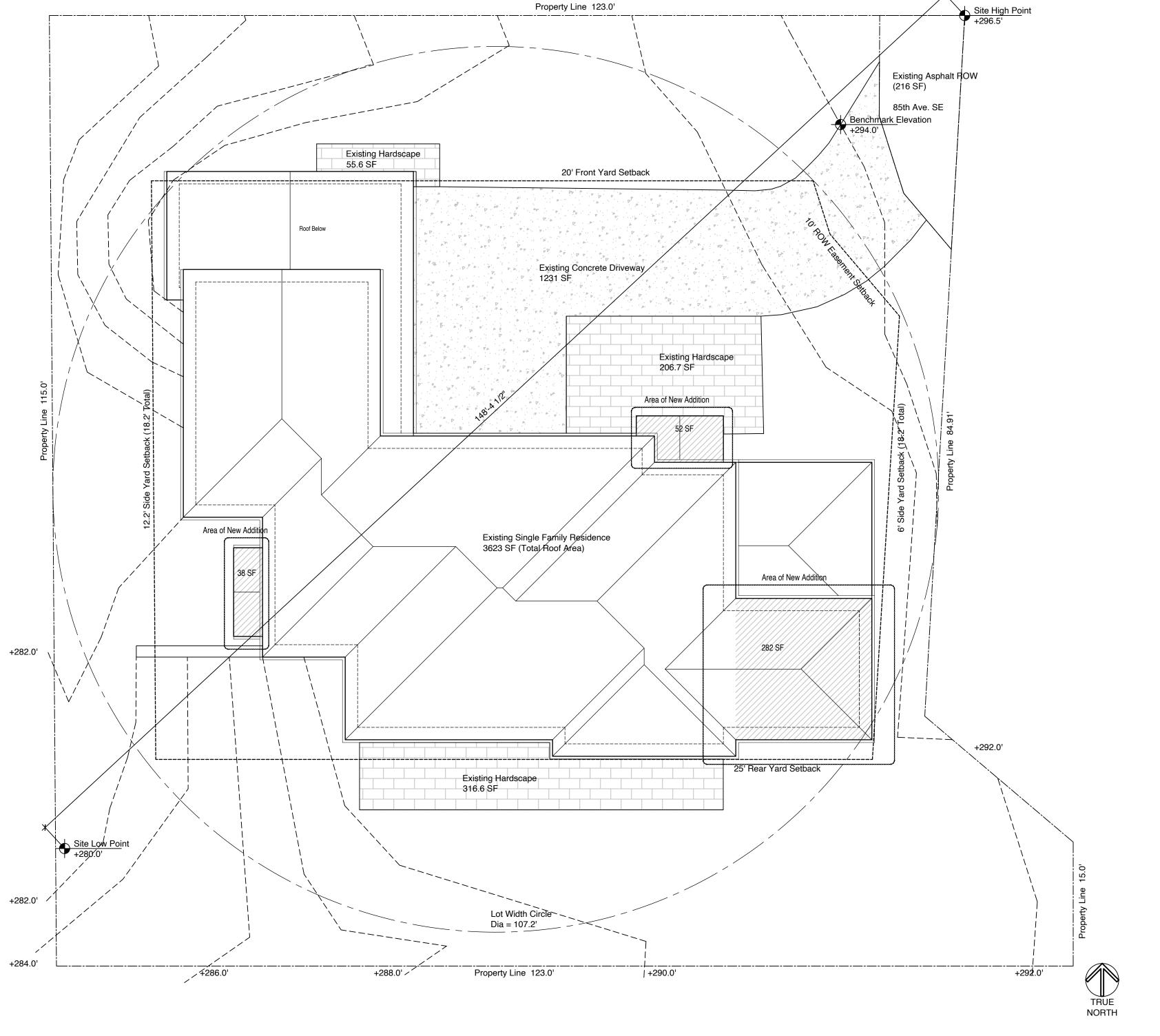
PROJECT DATA	PROPERTY DA	TA	LOT COVERAGE		CONSTRUCTION DATA		ENERGY DATA	
OWNER	PROJECT ADDRESS	6	LOT AREA		AREA SUMMARY		New Conditioned Square footage	added: 230 sq ft
Pang Ngernsupaluck Tom Mulcahy 4311 85th Ave. SE Mercer Island, WA	4311 85th Ave. SE Mercer Island, WA ZONING DESIGNATI	ION	12,733 SF Access Easement Area = 216 SF Net Lot Area = 12,517 SF		Enclosed Square Footage Lower Level (Existing) Main Level (Existing) Upper Level (Existing) Upper Level (New)	651 sq ft 2882 sq ft 2102 sq ft	Additions Less than 500SF = 1.5 Energy Credits Required Heat pump system to be used = 5.2 Water Heating System shall I	
ARCHITECT	R-9.6		LOT SLOPE High Point = 296.5'		Total (New)	230 sq ft 230 sq ft	or propane water heater with a m	
HhLodesign 215 W. Crockett St.	HEIGHT LIMIT		Low Point = 280.0' Distance = 148.4'		Total (Combined)	5635 sq ft	All new and altered building elem values:	nents to have the following
Seattle, WA 98119 Contact: Henry H Lo 206-229-8082	30'-0" to Highest poin	t of Roof	Slope = 16.5' / 148.4' = 11.1%		ADU	651 sq ft	Glazing U-Factor (Vertical): Glazing U-Factor (Overhead):	0.30 0.50
CONTRACTOR	Front Yard Setback Rear Yard Setback	20'-0" 25'-0"	LOT COVERAGE ALLOWED	LOT COVERAGE PROPOSED			Door U-Factor:	0.30
TBD Phone	Side Yard Setback	17% of Lot Width (107.2') = 18.2' total	<15% Slope Buildings and Driving Surfaces = 40%	Structures = 3675 SF Driving Surfaces = 1231 SF			Entire Slab: Below grade walls (interior): Below grade walls (exterior):	R-10 + R10 Perimete R-21 R-10
Fax Email CONTACT:	LOT AREA	Min = 33% of 18.2' = 6'	5006.8 SF Allowed	Total Proposed (Buildings and Driving Surfaces) = 4906 SF			Above grade walls: Floor Insulation:	R-21+R4 ci R-38
STRUCTURAL ENGINEER	12,733 sq ft		Required Landscaping Area = 60% 7510.2 SF Required	IMPERIOUS SURFACE PROPOSED			Ceilings: Vaulted Ceilings:	R-49 or R-38 adv R-38
Burke Engineers 925-639-5512	ASSESSOR'S TAX N 182405-9138	IUMBER	Hardscape = 9% 1126.5 SF Allowed	Proposed Structure = 3675 SF Existing Driveway = 1231 SF Total = 4906 SF			vaulted Cellings.	11 00
kolby.burke@burke-engineers.com CONTACT Kolby Burke		N AND LLR # 99-1353 REC D LLR BEING POR SW 1/4		Existing Hardscape = 579 SF				
		/EEN 84TH AVE SE &		Total Proposed Impervious Surface = 5485 SF				

+294.0'



+288.0'

+284.0'

+286.0'

Site Plan

Scale: 1/8" = 1'-0"

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> 215 West Crockett Street Seattle, Washington 98119 206.229.8082

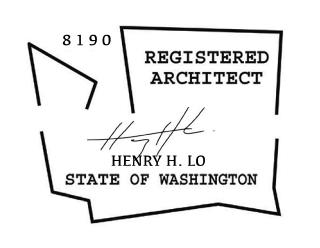
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REVISIONS

DATE June 29, 2022

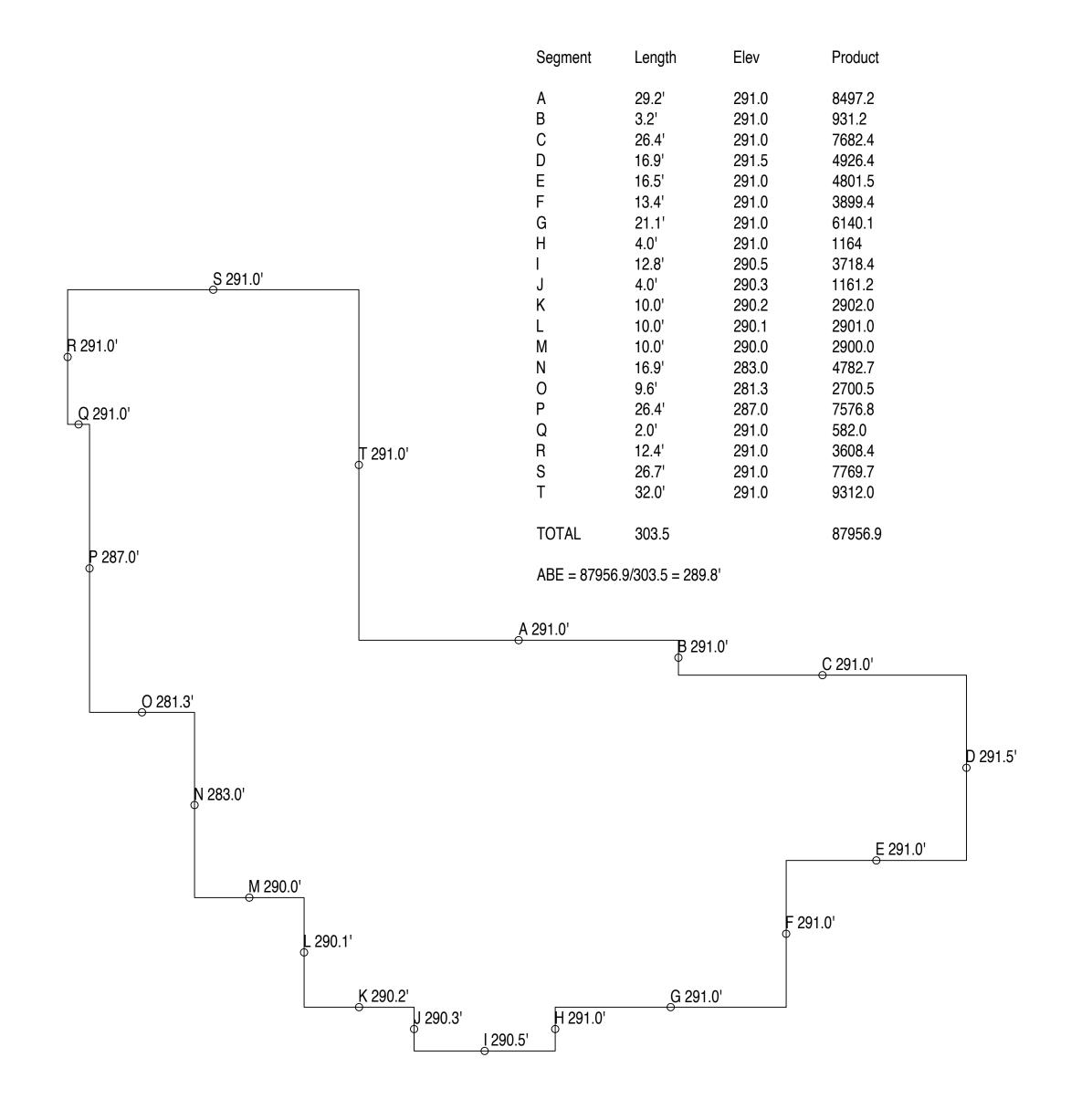
NM MERCER ISLAND RESIDENCE

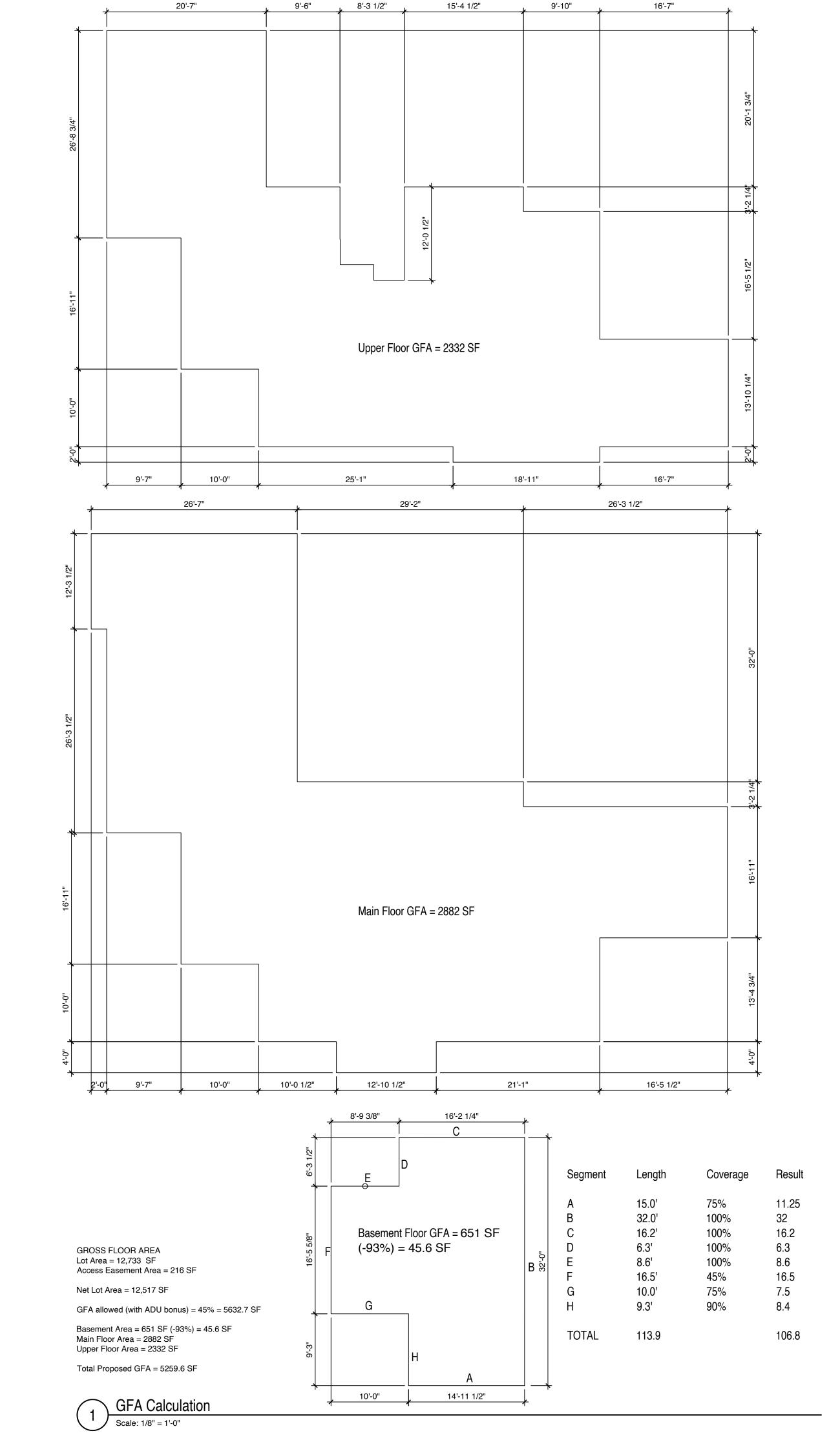
> 4311 85th Ave SE Mercer Island, Washington



Site Plan

A-1.0





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> > DATE
> > January 12, 2022

NM MERCER ISLAND RESIDENCE

> 4311 85th Ave SE Mercer Island, Washington



Land Use Calculations

A-1.1

ABE Calculation

Scale: 1/8" = 1'-0"

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

compact to 95% modified AASHO density at optimum moisture content.

