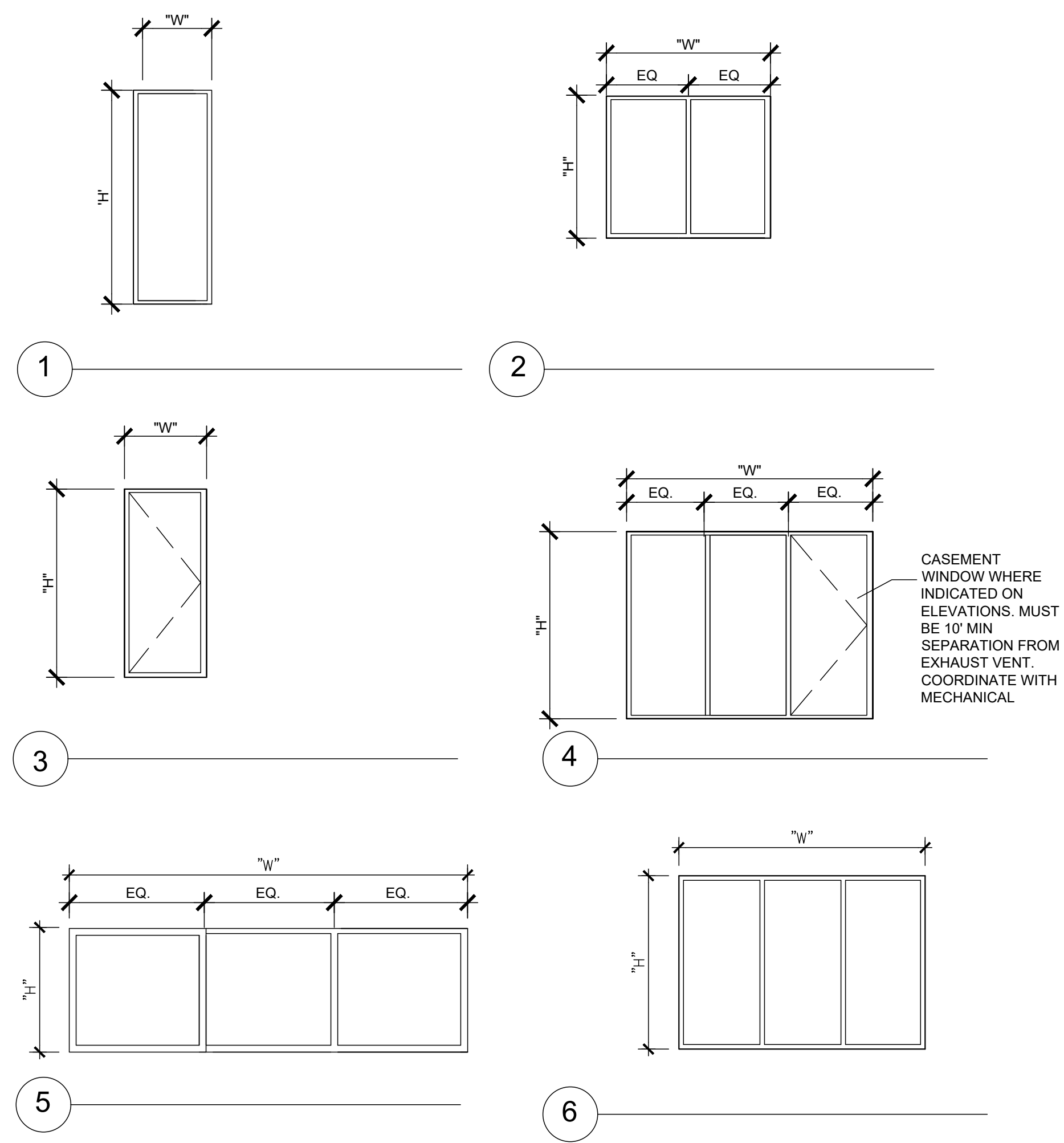
BUILDING PERMIT:
DATE: April 16, 2020

SHEET NO.
A6.3
DOOR SCHEDULE

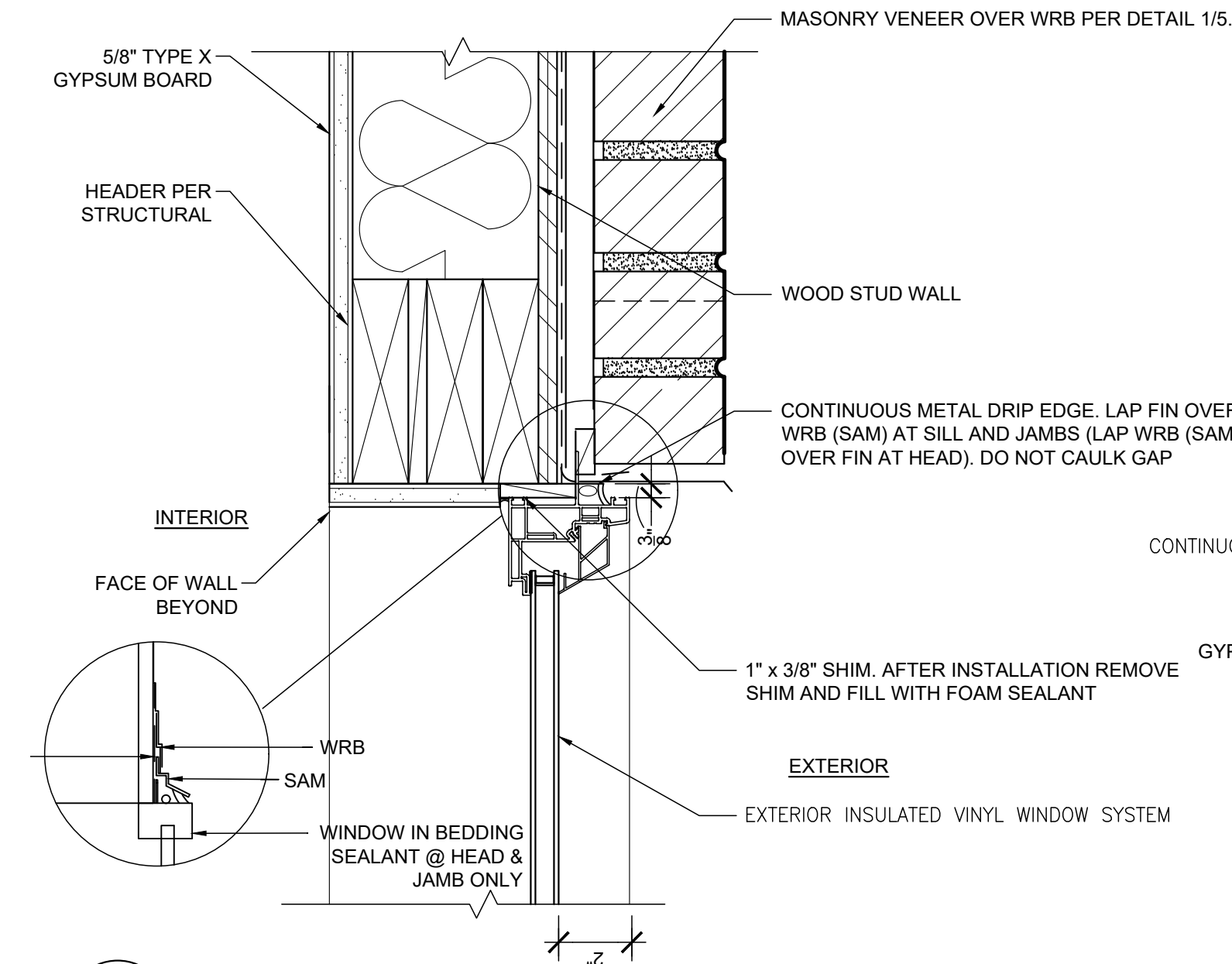
WINDOW SCHEDULE							
△	TYPE	WIDTH ("W")	HEIGHT ("H")	SILL (A.F.F.)	MATERIAL	NOTES	RATING
A	4	8'-0"	5'-6"	2'-6"	VINYL	A, B	--
B	4	9'-0"	5'-6"	2'-6"	VINYL	--	45 MIN
C	4	9'-0"	5'-6"	2'-6"	VINYL	A, B	--
D	1	2'-0"	6'-0"	2'-0"	VINYL	--	--
E	1	2'-0"	3'-6"	4'-6"	VINYL	--	--
F	1	2'-0"	3'-10"	3'-2"	VINYL	--	--
G	2	6'-0"	6'-0"	2'-0"	VINYL	A, B	--
H	1	3'-0"	4'-0"	3'-0"	VINYL	--	--
I	2	8'-0"	5'-4"	2'-6"	VINYL	A, B	--
J	2	6'-0"	4'-4"	2'-6"	VINYL	--	--
K	2	5'-0"	6'-0"	2'-0"	VINYL	A, B	--
L	1	3'-0"	4'-0"	2'-8"	ALUM	--	--
M	1	3'-0"	1'-0"	7'-0"	VINYL	--	--
N	6	9'-0"	6'-4"	2'-8"	ALUM	--	--
O	1	5'-0"	5'-0"	3'-0"	VINYL	--	--
P	3	6'-0"	5'-0"	3'-0"	VINYL	A, B	--
Q	3	2'-0"	4'-4"	2'-8"	VINYL	A, B	--
R	1	1'-6"	3'-6"	4'-6"	VINYL	A, B	--
S	2	6'-0"	6'-0"	1'-0"	VINYL	A, B	--
T	4	9'-0"	6'-0"	2'-0"	VINYL	A, B	--
U	1	1'-6"	4'-8"	2'-0"	VINYL	A, B	--
V	1	5'-0"	3'-0"	4'-0"	VINYL	--	--
W	1	3'-0"	8'-0"	0'-0"	VINYL	--	--
X	3	3'-0"	4'-0"	3'-0"	VINYL	A, B	--
Z	1	6'-0"	5'-0"	3'-0"	VINYL	--	--
AA	1	4'-0"	5'-0"	3'-0"	VINYL	--	--

NOTES:
 A. PROVIDE OPERABLE PANE PER WINDOW ELEVATION
 B. OPENABLE WINDOWS WITH A SILL HEIGHT OF LESS THAN 36" A.F.F. SHALL BE EQUIPPED WITH A WINDOW LIMITER DEVICE COMPLYING WITH ASTM F 2006 FOR NON-EMERGENCY ESCAPE WINDOWS OR ASTM F 2090 FOR EMERGENCY ESCAPE WINDOWS.

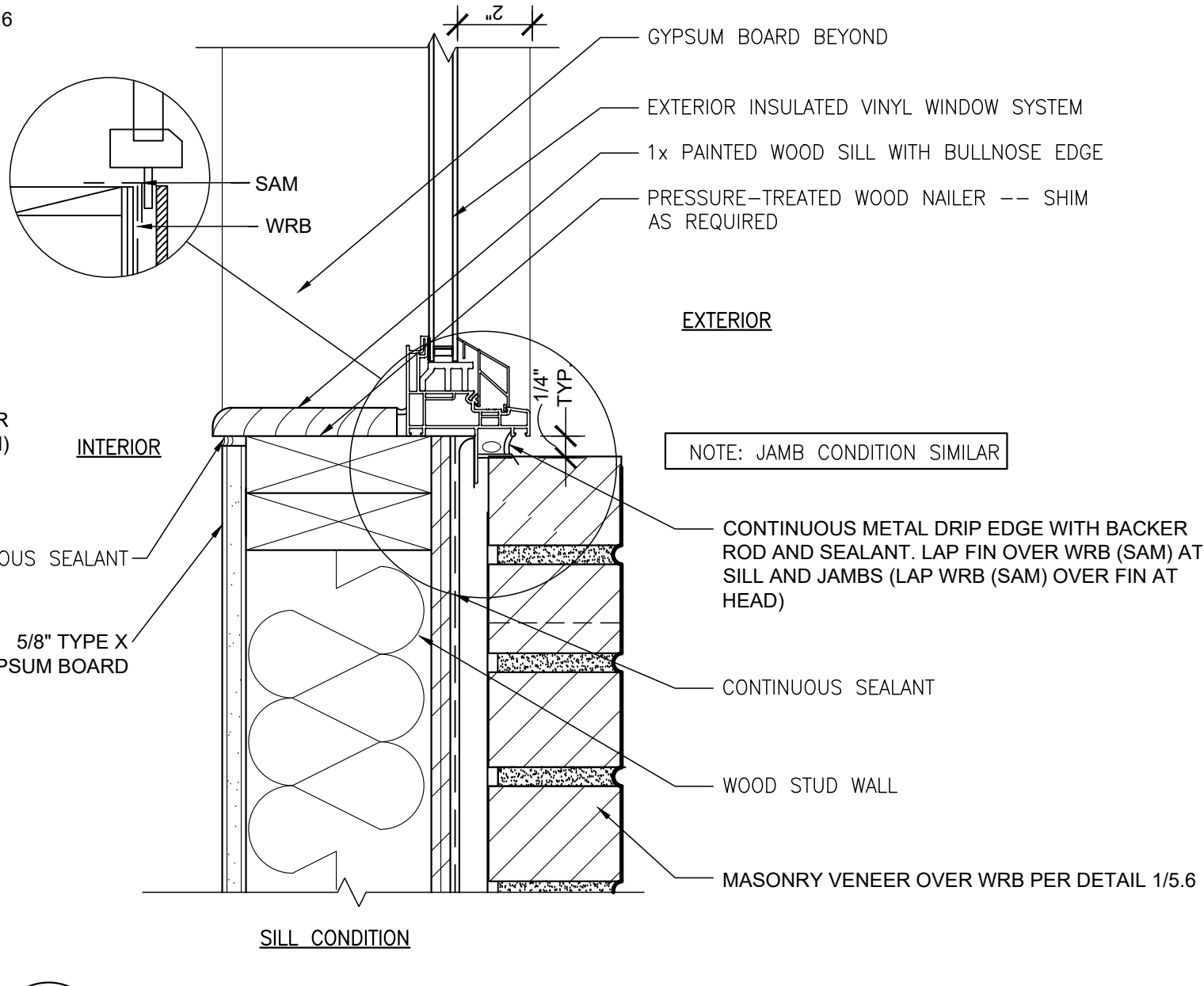
WINDOW GENERAL NOTES:
 1. SEE SPECIFICATIONS A0.3 FOR ADDITIONAL WINDOW REQUIREMENTS.
 2. GLASS USED IN DOORS AND WINDOWS LOCATED WITHIN A 24" ARC OF THE NEAREST VERTICAL EDGE OF A DOOR OR IN AREAS SUBJECT TO HUMAN IMPACT OR OTHER HAZARDOUS LOCATIONS SHALL BE TEMPERED OR OF AN APPROVED SAFETY GLAZING MATERIAL PER SECTION 2406 OF THE INTERNATIONAL BUILDING CODE.
 3. ALL GLAZING MUST MEET ENERGY CODE REQUIREMENTS PER A0.2 AND A0.3
 4. SEE DETAIL 4/A6.4 FOR TYPICAL WINDOW FLASHING DETAIL.
 5. SUBMIT SHOP DRAWINGS FOR REVIEW



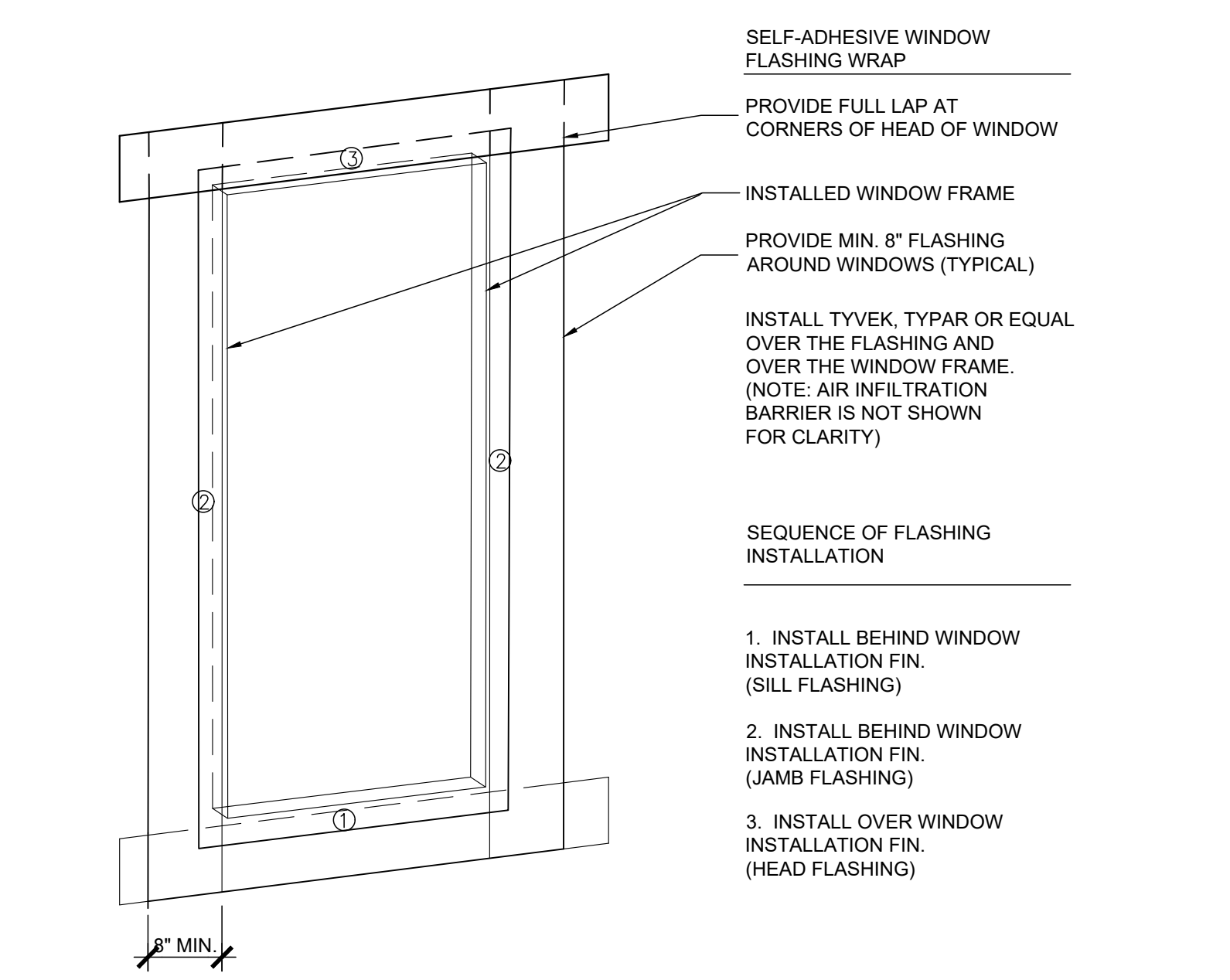
1 WINDOW SCHEDULE
 A6.4 NO SCALE



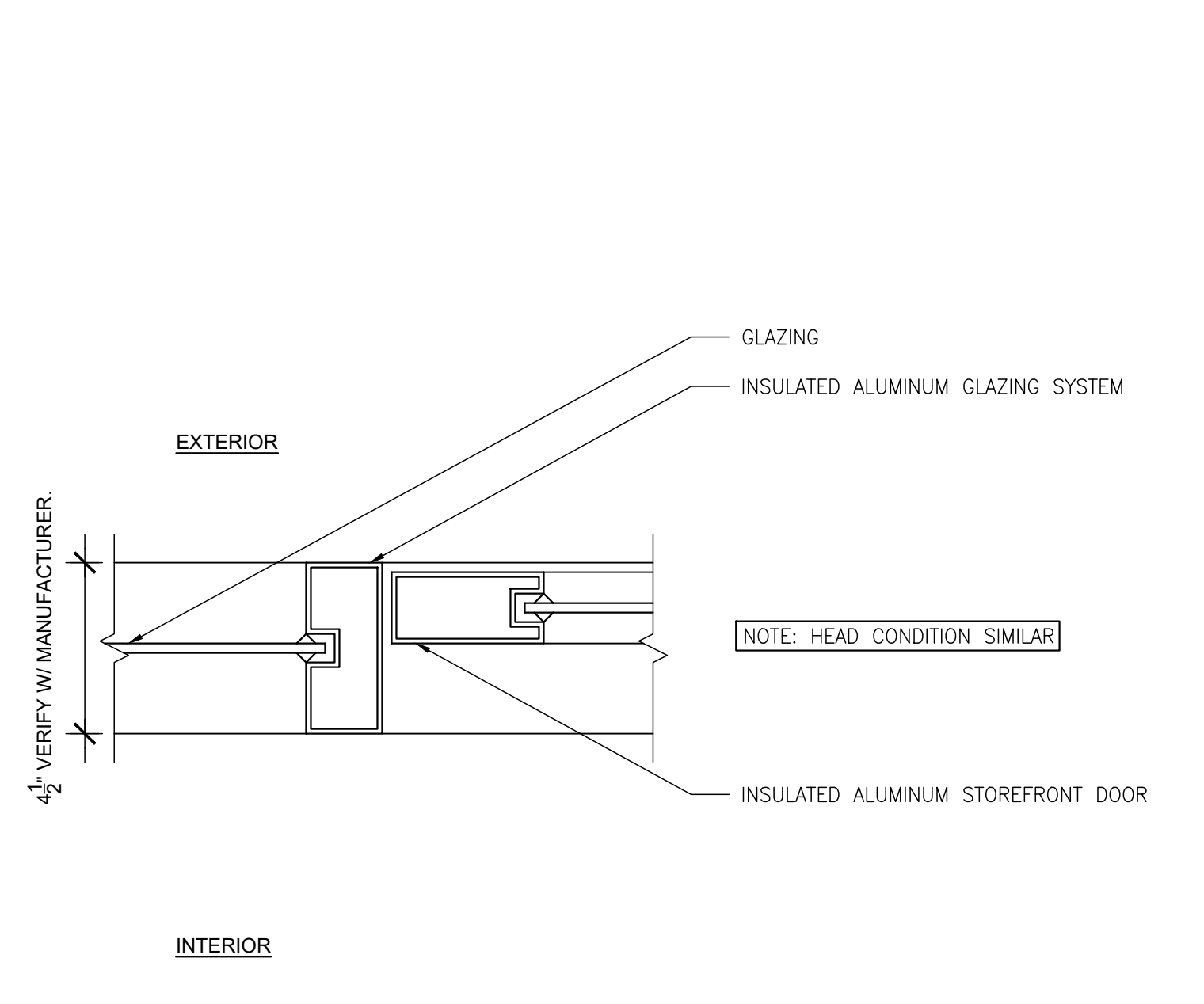
2 EXTERIOR WINDOW HEAD DETAIL
 A6.4 SCALE: 3" = 1'-0"



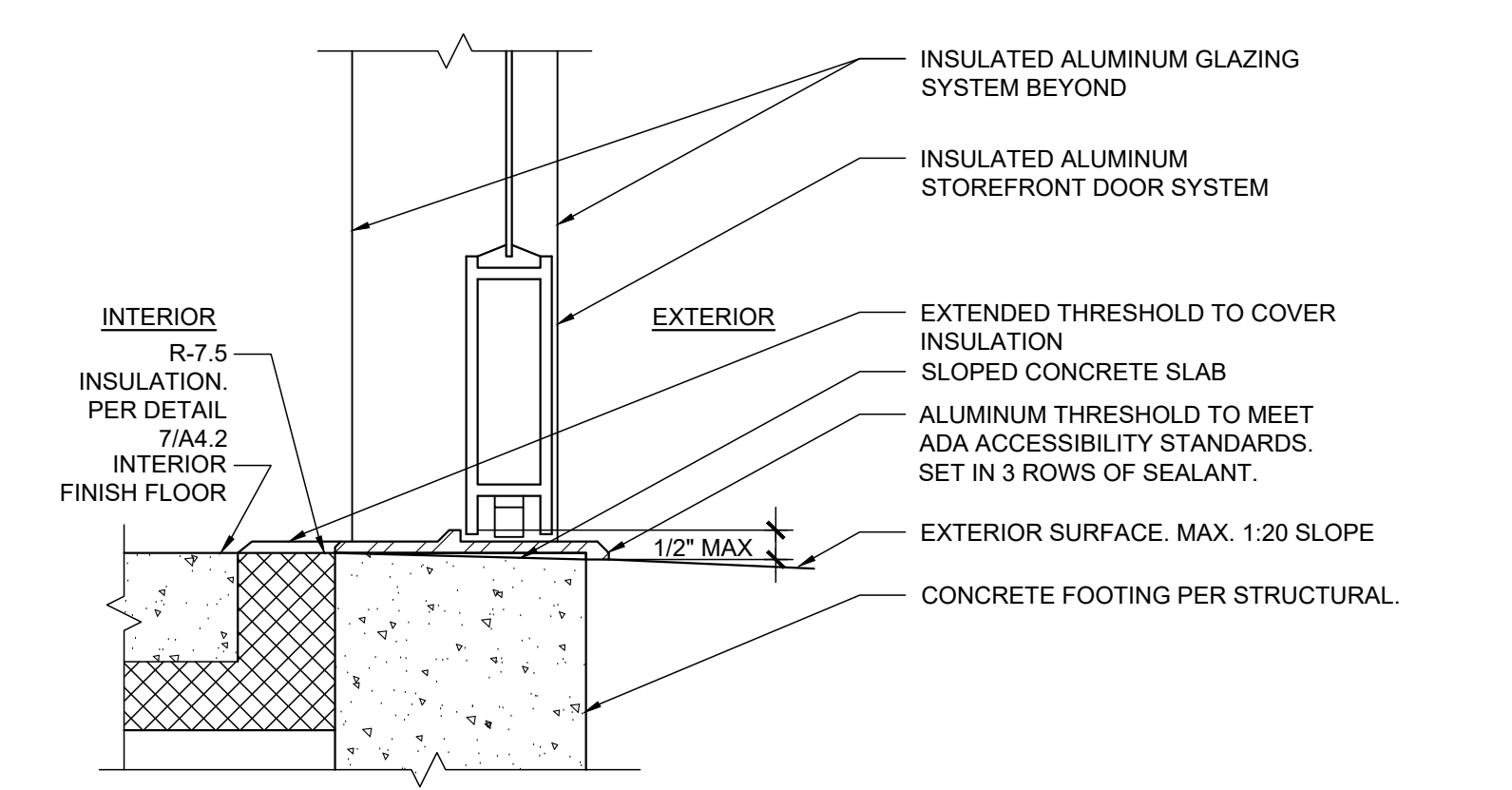
3 EXTERIOR WINDOW SILL DETAIL
 A6.4 SCALE: 3" = 1'-0"



4 TYPICAL WINDOW FLASHING
 A6.4 NOT TO SCALE



5 STOREFRONT DOOR JAMB AND HEAD
 A6.4 SCALE: 3" = 1'-0"



6 STOREFRONT DOOR AT THRESHOLD
 A6.4 SCALE: 3" = 1'-0"

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SHEET NO.
A6.4
 WINDOW SCHEDULE



TRUE NORTH
1 FIRST FLOOR REFLECTED CEILING PLAN
 A7.1 SCALE: 3/16" = 1'-0"

KEYNOTES

- 1 ONE HOUR RATED CEILING ASSEMBLY TYPICAL.
- 2 SOFFIT AT MECHANICAL DUCT. MAINTAIN FIRE RATED ASSEMBLY ABOVE. SEE DETAIL 3/A5.5
- 3 DROP CEILING FOR DUCTING. SEE MECHANICAL PLANS. MAINTAIN FIRE RATED ASSEMBLY ABOVE SEE DETAIL 4/A5.5
- 4 EXPOSED CONCRETE PT SLAB
- 5 BOX BEAM CEILING. SEE DETAIL 3/A5.5
- 6 HARDI SOFFIT
- 7 DROP CEILING FOR DUCTING AND MAIN LINES. MAINTAIN FIRE RATED ASSEMBLY ABOVE. SEE DETAIL 4/A5.5

REFLECTED CEILING GENERAL NOTES

- A. THIS DRAWING IS DIAGRAMMATIC AND FOR DESIGN PURPOSES ONLY-- SEE DRAWINGS BY EVANS ENGINEERING.
- B. FIRE SPRINKLER BY SEPARATE PERMIT.
- C. ALL EXIT SIGNS SHALL BE ILLUMINATED AT ALL TIMES. FOR EXTERNALLY ILLUMINATED SIGNS, TO ENSURE CONTINUED ILLUMINATION FOR A DURATION OF NOT LESS THAN 1 1/2 HOURS IN CASE OF PRIMARY POWER LOSS, THE EXIT SIGNS SHALL ALSO BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM PROVIDED FROM STORAGE BATTERIES.
- D. PROVIDE EGRESS ILLUMINATION PER SECTION 1006 OF THE OSSC -- SEE ELECTRICAL.

LEGEND

- 1x4 SURFACE MOUNTED LED LIGHT FIXTURE PER ELECTRICAL DRAWINGS
- 1x4 SURFACE MOUNTED LED LIGHT FIXTURE WITH INTEGRAL MOTION SENSORS AND EMERGENCY BATTERY BACKUP PER ELECTRICAL DRAWINGS.
- SURFACE MOUNTED LED CAN LIGHT PER ELECTRICAL DRAWINGS.
- SURFACE MOUNTED LED CAN LIGHT WITH INTEGRAL MOTION SENSORS AND EMERGENCY BATTERY BACKUP PER ELECTRICAL DRAWINGS.
- WALL MOUNTED LED VANITY LIGHT PER ELECTRICAL DRAWINGS. MOUNTED AT 7'-0" A.F.F.
- EXIT SIGN-- INSTALL IN ACCORDANCE WITH IBC SECTION 1011-- VERIFY LOCATIONS WITH FIRE MARSHAL AND OWNER. PROVIDE WITH EMERGENCY BATTERY PACK
- VENT FAN. SEE ELECTRICAL AND MECHANICAL DRAWINGS.
- CARBON MONOXIDE ALARM. SEE ELECTRICAL DRAWINGS.
- SMOKE DETECTOR. SEE ELECTRICAL DRAWINGS.
- FIRE ALARM SPEAKER HORN. SEE ELECTRICAL DRAWINGS.
- FIRE ALARM PULL STATION. SEE ELECTRICAL DRAWINGS.
- FIRE ALARM SPEAKER STROBE DEVICE. SEE ELECTRICAL DRAWINGS
- ELECTRICAL PANEL. SEE ELECTRICAL DRAWINGS.



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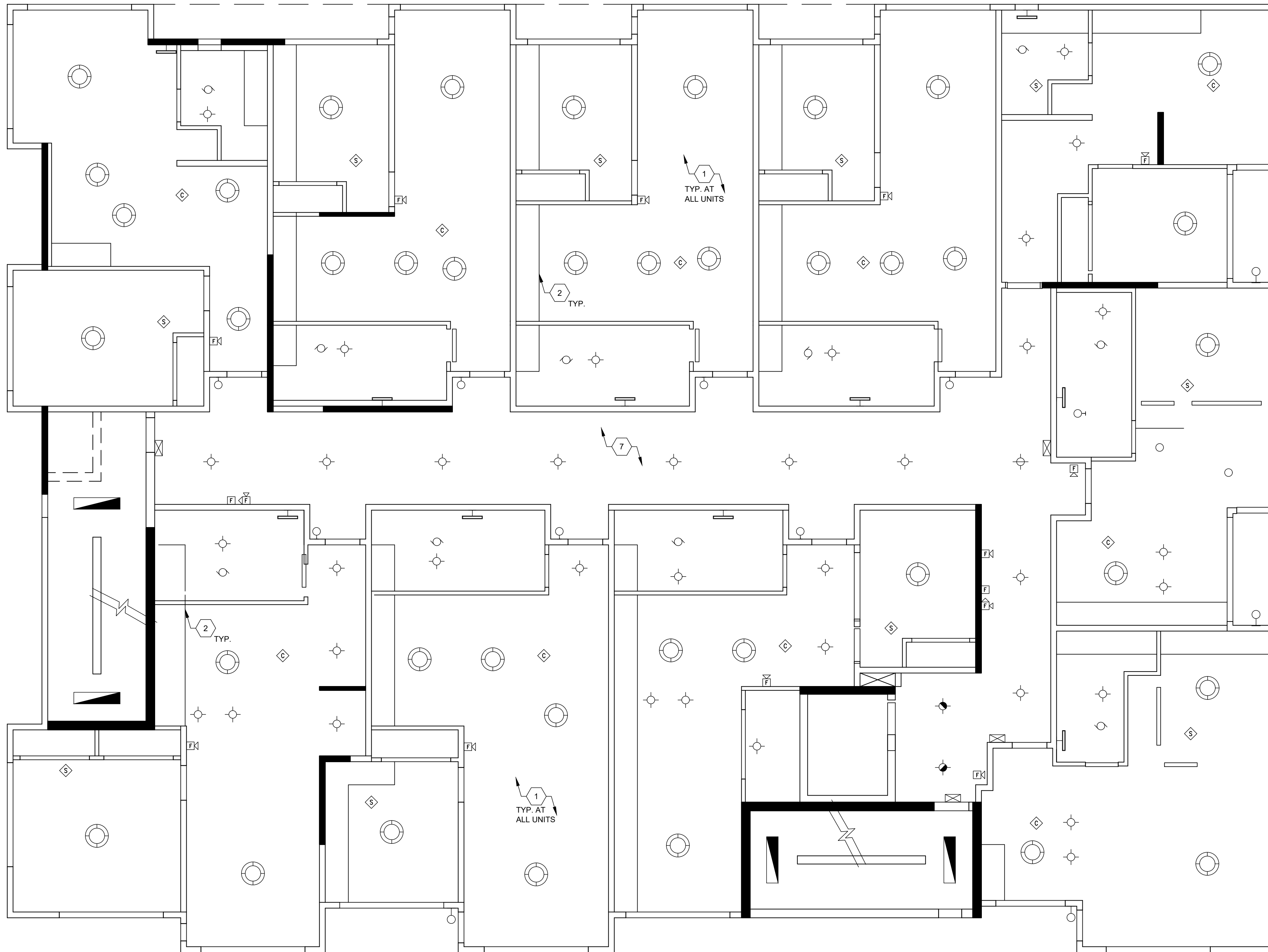
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 SHEET NO.

