

**ABE Calculation**

Segment	Length	Elevation	Product
A	5.1	84	428.4
B	3.4	84	285.6
C	31.1	84	2612.4
D	12.9	84	1083.6
E	4.0	83	332
F	15.1	81	1223.1
G	60.4	77	4650.8
H	27.9	79	2204.1
I	28.4	84	2385.6
J	3.6	84	302.4
<b>Total</b>	<b>191.9</b>		<b>15508</b>

$ABE = 15508 / 191.9 = 80.8'$

PROJECT DATA	PROPERTY DATA	CONSTRUCTION DATA
OWNER Eric and Jody Blohm	PROJECT ADDRESS 5642 E Mercer Way Mercer Island, WA 98040	SCOPE OF WORK Addition of 720.5 SF raised deck with stair to ground floor to existing Single Family Residence. New Roof Over Deck.
ARCHITECT HhLodesign 215 W. Crockett St. Seattle, WA 98119 Contact: Henry H Lo 206-229-8082	ZONING DESIGNATION R-15	LOT SLOPE High Point 136.0' Low Point 60.3' Length 322.9' Slope 23.4%
CONTRACTOR Urban Restoration Contact: Reg Willing 425-417-4811	HEIGHT LIMIT 30'-0" Max Building Height	
STRUCTURAL ENGINEER TBD	SETBACKS Front Yard Setback 20'-0" Rear Yard Setback 25'-0" Side Yard Setback 17'-0" Total 5.6' Min.	
	LOT AREA 33,451 sq ft	
	ASSESSOR'S TAX NUMBER 192405-9152	
	LEGAL DESCRIPTION POR GL 3 BEG AT PT 2120 FT N OF S LN OF SEC & 1032.41 FT E OF N & S C/L OF SEC TH N 03-58-12 E 100.24 FT TH E 300 FT TO WLY LN OF PRIVATE RDWY TH S 03-58-12 W 100.24 FT TH W 300 FT TO BEG ALSO POR GL 3 LY BET LN S 2205 FT & 2220 FT N OF S LN OF SEC & ELY OF PRIVATE RD TGW SH LDS ADJ	

**LOT COVERAGE CALCULATIONS**

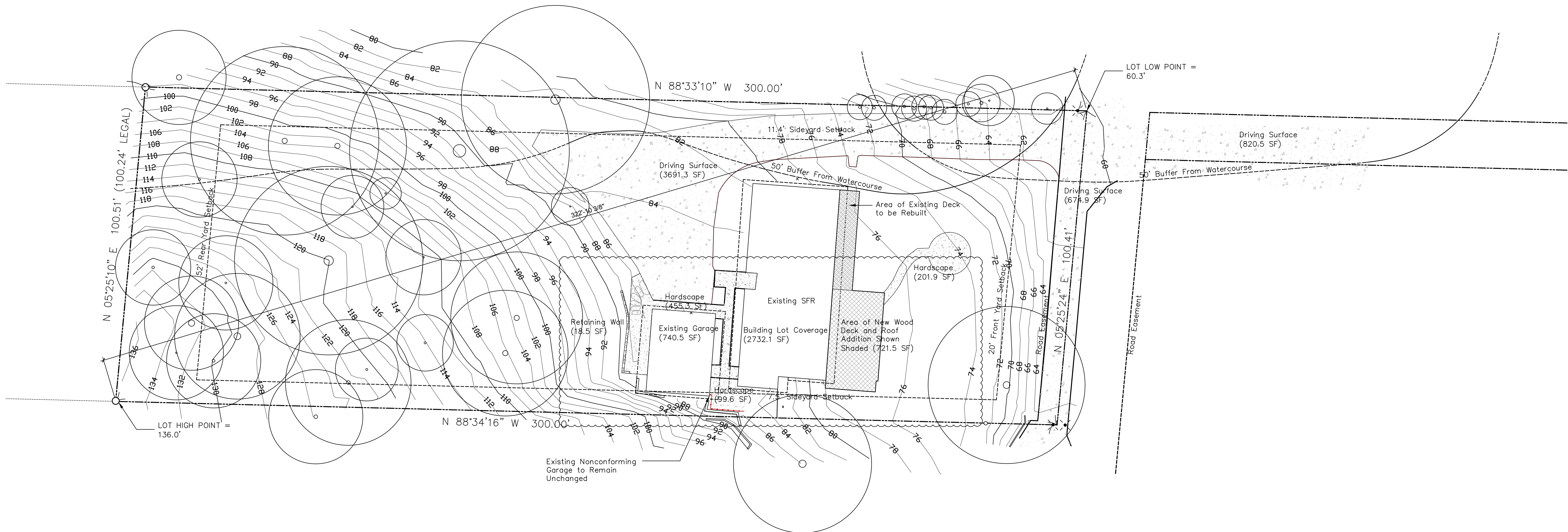
A. Gross Lot Area	33451	Square Feet
B. Net Lot Area	33451	Square Feet
C. Allowed Lot Coverage Area	11707.9	Square Feet
D. Allowed Lot Coverage	35	% of Lot
E. Existing Lot Coverage:		
1. Main Structure Roof Area	2732.1	Square Feet
2. Accessory Building Roof Area	740.5	Square Feet
3. Vehicular Use (driveway, paved access easements [portion used by the lot for access], parking)	5186.7	Square Feet
4. Covered Patios and Covered Decks	721.5	Square Feet
5. Total Existing Lot Coverage Area (E1+E2+E3+E4)	9380.8	Square Feet
F. (Total Lot Coverage Area Removed)	0	Square Feet
G. Proposed Adjustment for Single Story (Area)	0	Square Feet
H. Proposed Adjustment for Flag Lot	0	Square Feet
I. Total New Lot Coverage Area:		
1. Main Structure Roof Area	2732.1	Square Feet
2. Accessory Structure Roof Area	740.5	Square Feet
3. Vehicular Use (driveway, paved access easement [portion used by the lot for access], parking)	5186.7	Square Feet
4. Covered Patios and Covered Decks	721.5	Square Feet
5. Total New Lot Coverage Area (I1 + I2 + I3 + I4)	9380.8	Square Feet
J. Total Project Lot Coverage Area = (E5 - F) + I5	9380.8	Square Feet
K. Proposed Lot Coverage Area = (J/8) x 100	28.0	% of Lot
Lot coverage calculations shown on Plan Sheet #	A-1.0	

**HARDSCAPE CALCULATIONS**

A. Gross Lot Area	33451	Square Feet
B. Net Lot Area	33451	Square Feet
C. Area Borrowed from Lot Coverage	2327.1	Square Feet
D. Allowed Hardscape Area = 9% of lot area + C	5337.7	% of Lot
E. Allowed Hardscape Area	5337.7	Square Feet
F. Total Existing Hardscape Area:		
1. Uncovered Decks	0	Square Feet
2. Uncovered Patios	99.6	Square Feet
3. Walkways	657.2	Square Feet
4. Stairs	0	Square Feet
5. Rockeries and Retaining Walls	18.5	Square Feet
6. Other	0	Square Feet
7. Total Existing Hardscape Area (F1+F2+F3+F4+F5+F6)	775.3	Square Feet
G. (Total Hardscape Area Removed)	0	Square Feet
H. Total New Hardscape Area:		
1. Uncovered Decks	0	Square Feet
2. Uncovered Patios	0	Square Feet
3. Walkways	0	Square Feet
4. Stairs	0	Square Feet
5. Rockeries and Retaining Walls	0	Square Feet
6. Other	0	Square Feet
7. Total New Hardscape Area (H1+H2+H3+H4+H5+H6)	0	Square Feet
I. Total Project Hardscape Area = (F7 - G) + H7	775.3	Square Feet
J. Total Project Hardscape Area = (I/8)x100	2.3%	% of Lot
Hardscape calculations shown on Plan Sheet #	A-1.0	



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082



DRAWN BY  
DESIGN BY  
CHECKED BY  
APPROVED BY  
DATE  
August 28, 2023

REVISIONS  
November 29, 2023

**BLOHM  
DECK**  
5642 E Mercer Way  
Mercer Island, Washington

8190  
**REGISTERED  
ARCHITECT**  
HENRY H. LO  
STATE OF WASHINGTON

1 Site Plan  
1/16" = 1'-0"



Site Plan

A-1.0



## GENERAL NOTES

### GN-1 GENERAL NOTE

All work to comply with the following current codes:  
- 2018 INTERNATIONAL BUILDING CODE (IBC)  
- 2018 INTERNATIONAL RESIDENTIAL CODE (IRC)  
- 2018 INTERNATIONAL MECHANICAL CODE  
- 2018 INTERNATIONAL FIRE CODE  
- 2018 INTERNATIONAL FUEL GAS CODE (Natural Gas)  
- 2018 UNIFORM PLUMBING CODE  
- 2018 WASHINGTON STATE ENERGY CODE  
- and all other applicable local codes

### GN-2 GENERAL NOTE

All applicable codes, ordinances, and minimal structural requirements take precedence over drawings, notes, and specifications.

### GN-3 GENERAL NOTE

Dimensions are to face of stud unless noted otherwise.

### GN-4 GENERAL NOTE

Plumbing work and Electrical work is "Design/Build" and executed under separate permit.

## EARTH WORK

### EW-1 VERIFY SOIL CONDITIONS

Geotechnical Engineer shall field verify conformance of actual soil conditions with design assumptions

### EW-2 GEOTECHNICAL ENGINEER SITE VISITS

General contractor is responsible for scheduling site visits by Geotechnical Engineer

### EW-3 BEARING DEPTH

Extend excavation down to undisturbed soil of the specified strength with a minimum depth of 18" below finish grade

### EW-4 COMPACTED FILL

Compacted fill to be well graded and granular with no more than 5% passing a 200 sieve. Place in 8" loose lifts and compact to 95% modified AASHTO density at optimum moisture content.

### EW-5 BACKFILL

Backfill behind all retaining walls with free draining granular fill and provide for subsurface drainage. (Subject to field review by Geotechnical Engineer)

## MOISTURE PROTECTION

### MP-1 (IRC R317.1)

Provide a minimum clearance of 12" between untreated beams & girders and earth

Provide a minimum clearance of 18" between untreated joists and earth

Provide a minimum of 8" clear between untreated framing members in contact concrete or masonry exterior walls and earth

All wood in contact with concrete or masonry exterior walls to be pressure treated

All sills and sleepers on concrete slab that is in direct contact with the earth to be pressure treated

All wood in direct contact with the ground or embedded in concrete shall be pressure treated

Wood siding, sheathing and framing shall have a clearance of 6" to earth and 2" from concrete steps, porch slabs, patio slabs and similar horizontal surfaces exposed to weather.

### MP-2 (IRC R408) CRAWLSPACE VENTILATION

Crawlspace ground surface shall be covered with a Class 1 (0.1 per or less) vapor retarder material. Provide 1 sf of net free vent area for each 300 sf of crawlspace area. A vent shall be located within 3 feet of each corner. Vents shall be protected by 1/8" minimum, 1/4" maximum non-corrosive screen.

### MP-3 (IRC R806) ROOF VENTILATION

Provide 1 sf of net free vent area for each 150 sf of attic area. Venting may be reduced to 1 sf of net free vent area for each 300 sf of attic area provided at least 50% but no more than 80% of the vent area is located in the upper portion of the roof at least 3 feet above the eave. Vents shall be protected by 1/8" minimum, 1/4" maximum non-corrosive screen or approved soffit vents. A minimum 1" clear air space shall be provided between the insulation and the roof sheathing through the roof. All rafter bays to be ventilated.

## FIRE PROTECTION cont'd.

### FP-9 (IRC R315.1) CARBON MONOXIDE ALARMS

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

### FP-10 (IRC R315.3) CARBON MONOXIDE ALARM REQUIREMENTS

Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

### FP-11 (IRC R302.11) FIREBLOCKING REQUIRED

Fire blocking is required in the following locations.

-In concealed spaces of stud walls and partitions including furred spaces, parallel rows of studs, staggered studs as follows:

Vertically at ceiling and floor levels

Horizontally at intervals not exceeding 10 feet

-At all interconnections between concealed vertical and horizontal spaces such as soffits, dropped ceilings, and coved ceilings

-In concealed spaces between stair stringers at the top and bottom of the run.

-At openings around vents, pipes, ducts, cables, and wire at ceiling and floor level

-At fireplaces & chimneys per IRC R1003.19

-Fireblocking cornices of a 2-family dwelling is required at the line of dwelling unit separation

## SAFETY AND SECURITY

### SS-1 (IRC R308.4) SAFETY GLAZING - HAZARDOUS LOCATIONS

Provide safety glazing in the following locations

- Glazing in swinging doors

- Glazing in fixed and sliding panels of sliding door assemblies and panels in sliding and bifold closet door assemblies

- Glazing in storm doors

- Glazing in unframed swinging doors

- Glazing in door or enclosure for hot tub, whirlpool, sauna, steam room, bathtub, and shower. Glazing in any part of the a building wall enclosing these where the the bottom edge of the glazing is less than 60" above a standing or walking surface.

- Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24" arc of the door in a closed position AND whose bottom edge is less than 60" from the floor or walking surface

- Glazing that meets all of the following conditions

Exposed area of an individual pane larger than 9 sf  
Bottom edge less than 18" above the floor  
Top edge more than 36" above the floor  
Walking surface within 36" horizontally of the glazing

-All glazing in railings (regardless of area or height)

-Glazing in walls and fences enclosing swimming pools, hot tubs, spas where the bottom edge is less than 60" above walking surface and within 60" horizontally of the water's edge.

-Glazing adjacent to stairways, landings, and ramps within 36" horizontally of a walking surface when the exposed surface of the glass is less than 60" above the the plane of the adjacent walking surface

-Glazing adjacent to stairways within 60" horizontally of the bottom tread in any direction when the exposed surface of the glass is less than 60" above the nose of the tread

(SEE CODE SECTION FOR LIMITED LIST OF EXCEPTIONS)

### SS-2 (IRC R310.1.1,2,3,4) EMERGENCY ESCAPE (EGRESS)

Emergency escape opening shall have a minimum net clear opening of 5.7 sf  
Grade floor openings shall have a minimum net clear opening of 5.0 sf

- Emergency escape opening shall have a minimum net clear opening height of 24"  
- Emergency escape opening shall have a minimum net clear opening width of 20"  
- Emergency escape opening shall have a maximum sill height of 44"

### SS-3 (IRC R311.2) EXIT DOOR

Not less than one exit door shall be provided.  
Minimum size of 3'-0" x 6'-8"

### SS-4 (IRC R311.7) STAIRWAYS

#### WIDTH

Stairway width shall be no less than 36" in clear width above the handrail height and below the required headroom height, handrails may project no more than 4.5" on either side of the stairway

#### HEADROOM

The minimum headroom of all parts of the stairway shall be no less than 6'-8" measured vertically from the sloped plane adjoining the tread nosings

#### RISER HEIGHT

The maximum riser height is 7-3/4"  
The maximum discrepancy between tallest & shortest risers shall not exceed 3/8"

#### TREAD DEPTH

The minimum tread depth is 10" measured from nosing projection to nosing projection  
The maximum discrepancy between widest & narrowest treads shall not exceed 3/8"

#### NOSING

Provide a nosing not less than 3/4" but not more than 1-1/4" wide on stairways with solid risers.