EW-3 BEARING DEPTH Extend excavation down to undisturbed soil of the specified strength with a minimu depth of 18" below finish grade

Compacted fill to be well graded and granular with no more than 5% passing a 200 sieve. Place in 8: loose lifts and

Backfill behind all retauning 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

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 my 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

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

new dwellings.

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

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

be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

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 permamnent and without disconnecting switch other than those required for overcurrent protection

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 Vertically at ceiling and floor levels

Horizontally at intervals not exceeding 10 feet -At all interconnections between consealed vertical and horizontal spaces such as soffits, dropped ceilings, and

-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

- 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 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

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

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

The maximum riser height is 7-3/4"

The maximum discrepancy between tallest & shortest risers shall not exceed 3/8"

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"

RISER HEIGHT

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

Not less than 34" or more than 38" above the sloped plan adjoinging 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.

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 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. lo0ad 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-absorbant 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 0.20 Door U-Factor:

Entire Slab: R-10 Below grade walls (interior): 10/15/21 int + TB Below grade walls (exterior): 10/15/21 int + TB R-21 Above grade walls: Floor Insulation: R-30 R-49 Ceilings: or R-38 adv

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

Vaulted Ceilings: See Table 402.1.1 for footnotes

EC-3 (2018 R406) ADDITIONAL ENERGY EFFICIENCY REQUIREMENTS

R-38

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).

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 uses as a sealing material. EC-7 GROUND COVER

A ground cover of 6 mil black polyethelyene, 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. Gound 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

Recessed light cans installed in the building envelope shall be Type IC rated and certified under ASTM 283 to have

EC-11 (2018 R403.5) MECHANICAL VENTILATION

EC-9 (2018 R402.4.4) RECESSED LIGHTING

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 compy with Section 1411.

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

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.

Certificate.

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

Electric water heaters in unconditioned space or on concrete floors shall be placed on an incompressible insulated

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

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

VC-2 (IRC Section M1507) MECHANICAL VENTILATION

spaces shall be insulated to a minimum of R-8.

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

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

- 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"

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

MECHANICAL WORK

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

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.

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Seattle, Washington 98119 206.229.8082

APPROVED BY

DATE January 12, 2022

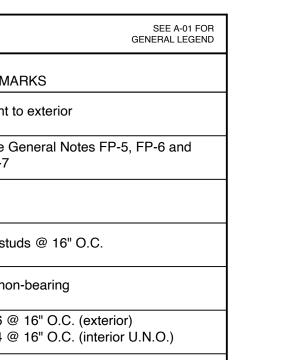
REVISIONS

NM MERCER ISLAND RESIDENCE

4311 85th Ave SE Mercer Island, Washington

ARCHITECT STATE OF WASHINGTON

FLOOR PLA	AN LEGEND	SEE A-01 FOI GENERAL LEGENI
SYMBOL	DESCRIPTION	REMARKS
\bigcirc _(cfm)	EXHAUST FAN	Vent to exterior
● SA	SMOKE DETECTOR	See General Notes FP-5, FP-6 and FP-7
• см	CO2 DETECTOR	
	EXISTING WALLS (to remain)	2x studs @ 16" O.C.
CTTTTTTTTT	EXISTING WALLS (to be demolished)	all non-bearing
	NEW WALL	2x6 @ 16" O.C. (exterior) 2x4 @ 16" O.C. (interior U.N.O.)
=====	NEW SOUND WALL	



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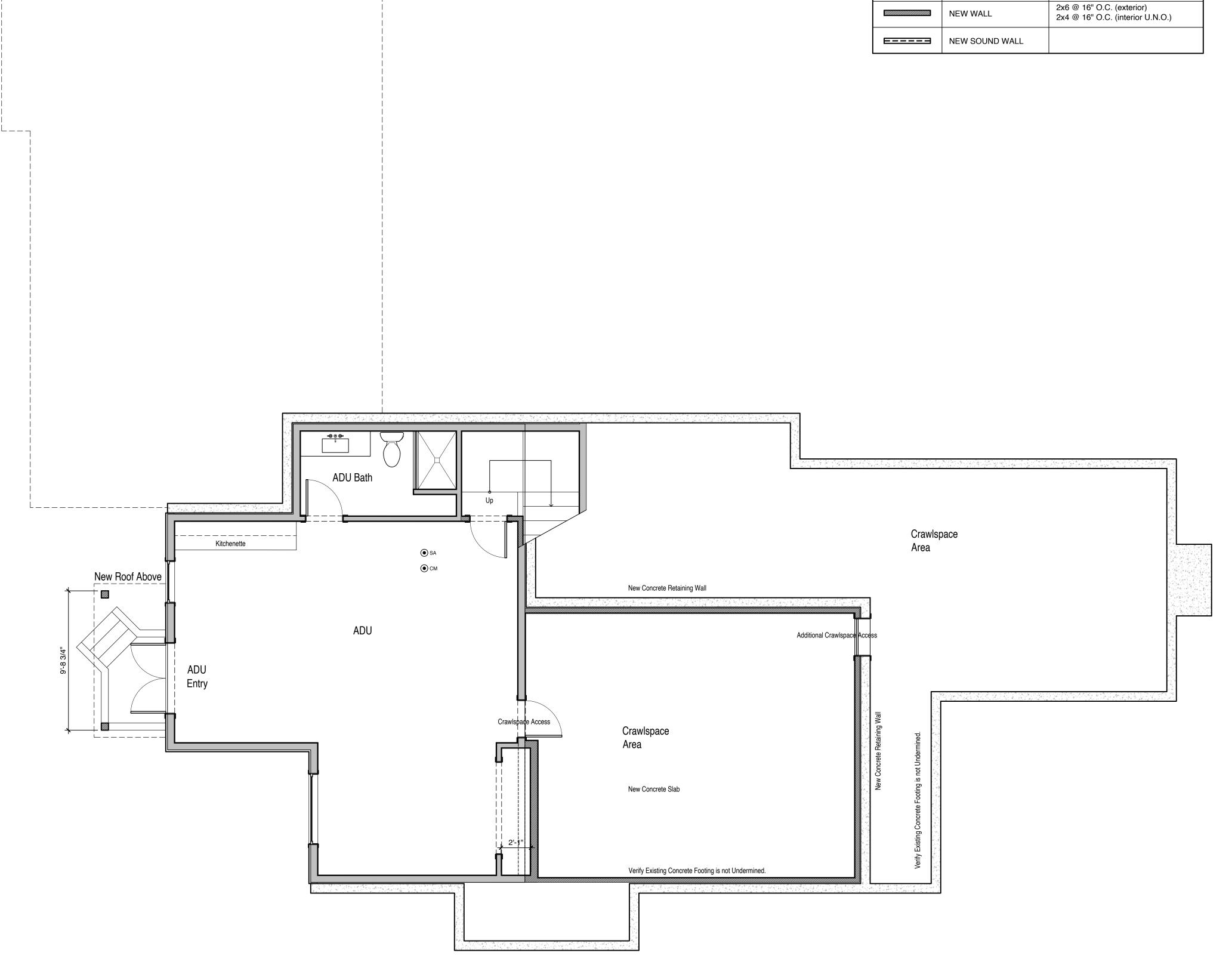
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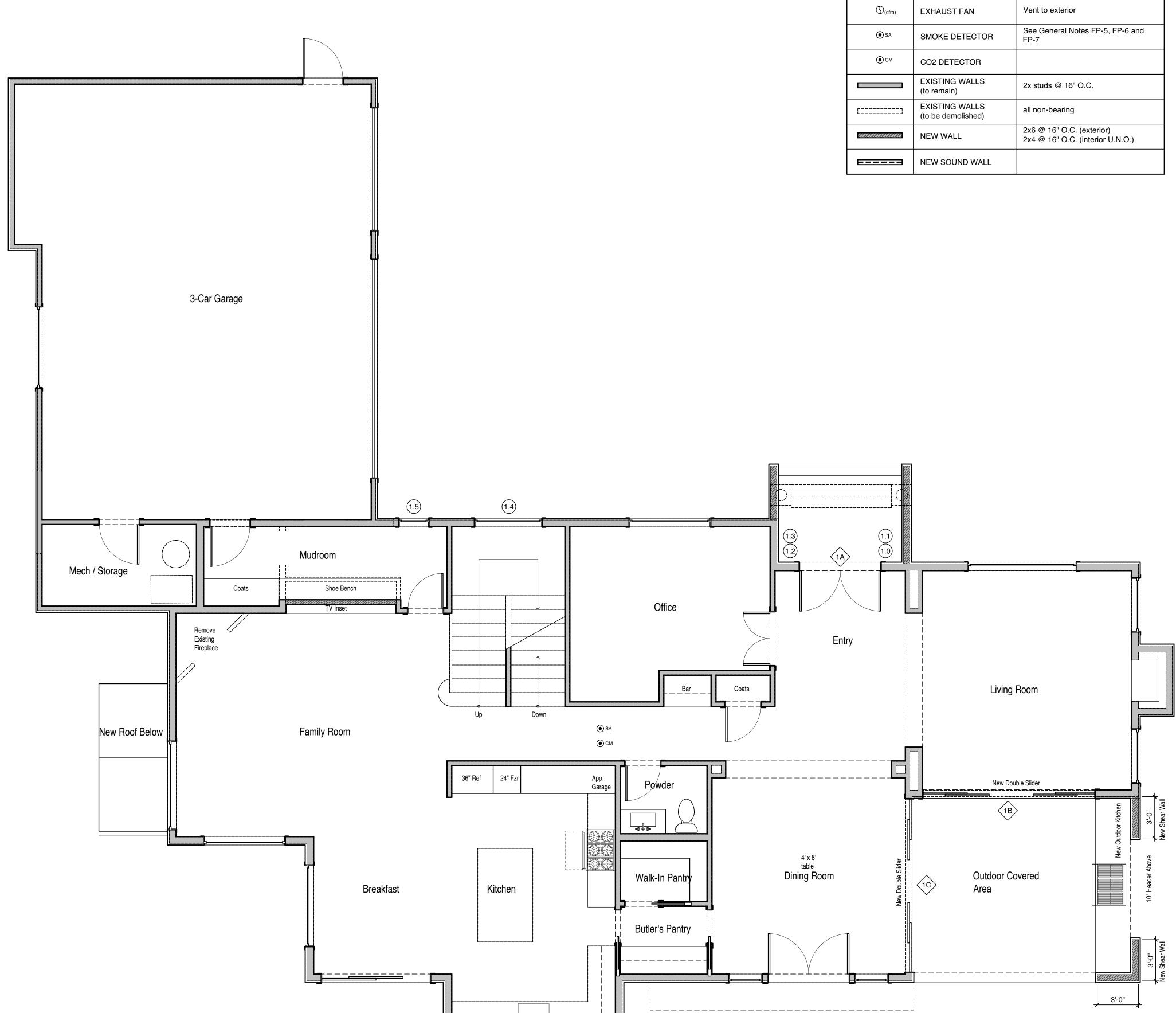


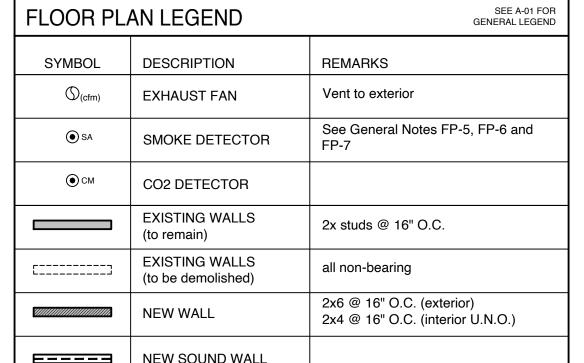
Basement Floor Plan

TRUE NORTH

A-2.0







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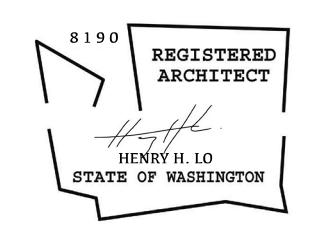
DATE June 26, 2022