A7.1

FIRST FLOOR REFLECTED
 CEILING PLAN



TRUE NORTH
 1
SECOND/THIRD FLOOR REFLECTED CEILING PLAN
 SCALE: 3/16" = 1'-0"

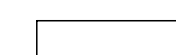

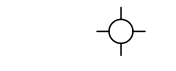




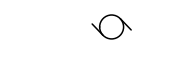
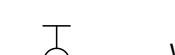



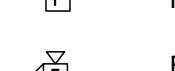


KEYNOTES

- 1 ONE HOUR RATED CEILING ASSEMBLY TYPICAL.
- 2 SOFFIT AT MECHANICAL DUCT. MAINTAIN FIRE RATED ASSEMBLY ABOVE. SEE DETAIL 3/A5.5
- 3 DROP CEILING FOR DUCTING. SEE MECHANICAL PLANS. MAINTAIN FIRE RATED ASSEMBLY ABOVE SEE DETAIL 4/A5.5
- 4 EXPOSED CONCRETE PT SLAB
- 5 BOX BEAM CEILING. SEE DETAIL 3/A5.5
- 6 HARDI SOFFIT
- 7 DROP CEILING FOR DUCTING AND MAIN LINES. MAINTAIN FIRE RATED ASSEMBLY ABOVE. SEE DETAIL 4/A5.5

REFLECTED CEILING GENERAL NOTES

- A. THIS DRAWING IS DIAGRAMMATIC AND FOR DESIGN PURPOSES ONLY-- SEE DRAWINGS BY EVANS ENGINEERING.
- B. FIRE SPRINKLER BY SEPARATE PERMIT.
- C. ALL EXIT SIGNS SHALL BE ILLUMINATED AT ALL TIMES. FOR EXTERNALLY ILLUMINATED SIGNS, TO ENSURE CONTINUED ILLUMINATION FOR A DURATION OF NOT LESS THAN 1 1/2 HOURS IN CASE OF PRIMARY POWER LOSS, THE EXIT SIGNS SHALL ALSO BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM PROVIDED FROM STORAGE BATTERIES.
- D. PROVIDE EGRESS ILLUMINATION PER SECTION 1006 OF THE OSSC -- SEE ELECTRICAL.

REFLECTED CEILING PLAN LEGEND

-  1x4 SURFACE MOUNTED LED LIGHT FIXTURE PER ELECTRICAL DRAWINGS
-  1x4 SURFACE MOUNTED LED LIGHT FIXTURE WITH INTEGRAL MOTION SENSORS AND EMERGENCY BATTERY BACKUP PER ELECTRICAL DRAWINGS.
-  SURFACE MOUNTED LED CAN LIGHT PER ELECTRICAL DRAWINGS.
-  SURFACE MOUNTED LED CAN LIGHT WITH INTEGRAL MOTION SENSORS AND EMERGENCY BATTERY BACKUP PER ELECTRICAL DRAWINGS.
-  WALL MOUNTED LED VANITY LIGHT PER ELECTRICAL DRAWINGS. MOUNTED AT 7'-0" A.F.F.
-  ROUND SURFACE MOUNTED LED LIGHTING FIXTURE PER ELECTRICAL DRAWINGS.
-  EXIT SIGN. INSTALL IN ACCORDANCE WITH IBC SECTION 1011. VERIFY LOCATIONS WITH FIRE MARSHAL AND OWNER. SEE ELECTRICAL DRAWINGS.
-  VENT FAN. SEE ELECTRICAL AND MECHANICAL DRAWINGS.
-  WALL MOUNTED SCONCE PER ELECTRICAL DRAWINGS.
-  CARBON MONOXIDE ALARM. SEE ELECTRICAL DRAWINGS.
-  SMOKE DETECTOR. SEE ELECTRICAL DRAWINGS.
-  FIRE ALARM SPEAKER HORN. SEE ELECTRICAL DRAWINGS.
-  FIRE ALARM PULL STATION. SEE ELECTRICAL DRAWINGS.
-  FIRE ALARM SPEAKER STROBE DEVICE. SEE ELECTRICAL DRAWINGS.
-  ELECTRICAL PANEL. SEE ELECTRICAL DRAWINGS.



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 1 OWNER REVISION: 04/28/20
 2 OWNER REVISION: 05/25/20
 3 OWNER REVISION: 08/21/20

BUILDING PERMIT:
 DATE: April 16, 2020
 SHEET NO.
A7.2
 SECOND/THIRD FLOOR
 REFLECTED CEILING PLAN



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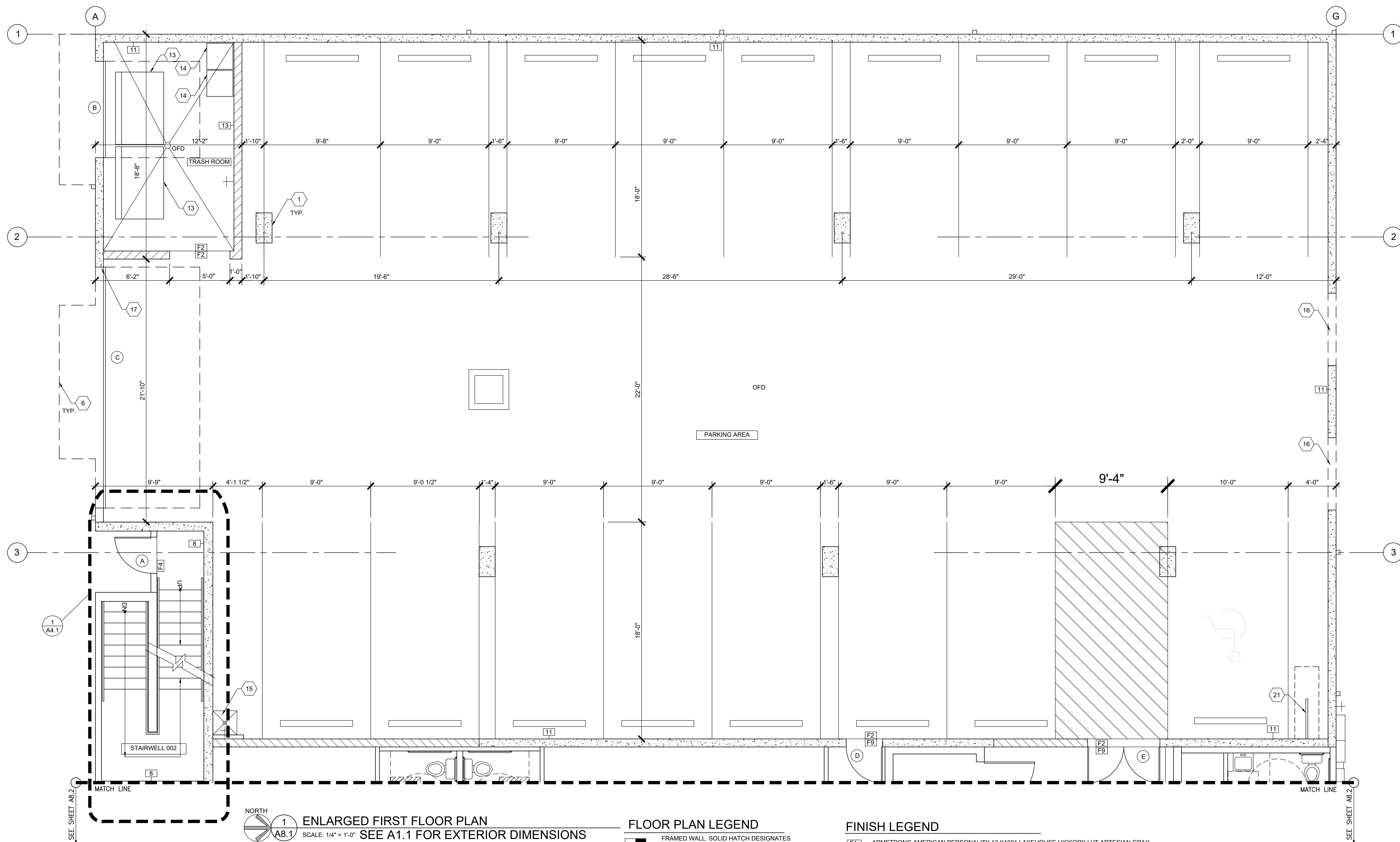
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BUILDING PERMIT:
DATE: April 16, 2020
SHEET NO.
A8.1
ENLARGED FIRST FLOOR
PLANS



FLOOR PLAN GENERAL NOTES

- CONTRACTOR SHALL VERIFY AND CONFIRM EXISTING CONDITIONS SHOWN OR IMPLIED ON DRAWINGS PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. NOTIFY A/E OF ANY DISCREPANCIES.
- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE 2014 OSSC, 2014 OMSC, 2014 OESC, 2014 OPSC, 2013 NFPA 13, 2013 NFPA 72, CITY OF PORTLAND CODE AND REGULATIONS, ALL APPLICABLE STATE AND FEDERAL SAFETY ORDERS, ICC/ANSI A117.1 ADA ACCESSIBILITY REQUIREMENTS, AND LOCAL ENERGY CODES. ALL REFERENCES TO CODES, SPECIFICATIONS AND STANDARDS SHALL MEAN AND ARE INTENDED TO BE THE LATEST EDITION, AMENDMENT, AND/OR REVISION OF SUCH REFERENCE STANDARD IN EFFECT.
- DIMENSIONS SHOWN ARE TO FACE OF WOOD STUD, OR CENTERLINE OF OPENING UNLESS NOTED OTHERWISE.
- LIGHT AND VENTILATION NOT INDICATED ON THESE PLANS SHALL BE PROVIDED AS PER OSSC SECTION 1203.
- ALL INSULATION INDICATED ON THE PLANS SHALL COMPLY WITH OR EXCEED THE REQUIREMENTS IN OSSC SECTION 707 FOR SMOKE DENSITY AND FLAME SPREAD.
- PROVIDE 2A-10BC FIRE EXTINGUISHERS WITHIN 75 FEET OF TRAVEL DISTANCE THROUGHOUT AND ONE EXTINGUISHER FOR EACH 3000 SF OR PORTION THEREOF. COORDINATE LOCATIONS WITH FIRE MARSHAL.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY TESTING AND COORDINATE ALL REQUIRED INSPECTIONS.
- ALL DOORS AND WINDOWS SHALL COMPLY WITH APPLICABLE ENERGY CODES.
- PROVIDE 18" MIN. CLEAR OPPOSITE DOOR LEVER ON PULL SIDE OF DOOR AND 12" MIN. CLEAR OPPOSITE DOOR LEVER ON PUSH SIDE PER ADA GUIDELINES
- VERIFY EXISTING ELECTRICAL SERVICE PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. COORDINATE WITH A/E.
- ALL EXTERIOR LIGHTING AND PLUMBING FIXTURES AND ACCESSORIES SHALL BE BLOCKED, WATERPROOFED, AND INSTALLED WITH TOP FLASHING.
- SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND REQUIREMENTS.

FLOOR PLAN LEGEND

- [Hatched Box] FRAMED WALL. SOLID HATCH DESIGNATES SHEAR WALL. SEE STRUCTURAL
- [Dotted Box] CONCRETE WALL
- [Diagonal Lines] BRICK WALL
- [Cross-hatched Box] CONCRETE MASONRY UNIT WALL
- [101] ROOM NUMBER
- [A.F.F.] ABOVE FINISH FLOOR ELEVATION
- [COL] CENTERLINE OF COLUMN
- [F.O.S.] FACE OF STUD
- [F.O.F.] FACE OF FINISH
- [F.O.C.] FACE OF CONCRETE
- [F.O.CA.] FACE OF CANOPY
- [1] WALL TYPE. SEE A5.1, A5.2, A5.5
- [4"X4"] 4"X4" PREFINISHED SHEET STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
- [WH] HOT WATER HEATER. SEE PLUMBING DRAWINGS.
- [OFD] FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS.
- [F1] FLOOR FINISH. SEE LEGEND AND DETAIL 3/49.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
- [A] DOOR TYPE SEE. A6.3
- [+] HOSE BIB. SEE PLUMBING DRAWINGS

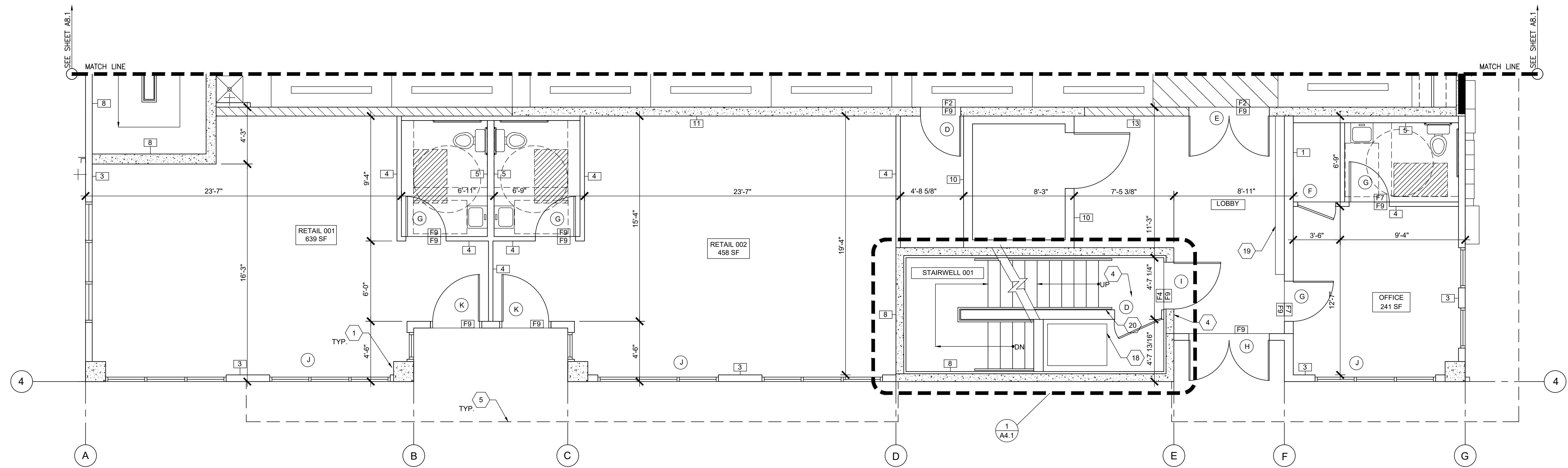
FINISH LEGEND

- [F1] ARMSTRONG AMERICAN PERSONALITY 12 K1001 LAKEHOUSE HICKORY LVT ARTESIAN GRAY
- [F2] BROOM FINISHED CONCRETE WITH CLEAR SEALANT
- [F3] CARPET 1 AT BEDROOMS
- [F4] FLEXCO HEAVY DUTY RADIAL II 776 AT STAIRS, CARPET TILE AT LANDINGS
- [F5] LUXURY VINYL PLANK TILE AT COMMON AREA - COLOR 2
- [F6] 3/4" PRE-ENGINEERED OAK FLOORS
- [F7] TILE TECH PORCE-STONE SERIES PEDESTAL PAVERS
- [F8] CARPET 3 AT PENTHOUSE BEDROOMS
- [F9] POLISHED CONCRETE WITH CLR SEALANT

FLOOR PLAN KEYNOTES

- [1] CONCRETE COLUMN. SEE STRUCTURAL
- [2] STACKED WASHER/DRYER. 24" MAX WIDTH.
- [3] SIDE BY SIDE WASHER/DRYER
- [4] PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE
- [5] CANOPY ABOVE. SEE ELEVATION AND STRUCTURAL
- [6] BAY WINDOW ABOVE.
- [7] 12" DEEP WIRE SHELF WITH HANGER ROD. INSTALL ONE SHELF AT 5'-6" A.F.F. CONTINUOUS OVER WATER HEATER WHERE APPLICABLE. INSTALL SECOND SHELF AT 4'-0" LONG AT 3'-0" A.F.F. TYP. AT BEDROOM CLOSETS

- [8] ADJUSTABLE SHELF UNIT TO 6" A.F.F.
- [9] CLOSET SHELF AT 5'-0" A.F.F. FIELD VERIFY WITH APPLIANCE OPERATION CLEARANCES.
- [10] BALCONY RAILING.
- [11] NOT USED
- [12] FURRING WALL
- [13] REFUSE AND RECYCLING DUMPSTER. SIZE PER GARBAGE HANDLER REQUIREMENTS
- [14] GLASS RECYCLING. SIZE PER GARBAGE HANDLER REQUIREMENTS
- [15] DOG WASH STATION. SEE PLUMBING DRAWINGS
- [16] 6'-0" W X 2'-0" H AT 6'-0" A.F.F. OPENINGS IN WALL FOR NATURAL VENTILATION AND LIGHT. SEE ELEVATIONS
- [17] AUTOMATIC OVERHEAD DOOR CONTROL PANEL. SEE ELECTRICAL DRAWINGS AND DOOR SCHEDULE
- [18] FIRE RISER IN FIRE RISER ROOM. SEE DRAWINGS BY FIRE SPRINKLER DESIGNER
- [19] MAIL BOX PER OWNER
- [20] PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE
- [21] LONG TERM WALL MOUNTED BICYCLE PARKING, 2 X 6 SPACE. RACK PER OWNER. SEE DETAIL 9/SD.1



NORTH
1
A8.2 ENLARGED FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0" SEE A1.1 FOR EXTERIOR DIMENSIONS

FLOOR PLAN GENERAL NOTES

- CONTRACTOR SHALL VERIFY AND CONFIRM EXISTING CONDITIONS SHOWN OR IMPLIED ON DRAWINGS PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. NOTIFY A/E OF ANY DISCREPANCIES.
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- PROVIDE 18" MIN. CLEAR OPPOSITE DOOR LEVER ON PULL SIDE OF DOOR AND 12" MIN. CLEAR OPPOSITE DOOR LEVER ON PUSH SIDE PER ADA GUIDELINES
- VERIFY EXISTING ELECTRICAL SERVICE PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. COORDINATE WITH A/E.
- ALL EXTERIOR LIGHTING AND PLUMBING FIXTURES AND ACCESSORIES SHALL BE BLOCKED, WATERPROOFED, AND INSTALLED WITH TOP FLASHING.
- SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND REQUIREMENTS.

FLOOR PLAN LEGEND

	FRAMED WALL. SOLID HATCH DESIGNATES SHEAR WALL. SEE STRUCTURAL
	CONCRETE WALL
	BRICK WALL
	CONCRETE MASONRY UNIT WALL
	ROOM NUMBER
	A.F.F. ABOVE FINISH FLOOR ELEVATION
	CENTERLINE OF COLUMN
	F.O.S. FACE OF STUD
	F.O.F. FACE OF FINISH
	F.O.C. FACE OF CONCRETE
	F.O.C.A. FACE OF CANOPY
	WALL TYPE. SEE A5.1, A5.2, A5.5
	4"X4" PREFINISHED SHEET STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
	HOT WATER HEATER. SEE PLUMBING DRAWINGS.
	FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS.
	FLOOR FINISH. SEE LEGEND AND DETAIL 9/A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
	DOOR TYPE SEE. A6.3
	HOSE BIB. SEE PLUMBING DRAWINGS

FINISH LEGEND

	ARMSTRONG AMERICAN PERSONALITY 12 K1001 LAKEHOUSE HICKORY LVT ARTESIAN GRAY
	BROOM FINISHED CONCRETE WITH CLEAR SEALANT
	CARPET 1 AT BEDROOMS
	FLEXCO HEAVY DUTY RADIAL II 776 AT STAIRS, CARPET TILE AT LANDINGS
	LUXURY VINYL PLANK TILE AT COMMON AREA - COLOR 2
	3/4" PRE-ENGINEERED OAK FLOORS
	TILE TECH PORCE-STONE SERIES PEDESTAL PAVERS
	CARPET 3 AT PENTHOUSE BEDROOMS
	POLISHED CONCRETE WITH CLER SEALANT

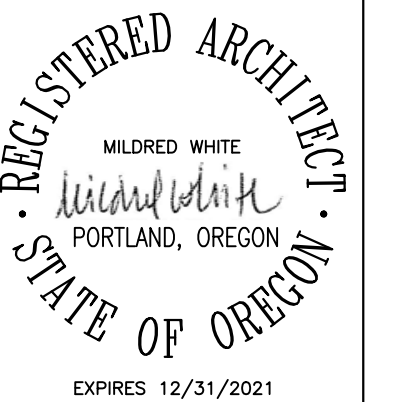
FLOOR PLAN KEYNOTES

	CONCRETE COLUMN. SEE STRUCTURAL
	STACKED WASHER/DRYER. 24" MAX WIDTH.
	SIDE BY SIDE WASHER/DRYER
	PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS. PERMANENTLY INSTALLED AND READILY VISIBLE
	CANOPY ABOVE. SEE ELEVATION AND STRUCTURAL
	BAY WINDOW ABOVE.
	12" DEEP WIRE SHELF WITH HANGER ROD. INSTALL ONE SHELF AT 5'-6" A.F.F. CONTINUOUS OVER WATER HEATER WHERE APPLICABLE. INSTALL SECOND SHELF AT 4'-0" LONG AT 3'-0" A.F.F. TYP. AT BEDROOM CLOSETS

	ADJUSTABLE SHELF UNIT TO 6" A.F.F.
	CLOSET SHELF AT 5'-0" A.F.F. FIELD VERIFY WITH APPLIANCE OPERATION CLEARANCES.
	BALCONY RAILING.
	NOT USED
	FURRING WALL
	REFUSE AND RECYCLING DUMPSTER. SIZE PER GARBAGE HANDLER REQUIREMENTS
	GLASS RECYCLING. SIZE PER GARBAGE HANDLER REQUIREMENTS
	DOG WASH STATION. SEE PLUMBING DRAWINGS
	6'-0" W X 2'-0" H AT 6'-0" A.F.F. OPENINGS IN WALL FOR NATURAL VENTILATION AND LIGHT. SEE ELEVATIONS
	AUTOMATIC OVERHEAD DOOR CONTROL PANEL. SEE ELECTRICAL DRAWINGS AND DOOR SCHEDULE
	FIRE RISER IN FIRE RISER ROOM. SEE DRAWINGS BY FIRE SPRINKLER DESIGNER
	MAIL BOX PER OWNER
	PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS. PERMANENTLY INSTALLED AND READILY VISIBLE
	LONG TERM WALL MOUNTED BICYCLE PARKING, 2 X 6 SPACE. RACK PER OWNER. SEE DETAIL 9/S02.1

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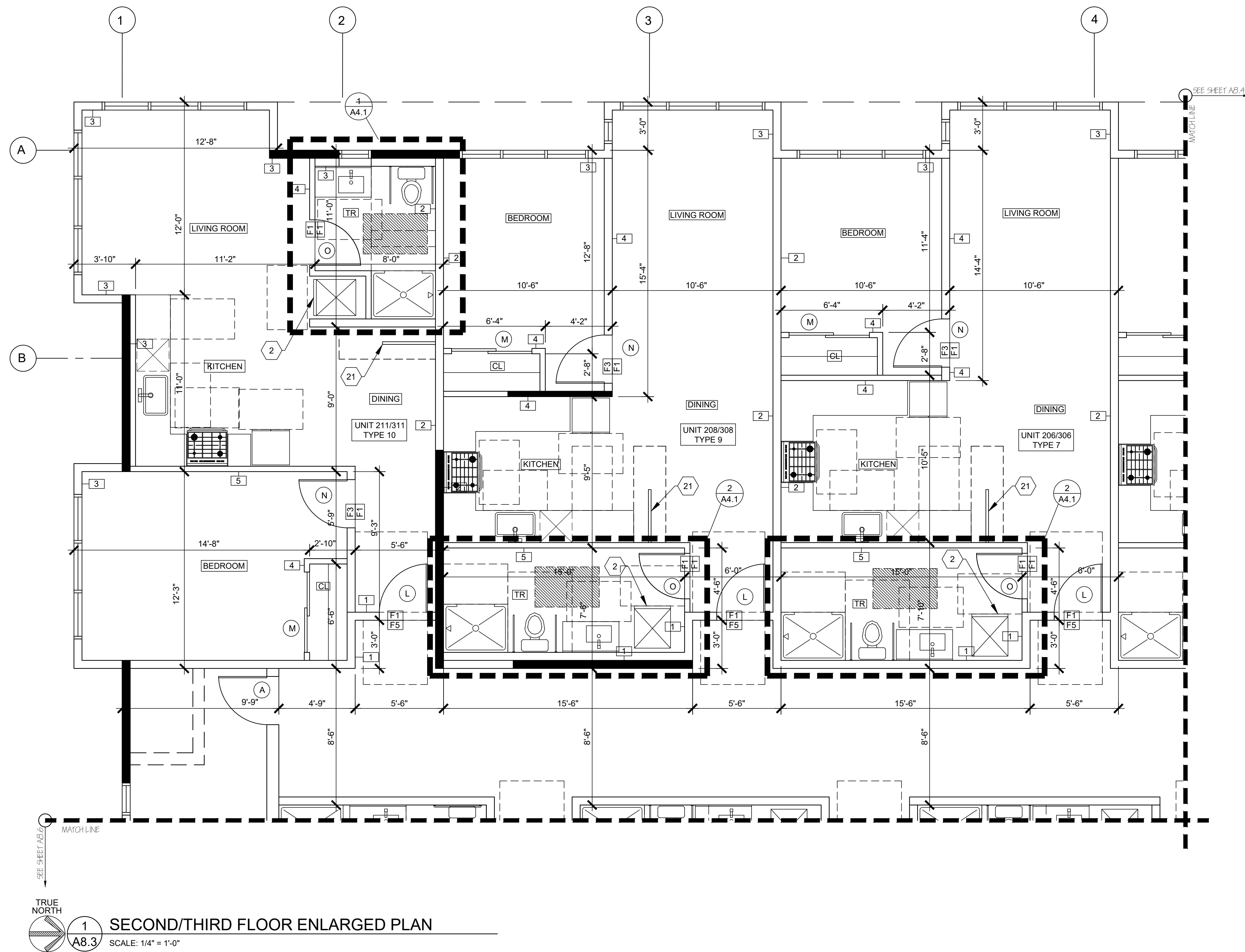
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DATE: April 16, 2020
SHEET NO.
A8.2
ENLARGED FIRST FLOOR
PLANS



TRUE NORTH
1
A8.3 SECOND/THIRD FLOOR ENLARGED PLAN
 SCALE: 1/4" = 1'-0"

FLOOR PLAN GENERAL NOTES

1. CONTRACTOR SHALL VERIFY AND CONFIRM EXISTING CONDITIONS SHOWN OR IMPLIED ON DRAWINGS PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. NOTIFY A/E OF ANY DISCREPANCIES.
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6. PROVIDE 2A-10BC FIRE EXTINGUISHERS WITHIN 75 FEET OF TRAVEL DISTANCE THROUGHOUT AND ONE EXTINGUISHER FOR EACH 3000 SF OR PORTION THEREOF. COORDINATE LOCATIONS WITH FIRE MARSHAL.
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FLOOR PLAN LEGEND

- FRAMED WALL. SOLID HATCH DESIGNATES SHEAR WALL. SEE STRUCTURAL
- CONCRETE WALL
- BRICK WALL
- CONCRETE MASONRY UNIT WALL
- ROOM NUMBER
- ABOVE FINISH FLOOR ELEVATION
- CENTERLINE OF COLUMN
- FACE OF STUD
- FACE OF FINISH
- FACE OF CONCRETE
- FACE OF CANOPY
- WALL TYPE. SEE A5.1, A5.2, A5.5
- 4"x4" PREFINISHED SHEET STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
- HOT WATER HEATER. SEE PLUMBING DRAWINGS
- FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS
- FLOOR FINISH. SEE LEGEND AND DETAIL 3/A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
- DOOR TYPE SEE. A6.3
- HOSE BIB. SEE PLUMBING DRAWINGS

FINISH LEGEND

- ARMSTRONG AMERICAN PERSONALITY 12 K1001 LAKEHOUSE HICKORY LVT ARTESIAN GRAY
- BROOM FINISHED CONCRETE WITH CLEAR SEALANT
- CARPET 1 AT BEDROOMS
- FLEXCO HEAVY DUTY RADIAL II 776 AT STAIRS, CARPET TILE AT LANDINGS
- LUXURY VINYL PLANK TILE AT COMMON AREA - COLOR 2
- 3/4" PRE-ENGINEERED OAK FLOORS
- TILE TECH PORCE-STONE SERIES PEDESTAL PAVERS
- CARPET 3 AT PENTHOUSE BEDROOMS

FLOOR PLAN KEYNOTES

- CONCRETE COLUMN. SEE STRUCTURAL
- STACKED WASHER/DRYER. 24" MAX WIDTH.
- SIDE BY SIDE WASHER/DRYER
- PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE
- CANOPY ABOVE. SEE ELEVATION AND STRUCTURAL
- BAY WINDOW ABOVE.
- 12" DEEP WIRE SHELF WITH HANGER ROD. INSTALL ONE SHELF AT 5'-6" A.F.F. CONTINUOUS OVER WATER HEATER WHERE APPLICABLE. INSTALL SECOND SHELF AT 4'-0" LONG AT 3'-0" A.F.F. TYP. AT BEDROOM CLOSETS
- ADJUSTABLE SHELF UNIT TO 6" A.F.F.
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- BALCONY RAILING.
- NOT USED
- FURRING WALL
- REFUSE AND RECYCLING DUMPSTER. SIZE PER GARBAGE HANDLER REQUIREMENTS
- GLASS RECYCLING. SIZE PER GARBAGE HANDLER REQUIREMENTS
- DOG WASH STATION. SEE PLUMBING DRAWINGS
- 6'-0" W X 2'-0" H AT 6'-0" A.F.F. OPENINGS IN WALL FOR NATURAL VENTILATION AND LIGHT. SEE ELEVATIONS
- AUTOMATIC OVERHEAD DOOR CONTROL PANEL. SEE ELECTRICAL DRAWINGS AND DOOR SCHEDULE
- FIRE RISER IN FIRE RISER ROOM. SEE DRAWINGS BY FIRE SPRINKLER DESIGNER
- MAIL BOX PER OWNER
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- LONG TERM WALL MOUNTED BICYCLE PARKING, 2 X 6 SPACE. RACK PER OWNER. SEE DETAIL 9/SD2.1

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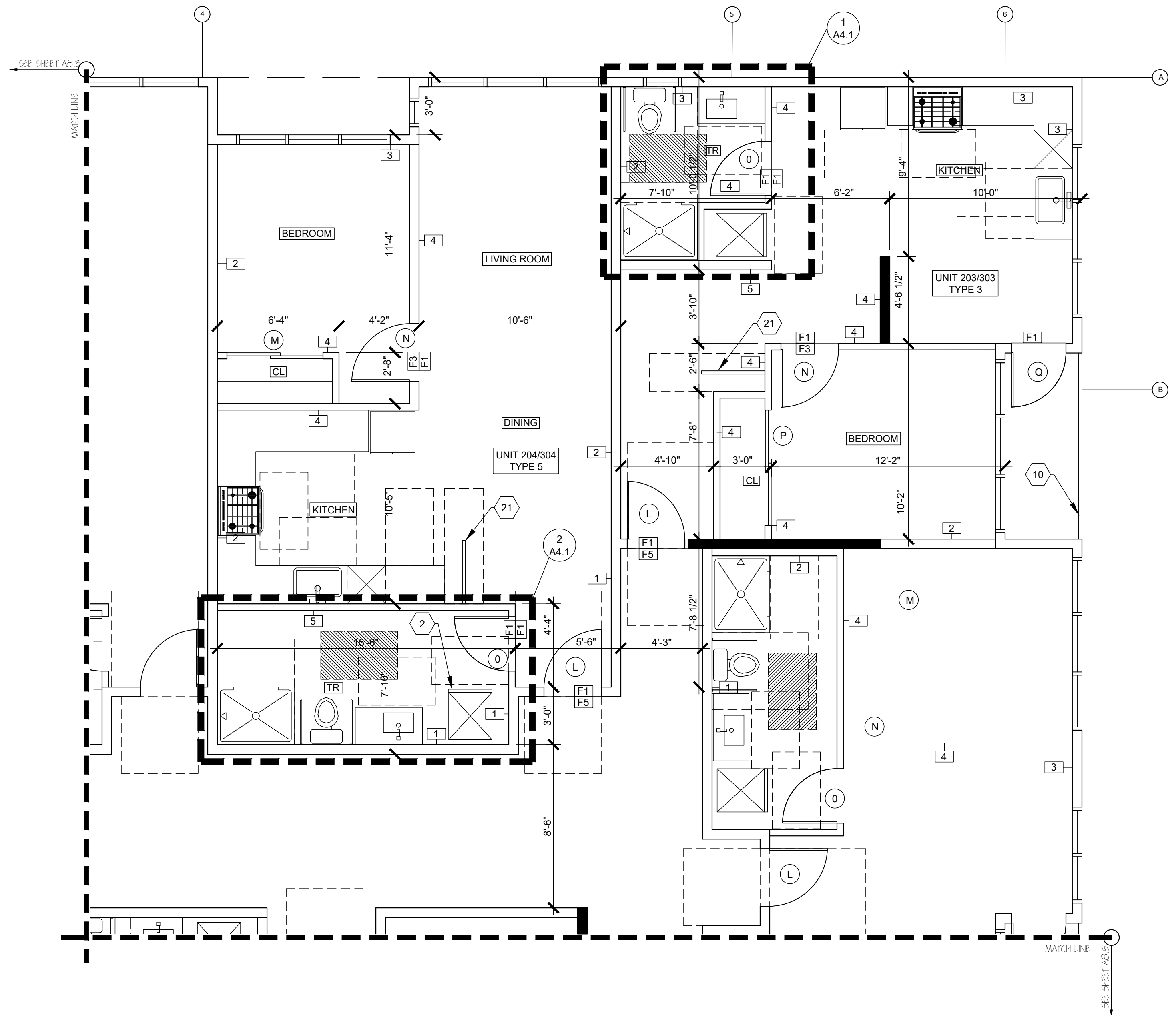
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BUILDING PERMIT:
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 SHEET NO.