#### HANDRAIL

A continuous handrail is required on at least one side of each continuous run of treads or flight with 4 or more risers

#### HANDRAIL HEIGHT

Not less than 34" or more than 38" above the sloped plan adjoining the tread nosings

#### HANDRAIL CONTINUITY

Handrail shall be continuous for the full length of the flight from a point directly above the top riser to a point directly above the bottom riser. Handrails shall be returned to the wall or terminate in a newel post or safety terminus.

#### HANDRAIL SPACE

There shall be a space of no less than 1-1/2" between handrail and adjacent wall surface.

#### HANDRAIL GRIP SIZE

Handrails with a circular cross section shall have an outside diameter of at least 1-1/4" and no more than 2". If the handrail is not circular it shall have a perimeter dimension of at least 4" and not more than 6-1/4" with a maximum cross section dimension of 2-1/4"  
(See code for additional options)

### SS-5 (IRC R312) GUARDS

Porches, balconies, ramps, and raised floor surfaces more than 30" above the floor or grade below shall have a guard not less than 36" in height.

Open side of stairs with a total rise of 30" or more shall have guards a minimum height of 34" above nosings. Guards shall have intermediate rails or balusters spaced so as not to allow the passing of a 4" diameter sphere. Contractor shall verify to inspector that all guards and railings shall be capable of resisting 200 lb. load on top rail acting in any direction as required by IRC Table R301.5.

## BATHROOM NOTES

### BN-1 (2018 IRC 307.1) SPACE REQUIREMENTS

Toilet - Minimum 15" clear each side, Minimum 21" clear in front of bowl

Vanity - Minimum 21" clear in front

Shower - Minimum 30" x 30", 24" clear in front of opening

### BN-2 (2018 IRC 307.2) TUB & SHOWER WALLS

Bathtub and shower floors and walls above bathtubs with shower heads shall be finished with a non-absorbent surface to a height of at least 6 feet above the floor.

## ENERGY CODE

### EC-1 CODE

All work to comply with 2018 WSEC

### EC-2 (2018 R402) BUILDING ENVELOPE REQUIREMENTS

Climate Zone 4C - King County

Compliance Path: Mandatory plus Prescriptive

#### Table 402.1.1

Glazing U-Factor (Vertical):	0.30
Glazing U-Factor (Overhead):	0.50
Door U-Factor:	0.20

#### Entire Slab:

Below grade walls (interior): R-10

Below grade walls (exterior): 10/15/21 int + TB

Above grade walls: R-21

Floor Insulation: R-30

Ceilings: R-49

or R-38 adv

Vaulted Ceilings: R-38

See Table 402.1.1 for footnotes

### EC-3 (2018 R406) ADDITIONAL ENERGY EFFICIENCY REQUIREMENTS

Dwelling units shall comply with all provisions of WSEC Chapter 4 and shall comply with sufficient options from Table R406.2 so as to achieve the at least the minimum number of Energy Credits as required (WSEC R406.2).

### EC-4 (2018 R402.2.4) ACCESS HATCHES & DOORS

Access hatches from conditioned spaces to crawlspaces and attics shall be weatherstripped and insulated to a level equivalent to the surrounding surfaces

### EC-5 (2018 R303.1.3) FENESTRATION (DOOR & WINDOW) U-FACTOR LABELS

All products shall be identified with NFRC labels indicating U-value, SHGC (or VT).

### EC-6 (2018 402.4.1.1) AIR BARRIER

A continuous air barrier shall be installed in the building envelope. Breaks or joints in the barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.

### EC-7 GROUND COVER

A ground cover of 6 mil black polyethylene, Class 1 (0.1 per or less), vapor retarder material shall be installed over the ground in crawlspaces. Joints should be lapped 12" and the ground cover should extend to the foundation walls. Ground cover can be omitted if crawlspaces have a concrete slab with a minimum thickness of 3-1/2"

### EC-8 (2018 R402.4.3) AIR LEAKAGE OF FENESTRATION

Exterior doors and windows shall be constructed to limit air leakage and be fitted with weatherstripping. Joints around door and window frames, openings between walls and foundations, between walls and roof, and any other penetrations shall be sealed, caulked, gasketed, or weatherstripped to prevent air leakage. Windows, skylights and sliding glass doors shall have an air infiltration rate of not more than 0.3 cfm per square foot, and swinging doors no more than 0.5 cfm per square foot, and be listed and labeled by the manufacturer

### EC-9 (2018 R402.4.4) RECESSED LIGHTING

Recessed light cans installed in the building envelope shall be Type IC rated and certified under ASTM 283 to have no more than 2.0 cfm air movement into the unconditioned cavity. They shall be installed with a gasket or caulk between the frame and the ceiling to prevent air leakage

### EC-10 (2018 503.4) EQUIPMENT PERFORMANCE

All heating equipment shall meet the requirements of the National Appliance Energy Conservation Act and be so labeled and comply with Section 1411.

### EC-11 (2018 R403.5) MECHANICAL VENTILATION

Mechanical ventilation system fans shall meet the efficacy requirements of Table R403.5.1

### EC-12 (2018 R403.1) CONTROLS

Provide a programmable thermostat for regulation of temperature. Thermostat shall allow for a 5-2 programmable schedule (weekdays/weekends) and be capable of providing at least two programmable setback periods per day.

### EC-13 (2018 R403.2) DUCTS

Ducts within or partial exposed to unconditioned spaces shall be insulated to a minimum of R-8 (WSEC R403.2.1). Framing cavities shall not be used as ducts or plenums. Installation of ducts in exterior walls shall not displace required envelope insulation (WSEC R403.2.3)

### EC-14 (2018 R403.2.2) SEALING OF MECHANICAL SYSTEM

Ducts, air handlers, and filter boxes shall be sealed. Ducts shall be leak tested in accordance with the provisions of 2012 WSEC R403.2.2

### EC-15 (2018 R403.2.2) DUCT LEAKAGE TEST

Duct leakage test results shall be provided to the building inspector and homeowner prior to an approved final inspection. A signed affidavit documenting the duct leakage test results shall be provided to the building inspector prior to an approved final inspection.

### EC-16 (2018 R403.3) MECHANICAL SYSTEM PIPING

Mechanical system piping capable of carrying fluids above 105 deg. F shall be insulated to a minimum of R-6.

### EC-17 (2018 R40.3.4.2) HOT WATER PIPE INSULATION

Insulation for hot water pipes shall have a minimum thermal resistance of R-4.

### EC-18 (2018 R403.4.3) ELECTRIC WATER HEATER INSULATION

Electric water heaters in unconditioned space or on concrete floors shall be placed on an incompressible insulated surface with a minimum R-10.

### EC-19 (2018 R404.1) LIGHTING EQUIPMENT

A minimum of 75 percent of permanently installed lamps in lighting fixtures shall be high efficacy lamps.

### EC-20 (2018 402.4.1.2) AIR LEAKAGE TESTING

The building or dwelling shall be tested and verified to have an air leakage rate not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. Where required by the building official testing shall be conducted by an approved third party. Testing shall be performed any time after creation of all penetrations in the building thermal envelope. The test results shall be posted on the Residential Energy Compliance Certificate.

### EC-21 (2018 401.3) ENERGY COMPLIANCE CERTIFICATE

A Residential Energy Compliance Certificate complying with SEC 105.4 is required to be completed by the design professional or builder and permanently posted within 3'-0" of the electrical panel prior to inspection.

## EXHAUST SYSTEMS CODE

### VC-1 CODE

All work to comply with International Residential Code (IRC), Chapter 15, Exhaust Systems

### VC-2 (IRC Section M1507) MECHANICAL VENTILATION

Source Specific Exhaust Fans

- Exhaust fans providing source specific ventilation shall have a minimum fan flow rating not less than 50 cfm at 0.25 inches water gauge for bathrooms, laundries, or similar rooms and 100 cfm at 0.25 inches water gauge for kitchens.

- Source specific ventilation systems shall be controlled by manual switches, dehumidistats, timers, or other approved means.

- Source specific ventilation ducts shall terminate outside the building. Exhaust ducts shall be equipped with backdraft dampers. All ducts in unconditioned spaces shall be insulated to a minimum of R-8.

### VC-3 (IRC Section M1507.3) WHOLE HOUSE VENTILATION

Intermittent Whole House Ventilation Integrated with a Forced-Air System

- Integrated whole house ventilation systems shall provide outdoor air at the rate calculated using Section M1507.3.3.4

- Integrated forced-air ventilation systems shall distribute outdoor air to each habitable room through the forced-air system ducts.

- Integrated forced-air ventilation systems shall have an outdoor air inlet duct connecting a terminal element on the outside of the building to the return air plenum of the forced air system at a point within 4 feet upstream of the air handler.

- The outdoor air inlet duct connection to the return air stream shall be located upstream of the forced-air system blower and shall not be connected directly into a furnace cabinet to prevent thermal shock to the heat exchanger.

- The system shall be equipped with a motorized damper connected to the automatic ventilation control as specified in Section M1508.5.2. The required flow rate shall be verified by field testing with a flow hood or a flow measuring station. Controls

- The whole house ventilation system shall be controlled by a 24-hour clock timer with the capability of continuous operation, manual and automatic control. At the time of final inspection the automatic control timer shall be set to operate the whole house system for at least 8 hours a day. A label shall be affixed to the control that reads "WHOLE HOUSE VENTILATION - See operating instructions"

## MECHANICAL WORK

### MW-1 (IRC M1307.2) WATER HEATER ANCHORAGE

Water heater shall be strapped at points within the upper 1/3 and lower 1/3 of the appliance. Strapping shall be a minimum of 4" above the controls.

### MW-2 (IRC M1307.3) ELEVATION OF IGNITION SOURCE

Appliances having an ignition source shall be elevated such that the source of the ignition is not less than 18" above the floor.

### MW-3 (IRC M1307.3.1) PROTECTION FROM IMPACT

Appliances located in the garage shall be protected from impact by approved barriers.

## FIRE PROTECTION

### FP-1 (IRC R302.6) SEPARATION REQUIRED

The garage shall be separated from the residence and its attic by not less than 1/2" thick GWB on the garage side. Garages beneath habitable rooms above by not less than 5/8" thick GWB Type X. Where the separation is a ceiling-floor assembly the structure supporting the assembly shall also be protected by not less than 1/2" thick GWB.

### FP-2 (IRC R302.5) OPENING PROTECTION

Openings between garage and residence shall be protected by either

- Solid wood door not less than 1 3/8" thick, or

- Solid or honeycomb metal door not less than 1 3/8" thick, or

- 20-minute fire rated door

### FP-3 (IRC R302.5.2) DUCT PENETRATION

Ducts in the garage and ducts penetrating the walls or ceiling separating the dwelling from the garage shall be a minimum of 26 gauge sheet metal and have no openings into the garage.

### FP-4 (IRC R302.7) UNDER-STAIR PROTECTION

Enclosed accessible space under stairs shall have walls and under-stair-surfaces protected on the enclosed side by not less than 1/2" thick GWB.

### FP-5 (IRC R314.1) SMOKE DETECTION AND NOTIFICATION

All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of the IRC and the household fire warning equipment provisions of NFPA 72.

### FP-6 (IRC R314.3) SMOKE DETECTION LOCATION

Smoke alarms shall be installed in the following locations

-in each sleeping room

-Outside each separate sleeping area in the immediate vicinity of the bedrooms

-On each additional story of the building including basements and habitable attics

When more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

### FP-7 (IRC R314.3.1) SMOKE ALARMS - ALTERATIONS, REPAIRS AND ADDITIONS

When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

### FP-8 (IRC R314.4) SMOKE ALARM POWER SOURCE

Smoke alarms shall receive their primary power from the building and have battery backup. Wiring shall be permanent and without disconnecting switch other than those required for overcurrent protection

Permit Conditions:

- Provide a residential Fire Sprinkler TI Permit for the modification, addition, or subtraction of the fire sprinkler system. A licensed fire sprinkler contractor must evaluate the current system and provide a letter stating the changes needed and if the current system has capacity.
- Provide annual test records showing the system has been recently tested within the last 365 days.
- Fire Sprinkler System activation must activate internal sounders or smoke alarms.



