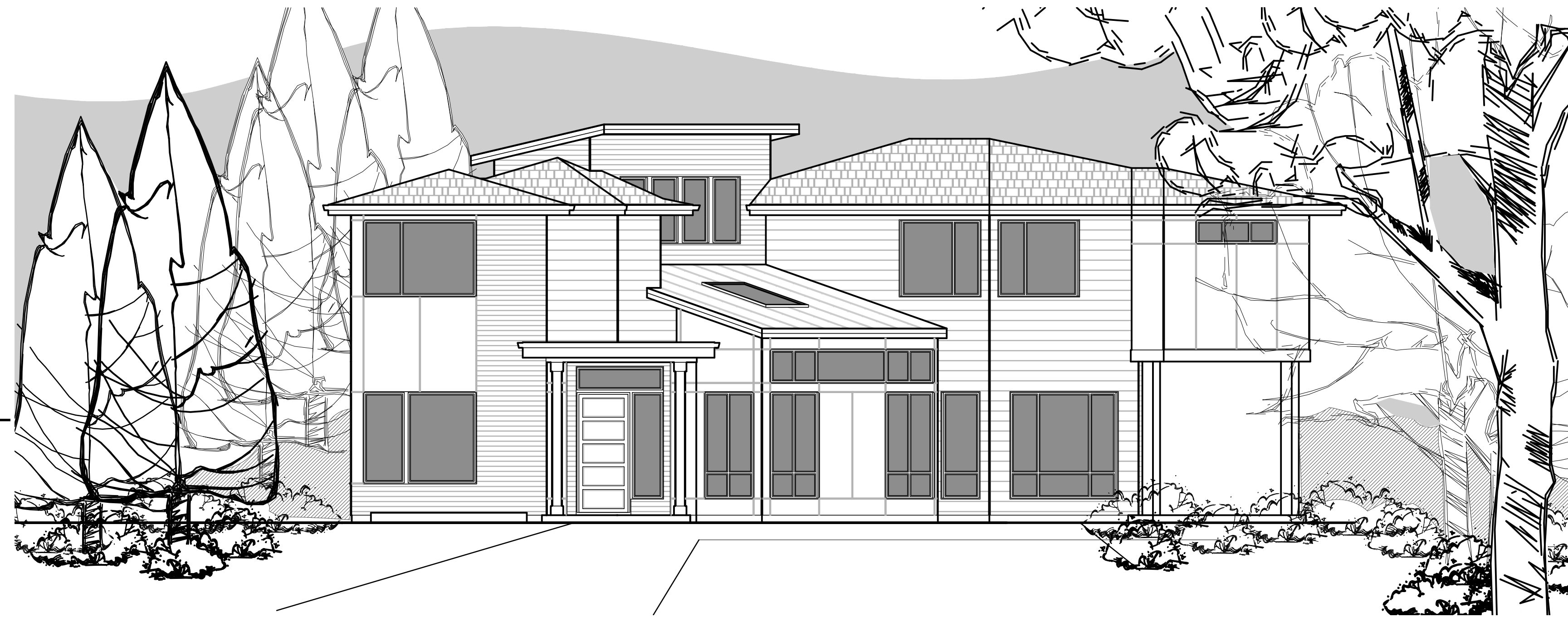




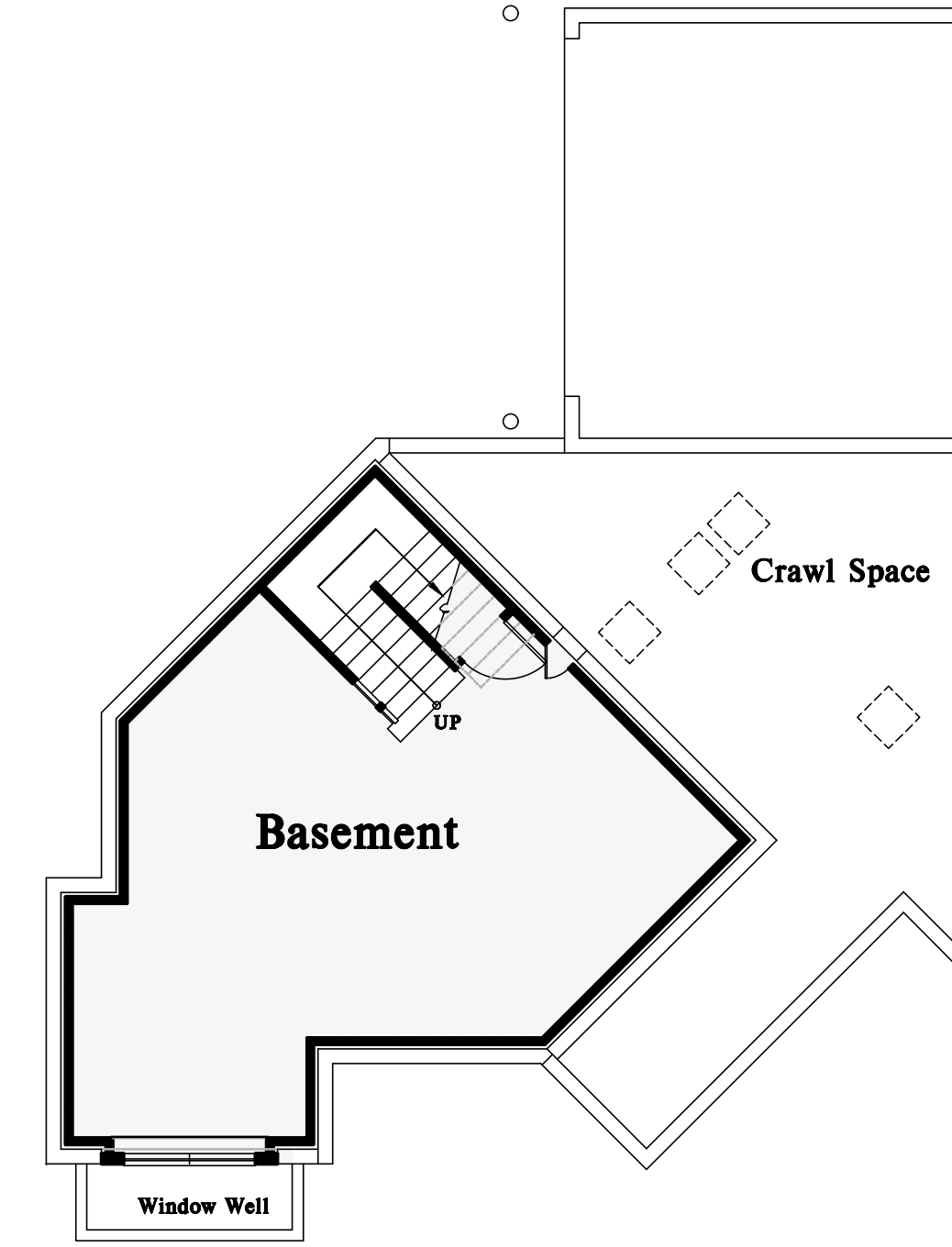
Side Elevation



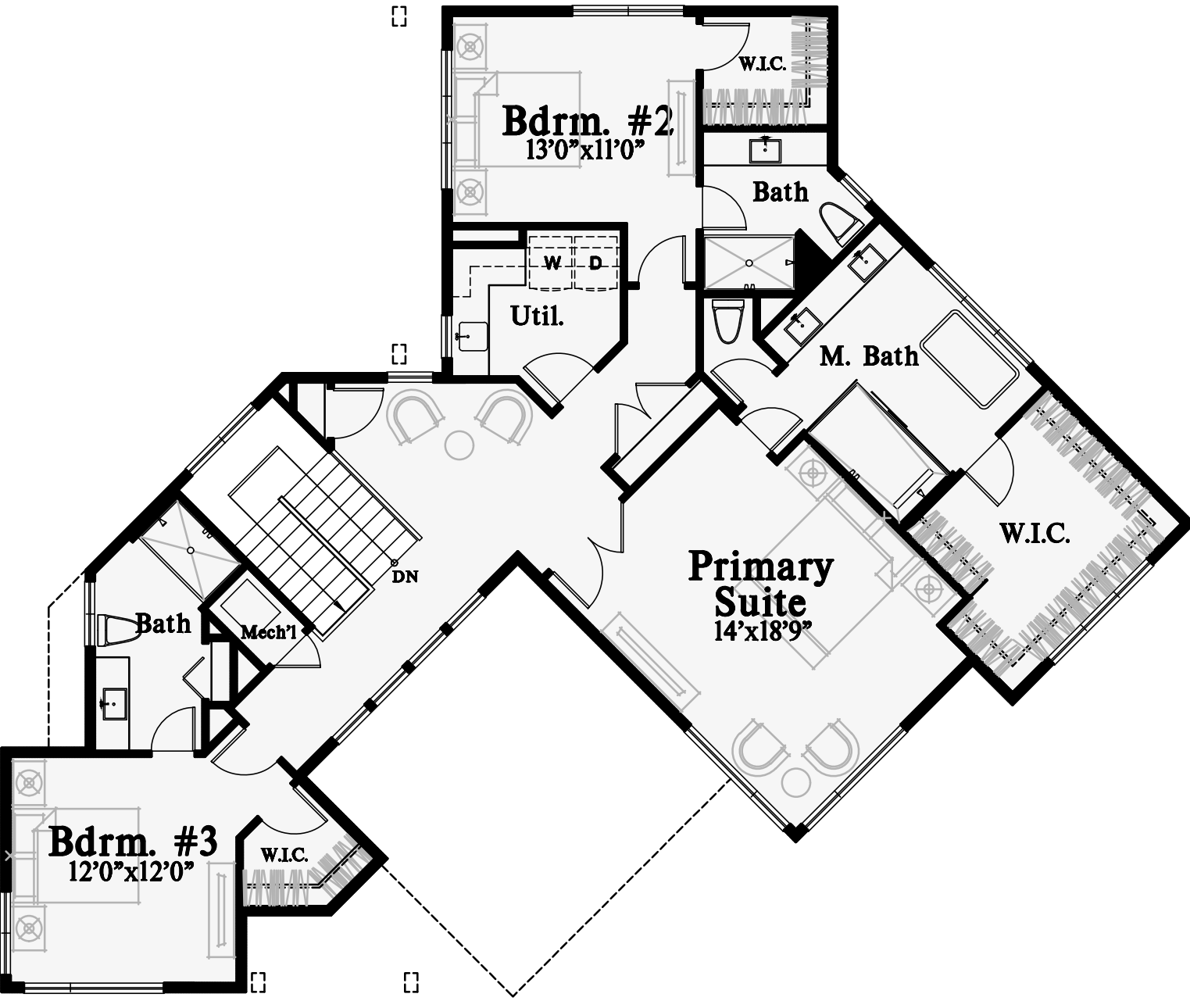
Rear Elevation



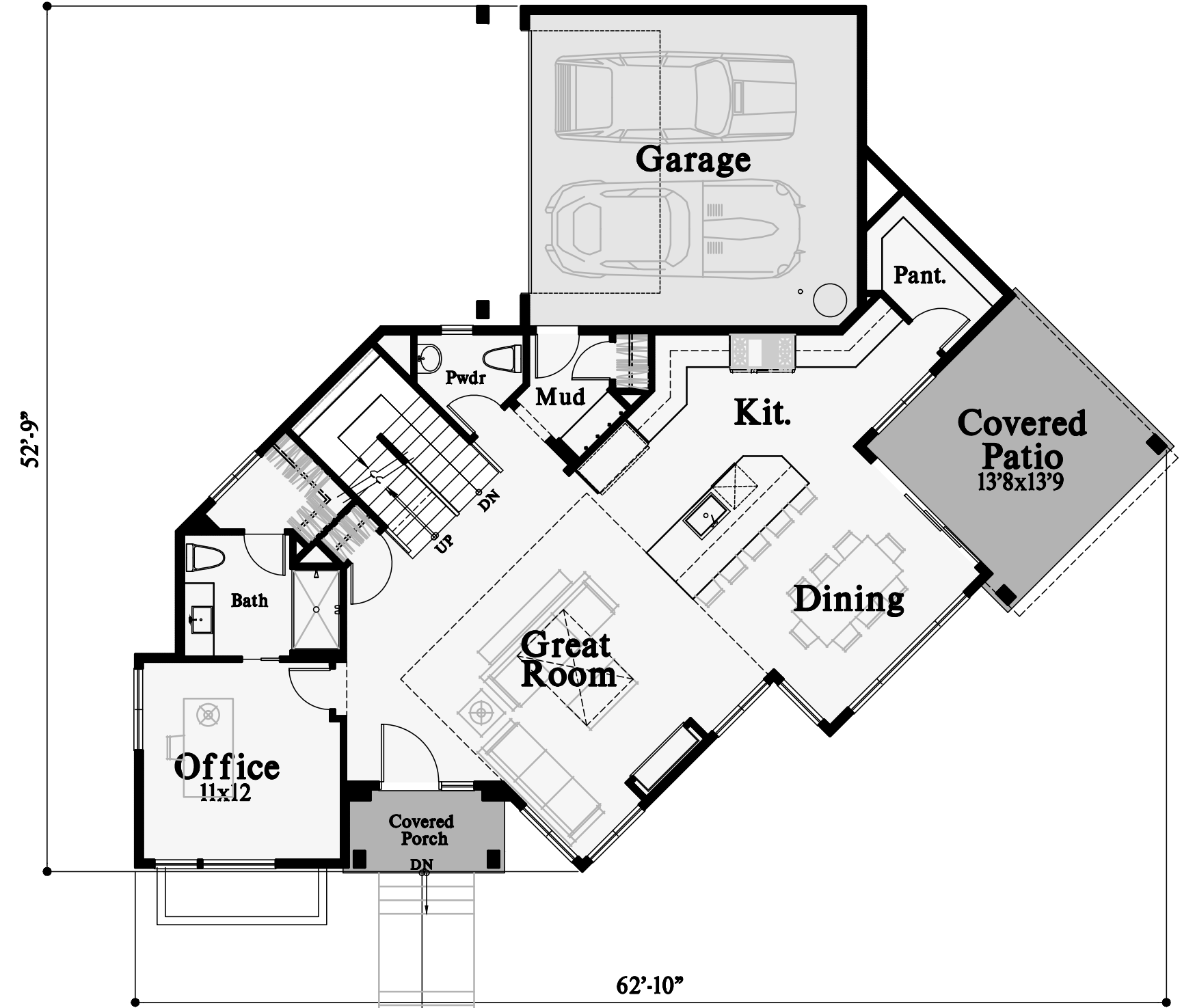
Side Elevation



Basement



Upper Floor Plan



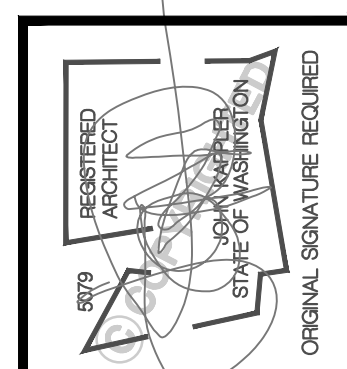
Main Floor Plan

Milestone NW Mercer Island Lot 1

7621 SE 22nd ST. Mercer Island, WA 98040

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SQUARE FOOTAGE	
MAIN FLOOR	1315 SF
UPPER FLOOR	1541 SF
BASEMENT	590 SF
TOTAL	3446 SF
GARAGE	405 SF
PORCH/PATIO	44/170 SF



Date	By	Description
12/2/24	AG	PERMIT SET

Milestone NW
Mercer Island Lot 1

7621 SE 22nd ST. Mercer Island, WA 98040

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Bellevue, WA 98007

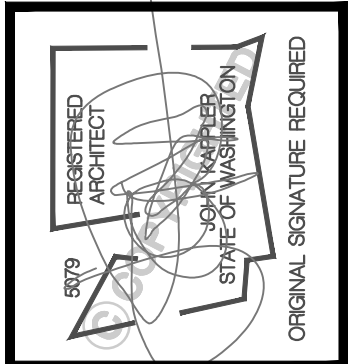
1-800-888-4517

www.kapplichhomeplans.com

TITLE	
JOB NO.:	21022.05
STARTING NO.:	21022.03

SHEET

COVER SHEET



Date	By	Description
12/2/24	AG	PERMIT SET

Milestone NW
Mercer Island Lot 1

7621 SE 22nd ST. Mercer Island, WA 98040

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TITLE
JOB NO.: 2102205
STARTING NO.: 2102203

SHEET
A1

Division I GENERAL REQUIREMENTS

01000 GENERAL

1. This coversheet has been prepared in a generic outline form following the standards set by the Construction Standards Institute (CSI). It is for the convenience of the Contractor/Owner. This outline is intended to work with a material selection list following the CSI format. Not all items are necessarily required to complete this specific project. Coordinate with Contractor/Owner for complete listing of specifications. Within this coversheet it will state, "Coordinate with materials finish selection schedule".

2. These drawings are copyrighted. ARCHITECTURAL INNOVATIONS P.S. retains all rights, ownership and copyright of this design under the federal copyright act. Reproductions of illustrations or working drawings in any form is by authorization of ARCHITECTURAL INNOVATIONS P.S. only.

3. Authorized reproductions must bear the name of ARCHITECTURAL INNOVATIONS P.S.

4. Construction/working drawings by their very nature are diagrammatic and do not purport to show all details or conditions of construction. Questions generally arise to the architectural/design intent and to construction technical detailing within these drawings. As clarifications, interpretations, and revisions are all part of the construction process, ARCHITECTURAL INNOVATIONS P.S. therefore shall not be liable for any direct, indirect, or consequential damages as a result of not participating in the construction process.

5. Do not vary or modify the work shown, except with written instruction from ARCHITECTURAL INNOVATIONS P.S. Report discrepancies and/or omissions to the architect immediately.

6. Due to the nature of construction and the building process there will be bidder design and Contractor/Owner selection of the building products, components, and assemblies. The "Marked" section of drawings is for the Contractor/Owner's responsibility to provide and coordinate specifications, including product selection and installation or assembly. ARCHITECTURAL INNOVATIONS P.S. assumes no liability or responsibility for discrepancies or conflicts which occur through Contractor/Owner specified materials and their respective installation. ARCHITECTURAL INNOVATIONS P.S. assumes no liability or responsibility for any items, which may be called out or referred to by manufacturer as brand name. Items called out are done so for convenience only.

7. Do not scale these drawings for critical dimensions. Verify all dimensions and datum before commencing work and be responsible for their accuracy. Report discrepancies and/or omissions to the architect immediately.

8. The Contractor/Owner is responsible for coordinating work with all trades to ensure proper and adequate interface of all trade works. The contractor shall be responsible for all required safety precautions and procedures required to do the work.

9. Except as specifically defined otherwise, interpretation for all definitions, abbreviations, and supplemental definitions shall follow accepted referenced standards.

10. All work within this contract shall represent that of industry standards for the respective trades in the location in which the project is built.
All references to IRC, IBC, and WSEC are references to the 2021 code updates & WA state Amendments.

02001 MISCELLANEOUS ASSEMBLY REQUIREMENTS

1. Provide crawl space access, minimum 18" x 24" unobstructed access through the floor, 16" x 24" through perimeter walls and below garage access, per IRC section R402.4. Insulate and weather-strip per WSEC R402.2.4. Allow 18" minimum space under wood joists and 17" minimum space under wood girders.

2. Provide attic access, minimum 22" x 30" with 30" minimum headroom, at unobstructed readily accessible opening, per IRC section R807.1. Insulate and weather-strip per WSEC R402.2.4 requirements.

3. Provide ventilation per IRC, as follows:

A) Crawl space ventilation: Minimum net area shall be not less than 1 s.f. per 300 s.f. under floor area. Required openings shall be evenly placed throughout the space and no less than 18" from the wall. The balance of required ventilation to be provided by attic or cornice vents per section R408.2.

B) Attic ventilation: Minimum net area shall be not less than 1 s.f. per 160 s.f. of attic area or 1 s.f. per 300 s.f. of attic area if at least 40 percent, and not more than 50 percent, of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated, and is no more than 3 feet below the ridge or highest point of the space. The balance of required ventilation to be provided by attic or cornice vents per IRC section R806.2 and WSEC requirements.

4. Slope all decks, walls, driveways, exterior door landings, and patios away from building. Minimum 1/4" per foot.

5. Provide approved nurseries or addresses in such a position as to be plainly visible and legible from the street or road fronting the property per IRC section R301.6.

6. Garage/house separation:

A) Garage ceilings separating attic spaces shall be protected with 1/2" Gypsum. When garages are beneath habitable rooms, the ceilings shall be covered with 5/8" type "X" Gypsum on the garage side. Where the separation is a floor/ceiling assembly, the structure shall be protected with 1/2" Gypsum per IRC table R302.6.

B) Door between garage and house shall be a self-closing solid wood core, honeycomb core steel, or 20-minute fire-rated door having a minimum thickness of 1-3/8" per IRC section R302.6.

C) Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gauge sheet steel or other approved material and shall have no openings into the garage per IRC section R302.5.2.

D) Garage floor shall slope to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway.

7. Stair assembly:

A) Minimum headroom height 6'-8" per IRC section R301.2.

B) Minimum stair tread depth 10" with a 3/4" minimum width, measured above handrail height. Maximum riser height: 1-3/4" per IRC sections R301.2 & R301.6.

C) Top of handrail shall be 34" minimum and 38" maximum above tread nosing and not less than 1-1/2" from the wall. Return rail ends to wall per IRC section R301.7.8.

D) Install the blocking between stringers at the top and bottom of each run per IRC section R301.7.

E) Cover wall/plate under stairs with 1/2" Gypsum per IRC section R302.1.

8. Laundry Chutes & Discharge Shafts - provide 5/8" type "X" Gypsum or 26 gauge sheet metal with lock joints on all openings to earth surfaces shall be self-closing solid core 1-3/8" per IRC section R302.1.

9. Fireblocking shall be provided in wood-frame construction in the following locations:

A) In concealed spaces of stud walls and partitions, including turned splices and parallel runs of studs or staggered studs, as follows:

1. Vertically at the ceiling and floor levels.

2. Horizontally at intervals not exceeding 10 feet.

B) At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.

C) In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R302.1.

D) At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with and approved material to resist the free passage of flame and products of combustion.

E) For the fireblocking of chimneys and fireplaces, see Section R903.3.

F) Fireblocking of corners of a two-family dwelling is required at the line of sealing unit separation.

G) Fireblocking shall consist of the following materials per IRC R302.11.1:

A) 2" nominal lumber.

B) Two thickness of 1" nominal lumber with broken lap joints.

C) One thickness of 7/8" wood structural panels with joints backed by 7/8" wood structural panels.

D) One thickness of 3/4" particleboard or joints backed by 3/4" particleboard.

E) One 1/2" gypsum board.

F) One 1/2" cement-based millboard.

G) Batt or blankets of mineral wool or glass fiber or other approved materials installed in such a manner as to be securely retained in place.

H) Structural design criteria: These notes are provided for convenience only and do not imply that complete structural analysis has been done on this structure.

A) Truss Loading: (UNO).

Top chord live load: 25psf

Top chord dead load: 10psf

Bottom chord live load: 15 psf, 11' tie

Bottom chord live load: 10psf without storage

20psf if limited storage

30psf if sleeping room

42psf or 55psf or 62psf

B) Roof live load: 25 psf (UNO).

C) Floor live load: 40 psf (UNO) Deck Live Load 60 psf (UNO).

D) Stair and corridor live loads: 40 psf

E) Mechanical units: weights provided by manufacturer

F) Wind: 10 mph (UNO)

G) Seismic Design Category: D/2 (UNO)

H) Allowable soil pressure: Unless a soils report by a qualified engineer is provided, all footings and foundations shall be on assumed 1500 psf bearing capacity unless otherwise noted on drawing.

I) Equivalent fluid pressure 35 psf (UNO).

J) All footings to be located below the frost line depth 18" (UNO)

02002 MISCELLANEOUS ASSEMBLY REQUIREMENTS CONT.

1. Prefabricated Fireplaces and Solid Fuel Burning Appliances per IRC and IRC, Chapter 101.

A) Solid fuel burning appliances include upright stoves, fireplace stoves, heaters/fireplace stoves, factory built fireplaces, and fireplace inserts, and all shall comply with the provisions of IRC.

B) Metal Chimneys shall be enclosed above the story in which the appliance served is located, in walls having one-hour fire resistance rating, and with a space on all sides between chimney and enclosing walls sufficient for examination and repair for entire chimney. Walls shall be without openings per IRC.

C) Provide fireblocking at chimney per IRC section R302.1.

D) Install metal fireplace with hearth and surround per manufacturers specifications.

E) Prefabricated fireplaces, chimneys, and related components to bear ULL or ICBO seal of approval and be installed per manufacturers requirements.

F) Fireblocking per IRC sections R302.1.

02003 REGULATORY REQUIREMENTS

1. All construction shall conform to the 2021 International Residential Code (IRC).

2021 International Building Code (IBC), 2021 International Fire Code (IFC).

2021 International Mechanical Code (IMC), 2021 Uniform Plumbing Code (UPC).

2021 Washington State Energy Code (WSEC) and in accordance with all State Law and Regulations and various codes imposed by jurisdictional requirements and local authorities.

2. Arrange inspections that are mandatory due to jurisdictional requirements.

02004 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1. Provide Temporary Facilities - including electricity utility, and temporary toilet, per jurisdictional requirements.

2. Provide Temporary Controls - including erosion sediment and surface water control and entrapment during construction per jurisdictional requirements.

END DIVISION 1

Division 2 SITE WORK

02100 EARTHWORK

Part 2 - Execution

1. Rough grading: 4" below finish grading unless otherwise specified.

2. Finish grading: Landscaping division 02300.

3. Excavation, backfilling, and compacting for structures as needed.

4. Excavation, backfilling, and compacting for pavement as needed.

5. Hauling and disposal of excavated material as needed.

6. Importing of material as needed.

7. Rock removal as needed.

02100 PAVING AND SURFACING

Part 2 - Product

1. Walk, road, and parking paving:

A. Asphalt: 2", class B, over 3" crushed rock or 2" ATB.

B. Crushed rock 3-8" min.

C. Concrete per Division 3.

2. Finish and color.

3. Coordinate with materials finish selection schedule.

4. Unit Pavement: 1. Coordinate with materials finish selection schedule.

5. Pavement marking: 1. Coordinate with materials finish selection schedule.

02100 SEWAGE AND DRAINAGE

Part 2 - Product

1. Subdrainage systems:

A. Foundation drainage: 4" SDR 35 or sched. 40 rigid PVC perforated pipe embedded in pea gravel or clean crushed rock and wrapped in filter fabric.

2. Storm sewage systems:

A. Exterior catch basins, grates, and frames:

1. Coordinate with materials finish selection schedule.

B. Culverts:

1. Coordinate with materials finish selection schedule.

C. Drain pipe: 4" ADS non-perforated light line.

3. Sanitary sewage systems:

A. Sewage collection lines: 8" PVC unless cast iron is noted.

B. Septic system: Per drawings of bidder designer.

Part 3 - Execution

1. Sanitary sewage system:

A. Slope to drain and surround in wall draining material per details.

2. Surface drainage: per IRC section R403.3.

02200 SITE IMPROVEMENTS

Part 2 - Product

1. Irrigation system: Bidder design.

2. Fences and gates:

1. Coordinate with materials finish selection schedule.

02300 LANDSCAPING

Part 2 - Product

1. Bidder Design

END DIVISION 2

Division 3 CONCRETE

03100 CONCRETE FORMWORK

Part 3 - Execution

1. Formwork and bracing for structural cast-in-place concrete shall be by subcontractor and shall meet the requirements of the drawings and industry standards.

2. All formwork shall be placed in such a manner as to allow cast-in-place concrete to be placed on solid substrate and to allow structural support members to sit below the frost line.

03100 CONCRETE REINFORCING

Part 2 - Product

1. Reinforcing steel: Deformed bar sizes and locations per plans and details. Grade 60 Fy = 60ksi per IRC section R404.13.3.1. Unless otherwise noted per Engineer.

2. Welded wire fabric: at locations per plans and details. 6x6 W4.4/W4.5E.

Part 3 - Execution

1. A minimum lap for all bars shall be 40 diameters taken from the smallest bar. Provide corner bars to match horizontal reinforcement. Minimum coverage per details and IRC section R404.13.3.1.3.

03100 CONCRETE ACCESSORIES

Part 2 - Product

1. Anchor bolts: 1/2" triple zinc 2X4X (G85 per ASTM A653) hot dipped galvanized steel (ASTM B3 for Anchors) with a minimum 1" embedment, per IRC section R403.1.6, unless otherwise noted per Engineer.

2. Washers: 3/5X1/4" xq triple zinc 2X4X (G85 per ASTM A653) hot dipped galv. steel (ASTM B3 for Anchors) plate washers per IRC section R402.11.1. Unless otherwise noted per Engineer.

Part 3 - Execution

1. Anchor bolts at 6'-0" o.c. max. for one story, 4'-0" o.c. for buildings over two stories in height, 12" from corners and joints with a minimum embedment of 1". Provide a minimum of (2) bolts per plate section per IRC section R403.1.6.

03300 CAST-IN-PLACE CONCRETE

Part 2 - Product

1. Structural concrete: Design Fc = 2500 psi min 5-1/2 sacks of cement per cubic yard of concrete and a maximum of 6.00 gallons of water per 54.0 sack of cement at 28 days. Max slump is 4". Segregation of materials to be prevented. Use Fc = 3000 psi concrete at 28 days with air entrainment only for concrete exposed to weather. In accordance with IRC Table R402.1.3. Special inspection not required unless noted otherwise per Engineer.

2. Architectural concrete: for exposed aggregate finish (weathered), Fc = 2000 psi at 28 days, with 3-8" round aggregate.

03300 CAST-IN-PLACE CONCRETE (cont.)

3. Admixtures:

A. All concrete shall have water reducing admixtures except for footings.

B. Air entrainment shall be 5-7% in all concrete exposed to weather, IRC Table R402.1.3.

C. Coloring agent:

1. Coordinate with materials finish selection schedule.

Part 3 - Execution

END DIVISION 3

Division 4 MASONRY

04100 MORTAR

Part 2 - Product

1. Type "M" or "S" mortar with integral waterproofing agent per IRC section R606.2.8.

Part 3 - Execution

1. Per IRC section R606.2.

04100 MASONRY ACCESSORIES

Part 2 - Product

1. Anchors and Ties: To be corrosion-resistant metal ties per IRC section R103.8.4.

2. Joint reinforcement: Standard strand no. 3 US gauge wire per IRC section R103.8.

Part 3 - Execution

1. Per IRC Chapter 7.

04100 UNIT MASONRY

Part 2 - Product

1. Brick masonry:

A. Exterior locations: name/fg:

1. Coordinate with materials finish selection schedule (by others).

B. Interior locations: name/fg:

1. Coordinate with materials finish selection schedule (by others).

C. Pavers/planters: name/fg:

1. Coordinate with materials finish selection schedule (by others).

2. Concrete masonry units: grade N-1 CMU, unless otherwise indicated sizes per drawings.

A. Special units:

1. Coordinate with materials finish selection schedule (by others).

3. Glass masonry units: (glass block) per IRC section R607.1.

A. Exterior locations: name/fg:

1. Coordinate with materials finish selection schedule (by others).

B. Interior locations: name/fg:

1. Coordinate with materials finish selection schedule (by others).

Part 3 Execution

1. Brick and Veneer:

A. Brick veneer shall be supported on footings, foundation, or other non-combustible supports. It shall have 1/2" felt backing and No. 8 gauge, non-corrosive ties at 1" per each 2 s.f. of veneer. Provide 1" minimum air space between veneer and backing. Provide approved flashing at base of veneer with 3/4" min. round weepholes at 33" o.c. max. located immediately above the flashing, extending from the air space to the exterior. Veneer shall support no load other than its own weight and the vertical dead load of veneer above. Provide single iron support at doors, windows, and other openings per R606.10.

2. Concrete masonry unit (CMU):

A. Concrete masonry unit, walls shall be constructed to conform to ASTM C90. It shall be laid up, reinforced, and anchored as shown on drawings.

04100 STONE

Part 2 - Product

1. As shown on drawings:

A. Exterior locations: name/fg:

1. Coordinate with materials finish selection schedule (by others).

B. Interior locations: name/fg:

1. Coordinate with materials finish selection schedule (by others).

Part 3 Execution

1. Stone Veneer: Adhered per manufacturer's installation instructions and in accordance with IRC R103.12.

A. On exterior stud walls, adhered masonry veneer shall be installed:

1. Minimum of 4 inches above the earth.

2. Minimum of 2 inches above paved areas, or

3. Minimum of 12 inch above exterior walking surfaces which are supported by the same foundation that supports the exterior wall.

B. Flashing at foundation:

1. A corrosion-resistant steel or flashing of a minimum Ø20-inch or 26-gauge galvanized or plastic with a minimum vertical attachment flange of 3 1/2 inches shall be installed.

END DIVISION 4

DIVISION 5 METALS

05100 METAL FASTENINGS

Part 2 - Product

1. Bolts: Use sizes and shapes per tags, or as needed for intended purposes. Bolts, nuts and cut washers in contact with treated wood to be triple zinc 2X4X (G85 per ASTM B633) hot dipped galvanized steel (ASTM B3 for Anchors).

2. Screws: As noted on drawings.

3. Other: As noted on drawings.

4. All wood members in contact with exposed concrete to be pressure treated members.

5. Particle Board: APA graded

BUILDING HEIGHT CALCULATION

Architectural elevation drawing of a two-story house. The drawing includes the following height and level callouts:

- TOP PLATE = 79.95'
- MAIN FF = 59.44'
- LOWEST GRADE = 55.25'
- A.B.E. = 51.11'
- MAX. ALLOWABLE HEIGHT = 81.11'
- ROOF HEIGHT = 84.11'
- Vertical dimensions on the left: 24'-8"
- Vertical dimensions on the right: 25'-8 1/2", 21'-5 1/2", 30.00'

City of Mercer Island Avg. Grade Calculations										City of Mercer Island GFA Calculations									
Midpoint	Datum	Elevation	F or E	Wall Segment Length			Lower Level Area Calculation						Lot Size = 8421.00 x 40.00% = 3368.40						
A	=	58.49	E	a	=	5.74	A*	=	335.73							Main Floor1315.00 Upper Floor1541.00 (1622-81)STAIRS Basement80.44 (590-509.56)EXCLUDED Garage405.00 3341.44 / 39.68%			
B	=	58.91	E	b	=	18.54	B*	=	1151.10	Wall Length	Percentage	Finish or Existing	Result						
C	=	59.75	E	c	=	23.67	C*	=	1414.28	16.84	99.20%	E	16.81						
D	=	59.75	E	d	=	8.50	D*	=	507.88	24.44	98.60%	E	24.10						
E	=	58.90	E	e	=	25.91	E*	=	1526.10	C 13.41	87.50%	E	11.73						
F	=	58.06	E	f	=	13.67	F*	=	793.68	D 10.39	79.30%	E	8.24						
G	=	57.95	E	g	=	2.00	G*	=	119.90	E 4.55	76.90%	E	3.50						
H	=	57.45	E	h	=	13.33	H*	=	765.81	F 1.83	75.30%	E	1.38						
I	=	56.90	E	i	=	4.83	I*	=	274.83	G 0.67	73.30%	E	0.49						
J	=	56.20	E	j	=	16.50	J*	=	927.30	H 8.00	68.20%	E	5.46						
K	=	55.75	E	k	=	6.15	K*	=	342.86	I 0.67	65.00%	E	0.44						
L	=	56.75	E	l	=	4.89	L*	=	228.02	J 1.83	62.60%	E	1.35						
M	=	55.60	E	m	=	22.17	M*	=	1238.65	K 11.67	71.20%	E	8.31						
N	=	55.25	E	n	=	13.00	N*	=	718.25	L 2.50	81.00%	E	2.03						
O	=	56.70	E	o	=	2.50	O*	=	141.75	M 7.89	87.80%	E	6.93						
P	=	57.00	E	p	=	7.50	P*	=	427.50		104.49		90.24						
Q	=	58.20	E	q	=	17.62	Q*	=	1025.48	Total Average Result			0.86						
				976.61		206.72	11929.12			Fir	Sq Ft	Result	Excluded Area						
Address				Lot 1		57.71	AVG. GRADE				590.00	0.86	509.56						

[illegible]

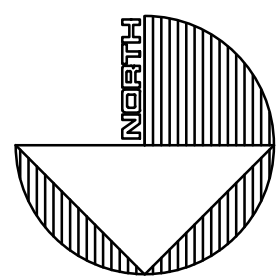
TREE RETENTION SCHEDULE					
#	TREE SPECIES	SCIENTIFIC NAME	DBH	COND.	RETAIN
1.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	30	FAIR-GOOD	YES
2.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	28	FAIR-GOOD	YES
3.	DEODAR CEDAR	CEDRUS DEODARA	23	GOOD	NO
4.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	18	FAIR	YES
5.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	40	GOOD	YES
6.	BIGLEAF MAPLE	ACER MACROPHYLLUM	18	FAIR	YES
7.	SCOUERS WILLOW	SALIX SCOUERIANA	9	FAIR-POOR	YES
24.	WESTERN RED CEDAR	THUJA PLICATA	10	FAIR	YES

DESIGNATION	SPECIES	QUANTITY
(N)	WESTERN RED CEDAR (6' tall)	3

LOT SLOPE CALCULATION

$$62.4' \times 50.0' = 12.4' / 122.78' = 0.10 \times 100 = 10\%$$

N.T.S.