A8.3

ENLARGED SECOND/THIRD
 FLOOR PLANS



FLOOR PLAN GENERAL NOTES

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FLOOR PLAN LEGEND

- FRAMED WALL. SOLID HATCH DESIGNATES SHEAR WALL. SEE STRUCTURAL
- CONCRETE WALL
- BRICK WALL
- CONCRETE MASONRY UNIT WALL
- ROOM NUMBER
- A.F.F. ABOVE FINISH FLOOR ELEVATION
- COL. CENTERLINE OF COLUMN
- F.O.S. FACE OF STUD
- F.O.F. FACE OF FINISH
- F.O.C. FACE OF CONCRETE
- F.O.CA. FACE OF CANOPY
- WALL TYPE. SEE A5.1, A5.2, A5.5
- DS. 4"x4" PREFINISHED SHEET STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
- WH. HOT WATER HEATER. SEE PLUMBING DRAWINGS
- OFD. FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS
- F.F. FLOOR FINISH. SEE LEGEND AND DETAIL 3/A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
- DOOR TYPE SEE .A6.3
- HOSE BIB. SEE PLUMBING DRAWINGS

FINISH LEGEND

- F1. ARMSTRONG AMERICAN PERSONALITY 12 K1001 LAKEHOUSE HICKORY LVT ARTESIAN GRAY
- F2. BROOM FINISHED CONCRETE WITH CLEAR SEALANT
- F3. CARPET 1 AT BEDROOMS
- F4. FLEXCO HEAVY DUTY RADIAL II 776 AT STAIRS, CARPET TILE AT LANDINGS
- F5. LUXURY VINYL PLANK TILE AT COMMON AREA - COLOR 2
- F6. 3/4" PRE-ENGINEERED OAK FLOORS
- F7. TILE TECH PORCE-STONE SERIES PEDESTAL PAVERS
- F8. CARPET 3 AT PENTHOUSE BEDROOMS

FLOOR PLAN KEYNOTES

- 1. CONCRETE COLUMN. SEE STRUCTURAL
- 2. STACKED WASHER/DRYER. 24" MAX WIDTH.
- 3. SIDE BY SIDE WASHER/DRYER
- 4. PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE
- 5. CANOPY ABOVE. SEE ELEVATION AND STRUCTURAL
- 6. BAY WINDOW ABOVE.
- 7. 12" DEEP WIRE SHELF WITH HANGER ROD. INSTALL ONE SHELF AT 5'-6" A.F.F. CONTINUOUS OVER WATER HEATER WHERE APPLICABLE. INSTALL SECOND SHELF AT 4'-0" LONG AT 3'-0" A.F.F. TYP. AT BEDROOM CLOSETS
- 8. ADJUSTABLE SHELF UNIT TO 6' A.F.F.
- 9. CLOSET SHELF AT 5'-0" A.F.F. FIELD VERIFY WITH APPLIANCE OPERATION CLEARANCES.
- 10. BALCONY RAILING.
- 11. NOT USED
- 12. FURRING WALL
- 13. REFUSE AND RECYCLING DUMPSTER. SIZE PER GARBAGE HANDLER REQUIREMENTS
- 14. GLASS RECYCLING. SIZE PER GARBAGE HANDLER REQUIREMENTS
- 15. DOG WASH STATION. SEE PLUMBING DRAWINGS
- 16. 6'-0" W X 2'-0" H AT 6'-0" A.F.F. OPENINGS IN WALL FOR NATURAL VENTILATION AND LIGHT. SEE ELEVATIONS
- 17. AUTOMATIC OVERHEAD DOOR CONTROL PANEL. SEE ELECTRICAL DRAWINGS AND DOOR SCHEDULE
- 18. FIRE RISER IN FIRE RISER ROOM. SEE DRAWINGS BY FIRE SPRINKLER DESIGNER
- 19. MAIL BOX PER OWNER
- 20. PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE
- 21. LONG TERM WALL MOUNTED BICYCLE PARKING, 2 X 6 SPACE. RACK PER OWNER. SEE DETAIL 9/SD2.1

TRUE NORTH

1 SECOND/THIRD FLOOR ENLARGED PLAN
 A8.4 SCALE: 1/4" = 1'-0"

BAMA
 Architecture and Design
 7350 SE Milwaukie Ave.
 Portland, Oregon 97202
 Ph: 503.253.4283



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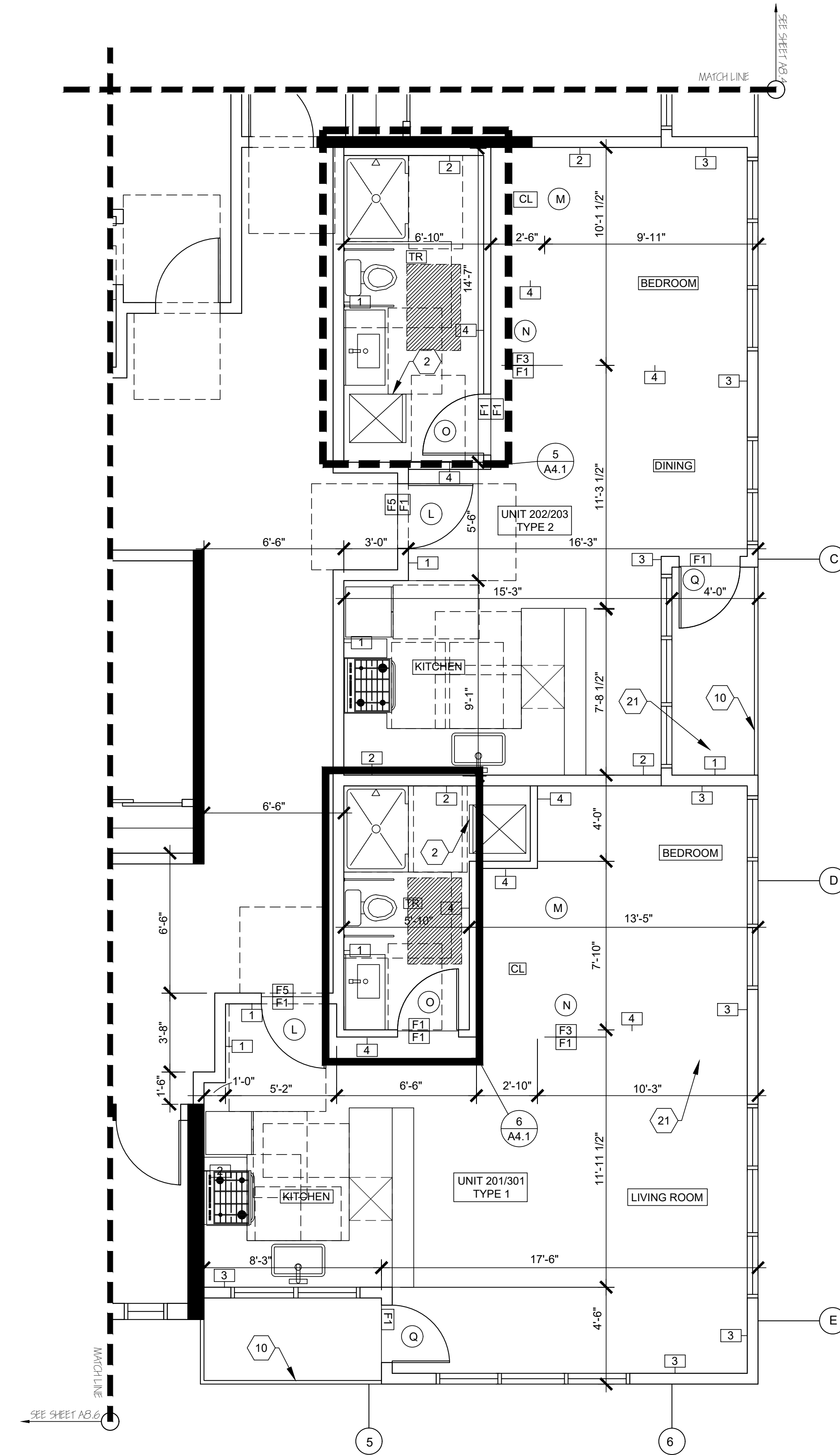
9391 SE 32nd Ave.
Mixed-Use

9391 SE 32ND AVE,
 MILWAUKIE, OR 97222

Proj # 201931

- REVISIONS:
- 1. OWNER REVISION: 04/28/20
 - 2. OWNER REVISION: 05/25/20
 - 3. OWNER REVISION: 08/21/20

BUILDING PERMIT:
 DATE: April 16, 2020
 SHEET NO.
A8.4
 ENLARGED SECOND/THIRD
 FLOOR PLANS



TRUE NORTH
 1 SECOND/THIRD FLOOR ENLARGED PLAN
 A8.5 SCALE: 1/4" = 1'-0"

FLOOR PLAN GENERAL NOTES

1. CONTRACTOR SHALL VERIFY AND CONFIRM EXISTING CONDITIONS SHOWN OR IMPLIED ON DRAWINGS PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. NOTIFY A/E OF ANY DISCREPANCIES.
2. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE 2014 OSSC, 2014 OMSC, 2014 OESC, 2014 OPSC, 2013 NFPA 13, 2013 NFPA 72, CITY OF PORTLAND CODE AND REGULATIONS, ALL APPLICABLE STATE AND FEDERAL SAFETY ORDERS, ICC/ANSI A117.1 ADA ACCESSIBILITY REQUIREMENTS, AND LOCAL ENERGY CODES. ALL REFERENCES TO CODES, SPECIFICATIONS AND STANDARDS SHALL MEAN AND ARE INTENDED TO BE THE LATEST EDITION, AMENDMENT, AND/OR REVISION OF SUCH REFERENCE STANDARD IN EFFECT.
3. DIMENSIONS SHOWN ARE TO FACE OF WOOD STUD, OR CENTERLINE OF OPENING UNLESS NOTED OTHERWISE.
4. LIGHT AND VENTILATION NOT INDICATED ON THESE PLANS SHALL BE PROVIDED AS PER OSSC SECTION 1203.
5. ALL INSULATION INDICATED ON THE PLANS SHALL COMPLY WITH OR EXCEED THE REQUIREMENTS IN OSSC SECTION 707 FOR SMOKE DENSITY AND FLAME SPREAD.
6. PROVIDE 2A-10BC FIRE EXTINGUISHERS WITHIN 75 FEET OF TRAVEL DISTANCE THROUGHOUT AND ONE EXTINGUISHER FOR EACH 3000 SF OR PORTION THEREOF. COORDINATE LOCATIONS WITH FIRE MARSHAL.
7. CONTRACTOR SHALL PROVIDE ALL NECESSARY TESTING AND COORDINATE ALL REQUIRED INSPECTIONS.
8. ALL DOORS AND WINDOWS SHALL COMPLY WITH APPLICABLE ENERGY CODES.
9. PROVIDE 18" MIN. CLEAR OPPOSITE DOOR LEVER ON PULL SIDE OF DOOR AND 12" MIN. CLEAR OPPOSITE DOOR LEVER ON PUSH SIDE PER ADA GUIDELINES.
10. VERIFY EXISTING ELECTRICAL SERVICE PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. COORDINATE WITH A/E.
11. ALL EXTERIOR LIGHTING AND PLUMBING FIXTURES AND ACCESSORIES SHALL BE BLOCKED, WATERPROOFED, AND INSTALLED WITH TOP FLASHING.
12. SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND REQUIREMENTS.

FLOOR PLAN LEGEND

- FRAMED WALL. SOLID HATCH DESIGNATES SHEAR WALL. SEE STRUCTURAL
- CONCRETE WALL
- BRICK WALL
- CONCRETE MASONRY UNIT WALL
- ROOM NUMBER
- A.F.F. ABOVE FINISH FLOOR ELEVATION
- COL. CENTERLINE OF COLUMN
- F.O.S. FACE OF STUD
- F.O.F. FACE OF FINISH
- F.O.C. FACE OF CONCRETE
- F.O.C.A. FACE OF CANOPY
- WALL TYPE. SEE A5.1, A5.2, A5.5
- 4"x4" PREFINISHED SHEET STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
- HOT WATER HEATER. SEE PLUMBING DRAWINGS
- FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS
- FLOOR FINISH. SEE LEGEND AND DETAIL 3/A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
- DOOR TYPE SEE. A6.3
- HOSE BIB. SEE PLUMBING DRAWINGS

FINISH LEGEND

- ARMSTRONG AMERICAN PERSONALITY 12 K1001 LAKEHOUSE HICKORY LVT ARTESIAN GRAY
- BROOM FINISHED CONCRETE WITH CLEAR SEALANT
- CARPET 1 AT BEDROOMS
- FLEXCO HEAVY DUTY RADIAL II 776 AT STAIRS, CARPET TILE AT LANDINGS
- LUXURY VINYL PLANK TILE AT COMMON AREA - COLOR 2
- 3/4" PRE-ENGINEERED OAK FLOORS
- TILE TECH PORCE-STONE SERIES PEDESTAL PAVERS
- CARPET 3 AT PENTHOUSE BEDROOMS

FLOOR PLAN KEYNOTES

- CONCRETE COLUMN. SEE STRUCTURAL
- STACKED WASHER/DRYER. 24" MAX WIDTH.
- SIDE BY SIDE WASHER/DRYER
- PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE CANOPY ABOVE. SEE ELEVATION AND STRUCTURAL
- BAY WINDOW ABOVE.
- 12" DEEP WIRE SHELF WITH HANGER ROD. INSTALL ONE SHELF AT 5'-6" A.F.F. CONTINUOUS OVER WATER HEATER WHERE APPLICABLE. INSTALL SECOND SHELF AT 4'-0" LONG AT 3'-0" A.F.F. TYP. AT BEDROOM CLOSETS
- ADJUSTABLE SHELF UNIT TO 6" A.F.F.
- CLOSET SHELF AT 5'-0" A.F.F. FIELD VERIFY WITH APPLIANCE OPERATION CLEARANCES.
- BALCONY RAILING.
- NOT USED
- FURRING WALL
- REFUSE AND RECYCLING DUMPSTER. SIZE PER GARBAGE HANDLER REQUIREMENTS
- GLASS RECYCLING. SIZE PER GARBAGE HANDLER REQUIREMENTS
- DOG WASH STATION. SEE PLUMBING DRAWINGS
- 6'-0" W X 2'-0" H AT 6'-0" A.F.F. OPENINGS IN WALL FOR NATURAL VENTILATION AND LIGHT. SEE ELEVATIONS
- AUTOMATIC OVERHEAD DOOR CONTROL PANEL. SEE ELECTRICAL DRAWINGS AND DOOR SCHEDULE
- FIRE RISER IN FIRE RISER ROOM. SEE DRAWINGS BY FIRE SPRINKLER DESIGNER
- MAIL BOX PER OWNER
- PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE
- LONG TERM WALL MOUNTED BICYCLE PARKING, 2 X 6 SPACE. RACK PER OWNER. SEE DETAIL 9/SD2.1

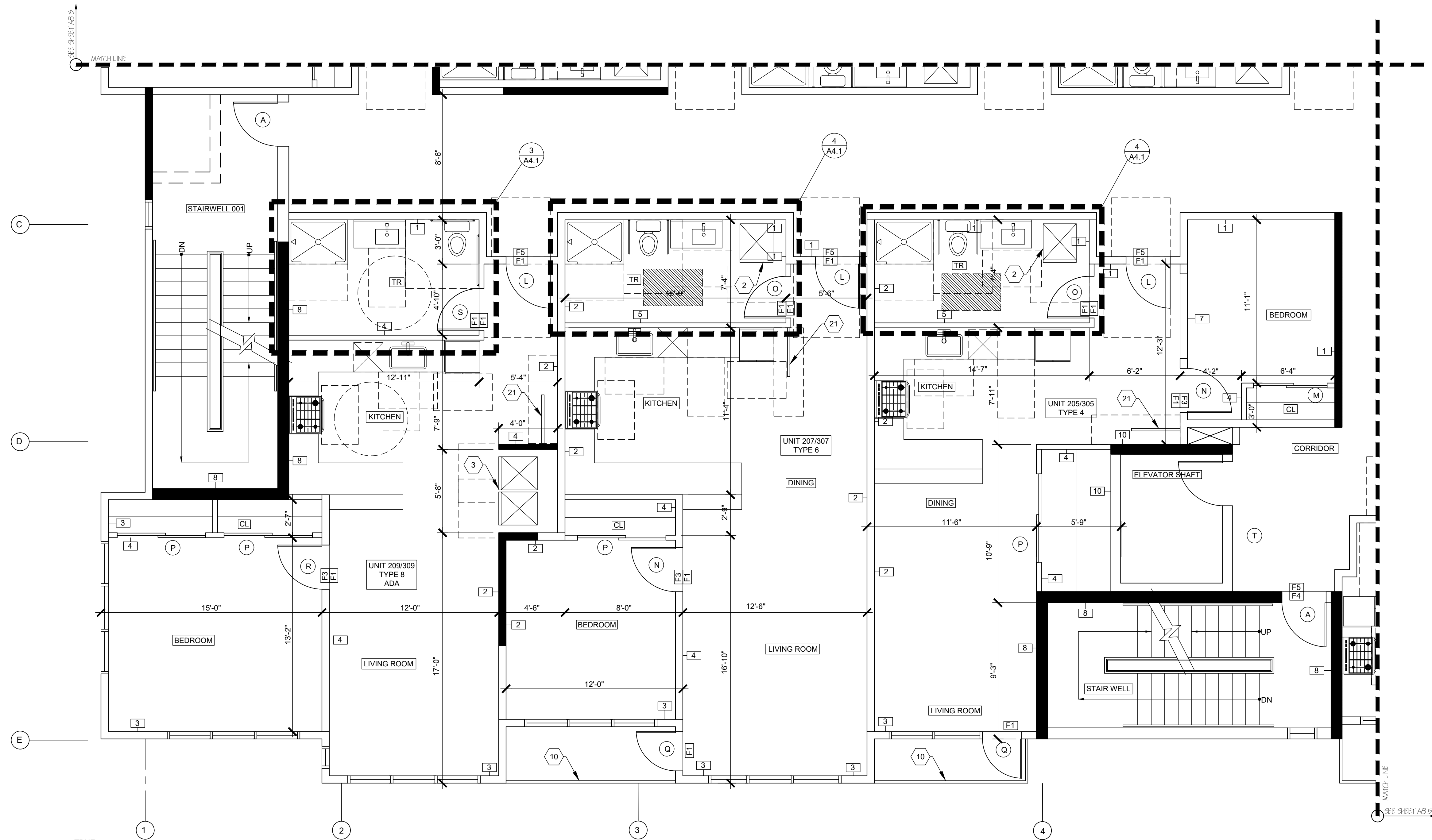


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9391 SE 32ND AVE,
 MILWAUKIE, OR 97222

Proj # 201931

- REVISIONS:
- OWNER REVISION 04/28/20
 - OWNER REVISION 05/25/20
 - OWNER REVISION 08/21/20



TRUE NORTH
1
A8.6 ENLARGED SECOND/THIRD FLOOR PLAN
 SCALE: 1/4" = 1'-0"

FLOOR PLAN GENERAL NOTES

- CONTRACTOR SHALL VERIFY AND CONFIRM EXISTING CONDITIONS SHOWN OR IMPLIED ON DRAWINGS PRIOR TO START OF CONSTRUCTION OR ORDERING OF MATERIALS. NOTIFY A/E OF ANY DISCREPANCIES.
- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE 2014 O.S.S.C., 2014 O.M.S.C., 2014 O.E.S.C., 2014 O.P.S.C., 2013 N.F.P.A. 13, 2013 N.F.P.A. 72, CITY OF PORTLAND CODE AND REGULATIONS. ALL APPLICABLE STATE AND FEDERAL SAFETY ORDERS, ICC/ANSI A117.1 ADA ACCESSIBILITY REQUIREMENTS, AND LOCAL ENERGY CODES. ALL REFERENCES TO CODES, SPECIFICATIONS AND STANDARDS SHALL MEAN AND ARE INTENDED TO BE THE LATEST EDITION, AMENDMENT, AND/OR REVISION OF SUCH REFERENCE STANDARD IN EFFECT.
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- ALL EXTERIOR LIGHTING AND PLUMBING FIXTURES AND ACCESSORIES SHALL BE BLOCKED, WATERPROOFED, AND INSTALLED WITH TOP FLASHING.
- SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND REQUIREMENTS.

FLOOR PLAN LEGEND

- FRAMED WALL. SOLID HATCH DESIGNATES SHEAR WALL. SEE STRUCTURAL
- CONCRETE WALL
- BRICK WALL
- CONCRETE MASONRY UNIT WALL
- ROOM NUMBER
- A.F.F. ABOVE FINISH FLOOR ELEVATION
- COL CENTERLINE OF COLUMN
- F.O.S. FACE OF STUD
- F.O.F. FACE OF FINISH
- F.O.C. FACE OF CONCRETE
- F.O.C.A. FACE OF CANOPY
- WALL TYPE. SEE A5.1, A5.2, A5.5
- DS 4"x4" PREFINISHED SHEET STEEL DOWNSPOUT. SEE ELEVATIONS AND ROOF PLAN.
- WH HOT WATER HEATER. SEE PLUMBING DRAWINGS.
- OFD FLOOR DRAIN. SEE PLUMBING/CIVIL DRAWINGS.
- F1 FLOOR FINISH. SEE LEGEND AND DETAIL S1A9.2 FOR ACCESSIBLE TRANSITION IN ALL COMMON AREAS AND TYPE A UNITS 209 AND 309.
- A DOOR TYPE SEE. A6.3
- HOSE BIB. SEE PLUMBING DRAWINGS

FINISH LEGEND

- F1 ARMSTRONG AMERICAN PERSONALITY 12 K1001 LAKEHOUSE HICKORY LVT ARTESIAN GRAY
- F2 BROOM FINISHED CONCRETE WITH CLEAR SEALANT
- F3 CARPET 1 AT BEDROOMS
- F4 FLEXCO HEAVY DUTY RADIAL II 776 AT STAIRS, CARPET TILE AT LANDINGS
- F5 LUXURY VINYL PLANK TILE AT COMMON AREA - COLOR 2
- F6 3/4" PRE-ENGINEERED OAK FLOORS
- F7 TILE TECH PORCE-STONE SERIES PEDESTAL PAVERS
- F8 CARPET 3 AT PENTHOUSE BEDROOMS
- F9 POLISHED CONCRETE WITH CLER SEALANT

FLOOR PLAN KEYNOTES

- 1 CONCRETE COLUMN. SEE STRUCTURAL
- 2 STACKED WASHER/DRYER. 24" MAX WIDTH.
- 3 SIDE BY SIDE WASHER/DRYER
- 4 PROVIDE SIGN IDENTIFYING ROOM AS CONTAINING FIRE RISER. SIGN TO BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED AND READILY VISIBLE
- 5 CANOPY ABOVE. SEE ELEVATION AND STRUCTURAL
- 6 BAY WINDOW ABOVE.
- 7 12" DEEP WIRE SHELF WITH HANGER ROD. INSTALL ONE SHELF AT 5'-6" A.F.F. CONTINUOUS OVER WATER HEATER WHERE APPLICABLE. INSTALL SECOND SHELF AT 4'-0" LONG AT 3'-0" A.F.F. TYP. AT BEDROOM CLOSETS

- 8 ADJUSTABLE SHELF UNIT TO 6" A.F.F.
- 9 CLOSET SHELF AT 5'-0" A.F.F. FIELD VERIFY WITH APPLIANCE OPERATION CLEARANCES.
- 10 BALCONY RAILING.
- 11 NOT USED
- 12 FURRING WALL
- 13 REFUSE AND RECYCLING DUMPSTER. SIZE PER GARBAGE HANDLER REQUIREMENTS
- 14 GLASS RECYCLING. SIZE PER GARBAGE HANDLER REQUIREMENTS
- 15 DOG WASH STATION. SEE PLUMBING DRAWINGS
- 16 6'-0" W X 2'-0" H AT 6'-0" A.F.F. OPENINGS IN WALL FOR NATURAL VENTILATION AND LIGHT. SEE ELEVATIONS
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- 21 LONG TERM WALL MOUNTED BICYCLE PARKING. 2 X 6 SPACE. RACK PER OWNER. SEE DETAIL 9/SD2.1

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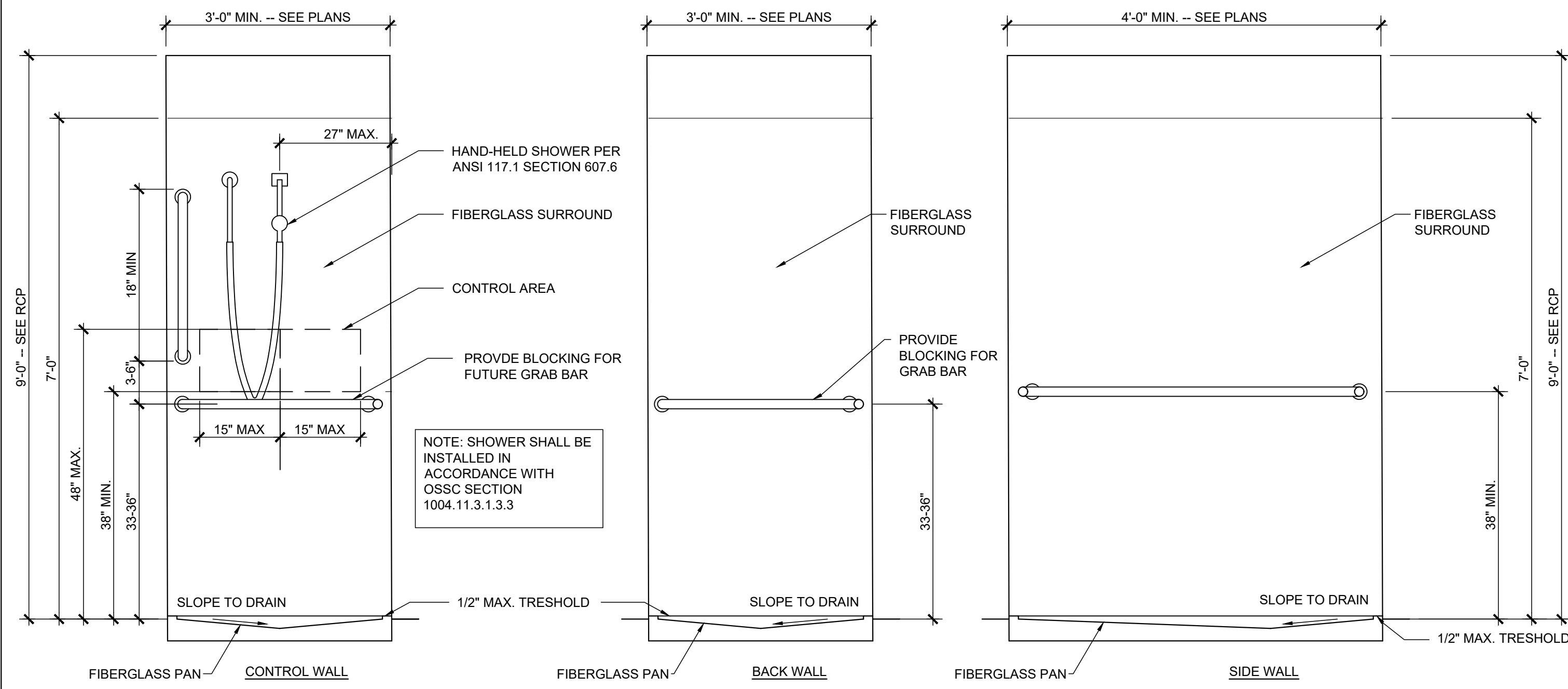
9391 SE 32nd Ave.
Mixed-Use