215 West Crockett Street  
Seattle, Washington 98119  
206.229.8082

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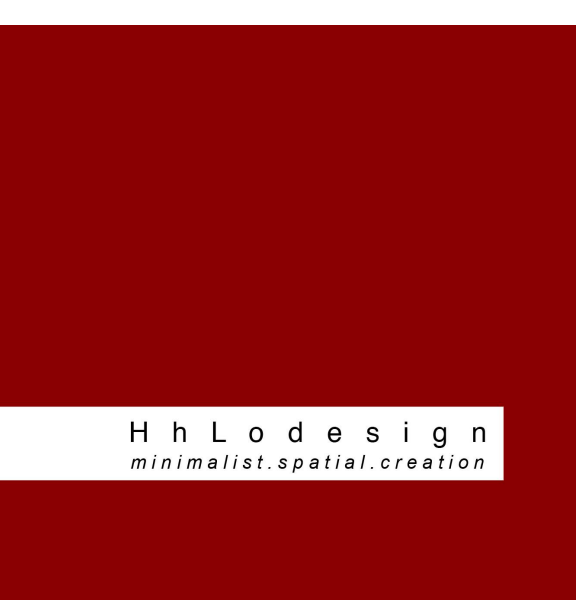
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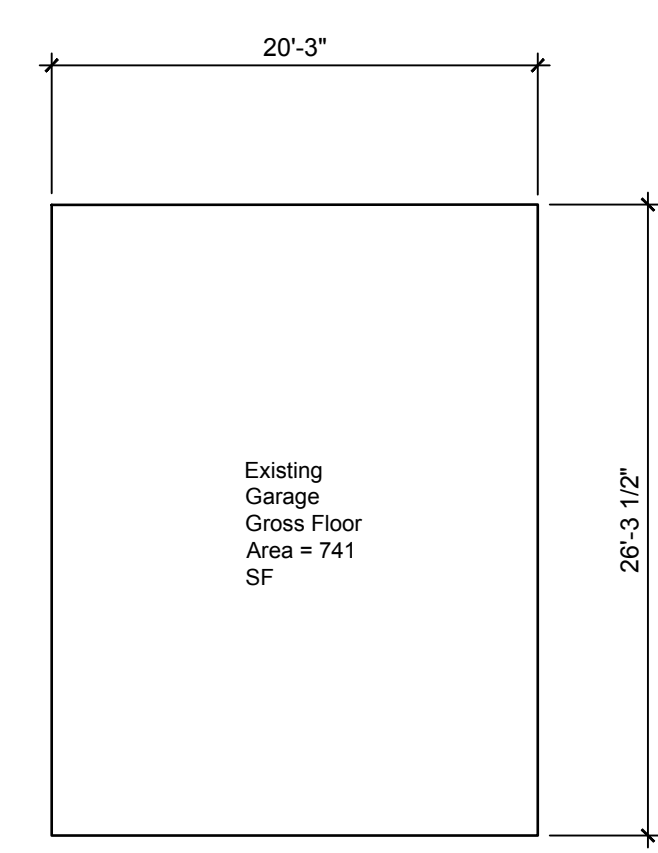
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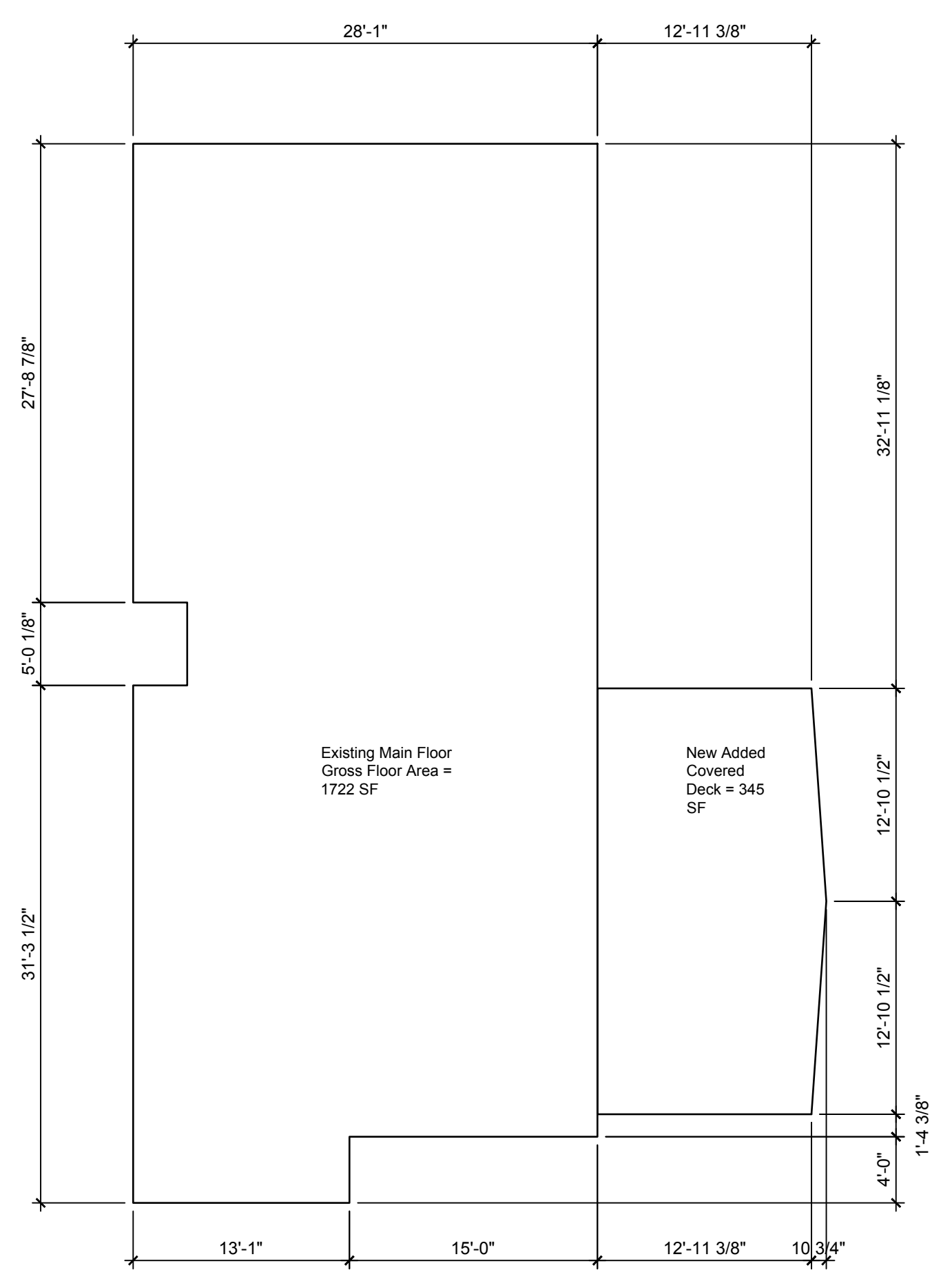




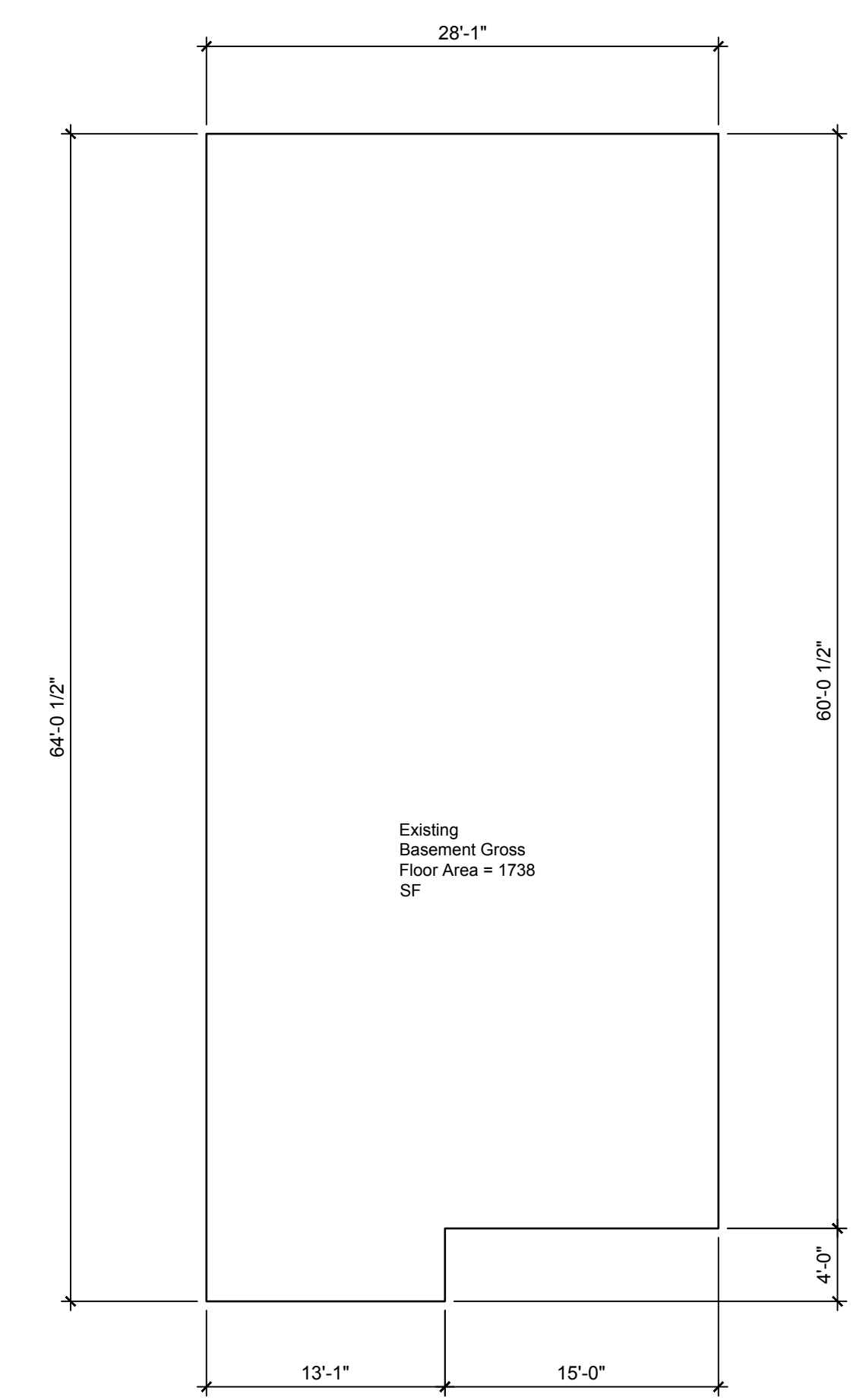
215 West Crockett Street  
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3 Garage - Gross Floor Area  
1/4" = 1'-0"



2 Main Level - Gross Floor Area  
1/4" = 1'-0"



1 Basement Level - Gross Floor Area  
1/4" = 1'-0"



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November 29, 2023

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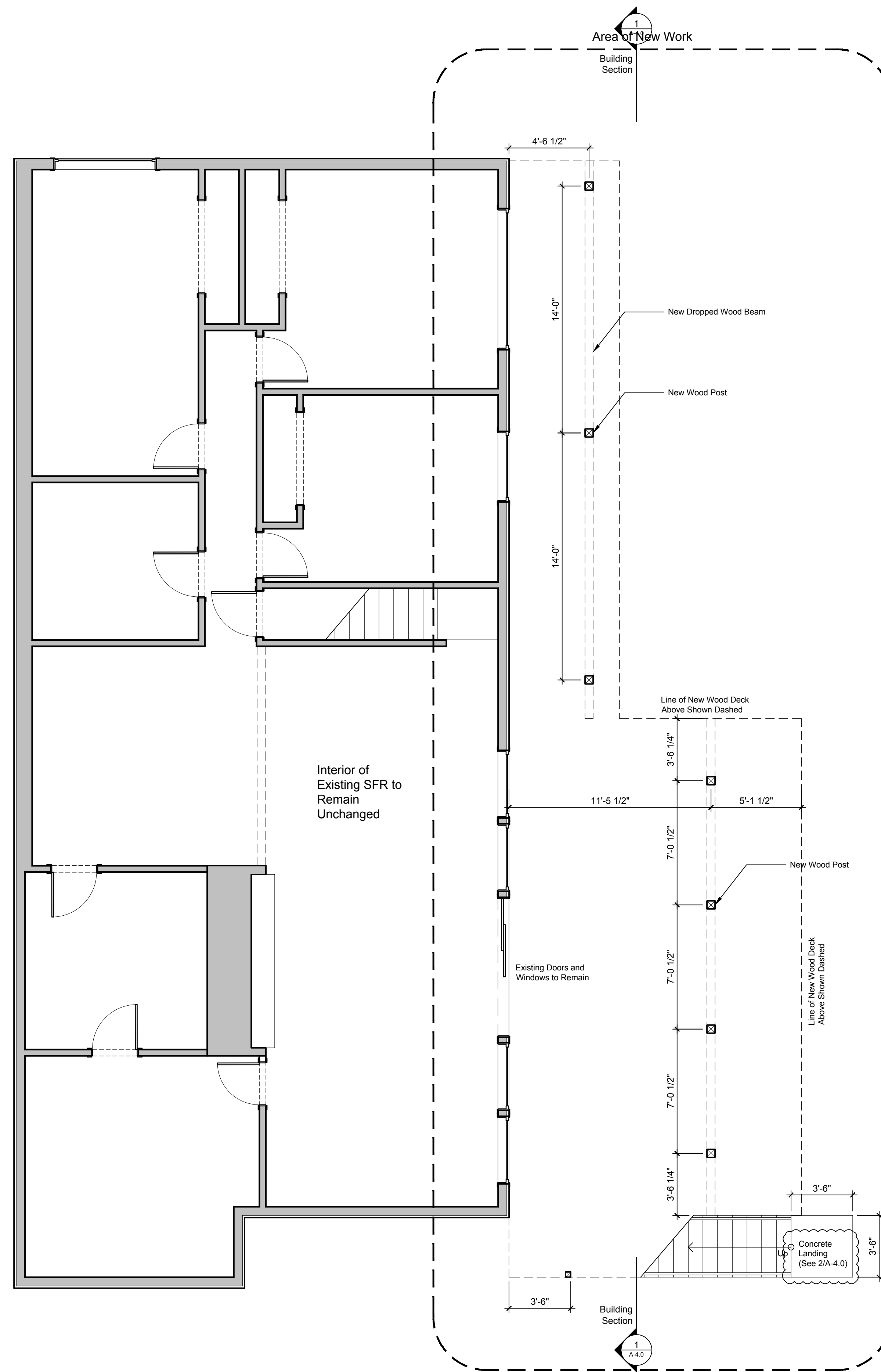
BLOHM  
DECK

5642 E Mercer Way  
Mercer Island, Washington



Gross Floor  
Area Calculation

A-1.2



1 Lower Floor Plan  
1/4" = 1'-0"



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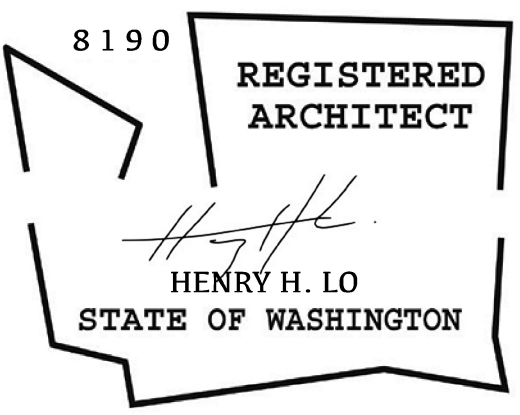
APPROVED BY

