Blake Residence Addition

GENERAL NOTES:

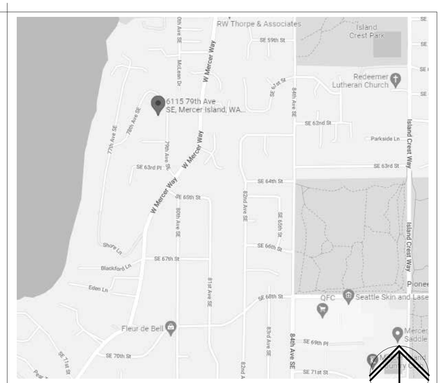
1. NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.
2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND INFORMATION INDICATED ON DRAWINGS AND/OR IN SPECIFICATIONS AND NOTIFY OWNER OF ANY DISCREPANCIES.
3. NOTED DIMENSIONS TAKE PREFERENCE OVER SCALE OF DRAWINGS
4. CONTRACTOR SHALL BE RESPONSIBLE FOR AND OBTAIN ALL REQUIRED PERMITS, LICENSES, INSURANCE, AND BONDS AND PAY REQUIRED FEES UNLESS NOTED OTHERWISE.
5. CONTRACTOR TO PROVIDE ALL FRAMING AND BLOCKING AS REQUIRED FOR LIGHT FIXTURES, HVAC, PLUMBING, CABINETRY, FINISHES, ETC.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CONSTRUCTION, INSTALLATION, FLASHING, AND SEALANT AS REQUIRED TO MAINTAIN THE PROJECT WEATHERTIGHT AS DETAILED IN THE DRAWINGS, AS REQUIRED BY MINIMUM ACCEPTED CONSTRUCTION STANDARDS, AND/OR PER MANUFACTURER'S REQUIREMENTS
7. ALL METAL FABRICATION SHALL BE PERFORMED BY AN APPROVED METAL FABRICATOR.
8. **ALL WINDOWS, DOORS, FIXTURES, APPLIANCES, TILE FINISHES, ACCESSORIES, SHALL BE BY OWNER, UNLESS NOTED OTHERWISE.**

FIRE DEPARTMENT NOTES:

1. A NFPA 72 FIRE ALARM SYSTEM SHALL BE INSTALLED WITHIN THIS PROJECT IN COMPLIANCE WITH NFPA 72, CHAPTER 29 AND FIRE DEPARTMENT REGULATIONS. THIS SYSTEM SHALL BE INSTALLED UNDER A SEPARATE PERMIT.

SHEET INDEX:

Architectural	
A 1.0	Title Sheet
A 1.1	Site Plan
A 1.2	Energy Forms and Requirements
A 2.0.1	Existing and Demo First Floor Plan
A 2.0.2	Existing and Demo Second Floor Plan
A 2.1	New First Floor Plan
A 2.2	New Second Floor Plan
A 2.3	Roof Plan
A 2.4	Electrical - Utility Plan
A 3.0	Existing and Demo Elevations
A 3.1	Elevations
A 3.2	Elevations
A 3.3	Elevations
A 4.1	Schedules, Building Sections
A 5.1	Stair Plans, Sections, Details
A 6.1	Spiral Stairs Details
Structural	
S 1.1	General Structural Notes
S 2.0	Foundation Plan Crawlspace Framing Plan
S 2.1	Upper Floor Framing Plan
S 2.2	Roof Framing Plan
S 3.1	Structural Details
S 3.2	Structural Details



VICINITY MAP (NTS):

PROJECT DATA:

OWNER: Patrick and Carly Scott
6115 79th Ave SE
Mercer Island, WA 98040
571.241.6521

SCOPE OF WORK / PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE FOLLOWING:
1. AN ADDITION TO EXISTING FIRST FLOOR:
   A. A NEW ENTRY, ENTRY CLOSET, AND POWDER ROOM
   B. A NEW PANTRY
2. AN ADDITION TO THE EXISTING SECOND FLOOR:
   A. NEW MASTER CLOSET
   B. NEW DECK OFF THE EXISTING DEN/BEDROOM
   C. NEW DECK OFF PRIMARY BEDROOM WITH EXTERIOR SPIRAL STAIR ACCESS
3. REPLACEMENT OF EXISTING EXTERIOR WINDOWS AND DOORS AS NOTED
4. REPLACE EXISTING INTERIOR STAIR ACCESS TO SECOND FLOOR
5. MODIFICATION OF EXISTING KITCHEN
6. MODIFICATION OF EXISTING PRIMARY BATHROOM
7. VARIOUS INTERIOR WALL RELOCATIONS (NON-BEARING)