Scale 1" = 10'

STREET ADDRESSES:
7621 SE 22nd Street, Mercer Island, WA 98040

PARCEL NUMBER:
531510-1846

LEGAL DESCRIPTION:
PARCEL A:
THE WEST 18397 FEET OF THE EAST 17897 FEET OF LOT 1, AND THE
WEST 13397 FEET OF THE EAST 13397 FEET OF LOT 2, BLOCK 24,
MICHAEL'S ISLAND ADDITION, ACCORDING TO THE PLAT
THEREOF RECORDED IN VOLUME 16 OF PLATS, PAGE 58, IN KING
COUNTY, WASHINGTON.

ZONING: R 84
SINGLE FAMILY RESIDENTIAL SETBACKS
FRONT YARD - 10'-0"
REAR YARD - 25'
SIDE YARD - 15'-0" COMBINED

HEIGHT LIMIT
30' ABOVE AVERAGE BUILDING ELEVATION
30' DOWNHILL HIGHEST PLATE

LOT COVERAGE
40% MAX OF GROSS LOT AREA
HARDSCAPE COVERAGE
9% MAX OF GROSS LOT AREA
G.F.A.
5,000SF OR 40% MAX. OF NET LOT AREA, WHICHEVER IS LESS

LOT AREA	
8421 SF	GROSS LOT AREA
<u>COVERED AREA CALCULATION</u>	
8421 SF	LOT AREA
x .40%	
3,368.84 SF	ALLOWABLE IMPERVIOUS COVERED
2,382 SF	HOUSE ROOF (includes gutters)
876 SF	DRIVEWAY (excludes area under eaves)
3,258 SF / 38.7%	TOTAL COVERED
<u>HARDSCAPE COVERAGE CALCULATION</u>	
8421 SF	LOT AREA
x .9%	
757.8 SF	ALLOWABLE HARDSCAPE COVERAGE
135 SF	FRONT WALK (excludes portion u/ eaves)
4.5 SF	A/C PAD (excludes portion u/ eave)
193.3 SF / 1.6%	TOTAL HARDSCAPE COVERAGE

— v — w —	DESIGNATES WATER
— s — s —	DESIGNATES SEWER
— st — st —	DESIGNATES STORM
— — — — —	DESIGNATES EXISTING GRADE
— — — — —	DESIGNATES FINISHED GRADE
— — — — —	DESIGNATES TREE DRIPLINE
— — — — —	DESIGNATES TREE DRIPLINE (EXCEPTIONAL TREE)
— — — — —	DESIGNATES LIMITS OF DISTURBANCE
— x — x —	DESIGNATES TREE FENCING
— o — o —	DESIGNATES EXISTING WOOD FENCE
	EXISTING FENCE TO BE REMOVED

TITLE		
JOB NO. :	2001202	
STARTING NO. :		
SHEET		
A1.1		

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Milestone NW Mercer Island 3-Lot 1 Lot 1		7621 SE 22nd Street Lot 1 Mercer Island, WA	
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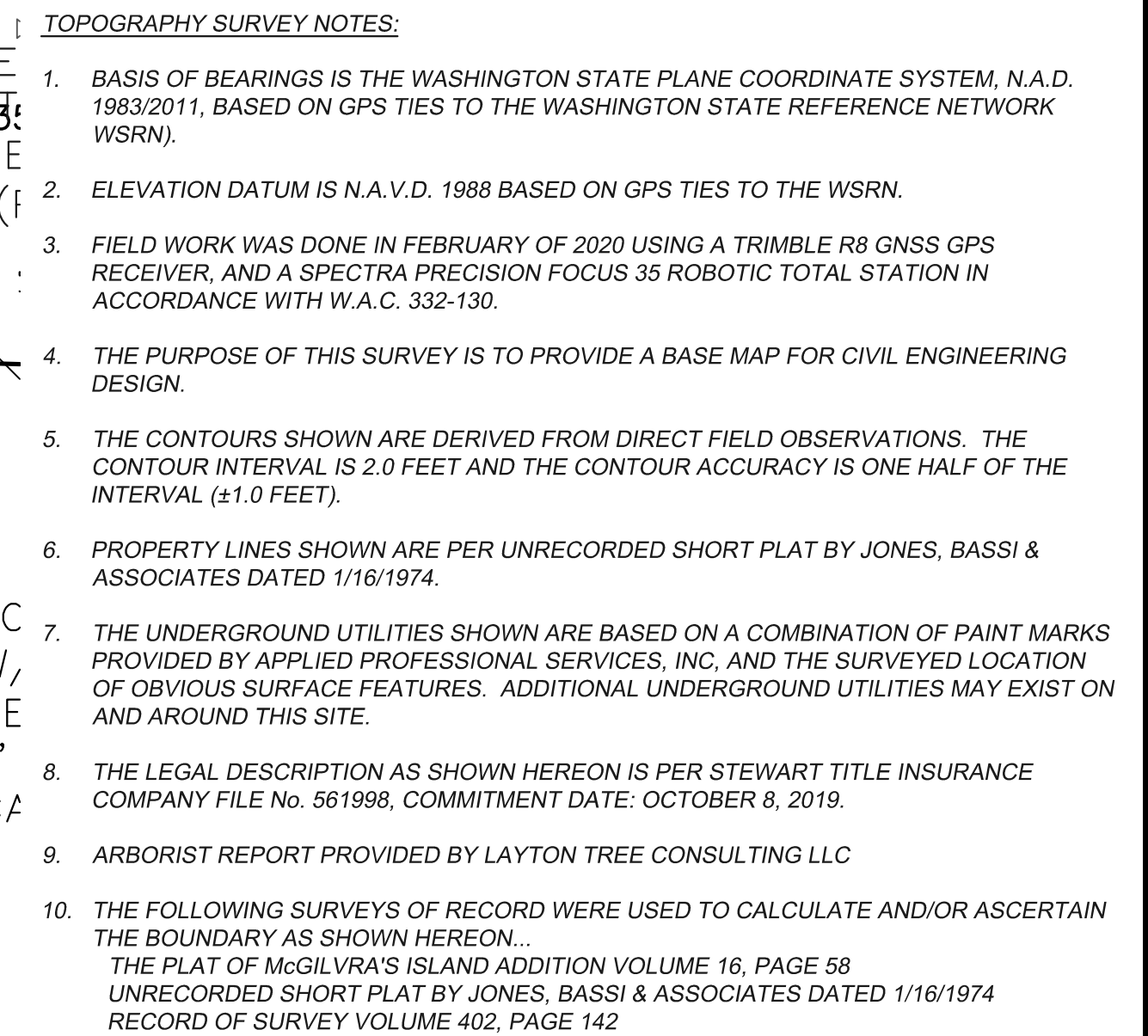
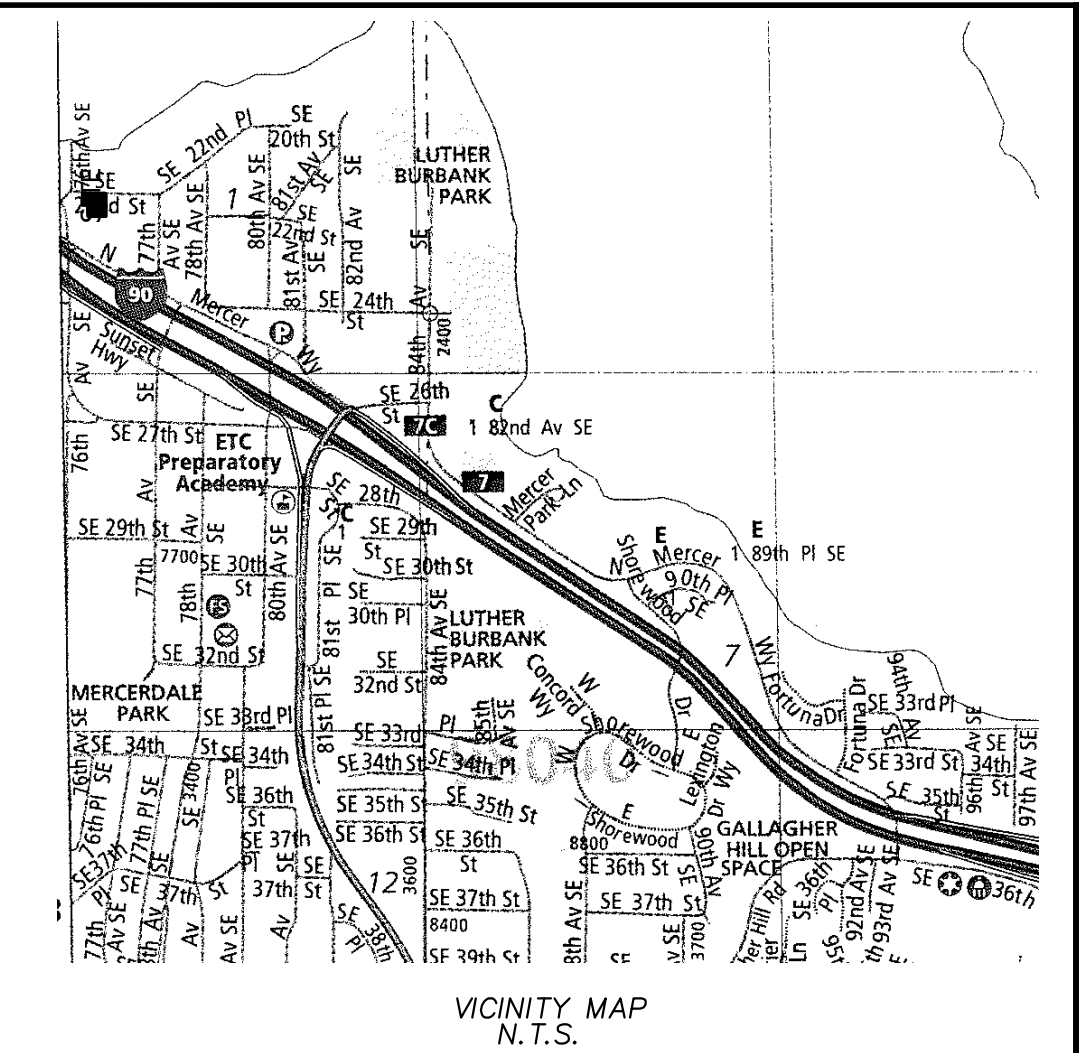
Date	By	Description
12-2-24	AS	PERMIT SET



BYTO REGISTERED ARCHTCT
 NON REVERSED
 STATE OF WASHINGTON
 ORIGINAL SIGNATURE REQUIRED

Milestone NW
Mercer Island 3-Lot 1
Lot 1
621 SE 22nd Street
Mercer Island, WA

LOT 1 BUILDING PERMIT
SE 1/4 OF SEC.1, T.24N., R.4E., W.M.
CITY OF MERCER ISLAND, WASHINGTON



1. THE SLOPE ELEVATIONS INDICATED ON THIS PLAN REPRESENT THE DESIGN TOP OF THE SPACED OR SURFACE, UNLESS OTHERWISE NOTED.
2. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
3. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH LOCAL SPECIFICATION.
4. ALL CUT AND FILL SLOPES SHALL BE 3: 1 OR FLATTER UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING FOR ALL NATURAL AND PAVED AREAS AND SHALL GRADE ALL AREAS TO PRECLUDE PONDING OF WATER.
6. ALL POLLUTANTS OTHER THAN SEDIMENT ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED -TH CONSTRUCTION ACTIVITIES.
7. PRIORITIES AND WATERWAYS DOWNSTREAM OF THE SITE SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FROM PROJECT SITE.
8. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
9. CONTRACTOR TO REMOVE UNSUITABLE SOILS LOCATED -THIN THE BUILDINGS FOOTING AREA.
10. FOR BOUNDARY AND TOPOGRAPHIC INFORMATION REFER TO PROJECT SURVEY AND FINAL ENGINEERING PLANS.
11. ALL GRADING, SITE PREPARATION, AND EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEERING REPORT.
12. ALL FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT AND COMPACTION.
13. IF NEW FILL IS PLACED OVER EXISTING SLOPES OF 20% OR GREATER, THE STRUCTURAL FILL SHOULD BE KEPTED AND BENCHED INTO COMPETENT NATIVE SLOPE SOILS. SEE FIGURE 4 ON SHEET C-2.6.
14. EXISTING TREES THAT CAN FEASIBLY BE RETAINED WILL BE PRESERVED. CONTRACTOR -LL WORK -TH CITY ARBORIST AND OTHER STAFF TO MAXIMIZE TREE RETENTION.
15. THE TOTAL IMPERVIOUS SURFACE ON LOT WILL NOT EXCEED THE NET MAXIMUM LOT COVERAGE AREA.

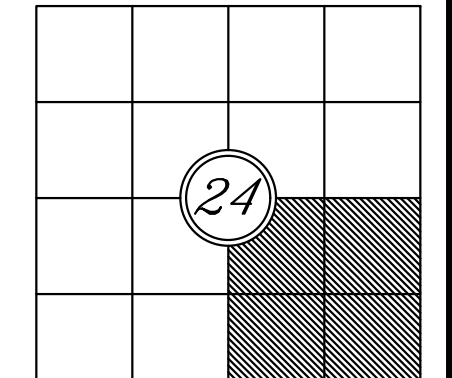
Call Before You Dig 811

LOT INFORMATION:					
LOT #	GROSS LOT AREA	MAX GFA 40%	NET LOT AREA	MAX. LOT COVERAGE (40%)	MAX. HARDSCAPE (9%)
1	8,402	3,362	8,402	3,361	756
2	8,419	3,368	8,410	3,364	757
3	8,400	3,360	8,400	3,360	756

PROJECT NO.: SUB21-006 MILESTONE-WCMI LLC



INDEX LOCATION:
SEC. 24 T. 24 N. R. 4 E. W.M.

[illegible]

**LOT 1 GRADING
AND DRAINAGE PLAN**

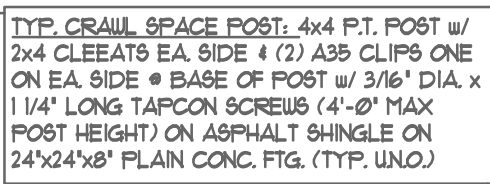
**8 CRESCENT KEY
BELLEVUE, WA 98006
CONTACT: GREG ARMS
PHONE: (206) 817-4192**

ENGINEERS - SURVEYORS
EASTSIDE CONSULTANTS, INC.
1320 N.W. MALL ST., SUITE B
WESSAQUAH, WASHINGTON 98027
PH(425)392-5351 FAX:392-4676

OB NO. 20025
DATE 01/2025
SCALE 1"=10'
DESIGNED ADP
DRAWN ADP
CHECKED RSF
APPROVED RSF

SHEET 1 OF 1

2. CRAWL SPACE AREA / 625 SF
3. CRAWL SPACE AREA / $300' \times 208' \text{ SF}$
OF VENT AREA REQUIRED
4. CRAWL SPACE VENT SURFACE AREA (75%
EFFICIENCY) = $58 \text{ SF PER VENT NET FREE AREA}$
5. VENT AREA / $58 = \underline{339 \text{ VENTS}}$
REQUIRED
6. 4 VENTS SHOWN (SEE PLAN FOR
LOCATION)
7. 4 VENTS $\times 58 = \underline{232 \text{ SF}}$ OF VENT
AREA PROVIDED
8. VENTS SHALL BE COVERED WITH CORROSION
RESISTANT WIRE MESH WITH OPENINGS OF
1/4" MAX
9. VENTS LOCATED IN RIM JOIST MUST BE PERMANENTLY
BAFFLED. U.S.E.C. 402.2.1

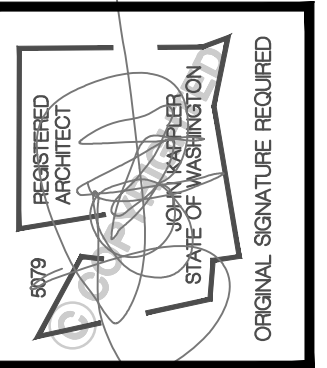


1. SEE TYPE MATERIALS LIST ON SECTION SHEET
2. SEE SHEET A-1 FOR ALL GENERAL NOTES AND FOR ALL REQUIREMENTS CONCERNING MECHANICAL, PLUMBING, AND ELECTRICAL.
3. TRUSS DESIGN: SEE 010605 PLAN SHOWS IF FOR GENERAL LAYOUT ON SEE DIV. 6/000 SHEET 1- TRUSS LAYOUT. SEE DIV. 01002101A SHEET A-1 FOR TRUSS SPAN PER ROOF FRAMING PLAN
4. TRUSS TYPE PER ROOF FRAMING PLAN
5. ROOF FRAMING SPACING, 24' o.c. U.N.O.
6. ROOF PITCH- EXTERIOR PER ELEVATION
7. INTERIOR PER SECTION.
8. RAFTER TAIL 2x4, VERIFY.
9. ROOF TAIL AND SLOPE OVERHANGING PER ROOF PLAN.
10. ALL HEADERS ARE 4x10 OF 7 U.N.O.
PROVIDE (1) TRIMMER STUD UP TO 4'-0" SPAN AND (2) TRIMMER STUDS OVER 4'-0" U.N.O.
SEE DIV. 061600 SHEET 1-01 FOR TRIMMER STUD HEADERS TO BE INSULATED W/ MIN. R-10 INSULATION
11. STUD NOTCHING AND BORING PER I.R.C. SPEC. R-601.6
- BEARING OR EXTERIOR WALL MAXIMUM NOTCH 25%,
- 40%
- 60% MAXIMUM BORING IF DOUBLED WITH NOT MORE THAN (2) SUCCESSIVE STUDS BORED
- BEARING OR EXTERIOR WALL MAXIMUM BORING 60%
- HOLES NO CLOSER THAN 5/8" TO FACE OF STUD

FP-1	CONCRETE STEM WALL, 8" WIDE WITH MIN. 15"x1" FOOTING. SEE DETAILS FOR ADDITIONAL INFORMATION. SEE DIV. 3 SHEET A-1
FP-2	CONCRETE STEM WALL, 6" WIDE WITH MIN. 12"x6" FOOTING. SEE DETAILS FOR ADDITIONAL INFORMATION. SEE DIV. 3 SHEET A-1
FP-3	CONCRETE SLAB ON GRADE SHALL BE 4" THICK STEEL TROUVELED FINISH. W/ 6"x6 W4x14 WLF ON 4" GRANULAR FILL. SLOPE 2" TO DOOR. PROVIDE THICKER EDGE AT DOOR SEE DIV. 3 SHEET A-1
FP-5	CRAWL SPACE VENT. SEE CALCULATION. SEE DIV. 1 SHEET A-1
FP-7	4"x10 BEAM LINE. UNO. MIN. 1" CLEARANCE FROM CONCRETE AT END OF BEAMS SEE DIV. 6 SHEET A-1
FP-8	4"x4 PRESSURE TREATED POST (8CAB POST AND BEAM WITH 2x4) ON 30" FLET ON HAT FOOTING UNO. PROVIDE 4"x6 POST @ BEAM SPLICE & NEGATIVE CONNECTION FROM POST TO FOOTING. SEE DIV. 6 SHEET A-1
FP-9	6 MIL. BLACK POLYETHYLENE GROUND COVER ON GRADE. SEE DIV. 7 SHEET A-1
FP-12	18"x24" CRAWL SPACE ACCESS. INSULATE AND WEATHER STRIP. SEE DIV. 010201 SHEET A-1
FP-17	STUB STEEL, 12" INTO SLAB @ 12" oc
FP-18	FLOOR JOIST SEE DIV. 6 SHEET A-1
FP-21	MIN. 1" CLEARANCE FROM CONCRETE AT END OF BEAMS
FP-22	EXTEND FIER MIN 18" BELOW SURROUNDING GRADE
FP-23	3" DIAMETER STEEL POST
FP-24	EDGE OF CONCRETE

 POINT LOADS FROM ABOVE
 POINT LOADS FROM ABOVE W/ LOADING
 POINT LOAD TRANSFERRING DOWN
 POINT LOAD TRANSFERRING DOWN W/ LOADING
 HANGER
 POINT LOAD TRANSFERRED BY KICKER
 HOLD DOWN WITH SIZE DESIGNATION
 VERTICAL STRAP WITH SIZE DESIGNATION TO BE USED ON FLOOR BELOW
 HORIZONTAL STRAP WITH SIZE DESIGNATION
 INDICATES BEAM CALCULATION WITH INDEXED NUMBER
 WALL ABOVE
 WALL BELOW

NOTE: UNLESS OTHERWISE NOTED, ENGINEERING AND CALCULATIONS ARE NOT PROVIDED IN THESE DRAWINGS.

[illegible]

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TITLE	
JOB NO. :	2102205
STARTING NO. :	2102203

SHEET

A2.0

FAN- DIRECT VENT TO OUTSIDE
-BATHROOMS/LAUNDRY 50 CFM MIN.
-KITCHEN EXHAUST HOOD TO BE MIN. OF
100CFM. IF EXHAUST HOOD EXCEEDS 400
CFM MAKE UP AIR MUST BE PROVIDED
PER SECTION M105.3.

UF WHOLE-HOUSE FAN TO RUN CONTINUOUS &
CONFORM TO IRC, M105.4. FAN SIZE PER
PLAN. FAN RATE TO BE ADJUSTED BY A
FACTOR OF 15 FOR A NON-BALANCED NON
DISTRIBUTED SYSTEM. FRESH AIR TO BE
PROVIDED BY THE FORCED AIR SYSTEM
DUCTS PER SECTION M105.4.1.

TO HAVE A SONS RATING OF 1.0 OR
LESS MEASURED AT 91 INCHES WATER
GAUGE

T THERMOSTAT @ 5'0" ABOVE FLOOR

④ 10V SMOKE ALARM PER IRC, R314 WITH BATTERY
BACKUP INTERCONNECTED PER R314.4 & R315.5.
USE A COMBINATION SMOKE/CARBON MONOXIDE
ALARM WHEN NOTED

⑤ HEAT FOR THE BATHROOM OR HEAT ALARM
RATED FOR THE AMBIENT OUTDOOR
TEMPERATURE & HUMIDITY PER IRC, R314.

MECHANICAL, PLUMBING, AND ELECTRICAL
SYSTEM FOR UNITS. PER DIV. 15.16 SEE SHEET A1

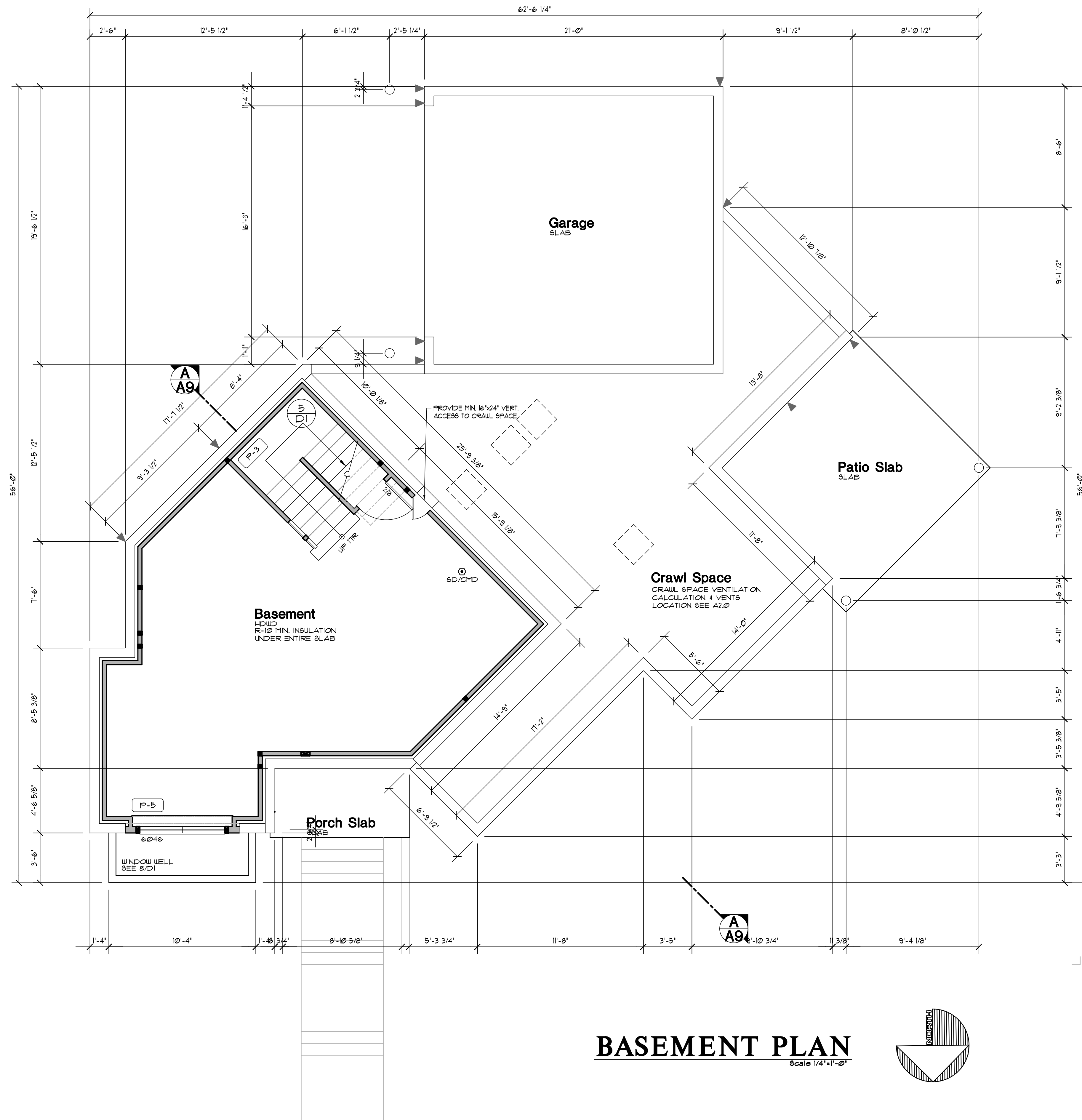
FURN	WH
------	----

A. PROVIDE 6" DIETERM FRESH AIR INTAKE FROM
OUTSIDE TO RETURN AIR PLENUM AT FURNACE
WITH MOTORIZED FLOW DAMPERS.

B. PROVIDE THERMAL EXPANSION TANK AT WATER
HEATER.

C. SIZE WATER HEATER TO FRAMING
TOP AND BOTTOM.

D. PROVIDE PRESSURE RELIEF LINE
PLUMBED TO OUTSIDE.



1. SEE SHEET A-1 FOR ALL GENERAL NOTES AND REQUIREMENTS.
2. ENERGY AND AIR QUALITY INFORMATION
SEE DIV. 17 SHEET A-1
3. SEE BUILDING ELEVATION FOR WINDOW
OPERATION SEE DIV. 8 SHEET A-1
4. SEE TYP. MATERIALS LIST ON SECTION SHEET
5. SEE SHEET A-1 FOR ALL NOTES AND
REQUIREMENTS CONCERNING MECHANICAL,
PLUMBING, AND ELECTRICAL.

- P-1** OCCUPANCY SEPARATION:
 APPLY (1) LAYER OF 1/2" G.W.B. TO GARAGE SIDE OF
 RESISTIVE ATTIC SPACES AND TO ALL BEAMS AND
 FOSTS SUPPORTING A FLOOR-CEILING ASSEMBLY.
 APPLY (1) LAYER OF 1/8" TYPE X G.W.B. TO GARAGE
 CEILING WHEN UNDER HABITABLE ROOMS.
 DUCTS THROUGH WALL OR CEILING COMMON TO
 HOUSE SHALL HAVE MINIMUM 26 GAUGE STEEL
 SEE DIV. 01002.6.A. SHEET A-1.

P-2 1/8" MIN SELF CLOSING SOLID WOOD CORE, HONEY-
 COMBED 1/4" MINUTE FIRE RATED DOOR
 SEE DIV. 01002.6.B. SHEET A-1

P-3 STAIR ASSEMBLY NOTES: PER I.R.C. SECTION R311
 A. HEADROOM MIN. 6'8", WIDTH MIN. 3'0".
 B. TREADS 10" MIN. DEPTH AND MIN. WIDTH OF 36"
 ABOVE HANDRAIL. HANDRAIL RISERS 7 1/2" MAX. HT.
 TREAD NOSING TO BE MINIMUM 3/4" AND A
 MAXIMUM OF 1 1/4" ON STAIRS WITH SOLID RISERS.
 C. HANDRAIL MIN. 34" TO MAX 38" ABOVE
 TREAD NOSING. HANDRAIL TYPE 1 CIRCULAR
 TO HAVE 1 1/4" MIN. TO 2" MAX. CROSS SECTION
 DIMENSION AND 1 1/2" MIN. CLEAR FROM WALL.
 RETURN RAIL, END RAIL AND HANDRAIL SHALL BE
 STRONG ENOUGH TO RESIST A 200 POUND POINT
 LOAD IN ANY DIRECTION PER I.R.C. TABLE R301.5
 D. INSTALL FIRE BLOCKING BETWEEN STRINGERS
 AT THE TOP AND BOTTOM OF EACH RUN PER
 I.R.C. SECTION R302.11.
 E. COVER USABLE SPACE UNDER STAIR W/
 1/2" G.W.B. PER I.R.C. SECTION R302.7.
 F. INTERMEDIATE WALLS SHALL BE SPACED
 W/ LESS THAN 4' BETWEEN BALUSTERS.
 G. PROVIDE STAIRWAY ILLUMINATION PER
 I.R.C. SECTION R302.12.
 SEE DIV. 01002.1 SHEET A-1.

P-4 SAFETY GLAZING PER I.R.C. SECTION R308
 A. WINDUOS WITHIN 18" OF FLOOR
 B. WINDUOS WITHIN A 24" ARC OF DOORS
 C. WINDUOS AT TUBS AND SHOWERS
 GLAZING IN DOORS
 E. LESS THAN 60" HORIZ. FROM THE BOT. STAIR
 TREAD NOSING, 4 BOT. EDGE OF GLAZING IS
 LESS THAN 36" ABOVE LANDING/WALKING SURFACE
 SEE DIV. 02600.0 SHEET A-1

P-5 EGRESS WINDUW PER I.R.C. SECTION R310
 SEE DIV. 02600.0 SHEET A-1

P-6 IGNITERS FOR GAS FIRED APPLIANCES IN
 GARAGE TO BE 18" MIN. ABOVE TOP OF SLAB.
 SEE DIV. 9 SHEET A-1

P-7 COVER WALLS ADJACENT TO TUBS AND SHOWERS
 WITH NON-ABSORBENT MATERIAL TO 2" ABOVE
 DRAIN INLETS, PER I.R.C. SECTION 3012.
 SEE DIV. 02930.0 SHEET A-1

P-8 (2) LAYERS OF FLOOR SHEATHING OVER
 FRAMING.

P-9 7/8" MAX. RISER WITH 10" MIN. RUN IF MORE THAN
 (3) RISERS, HANDRAIL REQUIRED PER I.R.C.
 SECTION R311.8. SEE DIV. 01002.1 SHEET A-1

P-10 18"x24" CRAWL SPACE ACCESS, INSULATE AND
 WEATHER STRIP. SEE DIV. 01002.1 SHEET A-1

P-11 22"x30" ATTIC SPACE ACCESS W/ 30" HEAD
 CLEARANCE. INSULATE AND WEATHER STRIP.
 SEE DIV. 01002.1 SHEET A-1

P-12 FLOOR MATERIAL BREAK LINE

P-13 WALL LINE ABOVE

P-14 WALL LINE BELOW

P-15 FIREPLACE ASSEMBLY NOTES:
 A. DIRECT VENT GAS FIREPLACES MUST BE LISTED,
 LABELED AND RATED FOR THE SPECIFICATIONS,
 SHALL CONFORM TO I.R.C. REQUIREMENTS,
 SEE DIV. 01002.12 SHEET A-1
 B. ZERO CLEARANCE FIREPLACES SHALL CONFORM
 TO I.R.C. REQUIREMENTS, SEE DIV. 01002.12 SH4T A-1
 C. HEARTH SHALL CONFORM TO I.R.C. REQUIREMENT
 SEE DIV. 01002.12
 D. FIREBLOCK OPENINGS AROUND PENETRATIONS
 IN EACH FLOOR RATED PER I.R.C. SECTION R302.12
 E. FIREPLACE MUST COMPLY WITH UL 121 TESTING

P-16 SEE SITE PLAN FOR LOCATION OF WALKWAYS & DRIVEWAYS

P-17 3" DIAMETER STEEL POST

P-18 36" GUARDRAIL PER I.R.C. SECTION R312 & TABLE R301.5
 CONTRACTOR TO VERIFY TO INSPECTOR THAT ALL
 GUARDS & RAILINGS ARE CAPABLE OF RESISTING
 200 LBS LOAD ON TOP RAIL ACTING IN ANY DIRECTION.
 B. VENT FOR MECHANICAL 1" CLEARANCE ALL SIDES
 PER I.R.C. SECTION R302.11. SEE DIV. 9 SHEET A-1.

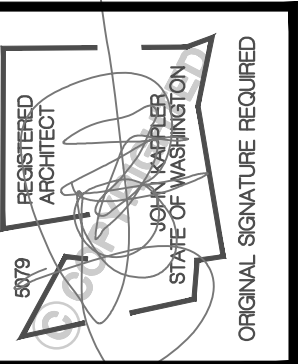
P-19 FLANT SHELF

P-20 UPPER AND LOWER LINEN CABINETS

P-22 60FFIT AREA

P-23 INTEGRATED MAKE UP AIR

P-24 2x6 STUDS W/ R-21 INSULATION MIN.