9391 SE 32ND AVE,
 MILWAUKIE, OR 97222

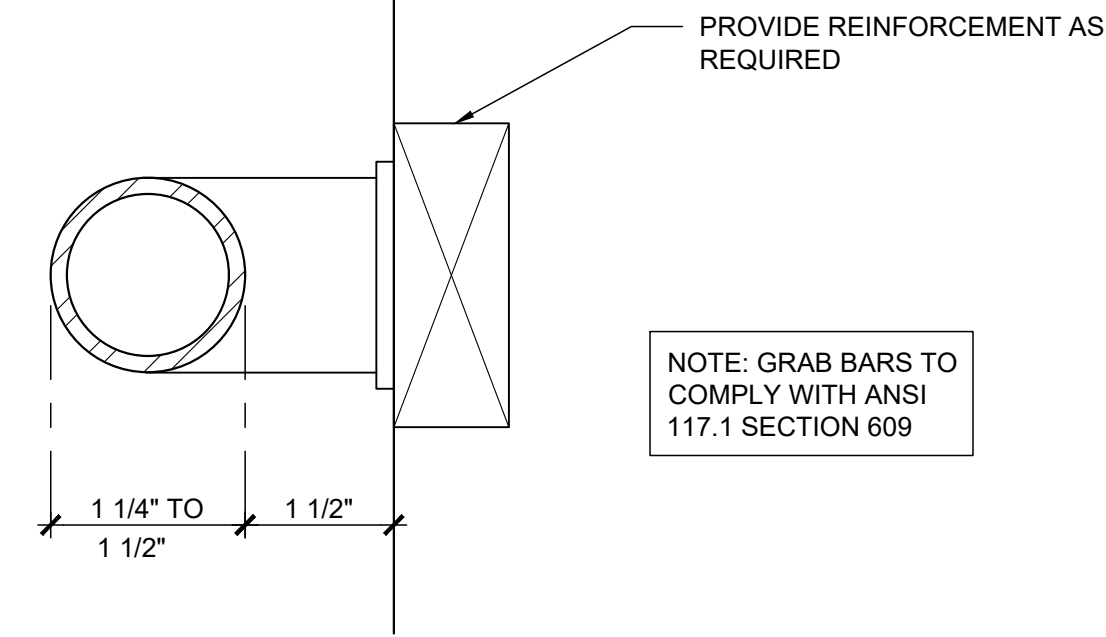
Proj # 201931

- REVISIONS:
- 1 OWNER REVISION 04/28/20
 - 2 OWNER REVISION 05/25/20
 - 3 OWNER REVISION 08/21/20

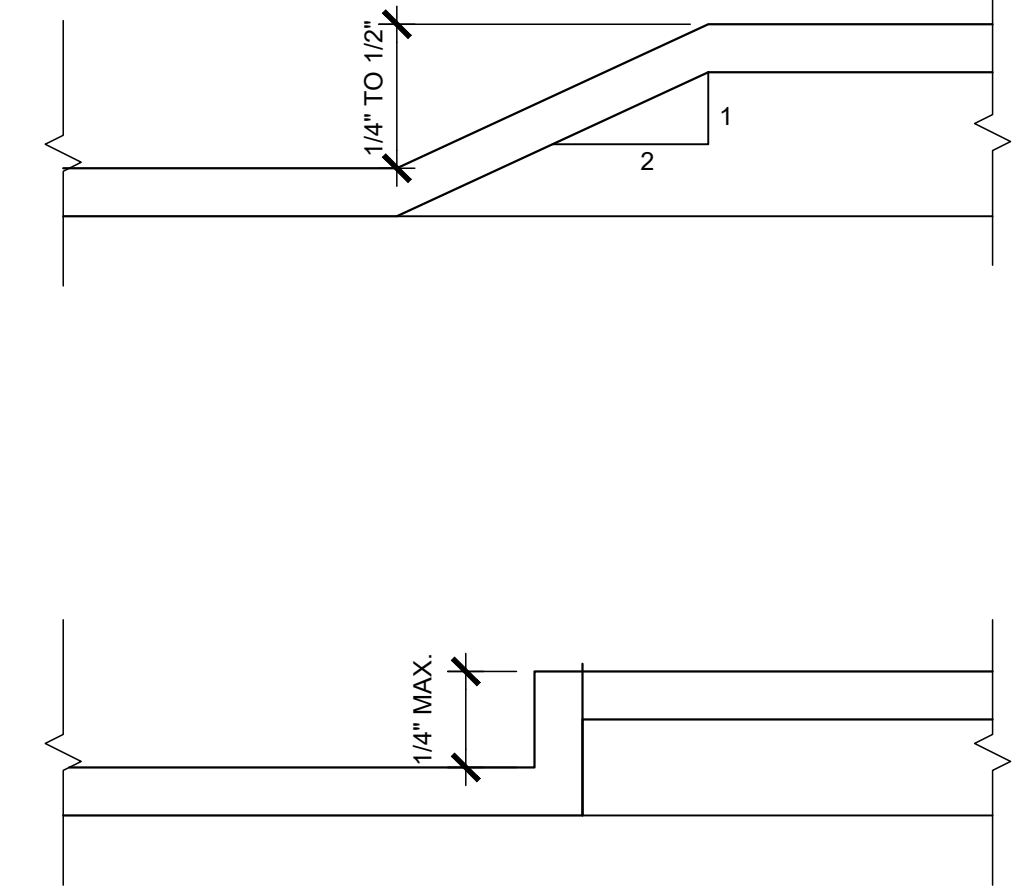
BUILDING PERMIT:
 DATE: April 16, 2020
 SHEET NO.
A8.6
 ENLARGED SECOND/THIRD
 FLOOR PLANS



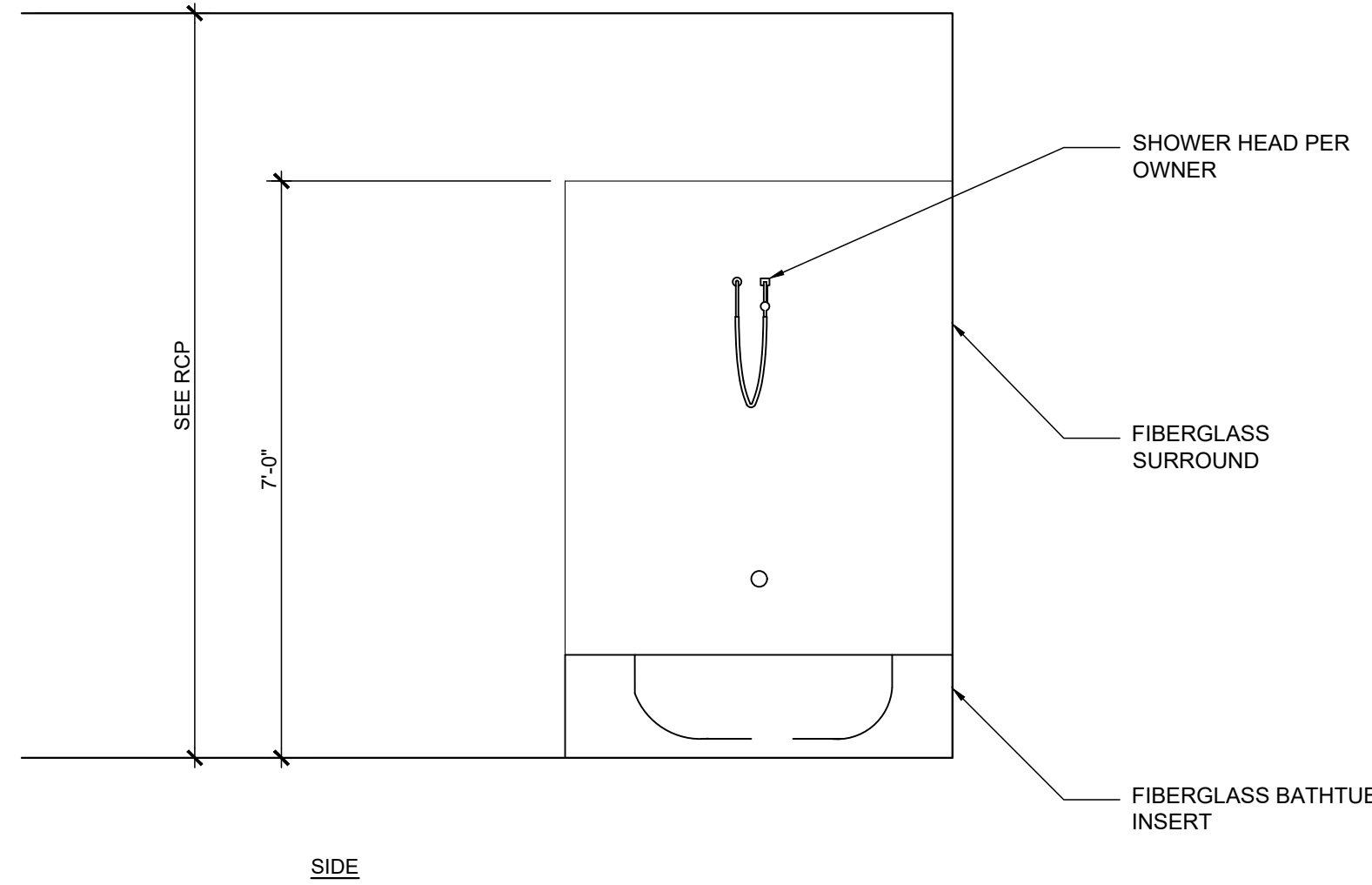
1 ACCESSIBLE SHOWER
A9.2 NOT TO SCALE



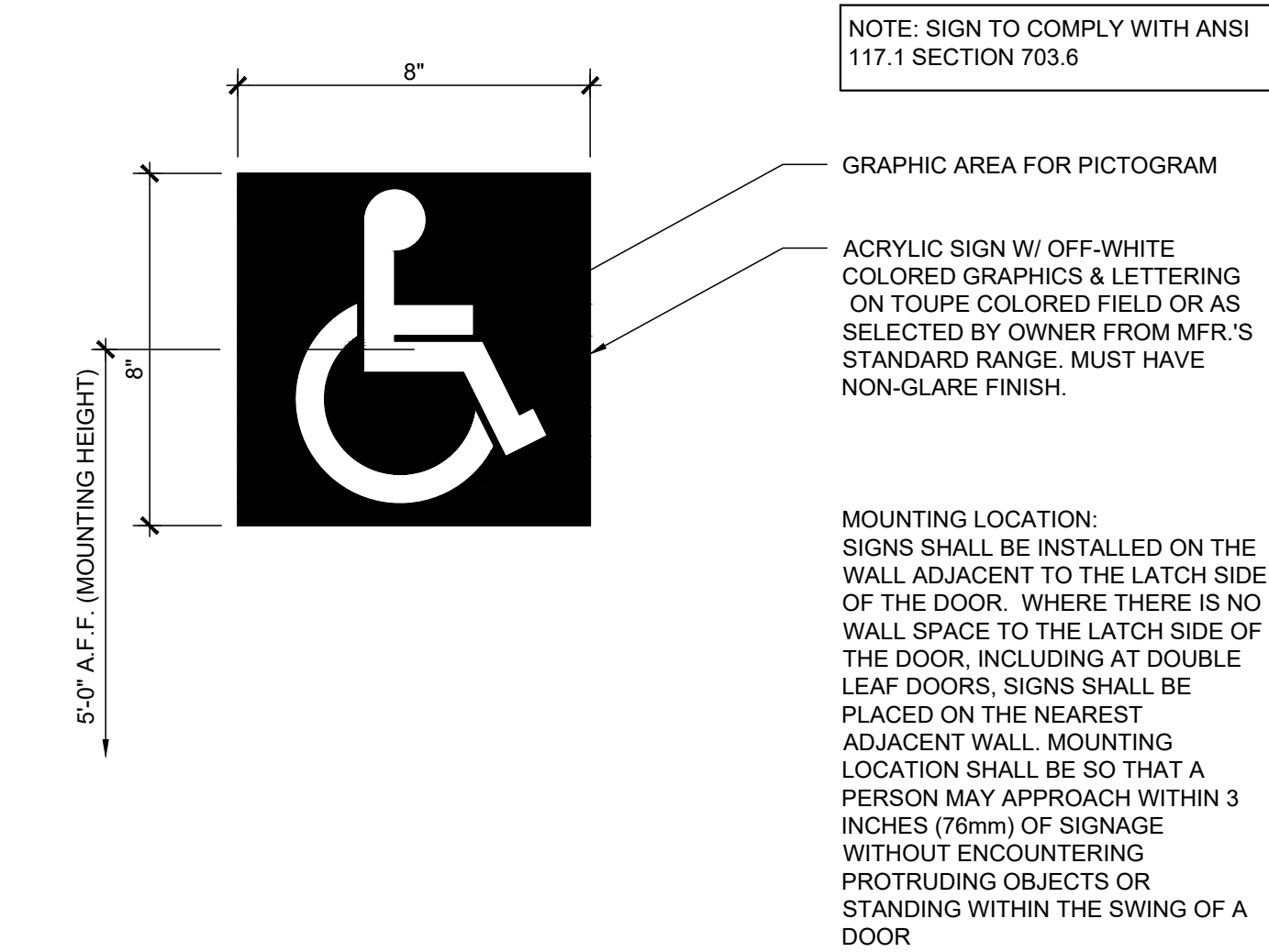
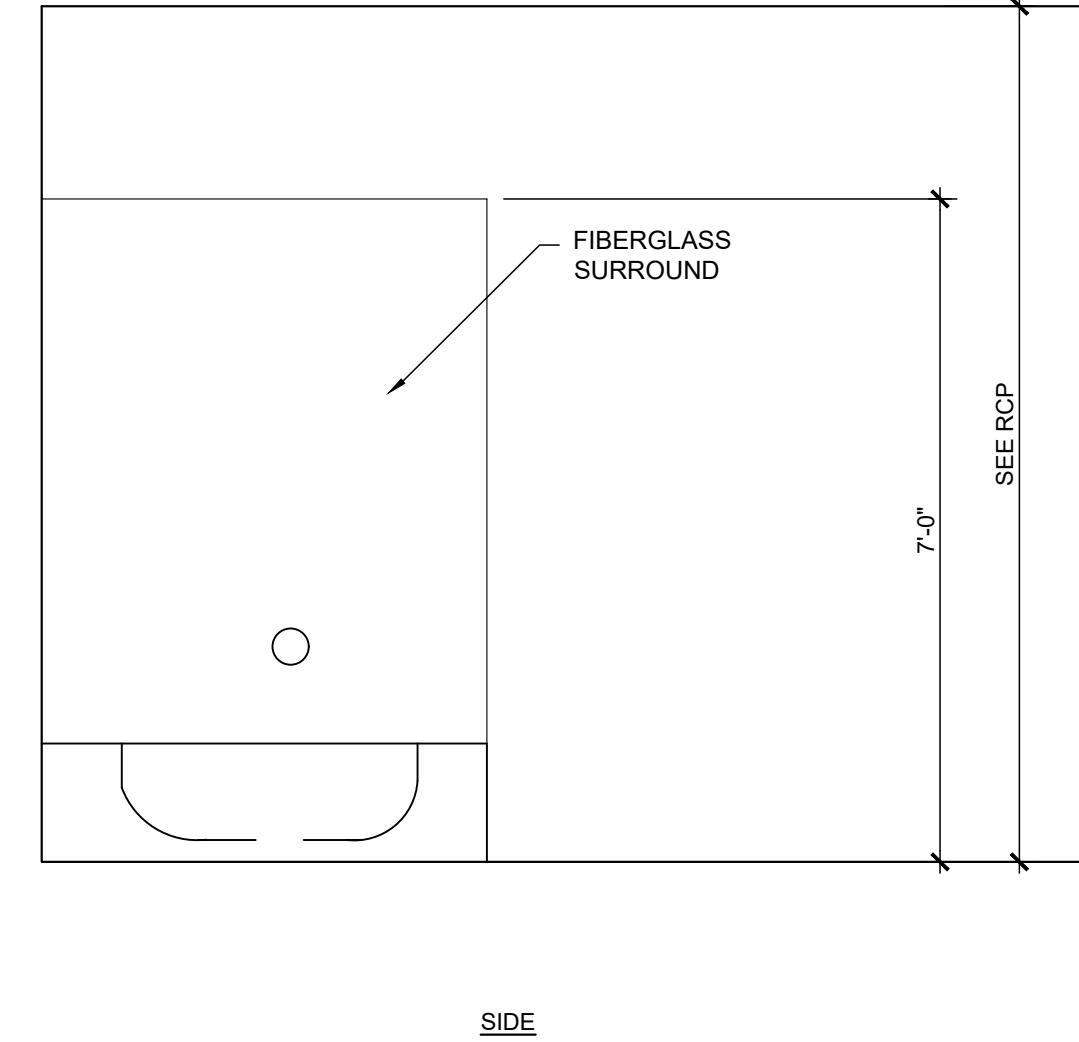
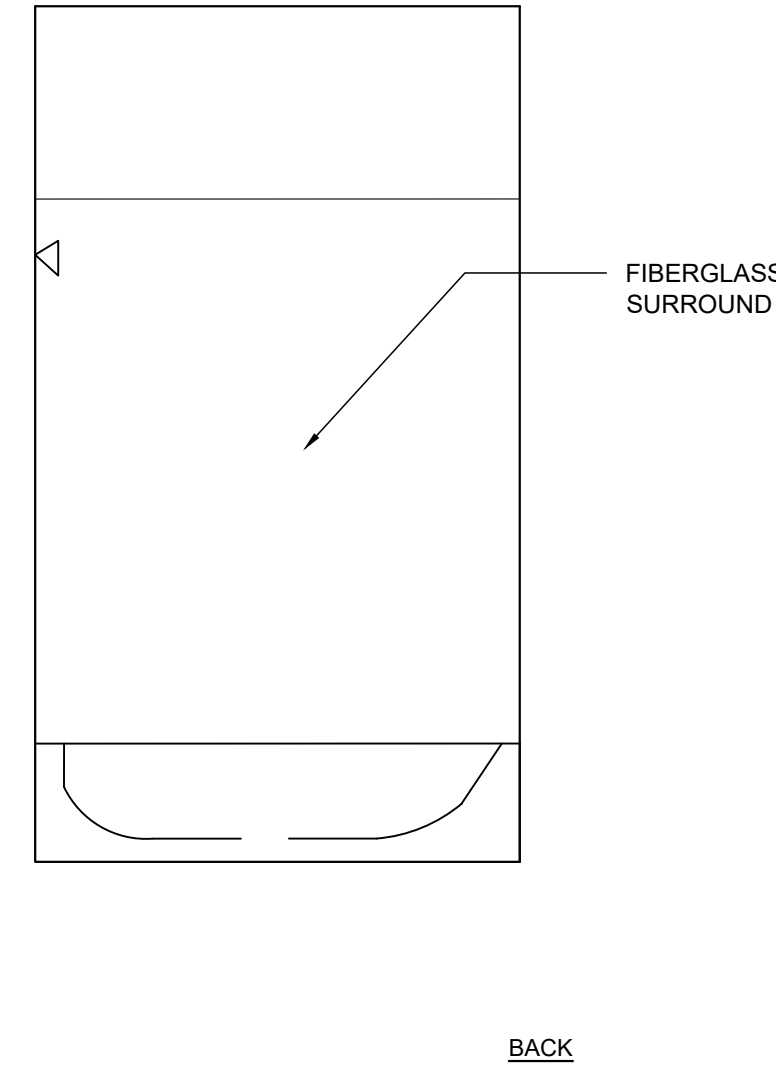
2 ACCESSIBLE GRAB BAR
A9.2 NOT TO SCALE



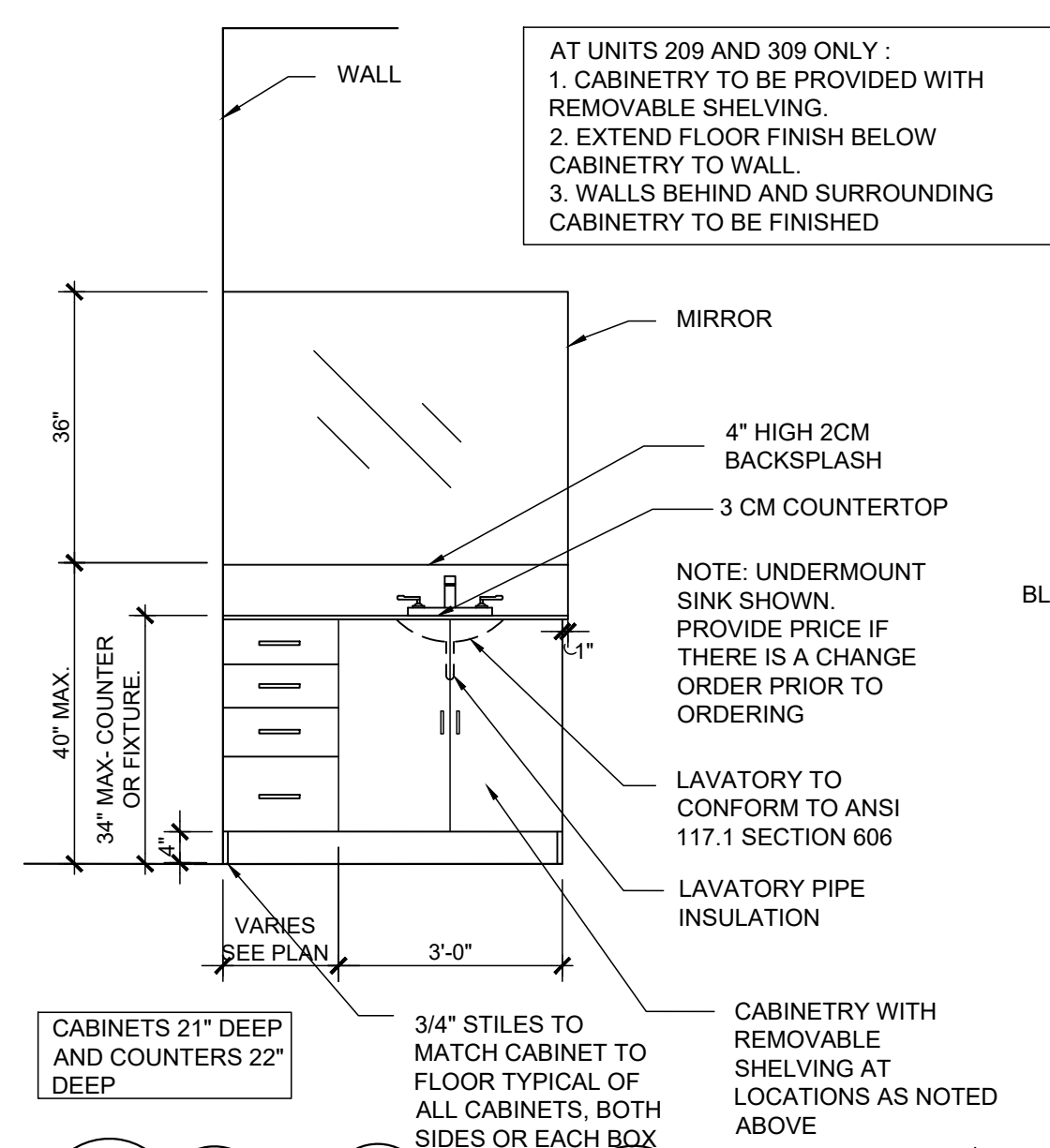
3 ACCESSIBLE CHANGES IN LEVEL
A9.2 1 1/2" = 1'-0"



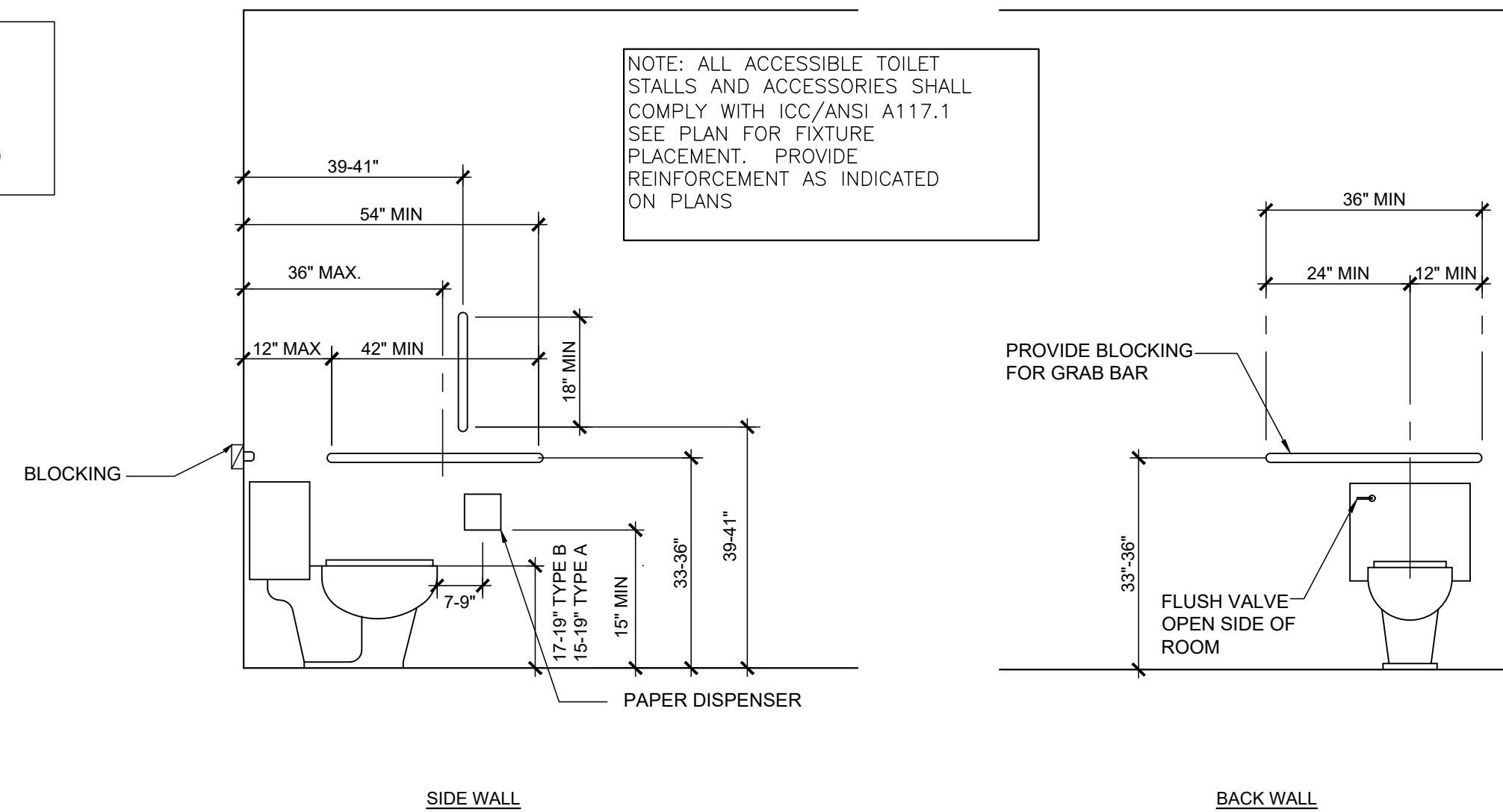
4 SHOWER/TUB
A9.2 NOT TO SCALE



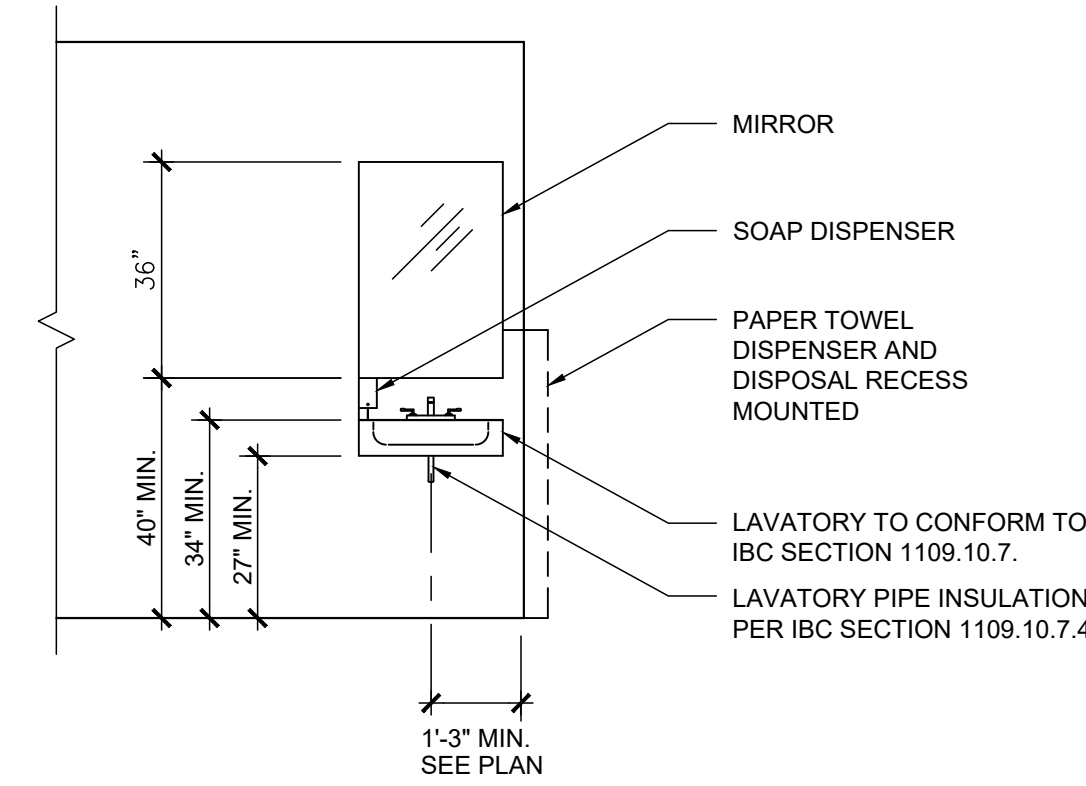
5 INTERNATIONAL SYMBOL OF ACCESSIBILITY
A9.2 3" = 1'-0"



6 ACCESSIBILITY COUNTER LAVATORY
A9.2 NOT TO SCALE



7 ACCESSIBLE WATER CLOSET
A9.2 NOT TO SCALE



8 TYPICAL WALL HUNG LAVATORY
A9.2 3/8" = 1'-0"



CITY OF MILWAUKIE

July 1, 2019

Auryn White
BAMA Architecture
7350 SE Milwaukie Ave
Portland, OR 97202

Re: Preapplication Report

Dear Auryn:

Enclosed is the Preapplication Report Summary from your meeting with the City on June 6, 2019, concerning your proposal for action on property located at 9391 SE 32nd Avenue.

A preapplication conference is required prior to submittal of certain types of land use applications in the City of Milwaukie. Where a preapplication conference is required, please be advised of the following:

- Preapplication conferences are valid for a period of 2 years from the date of the conference. If a land use application or development permit has not been submitted within 2 years of the conference date, the Planning Director may require a new preapplication conference.
- If a development proposal is significantly modified after a preapplication conference occurs, the Planning Director may require a new preapplication conference.

If you have any questions concerning the content of this report, please contact the appropriate City staff.

Sincerely,

Dan Harris
Administrative Specialist II

Enclosure

cc: Mildred White, BAMA Architecture
Valerie Hunter, VH Development
Izak Hamilton, Clackamas Fire District #1
Preapplication File

PRE-APPLICATION CONFERENCE REPORT

This report is provided as a follow-up to a meeting that was held on 6/6/2019 at 10AM

Applicant Name: Auryn White

Company: BAMA Architecture

Applicant 'Role': Owner

Address Line 1: 7350 SE Milwaukie Ave

Address Line 2:

City, State Zip: Portland OR 97202

Project Name: 4-story mixed use building

Description: Construct 4-story wood-framed mixed use building with 1st floor retail + covered parking. 2nd-4th floor 28 total res. Units

ProjectAddress: 9391 SE 32ND AVE

Zone: NMU (Neighborhood Mixed Use)

Occupancy Group:

ConstructionType:

Use: Neighborhood Mixed Use

Occupant Load:

AppsPresent: Auryn White, Mildred White, Valerie Hunter

Staff Attendance: Denny Egner, Mary Heberling, Steve Adams, Izak Hamilton

BUILDING ISSUES

ADA:

Structural:

Mechanical:

Plumbing:

Plumb Site Utilities:

Electrical:

Notes: This structure shall comply with all the code provisions of the Oregon Structural Specialty Code (OSSC).

Fire sprinklers and alarms will be required as per Oregon Structural Specialty Code (OSSC).

Please note all drawings must be individually rolled. If the drawings are small enough to fold they must be individually folded.

FIRE MARSHAL ISSUES

Fire Sprinklers:

Fire Alarms:

Fire Hydrants:

Turn Arounds:

Addressing:

Fire Protection:

Fire Access:

Hazardous Mat.:

Fire Marshal Notes: See notes attached.

PUBLIC WORKS ISSUES

Water:

A City of Milwaukie 6-inch water main on SE 32nd Avenue is available to provide service to the proposed development. A new water service and meter assembly will be required. The development will require separate water meters for the commercial and residential portions of the building. The Water System Development Charge (WSDC) is based on the size of water meter serving the property. A WSDC credit will be provided based on the size of existing water meter(s) being replaced. SDC charges and credits will be assessed at building permit issue.