PROJECT INFORMATION

PROJECT ADDRESS:	6115 79th Ave SE Mercer Island, WA 98040
LEGAL DESCRIPTION:	Lot Number 21-22, Lake View Highland Replat of Section 24, Town 24, Rng 04. (Lake View Highlands Replat of & Und Int in Private Park Less Beg SE Cor Lot 21 Th Newly 115 Ft Th N 19-26-00 E 10 Ft Th S)
APN:	4094800210
PROJECT YEAR BUILT:	1966
ZONE:	R-12
CONSTRUCTION TYPE:	TYPE V-B (Non-Sprinklered)
OCCUPANCY TYPE:	R-3
STORIES:	TWO STORY
SITE AREA :	0.35 AC

SITE SETBACKS:

	REQ	PROPOSED
FRONT YARD:	20'	28'-7"
SIDE YARD (TOTAL/MIN.)	15' / 5'	
SIDE YARD (NORTH):		15'-0"
SIDE YARD (SOUTH):		13'-7"
REAR YARD (Garage/Duplex):	25'	31'-10"
BUILDING HEIGHT (MAX. ABV. ABE):	30'	22'-4"

1
GROSS FLOOR AREA
EXISTING AREAS:

FIRST FLOOR:	2,195 SF
FIRST FLOOR OVER 16' HT.:	162 SF
STAIR:	33 SF
SECOND FLOOR:	1,498 SF
GARAGE:	545 SF
TOTAL:	4,433 SF (29%)
PROPOSED NEW AREAS:	
FIRST FLOOR:	211 SF
SECOND FLOOR:	96 SF
TOTAL:	307 SF
TOTAL GROSS FLOOR AREA:	4,740 SF (31%)
PROPOSED NEW SECOND FLOOR DECK AREA:	127 SF

LOT COVERAGE (Less than 15% site slope):

ALLOWABLE:	40% (15,246 SF x .40 = 6,098 SF)
EXISTING COVERAGE:	
MAIN ROOF AREA:	3,710 SF
DRIVEWAY:	704 SF
TOTAL:	4,414 SF

1
ROOF AREA REMOVED:	257 SF
NEW LOT COVERAGE:	
BUILDING ROOF AREA:	222 SF
DECKS:	127 SF
TOTAL:	167 SF
TOTAL LOT COVERAGE:	4,506 SF (30%)

HARDSCAPE

ALLOWABLE:	
9% OF LOT AREA:	1,372 SF
REMAINING FROM LOT COVERAGE:	1,592 SF (6,098 - 4,506)
TOTAL ALLOWABLE:	2,964 SF
PROPOSED:	
EXISTING:	1,931 SF
REMOVED (AT NEW BUILDING AREA):	<336 SF>
TOTAL PROPOSED:	1,595 SF

LANDSCAPE AREA (Less building and hardscape)

EXISTING:	9,971 SF (65%)
PROPOSED:	9,995 SF (66%)

PROJECT CODES AND STANDARDS:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE TO THE LATEST CODES AND REGULATIONS FOR THIS JURISDICTION AS PER THOSE LISTED BELOW AND ANY OTHER LOCAL CODES AND REGULATIONS.

2021 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL RESIDENTIAL CODE (IRC)
2021 INTERNATIONAL MECHANICAL CODE (IMC)
2021 INTERNATIONAL FUEL GAS CODE (IFGC)
2021 UNIFORM PLUMBING CODE (UPC)
2021 INTERNATIONAL FIRE CODE (IFC)
2021 INTERNATIONAL EXISTING BUILDING CODE
2021 INTERNATIONAL SWIMMING POOL AND SPA CODE
WASHINGTON STATE ENERGY CODE (WCEC)