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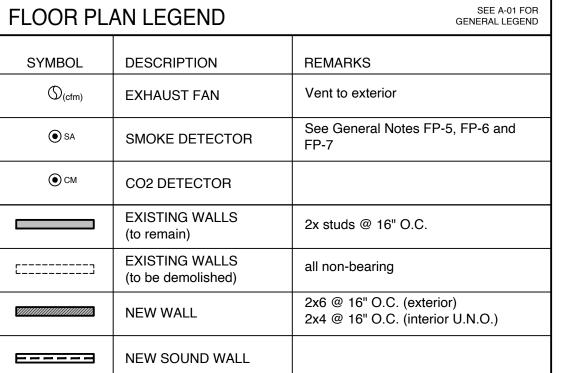
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4311 85th Ave SE Mercer Island, Washington



Main Floor Plan

FLOOR PLA	AN LEGEND	SEE A-01 FOF GENERAL LEGEND		
SYMBOL	DESCRIPTION	REMARKS		
$\bigcirc_{(cfm)}$	EXHAUST FAN	Vent to exterior		
● SA	SMOKE DETECTOR	See General Notes FP-5, FP-6 and FP-7		
• см	CO2 DETECTOR			
	EXISTING WALLS (to remain)	2x studs @ 16" O.C.		
E========	EXISTING WALLS (to be demolished)	all non-bearing		
	NEW WALL	2x6 @ 16" O.C. (exterior) 2x4 @ 16" O.C. (interior U.N.O.)		
E	NEW SOUND WALL			



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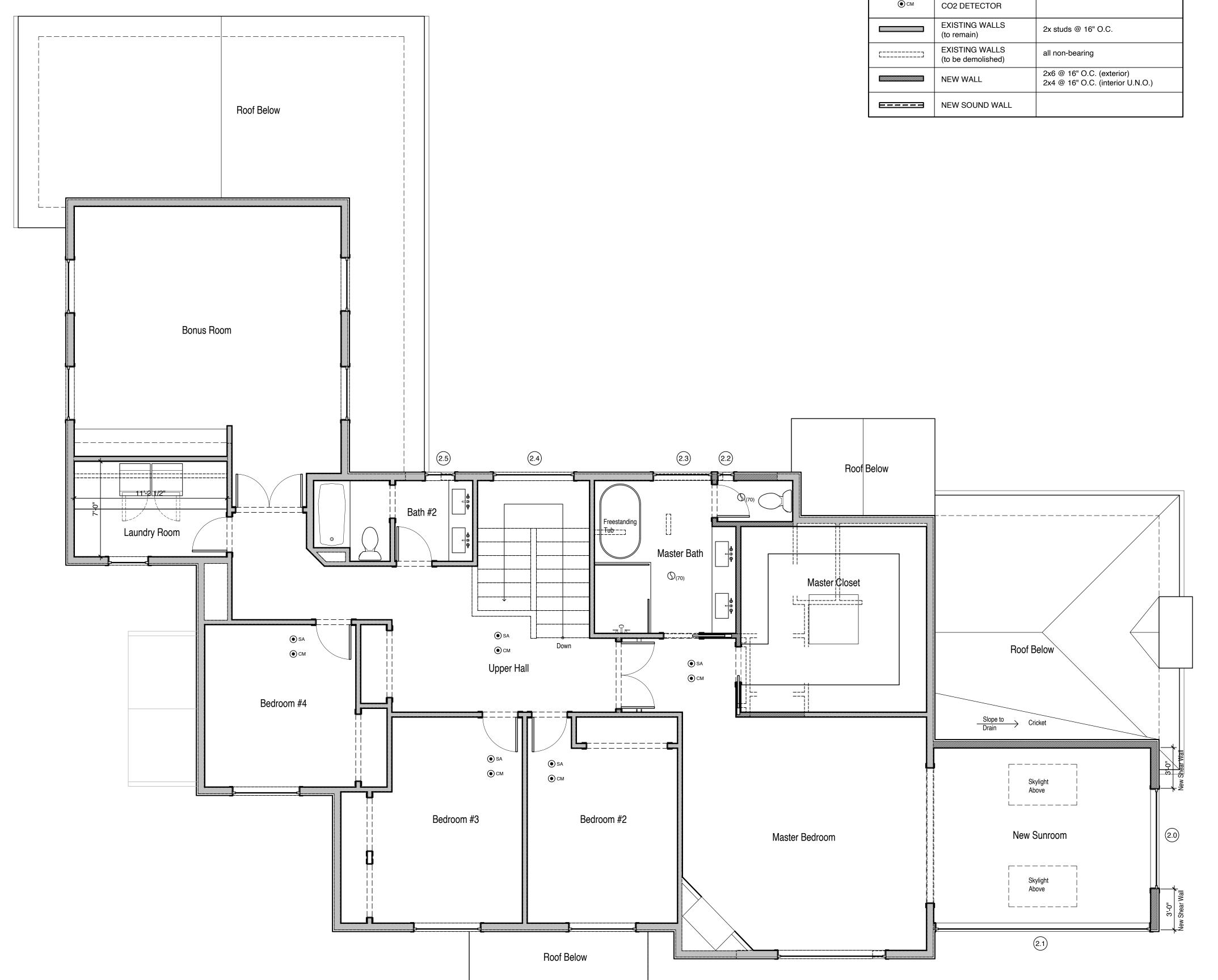
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Upper Floor Plan

TRUE NORTH

A-2.2





Area of New Addition (Shaded) Standing Metal Roof and Match Existing Sløpe ′______ V______ Existing Roofing to Remain -----; Area of New Addition (Shaded) Area of New Addition (Shaded) Match Existing Roofing / and Slope Match Existing Roofing and Slope

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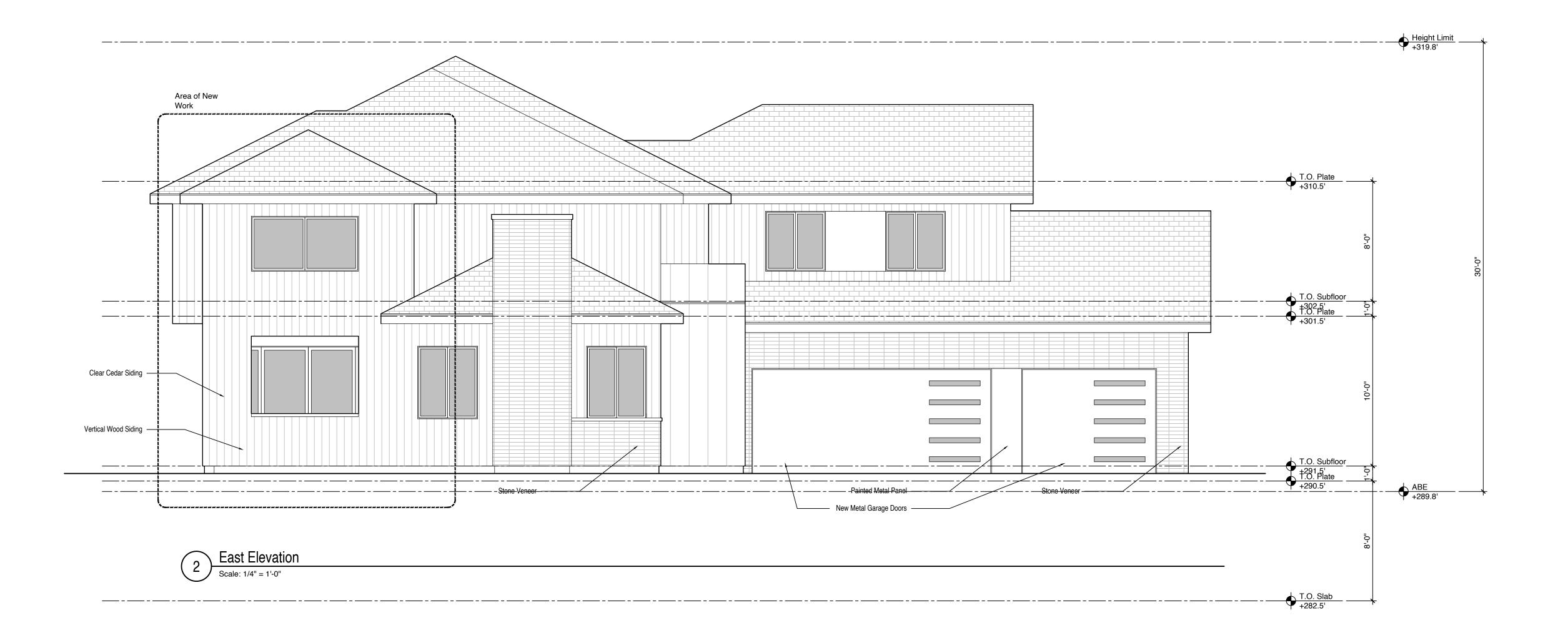
Roof Plan