[illegible]

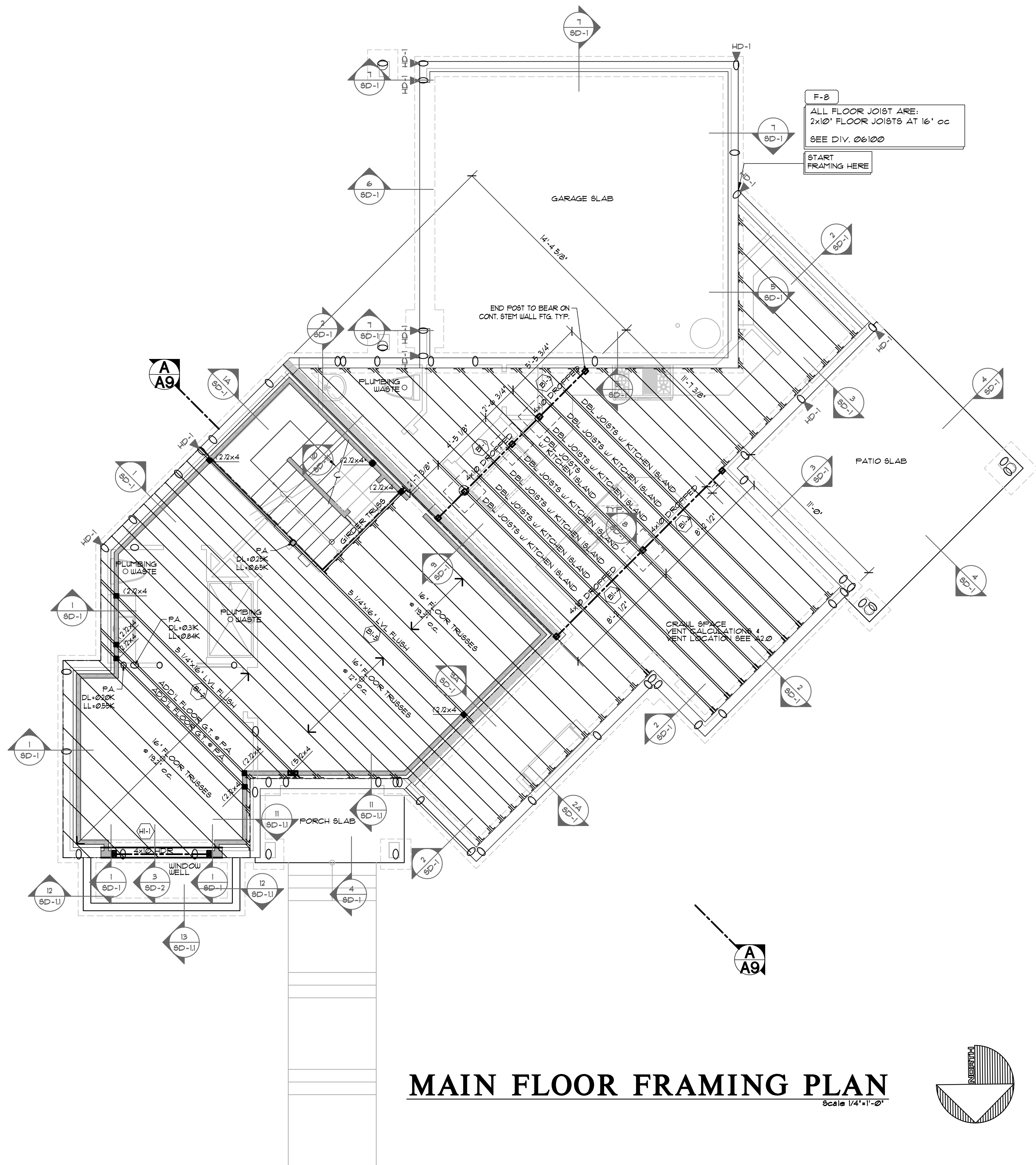
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TITLE	
DB NO. :	21022.05
STARTING NO. :	21022.03

SHEET

A2.1



STRUCTURAL NOTES

- WE WOULD LIKE TO SEE THE TRUSS SHOP DUGS TO VERIFY THE PERFORMANCE OF THE TRUSS SPANS
- NOTE TO TRUSS MANUF: VERIFY NO INTERIOR BEAMS ARE REQUIRED, CONTACT MKK IF ADDITIONAL BEAMS ARE REQUIRED

TYP. CRAIL SPACE POST: 4x4 P.T. POST w/ 2x4 CLEATS EA. SIDE (2) A35 CLIPS ONE ON EA. SIDE # BASE OF POST w/ 3/16" DIA. x 1 1/4" LONG TAPCON SCREWS (4"-8" MAX POST HEIGHT) ON ASPHALT SHINGLE ON 24"x24"x8" PLAIN CONC. FTG. (TYP. UNO.)

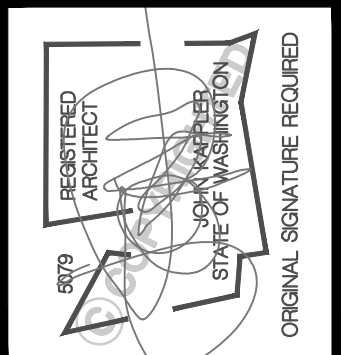
- GENERAL FRAMING NOTES**
- SEE TYPICAL MATERIALS LIST ON SECTION SHEET
 - SEE SHEET A-1 FOR ALL GENERAL NOTES AND FOR ALL REQUIREMENTS CONCERNING MECHANICAL, PLUMBING, AND ELECTRICAL.
 - TRUSS DESIGN BY MFG. TRUSS PLAN SHOWN IS FOR GENERAL LAYOUT ONLY. SEE DIV. 0620 SHEET A-1
 - TRUSS LOADING: SEE DIV. 01002.10A SHEET A-1
 - TRUSS SPAN PER FLOOR PLAN
 - TRUSS TYPE PER ROOF FRAMING PLAN
 - ROOF FRAMING SPACING: 24' OC. UNO.
 - ROOF PITCH: EXTERIOR PER ELEVATION INTERIOR PER SECTION.
 - RAFTER TAIL: 2x4. VERIFY.
 - ROOF TAIL AND RAKE OVERHANG PER ROOF PLAN.
 - ALL HEADERS ARE 4x10 DF #2 UNO. PROVIDE (1) TRIMMER STUD UP TO 4'-0" SPAN AND (2) TRIMMER STUDS OVER 4'-0" UNO. SEE DIV. 06100 SHEET A-1. HEADERS TO BE INSULATED W/ MIN. R-10 INSULATION
 - STUD NOTCHING AND BORING PER I.R.C. SECT. R602.6
 - BEARING OR EXTERIOR WALL MAXIMUM NOTCH 25% BORING 40%.
 - 60% MAXIMUM BORING IF DOUBLED WITH NOT MORE THAN (2) SUCCESSIVE STUDS BORED.
 - NON-BEARING MAXIMUM NOTCH 40% BORING 60%.
 - HOLES NO CLOSER THAN 5/8" TO FACE OF STUD.

- FRAMING PLAN KEYNOTES**
- F-1** BACK FRAMING AND SOFFIT AREA AS REQUIRED TO ALLOW FOR HVAC DUCTING. SEE DIV.15 SHEET A-1
 - F-2** RAKED PONY WALL ON TOP OF LOWER ROOF FRAMING MEMBERS SUPPORTING UPPER ROOF FRAMING MEMBERS.
 - F-3** ALIGN EDGE OF JOIST WITH FACE OF WALL
 - F-4** ALIGN INSIDE FACE OF BEAM WITH OUTSIDE FACE OF WALL
 - F-5** UPSET - BOTTOM OF BEAM EVEN W/ BOTTOM OF JOIST AND TOP OF BEAM EXTENDS UP ABOVE JOISTS
 - F-6** TOP OF BEAM IS FLUSH WITH BOTTOM OF JOIST WITH NO TOP PLATE. CUT ADJACENT FRAMING MEMBERS INTO BEAM FOR ADEQUATE SUPPORT.
 - F-7** ATTIC SPACE VENT SEE CALCULATION SEE DIV. 01002.3B SHEET A-1
 - F-8** FLOOR JOIST - SEE SCHEDULE DWG. SEE DIV. 06100 SHEET A-1
 - F-9** SEE ELEVATIONS AND SECTIONS FOR PLATE HEIGHT
 - F-10** PRESSURE BLOCKING SEE DIV. 06100 SHEET A-1
 - F-11** FLUSH - BOTTOM OF BEAM EVEN W/ BOTTOM OF JOISTS
 - F-12** TOP OF BEAM FLUSH W/ TOP OF JOIST AND BEAM EXTENDS DOWN BELOW JOISTS
 - F-13** TOP OF BEAM 3" BELOW TOP OF FLOOR TRUSS. FLOOR TRUSSES TO BE TOP CHORD BEARING.
 - F-14** 2x OVERFRAMING @ 24' OC. PROVIDE 2x6 STRONGBACK FURLING AND 2x KICKERS AT 6'-0" OC TO TRUSSES BELOW.
 - F-15** 2x6 CEILING JOISTS @ 24' OC

SYMBOLS & LEGEND

- POINT LOADS FROM ABOVE
- POINT LOADS FROM ABOVE W/ LOADING
- POINT LOAD TRANSFERING DOWN
- POINT LOAD TRANSFERING DOWN W/ LOADING
- HANGER
- POINT LOAD TRANSFERED BY KICKER
- HOLD DOWN WITH SIZE DESIGNATION
- VERTICAL STRAP WITH SIZE DESIGNATION TO BE USED ON FLOOR BELOW
- HORIZONTAL STRAP WITH SIZE DESIGNATION
- INDICATES BEAM CALCULATION WITH INDEXED NUMBER
- WALL ABOVE — WALL BELOW

NOTE: UNLESS OTHERWISE NOTED, ENGINEERING AND CALCULATIONS ARE NOT PROVIDED IN THESE DRAWINGS.



Date	By	Description
12/2/24	AG	PERMIT SET

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TITLE
JOB NO.: 21022.05
STARTING NO.: 21022.03

SHEET
A2.2

F FAN- DIRECT VENT TO OUTSIDE
"BATHROOM"/LAUNDRY 50 CFM MIN.
- KITCHEN EXHAUST HOOD TO BE MIN. OF
100CFM. IF EXHAUST HOOD EXCEEDS 400
CFM MAKE UP AIR MUST BE PROVIDED
PER SECTION MB03.6.

F F WHOLE-HOUSE FAN TO RUN CONTINUOUS &
CONFORM TO IRC, MB05.4. FAN SIZE PER
FLAN FAN RATE TO BE ADJUSTED BY A
FACTOR OF 15 FOR A NON-BALANCED NON
DISTRIBUTED SYSTEM. FRESH AIR TO BE
PROVIDED BY THE FORCED AIR SYSTEM
DUCTS PER SECTION MB05.41.

F F FAN TO HAVE A SONE RATING OF 10 OR
LESS MEASURED AT 91 INCHES WATER
GAUGE

T T THERMOSTAT @ 50° ABOVE FLOOR

① 110V SMOKE ALARM PER IRC, R314 WITH BATTERY
BACKUP INTERCONNECTED PER R314.4 & R315.
USE A COMBINATION SMOKE/CARBON MONOXIDE
ALARM WHEN NOTED

② HEAT DETECTOR OR HEAT ALARM
RATED FOR THE AMBIENT OUTDOOR
TEMPERATURES & HUMIDITY PER IRC, R314.

MECHANICAL, PLUMBING, AND ELECTRICAL
SYSTEM FOR UNITS. PER DIV. 15.6 SEE SHEET A1

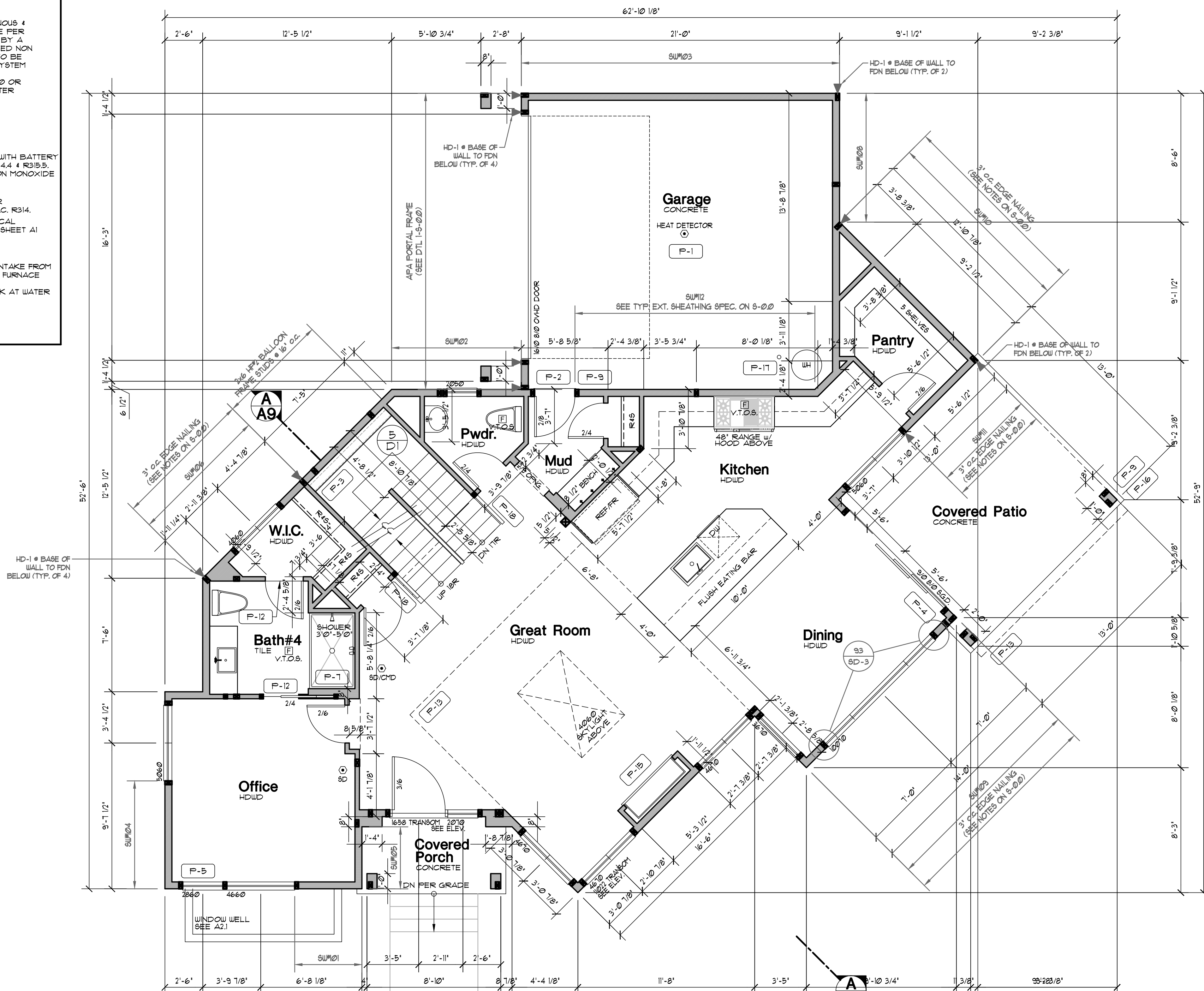
FURN	WH
------	----

A. PROVIDE 6" DIAMETER FRESH AIR INTAKE FROM
OUTDOOR TO RETURN AIR FLENUM AT FURNACE
WITH MOTORIZED FLOW DAMPERS.

B. PROVIDE THERMAL EXPANSION TANK AT WATER
HEATER.

C. CIRCULAR WATER HEATER TO FRAMING
TOP AND BOTTOM.

D. PROVIDE PRESSURE RELIEF LINE
FLUMED TO OUTSIDE.



1. SEE SHEET A-1 FOR ALL GENERAL NOTES AND REQUIREMENTS.
2. ENERGY AND AIR QUALITY INFORMATION SEE DIV. II SHEET A-1
3. SEE BUILDING ELEVATION FOR WINDOW OPERATION SEE DIV. 8 SHEET A-1
4. SEE TYP. MATERIALS LIST ON SECTION SHEET
5. SEE SHEET A-1 FOR ALL NOTES AND REQUIREMENTS CONCERNING MECHANICAL, PLUMBING AND ELECTRICAL.

- P-1** OCCUPANCY SEPARATION:
APPLY (1) LAYER OF 1/2" G.W.B. TO GARAGE SIDE OF
RESIDUAL ATTIC SPACES AND ALL BEAMS AND
POISTS SUPPORTING A FLOOR-CEILING ASSEMBLY.
APPLY (1) LAYER OF 1/8" TYPE "X" G.W.B. TO GARAGE
CEILING WHEN USING HANGABLE ROOMS.
DUCTS THROUGH WALL OR CEILING COMMON TO
HOUSE SHALL HAVE MINIMUM 26 GAUGE STEEL.
SEE DIV. 010201.6, SHEET A-1.

P-2 1/8" MIN. SELF CLOSING SLID WOOD CORE, MONEY-
CRIB BEDDED ATTIC JOIST MINUTE FIRE RATED DOOR.
SEE DIV. 010201.6, SHEET A-1.

P-3 STAIR ASSEMBLY NOTES: PER I.R.C. SECTION R301.
A. HEADROOM MIN. 6'-8", WIDTH MIN. 3'-0".
B. TREADS 10" MIN. DEPTH AND MIN. WIDTH OF 36"
ABOVE HANDRAILS AND MIN. RISES 7 1/2" MAX. HT.
TREAD NOSING TO BE MINIMUM 3/4" - AND
A MAXIMUM OF 1 1/4" ON STAIRS WITH SOLID RISERS.
C. HANDRAIL MIN. 34" TO MAX. 38" ABOVE
TREAD NOSING.
TREAD NOSING TO HAVE 1/4" MIN. TO 2" MAX. CROSS SECTION
DIMENSION AND 1 1/2" MIN. CLEAR FROM WALL.
RETURN RAIL, END OF STAIRS SHALL BE
STRONG ENOUGH TO RESIST A 200 LBS. POINT
LOAD IN ANY DIRECTION PER I.R.C. TABLE R301.5
D. INSTALL FIRE BLOCKING BETWEEN STRINGERS
AT THE TOP AND BOTTOM OF EACH RUN PER I.R.C.
SECTION R302.11.
E. COVER USABLE SPACE UNDER STAIR W/
1/4" G.W.B. PER I.R.C. SECTION R302.7.
F. INTERMEDIATE BALUSTERS SHALL BE SPACED
W/ LESS THAN 4" BETWEEN BALUSTERS.
G. PROVIDE STAIRWAY ILLUMINATION PER
I.R.C. SECTION R302.11.
SEE DIV. 010201.2 SHEET A-1.

P-4 SAFETY GLAZING PER I.R.C. SECTION R308
A. WINDOWS WITHIN 18" OF FLOOR.
B. WINDOWS WITHIN A 24" ARC OF DOORS
C. WINDOWS AT TUBS AND SHOWERS
GLAZING IN DOORS
E. LESS THAN 60" HORIZ. FROM THE BOT. STAIR
TREAD NOSING, 4 BOT. EDGE OF GLAZING IS
LESS THAN 36" FROM THE WALKING SURFACE
SEE DIV. 026200 SHEET A-1

P-5 EGRESS WINDOW PER I.R.C. SECTION R302
SEE DIV. 026200 SHEET A-1

P-6 IGNITERS FOR GAS FIRED APPLIANCES IN
GARAGE TO BE 18" MIN. ABOVE TOP OF SLAB.
SEE DIV. 15 SHEET A-1

P-7 COVER WALLS ADJACENT TO TUBS AND SHOWERS
WITH NON-ABSORBENT MATERIAL TO 12" ABOVE
DRAIN INLETS, PER I.R.C. SECTION 3012.
SEE DIV. 029250 SHEET A-1

P-8 (2) LAYERS OF FLOOR SHEATHING OVER
FRAMING.

P-9 7/8" X 1/8" RISER WITH 10' MIN. RUN IF MORE THAN
(3) RISERS, HANDRAIL REQUIRED PER I.R.C.
SECTION R301.13. SEE DIV. 010201.2 SHEET A-1

P-10 10"x24" CRAWL SPACE ACCESS, INSULATE AND
WEATHER STRIP. SEE DIV. 010201.2 SHEET A-1

P-11 22"x30" ATTIC SPACE ACCESS W/ 30" HEAD
CLEARANCE, INSULATE AND WEATHER STRIP.
SEE DIV. 010201.2 SHEET A-1

P-12 FLOOR MATERIAL BREAK LINE

P-13 WALL LINE ABOVE

P-14 WALL LINE BELOW

P-15 FIREPLACE ASSEMBLY NOTES:
A. DIRECT VENT GAS FIREPLACES MUST BE LISTED,
LABELLED AND INSTALLED PER MFG. SPECIFICATIONS.
SHALL CONFORM TO I.R.C. REQUIREMENTS.
SEE DIV. 010201.2 SHEET A-1
B. ZERO CLEARANCE FIREPLACES SHALL CONFORM
TO I.R.C. REQUIREMENTS. SEE DIV. 010201.2 SHEET A-1
C. HEARTH SHALL CONFORM TO I.R.C. REQUIREMENT
SEE DIV. 010201.2
D. FIREBLOCK OPENINGS AROUND PENETRATIONS
AT EACH FLOOR JOIST. SEE I.R.C. SECTION R302.7
E. FIREPLACE MUST COMPLY WITH 121 TESTING
SEE SITE PLAN FOR EXTENT OF WALKS & DRIVEWAYS

P-16 3" DIAMETER STEEL POST

P-18 36" GUARDRAIL PER I.R.C. SECTION R302 & TABLE R301.5
CONTRACTOR TO VERIFY TO INSPECTOR THAT ALL
GUARDS & RAILINGS ARE CAPABLE OF RESISTING
200 LBS. LOAD ON EACH RAIL, ACTING IN ANY DIRECTION.
PER I.R.C. SECTION R302.11. CLEARANCE ALL SIDES
PER I.R.C. SECTION R302.11. SEE DIV. 15 SHEET A-1

P-19 PLANT SHELF

P-20 UPPER AND LOWER LINEN CABINETS

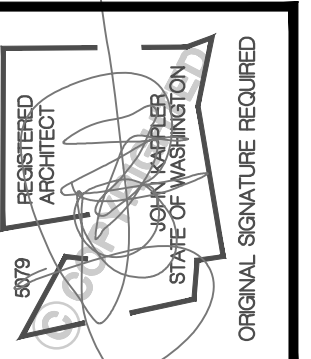
P-22 SOFFIT AREA

P-23 INTEGRATED MAKE UP AIR

P-24 2x6 STUDS W/ R-21 INSULATION MIN.

MAIN FLOOR	<u>1315</u>	SF
UPPER FLOOR	<u>1541</u>	SF
BASEMENT	<u>590</u>	SF
TOTAL	<u>3446</u>	SF
GARAGE	<u>405</u>	SF
PORCH/PATIO	<u>44/170</u>	SF

SQUARE FOOTAGE IS MEASURED TO THE OUTSIDE FACE OF WALLS. STAIRS ARE COUNTED ONCE IN CALCULATIONS. OPEN TO BELOW SPACES AND GARAGES ARE NOT INCLUDED IN CALCULATIONS.

[illegible]

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E

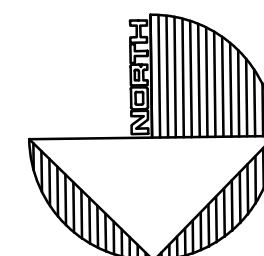
DB NO. :	2102205
STARTING NO. :	2102203

ET

A3

MAIN FLOOR PLAN

Scale 1/4" = 1'-0"





SHEET

A4

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F) FAN- DIRECT VENT TO OUTSIDE
-BATHROOM'S/LAUNDRY 50 CFM MIN.
-KITCHEN EXHAUST HOOD TO BE MIN. OF
100CFM. IF EXHAUST HOOD EXCEEDS 400
CFM MAKE UP AIR MUST BE PROVIDED
PER SECTION M1B03.6.

UF) WHOLE-HOUSE FAN TO RUN CONTINUOUS &
CONSERVE TO I/R. M1B05.4. FAN SIZE PER
FLAN PLAN RATE TO BE ADJUSTED BY A
FACTOR OF 15 FOR A NON BALANCED NON
DISTRIBUTED SYSTEM. FRESH AIR TO BE
PROVIDED BY EXHAUST AIR SYSTEM
DUCTS PER SECTION M1B05.41.

F) FAN TO HAVE A SONE RATING OF 10 OR
LESS MEASURED AT 21 INCHES WATER
GUAGE

T) THERMOSTAT @ 50° ABOVE FLOOR

④ 110V SMOKE ALARM PER I.R.C. R314 WITH BATTERY
BACKUP INTERCONNECTED PER R314.4 & R315.5.
USE A COMBINATION SMOKE/CARBON MONOXIDE
ALARM WHEN NOTED

④ HEAT DETECTOR OR HEAT ALARM
RATED FOR THE AMBIENT OUTDOOR
TEMPERATURES & HUMIDITY PER I.R.C. R314.

MECHANICAL, PLUMBING, AND ELECTRICAL
SYSTEM FOR UNITS: PER DIV. 15/16 SEE SHEET A1

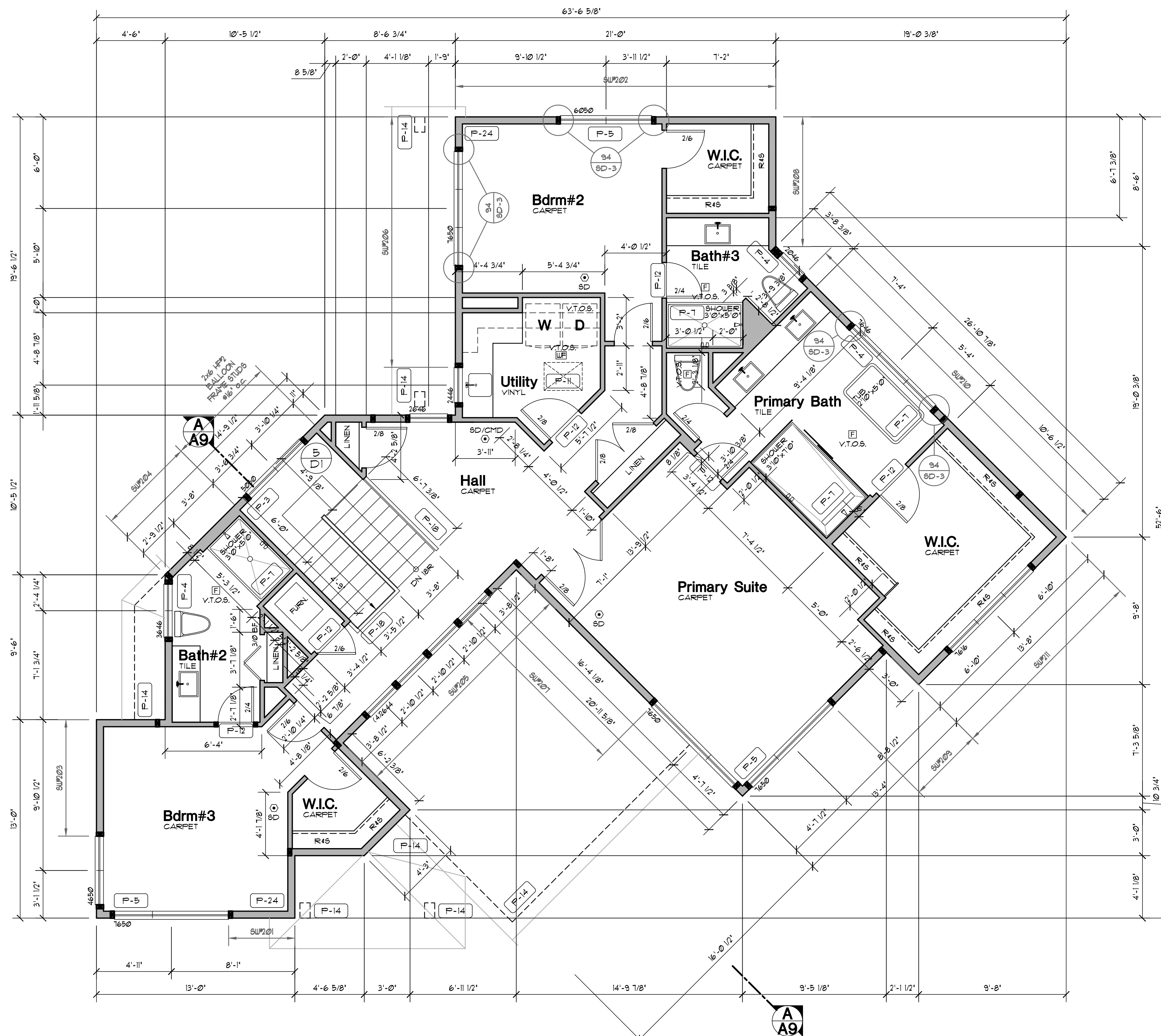
FURN UH

A) PROVIDE 6" DIAMETER FRESH AIR INTAKE FROM
OUTSIDE TO RETURN AIR PLENUM AT FURNACE
WITH MOTORIZED FLOW DAMPERS.

B) PROVIDE THERMAL EXPANSION TANK AT WATER
HEATER.

C) STRAP WATER HEATER TO FRAMING
TOP AND BOTTOM.

D) PROVIDE PRESSURE RELIEF LINE
PLUMBED TO OUTSIDE.



1. SEE SHEET A-1 FOR ALL GENERAL NOTES AND REQUIREMENTS.
2. ENERGY AND AIR QUALITY INFORMATION
SEE DIV. II SHEET A-1
3. SEE BUILDING ELEVATION FOR WINDOW
OPERATION SEE DIV. 8 SHEET A-1
4. SEE TYP. MATERIALS LIST ON SECTION SHEET
5. SEE SHEET A-1 FOR ALL NOTES AND
REQUIREMENTS CONCERNING MECHANICAL,
PLUMBING, AND ELECTRICAL.

- P-1** OCCUPANCY SEPARATION:
APPLY (1) LAYER OF 1/2" G.W.B. TO GARAGE SIDE OF
RESIDENTIAL ATTIC SPACES AND TO ALL BEAMS AND
POSTS SUPPORTING A FLOOR-CEILING ASSEMBLY.
APPLY (1) LAYER OF 3/8" TYPE "X" G.W.B. TO GARAGE
CEILING WHEN UNDER HABITABLE ROOMS.
DUCTS THROUGH WALLS OR CEILING COMMON TO
HOUSE SHALL HAVE MINIMUM 26 GAUGE STEEL
SEE DIV. 01002.6 & SHEET A-1.

P-2 3/8" MIN. SELF CLOSING SLID WOOD CORE, HONEY-
COMBED CARPET STEEL 120-MINUTE FIRE RATED DOOR.
SEE DIV. 01002.8 SHEET A-1.

P-3 STAIR ASSEMBLY NOTES: PER I.R.C. SECTION R311
A. HEADROOM MIN. 6'-8", WIDTH MIN. 3'-0".
B. TREADS 10" MIN. TREAD AND MIN. WIDTH OF 36"
ABOVE HANDRAILS. MAX. RISE 8 1/2" MAX. HT.
TREAD NOSING TO BE MINIMUM 3/4" AND A
MAXIMUM OF 1 1/4" ON STAIRS WITH SOLID RISERS.
C. HANDRAIL MIN. 34" TO MAX 38" ABOVE
TREAD NOSING. HANDRAIL TYPE 1 CIRCULAR
TO HAVE 1/4" MIN. TO 2" MAX. CROSS SECTION
DIMENSION AND 1 1/2" MIN. CLEAR FROM WALL.
RETURN RAIL, END OF STAIR, SHALL BE
STRONG ENOUGH TO RESIST A 1200 POUND POINT
LOAD IN ANY DIRECTION PER I.R.C. TABLE R301.5
D. INSTALL FIRE BLOCKING BETWEEN STRINGERS
AT THE TOP AND BOTTOM OF EACH RUN PER
I.R.C. SECTION R302.11.
E. COVER USABLE SPACE UNDER STAIR W/
1/2" G.W.B. PER I.R.C. SECTION R302.7.
F. INTERMEDIATE BALUSTERS SHALL BE SPACED
W/ LESS THAN 4" BETWEEN BALUSTERS.
G. PROVIDE STAIRWAY ILLUMINATION PER
I.R.C. SECTION R302.7.
SEE DIV. 01002.1 SHEET A-1.

P-4 SAFETY GLAZING PER I.R.C. SECTION R308
A. WINDOWS WITHIN 18" OF FLOOR.
B. WINDOWS WITHIN A 24" ARC OF DOORS
C. WINDOWS AT TUBS AND SHOWERS
D. GLAZING IN DOORS
E. LESS THAN 60" HORIZ. FROM THE BOT. STAIR
TREAD NOSING, 4 BOT. EDGE OF GLAZING IS
LESS THAN 36" 4" LANDING/WALKING SURFACE
SEE DIV. 01002.0 SHEET A-1.

P-5 EGRESS WINDOW PER I.R.C. SECTION R310
SEE DIV. 01002.0 SHEET A-1.

P-6 IGNITERS FOR GAS FIRED APPLIANCES IN
GARAGE TO BE 18" MIN. ABOVE TOP OF SLAB.
SEE DIV. 15 SHEET A-1.

P-7 COVER WALLS ADJACENT TO TUBS AND SHOWERS
WITH NON-ABSORBENT MATERIAL TO 12" ABOVE
DRAIN INLETS PER I.R.C. SECTION 3012.
SEE DIV. 010250 SHEET A-1.

P-8 (2) LAYERS OF FLOOR SHEATHING OVER
FRAMING.

P-9 3/4" MAX. RISER WITH 10" MIN. RUN, IF MORE THAN
13" RISERS, HANDRAIL REQUIRED PER I.R.C.
SECTION R311.7. SEE DIV. 01002.1 SHEET A-1.

P-10 18"x24" CRAWL SPACE ACCESS, INSULATE AND
WEATHER STRIP. SEE DIV. 01002.1 SHEET A-1.

P-11 22"x30" ATTIC SPACE ACCESS W/ 30" HEAD
CLEARANCE, INSULATE AND WEATHER STRIP.
SEE DIV. 01002.2 SHEET A-1.

P-12 FLOOR MATERIAL BREAK LINE

P-13 WALL LINE ABOVE

P-14 WALL LINE BELOW

P-15 FIREPLACE ASSEMBLY NOTES:
A. DIRECT VENT GAS FIREPLACES MUST BE LISTED,
LABELED AND RATED PER MFG. SPECIFICATIONS,
SHALL CONFORM TO I.R.C. REQUIREMENTS.
SEE DIV. 01002.12 SHEET A-1.
B. ZERO CLEARANCE FIREPLACES SHALL CONFORM
TO I.R.C. REQUIREMENTS PER MFG. SPECIFICATIONS.
SEE DIV. 01002.12 SHEET A-1.
C. HEARTH SHALL CONFORM TO I.R.C. REQUIREMENT
SEE DIV. 01002.12
D. FIREBLOCK OPENINGS AROUND PENETRATIONS
* EACH FLOOR PER I.R.C. SECTION R302.15.
E. FIREPLACE MUST COMPLY WITH UL 127 TESTING.
SEE SITE PLAN FOR EXTENT OF WALKS & DRIVEWAYS

P-16 3" DIAMETER STEEL POST

P-18 36" GUARDRAIL PER I.R.C. SECTION R312 & TABLE R301.5
CONTRACTOR TO VERIFY TO INSPECTOR THAT ALL
GUARDS & RAILINGS ARE CAPABLE OF RESISTING
200LB LOAD ON GUARDRAIL ACTING IN ANY DIRECTION.
SEE VERIFICATION OF MINIMUM CLEARANCE ALL SIDES
PER I.R.C. SECTION R302.11. SEE DIV. 15 SHEET A-1.

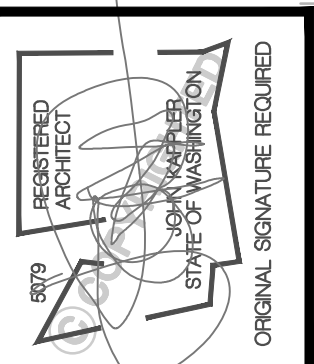
P-19 PLANT SHELF

P-20 UPPER AND LOWER LINEN CABINETS

P-22 SOFFIT AREA

P-23 INTEGRATED MAKE UP AIR

P-24 2x6 STUDS W/ R-21 INSULATION MIN.