Please refer to CFD #1 memorandum for fire hydrant and additional requirements

Sewer:

An 8-inch concrete wastewater main on SE 32nd Avenue will provide service to the proposed development. The existing service lateral size is unknown, and lateral must be sized to accommodate the proposed development. Currently, the wastewater SDC is comprised of two components: the first component is the City's SDC charge calculated based on plumbing fixture units in accordance with the Uniform Plumbing Code and the second component is the County's SDC for treatment calculated per equivalent dwelling unit that the City collects and forwards to the County. The wastewater SDC will be assessed and collected at the time the building permits are issued.

Storm:

Submission of a stormwater management plan by a qualified professional engineer is required as part of the proposed development. The plan shall conform to Section 2 - Stormwater Design Standards of Milwaukie Pubic Works Standards.
The stormwater management plan shall demonstrate that the post-development runoff does not exceed the predevelopment, including any existing stormwater management facilities serving the development property. Also, the plan shall demonstrate compliance with water quality standards. The City of Milwaukie has adopted the City of Portland 2016 Stormwater Management Manual for design of water quality facilities.

All new impervious surfaces, including replacement of impervious surface with new impervious surfaces, are subject to the water quality standards. See Milwaukie Public Works Standards for design and construction standards and detailed drawings.

If the runoff cannot be disposed of with onsite infiltration facilities, connection to the storm system in SE 32nd Avenue will be permitted.

The stormwater SDC is based on the amount of new impervious surface constructed at the site. The stormwater SDC will be assessed and collected at the time the building permits are issued.

Street:

The proposed development fronts the west side of SE 32nd Avenue, which is classified as a Collector Street. The portion of SE 32nd Avenue fronting the proposed development has a right-of-way width of 40 feet, a paved width of 28 feet, and curb tight sidewalks on both sides of the road.

The proposed development fronts the north side of SE Olsen Street, which is classified as a Local Street. The portion of SE Olsen Street fronting the proposed development has a right-of-way width of 50 feet and a paved width of approximately 16 feet with both sides of the road unimproved.

The Transportation SDC will be based on the increase in trips generated by the new use per the Trip Generation Handbook from the Institute of Transportation Engineers. The SDC for transportation is per p.m. peak trip generated. Credits will be given for any demolished structures, which shall be based upon the existing use of the structures.

Frontage:

Chapter 19.700 of the Milwaukie Municipal Code (MMC), applies to partitions, subdivisions, new construction, and modification and/or expansions of existing structures or uses that produce a projected increase in vehicle trips.

Transportation Facility Requirements, MMC Section 19.708, states that all rights-of-way, streets, sidewalks, necessary public improvements, and other public transportation facilities located in the public right-of-way and abutting the development site shall be adequate at the time of development or shall be made adequate in a timely manner.

SE Olsen Street

According to Code Table 19.708.2 the local street cross section includes the following:

- 8-foot travel lanes
- 6-foot parking strips with curb & gutter
- 5-foot landscape strips with sized stormwater planters
- 5-foot setback sidewalks

SE 32nd Avenue

According to Code Table 19.708.2 the collector street cross section includes the following:

- 10-foot travel lanes
- 8-foot parking strips with curb & gutter
- 5-foot landscape strips with sized stormwater planters
- 6-foot setback sidewalks

Right of Way:

The existing 50-foot right-of-way on SE Olsen Street fronting the proposed development is of adequate width to accommodate the planned cross-section.

The existing 40-foot right-of-way on SE 32nd Avenue fronting the proposed development is not of adequate width to accommodate the planned cross-section. A dedication of 10 feet may be necessary.

Driveways:

MMC 12.16.040.B addresses spacing requirements from intersections. The minimum spacing from an intersection for multifamily driveways on a local street is 100 feet. The intersection of 32nd Avenue and Olsen Street is at a sufficient distance as proposed.

MMC 12.16.040.A states that access to private property shall be permitted with the use of driveway curb cuts and driveways shall meet all applicable guidelines of the Americans with Disabilities Act (ADA). Driveway approaches shall be improved to meet the requirements of Milwaukie's Public Works Standards, Section 5.0085, at the time of development. The plan depicts an opening of 18 feet, which also includes the walkway width. This width appears to be inadequate. Depending on the number of dwelling units, the access width will need to be a minimum of 20 or 24 feet wide, exclusive

of the walkway width.

Erosion Control:

Per MMC Section 16.28.020.C, an erosion control permit is required prior to placement of fill, site clearing, or land disturbances, including but not limited to grubbing, clearing or removal of ground vegetation, grading, excavation, or other activities, any of which results in the disturbance or exposure of soils exceeding 500 square feet. The proposed development exceeds the threshold therefore, an erosion control permit is required.

MMC 16.28.020.E states that an erosion control permit is required prior to issuance of building permits or approval of construction plans. Also, MMC 16.28.020.B states that an erosion control plan that meets the requirements of Section 16.28.030 is required prior to any approval of an erosion control permit.

Traffic Impact Study:

MMC 19.704 states the Engineering Director will determine whether a proposed development has impacts on the transportation system by using existing transportation data. If the Engineering Director cannot properly evaluate a proposed development's impacts without a more detailed study, a transportation impact study (TIS) will be required to evaluate the adequacy of the transportation system to serve the proposed development and determine proportionate mitigation of impacts. The Engineering Director has determined that a project specific TIS is required to determine impacts of the development. The applicant will engage the city to determine scope prior to beginning work on the TIS.

PW Notes:

APPLICABILITY OF PRE-APPLICATION REVIEW

The comments provided are preliminary and intended to address the original application materials submitted unless otherwise specifically called out in the notes. The information contained within these notes may change over time due to changes or additional information presented for the development.

This pre-application review is for the following:

The construction of a 3-4 story mixed-use building.

SYSTEM DEVELOPMENT CHARGES (SDC'S)

There was insufficient information to estimate SDCs with the pre-application submitted. All SDCs are calculated, assessed, and collected at the time of building permit issue. Any changes in the proposed use may result in a change in the SDCs that are assessed. An estimate of SDCs can be provided if more detail is provided to staff.

The Parks & Recreation System Development Charge (PRSDC) is triggered when an application on a new dwelling or a change in commercial use is received. The PRSDC is calculate base on dwelling units and employees. Credit can be applied for demolished structures based upon existing use. The parks and recreation SDC will be assessed and collected at the time of building permit issue.

OVERHEAD UTILITIES

The existing building is served by overhead utility lines crossing above SE 32nd Avenue. Service to the new building will need to be placed underground.

REQUIREMENTS PRIOR TO OCCUPANCY

- Engineered plans for public improvements (street, sidewalk, and utility) are to be submitted and approved prior to start of construction. Full-engineered design is required along the frontage of the proposed development. Plans shall be prepared by a Professional Engineer licensed in the State of Oregon.
- The applicant shall pay an inspection fee of 5.5% of the cost of public improvements prior to start of construction.
- The applicant shall provide a payment and performance bond for 100% of the cost of the public improvements prior to the start of construction.
- The applicant shall provide a final approved set of Mylar "As Constructed" drawings to the City of Milwaukie prior to the final inspection.
- The applicant shall provide a maintenance bond for 100% of the cost of the public improvements prior to the final inspection

ADDITIONAL REQUIREMENTS

- All fees mentioned are subject to change in accordance with the City of Milwaukie Master Fee

Schedule.

PLANNING ISSUES

Setbacks:

NMU Setback Requirements:
Minimum street setback: none
Maximum street setback: 10 ft
Side and rear setback: none

Additional Setback requirements:

On 32nd Ave: Distance from the centerline: 30 ft, plus any NMU setback requirements

On Olsen St: Distance from centerline: 25 ft, plus any NMU setback requirements. Olsen street is wide enough to meet this setback requirement.

The setback may include usable open space such as plazas, courtyards, terraces, and small parks.

Building Height:

The maximum building height in the NMU is 3 stories or 45 ft, whichever is less. No building height bonuses are available in the NMU zone, but a variance to the height standard is possible. See more details on the variance process under the Application Procedures section.

Lot Coverage:

Maximum lot coverage is 85%. This includes the parking area as it will be covered. Lot coverage means the amount of area covered by building(s) on a lot expressed as a percentage of the total lot area. Lot coverage includes open structures, such as pole barns; building features such as a patio covers, roofed porches, and decks; or similar features with a surface height of more than 18 inches above average grade. Lot coverage does not include eaves.

Nonresidential Development:

New mixed-use buildings within commercial mixed-use zones must meet the standards in 19.505.7 Nonresidential Development. See the standards at link:

http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_500&frames=on

Landscape:

Minimum vegetation: 15%

No more than 20% of the required vegetation area shall be covered in mulch or bark dust. Mulch or bark dust under the canopy of trees or shrubs is excluded from this limit.

Usable open space may be counted toward the minimum vegetation requirement.

Parking:

Quantity Parking Requirements

Multifamily dwelling units with 800 sq ft of floor area or less:

-Minimum: 1 space per dwelling

-Maximum: 2 spaces per dwelling

General Retail:

-Minimum: 2 spaces per 1,000 sq ft of floor area

-Maximum: 5 spaces per 1,000 sq ft of floor area

Eating and Drinking Establishments:

-Minimum: 4 spaces per 1,000 sq ft of floor area

-Maximum: 15 spaces per 1,000 sq ft of floor area

Exemptions and By-Right Reductions to Quantity Requirements

Applicants are allowed to utilize multiple reductions provided that the total reduction in required parking does not exceed 25% of the minimum quantity requirement.

Proximity to Public Transit:

-Parking for commercial and industrial uses may be reduced by up to 10% if the development is within 500 ft walking distance of a transit stop with a peak hour service frequency of 30 mins or less.

-Parking for multifamily uses may be reduced up to 20% if the development is within 500 ft walking distance of a transit stop with a peak hour service frequency of 30 mins or less.

-

Multitenant Commercial Sites:

Where multiple commercial uses occur on the same site, minimum parking requirements shall be calculated as described below. The Planning Director shall have the authority to determine when multiple uses exist on a site:

-Use with highest parking requirement. The use that has the largest total number of minimum parking spaces required shall be required to provide 100% of the minimum number of parking spaces.

-All other uses. All other uses on the site shall be required to provide 80% of the minimum number of parking spaces.

Carpool/Vanpool:

Commercial and industrial developments that provide at least 2 carpool/vanpool parking spaces may reduce the required number of parking spaces by up to 10%.

Bicycle Parking:

The minimum amount of required bicycle parking for all non-single-family residential uses may be reduced by up to 10% for the provision of covered and secured bicycle parking in addition to what is required by Section 19.609. A reduction of 1 vehicle parking space is allowed for every 6 additional bicycle parking spaces installed. The bicycle spaces shall meet all other standards of Section 19.609. If a reduction of 5 or more stalls is granted, then on-site changing facilities for bicyclists, including showers and lockers, are required. The area of an existing parking space in an off-street parking area may be converted into bicycle parking to utilize this reduction.

Car Sharing:

Required parking may be reduced by up to 5% if at least 1 off-street parking space is reserved for a vehicle that is part of a car sharing program. The car sharing program shall be sufficiently large enough, as determined by the Planning Director, to be accessible to persons throughout Milwaukee and its vicinity. The applicant must provide documentation from the car sharing program that the program will utilize the space provided.

Quantity Modifications and Required Parking Determinations

Subsection 19.605.2 allows for the modification of minimum and maximum parking ratios from Table 19.605. The application for a determination and the approval criteria can be found in Subsection 19.605.2. Parking Modification Determination is a separate Type II land use application.

Link to the code section for vehicle parking quantities requirements is here:

http://www.qcode.us/codes/milwaukee/view.php?topic=19-19_600&frames=on

Transportation Review: The proposal will trigger the requirements of MMC Chapter 19.700 Public Facility Improvements. Please see the Public Works notes for more information about the requirements of MMC 19.700 and the necessary right-of-way dedication and/or street frontage improvements.

Application Procedures: The applicant is interested in demolishing the existing structure on the property and building a 3-4 story mixed-use building. Depending on how tall the structure will be and other development standards, there may be a few options for the types of application for the proposal.

1. 3-Story Mixed-Use Building that meets all development standards:

If there are no need for any variances to all development standards (including parking standards, the nonresidential development standards, or other standards related to this development) the process will be a Type I or Type II Development Review application.

The application will be reviewed through a Type I or Type II review per the process and approval criteria for development review found in MMC 19.906 and the application fee for a Type I review is \$200 and for a Type II review is \$1,000. The submitted narrative and site plans for the application should address the following sections of the MMC: 19.303 Commercial Mixed-Use Zones, 19.501 General Exceptions, 19.504.7 Minimum Vegetation, 19.504.9 On-Site Walkways and Circulation, 19.505.7 Nonresidential Development, 19.600 Off-Street Parking and Loading, 19.700 Public Facility Improvements, and 19.906 Development Review.

For the City's initial review, the applicant should submit 5 complete copies of the application, including all required forms and checklists. A determination of the application's completeness will be issued within 30 days. If deemed incomplete, additional information will be requested. If deemed complete, additional copies of the application will be required for referral to other departments, the Neighborhood District Association (NDA), and other relevant parties and agencies. City staff will inform the applicant of the total number of copies needed.

Land use application submission materials are listed below for your convenience. Please refer to the handouts online at the City's website at https://www.milwaukieoregon.gov/forms?keys=&term_node_tid_depth=311&field_microsite_tid_1=Al

1. All applicable land use applications forms with signatures of property owners.
2. All applicable land use application fees.
3. Completed and signed "Submittal Requirements" form.
4. 5 copies of an existing conditions and a proposed conditions site plan, both to scale. These two site plans can be combined onto one site plan. Once the application is deemed complete, additional copies will be requested for distribution to City departments, applicable governmental agencies, and the neighborhood district association for review.
5. Detailed narrative describing compliance with all applicable code sections.

Type I applications are decided by the Planning Director and are administrative in nature. Once the Planning Director renders a decision, there is a fifteen calendar-day appeal period. A decision is generally issued within 14 days of the application being deemed complete. Building permits will be accepted for review only after the appeal period for all land use decisions has expired.

Type II applications are decided by the Planning Director. A public notice is sent to all residents within 300 ft of the site and has a 14-day comment period. A decision is generally issued within 57 days of the application being deemed complete. Once the Planning Director renders a decision, there is a fifteen calendar-day appeal period. Building permits will be accepted for review only after the appeal period for all land use decisions has expired.

2. 4-Story Mixed-Use Building

A 4-story mixed use building does not meet the height requirements for the NMU zone. It will need to go through a Type III Variance process.

In addition to the same requirements needed for a Type I Development Review (see above), a variance application will need to be submitted for any standard that does not meet the requirements of the Milwaukie Municipal Code (MMC), including height. For a Type III Variance application, it will need to explain how it meets the approval criteria for a Type III Variance. See MMC 19.911 Variances on the approval criteria that needs to be addressed. The application will need to specifically address the Discretionary Relief Criteria, which include an alternative analysis, as well as, showing how the proposed variance avoids or minimizes impacts to surrounding properties, has desired public benefits, and responds to the existing built or natural environment in a creative and sensitive manner. The Planning Director and staff will need to see how a 4th story can meet that approval criteria. Creative ways to meet the criteria could be a step-back for the 4th floor, a green roof or other green building materials/amenities, and many more. A mixed-use building with just a 4th story will be hard for the Planning staff to recommend approval on due to it not providing anything that shows it meets the approval criteria.

The variance application will be reviewed through a Type III review per MMC 19.1006 and the application fee is \$2,000. The submittal narrative for the application should address the approval criteria for Type III Variances in MMC 19.911.

If there are multiple variances, one variance application can accommodate up to 3 variance requests.

The submittal requirements and materials are the same as listed above in the Type I process.

For Type III review, once the application is deemed complete, a public hearing with the Planning Commission will be scheduled. Staff will determine the earliest available date that allows time for preparation of a staff report (including a recommendation regarding approval) as well as provision of the required public notice to property owners and residents within 300 ft of the subject property, at least 20 days prior to the public hearing. A sign giving notice of the application must be posted on the subject property at least 14 days prior to the hearing.

Multiple applications are addressed concurrently. A Type II application would be reviewed with Type III applications at the Planning Commission, but are subject to the Type II approval criteria; not the Type III approval criteria.

Natural Resource Review: There are no natural resource overlay zones on this lot.

Lot Geography: The subject property is a rectangular lot that is 10,787.21 sq ft.

- Planning Notes:**
1. The preapplication conference is valid for purposes of submitting future land use applications as described in MMC 19.1002.4. A preapplication conference is valid for 2 years.
 2. The Milwaukie Municipal Code is available online at <http://www.qcode.us/codes/milwaukie/view.php?topic=19&frames=off>.
 3. The site is in the Ardenwald-Johnson Creek Neighborhood District Association (NDA) boundary. Staff encourages the applicant to present the proposal to the NDA and/or its Land Use Committee, as well as to the immediate property owners. The NDA's webpage is on-line at <https://www.milwaukieoregon.gov/citymanager/ardenwald-johnson-creek-nda>. Their meetings are held at 6:30 pm on the fourth Monday of the month at Milwaukie Café and Bottle Shop (9401 SE 32nd Ave.) The NDA Chairperson is Matt Rinker (mattrinker@hotmail.com). Please contact the Chair to coordinate a meeting to discuss the proposal.
 4. This site is a brownfield and has been recognized by the Department of Environmental Quality

(DEQ) as having had/or has contaminants on site. Please contact DEQ to assess any remediation that may be needed for this proposal. The City will also refer any submitted applications to DEQ to provide any comments on the proposal, if needed.

ADDITIONAL NOTES AND ISSUES

County Health Notes:

Other Notes:

This is only preliminary preapplication conference information based on the applicant's proposal and does not cover all possible development scenarios. Other requirements may be added after an applicant submits land use applications or building permits. City policies and code requirements are subject to change. If you have any questions, please contact the City staff that attended the conference (listed on Page 1). Contact numbers for these staff are City staff listed at the end of the report.

Sincerely,

City of Milwaukie Development Review Team

BUILDING DEPARTMENT

Samantha Vandagriff - Building Official - 503-786-7611

Harmony Drake - Permit Specialist - 503-786-7623

Stephanie Marcinkiewicz 503-786-7636

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Mary Heberling - Assistant Planner - 503-786-7658

CLACKAMAS FIRE DISTRICT

Mike Boumann - Lieutenant Deputy Fire Marshal - 503-742-2673

Izak Hamilton - Fire Inspector - 503-742-2660

Clackamas County Fire District #1

Fire Prevention Office



E-mail Memorandum

To: City of Milwaukie Planning Department
From: Izak Hamilton, Fire Inspector, Clackamas Fire District #1
Date: 6/6/2019
Re: 19-008PA, 9391 SE 32nd Ave., Milwaukie, OR

This review is based upon the current version of the Oregon Fire Code (OFC), as adopted by the Oregon State Fire Marshal's Office. The scope of review is typically limited to fire apparatus access and water supply, although the applicant must comply with all applicable OFC requirements. When buildings are completely protected with an approved automatic fire sprinkler system, the requirements for fire apparatus access and water supply may be modified as approved by the fire code official. The following items should be addressed by the applicant:

A Fire Access and Water Supply plan is required for subdivisions and commercial buildings over 1000 square feet in size or when required by Clackamas Fire District #1. The plan shall show fire apparatus access, fire lanes, fire hydrants, fire lines, available fire flow, FDC location (if applicable), building square footage, and type of construction. The applicant shall provide fire flow tests per NFPA 291, and shall be no older than 12 months. Work to be completed by experienced and responsible persons and coordinated with the local water authority.

Fire Safety Program: In accordance with NFPA 241 Chapter 7 a fire safety program shall include provisions for: Housekeeping, on-site security, fire protection systems, pre fire coordination with the fire district, fire district notification, protection of existing structures and equipment from exposure fires.

(Please see accompanying document)

Access:

1. Provide address numbering that is clearly visible from the street.
2. No part of the building may be more than 150 from an approved fire department access road.

3. Buildings exceeding 30 feet in height shall require extra width and proximity provisions for aerial apparatus.

Water Supply

1. **Fire Hydrants Commercial Buildings:** Where a portion of the building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided.

Note: This distance may be increased to 600 feet for buildings equipped throughout with an approved automatic sprinkler system.

2. All new buildings shall have a firefighting water supply that meets the fire flow requirements of the Fire Code. Maximum spacing between hydrants on street frontage shall not exceed 500 feet. Additional private on-site fire hydrants may be required for larger buildings. Fire sprinklers may reduce the water supply requirements.
3. Prior to the start of combustible construction required fire hydrants shall be operational and accessible.
4. The fire department connection (FDC) for any fire sprinkler system shall be placed as near as possible to the street, and within 100 feet of a fire hydrant.

Notes:

1. Comments may not be all inclusive based on information provided.
2. Please visit our website for access to our Fire flow Worksheet, and Fire Code Application Guide.

<http://www.clackamasfire.com/fire-prevention/new-construction-resources/>



Fire Safety During Construction

The purpose of this document is to outline the minimum requirements in Clackamas Fire District #1 for subdivisions and commercial buildings during construction, alteration, and demolition. The following items, along with the requirements on OFC Chapter 33, and NFPA 241 will be inspected and enforced by the fire district during activities regulated by the referenced standards.

Fire Safety Program: In accordance with NFPA 241 Chapter 7 a fire safety program shall include provisions for: Housekeeping, on-site security, fire protection systems, pre fire coordination with the fire district, fire district notification, protection of existing structures and equipment from exposure fires.

Temporary Offices and Sheds: Separation of the structures shall be in accordance with table 4.2.1 in NFPA 241.

Table 4.2.1 Separation Distances

Temporary Structure Exposing Wall Length		Minimum Separation Distance	
m	ft	m	ft
6	20	9	30
9	30	11	35
12	40	12	40
15	50	14	45
18	60	15	50
>18	>60	18	60

Hot Work: Shall be conducted in accordance with OFC Chapter 35. Permits are not required, but records of the operations should be maintained on site for 48 hours after the hot work has been completed. The fire district shall be notified prior to any hot work operation that will required fire protection or detection systems to be taken out of service. A fire watch is required in areas with combustible materials, and shall continue for no less than 30 minutes after operations are completed, or two hours after roofing operations. The fire watch

shall have a fire extinguisher with a rating of not less than 2-A:20-B:C within 30 feet of the operation. A pre hot work check shall be completed prior to work.

Access: Approved access for fire fighting shall be provided within 100 feet of all fire fighting equipment. (Stand Pipes, FDC's, Hydrants)

Water Supply: Hydrants shall be in service, and available for use prior to the arrival of combustible material on site.

Standpipes: In buildings required to have stand pipes, not less than one shall be provided for use during construction. Hose connections shall be in place adjacent to stairs, and be extended to within one floor of the highest point of construction.

Means of Egress: In buildings greater than 50 feet, or 4 stories in height, shall have at least one temporary **Lighted** stairway. This stairway shall remain clear of obstructions and be readily available for use.

Portable Fire Extinguishers: Structures under construction, alteration, and demolition shall be provided with not less than one 2-A:10-B:C portable fire extinguisher within 75 feet of all portions of the building. Additional fire extinguishers shall be placed at each stairway where combustible materials are present, in every storage shed. Additional fire extinguishers shall be available for other hazardous operations.

Waste Disposal: Accumulations of combustible waste shall be removed for the structure at the end of every work shift.

Storage of Flammable and Combustible Liquids and Gasses: No more than 60 gallons of Class I and II liquids shall be stored in or within 50 feet of the structure. Storage areas shall be marked with "No Smoking" signs. Appropriate NFPA 704 placards shall be in place.

For Additional Information Please Refer to the Following:

Temp Heating equipment OFC Section 3303, NFPA 241 Section 5.2

Smoking Restrictions OFC 3304, NFPA 241 Section 5.3

Explosive Materials OFC 3307, NFPA 241 Section 5.6

Roofing Operations OFC 3317, NFPA 241 Chapter 9



RENEWS 31 DEC 2021

TRANSPORTATION IMPACT STUDY

To

City of Milwaukie

For

Milwaukie Mixed-Use Development
9391 SE 32nd Avenue

Prepared

May 11, 2020

Revised

August 20, 2020

C&A Project Number

20200201.00

City of Milwaukie File Number

VR-2019-013

DEV-2020-005; TFR-2020-004

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I. INTRODUCTION

Property Description and Proposed Land Use Actions

The subject property located at 9391 SE 32nd Avenue is in the northwest corner of SE 32nd Avenue/SE Olsen Street intersection and is specifically described as tax lot 7700 on Clackamas County Assessors Map 11E25BD. The proposed mixed-use development includes 1,295 square feet of ground-floor retail and two floors of residential uses consisting of 18 apartments.

The existing auto repair establishment will be demolished. The existing 32nd site access will be closed, and the existing Olsen accesses will be consolidated into a single entry/exit, serving the proposed development's ground-level parking area. The proposed development is illustrated in the attached site plan and Figure 1 in Appendix A.

Transportation Analysis Description

The proposed development is consistent with the existing Neighborhood Mixed-Use (NMU) zoning. Based on materials contained in the January 23, 2020 City of Milwaukie *Transportation Impact Study (TIS) Checklist* prepared by Amanda Deering of DKS Associates and email correspondence with City staff, a detailed TIS is required to address City requirements. The checklist and email correspondence are included in Appendix B.

Following City review of the May 11, 2020 TIS, this revision also includes access study supporting a modification of the access spacing standard established in Milwaukie Municipal Code (MMC) Section 12.16.040.C.4. This modification allows for the proposed Olsen Street access to be less than the minimum 300-foot spacing from 32nd Avenue.

Analysis Intersections

Per City TIS requirements, specific intersection operations analysis is required. Based on development trip generation and distribution described later in this analysis, the following table presents the relative impacts to the study intersections:

TABLE 1 – STUDY INTERSECTION IMPACTS				
Intersection	AM Peak Hour		PM Peak Hour	
	Development Trips	Trip Volume Increase	Development Trips	Trip Volume Increase
SE 32nd Avenue / SE Olsen Street	3	0.5%	2	0.2%
SE 32nd Avenue / SE Harrison Street	2	0.2%	2	0.2%

As identified in the previous table, the proposed development is trip generation is low, resulting in the development causing a <1% intersection traffic volume increase. Because daily traffic fluctuations at these same intersections are typically greater than 5%, the subject development has *de minimus* transportation system impacts that cannot be quantified/measured. Regardless, at City request, intersection operations analysis is performed.

Analysis Scenarios

The proposed development will be constructed in one phase and is anticipated to be occupied by 2022. As such, the following analysis scenarios include:

- 2020 Current (Existing) Conditions
- 2022 Pre-Development Conditions
- 2022 Post-Development Conditions

II. EXISTING CONDITIONS

Existing Site Conditions

The subject property is located in the northwest corner of SE 32nd Avenue/SE Olsen Street intersection and is specifically described as tax lot 7700 on Clackamas County Assessors Map 11E25BD.

The property is currently developed with an existing auto repair establishment that will be demolished. The existing site access to 32nd will be closed and the accesses to Olsen will be consolidated to a single entry/exit, providing access to the ground-level parking area.

Roadway Facilities

The following table summarizes existing roadway classifications and characteristics within the study area.

TABLE 2 – EXISTING ROADWAY CHARACTERISTICS							
Roadway	Functional Classification	Lanes	Speed Limit (MPH)	Sidewalks	Bicycle Lanes	On-Street Parking	
SE 32 nd Avenue	Collector	2	25	Yes	No	No	
SE Harrison Street	Arterial	2-3	25	Yes	No	Yes	
SE Olsen Street	Neighborhood Route (east of 32 nd)	2	25	South Side Only	No	No	
SE Olsen Street	Local (west of 32 nd)	2	25	No	No	Yes	

Safety Analysis

When evaluating intersection safety, consideration is given to the total number and types of crashes occurring and the number of vehicles entering the intersection. This leads to the concept known as “crash rate,” typically expressed in terms of the number of crashes occurring per one million vehicles entering the intersection (crashes/mev). A critical crash rate analysis is then performed by comparing the subject intersection to the published statewide 90th percentile intersection crash rates at comparable/reference intersections. Crash rates close to or exceeding 1 crash/mev, or the 90th percentile rates require further analysis.

Crash data for the study area intersections were obtained from the Oregon Department of Transportation (ODOT) for five years from January 1, 2013 through December 31, 2017. The following table presents the study intersection crash rates and critical crash analysis. Crash data and crash rate calculations are provided in Appendix C.

TABLE 3 – INTERSECTION CRASH RATES										
Intersection	2013	2014	2015	2016	2017	Total	Crash Rate (crashes/mev)	Reference Population	90 th Percentile Crash Rate	Over or under Crash Rate?
SE 32 nd Avenue / SE Olsen Street	0	0	1	0	0	1	0.091	Urban 4ST	0.408	Under
SE 32 nd Avenue / SE Harrison Street	1	0	2	4	3	10	0.399	Urban 4ST	0.408	Under

All study area intersection crash rates are less than 1.0 crashes/mev, and less than the 90th percentile crash rates of the reference intersections; therefore, the intersections are considered relatively safe and no further evaluation of safety deficiencies is necessary.

Transit Facilities

Tri-Met currently operates one bus route in the immediate project area and is described as follows:

- **Route 75** – Cesar Chavez/Lombard – connects Milwaukie, SE Portland, Hollywood, N/NE Portland, and St. Johns, via Harrison, 32nd, Johnson Creek, 45th, Cesar E Chavez Blvd, 42nd, Columbia, Dekum, and Lombard. The route operates with frequent service, i.e., headways of 15 minutes or less most of the day, every day.

Intersection Traffic Volumes

Because it is not currently possible to obtain typical/average intersection traffic count data, the City of Milwaukie provided 2018 count data for the SE 32nd Avenue/SE Harrison Street and SE 32nd Avenue/SE Johnson Creek Boulevard intersections with instruction to apply an annual background growth rate to estimate current year traffic volumes. A copy of this data is included in Appendix D.

Background Growth

Consistent with City recommendations, and assumptions contained within the intersection traffic volume data provided by the City, a 2% annual background traffic growth rate was applied to the 2018 volumes to obtain 2020 (Existing) and 2022 (Development year) volumes which are illustrated in Figures 2 and 3 in Appendix A for the AM and PM peak hours.

III. SITE DEVELOPMENT

Development Trip Generation

Trip generation for the proposed mixed-use development and existing auto repair facility was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition, and practices from the *ITE Trip Generation Handbook*, 3rd Edition and is presented in the following table.

TABLE 4 – DEVELOPMENT TRIP GENERATION									
Land Use	ITE Code	Size	Daily	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Proposed Development									
Multifamily Housing (Mid-Rise)	221	18 DU	98	1	5	6	5	3	8
Shopping Center	820	1,295 SF	49	1	0	1	2	3	5
Total Proposed Development Trip Generation			147	2	5	7	7	6	13
Existing Development									
Automobile Care Center	942	2,550 SF	60 ¹	(4)	(2)	(6)	(4)	(4)	(8)
New Trip Generation (Proposed Uses – Existing Uses)			87²	(2)	3	1	3	2	5

¹ Weekday daily trip generation data not provided. Data presented for a Saturday.

² Considers Saturday daily trip generation for ITE Land Use 942.

As identified in the table above, the proposed development generates an additional 87 daily, 1 AM, and 5 PM peak hour trips over the existing development.

Trip Distribution and Traffic Assignment

Development trip distribution is based on existing traffic patterns, surrounding land uses, and engineering judgment.

The resulting trip distribution and traffic assignment are illustrated in the attached Figures 2 and 3 in Appendix A for the AM and PM peak hours.

IV. INTERSECTION ANALYSIS

Analysis Scope

Based on City TIS requirements, operations analysis is performed at the following intersections:

- SE 32nd Avenue/SE Olsen Street
- SE 32nd Avenue/SE Harrison Street

The existing site access to 32nd will be closed and the accesses to Olsen will be consolidated to a single entry/exit.

Analysis Description

Intersection peak hour factors (PHFs) were not included in the summarized traffic count data provided by the City. As such a 0.90 PHF is assumed for all intersections in all scenarios.

Intersection operation characteristics are generally defined by two mobility standards: volume-to-capacity (v/c) ratio and level-of-service (LOS). At signalized intersections, the v/c ratio is a measurement of an intersection's ability to accommodate the critical movements, while LOS is based on the average control delay per vehicle for the entire intersection. At unsignalized intersections, the v/c ratio and LOS are calculated for intersection approach movements yielding right-of-way.

Referring to the City of Milwaukie TSP materials, the Milwaukie Municipal Code (MMC), Section 19.1407.4(A) identifies a minimum operating standard of LOS D during peak operating conditions for all intersections. A review of the current MMC does not find this code section; however, MMC Section 19.704.1 contains a reference to "*intersection level of service (LOS)*" but no operating standards are identified. Notwithstanding there does not appear to be a currently identified operating standard, LOS D is assumed.