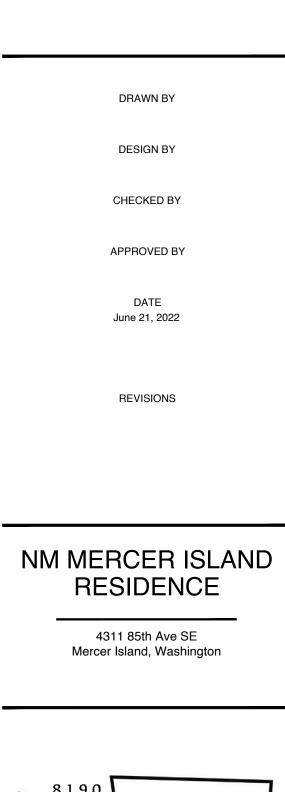
TRUE NORTH

A-2.3

Roof Plan - Option 1.2

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

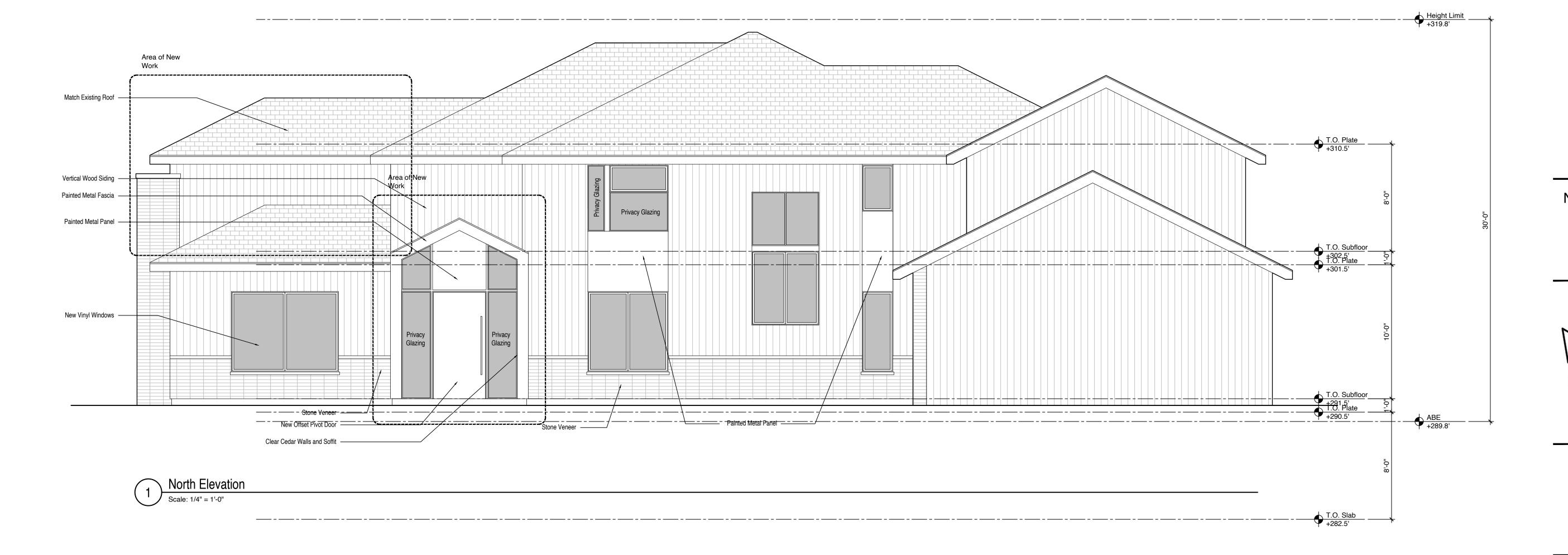


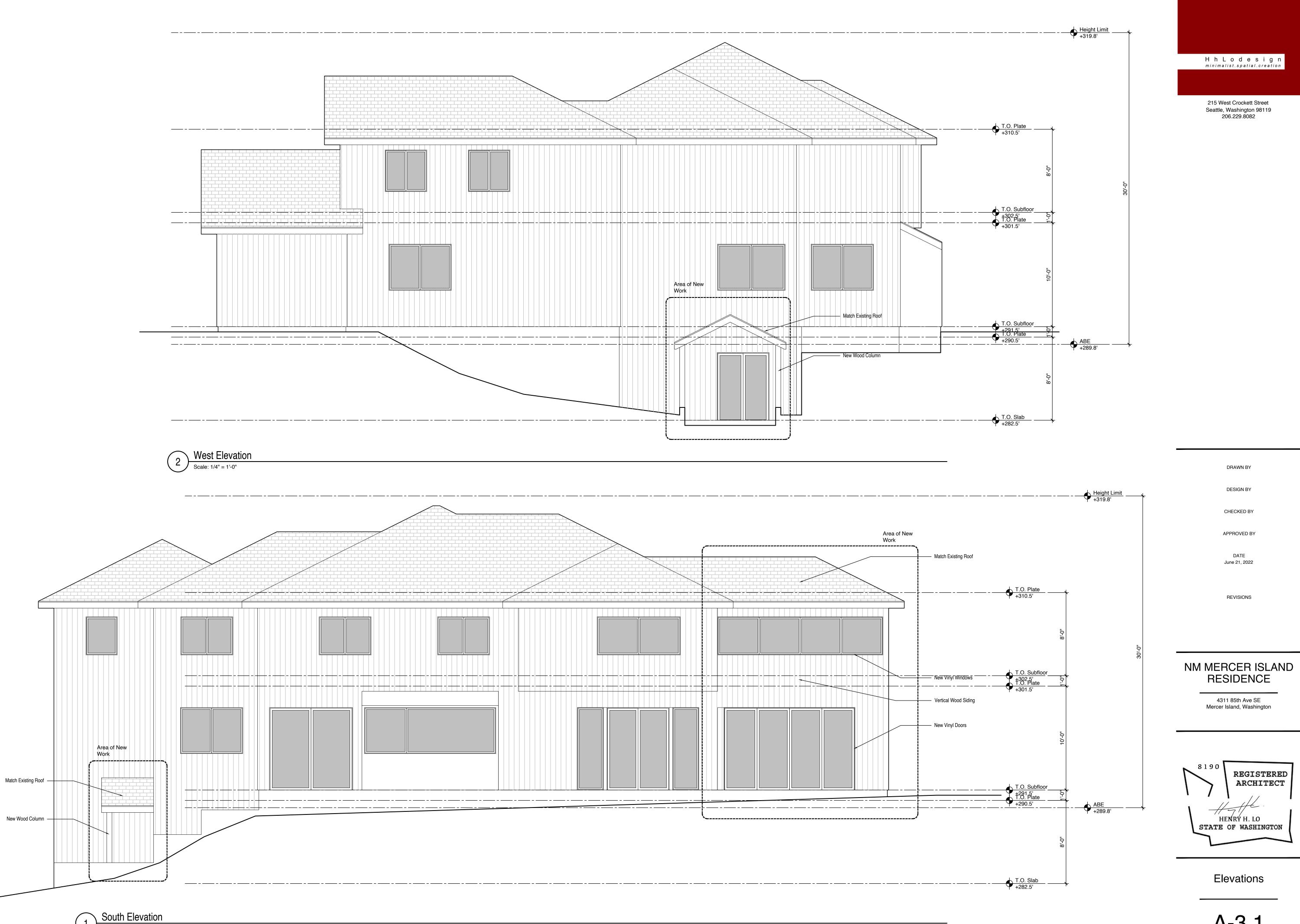


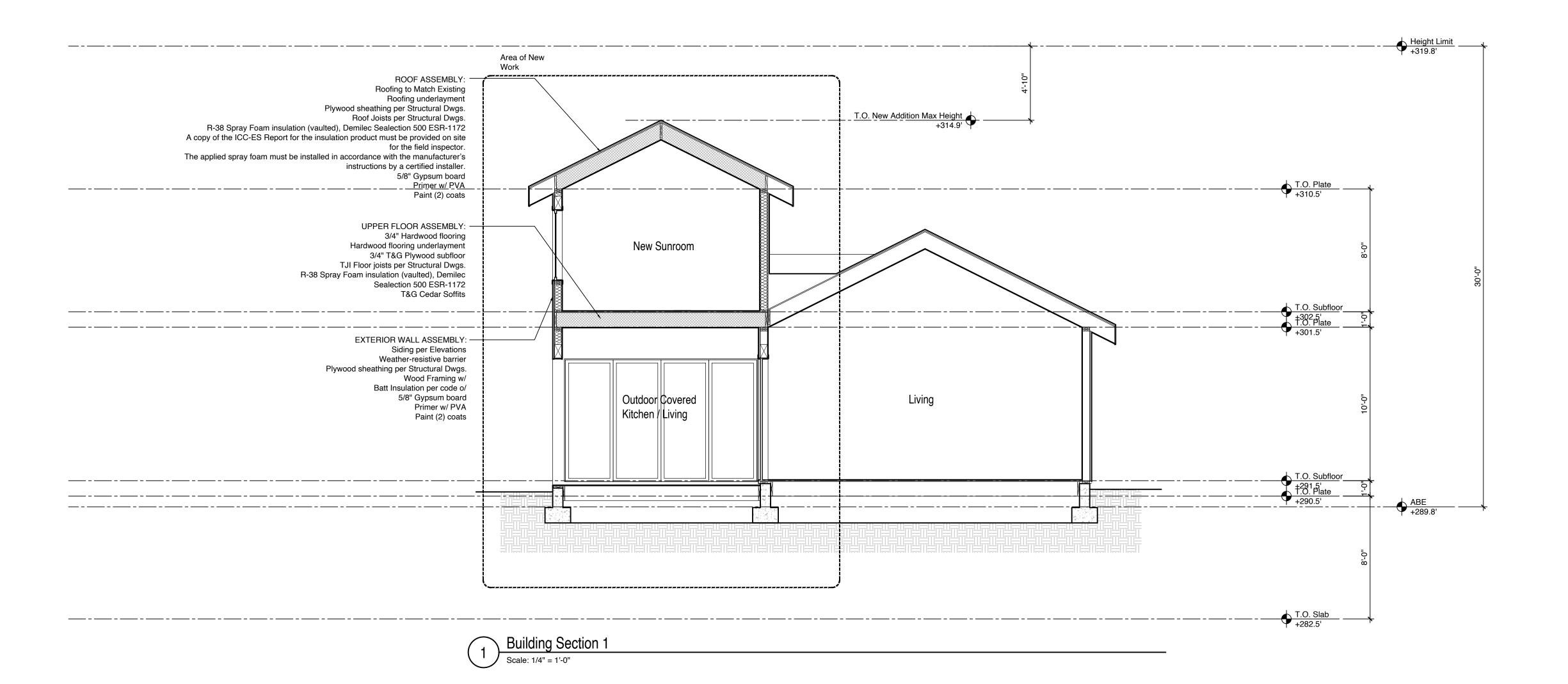
Elevations

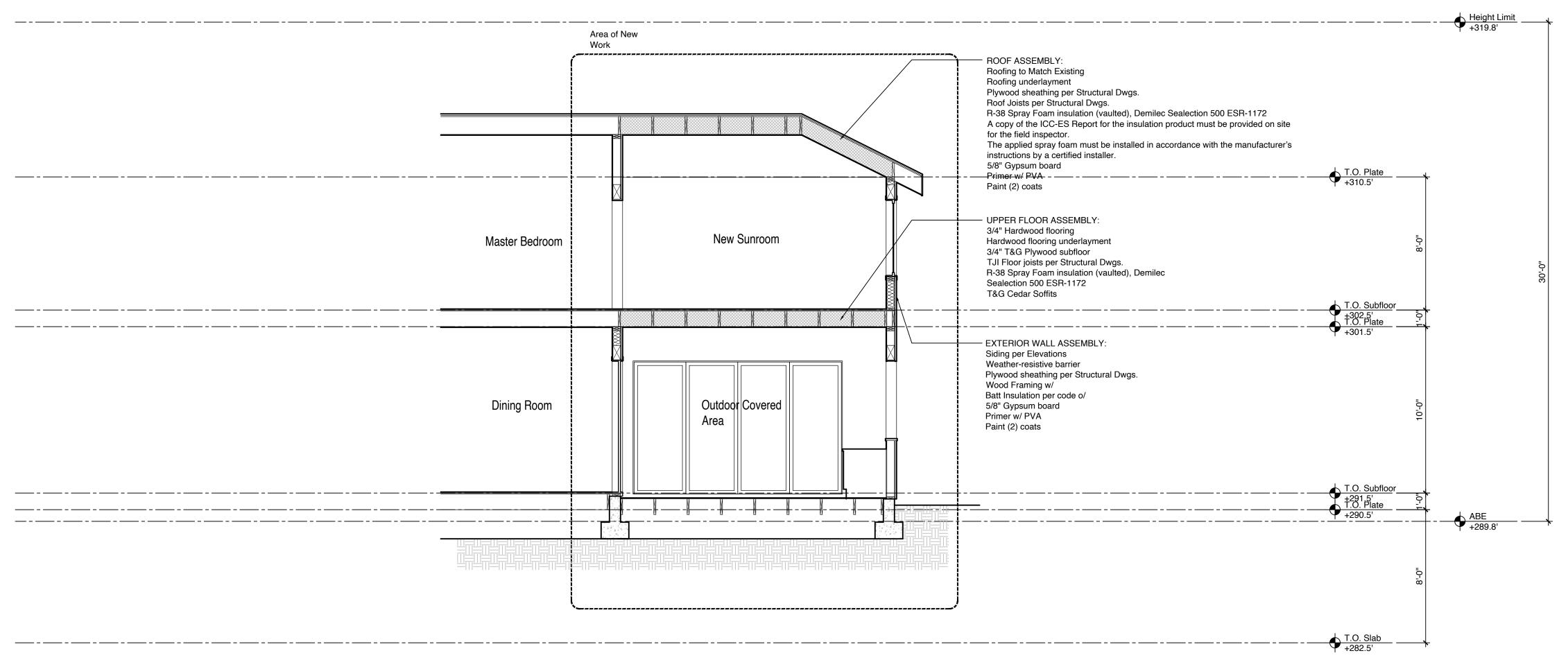
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Building Section

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> 215 West Crockett Street Seattle, Washington 98119 206.229.8082

> > DRAWN BY

CHECKED BY

DESIGN BY

APPROVED BY

DATE

June 21, 2022

REVISIONS

NM MERCER ISLAND RESIDENCE

> 4311 85th Ave SE Mercer Island, Washington



Sections

A-4.0

EXTER	EXTERIOR DOOR SCHEDULE								
SYMBOL	LOCATION	ROOM	DIAGRAM	TYPE	SIZE	AREA	FINISH	U	REMARKS
1A	Entry	-	1A below	Inswing	1-3/4" x See diagram		Stained Wood	NA	Offset Pivot
1B	Living Room	-	1B Below	Double Slider	1-3/4" x See diagram		Aluminum Clad	0.30	Safety Glazing
1C>	Dining Room	-	1B Below	Double Slider	1-3/4" x See diagram		Aluminum Clad	0.30	Safety Glazing

WINDOW DIAGRAM NOTES	

1. Windows are shown from the exterior side.

2. General Contractor to confirm all rough opening sizes and installation requirements with manufacturer prior to order.

3. Manufacturer to review installation locations and confirm safety glazing requirements.

4. Manufacturer to review installation locations and confirm designated units meet egress requirements.

5. Install units per all manufacturer's recommendations.

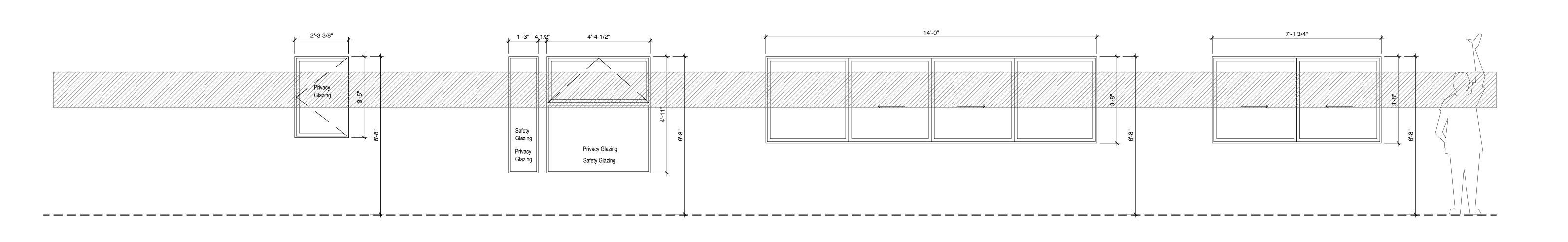
6. All exterior doors and windows to comply with security requirements of 2018 IRC Section R329

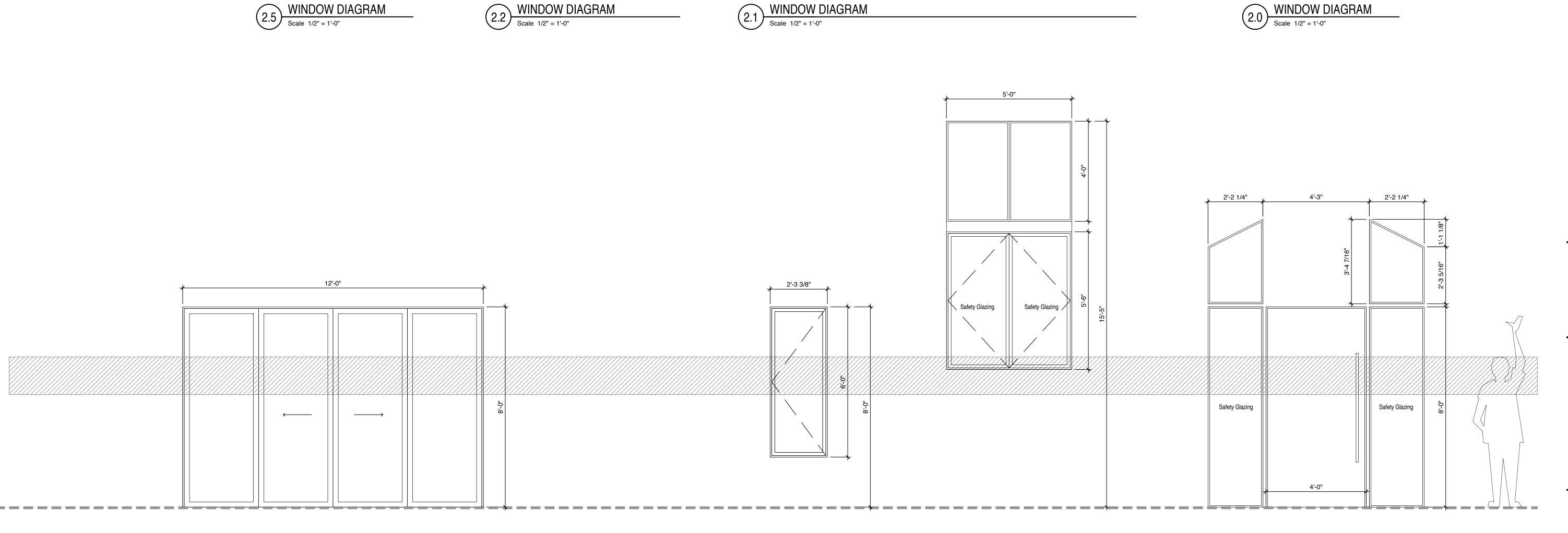
7. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL BY ARCHITECT PRIOR TO FABRICATION.