DATE  
April 04, 2023

REVISIONS  
November 29, 2023 1

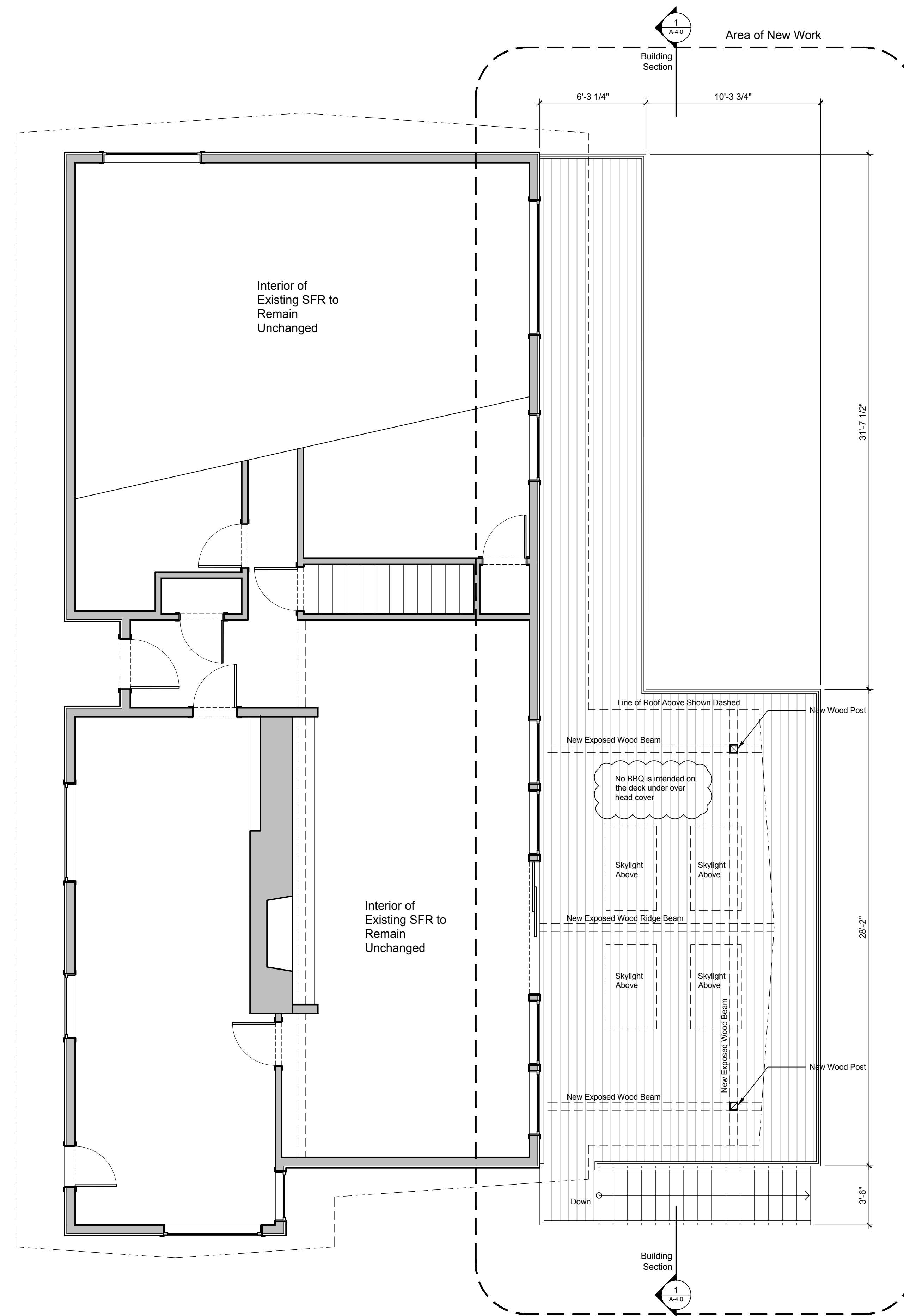
**BLOHM  
DECK**

5642 E Mercer Way  
Mercer Island, Washington



Lower Floor Plan

**A-2.0**



1 Main Floor Plan  
1/4" = 1'-0"

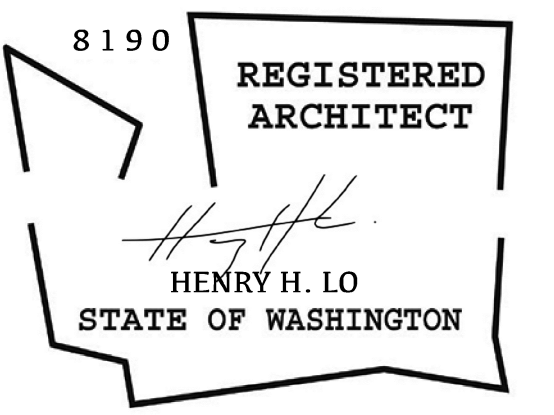


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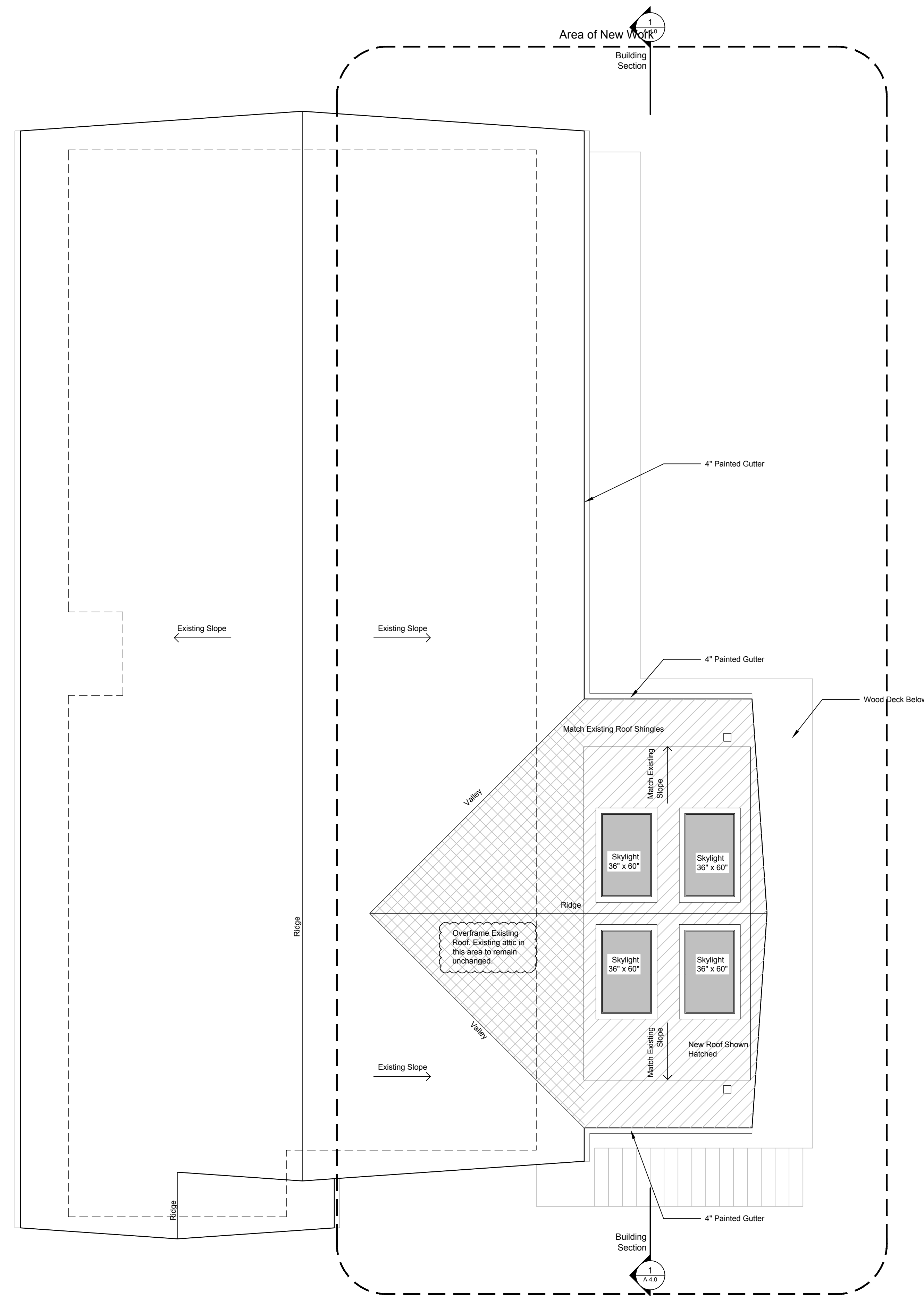
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Main Floor Plan

A-2.1



1 Roof Plan  
1/4" = 1'-0"



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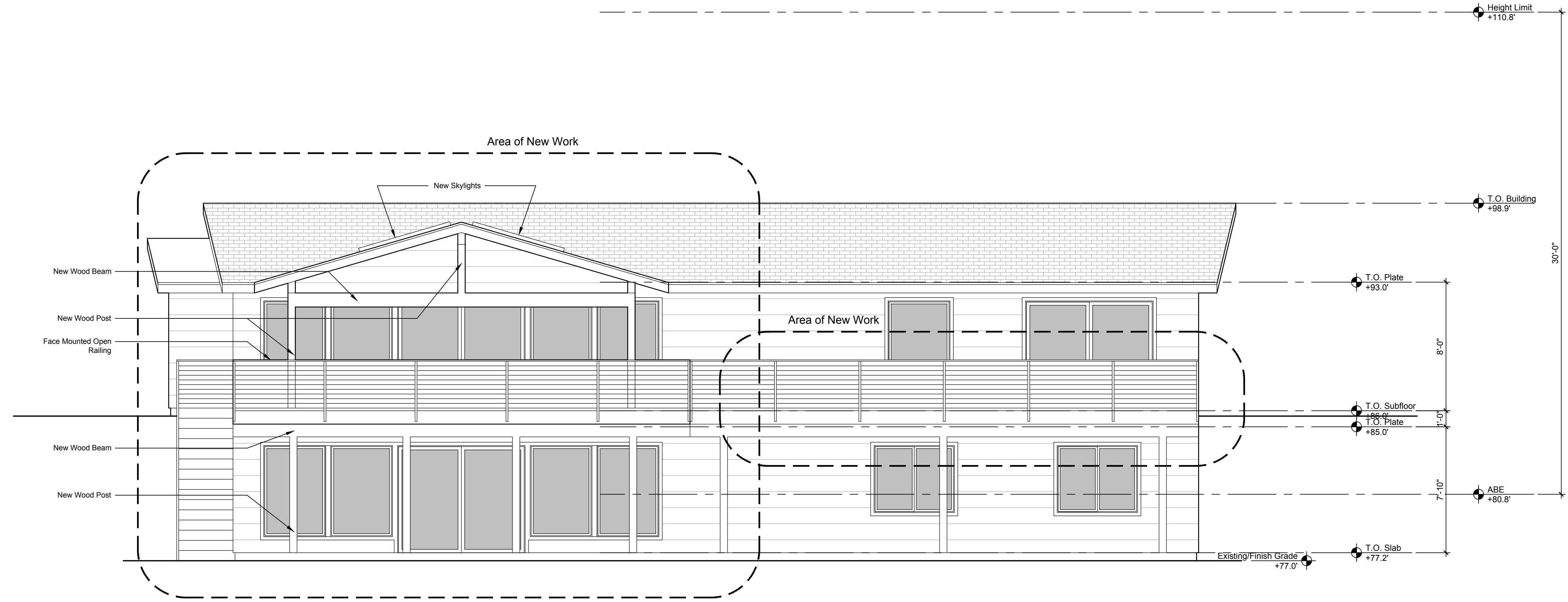
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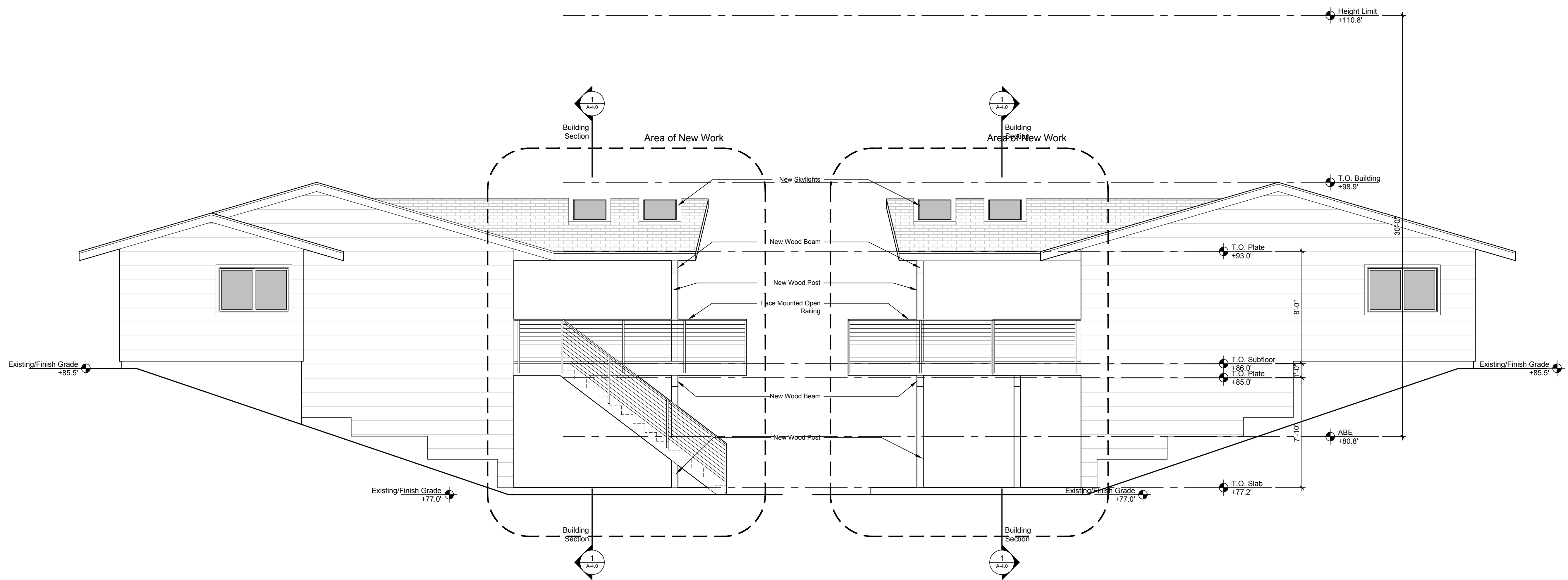