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date
1	Plan Check Corrections	12.05.2024

job no: 24001
date: 8 JULY 2024
title: Title Sheet

A 1.0

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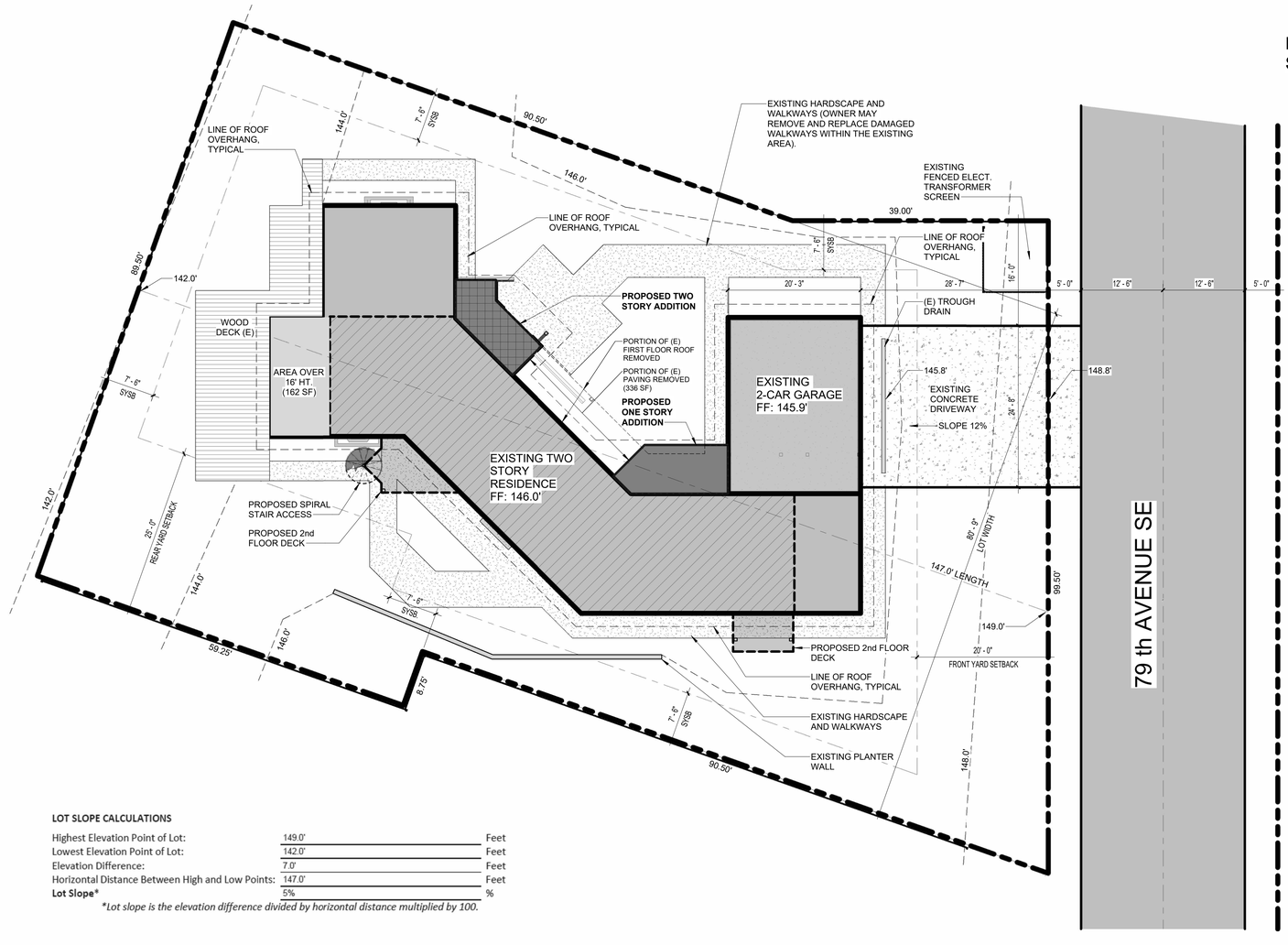
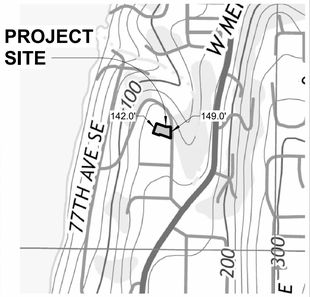




USGS TOPO MAP

SITE PLAN LEGEND

- FIRST FLOOR AREA
- SECOND FLOOR AREA
- 2-CAR GARAGE
- PROPOSED ONE STORY FIRST FLOOR ADDITION
- PROPOSED TWO STORY ADDITION
- PROPOSED SECOND FLOOR DECK
- AREA HARDSCAPE COVERED BY ROOF
- 146.0' SITE GRADES