	WINDOW SCHEDULE - Lower Level / Main Level								
SYM	LOCATION	ROOM	DIAGRAM	TYPE	SIZE	AREA	FINISH	U	REMARKS
1.0	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.1	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.2	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.3	Entry	-	1.0 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
1.4	Stairwell	-	1.4 below	Double Casement	See diagram		Aluminum Clad / Ptd.	0.30	
1.5	Mudroom	-	1.5 below	Casement	See diagram		Aluminum Clad / Ptd.	0.30	
2.0	Sunroom	-	2.0 below	Slider	See diagram		Aluminum Clad / Ptd.	0.30	
2.1	Sunroom	-	2.1 below	Slider	See diagram		Aluminum Clad / Ptd.	0.30	
2.2	Master Bath	-	2.2 below	Picture/Awning	See diagram		Aluminum Clad / Ptd.	0.30	
2.3	Master Bath	-	2.2 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
2.4	Stairwell	-	1.4 below	Picture	See diagram		Aluminum Clad / Ptd.	0.30	
2.5	Bath #2	-	2.5 below	Casement	See diagram		Aluminum Clad / Ptd.	0.30	

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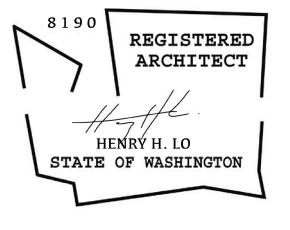
DRAWN BY

DESIGN BY

NM MERCER ISLAND RESIDENCE

4311 85th Ave SE

4311 85th Ave SE Mercer Island, Washington



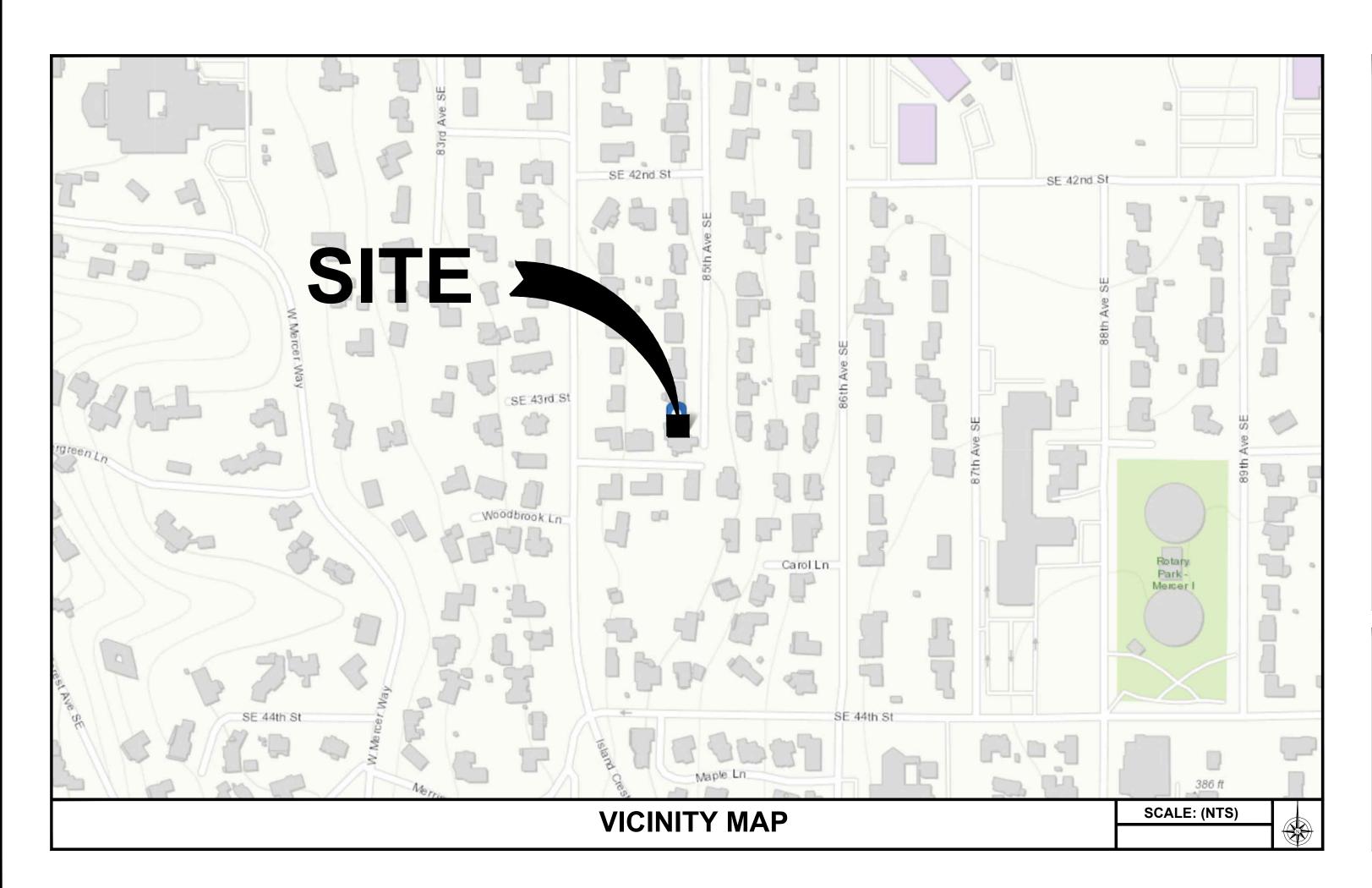
Window and Door
Schedules

A-5.0

SFR REMODEL - ADDITION

SITE NAME:

MERCER ISLAND (NM) RESIDENCE (STRUCTURAL)



<u>COUNTY:</u> <u>ZON</u> KING COUNTY R-9	
SITE PARCEL NUMBER: 182405-9138	
LEGAL DESCRIPTION: LOT A MERCER ISLAND L #20010522900002 SD L 1/4 OF NW 1/4 LY BETWEEN 86TH AVE SE	LR BEING POR SW
<u>OMNER:</u> PANG NGERNSUPALUCK & 4311 85TH AVE SE MERCER ISLAND, WA 980	
ARCHITECT: HENRY LO HhLo DESIGN 215 W. CROCKETT ST. SEATTLE, WA 98119	
ENGINEER: KOLBY BURKE, PE, SE BURKE CONSULTING ENGIN (925)639-5512 kolby.burke@burke-engine	,
DDO IECT INICO	

PROJECT INFORMATION

NEW (TWO-STORY) ADDITION TO EXISTING SINGLE-FAMILY RESIDENCE.

PROJECT DESCRIPTION

SHEET	DESCRIPTION	SHEET	DESCRIPTION
T-I	TITLE SHEET		
T-2	GENERAL STRUCTURAL NOTES		
T-3	GENERAL STRUCTURAL NOTES		
5-1	FDTN & LOWER FLR FRAMING		
5-2	LOWER FLR WALL FRAMING		
5-3	UPPER FLR FRAMING		
5-4	UPPER FLR WALL FRAMING		
S-5	ROOF FRAMING PLAN		
SD-I	STRUCTURAL DETAILS		
SD-2	STRUCTURAL DETAILS		

SHEET INDEX

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF ALL GOVERNING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

CODE COMPLIANCE

KEVIN OF WASHING 55484 FIGURAL ENGLISH 6/29/22
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IT IS A VIOLATION OF LAW FOR A PERSON, UNLESS ACTING UND THE DIRECTION OF A LICENSE PROFESSIONAL ENGINEER, T ALTER THIS DOCUMENT.

BURKE
CONSULTING ENGINEERS
KOLBY BURKE
kolby.burk@burke-engineers.com
(925) 639-5512

		ı	D -
		ı	DESCRIPTION
		1	REV DATE
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PROJECT MERCER ISLAND (NM) RESIDENCE

4311 85TH AVENUE SE

MERCER ISLAND, MA 98040

22 = 0 | 4

TITLE SHEET

SHEET

PROJECT AND SITE INFORMATION:

PROJECT NAME:
PARCEL NUMBER:
CLIENT NAME:
SITE LOCATION:

MERCER ISLAND (NM) RESIDENCE
182405-9138
PANG NGERNSUPALUCK & TOM MULCAHY
4311 85TH AVE SE
MERCER ISLAND, WA 98040

PROJECT DESCRIPTION

NEW TWO-STORY ADDITION TO EXISTING SINGLE-FAMILY RESIDENCE

APPLICABLE CODE AND STANDARDS:

ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES AND

NDS: NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2018 EDITION

ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS, LATEST EDITION.

IRC: INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION.

ACI: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, LATEST EDITION.

<u>AISC:</u> AMERICAN INSTITUTE OF STEEL CONSTRUCTION, STEEL CONSTRUCTION MANUAL, LATEST EDITION

DESIGN CRITERIA:

LIVE FLOOR LOAD,

LOAD COMBINATIONS: LOAD COMBINATIONS SHALL BE IN ACCORDANCE WITH SECTION 1605 OF THE IBC.

DEAD LOADS: INCLUDE THE FOLLOWING:

THE SELF-WEIGHT OF STRUCTURAL MEMBERS, COMPONENTS AND CLADDING (WHERE APPLICABLE)

Lo: 40 PSF (NON-SLEEPING AREA)

5 PSF (MISC. UNIFORM SUPERIMPOSED LOAD)

LIVE LOADS: LIVE LOADS ARE CALCULATED IN ACCORDANCE WITH ASCE 7-16
LIVE ROOF LOAD, Lo: 20 PSF
LIVE CEILING LOAD, Lo: 20 PSF (WSTORAGE, WHERE OCCURS)

SNOW LOADS: SNOW LOADS ARE CALCULATED IN ACCORDANCE WITH ASCE 7-16 AND SEAW SNOW MAP:

GROUND SNOW LOAD, Pg: 16 PSF ROOF SNOW LOAD, Ps: 25 PSF (MIN.)

<u>WIND LOADS:</u>

ULTIMATE WIND SPEED: 98 MPH
EXPOSURE: B

SEISMIC LOADS:
SITE CLASSIFICATION: D

 SITE CLASSIFICATION:
 D

 SS: 1.205,
 SDS: 1.138

 SI: 0.42,
 SDI: N/A

AND APPROVAL PRIOR TO FABRICATION.

TOTAL LOAD LIVE LOAD

DEFLECTION LIMITS:

GENERAL:

ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN THE GENERAL TYPE OF CONSTRUCTION REQUIRED.

L/240

L/360

CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.

<u>SUBSTITUTIONS:</u> ANY SUBSTITUTIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHALL BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD (EOR) FOR REVIEW

PRE-MANUFACTURED ELEMENTS: MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF WASHINGTON, AND SUBMITTED TO THE EOR FOR APPROVAL PRIOR TO FABRICATION.

SPECIAL CONDITIONS: CONTRACTOR SHALL VERIFY LEVELS, DIMENSIONS, AND EXISTING CONDITIONS IN THE FIELD BEFORE PROCEEDING. DIMENSIONS OF EXISTING CONDITIONS MAY BE BASED ON RECORD DRAWINGS AND ARE TO BE FIELD-VERIFIED BY THE CONTRACTOR. DIMENSIONS NOTED AS PLUS OR MINUS (+/-) INDICATE UNVERIFIED DIMENSIONS AND ARE APPROXIMATE. IN CASE OF DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS, OR OF ANY CONFLICTS OR EXCESSIVE VARIATIONS FROM INDICATED DIMENSIONS, THE CONTRACTOR SHALL OBTAIN DIRECTION FROM THE EOR BEFORE PROCEEDING. CONTRACTOR SHALL NOTIFY THE EOR OF ANY DISCREPANCIES OR FIELD CHANGES PRIOR TO INSTALLATION OR FABRICATION.

<u>DIMENSIONS:</u> DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS AS COMPONENTS OF THE DRAWINGS MAY NOT BE DRAWN TO SCALE. UTILIZE ONLY NOTED DIMENSIONS AND FOR DIMENSIONS NOT NOTED, CONTRACTOR SHALL REQUEST CLARIFICATION OF DIMENSIONS NOT SHOWN. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO VERIFY DIMENSIONS THAT CAN BE DETERMINED FROM INFORMATION CONTAINED IN THE

MEANS AND METHODS, SITE SAFETY: THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION AND SITE SAFETY FOR THE PROJECT. NO ACTIONS BY THE ENGINEER OF RECORD SHALL BE INTERPRETED TO SUPERSEDE THE CONTRACTOR'S RESPONSIBILITY FOR MEANS AND METHODS AND SITE SAFETY.