[illegible]

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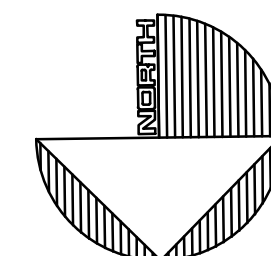
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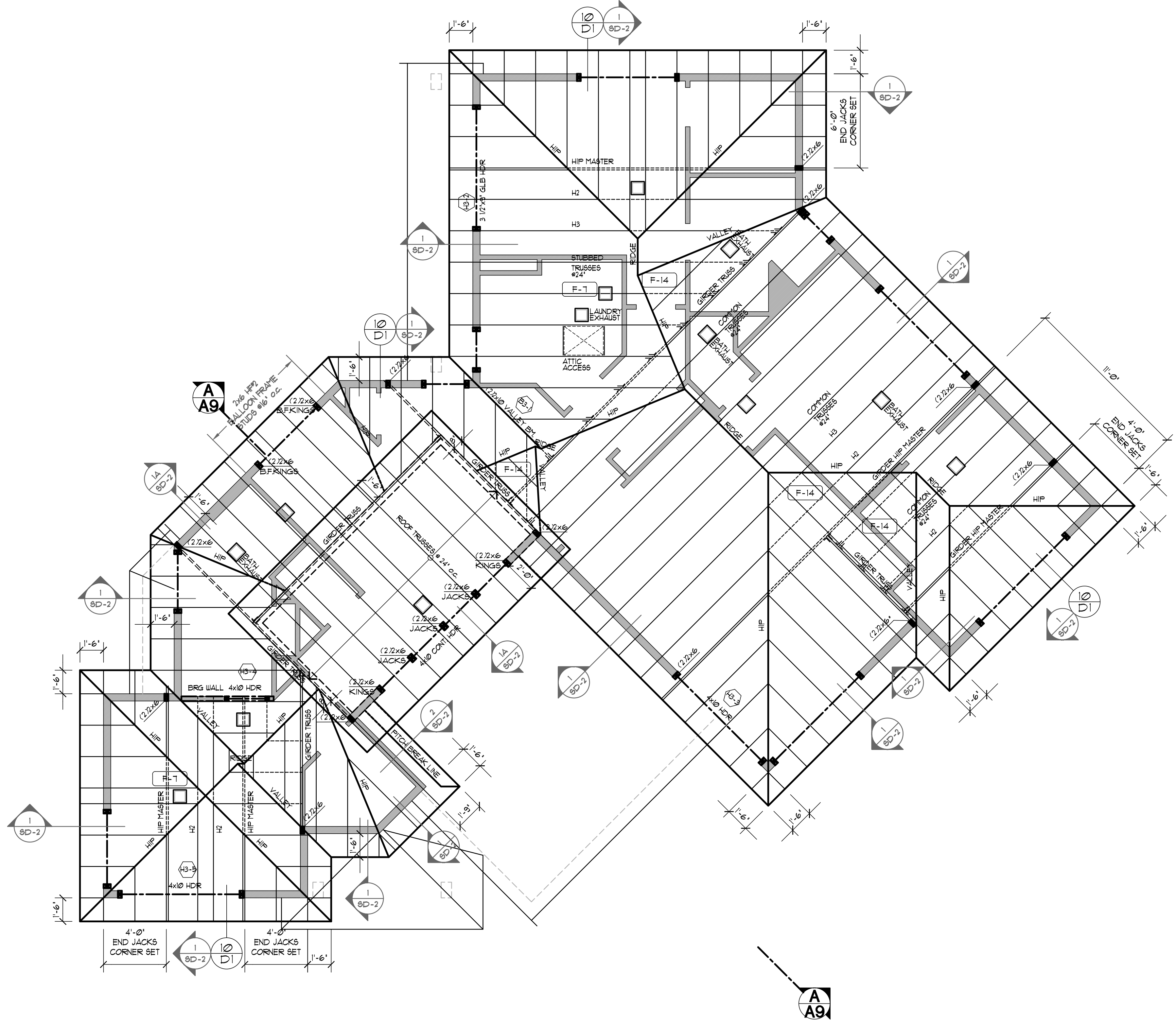
TITLE	
JOB NO. :	21022.05
STARTING NO. :	21022.03

SHEET

A5

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





UPPER ROOF FRAMING PLAN
SCALE 1/4"=1'-0"

GENERAL FRAMING NOTES

- SEE TYPICAL MATERIALS LIST ON SECTION SHEET
- SEE SHEET A-1 FOR ALL GENERAL NOTES AND FOR ALL REQUIREMENTS CONCERNING MECHANICAL, PLUMBING, AND ELECTRICAL.
- TRUSS DESIGN BY MFG. TRUSS PLAN SHOWN IS FOR GENERAL LAYOUT ONLY. SEE DIV. 6100 SHEET A-1
 - TRUSS LOADING. SEE DIV. 010010A SHEET A-1
 - TRUSS SPAN PER FLOOR PLANS
 - TRUSS TYPE PER ROOF FRAMING PLAN
- ROOF FRAMING SPACING, 24" O.C. UNO.
- ROOF PITCH- EXTERIOR PER ELEVATION INTERIOR PER SECTION.
- RAFTER TAIL 2x4. VERIFY.
- ROOF TAIL AND RAKE OVERHANG PER ROOF PLAN.
- ALL HEADERS ARE 4x10 DF #2 UNO. PROVIDE (1) TRIMMER STUD UP TO 4'-0" SPAN (B3) AND (2) TRIMMER STUDS OVER 4'-0" UNO. SEE DIV. 06100 SHEET A-1.
- STUD NOTCHING AND BORING PER I.R.C. SECT. R602.6
 - BEARING OR EXTERIOR WALL MAXIMUM NOTCH 25% BORING 40%.
 - 60% MAXIMUM BORING IF DOUBLED WITH NOT MORE THAN (2) SUCCESSIVE STUDS BORED.
 - NON-BEARING MAXIMUM NOTCH 40% BORING 60%.
 - HOLES NO CLOSER THAN 5/8" TO FACE OF STUD.

FRAMING PLAN KEYNOTES

- F-1 BACK FRAMING AND SOFFIT AREA AS REQUIRED TO ALLOW FOR HVAC DUCTING. SEE DIV.15 SHEET A-1
- F-2 RAKED PONY WALL ON TOP OF LOWER ROOF FRAMING MEMBERS SUPPORTING UPPER ROOF FRAMING MEMBERS.
- F-3 ALIGN EDGE OF JOIST WITH FACE OF WALL
- F-4 ALIGN INSIDE FACE OF BEAM WITH OUTSIDE FACE OF WALL
- F-5 UPSET - BOTTOM OF BEAM EVEN W/ BOTTOM OF JOIST AND TOP OF BEAM EXTENDS UP ABOVE JOISTS
- F-6 TOP OF BEAM IS FLUSH WITH BOTTOM OF JOIST WITH NO TOP PLATE. CUT ADJACENT FRAMING MEMBERS INTO BEAM FOR ADEQUATE SUPPORT.
- F-7 ATTIC SPACE VENT SEE CALCULATION SEE DIV. 010013B SHEET A-1
- F-8 FLOOR JOIST - SEE SCHEDULE DWG. SEE DIV. 06100 SHEET A-1
- F-9 SEE ELEVATIONS AND SECTIONS FOR PLATE HEIGHT
- F-10 PRESSURE BLOCKING SEE DIV. 06100 SHEET A-1
- F-11 FLUSH - BOTTOM OF BEAM EVEN W/ BOTTOM OF JOISTS
- F-12 TOP OF BEAM FLUSH W/ TOP OF JOIST AND BEAM EXTENDS DOWN BELOW JOISTS
- F-13 TOP OF BEAM 3" BELOW TOP OF FLOOR TRUSS. FLOOR TRUSSES TO BE TOP CHORD BEARING.
- F-14 2x OVERFRAMING # 24' O.C. PROVIDE 2x6 STRONGBACK FURLING AND 2x KICKERS AT 6'-0" O.C TO TRUSSES BELOW.
- F-15 2x6 CEILING JOISTS # 24' O.C

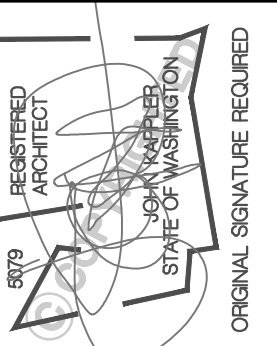
ROOF VENT CALCULATION

TOTAL ROOF AREA	1622	SF/300	=54	SF OF VENT AREA REQ
40% MIN. AT 36" MAX BELOW RIDGE	= 216	SF MIN.		
50% MAX. AT 36" MAX BELOW RIDGE	= 27	SF MAX.		
7	ROOF JACKS AT 50 SQ. IN. EACH =	350	SQ. IN.=243	SF
	(36" MAX BELOW RIDGE)			
237	L.F. OF EAVE VENTS AT 3.3+SQ. IN./L.F.	7821	SQ. IN.= 543	SF
TOTAL SF OF VENTILATION PROVIDED				= 786 SF

SYMBOLS & LEGEND

- POINT LOADS FROM ABOVE
- POINT LOADS FROM ABOVE W/ LOADING
- POINT LOAD TRANSFERING DOWN
- POINT LOAD TRANSFERING DOWN W/ LOADING
- HANGER
- POINT LOAD TRANSFERED BY KICKER
- HOLD DOWN WITH SIZE DESIGNATION
- VERTICAL STRAP WITH SIZE DESIGNATION TO BE USED ON FLOOR BELOW
- HORIZONTAL STRAP WITH SIZE DESIGNATION
- INDICATES BEAM CALCULATION WITH INDEXED NUMBER
- WALL ABOVE
- WALL BELOW

NOTE: UNLESS OTHERWISE NOTED, ENGINEERING AND CALCULATIONS ARE NOT PROVIDED IN THESE DRAWINGS.



Date	By	Description
12/2/24	AG	PERMIT SET

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JOB NO.: 2102205
STARTING NO.: 2102203

SHEET
A6

TYPICAL BUILDING MATERIALS

ROOF CONSTRUCTION

ROOFING: (DIV. 7)
BUILDING PAPER: (DIV. 7)
SHEATHING: (DIV. 6)

FRAMING: (DIV. 6)
INSULATION: (DIV. 7)
SOFFIT: (DIV. 7)
GWB: (DIV. 9)

SHINGLES (DIV. 01000.5)
30# BUILDING PAPER
7/16" O.S.B. OR EQUAL

PER PLAN
R-60 BLOWN-IN
PER SPEC.
5/8" GWB

EXTERIOR WALL CONSTRUCTION

SIDING MATERIAL: (DIV. 7)
BUILDING WRAP: (DIV. 7)
SHEATHING: (DIV. 6)
FRAMING: (DIV. 6)
INSULATION: (DIV. 7)

WOOD SIDING (DIV. 01000.5)
15# BUILDING PAPER
1/2" CDX PLYWOOD OR EQUAL
2 X 6 STUDS AT 16" OC
R-25 BLOWN BLANKET
PROVIDE CLASS II VAPOR RETARDER
IN MARINE ZONE 4
1/2" GWB

GWB: (DIV. 9)

FLOOR CONSTRUCTION

FLOORING: (DIV. 9)
SUBFLOOR: (DIV. 6)
FRAMING: (DIV. 6)
INSULATION: (DIV. 7)
SOFFIT: (DIV. 7)

FINISH PER PLANS (DIV. 01000.5)
3/4" T&G (PLYWD, COMPLY, OR EQ)
PER PLAN
R-38 BATT
PER SPEC.

TRIM:(DIV. 6)

WINDOW:
(WITH NO BRICK MOLD)

CORNER BOARDS:

FASCIA:

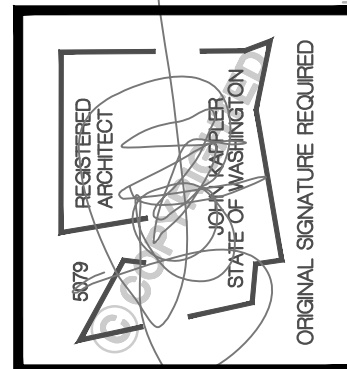
HEAD: METAL FLASHING
JAMB: METAL FLASHING
SILL: METAL FLASHING
INSIDE: METAL CORNER
OUTSIDE: METAL CORNER
2x8 UNO



WEST ELEVATION



NORTH ELEVATION



Date	By	Description
2/2/24	AG	PERMIT SET

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TITLE
JOB NO.: 21022.05
STARTING NO.: 21022.03

SHEET
A7

ROOF CONSTRUCTION

FRAMING: (DIV. 6)
INSULATION: (DIV. 7)
SOFFIT: (DIV. 7)
GWB: (DIV. 9)

PER PLAN
R-60 BLOWN-IN
PER SPEC.
5/8" GWB

SIDING MATERIAL: (DIV. 7)
BUILDING WRAP: (DIV. 7)
SHEATHING: (DIV. 6)
FRAMING: (DIV. 6)
INSULATION: (DIV. 7)

PROVIDE
IN MAR
1/2" GWB

FLOORING: (DIV. 9)
SUBFLOOR: (DIV. 6)
FRAMING: (DIV. 6)
INSULATION: (DIV. 7)
SOFFIT: (DIV. 7)

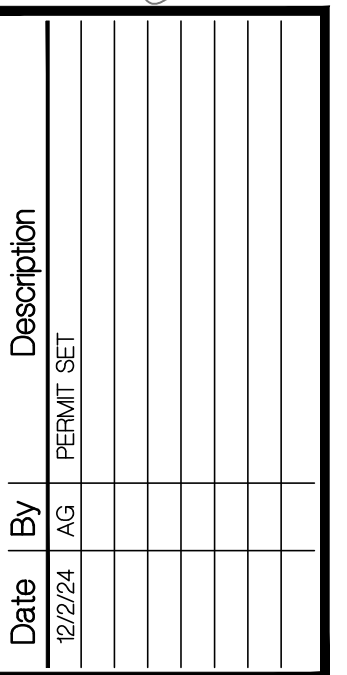
**WINDOW:
(WITH NO BRICK MOLD)**



Scale 1/4"=1'-0"



Scale 1/4" = 1'-0"



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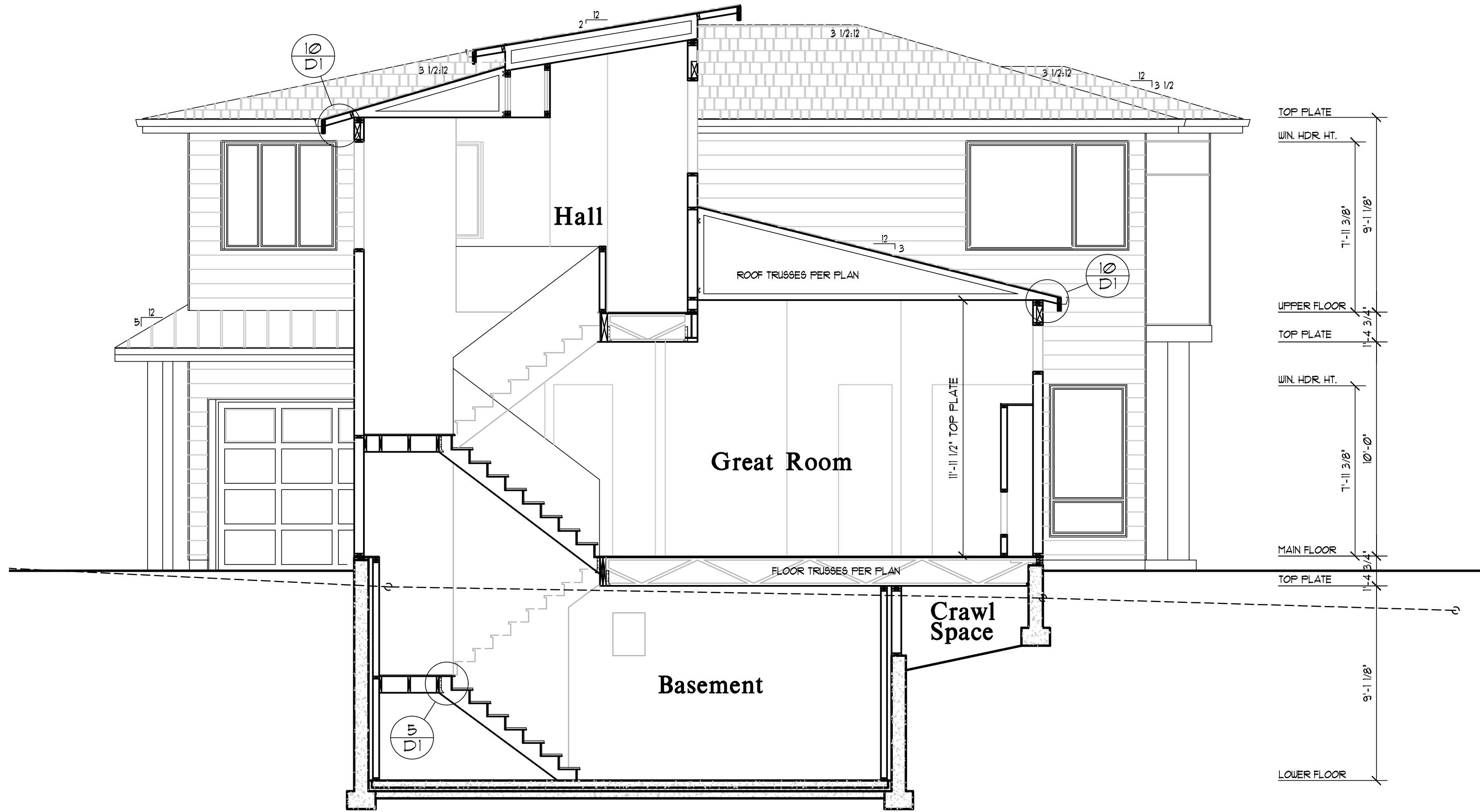
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TITLE

OB NO. :	21022.05
STARTING NO. :	21022.03

SHEET

A8



BUILDING SECTION A-A

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

TYPICAL BUILDING MATERIALS

ROOF CONSTRUCTION

- ROOFING: (DIV. 7)
BUILDING PAPER: (DIV. 7)
SHEATHING: (DIV. 6)

FRAMING: (DIV. 6)
INSULATION: (DIV. 7)
SOFFIT: (DIV. 7)
GWB: (DIV. 9)
- SHINGLES (DIV. 01000.5)
30# BUILDING PAPER
7/16" O.S.B. OR EQUAL

PER PLAN
R-60 BLOWN-IN
PER SPEC.
5/8" GWB

EXTERIOR WALL CONSTRUCTION

- SIDING MATERIAL: (DIV. 7)
BUILDING WRAP: (DIV. 7)
SHEATHING: (DIV. 6)
FRAMING: (DIV. 6)
INSULATION: (DIV. 7)

GWB: (DIV. 9)
- WOOD SIDING (DIV. 01000.5)
15# BUILDING PAPER
1/2" CDX PLYWOOD OR EQUAL
2 X 6 STUDS AT 16" OC
R-25 BLOW-IN BLANKET
PROVIDE CLASS II VAPOR RETARDER
IN MARINE ZONE 4
1/2" GWB

FLOOR CONSTRUCTION

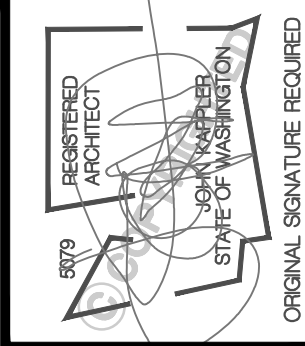
- FLOORING: (DIV. 9)
SUBFLOOR: (DIV. 6)
FRAMING: (DIV. 6)
INSULATION: (DIV. 7)
SOFFIT: (DIV. 7)
- FINISH PER PLANS (DIV. 01000.5)
3/4" T&G (PLYWD, COMPLY, OR EQ)
PER PLANS
R-38 BATT
PER SPEC.

TRIM:(DIV. 6)

- WINDOW:
(WITH NO BRICK MOLD)

CORNER BOARDS:

FASCIA:
- HEAD: METAL FLASHING
JAMB: METAL FLASHING
SILL: METAL FLASHING
INSIDE: MBATL CORNER
OUTSIDE: METAL CORNER
2x8 UNO



Date	By	Description
2/22/24	AG	PERMIT SET

Milestone NW
Mercer Island Lot 1

7621 SE 22nd ST. Mercer Island, WA 98040

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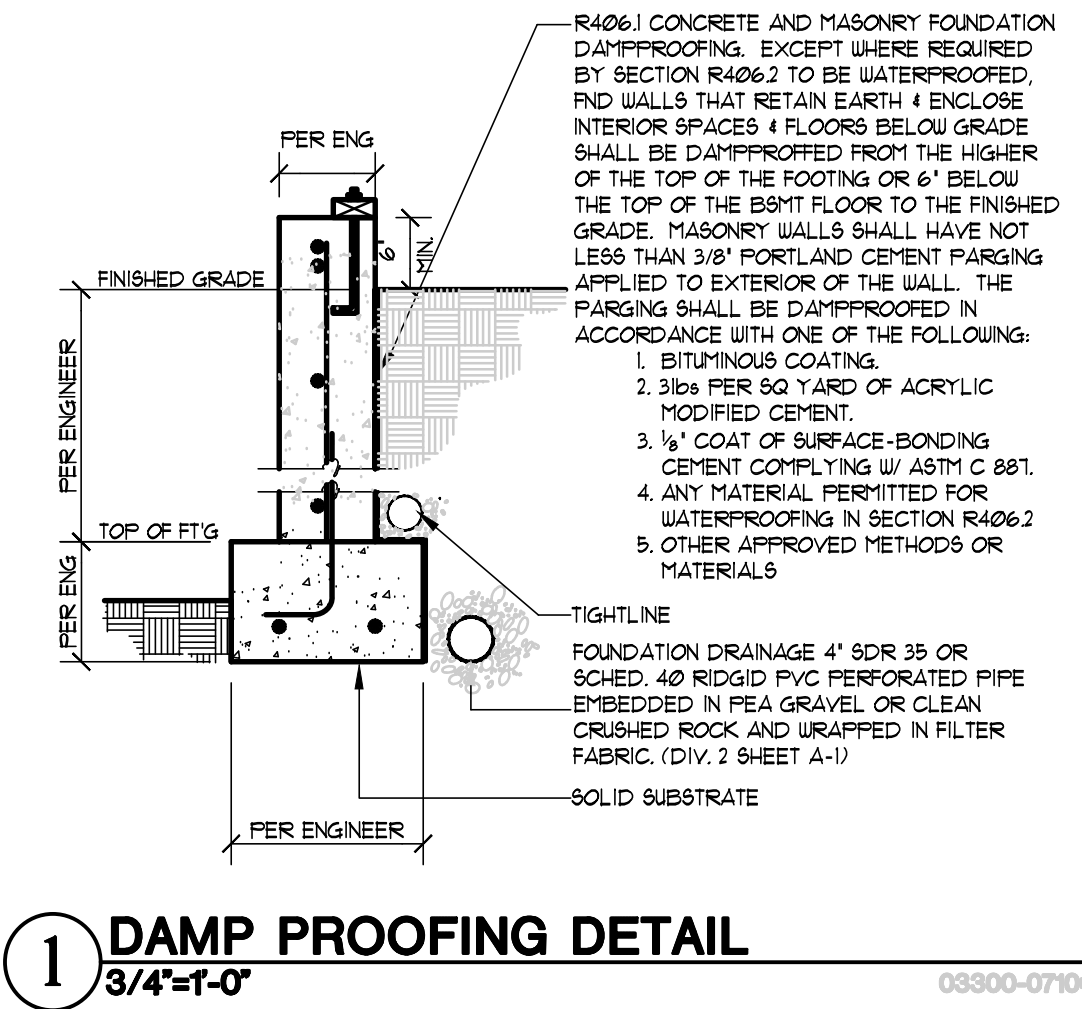
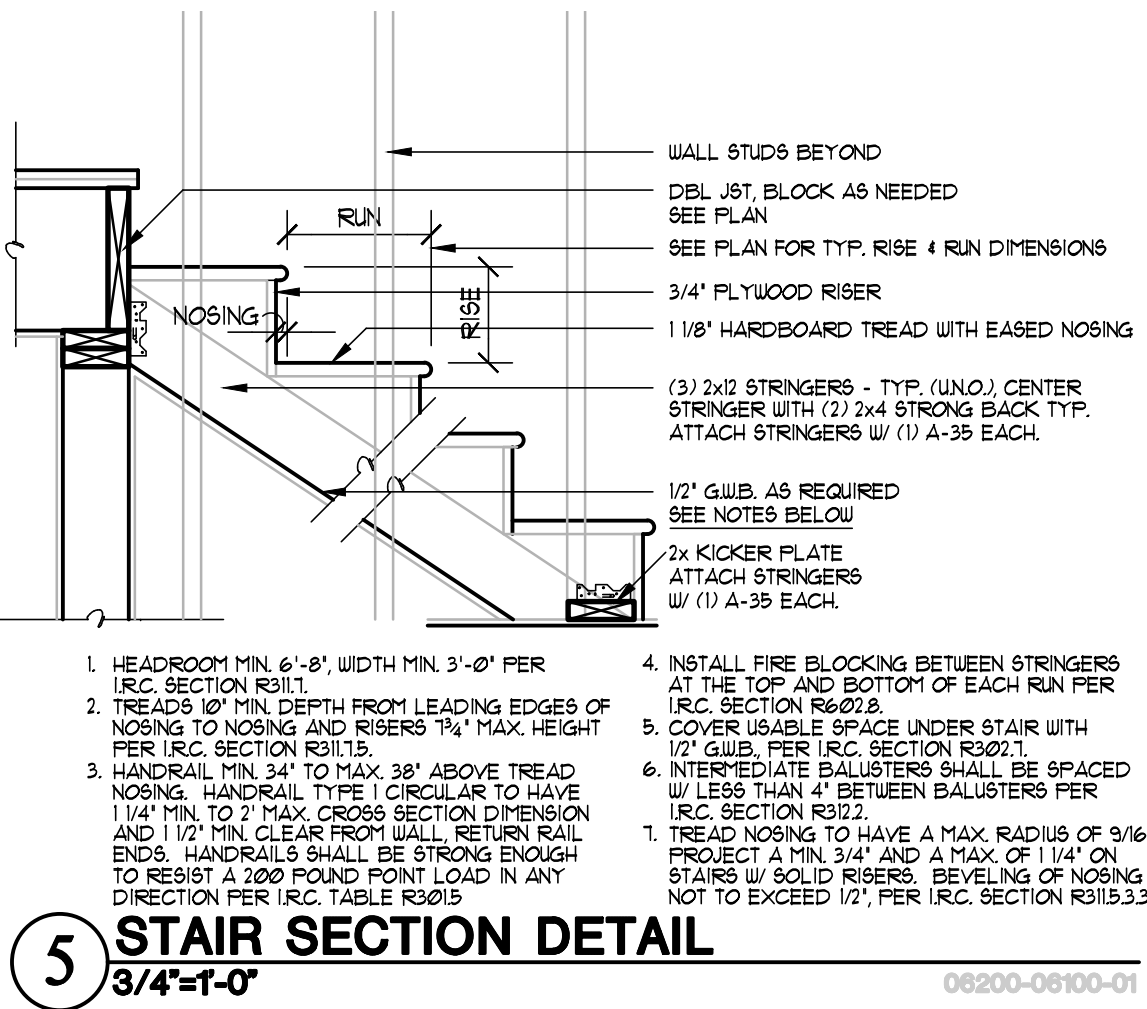
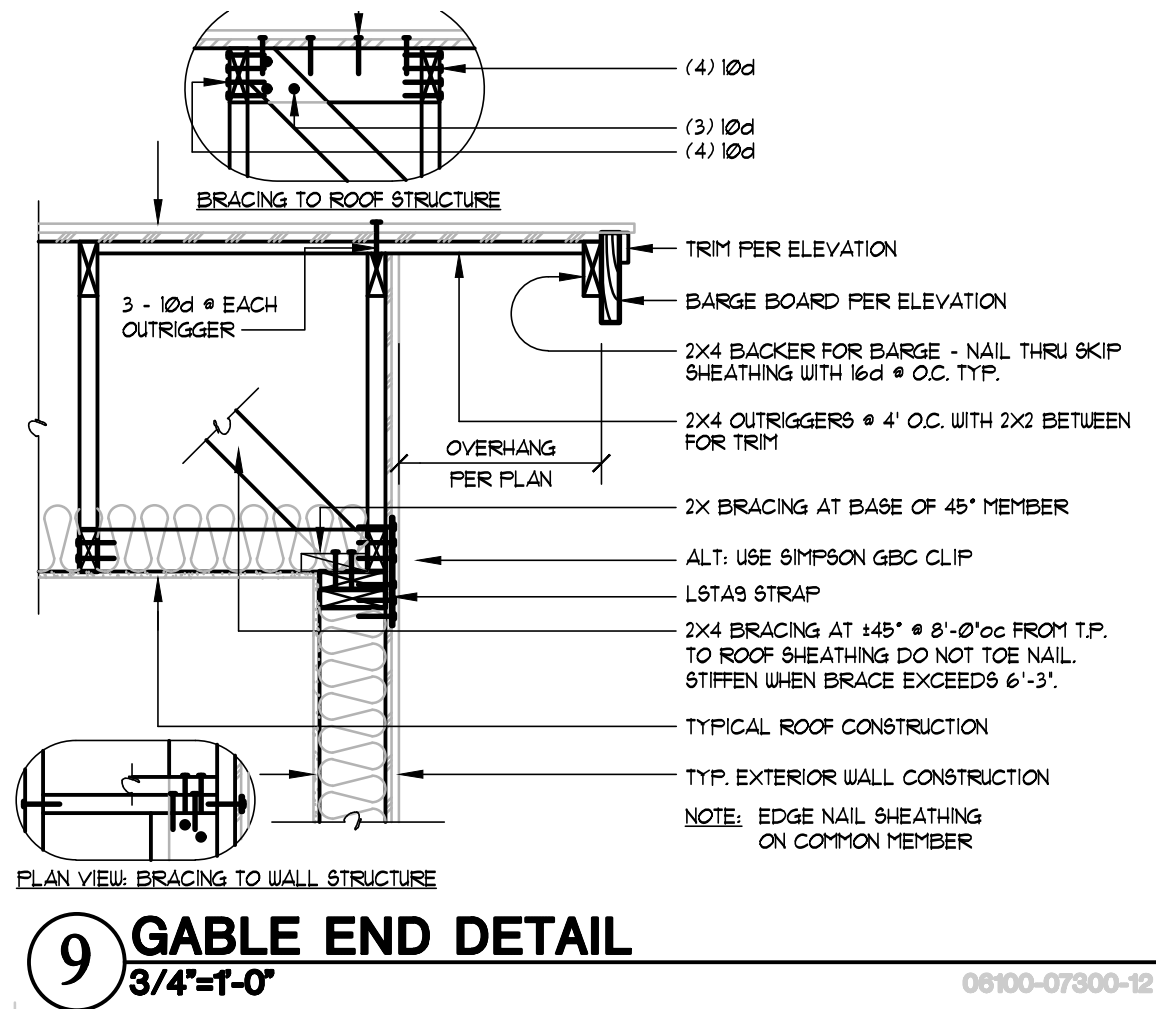
TITLE
JOB NO.: 21022.05
STARTING NO.: 21022.03