Operations Analysis

Intersection operations analyses were performed per the Transportation Research Board's *Highway Capacity Manual 6th Edition* methodologies using Trafficware's *Synchro* software (Version 11).

The proposed mixed-use development is an allowed use in the current zone designation. The development will be constructed in one phase and is anticipated to be occupied by 2022. As such, the following analysis scenarios include:

- 2020 Current (Existing) Conditions
- 2022 Pre-Development Conditions
- 2022 Post-Development Conditions

The following table summarizes weekday peak hour operation analysis results. Data output sheets from all operations calculations are in Appendix E.

TABLE 5 – INTERSECTION OPERATIONS ANALYSIS								
Intersection	Critical Movement Lane Group	Mobility Target	Operations					
			2020 30HV Existing		2022 30HV Pre-Development		2022 30HV Post-Development	
			AM	PM	AM	PM	AM	PM
SE 32 nd Avenue / SE Olsen Street	NB L/T/R	LOS D	A	A	A	A	A	A
	SB L/T/R	LOS D	A	A	A	A	A	A
	EB L/T/R	LOS D	B	B	B	B	B	B
	WB L/T/R	LOS D	B	B	B	B	B	B
SE 32 nd Avenue / SE Harrison Street	Intersection	LOS D	B	B	C	B	C	B

As identified in the table above, all intersections are anticipated to operate within agency mobility standards in all analysis scenarios. As previously noted, the proposed development is trip generation is low, resulting in the development causing a <1% intersection traffic volume increase. Because daily traffic fluctuations at these same intersections are typically greater than 5%, the subject development has *de minimus* transportation system impacts that cannot be quantified/measured.

V. TRANSPORTATION ANALYSIS

The following addresses specific items from the January 23, 2020 City of Milwaukie *Transportation Impact Study Checklist* in italics followed by the applicant's response in plain text.

Checklist Item: *Demonstrate compliance with applicable access spacing standards for any proposed driveways. If access spacing standards cannot be met, access restrictions should be recommended.*

Applicant Response: The existing site access to 32nd will be closed and the accesses to Olsen will be consolidated to a single entry/exit, providing access to the ground-level parking area. The proposed Olsen access is located as far away from 32nd as practical, as illustrated on the attached site plan in Appendix A. Noting the access is 50 feet (measured edge to edge) from 32nd, the applicant is requesting a modification of the access spacing standard established in Milwaukie Municipal Code (MMC) Section 12.16.040.C.4 which is presented in the following section of this analysis.

Checklist Item: *Analysis of sight distance at the site access point(s).*

Applicant Response: The proposed access to Olsen is located in an area where there is no horizontal or vertical roadway curvature. As such there are no sight distance obstructions. Further, the proposed site design provides the necessary clear vision areas.

Checklist Item: *Evaluate safe-routes-to-school for the site (generally ½ to 1-mile walking radius) and identify any necessary pedestrian facility improvements. Identify any nearby school bus stops (Contact the school district).*

Applicant Response: Ardenwald Elementary School, located at 8950 SE 36th Avenue, is within a 1-mile walking distance of the subject site. Except for 32nd, all roadways between the school and the subject site are functionally classified as a *Neighborhood Route* or a *Local* roadway. All roadways have sidewalks, and striped crosswalks are provided along the route-to-school.

It is further noted the Milwaukie TSP Pedestrian Element identifies Project "R" as a low priority project to fill in the sidewalk gaps on the north side of Olsen from 32nd to 42nd. This project is not funded. Refer to the Milwaukie TSP Pedestrian Master Plan map in Appendix F.

Checklist Item: *Analysis of public facility adequacy for pedestrians, bicycles, and public transportation access to the site and identification of the nearest transit stop (if within 1/2 mile of the project site).*

Applicant Response: The Milwaukie TSP Pedestrian Element identifies numerous locations adjacent 32nd, Harrison, and Olsen as having sidewalks less than 5 feet wide. The TSP also identifies Project "R" as a low priority project to fill in the sidewalk gaps on the north side of Olsen from 32nd to 42nd. This project is not funded.

The Milwaukie TSP Bicycle Element identifies Project "L" as a low priority project to fill in bike lane gaps on Harrison from Hwy 224 to 42nd. This project is not funded. The TSP also identifies Project "AU" to provide a bicycle crossing at Harrison/31st. No project priority is identified, and it is unfunded.

The Milwaukie TSP Public Transit Element identifies Tri-Met Route 75 as operating on 32nd. The route operates with frequent service, i.e., headways of 15 minutes or less most of the day, every day. There are transit stops on both sides of 32nd at Olsen.

Refer to the Milwaukie TSP Pedestrian, Bicycle, and Public Transit Master Plan maps in Appendix F.

Checklist Item: *Identify accessibility to public transit.*

Applicant Response: Tri-Met Route 75 operates on 32nd with frequent service, i.e., headways of 15 minutes or less most of the day, every day. There are transit stops on both sides of 32nd at Olsen.

Checklist Item: *Identify any access deficiencies (including transit/pedestrian/bicycle connections).*

Applicant Response: There are no access deficiencies immediately adjacent to the project site. Within the larger study area, there are pedestrian and bicycle system deficiencies as identified above.

Checklist Item: *Identify any TDM measures.*

Applicant Response: Due to the residential, and small commercial nature of the project, the applicant is not proposing any TDM measures.

Checklist Item: *Parking Supply Analysis.*

Applicant Response: The applicant is proposing to construct 17 on-site parking spaces. On-street parking is available in the project area on both sides of Olsen.

VI. MODIFICATION OF THE ACCESS SPACING STANDARD

Specific to site access improvements, per MMC 12.16.040.B.2 criteria presented below, the Applicant is requesting a modification of the *Accessway Location* criteria contained in MMC 12.16.040.C.4, also presented below, to provide less than the minimum 300-foot access spacing from a collector roadway.

The following presents the applicable MMC approval criteria followed by the Applicant's modification request and supporting access study findings.

MMC 12.16.040.B.2 – Modification of Access Spacing

Access spacing may be modified with submission of an access study prepared and certified by a registered professional traffic engineer in the State of Oregon. The access study shall assess transportation impacts adjacent to the project frontage within a distance equal to the access spacing requirement established in Subsection 12.16.040.B.1. For example, for a site with arterial access, the access study would include evaluation of site access and capacity along the project frontage plus capacity and access issues within six hundred (600) feet of the adjacent property. The access study shall include the following:

- a. Review of site access spacing and design;*
- b. Evaluation of traffic impacts adjacent to the site within a distance equal to the access spacing distance from the project site;*
- c. Review of all modes of transportation to the site;*
- d. Mitigation measures where access spacing standards are not met that include, but are not limited to, assessment of medians, consolidation of accessways, shared accessways, temporary access, provision of future consolidated accessways, or other measures that would be acceptable to the Engineering Director.*

MMC 12.16.040.C.4 – Accessway Location – Distance from Intersection

To protect the safety and capacity of street intersections, the following minimum distance from the nearest intersecting street face of curb to the nearest edge of driveway apron shall be maintained. Where intersecting streets do not have curbs, the distance shall be measured from the nearest intersecting street edge of pavement. Distance from intersection may be modified with a modification as described in MMC Section 12.16.040.B.2.

- a. At least forty-five (45) feet for single-family residential properties accessing local and neighborhood streets. Where the distance cannot be met on existing lots, the driveway apron shall be located as far from the nearest intersection street face of curb as practicable.*
- b. At least one hundred (100) feet for multifamily residential properties and all other uses accessing local and neighborhood streets.*
- c. At least three hundred (300) feet for collectors, or beyond the end of queue of traffic during peak hour conditions, whichever is greater.*
- d. At least six hundred (600) feet for arterials, or beyond the end of queue of traffic during peak hour conditions, whichever is greater.*

Applicant Response: The existing 32nd site access will be closed, and the existing Olsen accesses will be consolidated into a single entry/exit, serving the proposed development's ground-level parking area.

The proposed Olsen access is 50 feet (measured edge to edge) from 32nd, which is less than the MMC-required 300-foot minimum from a *Collector* roadway. The proposed access location is illustrated on the attached site plan in Appendix A.

The subject property has frontage on both 32nd and Olsen. Consistent with MMC 12.16.040.C.1, the proposed Olsen access is on the roadway with the lowest functional classification, i.e., *Local* versus *Collector*.

The property frontage on Olsen is less than 300 feet; therefore, it is not possible to meet the access spacing standard. As such, the proposed Olsen access is located as far away from 32nd as practical, and is located in an area where there is no horizontal or vertical roadway curvature, or resulting sight distance obstructions. Further, the proposed site design provides the necessary clear vision areas.

The proposed access to Olsen is located (approximately) directly across from the Milwaukie Café and Bottle Shop access. As such, there are not anticipated to be any overlapping motor vehicle left-turning conflicts.

Based on the weekday peak hour operation analysis results, the westbound 95th-percentile queue length is 0.2 vehicles (approximately 5 feet) during the AM peak hour and 0.1 vehicles (approximately 3 feet) during the PM peak hour. As such, the proposed access location is not anticipated to conflict with the westbound queue. Data output sheets from all operations calculations are in Appendix E

Overall, the proposed Olsen access is located in the best practical location and is anticipated to operate safely and efficiently. As such, the Applicant's requested modification of the *Accessway Location* criteria contained in MMC 12.16.040.C.4 can be approved.

VII. CONCLUSION

The following summary and recommendations are based on the materials contained in this analysis.

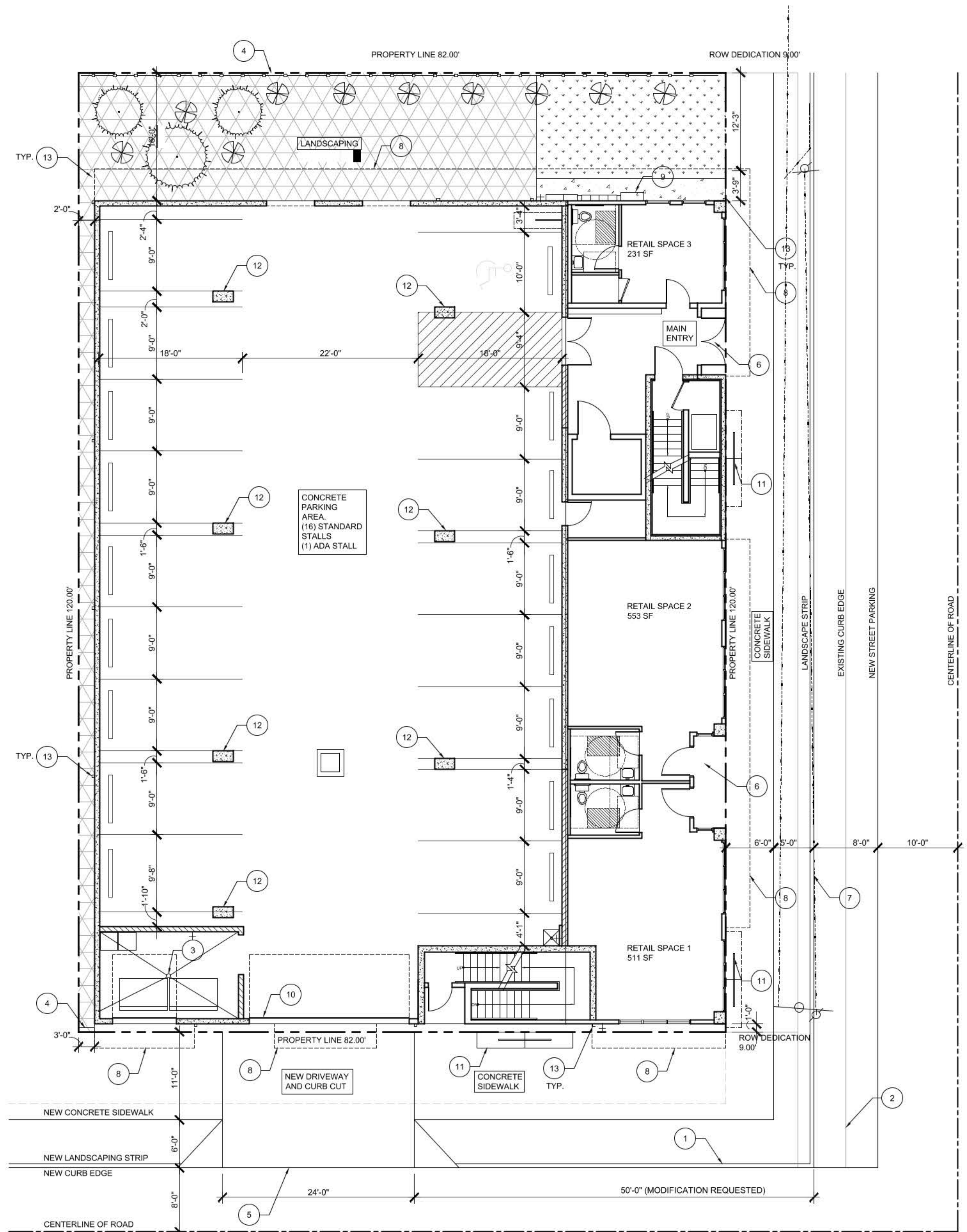
1. The subject property located at 9391 SE 32nd Avenue is in the northwest corner of SE 32nd Avenue/SE Olsen Street intersection and is specifically described as tax lot 7700 on Clackamas County Assessors Map 11E25BD.
2. The proposed mixed-use development includes 1,295 square feet of ground-floor retail and two floors of residential uses consisting of 18 apartments. The existing auto repair establishment will be demolished. The existing 32nd site access will be closed, and the existing Olsen accesses will be consolidated into a single entry/exit, serving the proposed development's ground-level parking area.
3. The proposed development is trip generation is low, resulting in the development causing a <1% intersection traffic volume increase. Because daily traffic fluctuations at these same intersections are typically greater than 5%, the subject development has *de minimus* transportation system impacts that cannot be quantified/measured.
4. All study area intersection crash rates are less than 1.0 crashes/mev, and less than the 90th percentile crash rates of the reference intersections; therefore, the intersections are considered relatively safe and no further evaluation of safety deficiencies is necessary.
5. The proposed development generates an additional 87 daily, 1 AM, and 5 PM peak hour trips over the existing development.
6. All intersections are anticipated to operate within agency mobility standards in all analysis scenarios. The subject development has *de minimus* transportation system impacts that cannot be quantified/measured.
7. There are no transportation system deficiencies immediately adjacent to the project site. Within the larger study area, there are pedestrian and bicycle system deficiencies and the City of Milwaukie TSP identifies mitigating projects.
8. The proposed Olsen access is 50 feet (measured edge to edge) from 32nd, which is less than the MMC-required 300-foot minimum from a *Collector* roadway. Based on analysis findings, the proposed Olsen access is located in the best practical location and is anticipated to operate safely and efficiently. As such, the Applicant's requested modification of the *Accessway Location* criteria contained in MMC 12.16.040.C.4 can be approved.

VIII. APPENDICES

- A. Figures**
- B. Agency Correspondence**
- C. Crash Data**
- D. Traffic Count Summaries**
- E. Operation Analyses**
- F. TSP System Maps**

Appendix A





NOTE: NO EXISTING TREES OR EXISTING NATURAL FEATURES ON SITE. NO TREE PROTECTION OR TREE REMOVAL REQUIRED.

TRUE NORTH

SITE PLAN
 SD1.1 SCALE: 1/8" = 1'-0"

SITE PLAN LEGEND

	PROPERTY LINE
	NEW FENCE. SEE DETAIL 1/SD2.1

PROPERTY INFORMATION

ADDRESS: 9391 SE 32ND AVE. MILWAUKIE, OR 97222
 PROJECT: 1,295 SF RETAIL AND PARKING ON FIRST FLOOR, WITH 18 APARTMENT UNITS LESS THAN 800 SF.

LEGAL DESCRIPTION
 LEGAL DESCRIPTIONS: ARDENWALD, BLOCK 5, LOT 21 AND 22
 TAX LOT ID: 11E25BD07700

PARCEL NUMBER: 00008547
ZONING CODE INFORMATION
 BASE ZONE: N MU (NEIGHBORHOOD MIXED USE)
 SITE AREA: 0.24 ACRES (10,800 SF)

PROPOSED SITE INFORMATION:
 PLOT: 9,720 SF
 BUILDING FOOTPRINT: 8,140 SF (84%)
 EXTERIOR CONCRETE PAVING: 80 SF (0.5%)
 PROPOSED LANDSCAPING: 1,500 SF (15.5%)
 MINIMUM FAR ALLOWED: 0.5:1

BUILDING HEIGHT:
 MAXIMUM ALLOWABLE HEIGHT (TABLE 19.303.3): 45'-0"
 ACTUAL HEIGHT: 45'-0"

MAX SETBACKS ALLOWED:
 MAXIMUM STREET SETBACK: 10'-0"
 ACTUAL STREET SETBACK: 1'-0"

AUTOMOBILE PARKING REQUIREMENTS (TABLE 19.605.1):
 MULTI-FAMILY HOUSING (1-UNIT): 18
 COMMERCIAL (2-1000 SF): 3
 SUBTOTAL: 21
 PROXIMITY TO MASS TRANSIT (20% REDUCTION): -4
 TOTAL REQUIRED: 17

BICYCLE PARKING REQUIREMENTS (TABLE 266-6):
 BIKE PARKING MIN. OF 22 REQUIRED. 22 TO BE PROVIDED.
 LOCATED IN UNITS. SEE FLOOR PLANS. 1 IN EACH UNIT, 1 IN PARKING FOR RETAIL

STANDARD BIKE PARKING (MIN OF 1 SPACE REQUIRED).
 ENCLOSED BIKE PARKING (1 PER UNIT, 50% MINIMUM OF REQUIRED)
 SEE SECTION: 19.609.2

FLOOR AND BUILDING COVERAGE AREA:
 FIRST FLOOR COVERED PARKING AREA/RETAIL: 8,066 SF
 SECOND FLOOR BUILDING AREA: 8,682 SF
 THIRD FLOOR BUILDING AREA: 8,682 SF
 TOTAL AREA (INCLUDING COVERED PARKING): 25,430 SF

SITE PLAN GENERAL NOTES
 EXISTING INFORMATION IS BASED ON DRAWINGS PROVIDED BY AKS.
 DIMENSIONS ARE TO FACE OF CURB, FACE OF BUILDING, PROPERTY LINE, OR CENTER OF PAINT STRIP UNLESS NOTED OTHERWISE.
 WHERE ACCESS TO OR WITHIN A STRUCTURE OR AN AREA IS RESTRICTED BECAUSE OF SECURED OPENINGS OR WHERE IMMEDIATE ACCESS IS NECESSARY FOR LIFE-SAVING OR FIRE FIGHTING PURPOSES A "KNOXBOX" KEY BOX SHALL BE INSTALLED IN AN APPROVED LOCATION.

PLANT KEY

SYMBOL	LANDSCAPING TYPE	SIZE	COUNT
TREES			
	MEDIUM SIZED DECIDUOUS TREE PER OWNER AND MARKET AVAILABILITY	2" CAL 4' ABOVE GRADE	3
*NOTE: MUST PROVIDE 3'X3' MIN PLANTING AREA			
SHRUBS			
	LANDSCAPE SHRUBS PER OWNER AND MARKET AVAILABILITY	1 GAL. 3" O.C.	10
GROUND COVER			
	MULCH PER OWNER		
	GRASS PER OWNER		

SITE PLAN KEYNOTES

- EXISTING CONCRETE CURB TO REMAIN.
- EXISTING CURB TO BE REMOVED.
- TRASH AND RECYCLING ROOM. PROVIDE DRAIN THAT CONNECTS TO A SANITARY SEWER WASTE LINE. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- NEW 6' HIGH CHAIN LINK FENCE WITH PRIVACY SLATS. PAINTED BLACK PER OWNER. SEE 1/SD2.1
- NEW CONCRETE OR ASPHALT DRIVEWAY WITH NEW CURB EDGE. SEE CIVIL DRAWINGS.
- NEW CONCRETE PAVING. SEE STRUCTURAL DRAWINGS
- NEW DEDICATION AND FRONTAGE IMPROVEMENTS. SEE CIVIL DRAWINGS.
- FACE OF BUILDING ABOVE
- ELECTRICAL GEAR. SEE DRAWINGS BY ELECTRICAL AND COORDINATE WITH PGE. PROVIDE CONCRETE PAD
- 20' WIDE CONTROLLED ACCESS ENTRY GATE. SEE ELECTRICAL. PROVIDE KEYBOX FOR EMERGENCY ACCESS.
- SHORT TERM BICYCLE PARKING AREA 2x6' EACH, FOUR TOTAL. SEE DETAIL 10/SD2.1.
- CONCRETE POST. SEE STRUCTURAL.
- DOWNSPOUT. SEE ROOF PLANS A1.5 & A1.6.

BAMA
 Architecture and Design
 7350 SE Milwaukie Ave.
 Portland, Oregon 97202
 Ph: 503.253.4283



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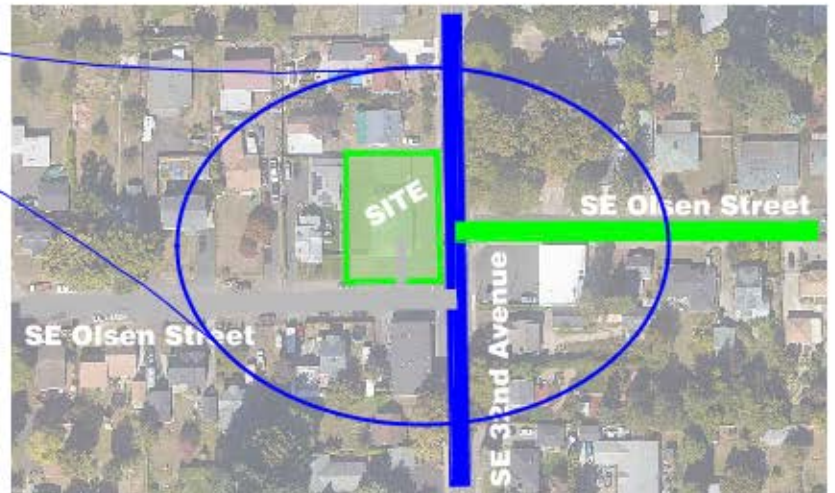
9391 SE 32nd Ave.
Mixed-Use

9391 SE 32ND AVE,
 MILWAUKIE, OR 97222

Proj # 201931

REVISIONS:
 OWNER REVISION: 04/28/20
 OWNER REVISION: 05/25/20

BUILDING PERMIT:
 DATE: 4-16-20
 SHEET NO.
SD1.1
 SITE PLAN



Functional Roadway Classifications

LEGEND

- Arterials
- Collectors
- Neighborhood Routes
- Local



1582 Feters Loop
 Eugene, Oregon 97402
 541-579-8315
 clemow@clemow-associates.com

SITE AREA

Milwaukie Mixed-Use Development - Milwaukie, Oregon

C&A Project No. 20200201.00

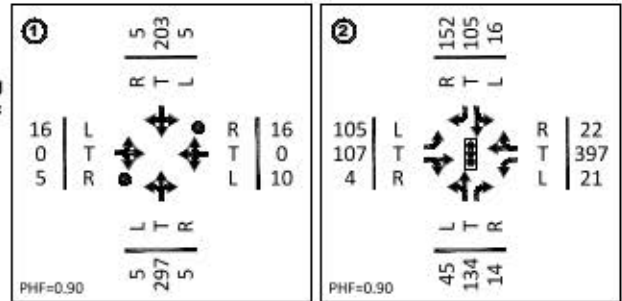
FIGURE

1

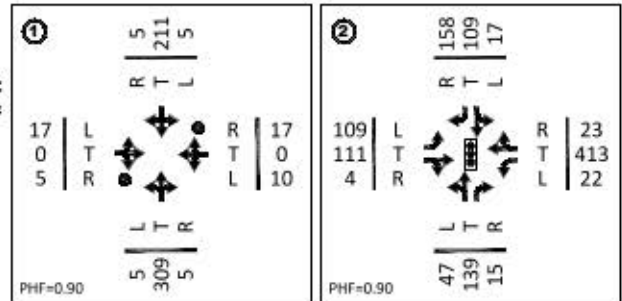
AM Peak Hour



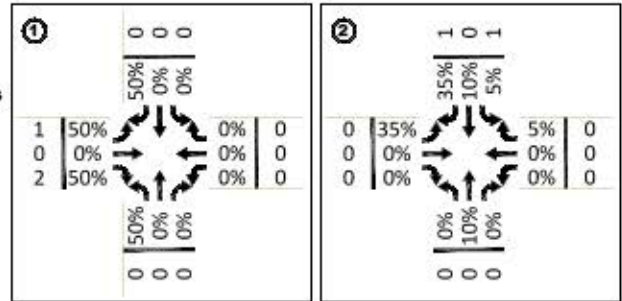
2020 Existing Traffic



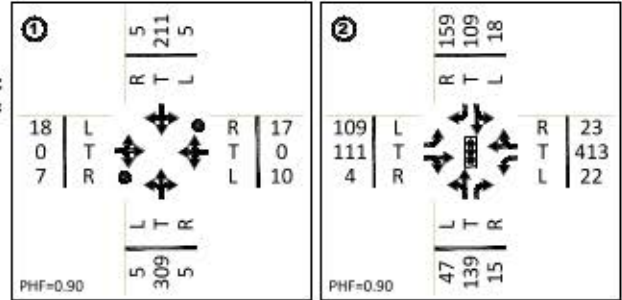
2022 Pre-Development Traffic



Development Trips



2022 Post-Development Traffic



1582 Fetters Loop
 Eugene, Oregon 97402
 541-579-8315
 cclemow@clemow-associates.com

AM PEAK HOUR TRAFFIC VOLUMES

Milwaukie Mixed-Use Development - Milwaukie, Oregon

C&A Project No. 20200201.00

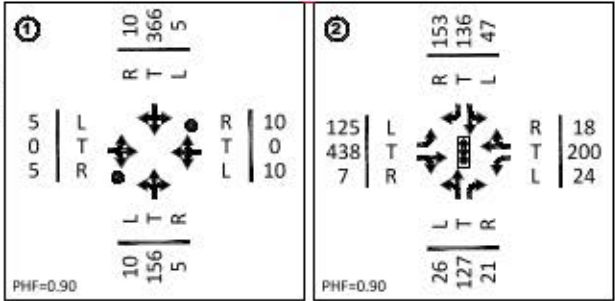
FIGURE

2

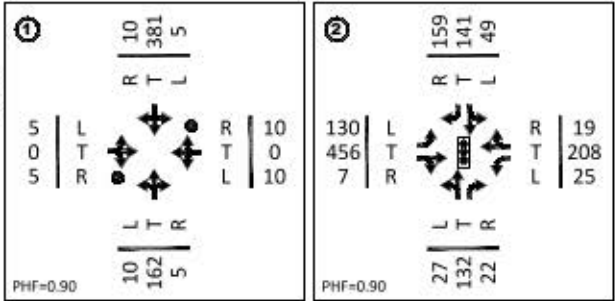
PM Peak Hour



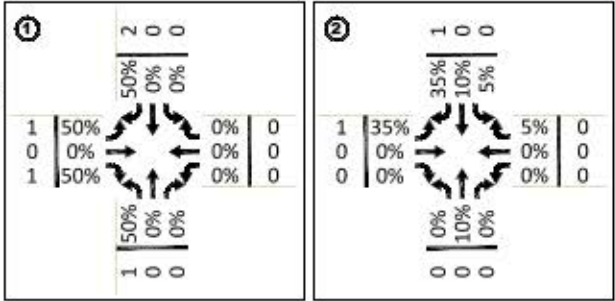
2020 Existing Traffic



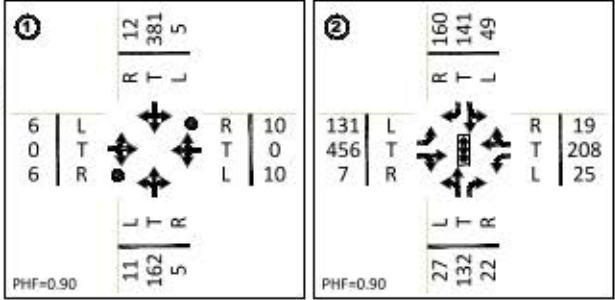
2022 Pre-Development Traffic



Development Trips



2022 Post-Development Traffic



1582 Fetters Loop
 Eugene, Oregon 97402
 541-579-8315
 clemow@clemow-associates.com

PM PEAK HOUR TRAFFIC VOLUMES

Milwaukie Mixed-Use Development - Milwaukie, Oregon

C&A Project No. 20200201.00

FIGURE

3

Appendix B



Table 4: TRANSPORTATION IMPACT STUDY CHECKLIST

Project Name: 32nd Avenue Mixed Use _____

City Reference Code: _____

Score

THRESHOLD SCORING

Transportation Impact Study Required with score of 99 or greater

Yes No Study Required Comment: _____ Date: _____

BACKGROUND INFORMATION

Yes No Oregon PE Stamp and Signature

INTRODUCTION AND SUMMARY

EXISTING CONDITIONS

Yes No Roadway Network - summary of roadway classifications and description of study area

Yes No Analysis Periods Correct (AM, Mid-day, PM, Afternoon (when classes let out),
 Saturday _____, Sunday Church Peak, Weekday evening peak (for evening services)

Yes No Existing Traffic Operations (Existing Level of Service, traffic volumes, speeds, accident data)

IMPACTS

Yes No Trip Generation - Daily, peak hour trips generated by site development: ITE Trip Generation Manual
 Survey

Yes No Level of Service Analysis - projected LOS with site build out, existing traffic, and background traffic growth

Yes No Future year 20 year analysis (*Note: Assumes proposed used conforms with adopted zoning.*)

Yes No Signal Warrant Analysis (peak hour warrants, if needed for capacity mitigation)

Yes No Turn Lane Warrant Analysis (where applicable)

Yes No Access Spacing Standards

Yes No Analysis of sight distance at frontage road access point(s)

Yes No Neighborhood Traffic Analysis

Yes No Identify safe route to school or school bus stop (Contact with school district)

Yes No Analysis of safe pedestrian/bicycle access to nearest transit stop (if within 1/2 mile of project site)

Yes No Identify accessibility to public transit

Yes No Parking Supply Analysis

MITIGATION

Yes No Identify need for right/left turn lanes, storage capacity and length

Yes No Identify possible corrections of any LOS deficiencies

Yes No Identify any access deficiencies (including transit/pedestrian/bicycle connections)

Yes No Identify any TDM measures

FIGURES

Yes No Vicinity Map

Yes No Site Plan

Yes No Existing peak hour turn movement volumes (counts conducted within previous 12 months)

Yes No Trip Distribution (%) including Added Project Peak Hour Traffic Volumes (see sample)

Yes No Approved Projects Peak Hour Traffic Volumes (land use to be provided by the City)

Yes No TSP Future Year turn movement volumes comparison

Yes No Programmed transportation improvements and transportation mitigation outlined in study

TABLES

Yes No Intersection Performance Existing Conditions

Yes No Project Trip Generation

Yes No Intersection Level of Service

OTHER

Yes No Technical appendix - sufficient material to convey complete understanding of traffic issues (e.g. HCM analyses, trip generation calculations, signal warrant analyses, turn lane warrant analyses, etc.) Include site survey information for trip generation and parking observations

Yes No Additional Comments Attached

Completed By: Amanda Deering (DKS Associates)

Date: January 23, 2020

Additional TIS Comments

Project Name: 32nd Avenue Mixed Use _____
City Reference Code: _____

- The proposed project would construct a four-story building with 21 residential apartment units with 3 commercial tenant spaces (approx. 2,500 sq. ft. commercial) on the northwest corner of SE 32nd Avenue and SE Olsen Street. The existing auto repair establishment would be demolished.
- The proposed project would include first floor covered parking.
- The existing site driveway on SE 32nd Avenue will be closed and the driveway on SE Olsen Street will be consolidated to a single entry, providing access to the ground level parking.
- The proposed development is consistent with existing zoning.
- Study intersection turn movement counts shall be conducted during typical weekday conditions while school is in full operation.
- Study intersections should include at a minimum:
 - SE 32nd Avenue/SE Olsen Street (both legs)
 - SE 32nd Avenue/SE Johnson Creek Boulevard
 - SE 32nd Avenue/SE Harrison Street
 - Site access/SE Olsen Street
- ITE trip generation rates should be used as the basis for estimation of vehicle trip generation potential of the site.
- Trip distribution/assignment should consider the existing travel patterns at the site.
- Background growth should include any approved developments in the study area (approved land uses to be provided by the City), as well as a background growth rate on study area roadways. Growth rates may be determined by comparing existing volumes at study area intersections with the historical traffic count data documented in the City's Transportation System Plan (TSP), representative future traffic growth rates documented in the TSP, or growth based on the Metro regional travel demand forecast model.
- Adequate public facilities for pedestrians, bicycles, and public transportation access for the site should be analyzed.
- The study should evaluate safe-routes-to-school for the site (generally ½ mile to 1 mile walking radius) and identify any necessary pedestrian facility improvements.
- The study must address compliance with applicable access spacing standards for any proposed driveways. If access spacing standards cannot be met, access restrictions should be recommended.
- The study must address if existing and proposed (if any) roadways are consistent with applicable roadway standard cross-sections.
- Documentation of sight distance measurements should be included for all access points (existing and proposed) and compared to sight distance standards where applicable.
- TIA scope development must be coordinated with appropriate Clackamas County and ODOT staff.