THE STRUCTURE HAS BEEN DESIGNED TO RESIST CODE SPECIFIED FORCES AFTER THE CONSTRUCTION OF ALL STRUCTURAL ELEMENTS HAS BEEN COMPLETED. STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO JOB SITE SAFETY; ERECTION MEANS, METHODS, AND SEQUENCES; TEMPORARY BRACING INSTALLATION; TEMPORARY SHORING; USE OF EQUIPMENT AND CONSTRUCTION PROCEDURES.

INSPECTIONS:

REFERENCE STANDARDS: IBC IIO

INSPECTIONS ARE TO BE PERFORMED BY THE BUILDING OFFICIAL. INSPECTIONS REQUIRED ARE AS FOLLOWS:

OIL: VERIFY SUBGRADE IS DRY, DENSE AND DOES NOT HAVE STANDING WATER PRIOR TO POURING FOOTINGS.

CONCRETE: INSPECTIONS REQUIRED ONLY FOR DESIGN MIXES WITH F'6 SPECIFIED

GREATER THAN 2500 PSI. TAKE CONCRETE CYLINDERS AS REQUIRED. VERIFY SLUMP AND STRENGTH.

REINFORCING: VERIFY ALL REINFORCING IS PLACED IN ACCORDANCE WITH APPROVED PLANS. CHECK FOR REQUIRED COVER, SIZE, AND GRADE OF STEEL.

WOOD: DIAPHRAGM NAILING, BLOCKING AND HOLDOWN CONNECTIONS.

SOILS, FOUNDATIONS, AND SLABS:

18 "SOILS AND FOUNDATIONS"

REFERENCE STANDARDS: DESIGN AND CONSTRUCTION SHALL CONFORM TO IBC CHAPTER

SOIL CONDITIONS: ALL CONCRETE CONSTRUCTION SHALL BEAR ON COMPETENT SOILS (UNDISTURBED NATIVE SOIL OR COMPACTED STRUCTURAL FILL TO 95%MAXIMUM DENSITY). BEARING SOILS SHALL BE FREE OF EXCESSIVE GROUND WATER AND SHALL BE LOCATED BELOW THE FROST LINE, AT A MINIMUM OF 18" BELOW GRADE.

FOOTING DEPTH: EXTERIOR STRIP FOOTINGS SHALL BEAR AT LEAST (18") BELOW FINISH GRADE. INTERIOR FOOTINGS SHALL BEAR AT ANY CONVENIENT DEPTH BELOW THE FLOOR SLAB

<u>UNDERGROUND UTILITIES:</u> DO NOT DAMAGE ANY UTILITIES. CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES IN THE AREA WHERE THE WORK IS TO BE PERFORMED. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS AS REQUIRED.

CONNECTION TO EXISTING FOUNDATIONS: WHERE NEW FOOTINGS ARE CAST AGAINST EXISTING FOOTINGS, A MINIMUM OF (4) POST-INSTALLED ANCHORS/REBAR SHALL BE INSTALLED, (2) IN THE FOOTING AND (2) IN THE STEM WALL, MAXIMUM 12" OC SPACING.

CONCRETE SLABS-ON-GRADE: CONCRETE SLABS ON GRADE SHALL BE NO LESS THAN 4" THICK AND REINFORCED WITH #4 BARS SPACED AT 12" O.C. IN EACH ORTHOGONAL DIRECTION (OR WITH WI.4 X WI.4 6X6 WELDED WIRE FABRIC) UNO. REBAR SHALL BE SUPPORTED TO REMAIN IN PLACE BETWEEN MID-DEPTH OF THE SLAB AND THE UPPER THIRD. SLABS SHALL BE CAST ON A IO MIL POLYETHYLENE VAPOR RETARDER WITH LAPPED JOINTS AT LEAST 6" WIDE, OVER A PREPARED COMPACTED SUB-BASE OF 6" THICK CLEAN GRAVEL, OR CRUSHED STONE PASSING A 2" SIEVE BUT < 10%PASSING A #4 SIEVE. FOR INSULATED SLABS THE VAPOR RETARDER SHALL BE PLACED BETWEEN THE RIGID FOAM AND THE SLAB. (A VAPOR RETARDER IS NOT REQUIRED FOR EXTERIOR SLABS OR SLABS IN UNHEATED STRUCTURES. A BASE COURSE IS NOT REQUIRED OVER WELL-DRAINED GRAVEL OR GRAVEL/SAND MIXTURES HAVING A PERCOLATION RATE NOT LESS THAN 4" PER HOUR. (REFER TO IRC SECTION R506.2.2 EXCEPTION, AND IRC TABLE R405.1 GROUP | AND FOOTNOTE "A".)

CONCRETE:

MIXING AND PLACING OF ALL CONCRETE AND SELECTION OF MATERIALS SHALL BE IN ACCORDANCE WITH THE BUILDING CODE. PROPORTIONS OF AGGREGATE TO CEMENT SHALL PRODUCE DENSE, WORKABLE MIX WHICH CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER.

COMPRESSIVE STRENGTH

CONCRETE STRENGTH SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS, UNLESS APPROVED OTHERWISE. CONCRETE MIXES SHALL CONFORM TO THE FOLLOWING

MAXIMUM WATER/CEMENT RATIO (BY WEIGHT)

MIN. F'c	NON-AIR ENTRAINED	AIR-ENTRAINED	MAXIMUM SLUMP	LOCATION
2500 PSI	.44	0.40	5	TOPPING SLAB
2500 PSI	.45	0.45	6	FOOTINGS/STEMWALL FOUNDATIONS
4000 PSI	-	0.35	8	STEEL PIPE FILL
4000 PSI	0.40	0.35	5	ALL OTHER CONC
5000 PSI	-	0.35		CONC PRE-CAST

THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR APPROVAL 2 WEEKS PRIOR TO PLACING CONCRETE. THE MIX DESIGN SHALL BE IN CONFORMANCE WITH ACI CHAPTER 26. THE SUBMITTAL SHALL INDICATE WHERE EACH CONCRETE MIX IS TO BE USED ON THE PROJECT, AS WELL AS THE MAXIMUM AGGREGATE SIZE OF EACH MIX. MAXIMUM AGGREGATE SIZE SHALL CONFORM TO THE SPECIFICATIONS.

SIZE OF AGGREGATE SHALL NOT BE MORE THAN THREE QUARTERS OF THE CLEAR DISTANCE BETWEEN REINFORCING BARS.

WATER/CEMENT RATIO: W/C RATIO SHALL BE MEASURED BY WEIGHT AND SHALL BE BASED

ON THE TOTAL CEMENTITIOUS MATERIAL. WATER/CEMENT RATIO SHALL BE DETERMINED BY

AGGREGATES: MAXIMUM SIZE OF AGGREGATE SHALL BE 1-1/2 INCHES, BUT MAXIMUM

THE SUPPLIER BASED ON STRENGTH REQUIREMENTS.

MATER: SHALL BE CLEAN AND POTABLE.

TOTAL CEMENTITIOUS MATERIAL: THE SUM OF ALL CEMENT PLUS FLYASH AND SLAG. AT THE CONTRACTORS OPTION FLYASH OR SLAG MAY BE SUBSTITUTED FOR CEMENT BUT SHALL NOT EXCEED 25% BY WEIGHT OF TOTAL CEMENTITIOUS MATERIAL. IN NO CASE SHALL THE AMOUNT OF FLYASH OR SLAG BE LESS THAN REQUIRED BY THE CONCRETE MIX DESIGN TABLE. FOOTING MIXES SHALL CONTAIN NOT LESS THAN 5 SACKS OF CEMENTITIOUS MATERIAL PER CUBIC YARD, ALL OTHER MIXES SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENTITIOUS MATERIAL PER CUBIC YARD, UNLESS NOTED OTHERWISE.

MAXIMUM CHLORIDE CONTENT: THE MAXIMUM WATER SOLUBLE CHLORIDE CONTENT SHALL NOT EXCEED 0.15% BY WEIGHT OF CEMENTITIOUS MATERIAL UNLESS NOTED OTHERWISE.

ADMIXTURES: WATER-REDUCING ADMIXTURES MAY BE INCORPORATED IN CONCRETE MIX DESIGNS, SHALL CONFORM TO ASTM C 494, AND SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CALCIUM CHLORIDE OR OTHER WATER-SOLUBLE CHLORIDE ADMIXTURES SHALL NOT BE USED.

AIR ENTRAINMENT: CONCRETE EXPOSED TO WEATHER: PROVIDE 5.0% TOTAL AIR CONTENT FOR ALL CONCRETE EXPOSED TO WEATHER. TOTAL AIR CONTENT IS THE SUM OF ENTRAINED AIR PROVIDED BY ADMIXTURES AND NATURALLY OCCURRING ENTRAPPED AIR. AIR CONTENT SHALL BE TESTED PRIOR TO BEING PLACED IN THE PUMP HOPPER OR BUCKET; IT IS NOT REQUIRED TO BE TESTED AT THE DISCHARGE END OF THE PUMP HOSE. THE TOLERANCE ON ENTRAPPED AIR SHALL BE +2.0% AND -1.5% WITH THE AVERAGE OF ALL TESTS NOT LESS THAN THE SPECIFIED AMOUNT.

SLUMP: SLUMP TOLERANCE SHALL BE PER ASTM C 94. MAX SLUMP SHALL NOT EXCEED 4".

CURING CONDITIONS: IF THE AIR TEMPERATURE WILL EXCEED 75 DEGREES FAHRENHEIT (1/6F)
WITHIN 48 HOURS OF PLACING CONCRETE, A MOIST CURE SHALL BE APPLIED TO THE
CONCRETE FOR A PERIOD OF 36 HOURS AFTER FINISHING CONCRETE SURFACES.

CONCRETE CONSTRUCTION:

CONTROL AND CONSTRUCTION JOINTS: CONSTRUCTION JOINTS SHALL MEET THE REQUIREMENTS OF ACI 30I SECTIONS 2.2.2.5 AND 5.3.2.6. SPECIAL BONDING METHODS PER SECTION 5.3.2.6 SHALL BE SATISFIED BY ITEM 2 BELOW UNLESS OTHERWISE DETAILED ON THE STRUCTURAL DRAWINGS. WHERE CONSTRUCTION JOINTS ARE NOT SHOWN ON PLAN OR ADDITIONAL CONSTRUCTION JOINTS ARE REQUIRED SUBMIT PROPOSED JOINTING FOR STRUCTURAL ENGINEERS APPROVAL. PROVIDE CONSTRUCTION JOINTS AS INDICATED BELOW UNLESS NOTED OTHERWISE ON THE PLANS:

- I. SLABS ON GRADE: PROVIDE CONSTRUCTION AND/OR CONTROL JOINTS AT 16 FEET O.C. MAXIMUM FOR UNEXPOSED SLABS ON GRADE AND 12 FEET O.C. FOR EXPOSED SLABS ON GRADE. COORDINATE JOINTS WITH ARCHITECTURAL DRAWINGS.
- 2. ATTACHMENT OF NEW CONCRETE TO EXISTING: WHERE SHOWN, ROUGHEN CONCRETE TO A MINIMUM AMPLITUDE OF 1/4" USING IMPACT HAMMER. REMOVE ALL LOOSE OR DAMAGED CONCRETE, THOROUGHLY FLUSH ALL SURFACES WITH POTABLE WATER, AIR BLAST WITH OIL FREE COMPRESSED AIR TO REMOVE ALL WATER. WET SURFACES BEFORE PLACING CONCRETE.

FOOTING/PLINTHS: FOOTINGS SHALL BE CENTERED ON POSTS OR SHEAR WALL BOUNDARY ELEMENTS. PROVIDE 2" PLINTHS FOR ALL POSTS AND SILL PLATES, PROVIDE 6" PLINTHS ABOVE GRADE OR WHEN SUPPORTING PRESSURE TREATED WOOD.

DRILLED EXPANSION (MEDGE) ANCHORS: ACCEPTABLE DRILLED-IN-CONCRETE ANCHORS OF SIZE, NUMBER AND SPACING AS SHOWN ON THE DRAWINGS SHALL BE AS FOLLOWS: HILTI KWIK-BOLT II CARBON STEEL WEDGE ANCHORS (ICBO #4627); WEJ-IT ANCHOR BOLT (ICBO #1372); ITW RAMSET/RED HEAD TRUBOLT CARBON STEEL WEDGE ANCHORS (ICBO #1372) OR APPROVED EQUAL.

POST-INSTALLED WALL ANCHORS: SILL PLATE WALL ANCHORS TO EXISTING CONCRETE SHALL BE HILTI ADHESIVE ANCHORS WITH HILTI HIT-RE 500 V3 EPOXY MORTAR. PROVIDE 5/8" (MIN.) DIAMETER HAS-E-55 ANCHOR BOLTS EMBEDDED A MINIMUM OF 8" INTO CONCRETE, UNLESS NOTED OTHERWISE.