Roof Plan

**A-2.2**



1 East Elevation  
1/4" = 1'-0"



2 South Elevation  
1/4" = 1'-0"

3 North Elevation  
1/4" = 1'-0"

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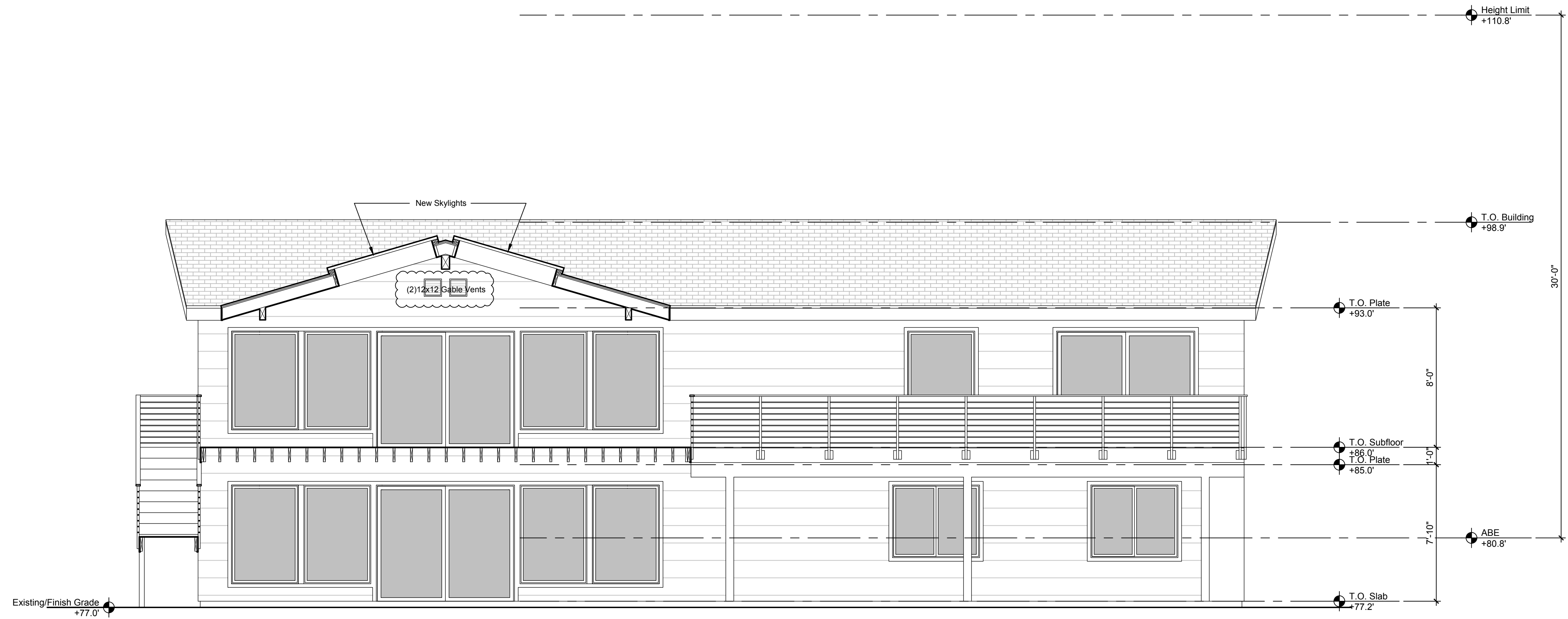
5642 E Mercer Way  
Mercer Island, Washington

8190 REGISTERED ARCHITECT  
HENRY H. LO  
STATE OF WASHINGTON

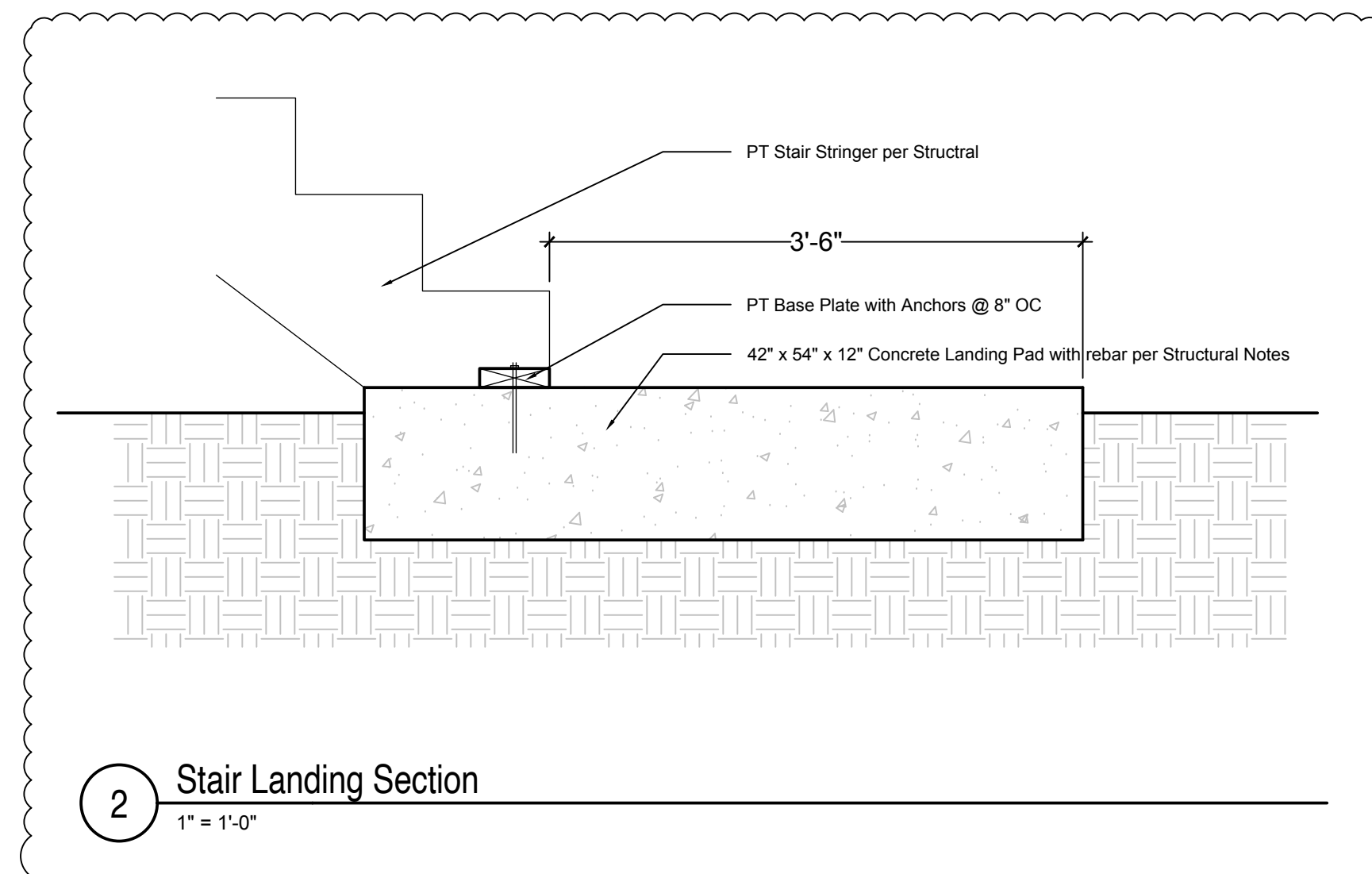
Exterior Elevations

**A-3.0**





1 Building Section  
1/4" = 1'-0"



2 Stair Landing Section  
1" = 1'-0"

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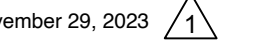
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ARCHITECT

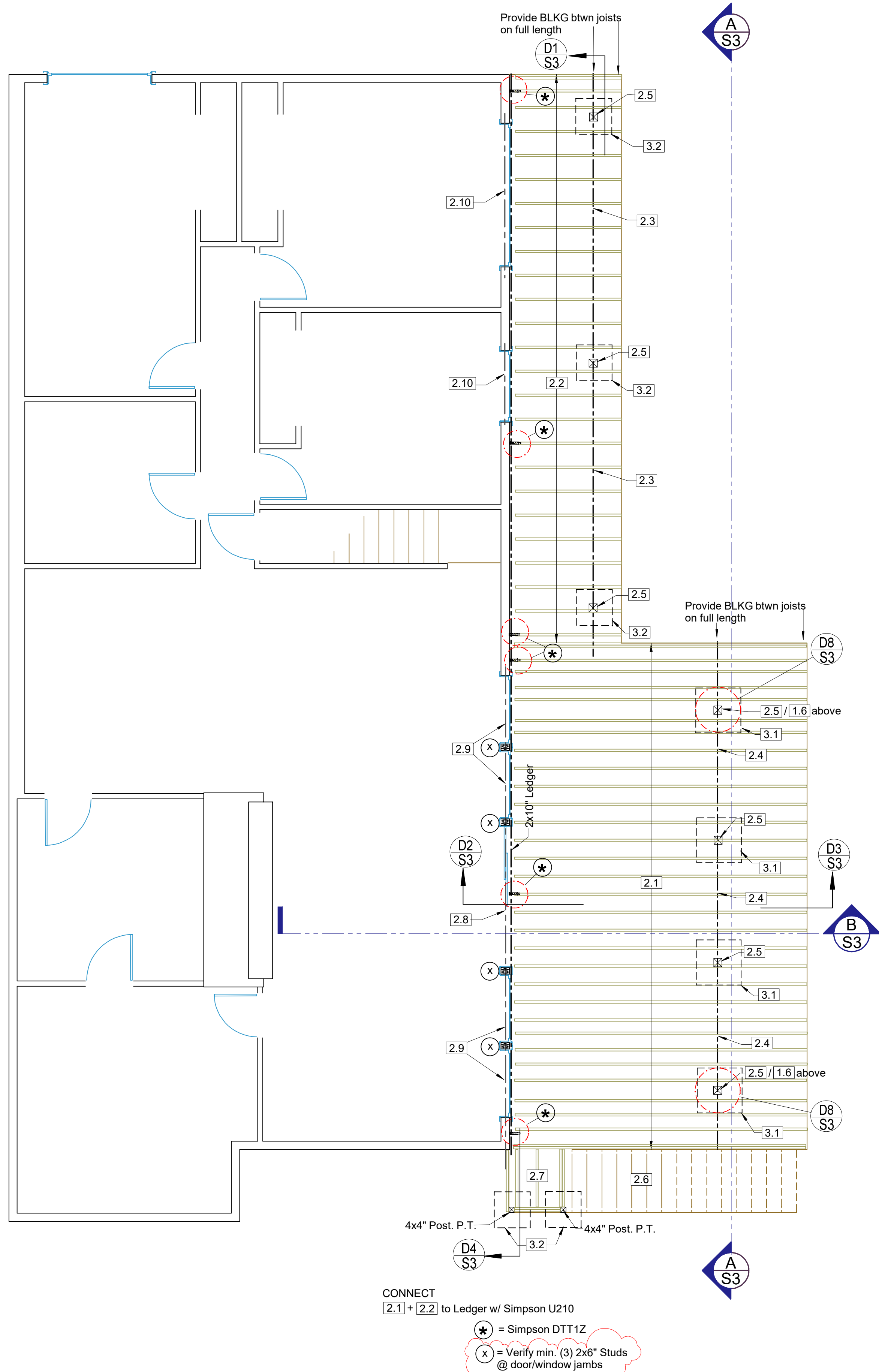
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STATE OF WASHINGTON

Building Section

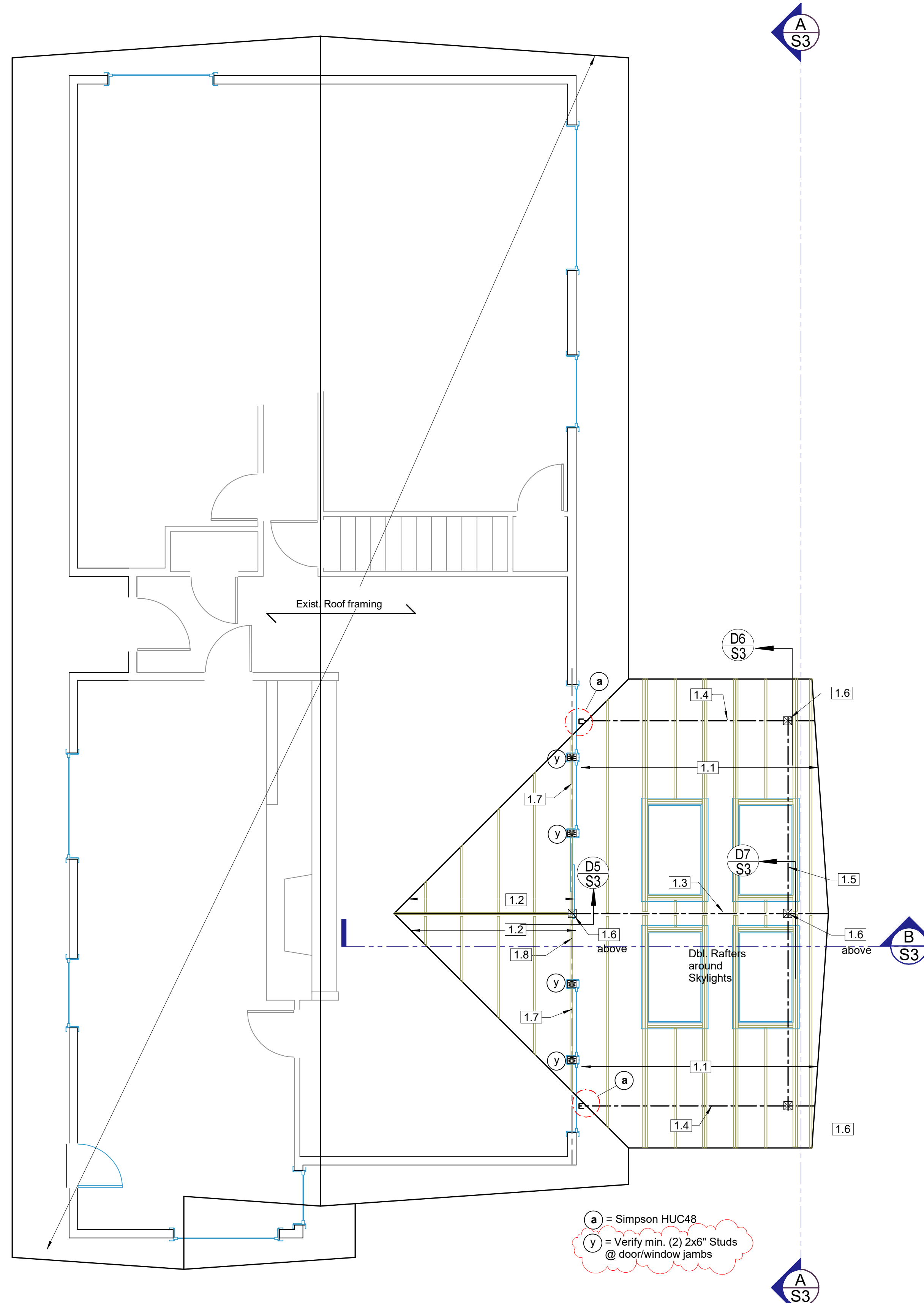
A-4.0







DECK FRAMING AND FOUNDATION PLAN SCALE: 1/4" = 1'-0" (1:48)