SHEET

A9

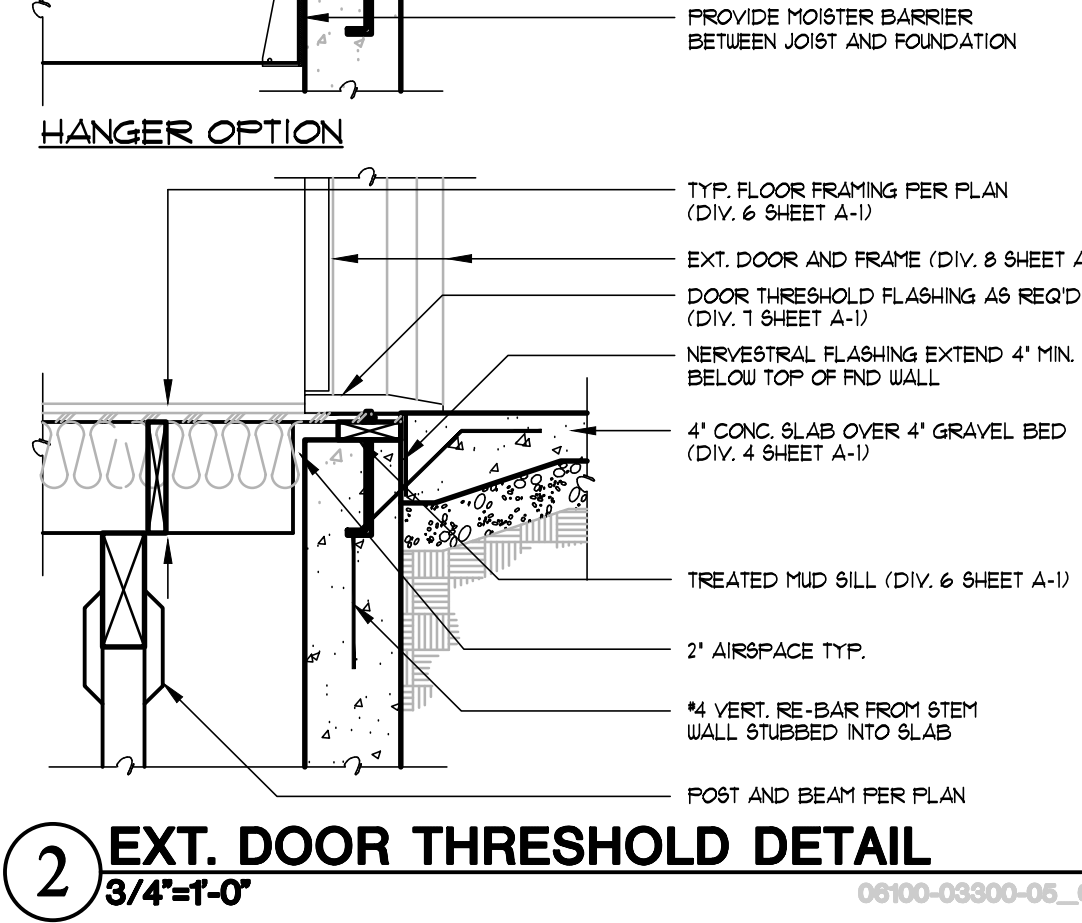
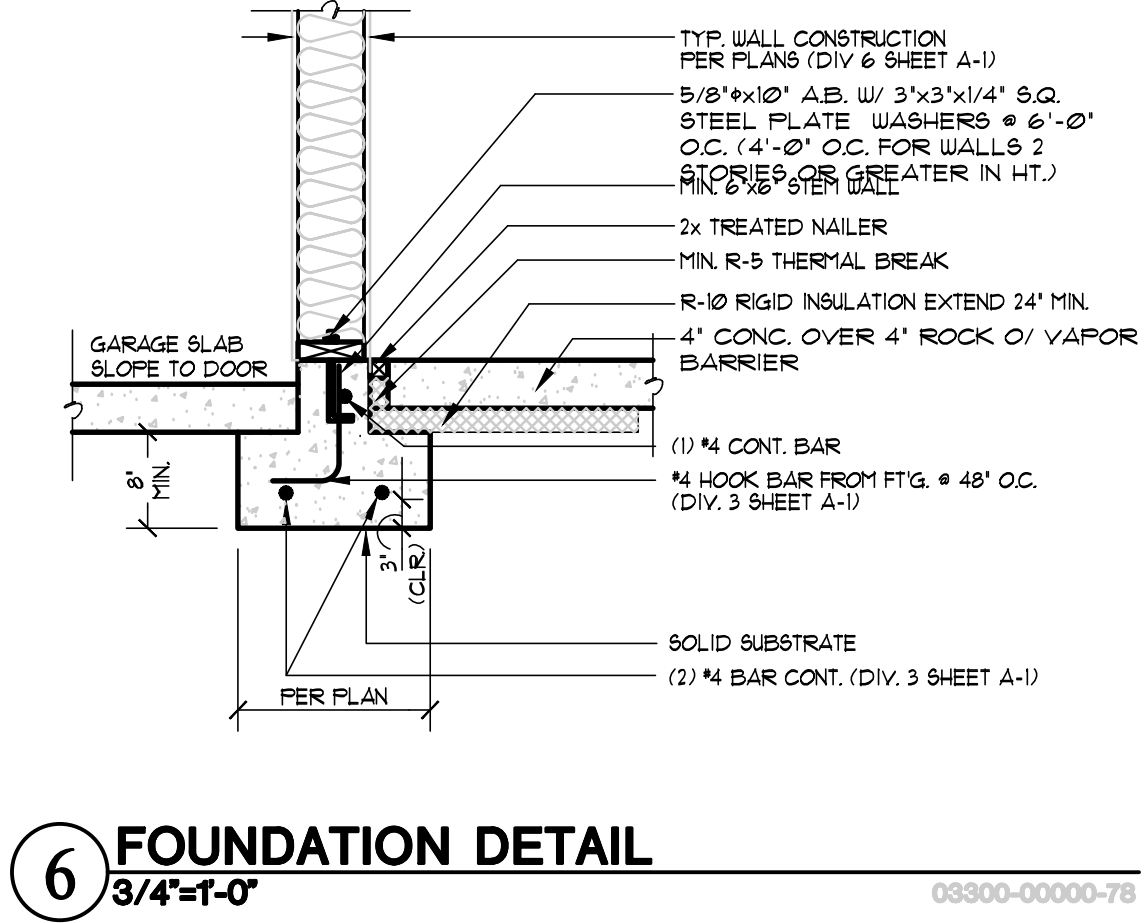
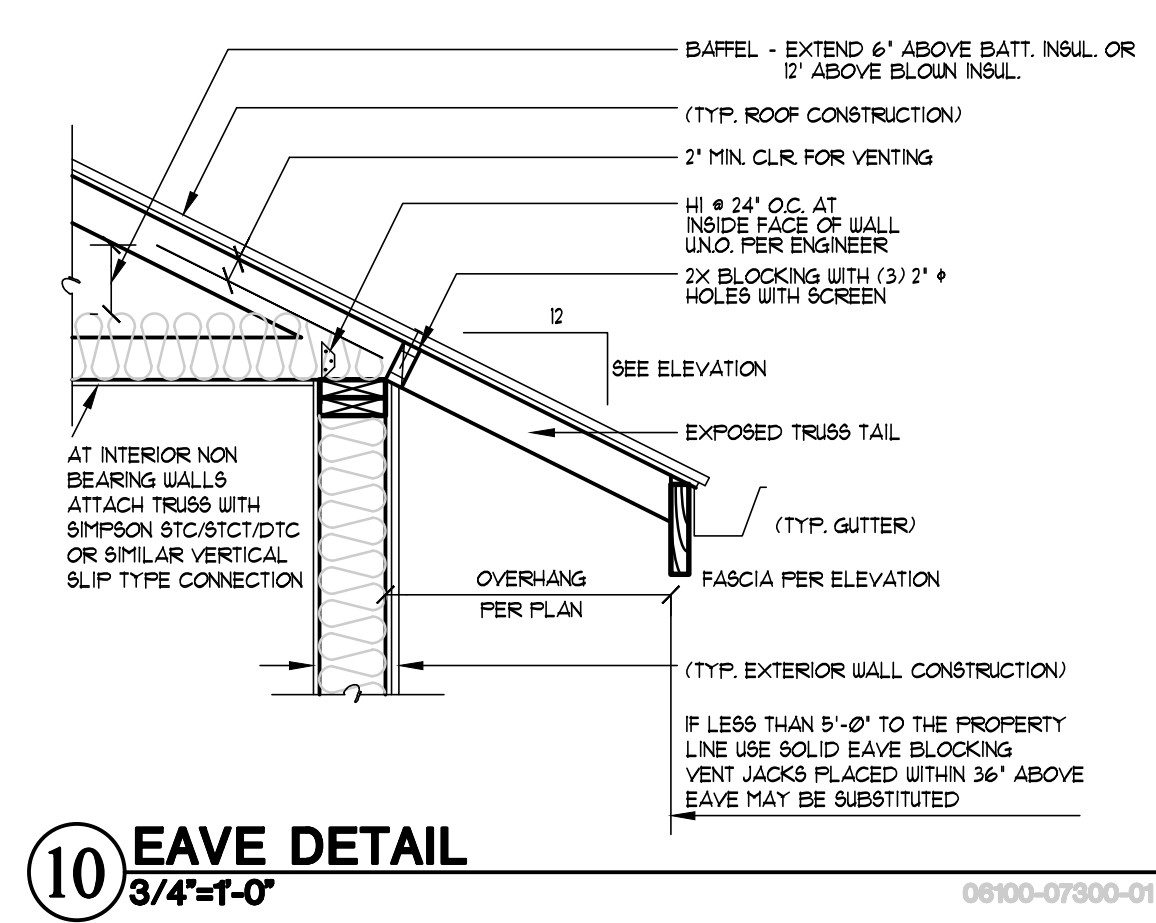
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13



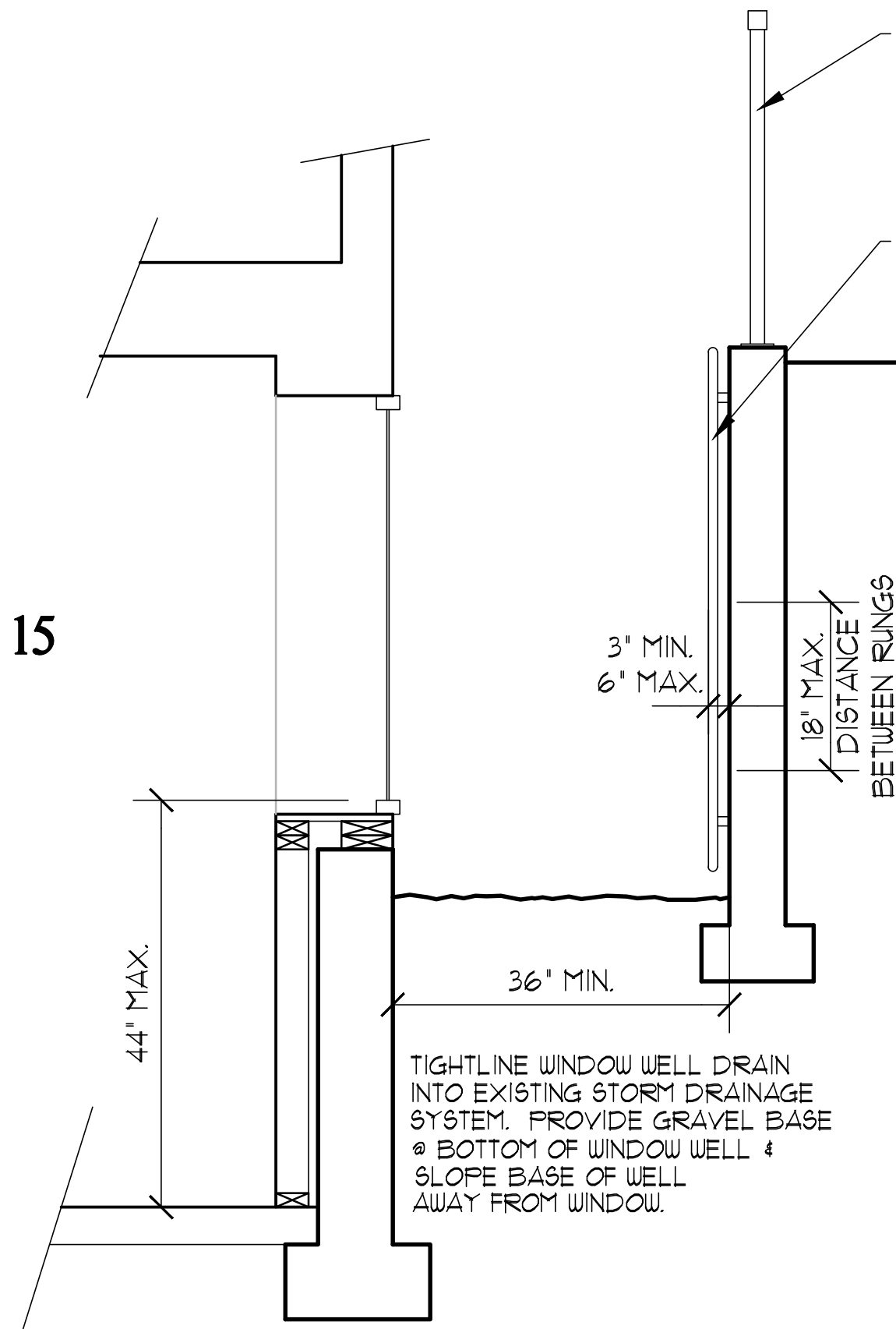
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14



19

15

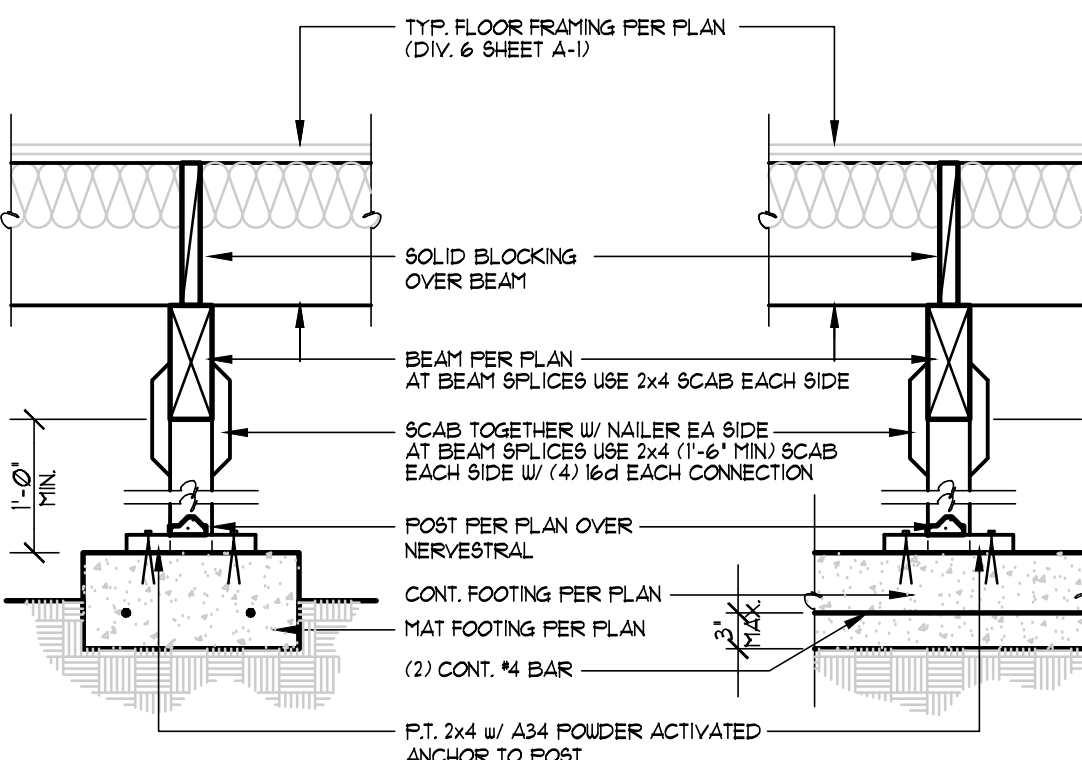
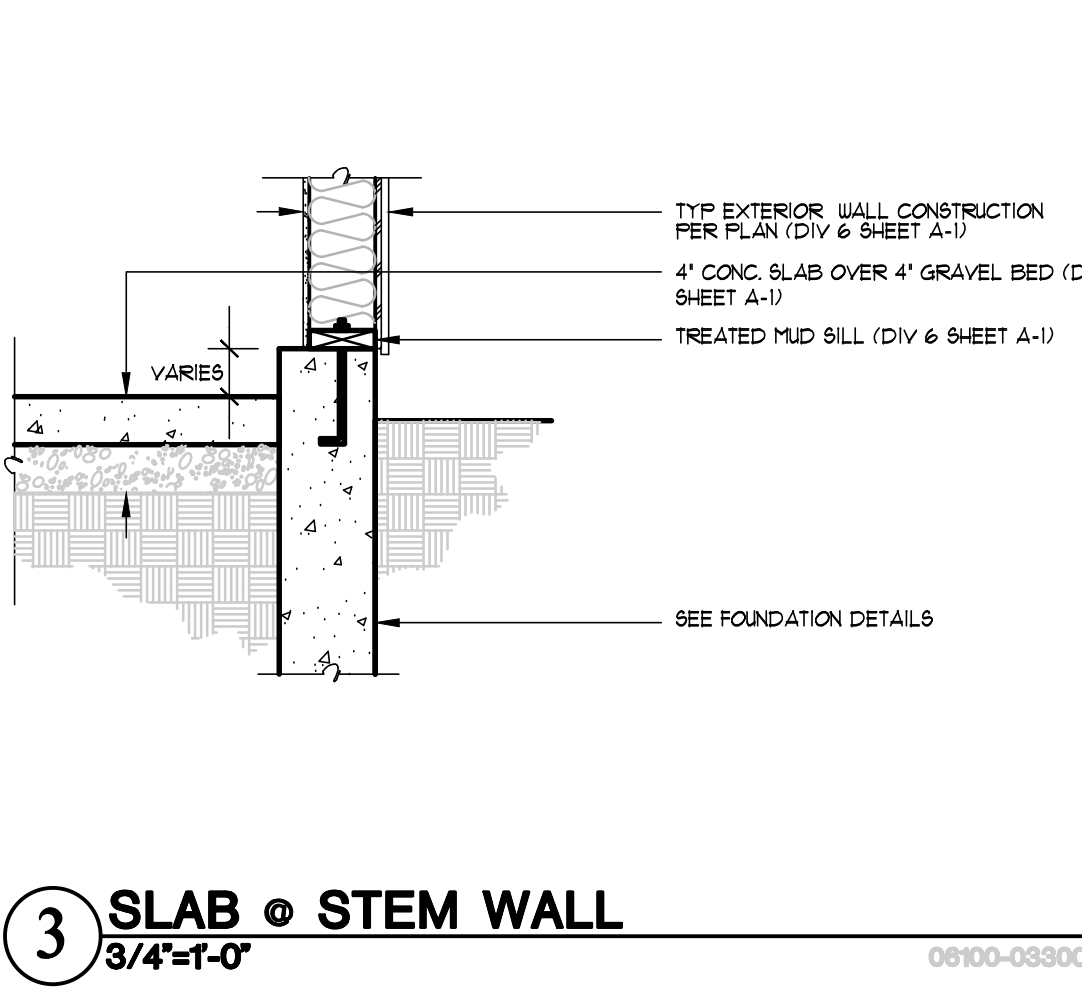
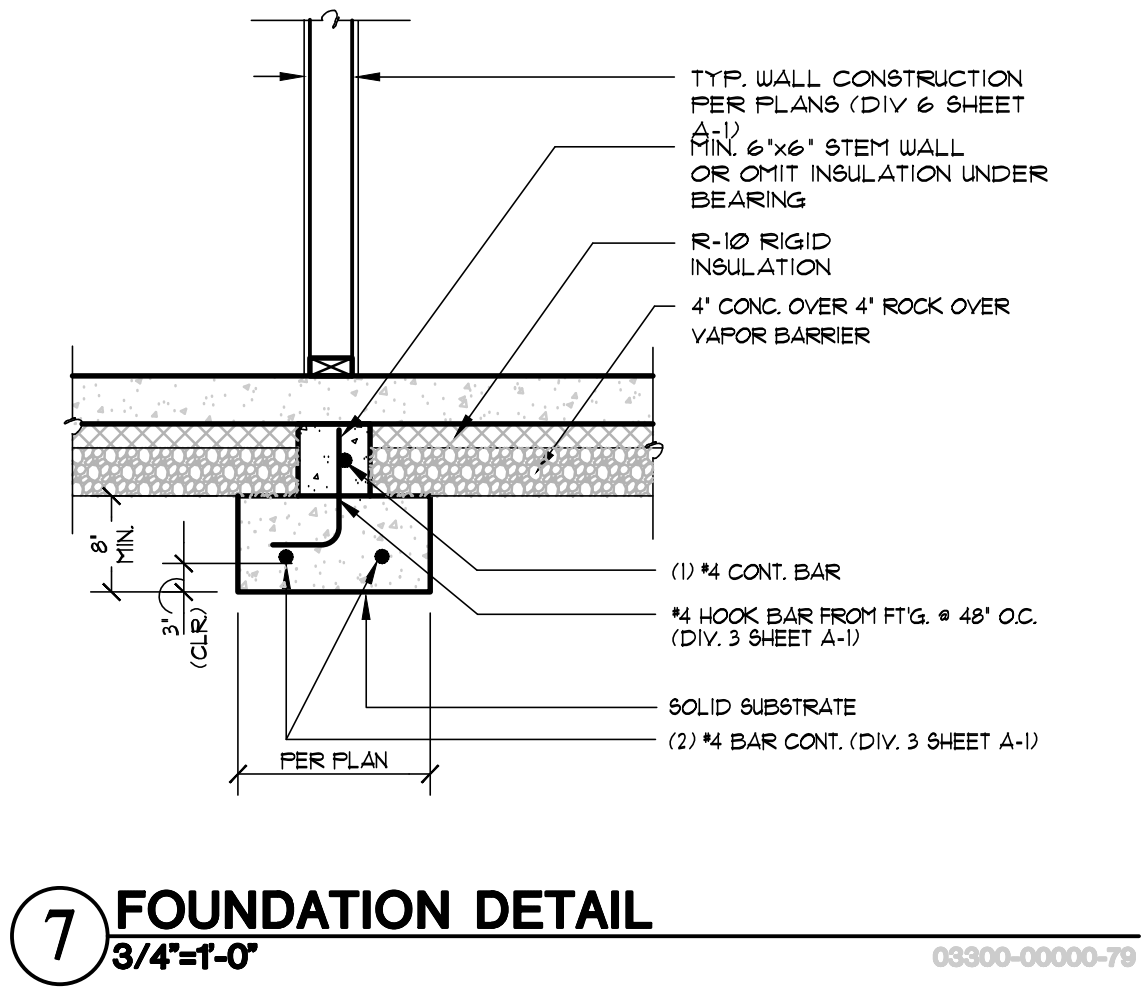


WINDOW WELL

R310.2 Window wells. The minimum horizontal area of the window well shall be 9 square feet (0.9 m²), with a minimum horizontal projection and width of 36 inches (914 mm). The area of the window well shall allow the emergency escape and rescue opening to be fully opened.

Exception: The ladder or steps required by Section R310.2.1 shall be permitted to encroach a maximum of 6 inches (152 mm) into the required dimensions of the window well.

R310.2.1 Ladder and steps. Window wells with a vertical depth greater than 44 inches (1118 mm) shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section shall not be required to comply with Sections R311.7 and R311.8. Ladders or rungs shall have an inside width of at least 12 inches (305 mm), shall project at least 3 inches (76 mm) from the wall and shall be spaced not more than 18 inches (457 mm) on center vertically for the full height of the window well.



20

8 WINDOW WELL DETAIL
3/4"=1'-0"

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DATE: 12/2/24
BY: AG
PERMIT SET

DESCRIPTION

Milestone NW
Mercer Island Lot 1

7621 SE 22nd ST. Mercer Island, WA 98040
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TITLE

JOB NO.: 21022.05
STARTING NO.: 21022.03

SHEET
D1

Floor (over crawl or exterior)					
Plan ID	Component Description	Ref.	Floor U	Area	UA
	R39 vented joist (2021 1.2, 1.3; 2016 1.3.4.5)	10-3	0.025	1.226	31
Sum of Area and UA				1.226	31

Slab on Grade (less than 2 feet below grade)						
Plan ID	Component Description	Ref.	Slab F		Slab Perim	FP
Sum of Perimeter and FP					0	0

<u>Below Grade Walls and Slabs</u>									
Plan ID	Component Description	Slab Depth	Ref.	Wall U	Wall Area	Wall UA	Slab F	Slab Perim	Slab UA
R10 Foam Ext w/TB, R10 Full Underlab	3.5' depth	Baylon & Ker	0.06	923	59.1	0.324	106	34	
Sum of Area, Length and UA					923	59.1	106	34	

[illegible]

Show Ventilation Calculator?		Show
Ventilation Requirements		
Conditioned Floor Area		3,446 sq. ft.
Number of Bedrooms		4
Run-Time Percent in Each 4-Hour Segment		100%
Is the system Balanced?		Unbalanced
Is the system Distributed?		Not Distributed
Ventilation Code Section		IRC, Chapter 15
Whole House Mechanical Ventilation Airflow Rate		113 CFM

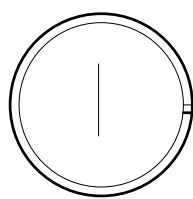
Show Distribution System Calculator?		Show	
HVAC Thermal Distribution System			
Is this a hydronic heating system?		Download RS-33 (2018) http://www.energy.wa.edu/Documents/Data/2018/RS33/2018RS33.xls	
Location of Ducts	Conditioned Space		
Location of Air Handler	Conditioned Space		
Is Duct Testing Required? Yes			
Maximum Duct Leakage:			
Maximum total measured duct leakage per square foot		0.08	
Maximum allowable total measured duct leakage		0.075	
		275 CFM25	

A maximum of 10 feet of return ducts and 5 feet of supply ducts are allowed to be located outside of the building thermal envelope, if insulated and sealed per IMC3.7.

Show Heating System Sizing?		Show
Heating System Sizing - Proposed Design		Try Out BetterBulbNW's HVAC Sizing Tool: https://betterbulbnw.com/resources/hvac-sizing-tool
Nearest Weather Station	Mercer Island	
Indoor Design Temperature	70 F	
Outdoor Design Temperature	25 F	
Design Temperature Difference (ΔT)	45 F	
Conditioned Floor Area, Proposed Design	3,465 sq ft	
Conditioned Volume	27,668 cu ft	

Leave blank to use default of 8.5°F ceiling height

HVAC System Type	Heat Pump
Location of HVAC Distribution System	Conditioned Space
Sum of UA, including exempt door and window	635
Envelope Heat Load Sum of Q(A x ΔT)	24,069 Btu / Hour
Air Leakage Heat Load (Volume X ΔQ x ΔT) x 0.018)	13,398 Btu / Hour
Building Design Heat Load Air Leakage + Envelope Heat Load	37,464 Btu / Hour
Building and Duct Heat Load For ducts located in unconditioned space: Sum of Building Heat Load X 1.25 for heat pumps For ducts located in conditioned space or ductless: Sum of Building Heat Load X 1	37,464 Btu / Hour
Maximum Heat Equipment Output Building and Duct Heat Load X 1.25 for heat pumps Building and Duct Heat Load X 1.40 for all other systems	46,830 Btu / Hour 13.7 kW



APA PORTAL FRAME DETAIL WITH HOLDDOWNS

SCALE: N.T.S.

BASEMENT SLAB

4" CONC. SLAB ON 10 MIL VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GARAGE SLAB

4" CONC. SLAB ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

PORCH SLAB

4" CONC. SLAB ON GRADE ON 10 MIL VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- DESIGN LOADS:
 - SOIL: 1500 PSF ALLOWABLE BEARING PRESSURE
- CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS IN 28 DAYS, UNO:
 - $f_c = 3000$ psi, ... FOUNDATION WALLS
 - 3000 psi, ... FOOTINGS
 - 2500 psi, ... INTERIOR SLABS ON GRADE
 - 3500 psi, ... GARAGE & EXT. SLABS ON GRADE
 - $f_{ty} = 60,000$ psi
- ALL CONCRETE HAS BEEN DESIGNED FOR 2500 PSI, ANYTHING GREATER THAN THIS SPECIFICATION IS FOR WEATHERING ONLY.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- FOUNDATION WALL DESIGN IS BASED ON BACKFILL SOIL PRESSURE OF 55 PCF AT REST, 35 PCF ACTIVE & 7TH SEISMIC SURCHARGE.
- TYPICAL REINFORCEMENT DETAILS: LAP ALL REBAR 24" MIN. BEND BARS AND LAP AT CORNERS; PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT; PROVIDE 3" MINIMUM COVER AT THE BOTTOM BARS AND 1 1/2" COVER AT THE SIDES.
- FOUNDATION WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY EITHER ADEQUATE TEMPORARY BRACING OR INSTALLATION OF FIRST FLOOR DECK.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE. CONSULT SOILS REPORT/LOCAL MUNICIPALITY FOR MINIMUM DEPTH BELOW GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP (15'-0" O.C.)
- FASTEN SILL PLATES TO FOUNDATION WALLS WITH 3/8" DIA. ANCHOR BOLTS W/ MIN. 3"x3"x1/2" PLATE WASHERS (EDGE OF WASHER TO BE LOCATED WITHIN 1/2" OF EXTERIOR EDGE OF SILL PLATE) PROVIDE A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAXIMUM FROM PLATE ENDS, UNO. (SEE FND. DETAILS).
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE OR MASONRY FOUNDATION SHALL BE PRESERVATIVE TREATED, HEM FIR #2.
- ARCH/BUILDER TO VERIFY ALL DIMENSIONS

LOADING AND DESIGN PARAMETERS

GRAVITY DESIGN LOADS:	
DEAD LOAD (PSF):	
ROOF TRUSSES TOP CHORD:	10
ROOF TRUSSES BOTTOM CHORD:	7
FLOOR TRUSSES:	15
FLOOR (2x):	10
LIVE LOAD (PSF):	
ROOF:	20
RESIDENTIAL LIVING AREAS:	40
RESIDENTIAL SLEEPING AREAS:	30
GARAGE:	30
SNOW LOAD:	
GROUND SNOW LOAD (PSF) (S):	25
FLAT ROOF SNOW LOAD (PSF) (S):	25
SNOW EXPOSURE FACTOR (C _e):	0.9
SNOW LOAD IMPORTANCE FACTOR (I):	1.0
THERMAL FACTOR (C _t):	1.2
LATERAL DESIGN LOADS:	
WIND LOAD: (IBC 1609)	
SPEED (V ₅₀) (MPH):	100
MIN. RISK CATEGORY:	II
IMPORTANCE FACTOR (I _w):	1.0
EXPOSURE CATEGORY:	C
INTERNAL PRESSURE COEFF. (C _{ei}):	±0.18
TOPOGRAPHIC FACTOR (K _{zt}):	1.00
SEISMIC LOAD: (IBC 1603)	
SEISMIC RISK CATEGORY:	II
SEISMIC IMPORTANCE FACTOR (I _s):	1.0
HAPPED S _{rs} 1285	S _{rs} 0.483
SITE CLASS:	D
SPECTRAL RESPONSE COEFF.: S _{rs} 1.08	S _{rs} 0.585
SEISMIC DESIGN CATEGORY:	
BASIC SEISMIC-FORCE-RESISTING SYS.:	D
LIGHT FRAMED WALLS	
N/WOOD STRUCTURAL PANELS	
ULTIMATE BASE SHEAR:	
TRANS: 14 k	LONG: 14 k
SEISMIC RESPONSE COEFF. (C _s):	TRANS: 0.170
RESPONSE REDUCTION FACTOR (R):	TRANS: 6.5
TRANS: 6.5	LONG: 6.5
ANALYSIS PROCEDURE USED:	
EQUIVALENT LATERAL FORCE	

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUTS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO: FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

TRUSSES SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES OR GIRDER TRUSSES DOES NOT EXCEED THE FOLLOWING:

- ROOF TRUSSES:
 - 1/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:
 - 1/8" DEAD LOAD
- FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS:
 - LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD, (NOT DIFFERENTIAL DEFLECTION)

LATERAL BRACING NOTES

THIS ADDITION HAS BEEN ENGINEERED TO RESIST LATERAL FORCES RESULTING FROM: 100 MPH WIND SPEED, EXP. C (ASCE 7-16 WIND MAP, PER IRC R301.2.1.1) RISK CAT. 2 & SEISMIC CAT. D.

100 MPH WIND IN 2021 IRC MAP

ENGINEERED DESIGN WAS COMPLETED PER 2021 IBC (SECTION 1609) & ASCE 7-16, AS PERMITTED BY R301.1.3 OF THE 2021 IRC. ACCORDINGLY, THIS ADDITION, AS DOCUMENTED AND DETAILED HEREIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES, AND DOES NOT NEED TO CONFORM TO THE PRESCRIPTIVE PROVISIONS OF R602.10.

STANDARD EXTERIOR WALL SHEATHING SPECIFICATIONS

- 3/8" OSB OR 15/32" PLYWOOD:

FASTEN SHEATHING W/ 2 1/2"x0.131" NAILS @ 6" O.C. AT ALL SUPPORTED PANEL EDGES AND 12" O.C. IN THE PANEL FIELD. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED PER THIS SPECIFICATION UNO, ON PLANS.

NOTES:

- LATERAL ANALYSIS ASSUMES STUD SPACING @ 16" O.C.
- ALL SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES FASTENED TOGETHER W/ 3"x0.131" NAILS @ 8" O.C. USE (2)2x4x10.75" NAILS AT EACH LAP SPlice, (6) EACH SIDE OF JOINT (TYP. UNO.)
- ALL EXTERIOR WALLS ARE CONTINUOUSLY SHEATHED.
- ALL INTERIOR SHEAR WALLS AND EXTERIOR WALLS ARE SHEATHED ABOVE AND BELOW OPENINGS.
- WHERE OSB/PLYWOOD SHEATHING IS APPLIED TO BOTH FACES OF A SHEAR WALL, PANEL JOINT SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.), OR SHEAR WALL ABOVE (S.W.A.)
- BEAM / HEADER
- INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL W/ 3" O.C. EDGE NAILING
- INDICATES AREA OF ROOF OVERFRAMING
- JL METAL HANGER
- INDICATES POST ABOVE, PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLDDOWN

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON STDH14 (R/L) HOLD-DOWN
HD-5	SIMPSON CS16 STRAP TIE (14" END LENGTH)
HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)
HD-T	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)

GENERAL STRUCTURAL NOTES

DESIGN PARAMETERS

- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

GENERAL FRAMING

- EXTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- INTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x "STUD" GRADE MEMBERS SPACED @ 24" O.C. (MAX.)
- ALL WALLS TALLER THEN TYP. PLATE HEIGHT SHALL BE CONSIDERED BALLOON FRAMED & SHALL BE CONSTRUCTED FROM FLOOR TO UNDERSIDE OF FRAMING AT NEXT LEVEL. B.F. WALLS SHALL BE 2x6 HEM FIR (HF) #2 GRADE LUMBER, OR BETTER, UNO.
- ALL SHEATHING AND LEDGERS ARE TO BE DIRECTLY APPLIED AND FASTENED TO FRAMING. DO NOT PROVIDE CONTINUOUS INSULATION BETWEEN FRAMING AND SHEATHING/LEDGERS
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STUD, MINIMUM:
 - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, UNO.

- BUILT-UP POSTS SHALL BE 2x4 OR 2x6 HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO. & SOLID WOOD COLUMNS SHALL BE SPRUCE PINE FIR (SPF) #2 GRADE LUMBER, OR BETTER, UNO.
- ALL 2x6 AND LARGER SOLID SAWN BEAMS/HEADERS SHALL BE HEM FIR #2 (HF #2) OR BETTER. ALL 4x6 AND LARGER SOLID SAWN LUMBER SHALL BE DOUG FIR #2 (DF #2) OR BETTER.
- ALL FRAMING LUMBER SHALL BE KILN DRIED TO 15% MC (KD-15).

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN GENERAL NOTES, IN DETAILS, OR ON PLANS. ALL NAILS SPECIFIED ARE MIN. DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENT FOR MAX. CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.

- FASTEN ALL BEAMS TO COLUMNS, OR FLUSH BEAMS TO SUPPORTING BEAMS W/ (4) 3"x0.131" TOENAILS (MIN), TYP. UNO.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS & HOLD-DOWNS CONTINUOUS TO FOUNDATION/BEARING. BLOCKING TO MATCH POST ABOVE.

- ENGINEERED LUMBER TO MEET OR EXCEED THE FOLLOWING:
 - LVL MEMBERS - Fb=2325 PSI; Fv=910 PSI; E=1.55x10⁶ PSI
 - LVL MEMBERS - Fb=2600 PSI; Fv=285 PSI; E=2.0x10⁶ PSI
 - GLB MEMBERS - Fb=2400 PSI; Fv=11850 PSI; Fv=265 PSI; E=1.8x10⁶ PSI; DF/DF; 24F-V4 (UNO.)

- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
 - LVL MEMBERS - Fb=2400 PSI; Fv=11850 PSI; E=1.8x10⁶ PSI

- FACE NAIL MULTI-PLY 2x BEAMS & HEADERS W/ 3-ROWS OF 3"x0.131" NAILS (MIN) @ 12" O.C. STAGGERED, APPLY NAILING FROM BOTH FACES @ 3-PLY OR MORE CONDITIONS. UTILIZE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.

- TRUSS SHOP DWGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PROPOSED CONSTRUCTION SHALL BE SUBMITTED TO BUILDING DESIGNER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY IN ACCORDANCE WITH TPI-1 23.2.3 & 23.4.3.

- REFER TO IRC FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. UNO.

- BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653, TYPE G95 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA AND SHALL RUN CONTINUOUS OVER SUPPORTS WHEREVER POSSIBLE. ALL LOADS SHOWN ON PLAN FOR MANUF. DESIGNS ARE ASD LEVEL LOADS, UNO. (EXCLUDES STONE/MARBLE OR NET BED CONSTRUCTED FLOORS - CONTACT MK FOR EXCLUDED DESIGNS).
- ALL METAL I-JOIST/TRUSS HANGERS SHALL BE SPECIFIED BY I-JOIST/TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.

- 2x FLOOR JOISTS HAVE BEEN DESIGNED TO MEET OR EXCEED L/360 LIVE LOAD DEFLECTION CRITERIA.
- TYPICAL 2x JOIST HANGERS (UNO. ON PLANS):
 - SINGLE PLY: SIMPSON LUS20
 - DOUBLES: SIMPSON LUS20-2

- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED "STUD"-FLOOR 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD.

- ALL FLUSH CONNECTIONS SHALL BE CONNECTED WITH HANGER APPROPRIATE FOR MEMBER SIZE, UNO.
- FASTEN TRUSSES TO SINGLE PLY FLUSH BEAMS W/ 1/2" LONG NAILS.

ROOF FRAMING

- FASTEN EACH ROOF TRUSS TO TOP PLATE W/ (4) 3"x0.131" TOENAILS (MIN) & (1) SIMPSON H25T CLIP @ ALL BEARING POINTS. PROVIDE (2) SIMPSON H25T CLIPS AT 2-PLY GIRDER TRUSSES, (2) SIMPSON H25T CLIPS AT 3-PLY GIRDER TRUSSES AT ALL BEARING POINTS.

- FASTEN EACH ROOF RAFTER TO TOP PLATE WITH (1) SIMPSON H25T CLIP. PROVIDE (2) SIMPSON H25T CLIPS AT FLUSH BEAMS IN THE ROOF - AT ALL BEARING POINTS.

- ROOF SHEATHING SHALL BE 7/8" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS W/ 2 1/2" x 0.131" NAILS @ 6" O.C. AT PANEL EDGES & @ 6" O.C. AT INTERMEDIATE SUPPORTS. ROOF SHEATHING SHALL EXTEND BELOW ALL INSTANCES OF OVERFRAMING. BLOCKING SHALL BE INSTALLED AS REQUIRED TO LIMIT ROOF SHEATHING SPANS TO 24" MAX.