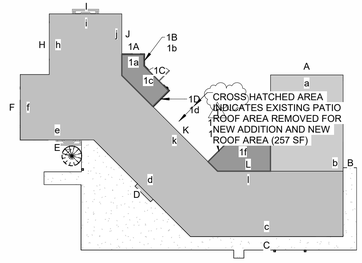
North

ABE CALCULATION

MIDPOINT ELEVATION				WALL SEGMENT LENGTH			ELEVATION x LENGTH
A.	145.9	x	a.	23.4	=		3414
B.	145.9	x	b.	44.8	=		6536
C.	145.9	x	c.	42.6	=		6215
D.	145.9	x	d.	38.3	=		5588
E.	145.9	x	e.	20.5	=		2991
F.	143.0	x	f.	18.3	=		2617
G.	143.2	x	g.	6.1	=		874
H.	143.5	x	h.	17.0	=		2440
I.	145.9	x	i.	20.3	=		2962
J.	145.9	x	j.	11.2	=		1634
K.	145.9	x	k.	21.6	=		3151
L.	N/A	x	l.	N/A	=		N/A
M.	145.9	x	m.	19.5	=		2845
ADDITION:							
1A	145.9	x	1a	6.4	=		934
1B	145.9	x	1b	3.3	=		481
1C	145.9	x	1c	9.9	=		1444
1D	145.9	x	1d	6.4	=		934
1E	145.9	x	1e	6.7	=		978
1F	145.9	x	1f	12.7	=		1853
TOTALS:				329.0			47891

47891' / 329.0' = 145.6' Average Building Elevation (ABE)

MAXIMUM BUILDING HEIGHT: 145.6 + 30' = 175.6'



SITE PLAN NOTES:

1. NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.
2. NO CHANGES TO EXISTING DRAINAGE OR SITE LANDSCAPING IS TO OCCUR WITH THIS PROJECT.
3. EXISTING SOLID WALKWAYS, DRIVEWAYS, PATIOS, AND SIMILAR SOLID SURFACES SHALL REMAIN OR BE REPLACED IN SAME LOCATION AND AREA OF EXISTING.
4. NO GRADING OR CHANGE IN GRADES ARE TO OCCUR WITH THIS PROJECT.
5. EXCAVATION FOR ALL FOOTINGS SHALL HAVE SOILS REMAIN ON SITE AND/OR BE REMOVED AND DISPOSED OF IN AN APPROVED LOCATION AND SHALL BE LESS THAN 50 CY.
6. ALL REMOVED CONCRETE, CONSTRUCTION MATERIAL, AND WASTE SHALL BE PROPERLY DISPOSED OF IN AN APPROVED DISPOSAL LOCATION.
7. ALL CONSTRUCTION MATERIAL AND WASTE SHALL BE PROPERLY PROTECTED AND STORED TO PREVENT DUST, RUNOFF, OR DAMAGE TO THE SITE, THE MATERIAL, AND/OR THE ADJACENT PROPERTIES.

LOT SLOPE CALCULATIONS

Highest Elevation Point of Lot:	149.0'	Feet
Lowest Elevation Point of Lot:	142.0'	Feet
Elevation Difference:	7.0'	Feet
Horizontal Distance Between High and Low Points:	147.0'	Feet
Lot Slope*	5%	%

**Lot slope is the elevation difference divided by horizontal distance multiplied by 100.*

1 Site
1" = 10'-0"

GROSS FLOOR AREA CALCULATIONS

Building Area	Existing Area	Removed Area	New/Addition Area	Total
Upper Floor	1,498 Sq. Ft.	0 Sq. Ft.	96 Sq. Ft.	1,594 Sq. Ft.
Main Floor	2,195 Sq. Ft.	0 Sq. Ft.	211 Sq. Ft.	2,406 Sq. Ft.
Gross Basement Area	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
Garage/ Carport	545 Sq. Ft.	0 Sq. Ft.	0 Sq. Ft.	545 Sq. Ft.
Total Floor Area	4,238 Sq. Ft.	0 Sq. Ft.	307 Sq. Ft.	4,545 Sq. Ft.
Accessory Buildings	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
Accessory Dwelling Unit	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
2nd & 3rd Story Roofed Decks	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
Basement Area Excluded	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
150% GFA Modifier* (main and upper floor x2)	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
200% GFA Modifier* (main and upper floor x2)	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
	162		162	
Staircase GFA Modifier* (x2 for a three story staircase, x3 for a four story staircase)	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
	33		33	
TOTAL Building Area	4,433 Sq. Ft.	Sq. Ft.	307 Sq. Ft.	4,740 Sq. Ft.