DECK COVER FRAMING PLAN SCALE: 1/4" = 1'-0" (1:48)

KEY NO.	ROOF LEVEL
1.1	Rafters, HF No.2, 2x8" @ 24" o.c.
1.2	Overframing, HF No.2, 2x6" @ 24" o.c.
1.3	Ridge Beam, DF No.2, 6x10"
1.4	Beam, DF No. 2, 4x8"
1.5	Glulam WS, 24F-1.8E, 5-1/2x10-1/2"
1.6	Post, HF No.2, 6x6", P.T.
1.7	Exist. Header, DF No.2, verify min. 4x8"
1.8	Exist. Header, DF No.2, verify min. 4x10"

KEY NO.	DECK
2.1	Deck Joists, HF No.2, 2x10" @ 12" o.c.
2.2	Deck Joists, HF Mo.2, 2x10" @ 16" o.c.
2.3	Beam, HF No.2, 6x12", P.T.
2.4	Beam, HF No.2, 6x12", P.T.
2.5	Post, HF No.2, 6x6", P.T.
2.6	Stair Stringers, HF No.2, 2x12" @ 12" o.c., P.T.
2.7	Landing Joists, HF No.2, 2x6" @ 16" o.c., P.T.
2.8	Exist. Header, verify min. LSL, 1.55E, 2325Fb, 3-1/2x9-1/4"
2.9	Exist. Header, DF No.2, verify min. 4x8"
2.10	Exist. Header, DF No.2, verify min. 4x6"

KEY NO.	FOUNDATION
3.1	Spread Footing, fc = 2,500 psi, 30x30x8"
3.2	Spread Footing, fc = 2,500 psi, 24x24x8"

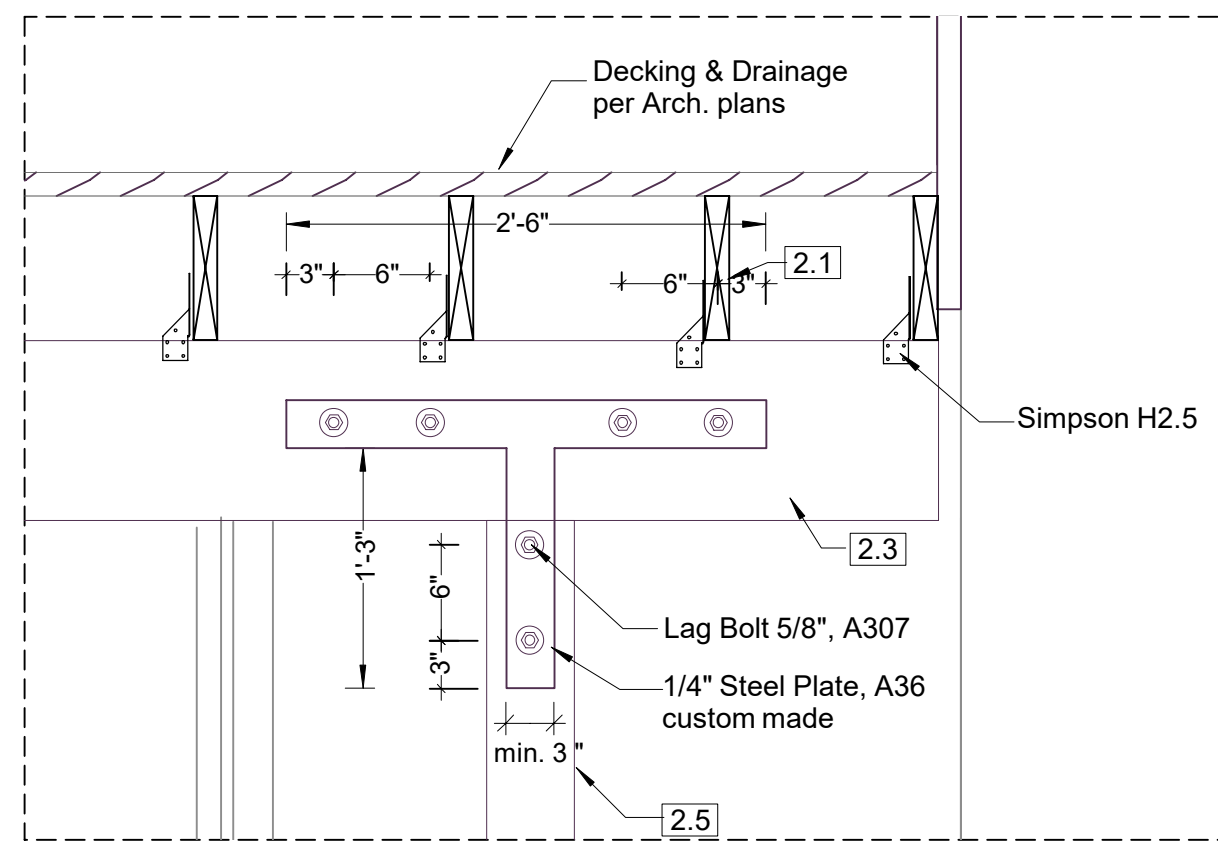
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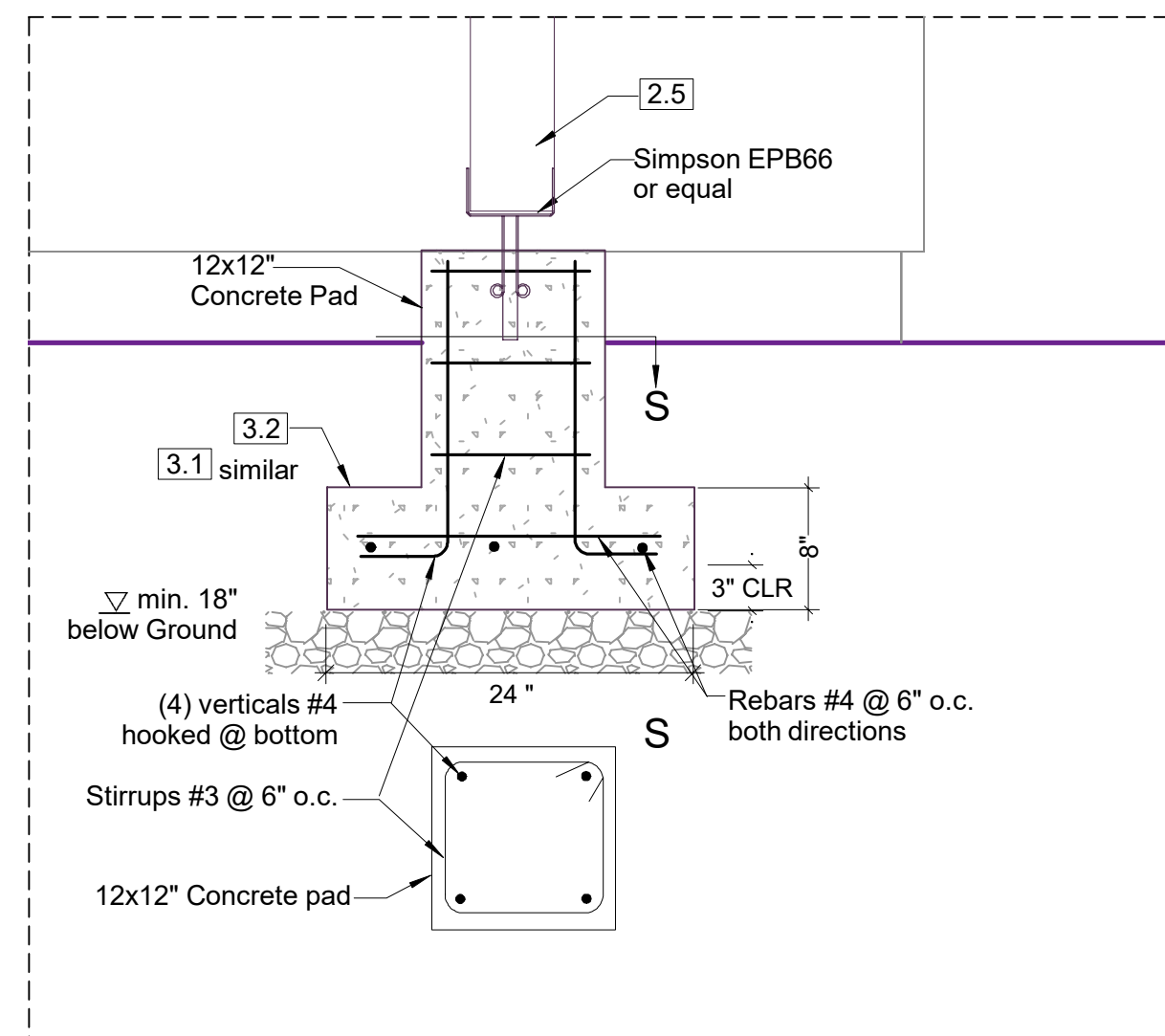
**tec instruct LLC**  
 4111 164th St. SW #51, Lynnwood, WA 98087  
 Telephone (206) 553 9076 - email: www.heimisch@yahoo.com  
 ENGINEERING

CLIENT:	Eric & Jodi Blohm	<b>S2</b>
JOB SITE:	5642 E Mercer Way, Mercer Island, WA	
PROPERTY #		
DESCRIPTION:	New Covered Deck	
DATE:	03/30/2023 SCALE: as noted	
ENGINEER:	Roland Heimisch, P. E.	