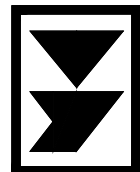
- ALL METAL HANGERS SHALL BE SPECIFIED BY THE TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.

- ROOF TRUSS SHOP DRAWINGS & CALCULATIONS SHALL BE DESIGNED

seal:



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M&K project number:

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project mgr:

NJM

drawn by:

RSC

issue date:

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REVISIONS:

date:

initial:

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INNOVATIONS

STRUCTURAL NOTES

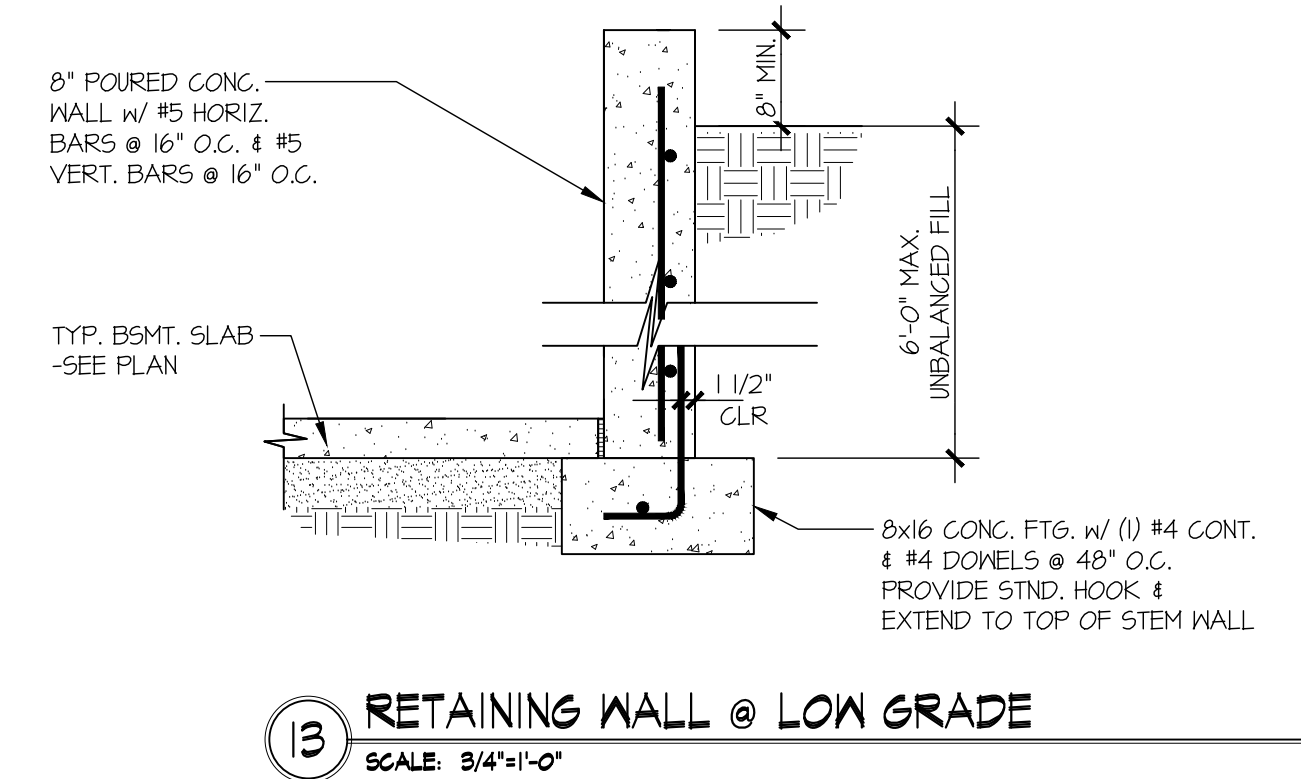
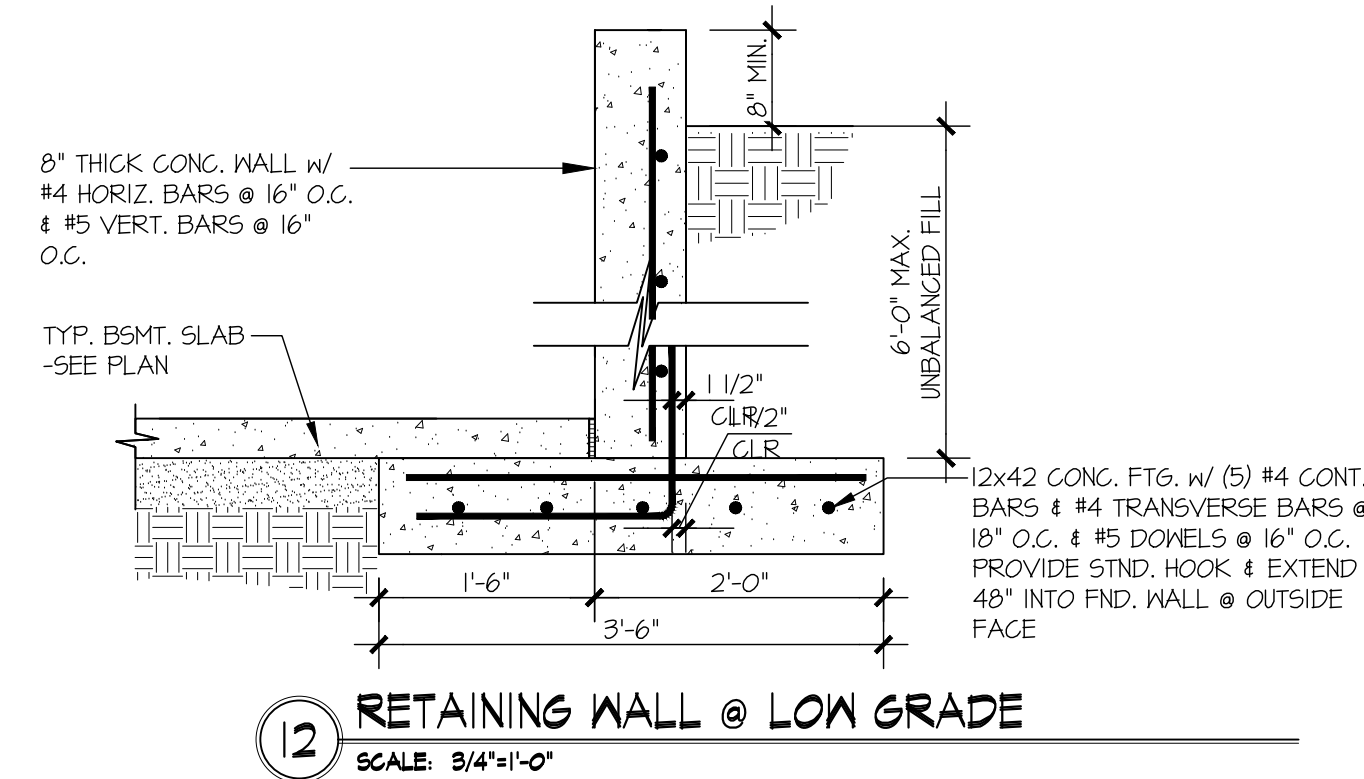
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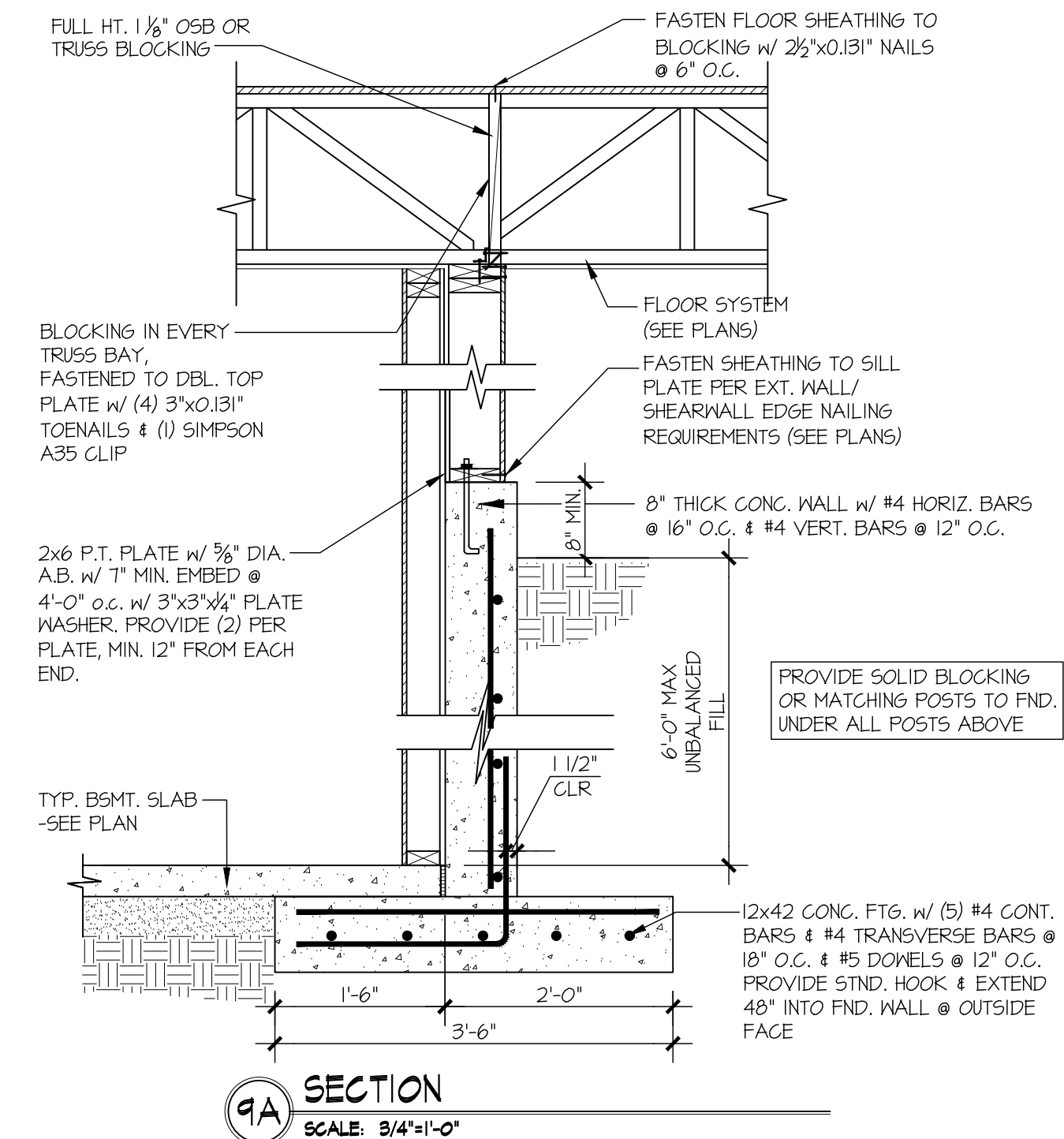
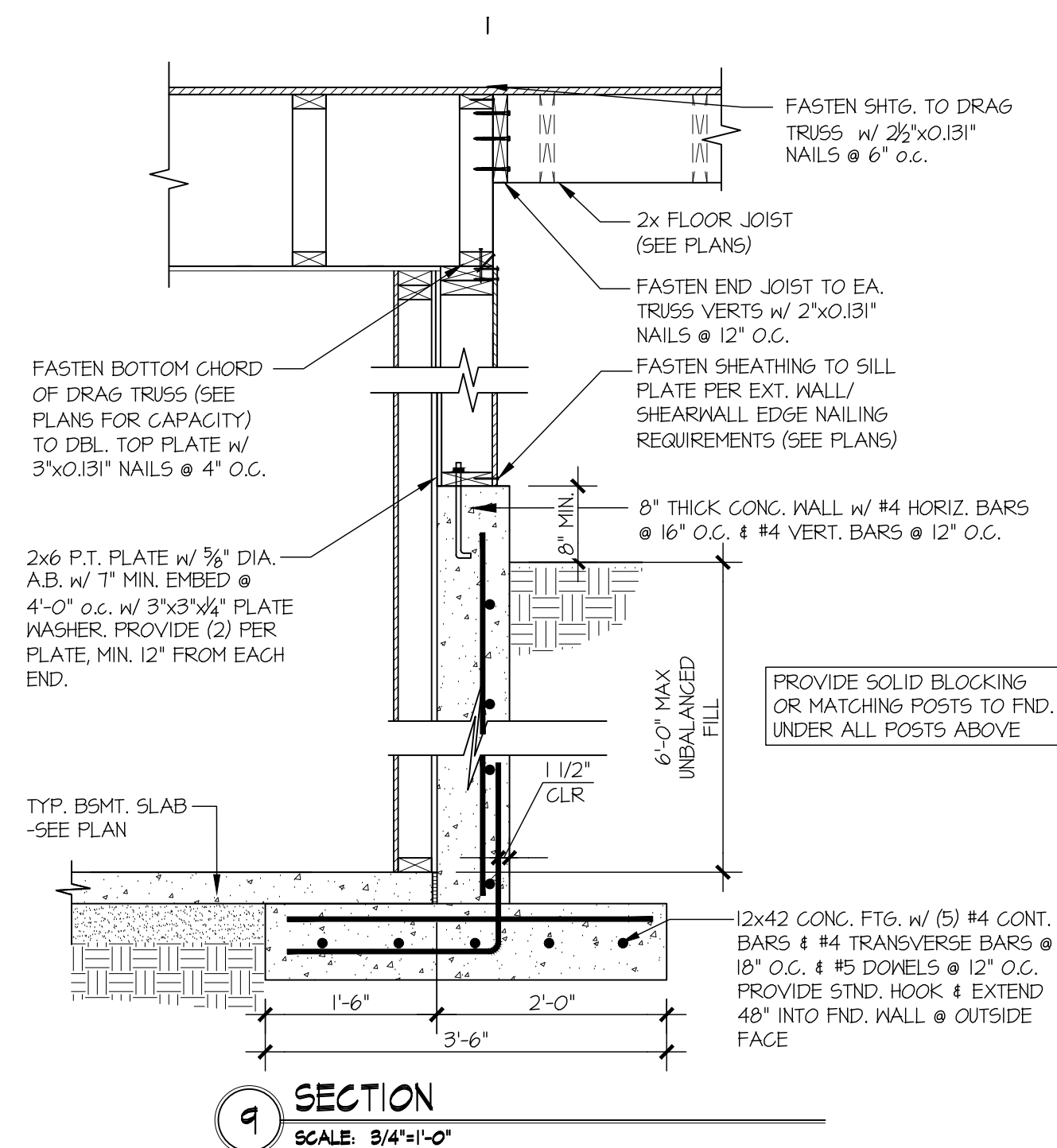
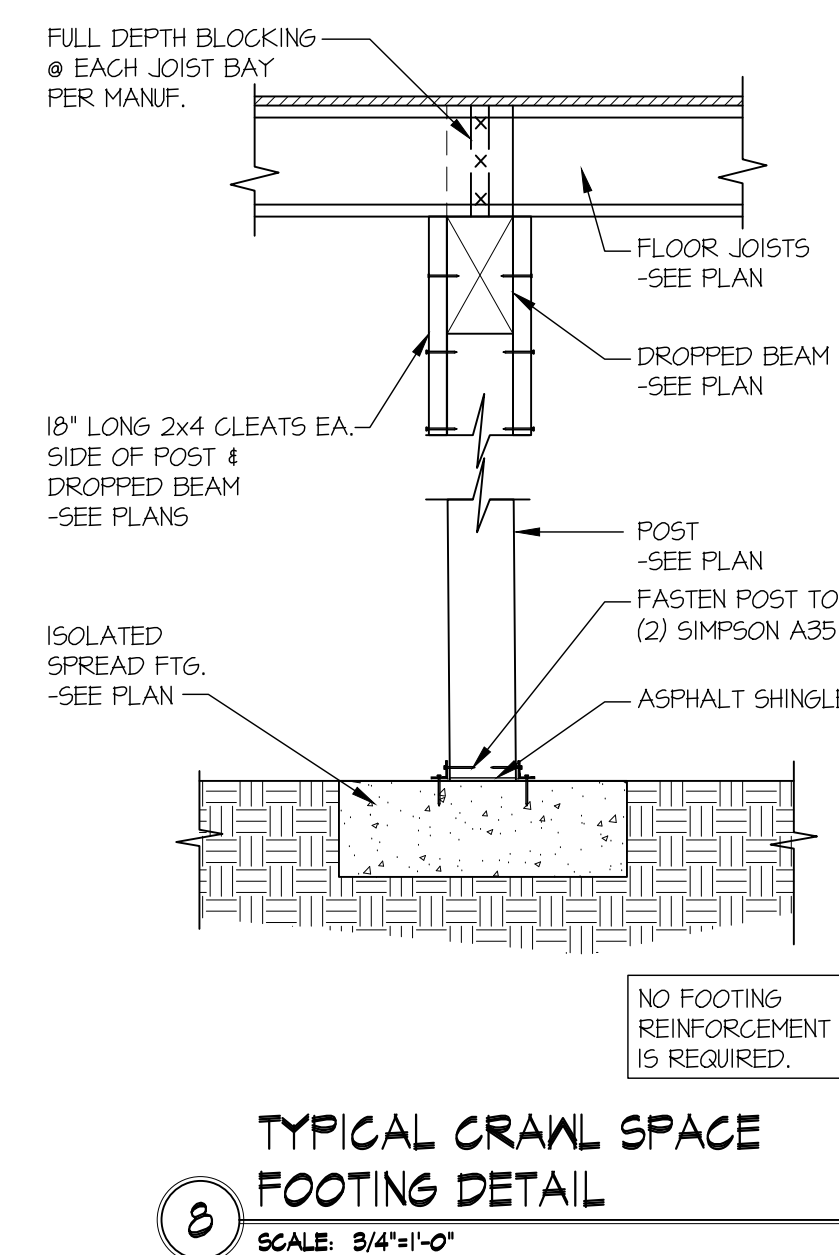
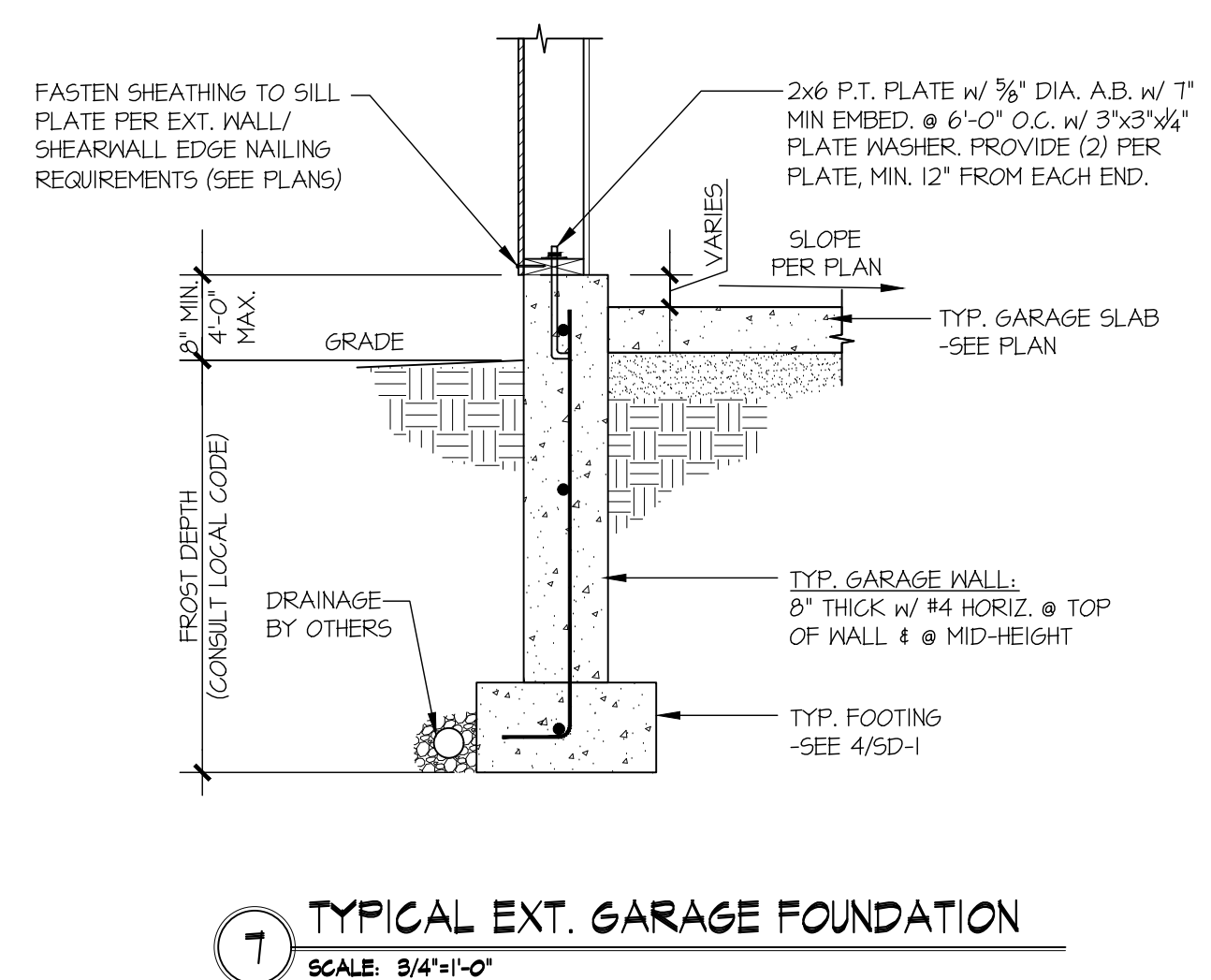
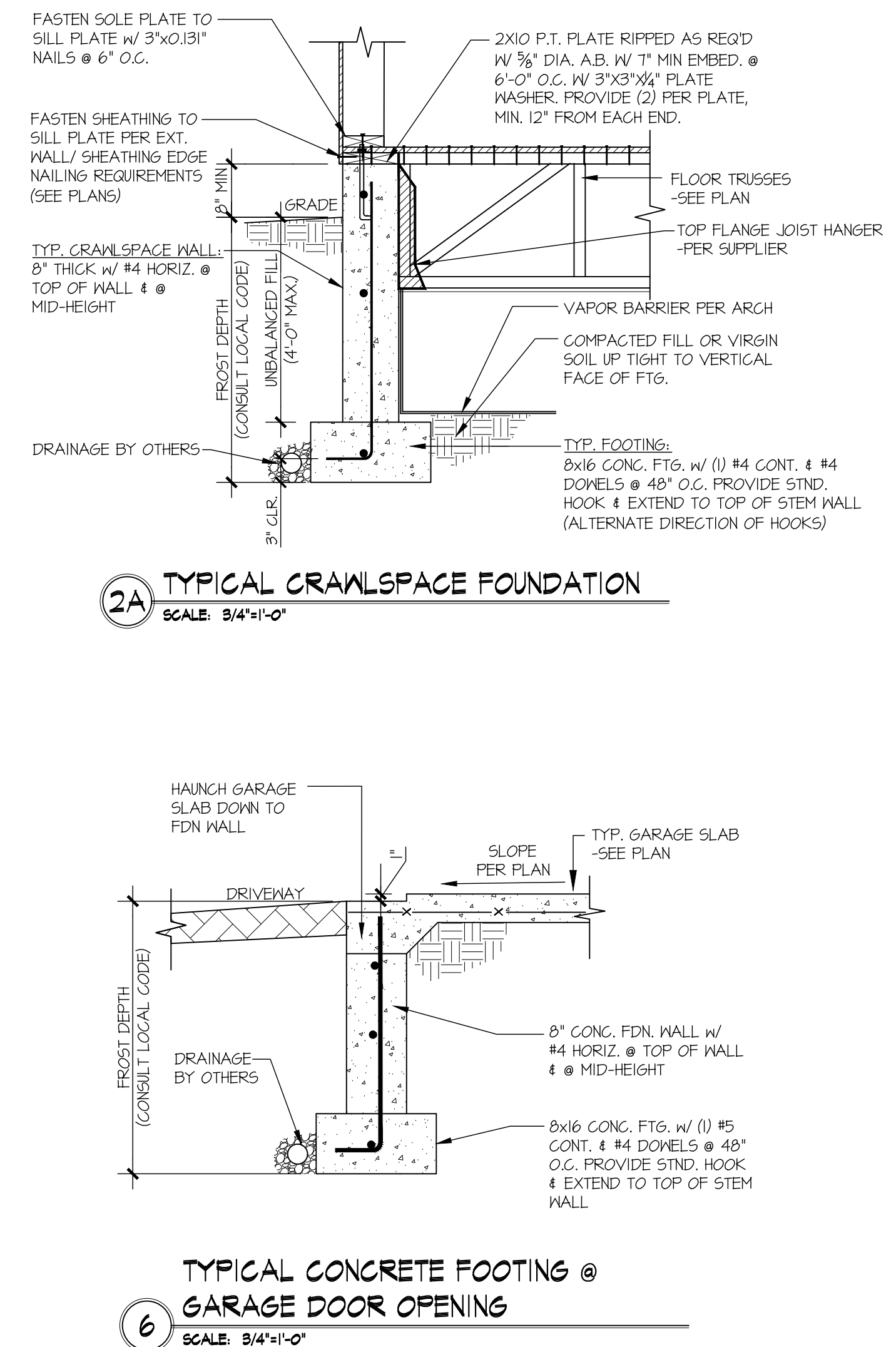
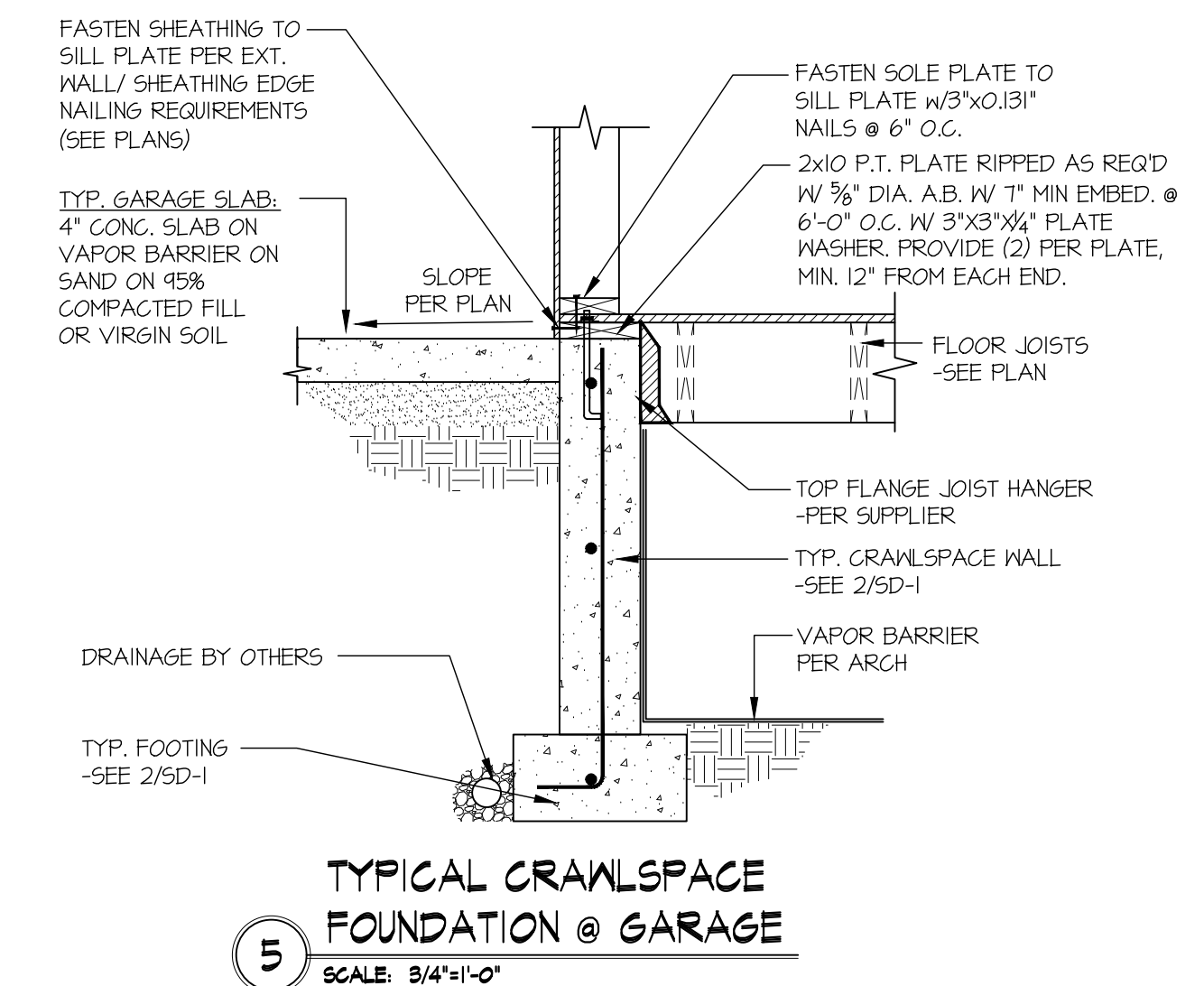
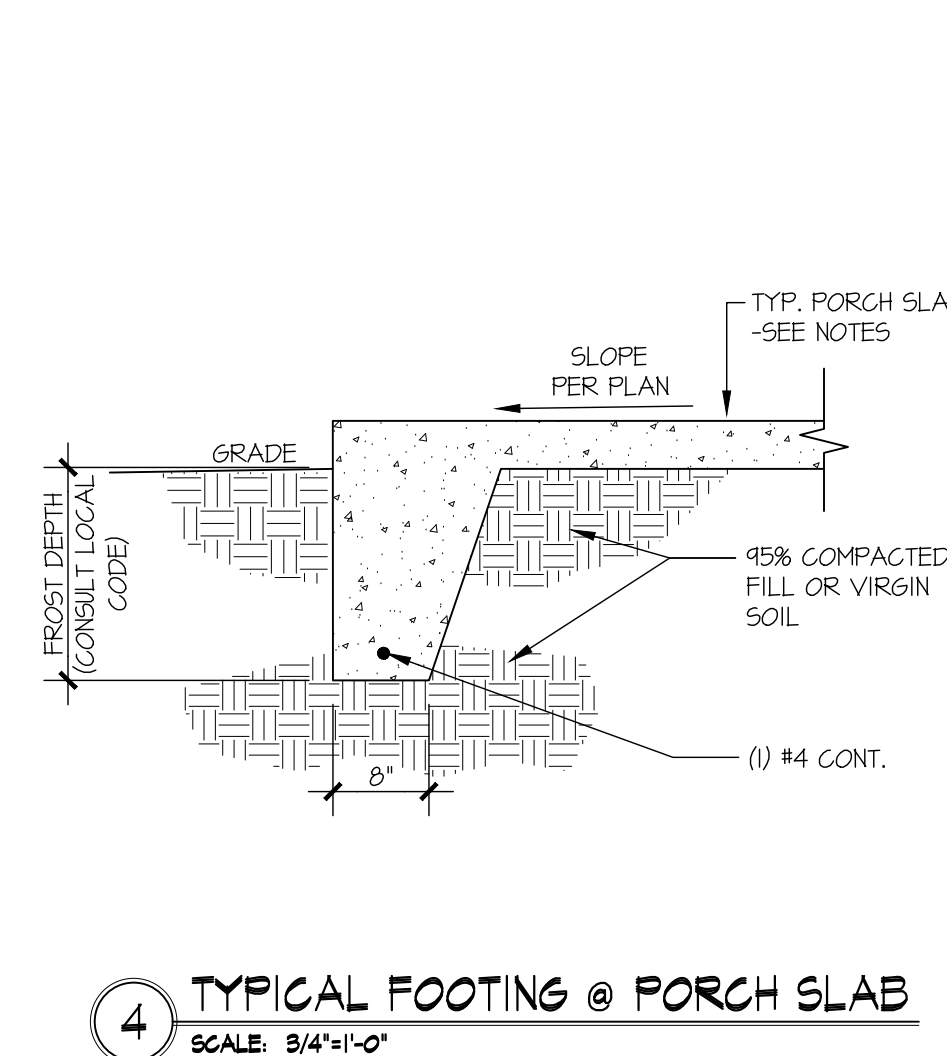
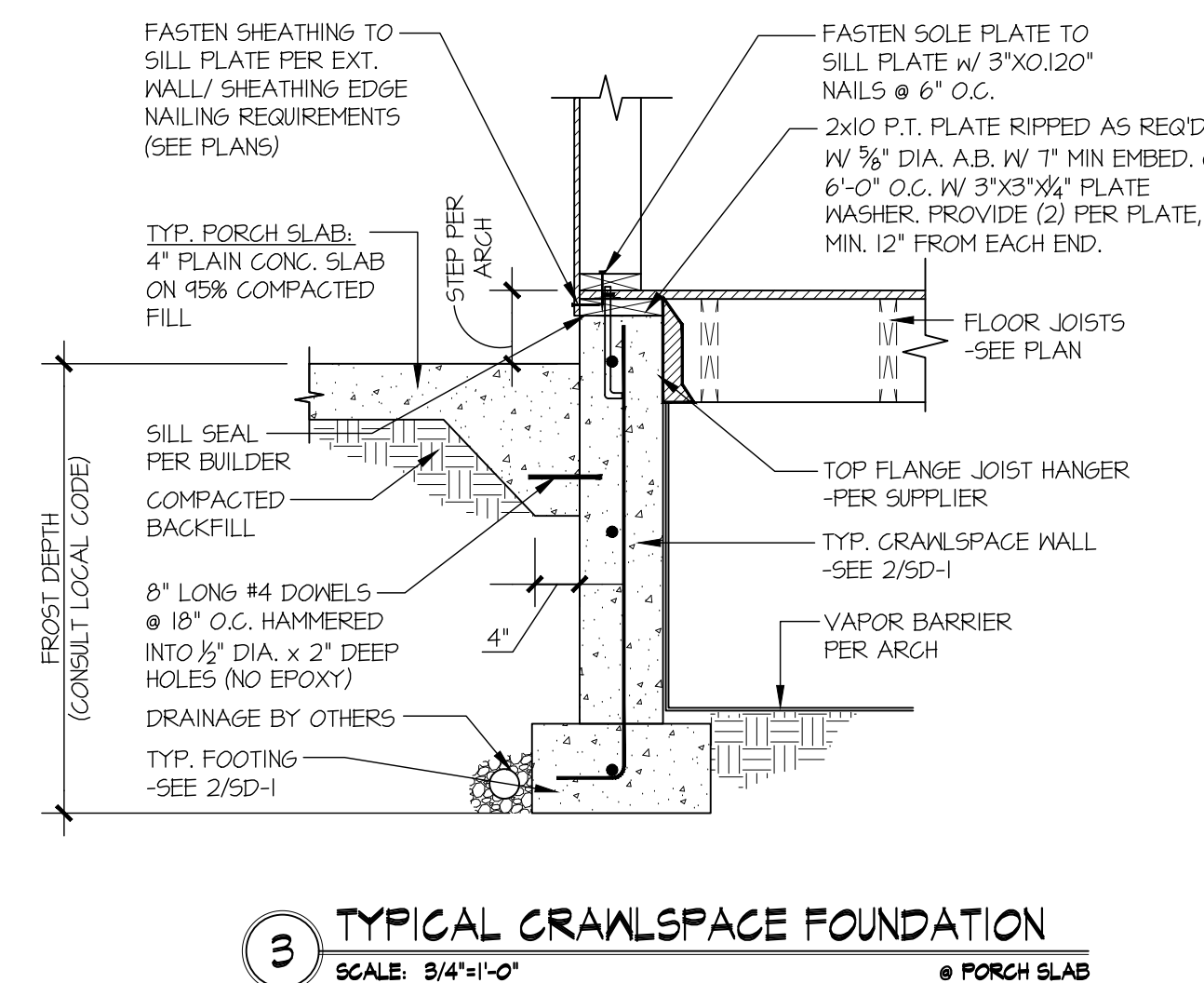
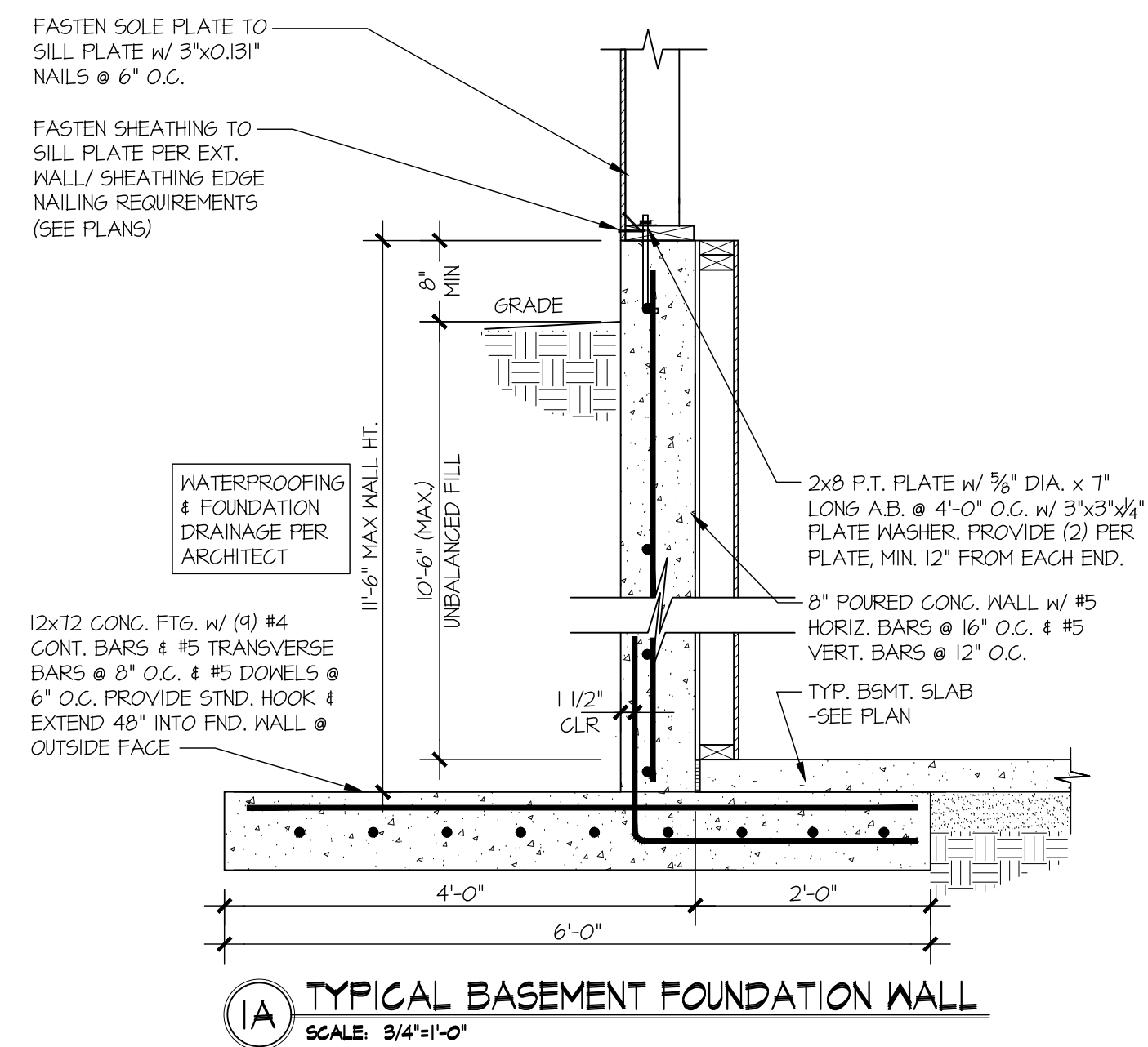
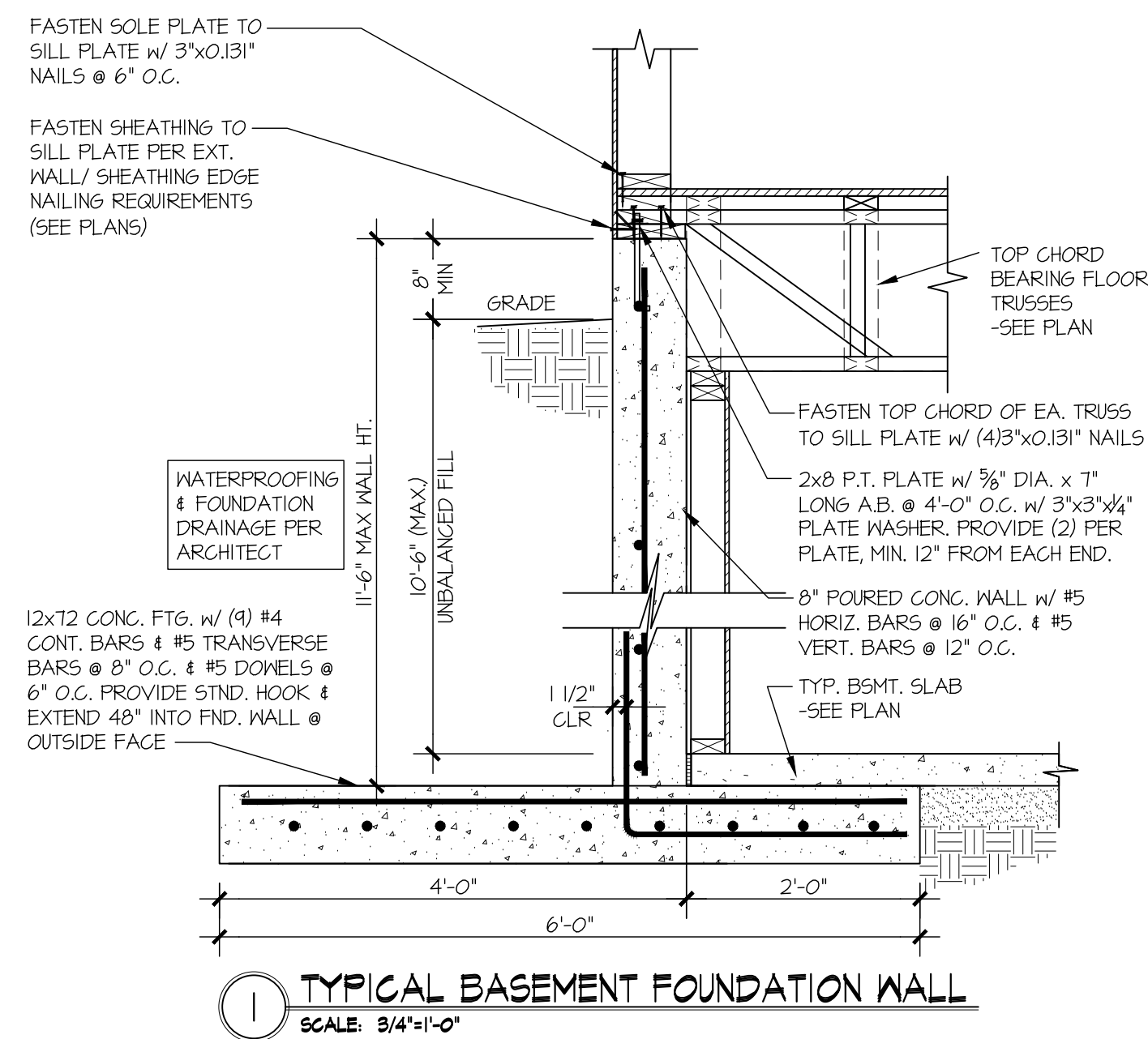
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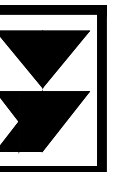
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SD-1.1