NON-SHRINK GROUT FOR BASE PLATES: APPROVED GROUTS INCLUDE: MASTER BUILDER'S "MASTER FLOW 928," SIKA CORPORATIONS "SIKAGROUT 212," BURKE COMPANY'S "NONFERROUS NONSHRINK GROUT," OR APPROVED EQUAL. GROUT SHALL BE MIXED, APPLIED AND CURED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

DRILLED AND DOWELLED REBAR: EPOXY ADHESIVE SHALL BE "CIA GEL" (ICBO #4846) AS MANUFACTURED BY COVERT OPERATIONS COMPANY, LONG BEACH, CALIFORNIA; "POWERFAST" (ICBO 4514) AS MANUFACTURED BY POWERS RAWL, NEW ROCHELLE, NY, "SOLID BOND 200" (ICBO #4398) AS MANUFACTURED BY ADHESIVES TECHNOLOGY CORPORATION, KENT, WASHINGTON, "HIT HY150 (ICBO #5193) AS MANUFACTURED BY HILTI CORP, TULSA, OKLAHOMA, OR APPROVED EQUAL.

REINFORCING STEEL:

SLABS AND JOISTS

STIRRUPS, TIES AND SPIRALS

OF BEAMS OR COLUMNS

ALL REINFORCING SHALL BE NEW BILLET STOCK ASTM A615, GRADE 60. BARS SHALL BE SECURELY TIED IN PLACE WITH #16 DOUBLE-ANNEALED IRON WIRE. BARS SHALL BE SUPPORTED ON ACCEPTABLE NON-CORROSIBLE CHAIRS. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING OF REINFORCED CONCRETE STRUCTURES." CONTRACTOR SHALL COORDINATE REINFORCING STEEL PLACEMENT DETAILS AND PROVIDE TEMPLATES FOR PLACING STEEL IN CONGESTED AREAS AS NECESSARY.

REINFORCING STEEL MATERIALS:	
DEFORMED BARS	ASTM A615, GRADE 60
SMOOTH WELDED WIRE FABRIC	ASTM A185 (FY = 65 KSI)
DEFORMED WELDED WIRE FABRIC	ASTM A497 (FY = 70 KSI)
EPOXY COATED REINFORCING	ASTM A775
DEFORMED BARS TO BE WELDED OR SPECIFIED	ASTM A706, GRADE 60
DEFORMED BARS MARKED "SDQ"	SEE SDQ REINFORCING

<u>BAR SPLICES:</u> CONFORM TO ACI FOR CLASS "B" SPLICES OR 40 BAR DIAMETERS, WHICHEVER IS GREATER. LAP REINFORCING BARS LENGTH SHALL BE A MINIMUM OF 48 TIMES THE BAR DIAMETERS.

BAR CLEAR COVER: MINIMUM CAST-IN-PLACE CONCRETE COVER OVER REINFORCING STEEL, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:

FOOTINGS & RETAINING WALLS: WHERE CAST AGAINST EARTH: EXPOSED TO EARTH/WEATHER:	3" (INCHES) 2" (NO. 6 THU NO. 18 BARS) 1-1/2" (NO. 5 BAR AND SMALLEF
NOT EXPOSED TO WEATHER:	1-1/2" (NO. 14 AND NO. 18 BARS) 3/4" (NO. 11 BAR AND SMALLER
OTHER CONCRETE: WALLS - INTERIOR FACE	3/4 INCH

IF WELDING OF REINFORCING IS REQUIRED, IT SHOULD BE OBSERVED AS DEFINED IN IBC SECTION 1704.4, WITH PARTICULAR EMPHASIS ON JOINT CONFIGURATION, SUITABILITY OF LOW HYDROGEN ELECTRODES, PREHEAT AND INTERPASS TEMPERATURE, AND INTERPASS SLAG REMOVAL. WELDING PROCEDURES SHALL CONFORM TO AWS DI.4. ALL WELDING OF REINFORCING STEEL SHALL BE DONE BY AWS/WABO (CALIFORNIA) STATE ASSOCIATION OF BUILDING OFFICIALS) CERTIFIED WELDERS.

1-1/2 INCH

2 INCHES

REINFORCING WITH SPECIAL DUCTILE QUALITY REQUIREMENT (SDQ REINFORCING):
REINFORCEMENT MARKED "SDQ" SHALL COMPLY WITH ASTM A 706. ASTM A 615
GRADES 40 AND 60 REINFORCEMENT SHALL BE PERMITTED IN THESE MEMBERS IF:

- (I) THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YELD STRENGTH BY MORE THAN 18,000 PSI (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3,000 PSI); AND
- (2) THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRENGTH TO THE ACTUAL TENSILE YIELD IS NOT LESS THAN 1.25.

MOOD:

FRAMING LUMBER: ALL LUMBER IN CONTACT WITH MASONRY, CONCRETE, OR EARTH SHALL BE PRESSURE PRESERVATIVE TREATED IN ACCORDANCE AWPA (AMERICAN WOOD PROTECTION ASSOCIATION) STANDARDS. PROVIDE TWO LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC., AND CONCRETE OR MASONRY.

SAWN LUMBER SHALL CONFORM TO THE WCLIB (WEST COAST LUMBER INSPECTION BUREAU). ALL LUMBER WITH A LEAST DIMENSION OF 2" (NOMINAL) SHALL BE STAMPED SURFACE-DRY AND SHALL HAVE A MOISTURE CONTENT WHEN SURFACED AND WHEN INSTALLED OF NOT MORE THAN 19 PERCENT. LUMBER WITH A LEAST DIMENSION OF 4" (NOMINAL) OR GREATER SHALL BE STAMPED SURFACE-GREEN AND AIR-DRIED TO A MOISTURE CONTENT OF NOT MORE THAN 19 PERCENT PRIOR TO ITS USE IN FRAMING THE STRUCTURE.LUMBER SHALL BE GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

WALL STUDS	2X MEMBERS 3X MEMBERS	HEM-FIR STUD GRADE HEM-FIR NO. 2
WALL PLATES	(2X, 3X MEMBERS)	HEM-FIR STANDARD GRADE (PT SILL PLATES @ FDTN)
JOISTS AND BEAMS	(2X, 3X MEMBERS)	HEM-FIR NO. 2 MIN. BASE VALUE, FB = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. I MIN. BASE VALUE, FB = 1000 PS
BEAMS	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. MIN. BASE VALUE, FB = 1350 PSI
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MIN. BASE VALUE, FC = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. I MIN. BASE VALUE, FC = 1000 PS

ENGINEERED WOOD PRODUCTS: SHALL CONFORM TO ASTM 5456

PSL - PARALLEL STRAND LUMBER 2.0E
LSL - LAMINATED STRAND LUMBER 1.5E
LVL - LAMINATED VENEER LUMBER 1.8E

GLUED LAMINATED MEMBERS: SHALL BE FABRICATED IN CONFORMANCE WITH ANSI STANDARD AIGO.I. EACH MEMBER SHALL BEAR AN AITC OR APA EMS IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA EMS CERTIFICATE OF CONFORMANCE. CAMBER ALL GLULAM BEAMS TO 2,000' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS. ONE COAT OF END SEALER SHALL BE APPLIED IMMEDIATELY AFTER TRIMMING IN EITHER SHOP OR FIELD. MEMBERS SHALL BE VISUALLY GRADED WESTERN SPECIES "FRAMING" *INDUSTRIAL, ARCHITECTURAL, PREMIUM* GRADE WITH STRENGTH INDICATED AS FOLLOWS:

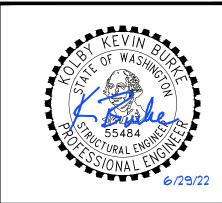
	<u>SYMBOL</u>	<u>SPECIES</u>	<u>SIZES</u>	<u>USES</u>
BEAMS	24F - V4 24F - V8	DF/DF DF/DF	ANY DEPTH ANY DEPTH	SIMPLE SPAN CONTINUOUS OR CANTILEVER SPAN
COLUMNS	2 - L2	DF	ALL	ALL
TRUSSES	2 - L2	DF	ALL	ALL
PITCHED AND CURVED BEAMS	24F - V8	DF/DF	ALL	ALL

TIMBER TRUSSES: SHALL BE CONSTRUCTED TO THE LINES AND PROFILES AS INDICATED ON THE DRAWINGS. CONTRACTOR SHALL VERIFY ALL TRUSS DIMENSIONS PRIOR TO FABRICATION. CONNECTIONS AND CONNECTION HARDWARE SHALL BE TIGHT FITTING. TRUSSES ARE ENGINEERED FOR DESIGN GRAVITY AND LATERAL LOADS ONLY. CONTRACTOR SHALL PROVIDE ADDITIONAL BRACING AS REQUIRED FOR HANDLING AND ERECTION.

TIMBER CONNECTORS: TIMBER CONNECTORS INDICATED ON THE DRAWINGS USE NOMENCLATURE AND PART NUMBERS CONTAINED IN THE CATALOGS BY SIMPSON STRONG-TIE COMPANY. CONNECTORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICBO APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. SUBMIT MANUFACTURER'S CATALOG AND ICBO REPORTS TO ARCHITECT AND ENGINEER FOR REVIEW WHEN REQUESTING SUBSTITUTIONS. ALL SPECIFIED FASTENERS MUST BE USED AND PROPER INSTALLATION PROCEDURES MUST BE OBSERVED IN ORDER TO OBTAIN ICBO APPROVED LOAD CAPACITIES. VERIFY THAT THE DIMENSIONS OF THE SUPPORTING MEMBER ARE SUFFICIENT TO RECEIVE THE SPECIFIED FASTENERS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE ALL NAILS SHALL BE COMMON. FOR EXTERIOR APPLICATIONS CONNECTORS SHALL BE PROTECTED WITH Z-MAX COATING PER ASTM A653, HOT DIPPED GALVANIZED (HDG) PER ASTM A123, OR TYPE 316L STAINLESS STEEL AND FASTENED WITH "DOUBLE-BARRIER COATING" SDS SCREWS OR HDG NAILS AS REQUIRED FOR THAT CONNECTOR. ALTERNATIVE TIMBER CONNECTORS MAY BE SUBMITTED FOR APPROVAL, PROVIDED THAT THEY HAVE EQUAL OR GREATER STRUCTURAL CAPACITY AND ARE FIT DIMENSIONALLY WITHIN ARCHITECTURAL FINISHES. UNLESS OTHERWISE NOTED ALL JOIST CONNECTORS SHALL BE LU AND U SERIES JOIST CONNECTORS. UNLESS OTHERWISE NOTED ALL ROOF JOISTS AND RAFTERS SHALL UTILIZE H2.5 HURRICANE ANCHORS AT EACH JOIST TO TOP WALL PLATES.

BOLTS: ALL TYPICAL, LAG AND MACHINE BOLTS SHALL BE ASTM 307 BOLTS. BOLTS, NUTS, AND WASHERS EXPOSED TO WEATHER OR MOISTURE SHALL BE HOT-DIPPED GALVANIZED. PROVIDE FLAT WASHERS UNDER BOTH HEADS AND NUTS OF BOLTS USED IN TIMBER CONNECTIONS. ALL FRAMING NAILS SHALL BE COMMON NAILS. NAILS USED FOR FLOOR DIAPHRAGM NAILING SHALL BE EITHER COMMON GALVANIZED OR "SINKER" NAILS UTILIZING APPROVED GLUE. POWER DRIVEN NAILS SHALL HAVE COMPLETE HEADS, I.E. NOT NOTCHED. NOTCHED HEAD POWER DRIVEN NAILS MAY BE USED IF 16d NAILS ARE SUBSTITUTED FOR 8d, 10d, AND 12d NAILS. NOTCHED HEAD POWER DRIVEN NAILS MAY BE SUBSTITUTED FOR 16d COMMON NAILS IF THE INDICATED SPACING IS REDUCED BY ONE-THIRD.

GALVANIZED FASTENERS: ALL NAILS INTO PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED PER ASTM AI53 OR STAINLESS STEEL. ALL METAL CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED AND CONFORM TO ASTM A653 DESIGNATION CLASS GI85 (1.85 oz OF ZINC PER SQ FT MIN) OR TYPE 304/316 STAINLESS STEEL. SIMPSON STRONG-TIE Z-MAX CONNECTORS MEET THIS REQUIREMENT, FASTENERS AND CONNECTORS USED TOGETHER SHALL BE OF THE SAME TYPE (E.G. HOT DIPPED NAILS WITH HOT DIPPED HANGERS).



IT IS A VIOLATION OF LAW FOR AN PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

BURKE CONSULTING ENGINE KOLBY BURKE Kolby.burke@burke-engineer (925) 639-5512

REV DATE DESCRIPTION BY

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ISLAND, MA 98040

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SHEET TITLE

GENERAL NOTES

T-2

SHEET

MOOD FRAMING:

ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1 OF THE BUILDING CODE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

GENERAL MOOD CONSTRUCTION: CONFORM TO IBC 2304. UNLESS NOTED OTHERWISE, STUDS SHALL BE SPACED AT I6" OC, EXTERIOR STUDS SHALL BE 2X6, AND INTERIOR STUDS SHALL BE 2X4. ALL STUD WALLS SHOWN ON STRUCTURAL DRAWINGS SHALL HAVE THEIR LOWER PLATES ATTACHED TO MOOD FRAMING BELOW WITH I6D NAILS AT 6"OC STAGGERED OR BOLTED TO CONCRETE OR MASONRY PER WALL ANCHORAGE.

MALL ANCHORAGE: SILL PLATES SHALL BE ANCHORED TO THE CONCRETE FOUNDATION WITH A MINIMUM I/2" DIAMETER A-307 ANCHOR BOLT EMBEDDED AT LEAST 7" AND SPACED A MAXIMUM OF 5' ON CENTER. MINIMUM (2) ANCHOR BOLTS PER SILL PLATE. PROVIDE (I) ANCHOR WITHIN 12" BUT NOT LESS THAN 7 BOLT DIAMETERS FROM THE END OF EACH SILL PLATE. SEE SHEAR WALL SCHEDULE FOR SHEAR WALL ANCHORAGE. PROVIDE 3" SQUARE MINIMUM X I/4" THICK STEEL PLATE WASHERS AND HEX NUTS. ANCHORS SHALL BE CENTERED ON THE SILL PLATE AND WASHERS SHALL EXTEND TO WITHIN I/2" OF THE WALL SHEATHING AT SHEAR WALLS.