**Enter the actual room area*

A.	Lot Area		15,246		Square Feet
B.	Zone	R-8.4 ☐ R-9.6 ☐	R-12 ☑	R-15 ☐	
C.	Allowed Gross Floor Area (refer to "allowed GFA")		6,098		Square Feet
D.	Allowed Gross Floor Area		40		% of Lot
E.	Proposed Gross Floor Area		4,740		Square Feet
F.	Proposed Gross Floor Area		31		% of Lot

Gross floor area calculations found on Plan Sheet # A1.1

Basement exclusion calculations found on Plan Sheet # N/A

HARDSCAPE CALCULATIONS

A.	Gross Lot Area	15,246	Square Feet
B.	Net Lot Area	15,246	Square Feet
C.	Area Borrowed from Lot Coverage	1,592	Square Feet
D.	Allowed Hardscape Area = 9% of lot area + C	1,372	% of Lot
E.	Allowed Hardscape Area	2,964	Square Feet
F.	Total Existing Hardscape Area:		
1.	Uncovered Decks	485 (wood decks)	Square Feet
2.	Uncovered Patios	0	Square Feet
3.	Walkways	1,446	Square Feet
4.	Stairs	0	Square Feet
5.	Rockeries and Retaining Walls	0	Square Feet
6.	Other	0	Square Feet
7.	Total Existing Hardscape Area (F1+F2+F3+F4+F5+F6)	1,931	Square Feet
G.	(Total Hardscape Area Removed)	336 (Removed for Bldg. Addition)	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	1,595	Square Feet
J.	Total Project Hardscape Area = (I/B)x100	10	% of Lot

Hardscape calculations shown on Plan Sheet # A1.1

LOT COVERAGE CALCULATIONS

A.	Gross Lot Area	15,246	Square Feet
B.	Net Lot Area	15,246	Square Feet
C.	Allowed Lot Coverage Area	6,098	Square Feet
D.	Allowed Lot Coverage	40	% of Lot
E.	Existing Lot Coverage:		
1.	Main Structure Roof Area	3,710	Square Feet
2.	Accessory Building Roof Area	N/A	Square Feet
3.	Vehicular Use (driveway, paved access easements [portion used by the lot for access], parking	704	Square Feet
4.	Covered Patios and Covered Decks	0	Square Feet
5.	Total Existing Lot Coverage Area (E1+E2+E3+E4)	4,414	Square Feet
F.	(Total Lot Coverage Area Removed)	257 (Existing patio roof removed)	Square Feet
G.	Proposed Adjustment for Single Story (Area)		Square Feet
H.	Proposed Adjustment for Flag Lot		Square Feet
I.	Total New Lot Coverage Area:		
1.	Main Structure Roof Area	222 (New roof at addition)	Square Feet
2.	Accessory Structure Roof Area	N/A	Square Feet
3.	Vehicular Use (driveway, paved access easement [portion used by the lot for access], parking)	0	Square Feet
4.	Covered Patios and Covered Decks	127	Square Feet
5.	Total New Lot Coverage Area (I1 + I2 + I3 + I4)	349	
J.	Total Project Lot Coverage Area = (E5 - F) + I5	4,506	Square Feet
K.	Proposed Lot Coverage Area = (J/B) x 100	30	% of Lot

Lot coverage calculations shown on Plan Sheet # A1.1

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaala.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date
1	Plan Check Corrections	12.05.2024

job no: 24001
date: 8 JULY 2024
title: Site Plan

A 1.1

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ENERGY CODE GENERAL NOTES:

1. THIS PROJECT SHALL COMPLY WITH ALL THE MINIMUM REQUIREMENTS AS NOTED ON TABLE 402.1.3 WHERE APPLICABLE.

2. THIS PROJECT IS AN ADDITION OF LESS THAN 500 SF AND SHALL COMPLY WITH REQUIREMENTS TO ACHIEVE A MINUM 2.0 CREDITS AS DEFINED IN THE ENERGY CODE. THE FOLLOWING ITEMS ARE TO BE INSTALLED TO ACHIEVE THE 2.0 CREDITS:

   A. BUILDING ENVELOPE OPTION 1.2, CREDIT OF 1.0:
      a. PERSCRIPTIVE COMPIANCE BASED ON TABLE R402.1.3
      b. VERICAL FENESTRATION U=0.25
      c. SLAB ON GRADE WITH PERIMETER AND UNDER SLAB R-10
   B. EFFICIENT WATER HEATING OPTION 5.4, CREIT OF 1.0
      a. VERIFY WATER HEATING HAS A UEF MIN. OF 0.91

3. SEE BUILDING SECTION(S) FOR FURTHER DEFINED AREAS OF COMPLIANCE.

WASHINGTON STATE UNIVERSITY
Energy Program

Permit#	
Address or Lot & Block	
City	Zip

These requirements apply to all the IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

Instructions: This single-family project uses the requirements of the Prescriptive Path below to incorporate the minimum values listed. Based on the conditioned floor area of the structure, the number of required additional credits must be selected by the permit applicant.