RE: Milwaukie Mixed-Use Development - Transportation Analysis

1 message

Steve Adams <AdamsS@milwaukieoregon.gov>

Thu, May 7, 2020 a

To: Chris Clemow <clemow@clemow-associates.com>

Cc: Vera Kolas <KolasV@milwaukieoregon.gov>, Valerie Hunter <vhproperty@gmail.com>, Mildred White <mildred@bamadesign.com>, Aury White <aury@bamadesign.com>, Dennis Egner <EgnerD@milwaukieoregon.gov>, Dalton Vodden <VoddenD@milwaukieoregon.gov>, "Reah Flisakowski (rff@dksassociates.com)" <rff@dksassociates.com>

Good morning,

Sorry, yes, ITE Code 820 with no pass-by/diverted-link reductions.

Yes, interpolating the known traffic data at 32nd/Harrison and 32nd/Johnson Creek intersections, and adding a background growth factor to it is acceptable.

Thanks, Steve

Steve R. Adams, PE

City Engineer

he • him • his

City of Milwaukie

o 503-786-7605, ce 971-978-7435

6101 SE Johnson Creek Blvd • Milwaukie, OR 97206

Disclosure Notice: Messages to and from this e-mail address may be subject to the Oregon Public Records Law.

From: Chris Clemow <clemow@clemow-associates.com>

Sent: Tuesday, May 5, 2020 1:25 PM

To: Steve Adams <AdamsS@milwaukieoregon.gov>

Cc: Vera Kolas <KolasV@milwaukieoregon.gov>; Valerie Hunter <vhproperty@gmail.com>; Mildred White <mildred@bamadesign.com>; Aury White <aury@bamadesign.com>; Dennis Egner <EgnerD@milwaukieoregon.gov>; Dalton Vodden <VoddenD@milwaukieoregon.gov>; Reah Flisakowski (rff@dksassociates.com) <rff@dksassociates.com>

Subject: Re: Milwaukie Mixed-Use Development - Transportation Analysis

This Message originated outside your organization.

Steve,

Several additional questions/comments as we proceed with analysis preparation:

You indicate "ITE Code 221 and ITE Code 822 best apply to the proposed development". There does not appear to be an ITE Code 822. Did you mean ITE Code 820 with no pass-by/diverted-link reductions?

You indicate analysis will be required at the "SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts provided by the City for the Harrison [intersection], and include background traffic growth rate." It is noted the City provided data for the 32nd/Harrison and 32nd/Johnson Creek intersections. Because it is not currently possible to obtain typical/average intersection traffic data at the 32/Olsen intersection, we propose to estimate these turning movement volumes using the data you provided at the other intersections. Is this acceptable?

Thank you,

Chris

Christopher M. Clemow PE, PTOE

Transportation Engineer

clemow@clemow-associates.com

541-579-8315

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On Tue, Apr 28, 2020 at 4:04 PM Steve Adams <AdamsS@milwaukieoregon.gov> wrote:

Good day,

My thoughts on this development and traffic study:

- With understanding the recent changes in the ITE 10th Edition, I feel that ITE Code 221 and ITE Code 822 best apply to the proposed development.
- Without knowing the tenants in the commercial area of the project, I feel that Pass-By/Diverted Trips cannot be applied to the project.

- While I feel trips for defunct businesses should have a time limit for expiration, City code is silent on both allowing trip credits and expiring trip credits. For this instance we will allow the 8 trip credit previous use as an automobile care center.
- Net New AM Peak Hour trips remain at 3; Net New PM Peak Hour trips are adjusted to 5.
- A traffic memo is required as we stated previously. The TIS will evaluate the SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts provided by the City Harrison, and including a background traffic growth rate.

Please let me know should you have any questions.

Thanks, Steve

Steve R. Adams, PE

City Engineer

he • him • his

City of Milwaukie

o 503-786-7605, ce 971-978-7435

6101 SE Johnson Creek Blvd • Milwaukie, OR 97206

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From: Chris Clemow <cclemow@clemow-associates.com>
Sent: Tuesday, April 7, 2020 3:32 PM
To: Vera Kolas <KolasV@milwaukieoregon.gov>
Cc: Valerie Hunter <vhproperty@gmail.com>; Mildred White <mildred@bamadesign.com>; Aurnyn White <aurnyn@bamadesign.com>; Steve Adams <AdamsS@milwaukieoregon.gov>; Alex Roller <RollerA@milwaukieoregon.gov>; Dennis Egner <EgnerD@milwaukieoregon.gov>; Dalton Voddan <VoddanD@milwaukieoregon.gov>; undefined <rif@dksassociates.com>
Subject: Re: Milwaukie Mixed-Use Development - Transportation Analysis

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This Message originated outside your organization.

Vera, et al,

I see I presented some incorrect retail square footage numbers in my previous email; however, the trip generation numbers are correct for the actual retail square footage - 1,085 SF.

The following is the corrected material...

- The TIS will evaluate the SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts you provided and include a background traffic growth rate.
- It is our understanding City staff will provide further clarification of potential trip credits. The TIS will incorporate these materials when received.
- You have indicated a Shopping Center (ITE Land Use 820) is not acceptable for the proposed commercial use and have requested we assume more appropriate designations better reflecting the propose uses. We have recently faced this same issue on several other projects in the Portland metro area having a multi-story building with residential over commercial. The following is our response:

Based on the applicant's site plan, there are three (3) commercial spaces totaling 1,085 square feet, resulting in rather small individual spaces. Based on applicant-provided information, the space in the no building corner will be used by the owner for property management purposes. The remaining two spaces are of similar size - and their tenancy is unknown.

Previously, these retail spaces were commonly characterized as Specialty Retail Center uses in the ITE Trip Generation Manual (TGM) 9th edition - ITE Land Use 826, and 8th Edition - ITE Land Use 814. However, the current ITE TGM 10th Edition eliminated the Specialty Retail Center land use code and includes the statement, "In an effort to continually provide data that accurately reflects the composition each land use, some data were reassigned to other land uses, corrected from previous editions, or removed from the database. Several land uses were also renumbered to facilitate a more logical grouping related land uses. The following list summarizes these changes: ...Specialty Retail Center (826) was removed. Data from the land use was reclassified to existing land uses."

A review of available TGM 10th Edition land use codes finds a small number of potential uses which are summarized in the table below and in the attached PDF.

Land Use	ITE Code	Range of Sizes	Number of Studies	Development Size	AM Peak Hour Trip Generation	PM Peak Hour Trip Generation	ITE Land Use Description
Shopping Center	820	7.42-207.98 KSF	147	1,085 KSF	1	4	A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands. Factory outlet center (Land Use 823) is a related use. Additional Data Shopping centers, including neighborhood centers, community centers, regional centers, and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses). Many shopping centers, in addition to the integrated unit of shops in one building or enclosed around a mall, include outparcels (peripheral buildings or pads located on the perimeter of the center adjacent to the streets and major access points). These buildings are typically drive-in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers studied included peripheral buildings, it can be assumed that some of the data show their effect.
Apparel Store	876	66.4 KSF	1	1,085 KSF	1	4	An apparel store is an individual store specializing in the sale of clothing. Department store (Land Use 875) is a related use

Arts and Crafts Store	879	56.55 KSF	1	1,085 KSF	—	7	An arts and crafts store is a free-standing facility that sells art, framing, wall décor, and seasonal merchandise. These stores may provide in-store arts and crafts classes. Arts and crafts stores are sometimes found as separate parcels within a retail complex, with or without their own dedicated offstreet parking.
Mid-Rise Residential with 1st-Floor Commercial	231	422 DU	1	21 DU	6 ¹	8 ¹	Mid-rise residential with 1st-floor commercial are mixed-use multifamily housing buildings that have between three and 10 levels (floors) and include retail space on the first level. These facilities are typically found in dense multi-use urban and center city core settings. Multifamily housing (midrise) (Land Use 221) and high-rise residential with 1st-floor commercial (Land Use 232) are related land uses.

¹ Trip generation includes both Retail and Residential Land Uses

Discussions with ITE staff regarding this issue resulted in the following recommendations:

- The retail portion of the [applicant's] proposed development is small compared to the ITE data sets, and data for Land Uses 876 and 879 is limited to 1 observation. As such, if retail trip generation is estimated separately, the Shopping Center Land Use is the most similar, and appropriate, land use to use for estimating purposes.
- Consideration should be given to using Land Use 231. While this is a new land use (as of the ITE TGM 10th edition) and there is only 1 observation, it is based on Oregon data and this is a 'newer' development type, similar to the [applicant's] proposed development. It is further noted the retail trip generation portion of this land use is less than a stand-alone retail trip generation rate.
- Trip generation data can be obtained via data collection at similar developments based on ITE recommended practice, with the additional ITE staff recommendation the data be collected/characterized using ITE Land Use 231. ITE staff further noted that because the [applicant's] proposed development is small, additional data collection is unlikely to yield significantly different results than to simply use Land Use 231, or Land Uses 221 and 820.

Based on the above information, we recommend assuming Land Use 231. Alternatively, we can continue to use the trip generation methodology/estimates proposed in our scoping letter assuming Land Use 820. Please let us know how you wish for us to proceed.

Thank you,

Chris

Christopher M. Clemow PE, PTOE

Transportation Engineer

cclemow@clemow-associates.com

541-579-8315

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On Tue, Apr 7, 2020 at 1:47 PM Chris Clemow <cclemow@clemow-associates.com> wrote:

Vera,

The following are our comments and additional questions regarding your response:

- The TIS will evaluate the SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts you provided and include a background traffic growth rate.
- It is our understanding City staff will provide further clarification of potential trip credits. The TIS will incorporate these materials when received.
- You have indicated a Shopping Center (ITE Land Use 820) is not acceptable for the proposed commercial use and have requested we assume more appropriate designations better reflecting the proposed uses. We have recently faced this same issue on several other projects in the Portland metro area having a multi-story building with residential over commercial. The following is our response:

Based on the applicant's site plan, there are three (3) commercial spaces totaling 1,085 square feet, resulting in rather small individual spaces. Based on applicant-provided information, the space in the northeast building corner will be used by the owner for property management purposes. The remaining two spaces total approximately 1,150 SF and are of similar size - approximately 575 SF each and tenancy is unknown.

Previously, these retail spaces were commonly characterized as Specialty Retail Center uses in the ITE Trip Generation Manual (TGM) 9th edition - ITE Land Use 826, and 8th Edition - ITE Land Use 81. However, the current ITE TGM 10th Edition eliminated the Specialty Retail Center land use code and includes the statement, "In an effort to continually provide data that accurately reflects the composition of each land use, some data were reassigned to other land uses, corrected from previous editions, or removed from the database. Several land uses were also renumbered to facilitate a more logical group of related land uses. The following list summarizes these changes: ...Specialty Retail Center (826) was removed. Data from the land use was reclassified to existing land uses."

A review of available TGM 10th Edition land use codes finds a small number of potential uses which are summarized in the table below and in the attached PDF.

Land Use	ITE Code	Range of Sizes	Number of Studies	Development Size	AM Peak Hour Trip Generation	PM Peak Hour Trip Generation	ITE Land Use Description
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							In banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers are included peripheral buildings, it can be assumed that some of the data show their effect.
Apparel Store	876	66.4 KSF	1	1,325 KSF	1	4	An apparel store is an individual store specializing in the sale of clothing. Department store (Land Use 875) is a retail store that specializes in the sale of clothing, shoes, and accessories.
Arts and Crafts Store	879	56.55 KSF	1	1,325 KSF	—	7	An arts and crafts store is a free-standing facility that sells art, framing, wall décor, and seasonal merchandise. These stores may provide in-store arts and crafts classes. Arts and crafts stores are sometimes found as separate parcels retail complex, with or without their own dedicated offstreet parking.
Mid-Rise Residential with 1st-Floor Commercial	231	422 DU	1	21 DU	6 ¹	8 ¹	Mid-rise residential with 1st-floor commercial are mixed-use multifamily housing buildings that have between three and six levels (floors) and include retail space on the first level. These facilities are typically found in dense multi-use urban center city core settings. Multifamily housing (midrise) (Land Use 221) and high-rise residential with 1st-floor commercial (Land Use 232) are related land uses.

¹ Trip generation includes both Retail and Residential Land Uses

Discussions with ITE staff regarding this issue resulted in the following recommendations:

- The retail portion of the [applicant's] proposed development is small compared to the ITE data sets, and data for Land Uses 876 and 879 is limited to 1 observation. As such, if retail trip generation is estimated separately, the Shopping Center Land Use is the most similar, and appropriate, land use to use for estimating purposes.
- Consideration should be given to using Land Use 231. While this is a new land use (as of the ITE TGM 10th edition) and there is only 1 observation, it is based on Oregon data and this is a new development type, similar to the [applicant's] proposed development. It is further noted the retail trip generation portion of this land use is less than a stand-alone retail trip generation rate.
- Trip generation data can be obtained via data collection at similar developments based on ITE recommended practices, with the additional ITE staff recommendation the data be collected/characterized as ITE Land Use 231. ITE staff further noted that because the [applicant's] proposed development is small, additional data collection is unlikely to yield significantly different results than to simply use Land Use 231, or Land Uses 221 and 820.

Based on the above information, we recommend assuming Land Use 231. Alternatively, we can continue to use the trip generation methodology/estimates proposed in our scoping letter assuming Land Use 221 and 820. Please let us know how you wish for us to proceed.

Thank you,

Chris

Christopher M. Clemow PE, PTOE

Transportation Engineer

cclemow@clemow-associates.com

541-579-8315

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On Mon, Apr 6, 2020 at 8:36 AM Vera Kollas <KollasV@milwaukieoregon.gov> wrote:

Good morning Valerie,

One of the engineers will respond to your question so you have a specific answer from the Engineering Department.

Thank you,

Vera

VERA KOLIAS, AICP

Associate Planner

she • her • hers

503.786.7453

City of Milwaukie

6101 SE Johnson Creek Blvd • Milwaukie, OR 97206

From: Valerie Hunter <vhproperty@gmail.com>

Sent: Monday, April 6, 2020 8:14

To: Vera Kollas <KollasV@milwaukieoregon.gov>

Cc: Mildred White <mildred@BAMAdesign.com>; Chris Clemow <cclemow@clemow-associates.com>; Aaryn White <aaryn@bamadesign.com>; Steve Adams <AdamsS@milwaukieoregon.gov>; Al

Roller <RollerA@milwaukieoregon.gov>; Dennis Egner <EgnerD@milwaukieoregon.gov>; Dalton Vodden <VoddenD@milwaukieoregon.gov>; undefined <rff@dkassociates.com>

Subject: Re: Milwaukie Mixed-Use Development - Transportation Analysis

This Message originated outside your organization.

Good Morning Vera,

Thank you for your response my team is working on all the items.. but I do have one question about the credits... Can you send me where in your code that it explains them please.. I really find it not a viable option not to give credits for a business that was so long standing and never replaced with another business. I hope to have everything turned into you today from Chris & Mildred.

Valerie S Hunter
Certified REO Specialist-CREO, AREO
ABR, CRS, GRI, E-PRO
H&H Preferred Real Estate

Cell: 541-419-7253
email: vhproperty@gmail.com

<https://www.oregon.gov/rea/licensing/Documents/Initial-Agency-Disclosure-Pamphlet.pdf>

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On Apr 3, 2020, at 2:51 PM, Vera Kolias <KoliasV@milwaukieoregon.gov> wrote:

Hello Mildred and Chris,

We have discussed the March 4 scoping letter that was submitted, which provided an argument for a limited TIS scope for the proposed project. The following summarizes our discussion:

The required TIS must address the full scope that was provided by the city. However:

- Study intersections to include only: SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St
- Attached please find a preliminary traffic study completed in October 2018. Please use this document as a source for trip counts, but they should be modified by the standard 2-3% increase per year to bring them up to date.
- You propose to claim trip credits for the prior use on the site. However, it has been closed for more than 2 years, so those credits are not available.
- You propose to use ITE code 820 (shopping center) for the commercial uses on the site. This is not an acceptable land use code for the proposed development. Please use a more appropriate designation that better reflects the proposed uses in the development.

Please let me know if you have any questions.

Stay healthy and safe,

Vera

Vera Kolias, AICP
Associate Planner
she/her/hers
503.786.7653
City of Milwaukie
6101 SE Johnson Creek Blvd., Milwaukie, OR 97206

From: Mildred White <mildred@BAMAdesign.com>
Sent: Tuesday, March 24, 2020 8:09 PM
To: Vera Kolias <KoliasV@milwaukieoregon.gov>; 'Chris Clemow' <cclemow@clemow-associates.com>; Alex Roller <RollerA@milwaukieoregon.gov>; Steve Adams <AdamsS@milwaukieoregon.gov>
Cc: 'Auryn White' <auryn@bamadesign.com>; 'Valerie Hunter' <vhproperty@gmail.com>
Subject: RE: Milwaukie Mixed-Use Development - Transportation Analysis

This Message originated outside your organization.

Good evening Vera,

I hope you are doing well and staying healthy. Just wanted to reach out to you and see if there's been an update on this project from the engineering department over the last week.

Thanks for your assistance,
Mildred

Mildred White, AIA, NCARB

Principal
BAMA Architecture and Design, LLC

7350 SE Milwaukie Avenue

Portland, Oregon 97202
office: 503-253-4283

Cell: 503-380-2852
Mildred@BAMAdesign.com

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PLEASE NOTE, ALTHOUGH BAMA ARCHITECTURE IS CONTINUING TO WORK AS NORMAL, OUR PHYSICAL OFFICE IS CURRENTLY CLOSED FOR HEALTH PRECAUTIONS, PLEASE EMAIL OR CALL MY CELL PHONE. THANK YOU FOR YOUR UNDERSTANDING.

From: Vera Kolas
Sent: Tuesday, March 17, 2020 1:41 PM
To: Chris Clemow <clemow@cleomow-associates.com>; Alex Roller <RollerA@milwaukieoregon.gov>; Steve Adams <AdamsS@milwaukieoregon.gov>
Cc: Auryrn White <auryrn@bamadesign.com>; Mildred White <mildred@bamadesign.com>; Valerie Hunter <vhproperty@gmail.com>
Subject: Re: Milwaukie Mixed-Use Development - Transportation Analysis

Hello Chris,

Given the Coronavirus situation I just wanted to check in with you and let you know that the Engineering Department is reviewing the scoping letter and we will respond soon.

-Vera

Vera Kolas, AICP
Associate Planner
she/her/hers
503.786.7653
City of Milwaukie
6101 SE Johnson Creek Blvd., Milwaukie, OR 97206

From: Chris Clemow <clemow@cleomow-associates.com>
Sent: Thursday, March 5, 2020 10:22 AM
To: Vera Kolas <KolasV@milwaukieoregon.gov>; Alex Roller <RollerA@milwaukieoregon.gov>
Cc: Auryrn White <auryrn@bamadesign.com>; Mildred White <mildred@bamadesign.com>; Valerie Hunter <vhproperty@gmail.com>
Subject: Milwaukie Mixed-Use Development - Transportation Analysis

Vera and Alex,

Attached is a copy of our Transportation Impact Study (TIS) scoping letter supporting the proposed Milwaukie Mixed-Use development that addresses the January 23, 2020 City of Milwaukie Transportation Impact Study Checklist prepared by Amanda Deering of DKS Associates.

Please note, the development size has decreased from that contemplated by the City checklist, resulting in decreased transportation system impacts and a decreased scope of work.

Please review the attached materials and provide necessary comments so that we can prepare the TIS.

Thank you,
Chris

Christopher M. Clemow PE, PTOE
Transportation Engineer
cclemow@cleomow-associates.com

541-579-8315

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<Hillside Master Plan Draft 10-8.pdf>

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Appendix C



January 1, 2013 through December 31, 2017

INTERSECTION CRASH RATES

Intersection	Crashes						PM Entering Volume	ADT (10xPM)	AADT (365xADT)	Annual Crashes	Crash Rate (crashes/MEV)	Reference Population	90th%ile Crash Rate	Over or Under Crash
	2013	2014	2015	2016	2017	Total								
SE 32nd Avenue / SE Olsen Street	0	0	1	0	0	1	603	6,030	2,200,950	0.20	0.091	Urban 4SG	0.860	Under
SE 32nd Avenue / SE Harrison Street	1	0	2	4	3	10	1,375	13,750	5,018,750	2.00	0.399	Urban 4ST	0.408	Under

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
 TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
 CRASH SUMMARIES BY YEAR BY COLLISION TYPE

SE 32nd Ave & SE Olsen St
 January 1, 2013 through December 31, 2017

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2015														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	1	0	1	0	1	0	1
2015 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	1
FINAL TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	1

Disclaimers: Effective 2016, collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
 TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
 CRASH SUMMARIES BY YEAR BY COLLISION TYPE

SE 32nd Ave & SE Harrison St
 January 1, 2013 through December 31, 2017

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2017														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	0	1	1	0	1	0	1
PEDESTRIAN	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2017 TOTAL	0	1	1	2	0	1	0	1	1	2	0	2	0	1
YEAR: 2016														
ANGLE	0	2	0	2	0	5	0	1	1	1	1	2	0	0
TURNING MOVEMENTS	0	2	0	2	0	2	0	1	1	2	0	2	0	0
2016 TOTAL	0	4	0	4	0	7	0	2	2	3	1	4	0	0
YEAR: 2015														
TURNING MOVEMENTS	0	0	2	2	0	0	0	2	0	1	1	2	0	0
2015 TOTAL	0	0	2	2	0	0	0	2	0	1	1	2	0	0
YEAR: 2014														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	1	0	1	0	1	0	0	1	0	1	1	0	0
2014 TOTAL	0	2	0	2	0	2	0	1	1	1	1	2	0	0
YEAR: 2013														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	1	0	1	0	1	0	1
TURNING MOVEMENTS	0	1	1	2	0	3	0	2	0	2	0	2	0	0
2013 TOTAL	0	1	2	3	0	3	0	3	0	3	0	3	0	1
FINAL TOTAL	0	8	5	13	0	13	0	9	4	10	3	13	0	2

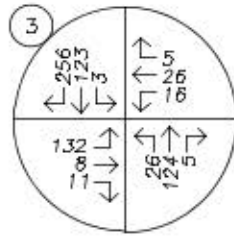
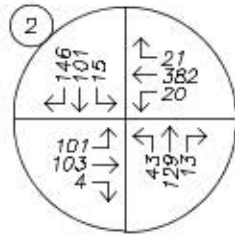
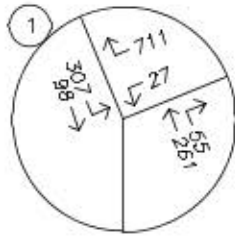
Disclaimers: Effective 2016, collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

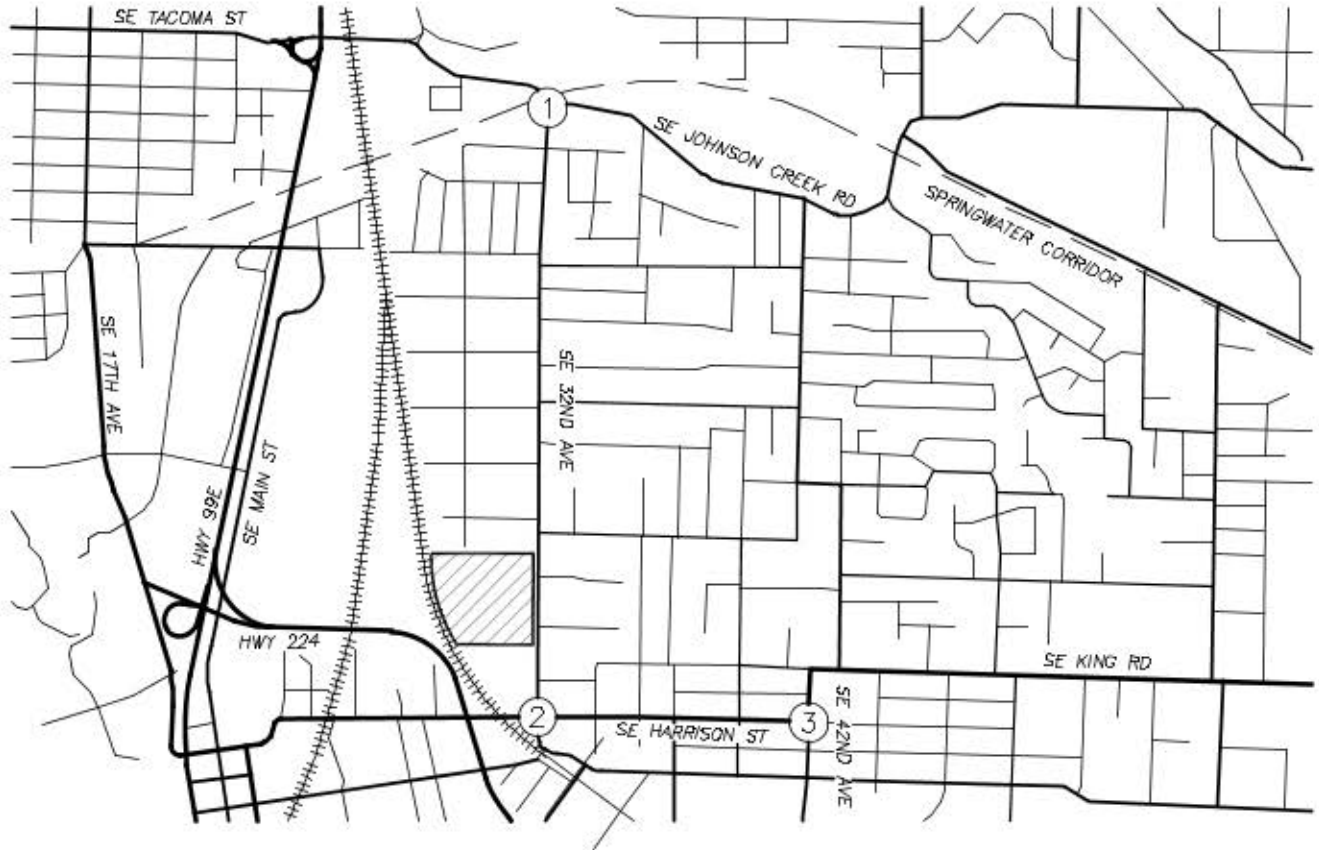
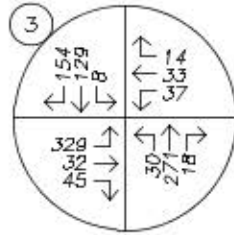
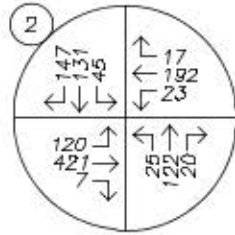
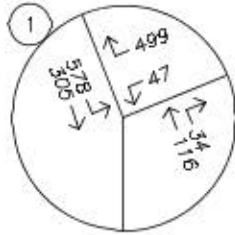
Appendix D



AM PEAK HOUR



PM PEAK HOUR

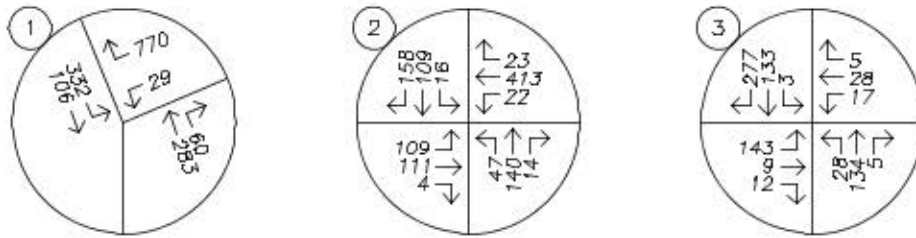


TRAFFIC VOLUMES
Existing Conditions
AM & PM Peak Hours

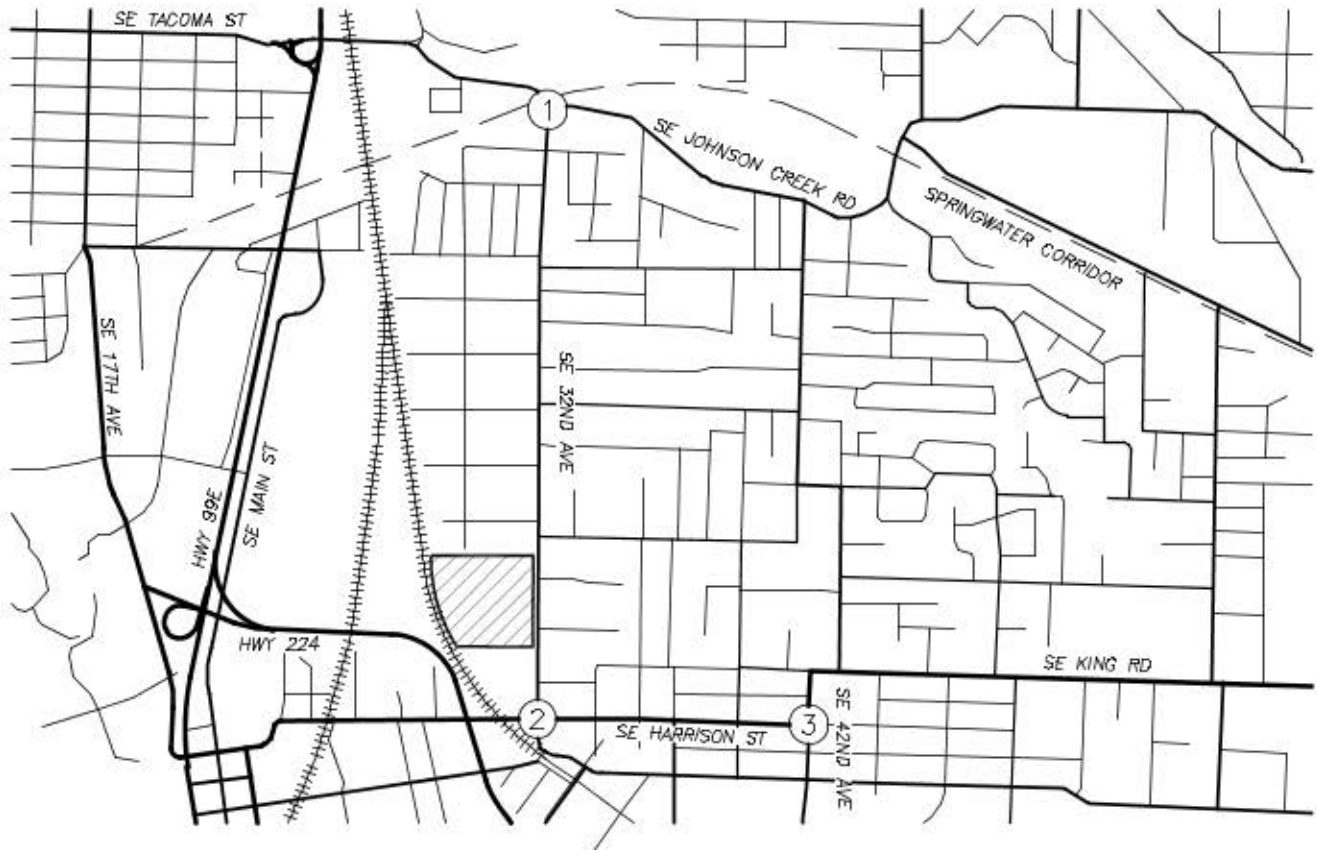
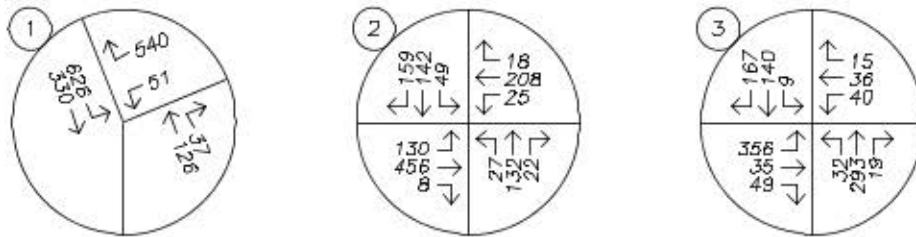