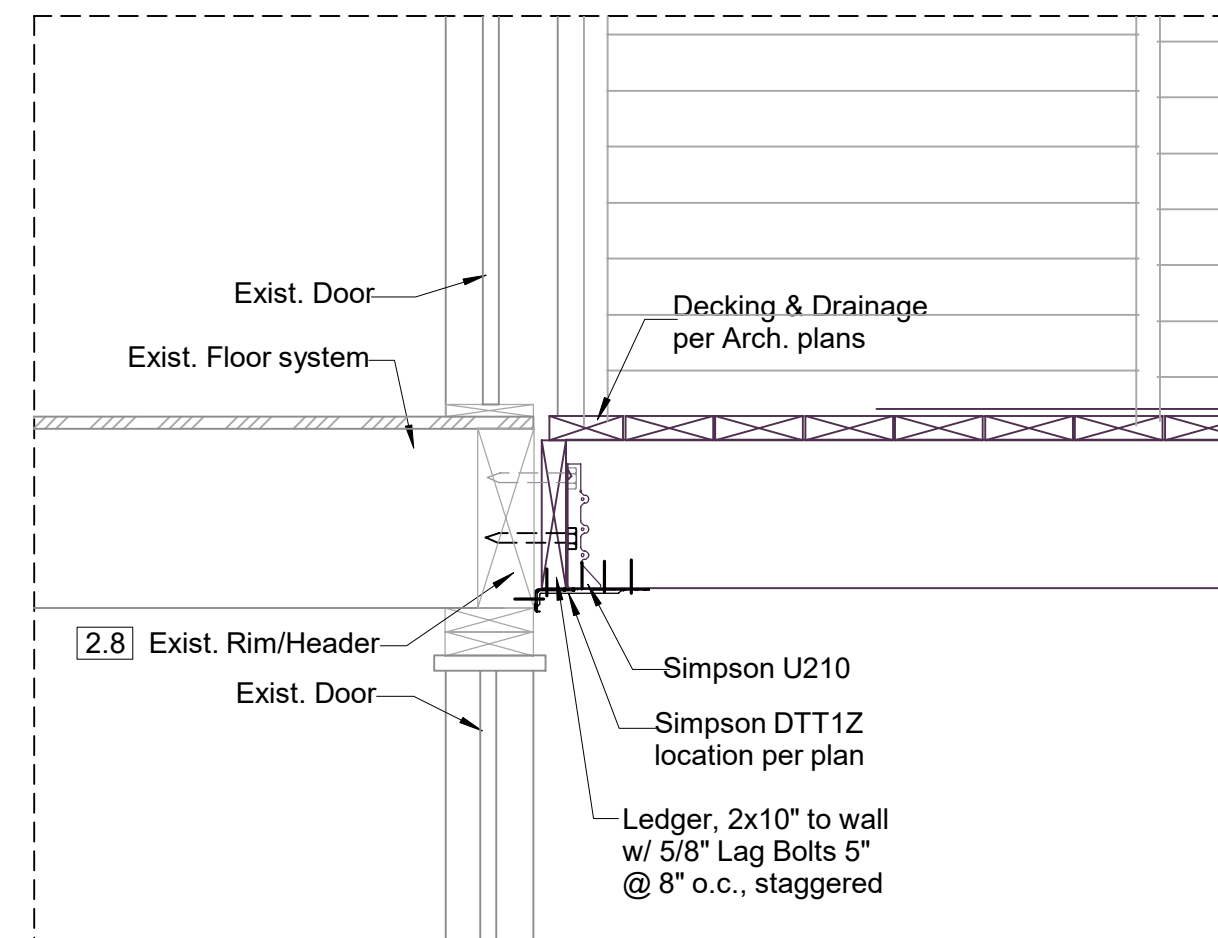




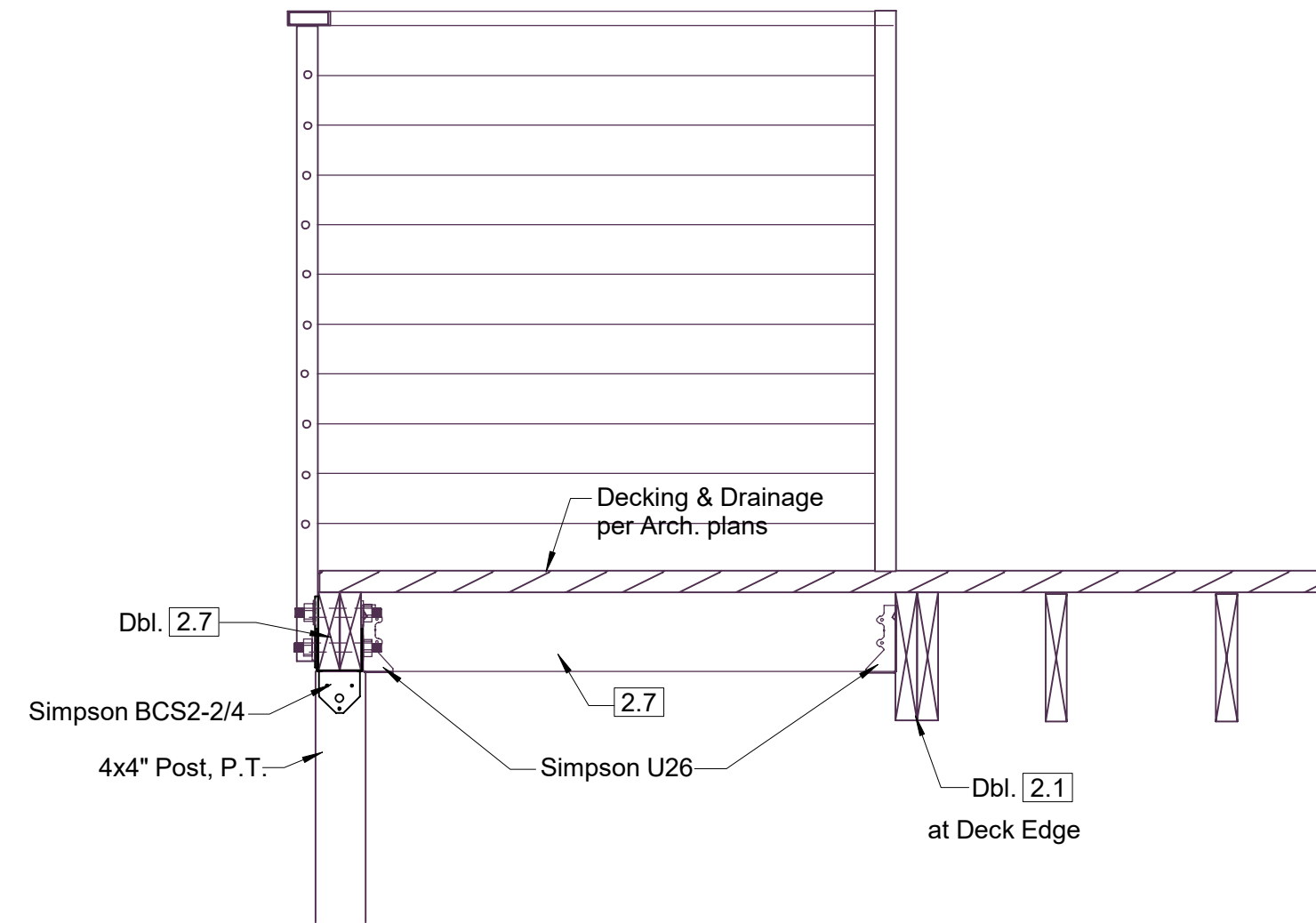
DETAIL 1 SCALE: 1" = 1'-0" (1:12)



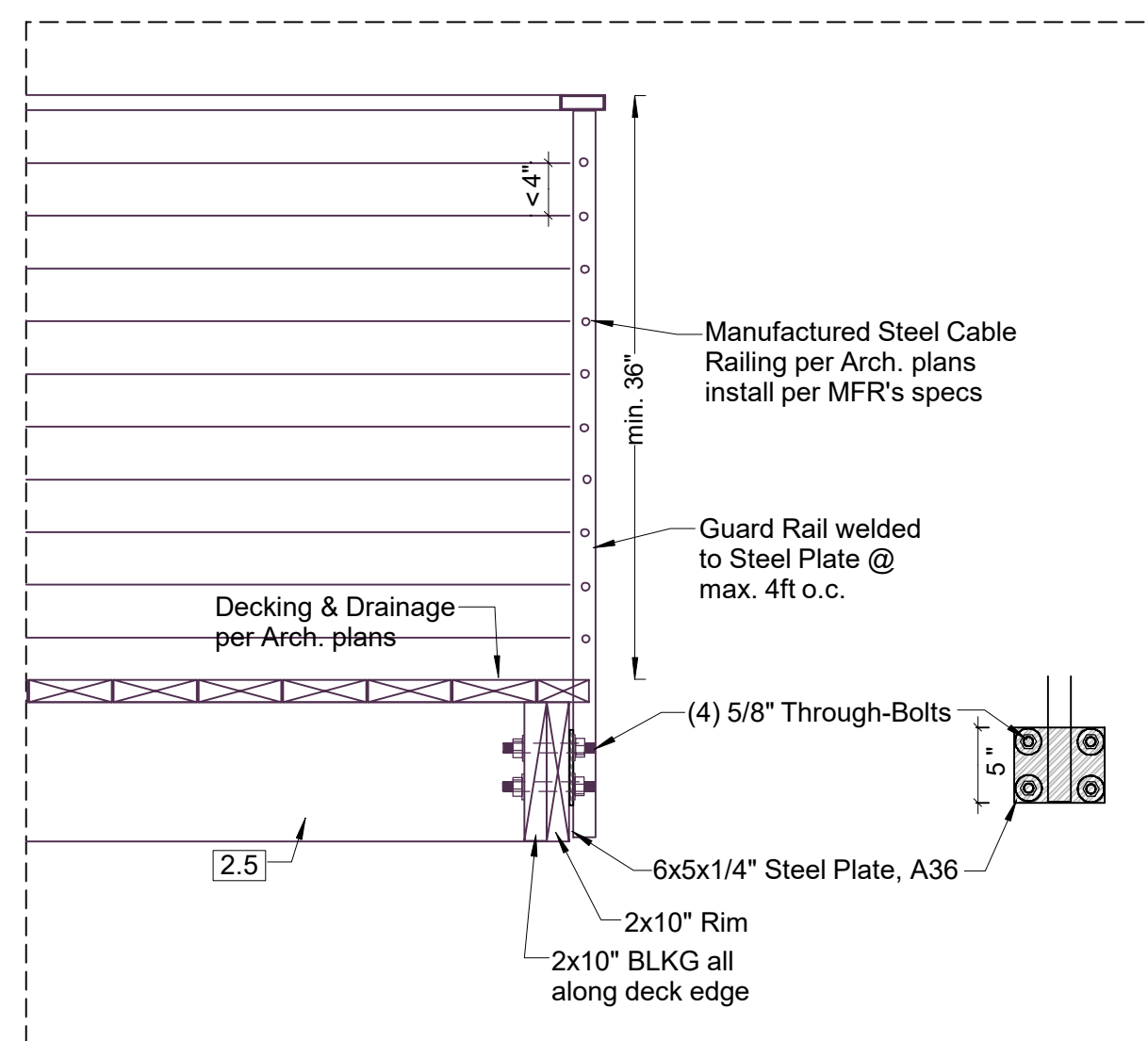
DETAIL 2 SCALE: 1" = 1'-0" (1:12)



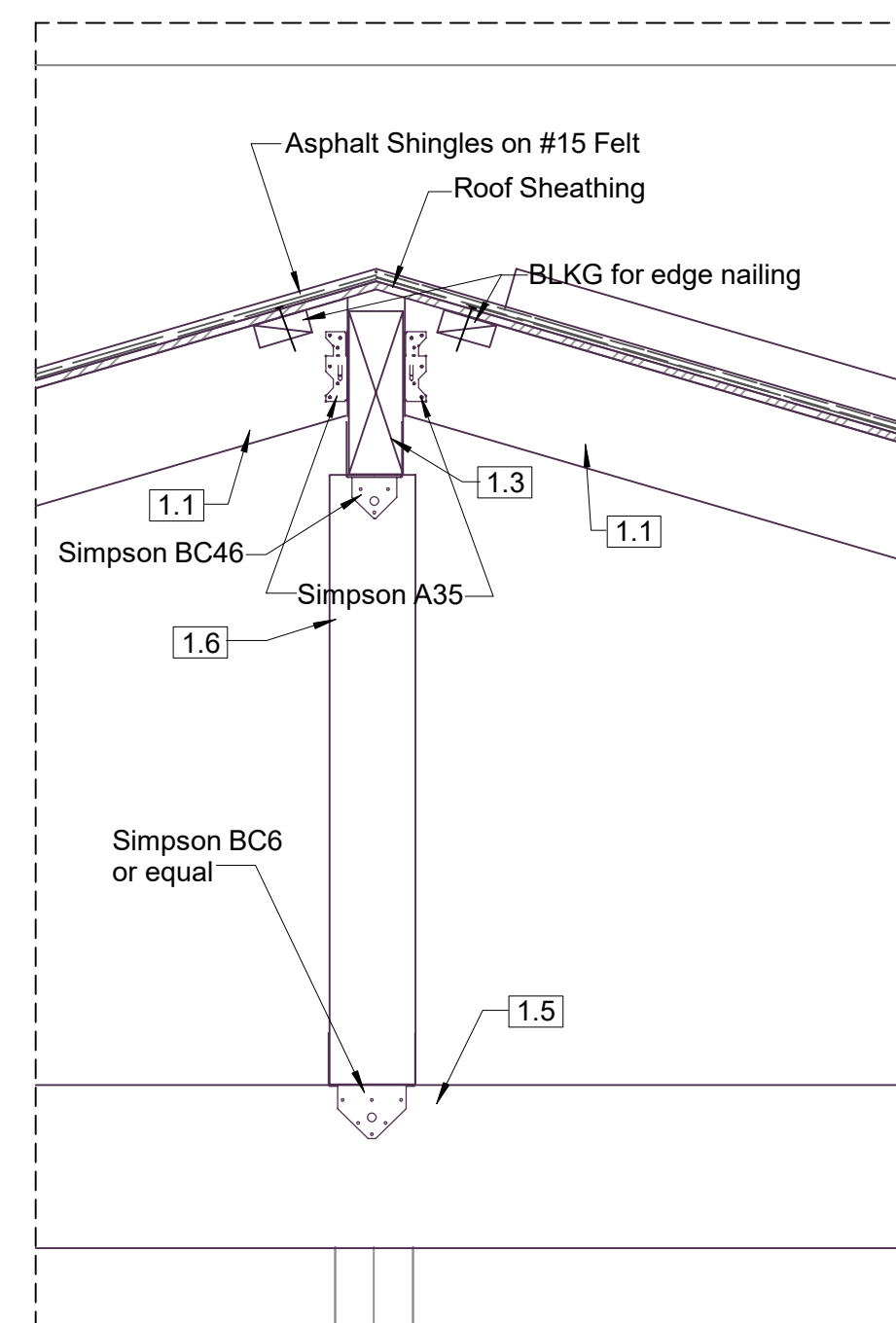
DETAIL 3 SCALE: 1" = 1'-0" (1:12)



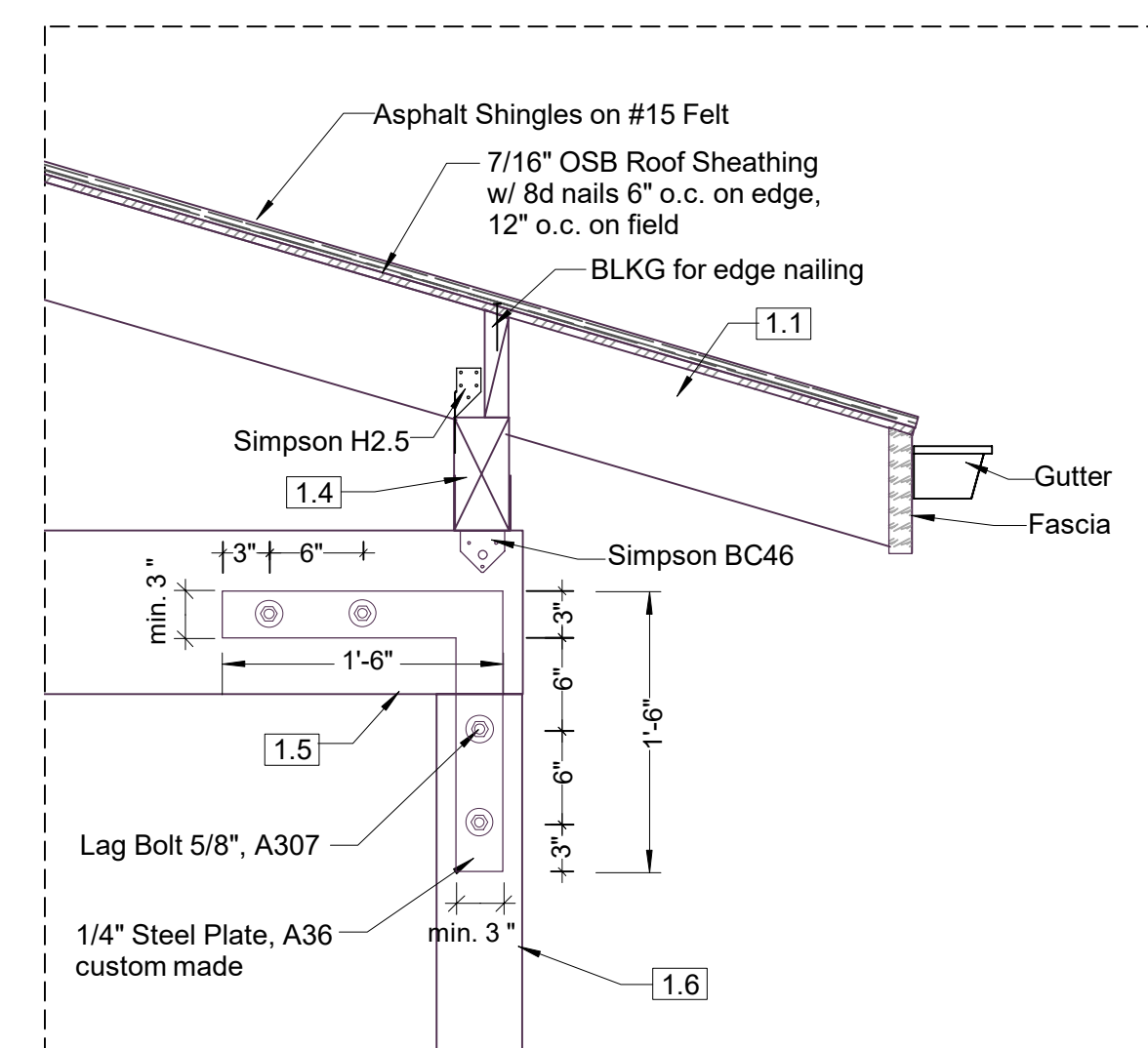
DETAIL 4 SCALE: 1" = 1'-0" (1:12)