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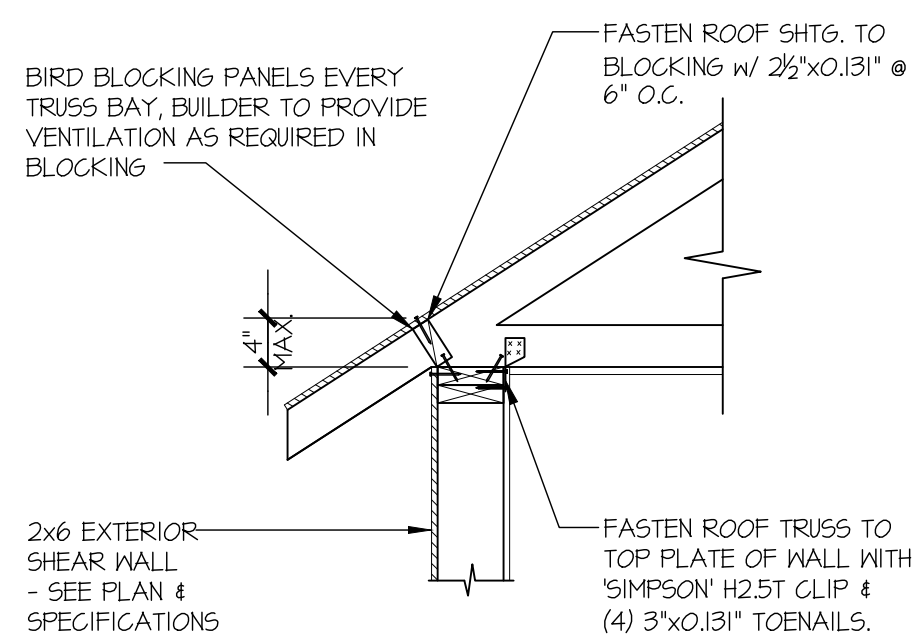
STRUCTURAL DETAILS

MERCER ISLAND - LOT 1

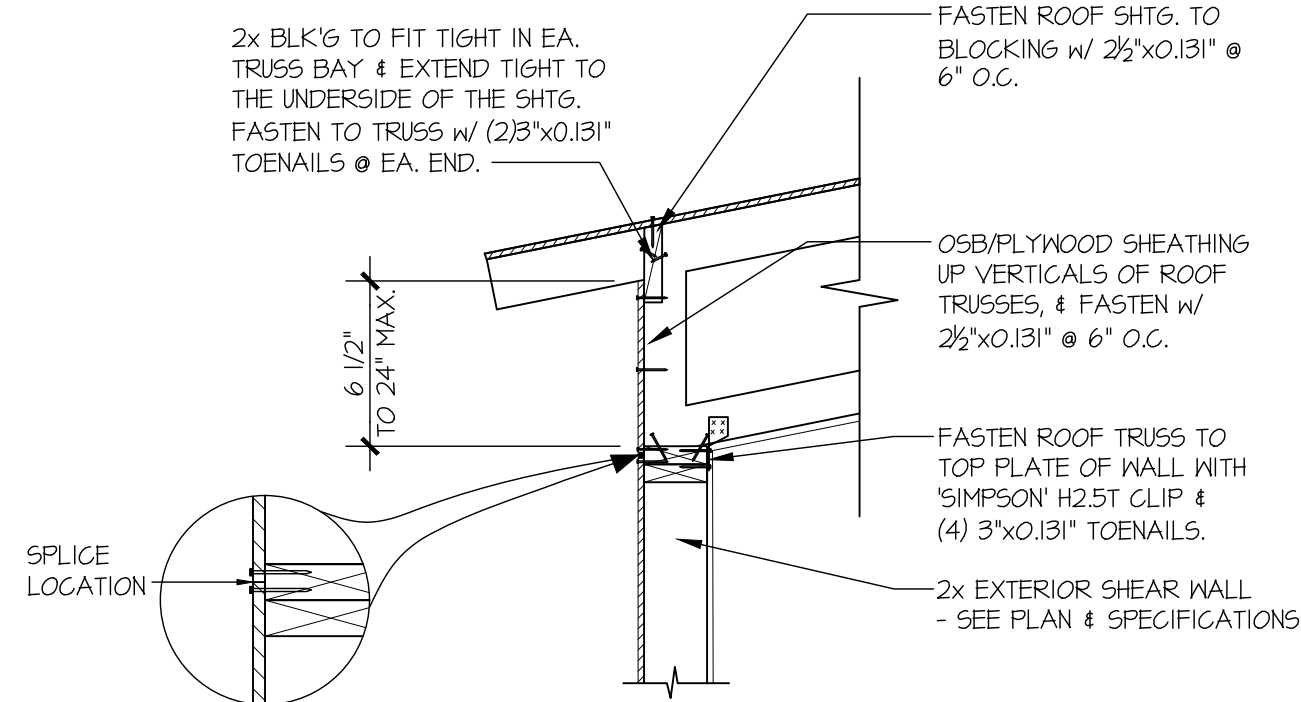
7621 SE 22ND ST

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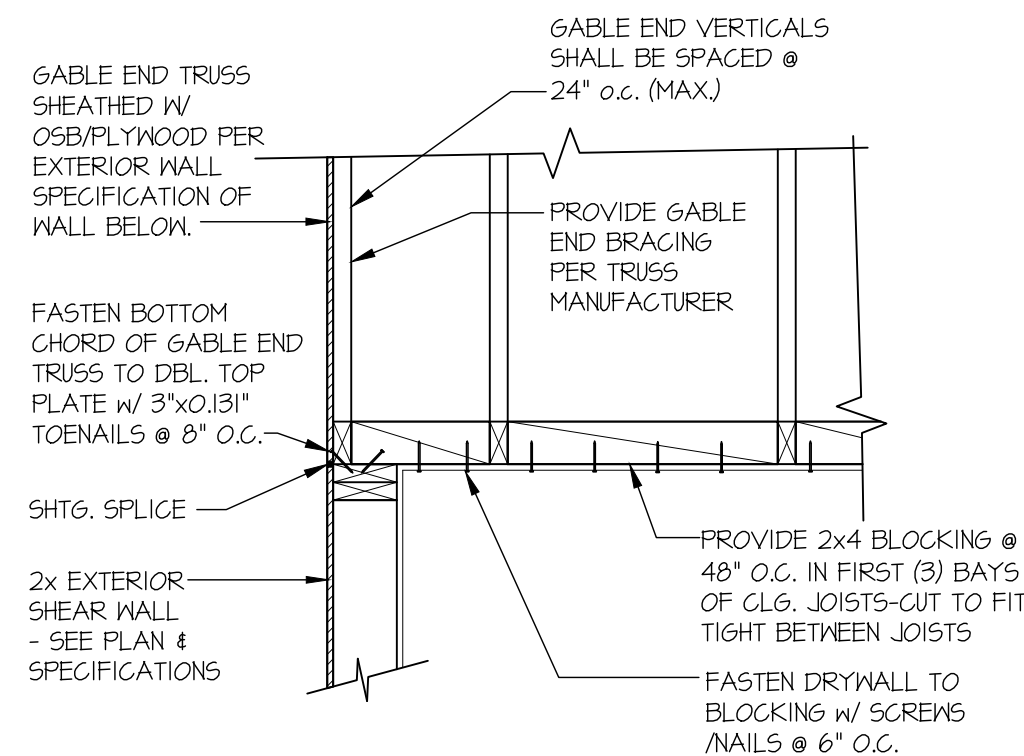
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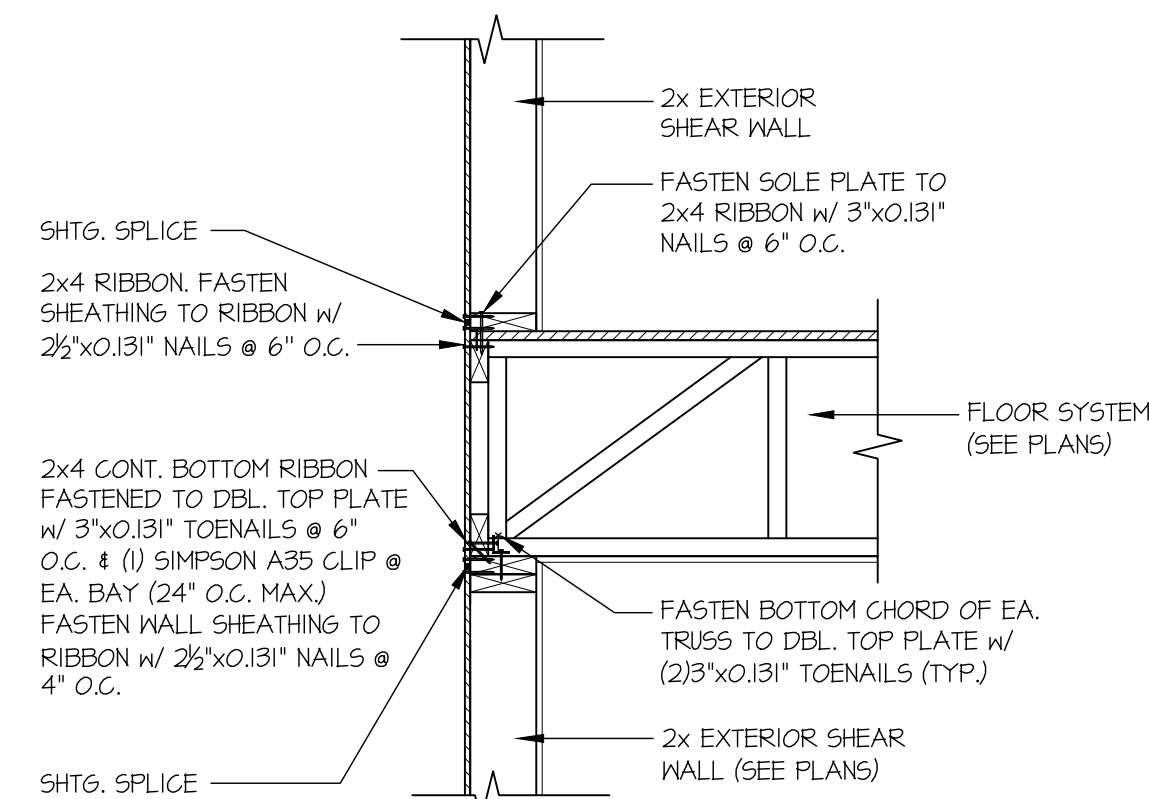
1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/4"=1'-0" HEEL HEIGHT LESS THAN 6 ½"



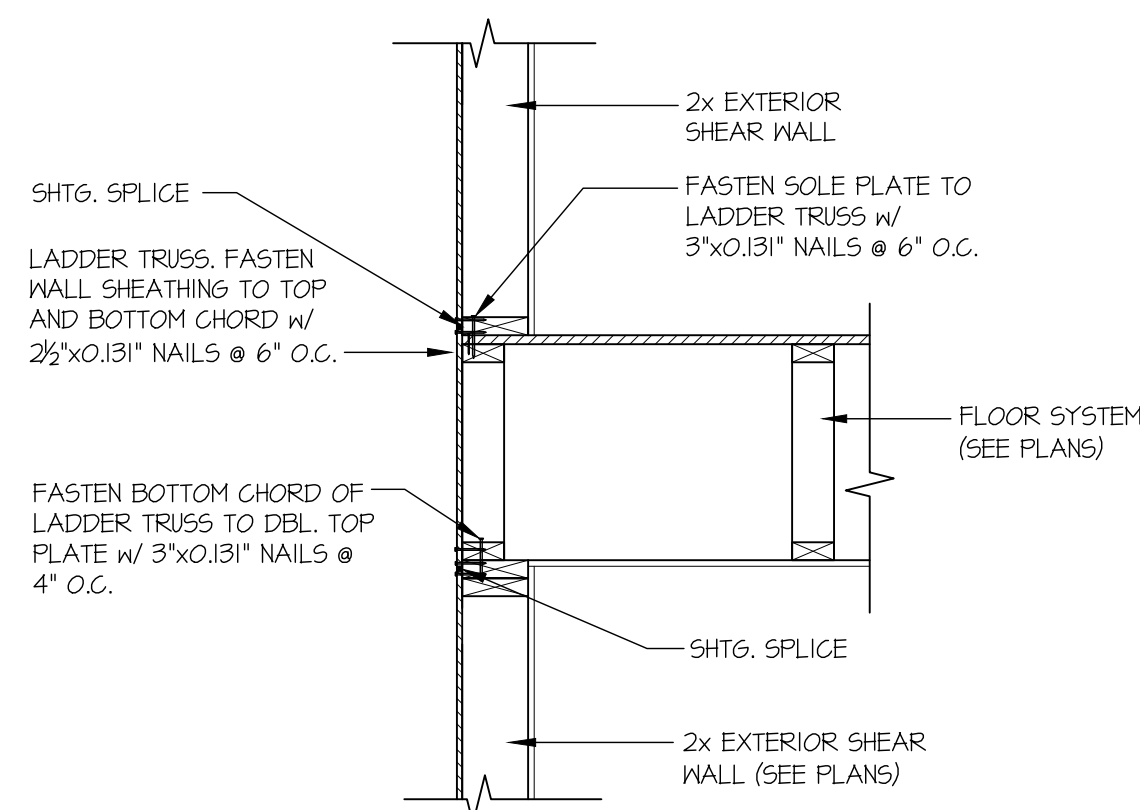
1A TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/4"=1'-0"



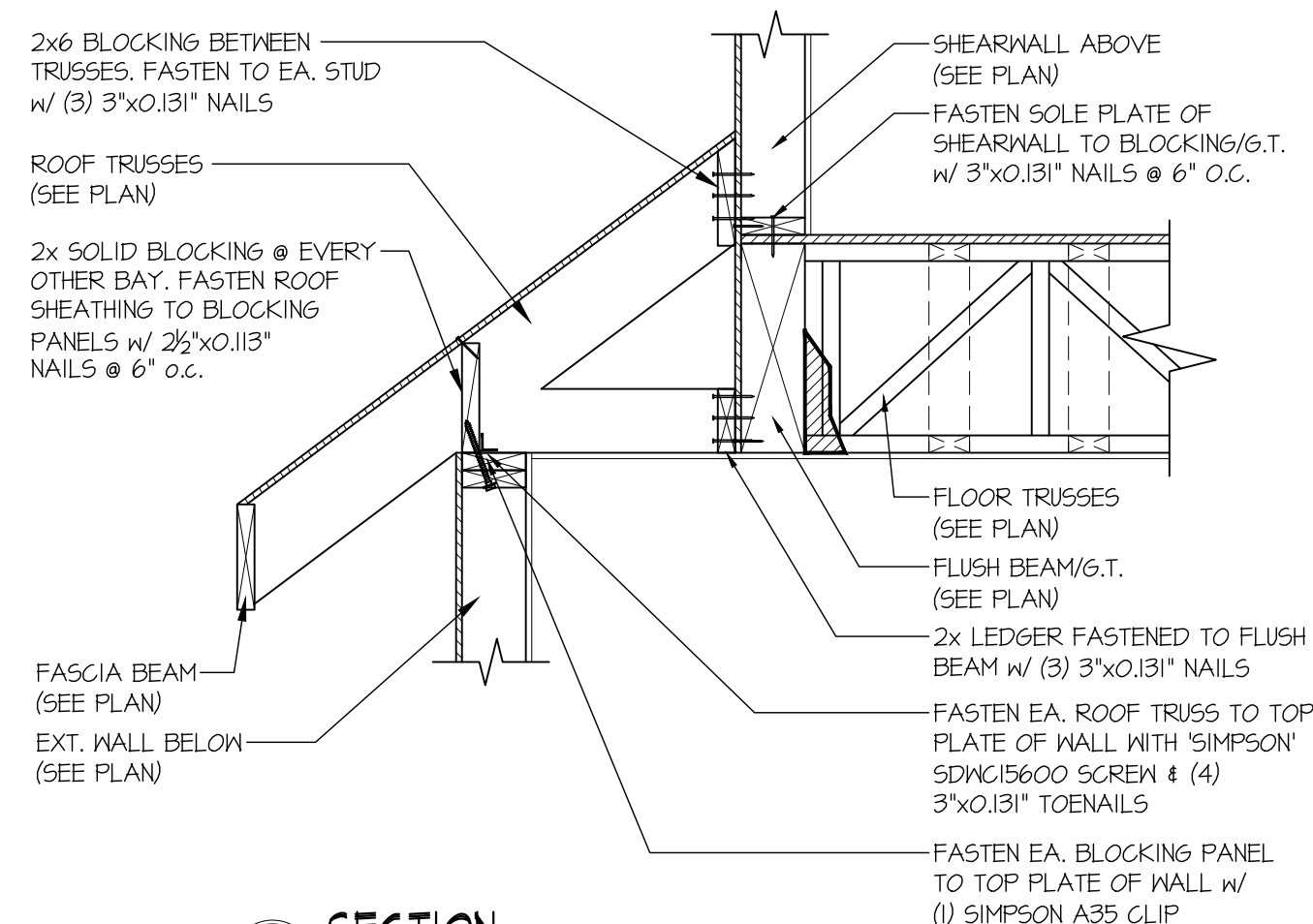
2 TYPICAL GABLE END DETAIL
SCALE: 3/4"=1'-0"



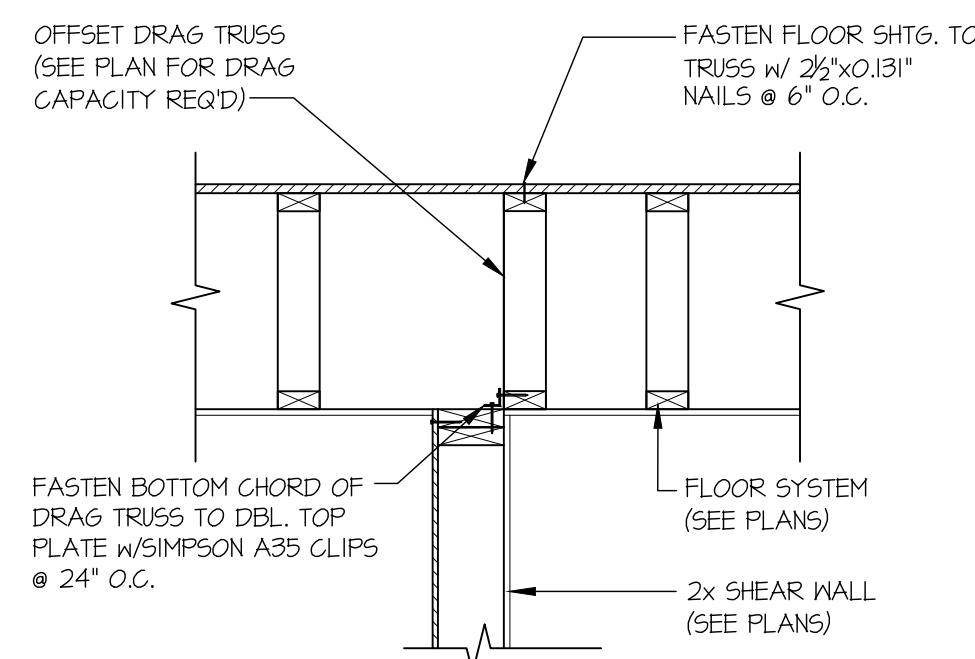
3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



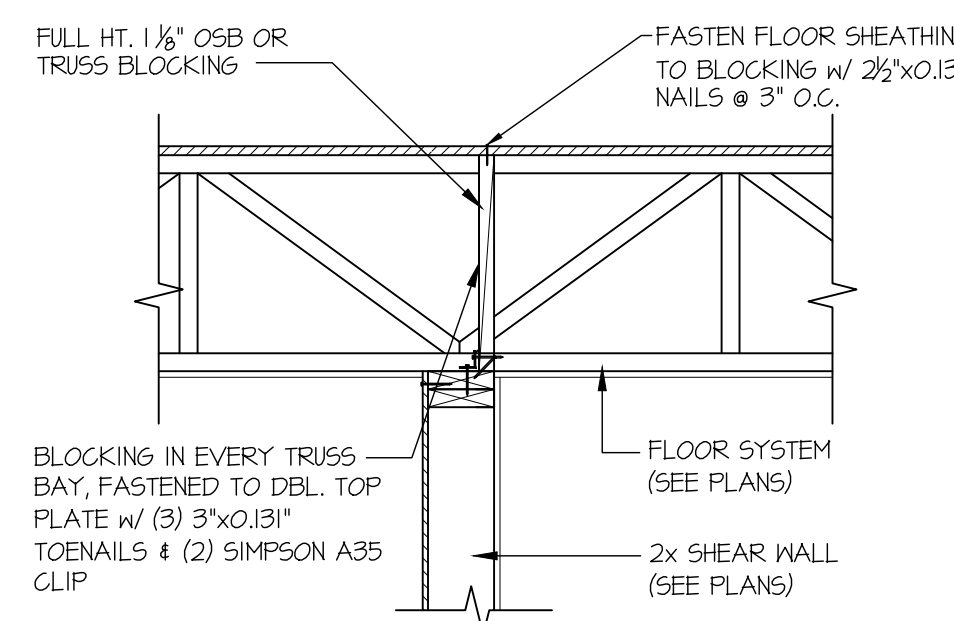
4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0" PARALLEL FRAMING



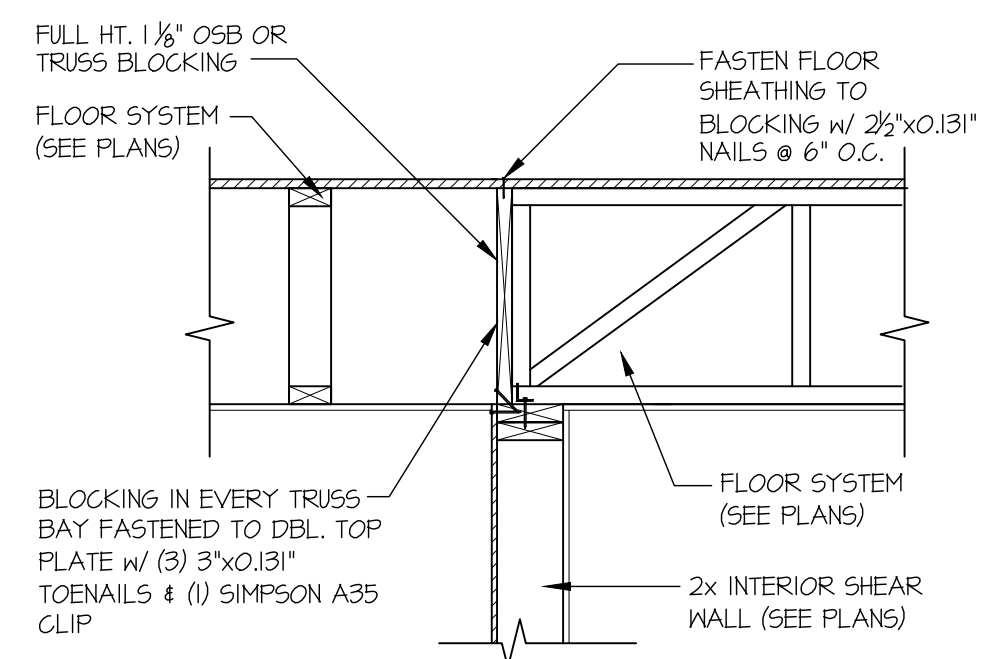
5 SECTION
SCALE: 3/4"=1'-0"



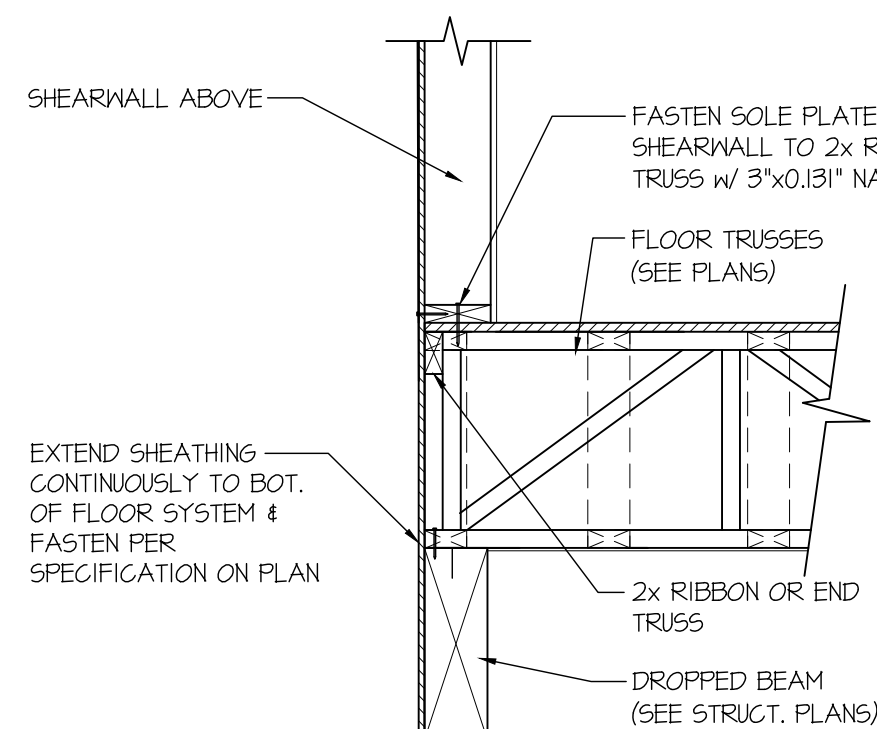
11 SHEAR TRANSFER DETAIL @ SHEAR WALL BELOW
SCALE: 3/4"=1'-0"



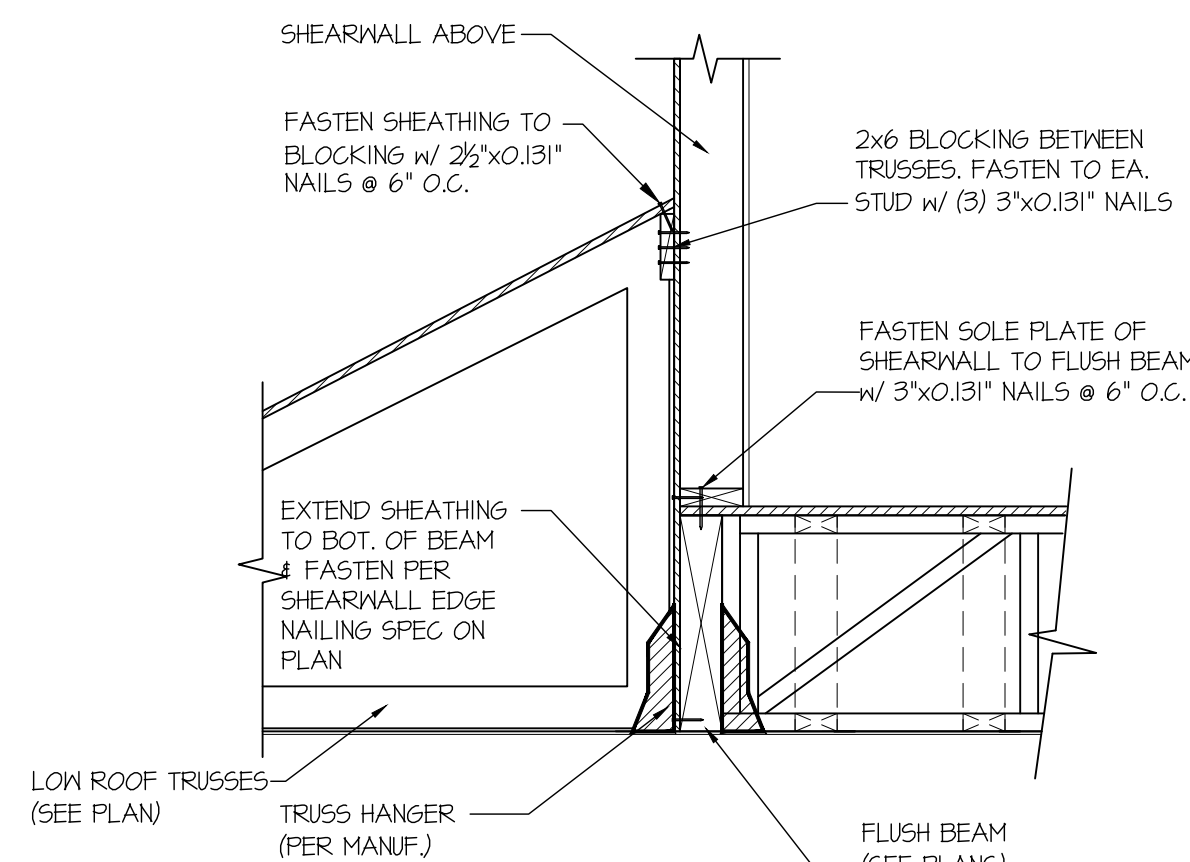
14 SHEAR TRANSFER DETAIL @ SHEAR WALL BELOW
SCALE: 3/4"=1'-0"