HEADERS SHALL BE PER THE PLANS AND HEADER SCHEDULE. UNO PROVIDE TWO STUDS MINIMUM AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. NAIL TOGETHER INDIVIDUAL MEMBERS OF BUILT UP POSTS MITH TWO ROWS OF 16D © 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEARWALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE 5/8" GYPSUM WALLBOARD ON INTERIOR SURFACES. ALL WALLS SHALL HAVE SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16D NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16D NAILS. UNLESS NOTED OTHERWISE FACE NAIL DOUBLE TOP PLATE WITH 16D © 124 O.C. AND LAP MINIMUM 4'-O4 AT JOINTS AND PROVIDE EIGHT 16D NAILS © 44 O.C. EACH SIDE JOINT.

UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 \times 1-1/4 $^{\wedge}$ TYPE S OR W SCREWS @ 8 $^{\wedge}$ ON-CENTER.

TIMBER SHIMS SHALL BE EITHER METAL, PLASTIC, OR HARDWOOD SPECIES. WOOD SHIMS SHALL NOT BE USED IN CONTACT WITH MASONRY OR CONCRETE OR FOR MOISTURE EXPOSED APPLICATIONS.

NAILING: CONFORM TO IBC 2304.10 "CONNECTIONS AND FASTENERS". UNLESS NOTED OTHERWISE ALL NAILS SHALL BE COMMON. NAILS SHALL BE DRIVEN FLUSH AND SHALL NOT FRACTURE THE SURFACE OF SHEATHING. NO COUNTERSINKING PERMITTED, TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END. NAIL SIZES SPECIFIED ON THE DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	<u>LENGTH</u>	COMMON	SINKER	<u>B0X</u>
6d	2'	.113"	.099"	
8d	2 1/2"	.131"	.II3	
10d	3"	.148"	.l20	.128
12d	3 1/4"	.148"	.I35	
16d	3 1/2"	.162"	.148	.135
20d	4"	.192"	.177	.148
146 STPL =	14GAGE STAPLE	MITH 7/16" MINIMU	JM CROWN	

WOOD STRUCTURAL PANELS (SHEATHING): WOOD SHEATHING SHALL CONFORM TO THE U.S. DEPARTMENT OF COMMERCE STANDARDS PS-I AND PS-2 ACCORDING TO TYPE AND SHALL BE IDENTIFIED BY THE TRADEMARKS OF AN APPROVED TESTING \$ INSPECTION AGENCY.

SHEATHING SHALL BE APA PERFORMANCE RATED PANELS PER NER REPORT NUMBER 108. SHEATHING MAY BE PLYWOOD PER UBC STD 23-2 OR ORIENTED STRAND BOARD (OSB) PER UBC STD 23-3, UNLESS NOTED OTHERWISE. PLYWOOD PANELS SHALL BE GRADE CD AND ALSO CONFORM TO PS 1-83 (UBC STD 23-2). ALL PANELS SHALL BE IDENTIFIED AS EXPOSURE I UNLESS NOTED OTHERWISE. PANEL RATING TO BE AS FOLLOWS UNLESS NOTED OTHERWISE:

ROOF: 19/32" (OR 5/8") THICK, 40/20
WALLS: 7/16" (OR 1/2") THICK, 32/16
FLOORS: 23/32" (OR 3/4") THICK, TONGUE AND GROOVE, 48/24

UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE INSTALLED STAGGERED WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED WITH IOD NAILS @ 6"OC TO FRAMED PANEL EDGES AND OVER STUD WALLS SHOWN ON PLANS AND @ 12"OC TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED SHEATHING EDGE CLIPS @ 16"OC AT UNBLOCKED ROOF SHEATHING EDGES. INSTALLED WITH 1/8" GAP BETWEEN PANELS.

UNLESS OTHERWISE NOTED ON THE PLANS, WALL SHEATHING MAY BE INSTALLED HORIZONTALLY OR VERTICALLY, UNSUPPORTED EDGES SHALL BE BLOCKED AND ALL EDGES INSTALLED SHALL BE NAILED WITH IOD @ 6"OC, NAIL WITH IOD @ 12"OC AT INTERMEDIATE SUPPORTS. NAIL SHEAR WALL SHEATHING TO ALL HOLDOWN STUDS USING EDGE NAIL SPACING WHEN HOLDOWN STUD DOES NOT OCCUR AT PANEL EDGE.

NOTCHES AND HOLES IN WOOD FRAMING: NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN THE SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.

IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOE-NAIL JOISTS TO SUPPORTS WITH TWO I6D NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS I6D @ 124 ON-CENTER.

POST-INSTALLED ANCHORS: ANCHORS TO EXISTING CONCRETE SHALL BE HILTI ADHESIVE ANCHORS WITH HILTI HIT-RE 500 V3 EPOXY MORTAR. PROVIDE 5/8" DIAMETER HAS-E-55 ANCHOR BOLTS EMBEDDED A MINIMUM OF 8" INTO CONCRETE, UNLESS NOTED OTHERWISE.

SETTLEMENT SHRINKAGE:

DUE TO CROSS GRAIN WOOD SHRINKAGE, NEW BUILDING CONSTRUCTION IS EXPECTED TO SETTLE APPROXIMATELY %" PER STORY. ALL PLUMBING AND MECHANICAL DUCTS SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHER MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE DEPTH OF THE FLOOR PLATES AND NOT IN THE LENGTH OF THE WALL.

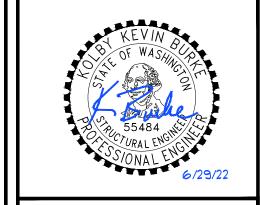
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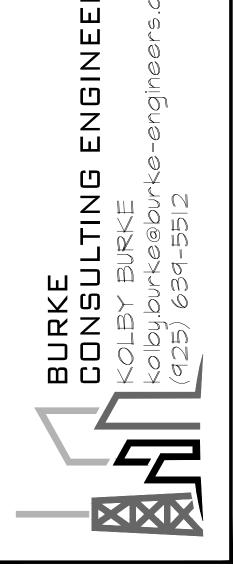
DECK LATERAL LOAD CONN

	ADDITEVI	A11011	LIGI
<u>+</u>	DIM TO BE FIELD VERIFIED	HORIZ	HORIZONTAL
@	ΛT	исс	HOLLOW STRUCTURAL SECTION
	AT	HSS	HOLLOW STRUCTURAL SECTION
AB	ANCHOR BOLT	HT	HEIGHT
AFF	ABOVE FINISH FLOOR	INT	INTERIOR
AGL	ABOVE GRADE LEVEL	ID	INSIDE DIAMETER
ALT	ALTERNATE	JST	JOIST
APPROX	APPROXIMATELY	JT	JOINT
ARCH.	ARCHITECTURAL	k	KIPS
AMSL	ABOVE MEAN SEA LEVEL	KSF	KIPS PER SQUARE FOOT
В/	BOTTOM OF	L	AISC STD ANGLE
BLDG	BUILDING	LF	LINEAL FOOT
BLKG	BLOCKING	LL	LIVE LOAD
BM	BEAM	LLH	LONG LEG HORIZONTAL
BOF	BOTTOM OF FOOTING	LLV	LONG LEG VERTAICAL
ВОТ	воттом	LOC	LOCATION
ВР	BASEPLATE	LONGIT	LONGITUDINAL
BRG	BEARING	MAS	MASONRY
BTWN	BETWEEN	MAX	MAXIMUM
B.U.	BUILT-UP	M.B.	MACHINE BOLT
C	AISC STD CHANNEL	MECH	MECHANICAL
(C=)	CAMBER	MFR	MANUFACTURER
CANT.	CANTILEVER	MIN	MINIMUM
CIP	CAST IN PLACE	MISC	MISCELLANEOUS
CJ	CONTROL/CONSTRUCTION JOINT	MTL	METAL
СЈР	COMPLETE JOINT PENETRATION	(N)	NEW
CL	CENTERLINE	NF	NEAR FACE
CLR	CLEAR(ANCE)	NS	NEAR SIDE
CMU	CONCRETE MASONRY UNIT	NTS	NOT TO SCALE
COL	COLUMN	OC	ON CENTER
CONC	CONCRETE	OD	OUTSIDE DIAMETER
CONN	CONNECTION	OF	OUTSIDE FACE
CONST	CONSTRUCTION	OPNG	OPENING
CONT	CONTINUOUS	OPP	OPPOSITE
CONTR	CONTRACTOR	PAF	POWDER ACTUATED FASTENER
COORD	COORDINATE	PC	PRECAST
CTR	CENTER	PERP	PERPENDICULAR
CY	CUBIC YARD	PJP	PARTIAL JOINT PENETRATION
	DOUBLE	PL	PLATE
DBL			
DEMO	DEMOLISH OR DEMOLITION	PREFAB	PREFABRICATED
DF	DOUGLAS FIR	PSF	POUNDS PER SQUARE FOOT
DIA OR	DIAMETER	PSI	POUNDS PER SQUARE INCH
DIAG	DIAGONAL	PT	PRESSURE TREATED
DIM	DIMENSION	QTY	QUANTITY
DIST	DISTRIBUTED	R	RADIUS
DL	DEAD LOAD	REF	REFERENCE
DN	DOWN	REINF	REINFORCING
DP	DEPTH/DEEP	REQ'D	REQUIRED
DWG	DRAWING	RET	RETAIN(ING)
DWL	DOWEL	SCHED	SCHEDULE
EA	EACH	SF	SQUARE FOOT
EF	EACH FACE	SIM	SIMILAR
EJ	EXPANSION JOINT	SOG	SLAB ON GRADE
EL	ELEVATION	SPEC	SPECIFICATION(S)
ELEV.	ELEVATOR	SQ	SQUARE
EMBED	EMBEDMENT	SR	SOLID ROUND MEMBER
ENGR	ENGINEER	STD	STANDARD
EOR	ENGINEER OF RECORD	STGR	STAGGER(ED)
EQUIP	EQUIPMENT	STRUCT	STRUCTURAL
EQ	EQUAL	SUPP	SUPPORT
EW	EACH WAY	SYM	SYMMETRICAL
EX OR (E)	EXISTING	T/	TOP OF
EXP	EXPANSION JOINT	T&B	TOP AND BOTTOM
EXT	EXTERIOR	T&G	TONGUE AND GROOVE
F/	FACE OF	THRD	THREAD(ED)
FDN	FOUNDATION	THRU	THROUGH
FF	FAR FACE	TKND	THICKENED
ГГ	FAR FALF	INNU	LOU KENELI
FIA?	-		
FIN	FINISH	TOF	TOP OF FOOTING
FIN FLR	-		
	FINISH	TOF	TOP OF FOOTING
FLR	FINISH FLOOR	TOF TOS	TOP OF FOOTING TOP OF STEEL
FLR FRMG	FINISH FLOOR FRAMING	TOF TOS TRANSV	TOP OF FOOTING TOP OF STEEL TRANSVERSE
FLR FRMG FS	FINISH FLOOR FRAMING FAR SIDE	TOF TOS TRANSV TRT'D	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED
FLR FRMG FS FTG GA	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE	TOF TOS TRANSV TRT'D TYP UNO	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE
FLR FRMG FS FTG GA GALV	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED	TOF TOS TRANSV TRT'D TYP UNO UT	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING
FLR FRMG FS FTG GA GALV GEO	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED GEOTECHNICAL	TOF TOS TRANSV TRT'D TYP UNO UT VERT	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING VERTICAL
FLR FRMG FS FTG GA GALV GEO GLB	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED GEOTECHNICAL GLULAM BEAM	TOF TOS TRANSV TRT'D TYP UNO UT VERT W	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING VERTICAL AISC STD WIDE FLANGE
FLR FRMG FS FTG GA GALV GEO	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED GEOTECHNICAL	TOF TOS TRANSV TRT'D TYP UNO UT VERT	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING VERTICAL
FLR FRMG FS FTG GA GALV GEO GLB	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED GEOTECHNICAL GLULAM BEAM	TOF TOS TRANSV TRT'D TYP UNO UT VERT W	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING VERTICAL AISC STD WIDE FLANGE
FLR FRMG FS FTG GA GALV GEO GLB GR	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED GEOTECHNICAL GLULAM BEAM GRADE	TOF TOS TRANSV TRT'D TYP UNO UT VERT W W/	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING VERTICAL AISC STD WIDE FLANGE WITH
FLR FRMG FS FTG GA GALV GEO GLB GR GWB	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED GEOTECHNICAL GLULAM BEAM GRADE GYPSUM WALL BOARD	TOF TOS TRANSV TRT'D TYP UNO UT VERT W W/ W/O	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING VERTICAL AISC STD WIDE FLANGE WITH WITHOUT
FLR FRMG FS FTG GA GALV GEO GLB GR GWB HD	FINISH FLOOR FRAMING FAR SIDE FOOTING GAUGE GALVANIZED GEOTECHNICAL GLULAM BEAM GRADE GYPSUM WALL BOARD HOLD-DOWN	TOF TOS TRANSV TRT'D TYP UNO UT VERT W W/ W/O WD	TOP OF FOOTING TOP OF STEEL TRANSVERSE TREATED TYPICAL UNLESS NOTED OTHERWISE ULTRASONIC TESTING VERTICAL AISC STD WIDE FLANGE WITH WITHOUT WIDTH

ABBREVIATION LIST



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



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GENERAL NOTES

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