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AM PEAK HOUR



PM PEAK HOUR



TRAFFIC VOLUMES
2022 Background Conditions
AM & PM Peak Hours



Appendix E



HCM 6th TWSC
2: SE 32nd Avenue & SE Olsen Street

05/06/2020

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	5	10	0	16	5	297	5	5	203	5
Future Vol, veh/h	16	0	5	10	0	16	5	297	5	5	203	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	0	6	11	0	18	6	330	6	6	226	6

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	595	589	229	589	589	333	232	0	0	336	0	0
Stage 1	241	241	-	345	345	-	-	-	-	-	-	-
Stage 2	354	348	-	244	244	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	416	421	810	420	421	709	1336	-	-	1223	-	-
Stage 1	762	706	-	671	636	-	-	-	-	-	-	-
Stage 2	663	634	-	760	704	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	402	416	810	413	416	709	1336	-	-	1223	-	-
Mov Cap-2 Maneuver	402	416	-	413	416	-	-	-	-	-	-	-
Stage 1	757	702	-	667	632	-	-	-	-	-	-	-
Stage 2	642	630	-	750	700	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.3		11.8		0.1		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1336	-	-	457	556	1223	-
HCM Lane V/C Ratio	0.004	-	-	0.051	0.052	0.005	-
HCM Control Delay (s)	7.7	0	-	13.3	11.8	8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

HCM 6th Signalized Intersection Summary
 4: SE 32nd Avenue & SE Harrison Street

05/06/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	107	4	21	397	22	45	134	14	16	105	152
Future Volume (veh/h)	105	107	4	21	397	22	45	134	14	16	105	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	119	4	23	441	24	50	149	16	18	117	169
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	646	22	48	529	29	196	530	608	123	648	608
Arrive On Green	0.08	0.36	0.36	0.03	0.30	0.30	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1781	1799	60	1781	1757	96	286	1380	1585	118	1690	1585
Grp Volume(v), veh/h	117	0	123	23	0	465	199	0	16	135	0	169
Grp Sat Flow(s),veh/h/ln	1781	0	1859	1781	0	1853	1667	0	1585	1808	0	1585
Q Serve(g_s), s	3.4	0.0	2.4	0.7	0.0	12.2	0.0	0.0	0.3	0.0	0.0	3.8
Cycle Q Clear(g_c), s	3.4	0.0	2.4	0.7	0.0	12.2	3.8	0.0	0.3	2.5	0.0	3.8
Prop In Lane	1.00		0.03	1.00		0.05	0.25		1.00	0.13		1.00
Lane Grp Cap(c), veh/h	151	0	667	48	0	558	726	0	608	772	0	608
V/C Ratio(X)	0.77	0.00	0.18	0.48	0.00	0.83	0.27	0.00	0.03	0.17	0.00	0.28
Avail Cap(c_a), veh/h	273	0	803	188	0	711	726	0	608	772	0	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	11.5	25.0	0.0	17.0	11.1	0.0	10.0	10.7	0.0	11.1
Incr Delay (d2), s/veh	8.2	0.0	0.1	7.1	0.0	6.7	0.9	0.0	0.1	0.5	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.9	0.4	0.0	5.7	1.6	0.0	0.1	1.0	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	0.0	11.6	32.1	0.0	23.7	12.0	0.0	10.1	11.2	0.0	12.2
LnGrp LOS	C	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		240			488			215			304	
Approach Delay, s/veh		21.3			24.1			11.9			11.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.0	5.4	22.7		24.0	8.4	19.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		20.0	5.5	22.5		20.0	8.0	20.0				
Max Q Clear Time (g_c+I1), s		5.8	2.7	4.4		5.8	5.4	14.2				
Green Ext Time (p_c), s		1.0	0.0	0.6		1.1	0.1	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			18.5									
HCM 6th LOS			B									

HCM 6th TWSC
2: SE 32nd Avenue & SE Olsen Street

05/06/2020

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	0	5	10	0	17	5	309	5	5	211	5
Future Vol, veh/h	17	0	5	10	0	17	5	309	5	5	211	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	0	6	11	0	19	6	343	6	6	234	6

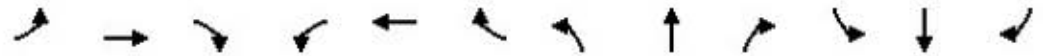
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	617	610	237	610	610	346	240	0	0	349	0	0
Stage 1	249	249	-	358	358	-	-	-	-	-	-	-
Stage 2	368	361	-	252	252	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	402	409	802	407	409	697	1327	-	-	1210	-	-
Stage 1	755	701	-	660	628	-	-	-	-	-	-	-
Stage 2	652	626	-	752	698	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	388	404	802	400	404	697	1327	-	-	1210	-	-
Mov Cap-2 Maneuver	388	404	-	400	404	-	-	-	-	-	-	-
Stage 1	750	697	-	656	624	-	-	-	-	-	-	-
Stage 2	631	622	-	742	694	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.7		12		0.1		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	440	547	1210	-
HCM Lane V/C Ratio	0.004	-	-	0.056	0.055	0.005	-
HCM Control Delay (s)	7.7	0	-	13.7	12	8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

HCM 6th Signalized Intersection Summary
4: SE 32nd Avenue & SE Harrison Street

05/06/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	111	4	22	413	23	47	139	15	17	109	158
Future Volume (veh/h)	109	111	4	22	413	23	47	139	15	17	109	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	123	4	24	459	26	52	154	17	19	121	176
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	660	21	50	538	30	195	527	611	123	647	611
Arrive On Green	0.09	0.37	0.37	0.03	0.31	0.31	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1801	59	1781	1753	99	292	1366	1585	124	1679	1585
Grp Volume(v), veh/h	121	0	127	24	0	485	206	0	17	140	0	176
Grp Sat Flow(s),veh/h/ln	1781	0	1860	1781	0	1852	1658	0	1585	1803	0	1585
Q Serve(g_s), s	3.6	0.0	2.5	0.7	0.0	13.4	0.0	0.0	0.4	0.0	0.0	4.2
Cycle Q Clear(g_c), s	3.6	0.0	2.5	0.7	0.0	13.4	4.1	0.0	0.4	2.7	0.0	4.2
Prop In Lane	1.00		0.03	1.00		0.05	0.25		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	155	0	681	50	0	568	722	0	611	770	0	611
V/C Ratio(X)	0.78	0.00	0.19	0.48	0.00	0.85	0.29	0.00	0.03	0.18	0.00	0.29
Avail Cap(c_a), veh/h	229	0	734	180	0	680	722	0	611	770	0	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	11.7	26.1	0.0	17.7	11.6	0.0	10.4	11.1	0.0	11.6
Incr Delay (d2), s/veh	9.7	0.0	0.1	7.1	0.0	8.9	1.0	0.0	0.1	0.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.0	0.4	0.0	6.6	1.7	0.0	0.1	1.1	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	0.0	11.9	33.1	0.0	26.6	12.5	0.0	10.5	11.6	0.0	12.8
LnGrp LOS	C	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		248			509			223				316
Approach Delay, s/veh		22.7			26.9			12.4				12.3
Approach LOS		C			C			B				B
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		25.0	5.5	23.9		25.0	8.8	20.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		21.0	5.5	21.5		21.0	7.0	20.0				
Max Q Clear Time (g_c+I1), s		6.1	2.7	4.5		6.2	5.6	15.4				
Green Ext Time (p_c), s		1.1	0.0	0.6		1.2	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay			20.0									
HCM 6th LOS			C									

HCM 6th TWSC
2: SE 32nd Avenue & SE Olsen Street

05/06/2020

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	0	7	10	0	17	5	309	5	5	211	5
Future Vol, veh/h	19	0	7	10	0	17	5	309	5	5	211	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	0	8	11	0	19	6	343	6	6	234	6

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	617	610	237	611	610	346	240	0	0	349	0	0
Stage 1	249	249	-	358	358	-	-	-	-	-	-	-
Stage 2	368	361	-	253	252	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	402	409	802	406	409	697	1327	-	-	1210	-	-
Stage 1	755	701	-	660	628	-	-	-	-	-	-	-
Stage 2	652	626	-	751	698	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	388	404	802	398	404	697	1327	-	-	1210	-	-
Mov Cap-2 Maneuver	388	404	-	398	404	-	-	-	-	-	-	-
Stage 1	750	697	-	656	624	-	-	-	-	-	-	-
Stage 2	631	622	-	739	694	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.5		12		0.1		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	451	545	1210	-
HCM Lane V/C Ratio	0.004	-	-	0.064	0.055	0.005	-
HCM Control Delay (s)	7.7	0	-	13.5	12	8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

HCM 6th Signalized Intersection Summary
 4: SE 32nd Avenue & SE Harrison Street

05/06/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	111	4	22	413	23	47	139	15	18	109	159
Future Volume (veh/h)	109	111	4	22	413	23	47	139	15	18	109	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	123	4	24	459	26	52	154	17	20	121	177
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	660	21	50	538	30	195	527	611	127	642	611
Arrive On Green	0.09	0.37	0.37	0.03	0.31	0.31	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1801	59	1781	1753	99	292	1366	1585	133	1666	1585
Grp Volume(v), veh/h	121	0	127	24	0	485	206	0	17	141	0	177
Grp Sat Flow(s),veh/h/ln	1781	0	1860	1781	0	1852	1658	0	1585	1799	0	1585
Q Serve(g_s), s	3.6	0.0	2.5	0.7	0.0	13.4	0.0	0.0	0.4	0.0	0.0	4.2
Cycle Q Clear(g_c), s	3.6	0.0	2.5	0.7	0.0	13.4	4.1	0.0	0.4	2.7	0.0	4.2
Prop In Lane	1.00		0.03	1.00		0.05	0.25		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	155	0	681	50	0	568	722	0	611	769	0	611
V/C Ratio(X)	0.78	0.00	0.19	0.48	0.00	0.85	0.29	0.00	0.03	0.18	0.00	0.29
Avail Cap(c_a), veh/h	229	0	734	180	0	680	722	0	611	769	0	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	11.7	26.1	0.0	17.7	11.6	0.0	10.4	11.1	0.0	11.6
Incr Delay (d2), s/veh	9.7	0.0	0.1	7.1	0.0	8.9	1.0	0.0	0.1	0.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.0	0.4	0.0	6.6	1.7	0.0	0.1	1.1	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	0.0	11.9	33.1	0.0	26.6	12.5	0.0	10.5	11.6	0.0	12.8
LnGrp LOS	C	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		248			509			223				318
Approach Delay, s/veh		22.7			26.9			12.4				12.3
Approach LOS		C			C			B				B
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		25.0	5.5	23.9		25.0	8.8	20.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		21.0	5.5	21.5		21.0	7.0	20.0				
Max Q Clear Time (g_c+I1), s		6.1	2.7	4.5		6.2	5.6	15.4				
Green Ext Time (p_c), s		1.1	0.0	0.6		1.2	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay			20.0									
HCM 6th LOS			C									

HCM 6th TWSC
2: SE 32nd Avenue & SE Olsen Street

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Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	5	10	0	10	10	156	5	5	366	10
Future Vol, veh/h	5	0	5	10	0	10	10	156	5	5	366	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	0	6	11	0	11	11	173	6	6	407	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	629	626	413	626	628	176	418	0	0	179	0	0
Stage 1	425	425	-	198	198	-	-	-	-	-	-	-
Stage 2	204	201	-	428	430	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	395	401	639	397	400	867	1141	-	-	1397	-	-
Stage 1	607	586	-	804	737	-	-	-	-	-	-	-
Stage 2	798	735	-	605	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	385	394	639	388	393	867	1141	-	-	1397	-	-
Mov Cap-2 Maneuver	385	394	-	388	393	-	-	-	-	-	-	-
Stage 1	600	582	-	795	729	-	-	-	-	-	-	-
Stage 2	779	727	-	596	580	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	12	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1141	-	-	480	536	1397	-
HCM Lane V/C Ratio	0.01	-	-	0.023	0.041	0.004	-
HCM Control Delay (s)	8.2	0	-	12.7	12	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

HCM 6th Signalized Intersection Summary

4: SE 32nd Avenue & SE Harrison Street

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	438	7	24	200	18	26	127	21	47	136	153
Future Volume (veh/h)	125	438	7	24	200	18	26	127	21	47	136	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	487	8	27	222	20	29	141	23	52	151	170
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	602	10	56	437	39	151	626	628	212	557	628
Arrive On Green	0.10	0.33	0.33	0.03	0.26	0.26	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1781	1835	30	1781	1691	152	164	1580	1585	303	1406	1585
Grp Volume(v), veh/h	139	0	495	27	0	242	170	0	23	203	0	170
Grp Sat Flow(s),veh/h/ln	1781	0	1865	1781	0	1843	1745	0	1585	1709	0	1585
Q Serve(g_s), s	3.7	0.0	11.9	0.7	0.0	5.5	0.0	0.0	0.4	0.0	0.0	3.6
Cycle Q Clear(g_c), s	3.7	0.0	11.9	0.7	0.0	5.5	3.0	0.0	0.4	3.6	0.0	3.6
Prop In Lane	1.00		0.02	1.00		0.08	0.17		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	180	0	612	56	0	477	777	0	628	769	0	628
V/C Ratio(X)	0.77	0.00	0.81	0.48	0.00	0.51	0.22	0.00	0.04	0.26	0.00	0.27
Avail Cap(c_a), veh/h	326	0	872	199	0	730	777	0	628	769	0	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	15.1	23.4	0.0	15.6	9.9	0.0	9.1	10.1	0.0	10.0
Incr Delay (d2), s/veh	6.9	0.0	3.8	6.3	0.0	0.8	0.6	0.0	0.1	0.8	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	5.0	0.4	0.0	2.2	1.2	0.0	0.1	1.4	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	18.9	29.8	0.0	16.4	10.5	0.0	9.2	10.9	0.0	11.1
LnGrp LOS	C	A	B	C	A	B	B	A	A	B	A	B
Approach Vol, veh/h		634			269			193			373	
Approach Delay, s/veh		21.0			17.7			10.4			11.0	
Approach LOS		C			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	5.5	20.2		23.5	9.0	16.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.5	5.5	23.0		19.5	9.0	19.5				
Max Q Clear Time (g_c+I1), s		5.0	2.7	13.9		5.6	5.7	7.5				
Green Ext Time (p_c), s		0.9	0.0	2.2		1.5	0.1	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	5	10	0	10	10	162	5	5	381	10
Future Vol, veh/h	5	0	5	10	0	10	10	162	5	5	381	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	0	6	11	0	11	11	180	6	6	423	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	652	649	429	649	651	183	434	0	0	186	0	0
Stage 1	441	441	-	205	205	-	-	-	-	-	-	-
Stage 2	211	208	-	444	446	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	381	389	626	383	388	859	1126	-	-	1388	-	-
Stage 1	595	577	-	797	732	-	-	-	-	-	-	-
Stage 2	791	730	-	593	574	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	371	382	626	375	381	859	1126	-	-	1388	-	-
Mov Cap-2 Maneuver	371	382	-	375	381	-	-	-	-	-	-	-
Stage 1	588	574	-	788	724	-	-	-	-	-	-	-
Stage 2	772	722	-	584	571	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	12.2	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1126	-	-	466	522	1388	-
HCM Lane V/C Ratio	0.01	-	-	0.024	0.043	0.004	-
HCM Control Delay (s)	8.2	0	-	12.9	12.2	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

HCM 6th Signalized Intersection Summary
 4: SE 32nd Avenue & SE Harrison Street

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	456	7	25	208	19	27	132	22	49	141	159
Future Volume (veh/h)	130	456	7	25	208	19	27	132	22	49	141	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	144	507	8	28	231	21	30	147	24	54	157	177
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	619	10	57	447	41	148	617	619	208	548	619
Arrive On Green	0.10	0.34	0.34	0.03	0.26	0.26	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1836	29	1781	1689	154	162	1581	1585	302	1405	1585
Grp Volume(v), veh/h	144	0	515	28	0	252	177	0	24	211	0	177
Grp Sat Flow(s),veh/h/ln	1781	0	1865	1781	0	1843	1743	0	1585	1707	0	1585
Q Serve(g_s), s	3.9	0.0	12.6	0.8	0.0	5.8	0.0	0.0	0.5	0.0	0.0	3.8
Cycle Q Clear(g_c), s	3.9	0.0	12.6	0.8	0.0	5.8	3.2	0.0	0.5	3.9	0.0	3.8
Prop In Lane	1.00		0.02	1.00		0.08	0.17		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	186	0	629	57	0	488	765	0	619	757	0	619
V/C Ratio(X)	0.77	0.00	0.82	0.49	0.00	0.52	0.23	0.00	0.04	0.28	0.00	0.29
Avail Cap(c_a), veh/h	321	0	859	196	0	719	765	0	619	757	0	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	15.2	23.8	0.0	15.6	10.3	0.0	9.4	10.5	0.0	10.4
Incr Delay (d2), s/veh	6.7	0.0	4.6	6.3	0.0	0.8	0.7	0.0	0.1	0.9	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.5	0.4	0.0	2.3	1.3	0.0	0.2	1.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	0.0	19.7	30.0	0.0	16.5	11.0	0.0	9.5	11.4	0.0	11.6
LnGrp LOS	C	A	B	C	A	B	B	A	A	B	A	B
Approach Vol, veh/h		659			280			201			388	
Approach Delay, s/veh		21.6			17.8			10.8			11.5	
Approach LOS		C			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	5.6	20.8		23.5	9.2	17.2				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.5	5.5	23.0		19.5	9.0	19.5				
Max Q Clear Time (g_c+I1), s		5.2	2.8	14.6		5.9	5.9	7.8				
Green Ext Time (p_c), s		0.9	0.0	2.2		1.6	0.1	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			16.9									
HCM 6th LOS			B									

HCM 6th TWSC
2: SE 32nd Avenue & SE Olsen Street

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Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	6	10	0	10	11	162	5	5	381	12
Future Vol, veh/h	6	0	6	10	0	10	11	162	5	5	381	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	7	11	0	11	12	180	6	6	423	13

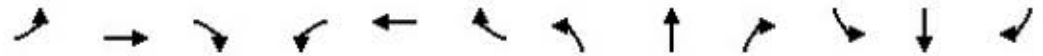
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	655	652	430	652	655	183	436	0	0	186	0	0
Stage 1	442	442	-	207	207	-	-	-	-	-	-	-
Stage 2	213	210	-	445	448	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	379	387	625	381	386	859	1124	-	-	1388	-	-
Stage 1	594	576	-	795	731	-	-	-	-	-	-	-
Stage 2	789	728	-	592	573	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	369	380	625	372	379	859	1124	-	-	1388	-	-
Mov Cap-2 Maneuver	369	380	-	372	379	-	-	-	-	-	-	-
Stage 1	587	573	-	785	722	-	-	-	-	-	-	-
Stage 2	769	719	-	582	570	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13		12.2		0.5		0.1	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1124	-	-	464	519	1388	-
HCM Lane V/C Ratio	0.011	-	-	0.029	0.043	0.004	-
HCM Control Delay (s)	8.2	0	-	13	12.2	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

HCM 6th Signalized Intersection Summary
 4: SE 32nd Avenue & SE Harrison Street

05/06/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	456	7	25	208	19	27	132	22	49	141	160
Future Volume (veh/h)	131	456	7	25	208	19	27	132	22	49	141	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	507	8	28	231	21	30	147	24	54	157	178
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	619	10	57	445	40	148	617	619	208	548	619
Arrive On Green	0.11	0.34	0.34	0.03	0.26	0.26	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1836	29	1781	1689	154	162	1580	1585	302	1405	1585
Grp Volume(v), veh/h	146	0	515	28	0	252	177	0	24	211	0	178
Grp Sat Flow(s),veh/h/ln	1781	0	1865	1781	0	1843	1742	0	1585	1707	0	1585
Q Serve(g_s), s	4.0	0.0	12.6	0.8	0.0	5.8	0.0	0.0	0.5	0.0	0.0	3.9
Cycle Q Clear(g_c), s	4.0	0.0	12.6	0.8	0.0	5.8	3.2	0.0	0.5	3.9	0.0	3.9
Prop In Lane	1.00		0.02	1.00		0.08	0.17		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	188	0	629	57	0	486	765	0	619	757	0	619
V/C Ratio(X)	0.77	0.00	0.82	0.49	0.00	0.52	0.23	0.00	0.04	0.28	0.00	0.29
Avail Cap(c_a), veh/h	321	0	859	196	0	719	765	0	619	757	0	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	15.2	23.8	0.0	15.7	10.3	0.0	9.4	10.5	0.0	10.5
Incr Delay (d2), s/veh	6.7	0.0	4.6	6.3	0.0	0.9	0.7	0.0	0.1	0.9	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.5	0.4	0.0	2.3	1.3	0.0	0.2	1.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	19.7	30.0	0.0	16.6	11.0	0.0	9.5	11.4	0.0	11.6
LnGrp LOS	C	A	B	C	A	B	B	A	A	B	A	B
Approach Vol, veh/h		661			280			201			389	
Approach Delay, s/veh		21.6			17.9			10.8			11.5	
Approach LOS		C			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	5.6	20.8		23.5	9.3	17.2				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.5	5.5	23.0		19.5	9.0	19.5				
Max Q Clear Time (g_c+I1), s		5.2	2.8	14.6		5.9	6.0	7.8				
Green Ext Time (p_c), s		0.9	0.0	2.2		1.6	0.1	1.1				
Intersection Summary												
HCM 6th Ctrl Delay				17.0								
HCM 6th LOS				B								

Appendix F





Transportation System Plan

FIGURE 5-1a

PEDESTRIAN MASTER PLAN

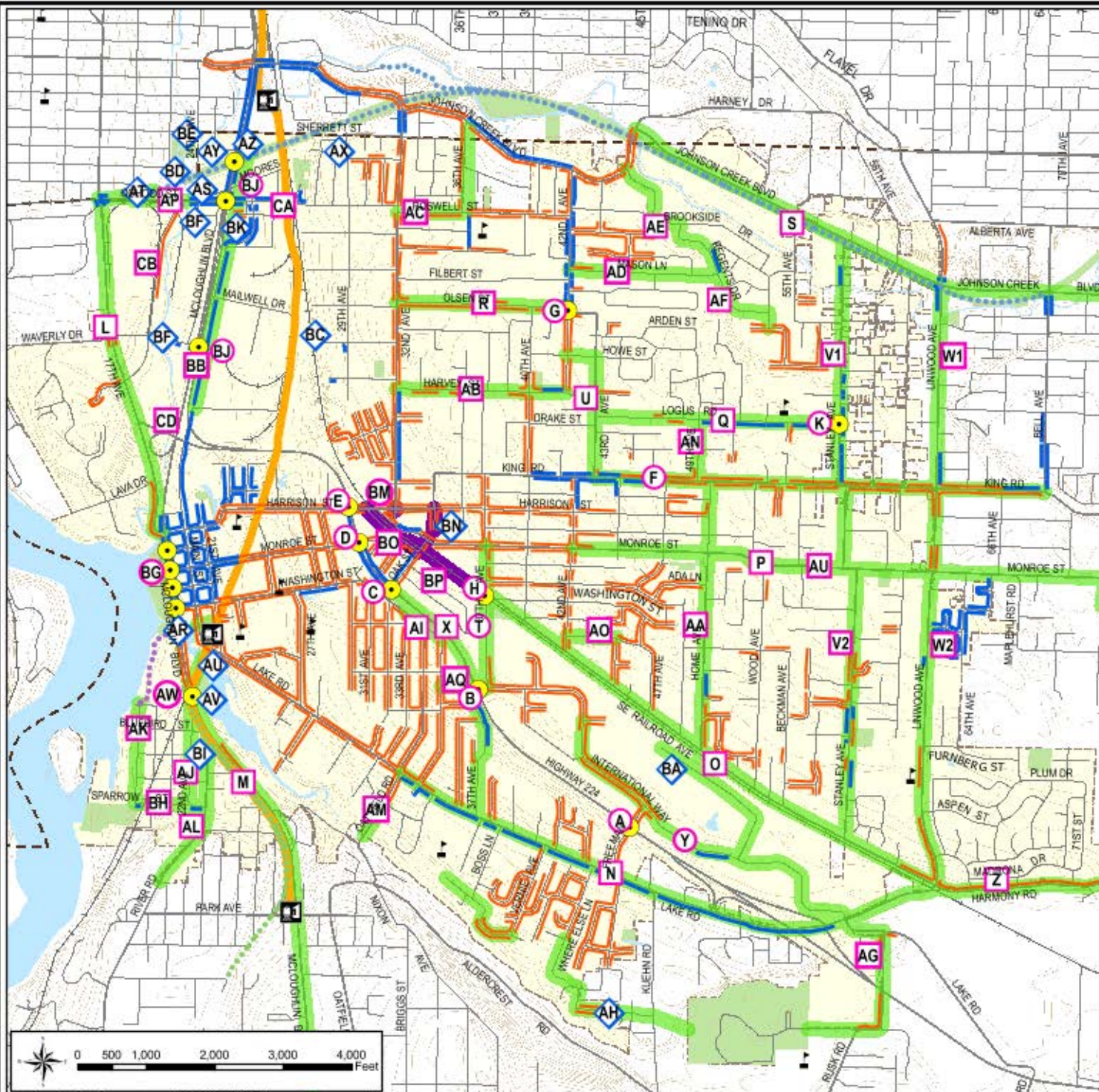
October 2018

LEGEND

Existing Sidewalks		Proposed Improvement	
	< 5 ft width		Pedestrian Intersection Safety Improvement
	5 ft - 10 ft width		Pedestrian Facilities
	Kellogg Creek Trail		Central Milwaukee 2015 TSP Amendments
	Springwater Trail		Light Rail Station
	Trolley Trail		Light Rail Station
	Schools		County Line
	Major Roads		10' Contours
	Streets		City Limits
	Railroad		Light Rail Transit
	Water		Parks

PROPOSED PROJECTS

- Improve Intersection to Increase Pedestrian Safety**
- A** Freeman Way/HWY 224
 - B** 37th Ave/HWY 224
 - C** Oak St/HWY 224
 - D** Monroe St/HWY 224
 - E** Harrison St/HWY 224
 - F** King Rd improvements
 - G** Olsen St/42nd Ave
 - H** Railroad Ave/37th Ave
 - K** Stanley Ave/Logus Rd
 - AW** McLoughlin Blvd and 22nd Ave
 - BG** All McLoughlin crossings
 - BJ** McLoughlin and Ochoco/Milport
- Provide Pedestrian Facilities Where Not Currently Present**
- See Table S-1 for project descriptions L-AG, AI-AQ, BB, BH, CA-CD**
- Enhance Existing Pedestrian Connection**
- AD** Create ped connection from Rowe Middle School to North Clackamas Park
 - AP** Construct pedestrian underpass under HWY 99E at Kellogg Creek
 - AT** Complete Springwater Trail along Ochoco St
 - AL** Construct bike-ped overpass over Kellogg Creek
 - AV** Construct Kronberg Park Trail
 - AX** Pave connection to Springwater Trail at 29th Ave and Sherrett
 - AY** Improve connection from Springwater Corridor to Pendleton Site
 - AZ** Construct stairs to connect Springwater Corridor to LRT Station
 - BA** Establish bike-ped connection across Railroad Ave and tracks
 - BC** Establish bike-ped connection over railroad tracks and LRT
 - BD** Construct stairs from Springwater Corridor to McLoughlin Blvd
 - BE** Construct bike-ped bridge over Johnson Creek along Oatsop St at 23rd Ave to connect to LRT station
 - BF** Improve bike-ped connection to neighborhoods west of station
 - BI** Establish bike-ped connection over McLoughlin at River Rd
 - BJ** Establish bike-ped connection to McLoughlin at Stubb St
- Provide Improved Pedestrian Facilities in Central Milwaukee**
- See Table S-1 for project descriptions BM, BN, BO, and BP**





Transportation System Plan

FIGURE 6-8a

BICYCLE MASTER PLAN

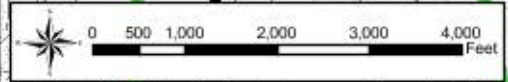
October 2018

LEGEND

Existing Bicycle Facilities		Proposed Improvements	
	Shared Lane		Bicycle Intersection Safety Improvement
	Bicycle Lane		Bicycle Lanes
	Kellogg Creek Trail		Neighborhood Greenway
	Springwater Trail		Central Milwaukee 2015 TSP Amendments
	Trolley Trail		City Limits
	Schools		Light Rail Station
	Major Roads		County Line
	Streets		Water
	Parks		Parks
	Light Rail Transit		Light Rail Transit

PROPOSED PROJECTS

- Improve Intersection to Increase Bicycle Safety**
- A Adams St/21st Ave/Railroad Crossing
 - B Johnson Creek Blvd/Springwater Trail
 - C Johnson Creek Blvd/Linwood Ave
 - D Linwood Ave/King Rd
 - E Linwood Ave/Monroe St
 - F Linwood Ave/Harmony Rd
 - G Washington St/Oak St/Hwy 224
 - H International Way/Lake Rd
 - AF McLoughlin and 22nd
 - AP McLoughlin/Ochoco/Milport
- Provide Improved Bicycle Facilities Where not Currently Present**
- See Table 6-2 for project descriptions B-R, AI, AJ, and BA-BC
- Enhance Existing Bicycle Connection**
- AI Install Neighborhood Greenway treatments at various locations
 - U Construct bike overpass from Railroad Ave to International Way
 - W Improve Springwater Trail paving
 - X Improve Kellogg Creek Trail
 - Y Install Trolley Trail signage
 - Z Fill in gaps in existing bike network with bike lanes or multiuse path. Improve intersection safety on 17th Ave at Hwy 224 and at 99E.
 - AB Complete Springwater Trail along Ochoco St
 - AC Construct Kronberg Park Trail
 - AD Construct bike-ped overpass over Kellogg Creek
 - AE Construct pedestrian underpass under Hwy 99E at Kellogg Creek
 - AG Pave connection to Springwater Trail at 29th Ave and Sherrett
 - AH Improve connection from Springwater Corridor to Pendleton Site
 - AK Establish bike-ped connection over railroad tracks and LRT
 - AL Construct stairs to connect Springwater Corridor to McLoughlin Blvd
 - AM Construct bike-ped bridge over Johnson Creek along Clatsop St at 23rd Ave to connect to LRT station
 - AN Improve bike-ped connection to neighborhoods west of station
 - AO Establish bike-ped path on Sparrow to connect River Rd to Trolley Trail
 - AP Establish bike-ped connection over McLoughlin at River Rd
 - AR Establish bike-ped connection to McLoughlin at Stubb St
- Provide Improved Bicycle Facilities in Central Milwaukee**
- See Table 6-2 for project descriptions AS, AT, AU, AV, and AW



Original Map Created by DKS Associates in 2007. Amended by the City of Milwaukee in 2013, 2015, and 2018



Transportation System Plan

FIGURE 7-3

PUBLIC TRANSIT MASTER PLAN

November 2013

LEGEND

Existing Facilities

- Bus Route Number
- Bus Stop
- Bus Route
- Light Rail Station
- Light Rail Transit
- Park-and-Ride

Proposed Improvements

- Park-and-Ride
- New or Rerouted Bus Route
- Bus Rapid Transit Route

Other Map Features

- Schools
- Major Roads
- Streets
- Railroad
- Kellogg Creek Trail
- Springwater Trail
- Trolley Trail
- County Line
- Water
- Parks
- City Limits



DKS Associates

TRANSPORTATION SOLUTIONS



0 500 1,000 2,000 3,000 4,000 Feet