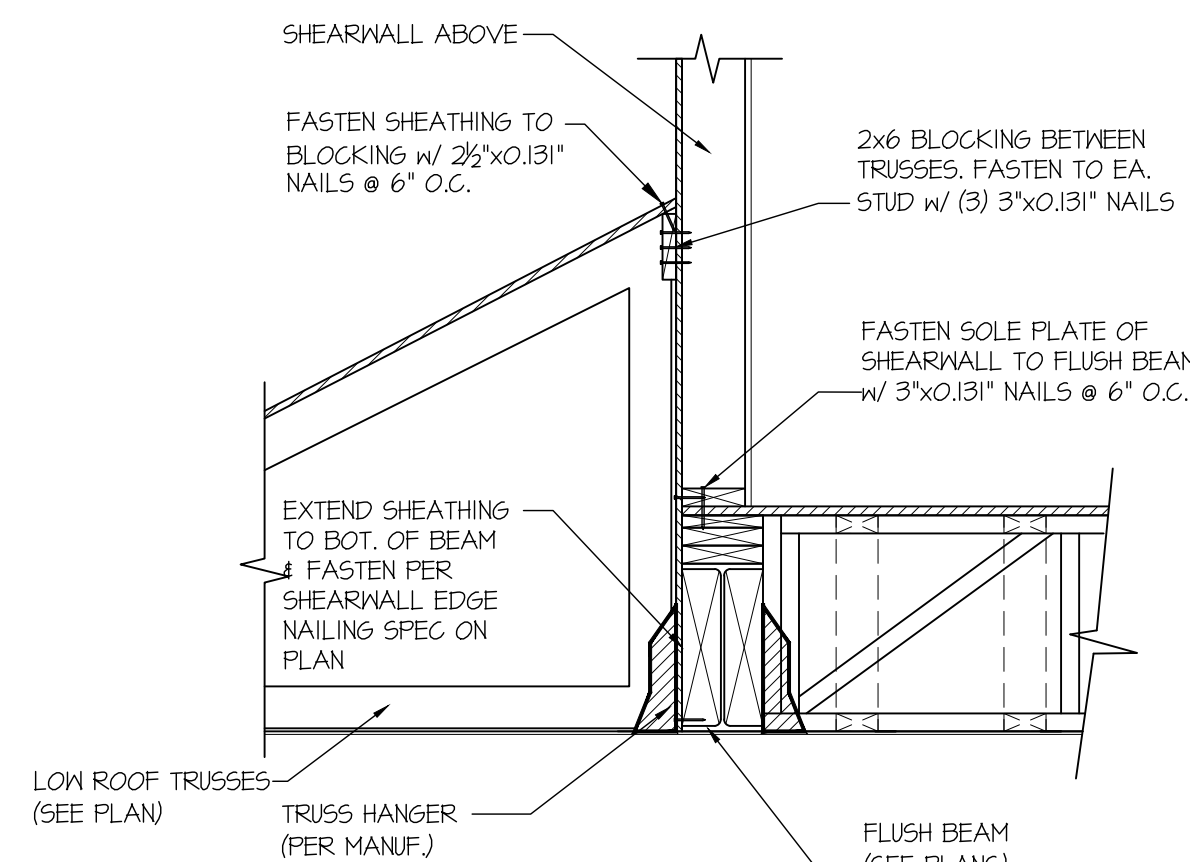
15 SHEAR TRANSFER DETAIL @ INTERIOR SHEAR WALL
SCALE: 3/4"=1'-0"



39 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"

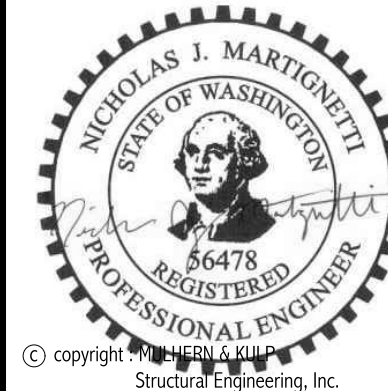


50 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



52A SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"

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RSC

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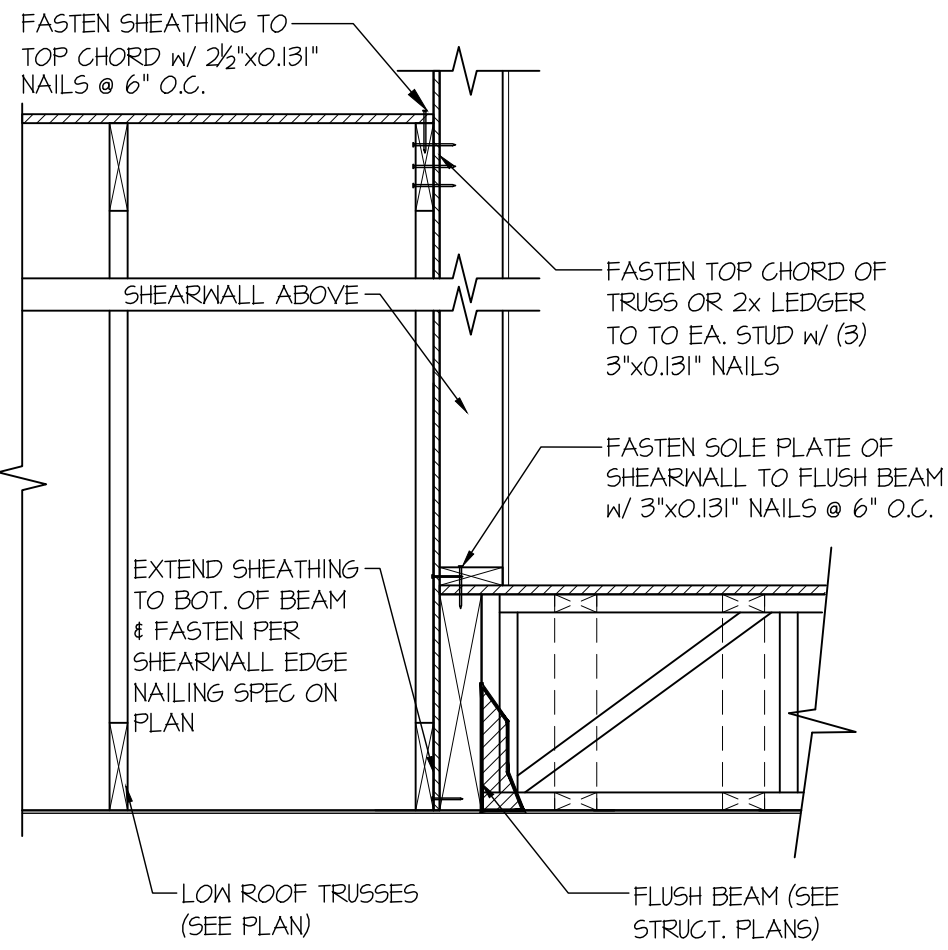
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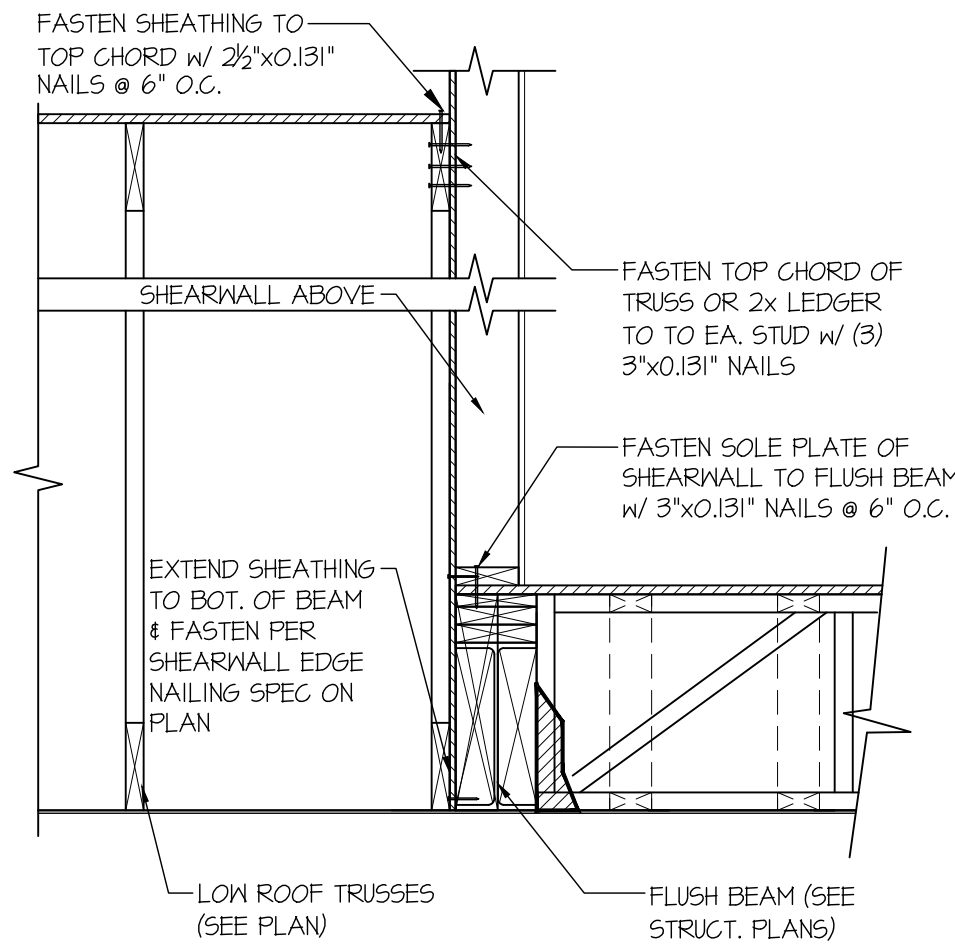
MERCER ISLAND - LOT 1
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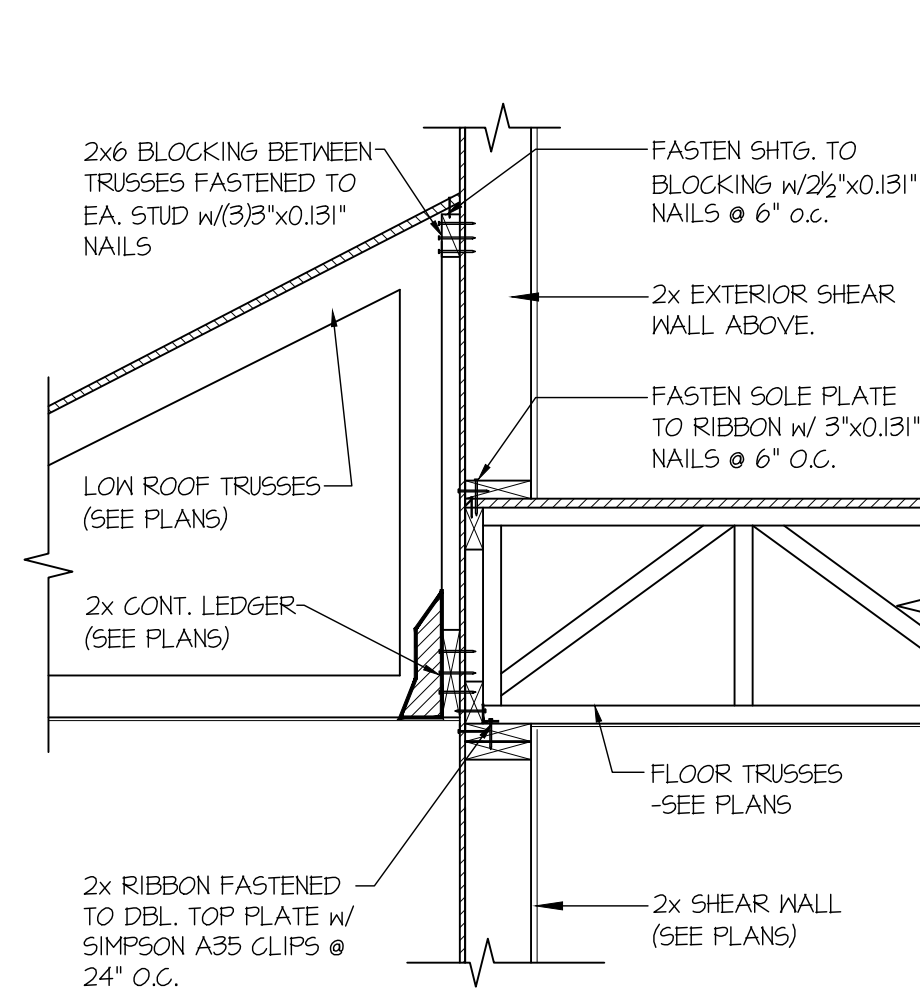
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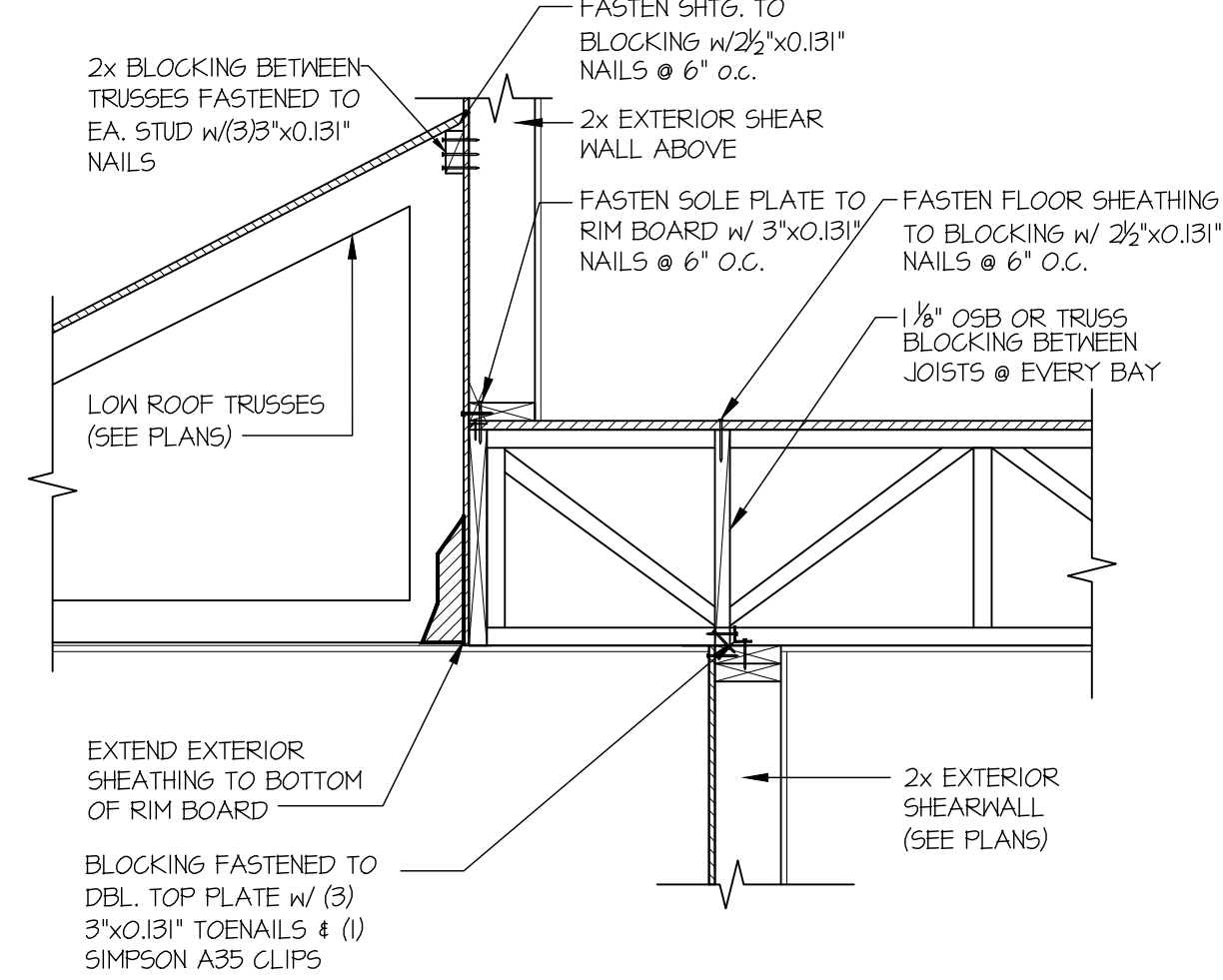
59 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



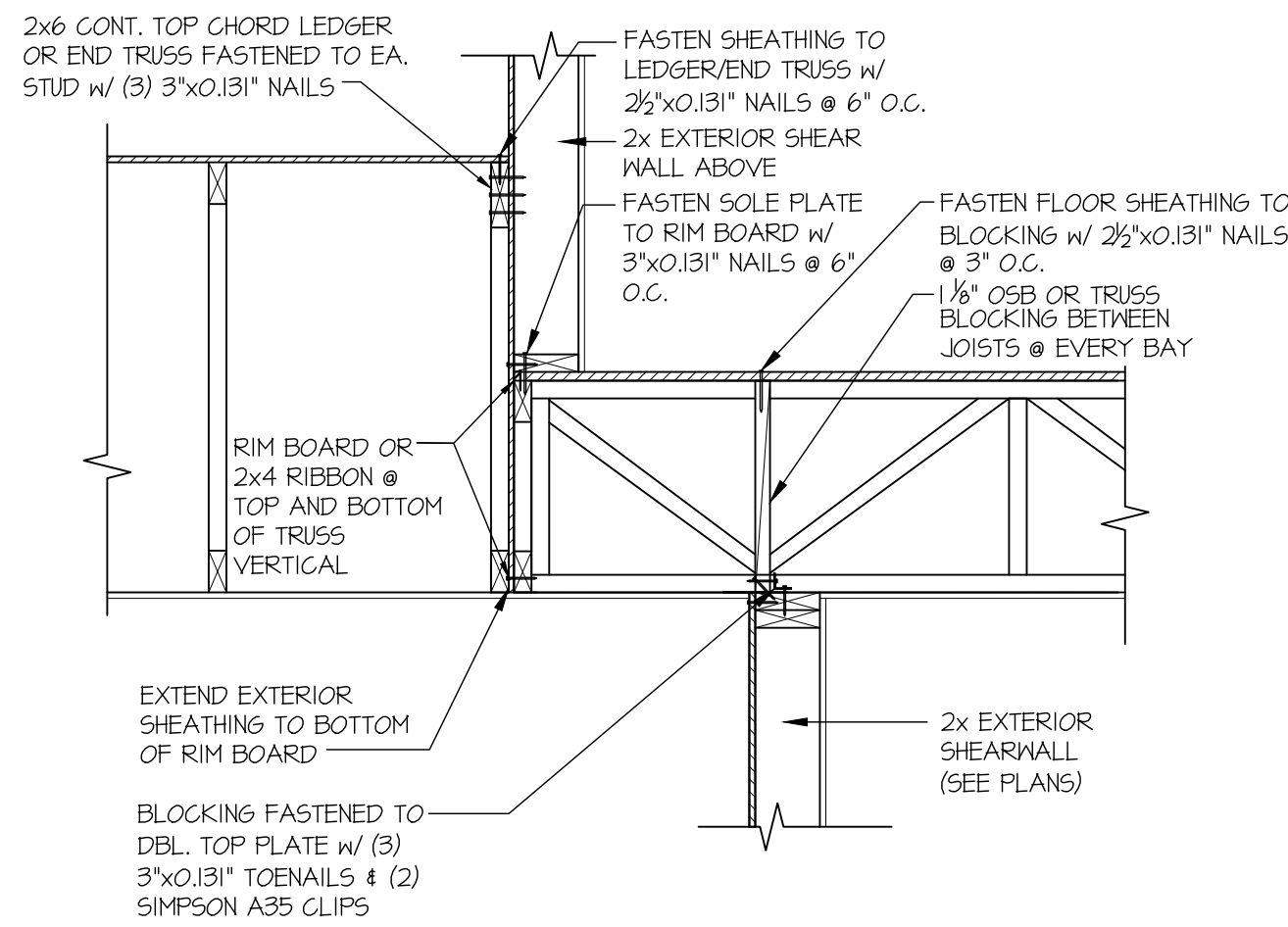
59A SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



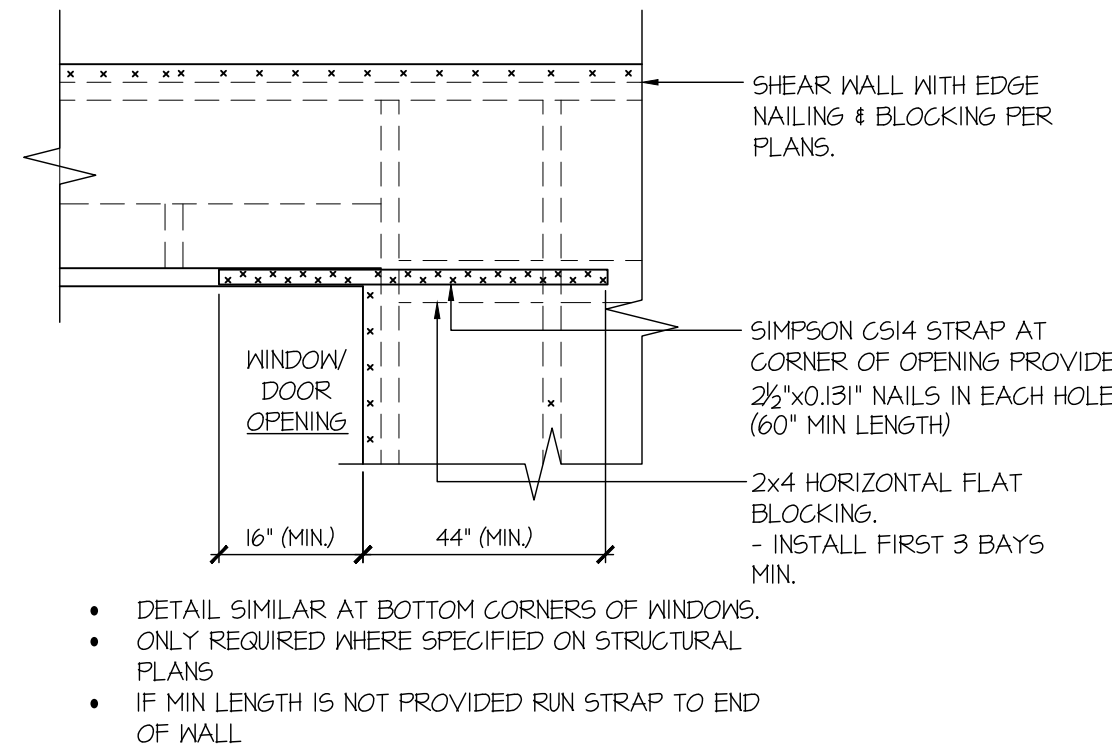
60 TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



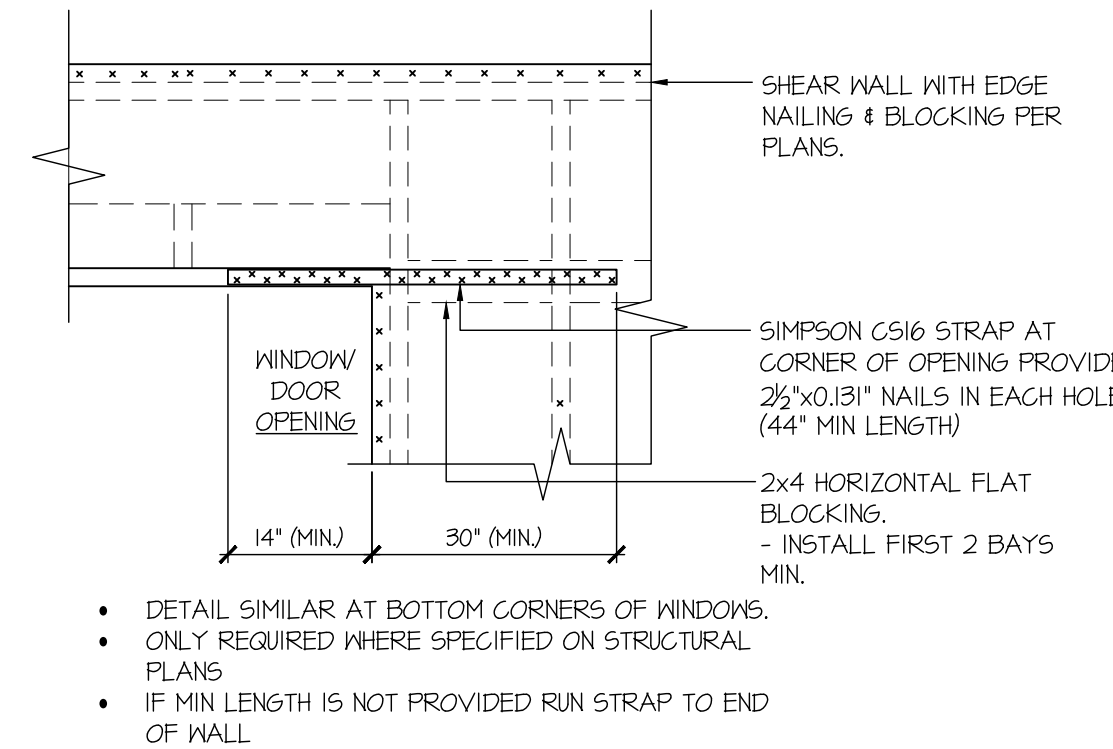
63 TYPICAL SHEAR TRANSFER DETAIL
@ EXTERIOR WALL ABOVE
SCALE: 3/4"=1'-0"



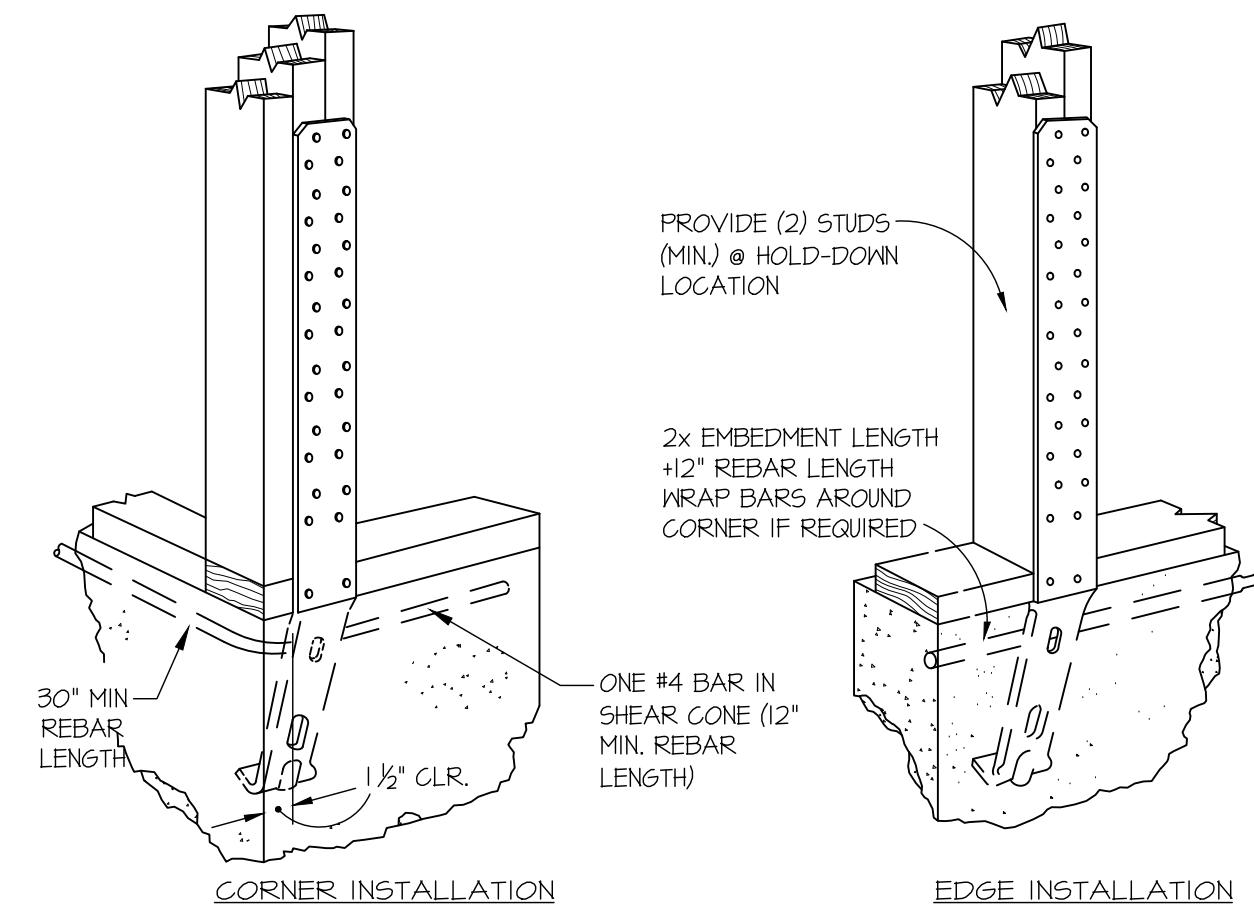
67 SHEAR TRANSFER DETAIL @
CANT'D EXTERIOR WALL ABOVE
SCALE: 3/4"=1'-0"



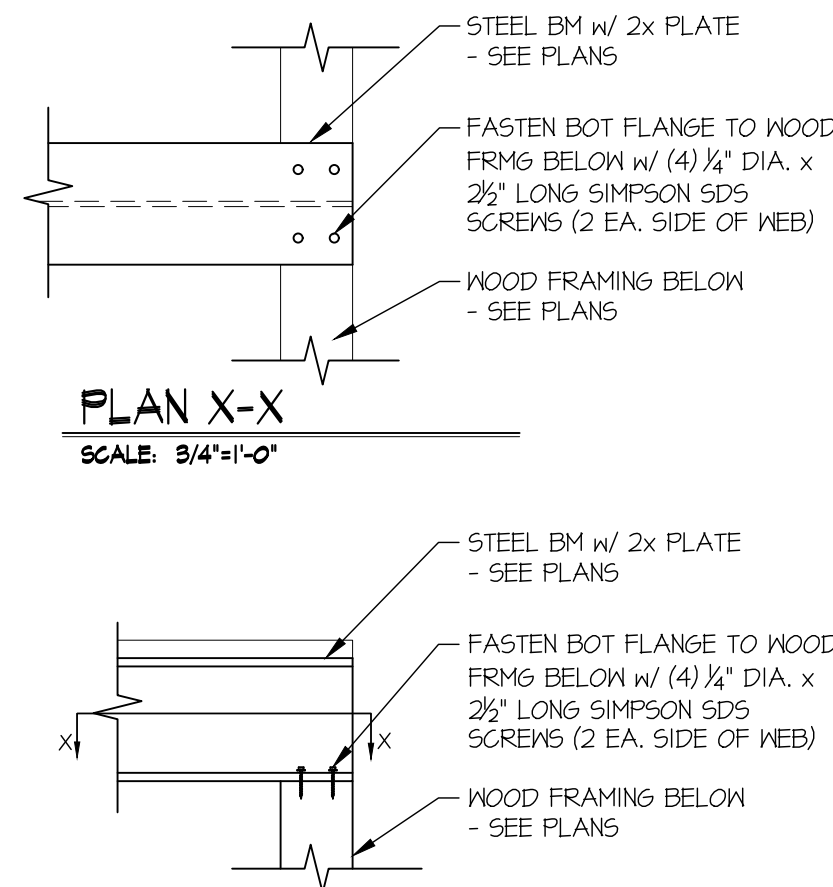
93 EXT. WALL & INT. SHEARWALL
OPENING ELEVATION
SCALE: NTS



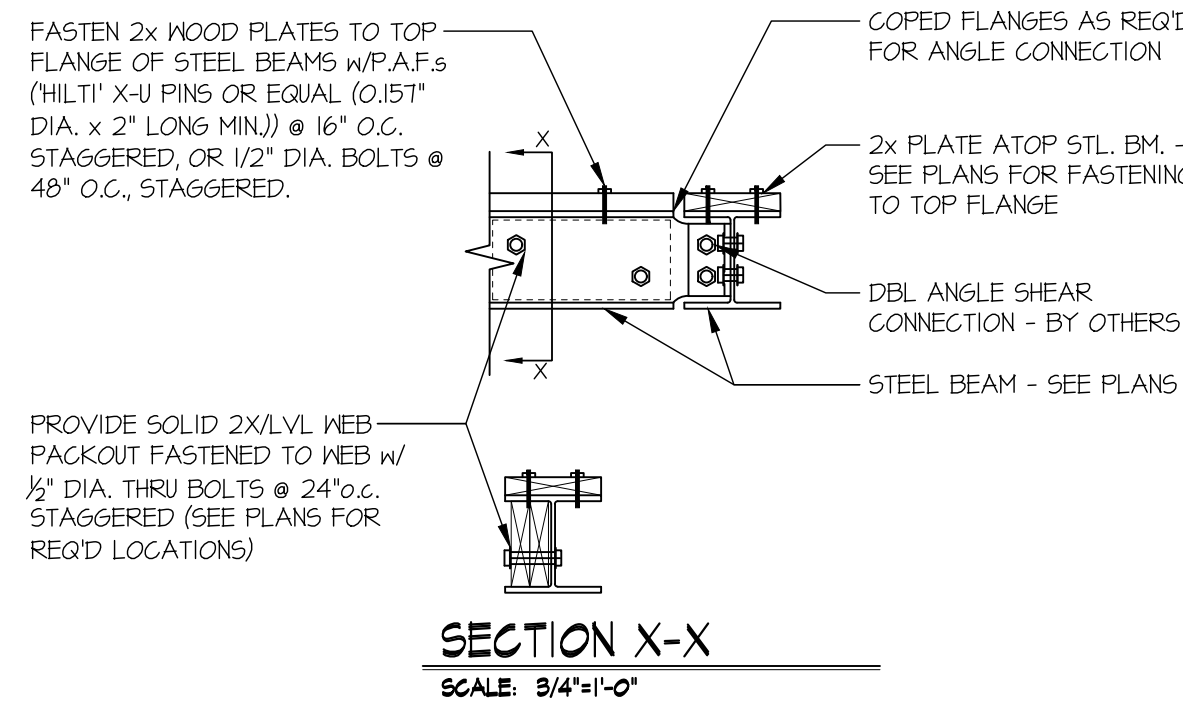
94 EXT. WALL & INT. SHEARWALL
OPENING ELEVATION
SCALE: NTS



A TYPICAL HOLD-DOWN INSTALLATION
NOT TO SCALE SIMPSON 5THD HD @ FOUNDATION



B STL. BM TO WOOD FRMG CONNECTION
SCALE: 3/4"=1'-0"

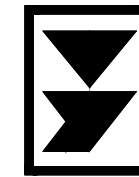


C DOUBLE ANGLE STEEL CONNECTION
SCALE: 3/4"=1'-0"

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