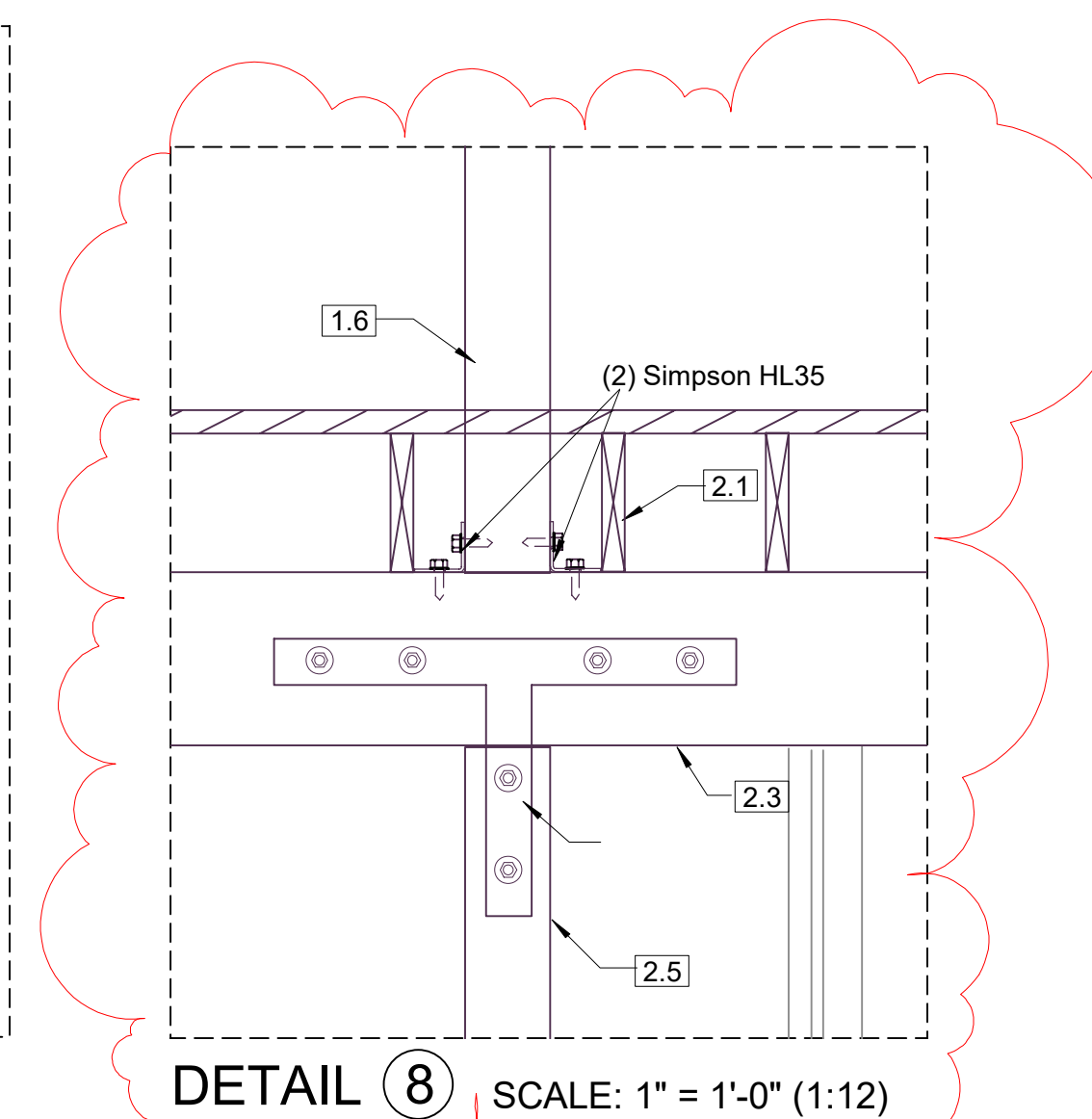
DETAIL 5 SCALE: 1" = 1'-0" (1:12)



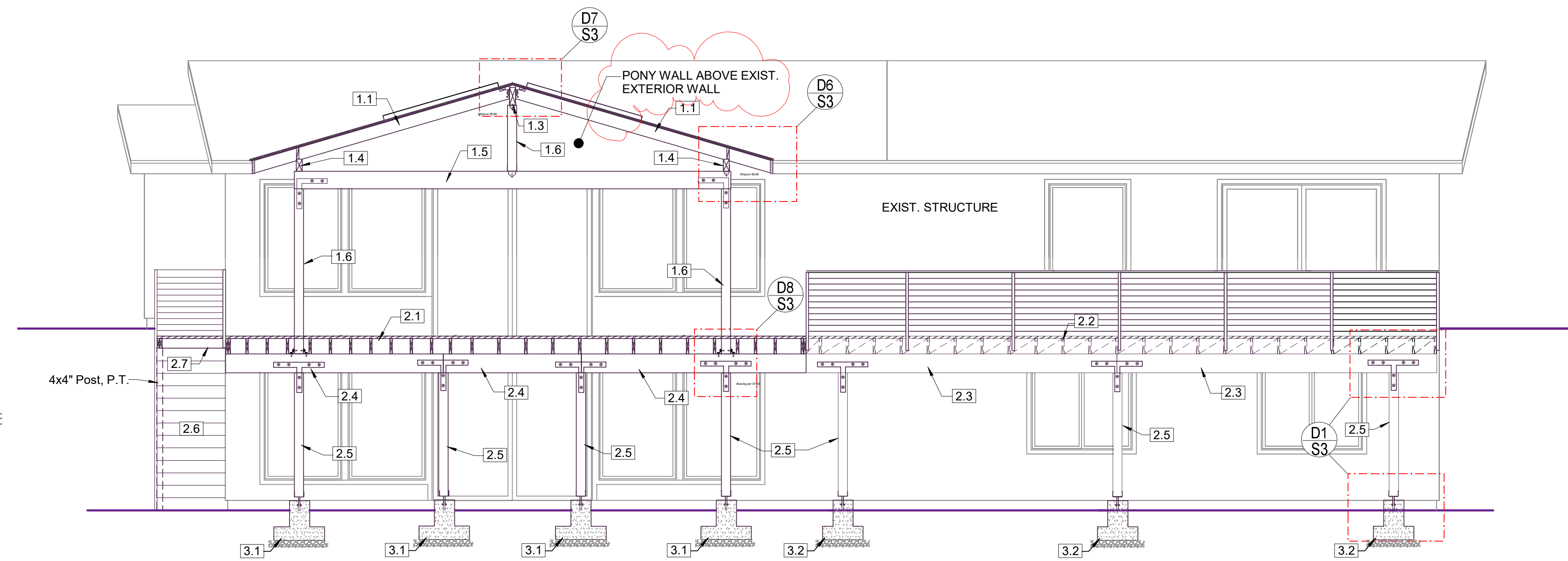
DETAIL 6 SCALE: 1" = 1'-0" (1:12)



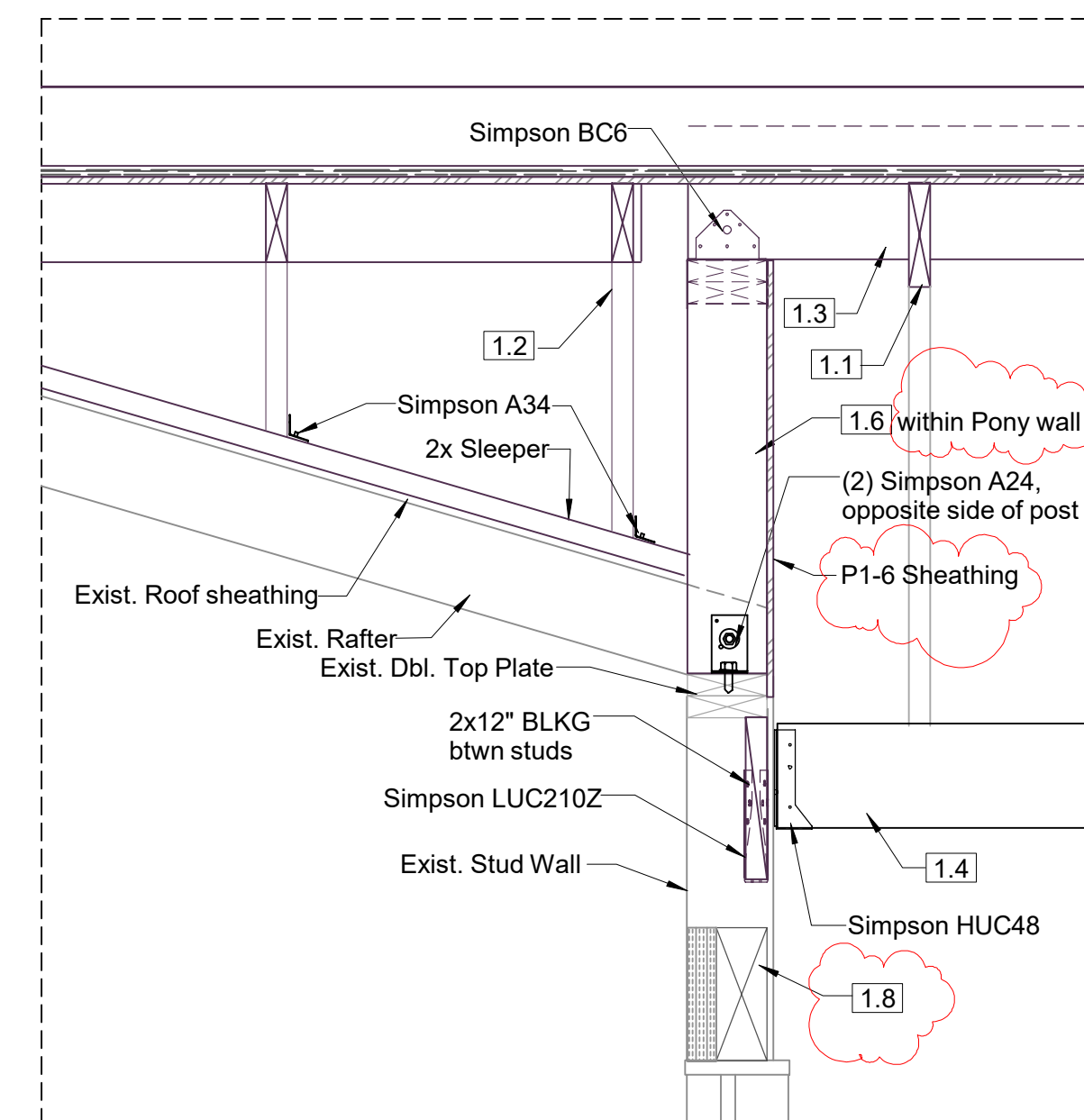
DETAIL 7 SCALE: 1" = 1'-0" (1:12)



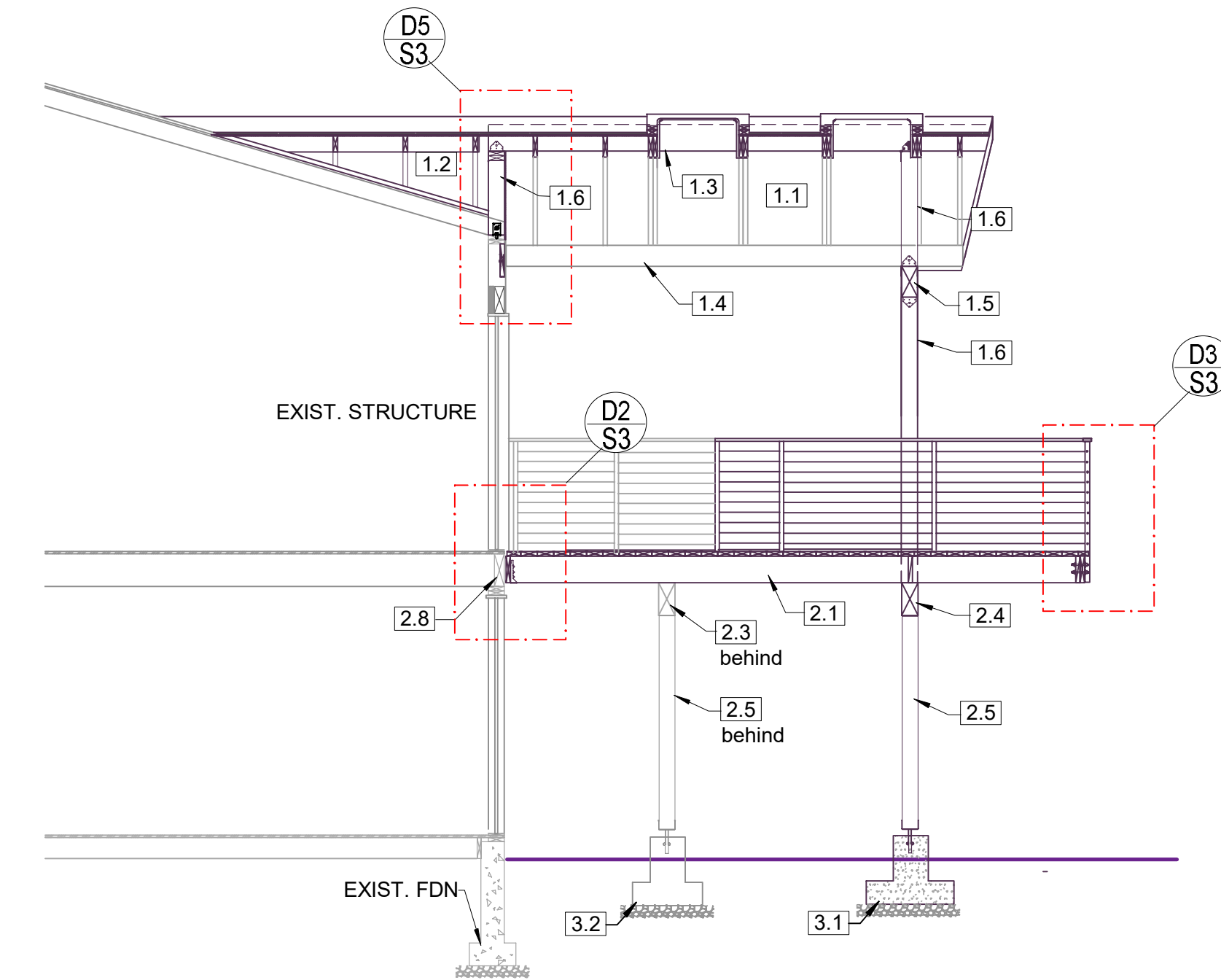
DETAIL 8 SCALE: 1" = 1'-0" (1:12)



BUILDING SECTION A-A SCALE: 1/4" = 1'-0" (1:48)



DETAIL 5 SCALE: 1" = 1'-0" (1:12)



BUILDING SECTION B SCALE: 1/4" = 1'-0" (1:48)

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**ENGINEERING**

CLIENT:	Eric & Jodi Blohm	SHEET
JOB SITE:	5642 E Mercer Way, Mercer Island, WA	<b>S3</b>
PROPERTY #		
DESCRIPTION:	New Covered Deck	
DATE:	03/30/2023 SCALE: as noted	
ENGINEER:	Roland Heimisch, P. E.	