Provide all information from the following tables in as building permit drawings: Table R402.1.2 - Insulation and Fenestration Requirements by Component, Table R406.2 – Fuel Normalization Credits and R406.3 Energy Credits.

Authorized Representative Signature		*Date*	

	All Climate Zones Table 402.1.3	
	R-Value [a]	**U-Factor [a]**
Fenestration U-Factor [b,i]	n/a	0.30
Skylight U-Factor [b]	n/a	0.50
Ceiling [c]	60	n/a
Wood Frame Wall [d,j]	20+5 or 13+10	n/a
Floor	30	n/a
Below Grade Wall [c,h]	10/15/21 int + 5TB	n/a
Slab [f,g] R-Value & Depth	10, 4 ft	n/a

a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table
b. The fenestration U-factor column excludes skylights.
c. "10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.
d. R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.
e. For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.
f. R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.3.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.
g. For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.
h. Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78 percent of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.
i. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "R13+10" means R-13 cavity insulation plus R-10 continuous insulation
j. A maximum U-factor of 0.32 shall apply to vertical fenestration products installed in buildings located above 4000 feet in elevation above sea level, or in windborne debris regions where protection of openings is required under Section R301.2.1.2 of the International Residential Code.

2021 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective March 15, 2024)

Each dwelling unit ***in a residential building*** shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

1. Small Dwelling Unit: ..... **5.0 credits**
   Dwelling units less than 1500 square feet in conditioned floor area with less than 300 square feet of fenestration area. Additions to existing building greater than 500 square feet of heated floor area but less than 1500 square feet.
2. Medium Dwelling Unit: ..... **8.0 credits**
   All dwelling units that are not included in #1, #3 or #4.
3. Large Dwelling Unit: ..... **9.0 credits**
   Dwelling units exceeding 5000 square feet of conditioned floor area.
4. Dwelling units serving Group R-2 occupancies: ..... **6.5 credits**
   Section R401.1 and residential building Section R202 for Group R-2.
5. Additions 150 square feet to 500 square feet: ..... **2.0 credits**

The drawings included with the building permit application shall identify which options have been selected and the point value of each option, regardless of whether separate mechanical, plumbing, electrical, or other permits are utilized for the project

Before selecting your credits on this Summary table, review the details in Table 406.3 (Single Family), on page 4.

Table R406.2 ENERGY EQUALIZATION CREDITS			
System Type	**Description of Primary Heating Source**		**Credits – select ONE system type**
1	For combustion heating equipment meeting minimum federal efficiency standards for the equipment listed in Table C403.3.2(5) or C403.3.2(6)	0	X
2	For an initial heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) and supplemental heating provided by electric resistance or a combustion furnace meeting minimum standards listed in Table C403.3.2(5)b found in the 2021 WSEC- COMMERCIAL ENERGY CODE	1.5	☐
3	For heating system based on electric resistance only (either forced air or Zonal)	0.5	☐
4[c]	For heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) or C403.3.2(9) or Air to water heat pump units that are configured to provide both heating and cooling and are rated in accordance with AHRI 550/590	3.0	☐
5	For heating system based on electric resistance with: 1. Inverter-driven ductless mini-split heat pump system installed in the largest zone in the dwelling, or 2. With 2kW or less total installed heating capacity per dwelling	2.0	☐

a. See Section R401.1 and residential building in Section R202 for Group R-2 scope.
b. The gas back-up furnace will operate as fan-only when the heat pump is operating. The heat pump shall operate at all temperatures above 38°F (3.3°C) (or lower). Below that "changeover" temperature, the heat pump would not operate to provide space heating. The gas furnace provides heating below 38°F (3.3°C) (or lower).
c. Additional points for the HVAC system are included in Table R406.3.

2021 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective March 15, 2024)

Summary of Table R406.3				
Options	***Energy Credit Option Descriptions***		***Credits – limited to one energy option from each category [f]***	***Comments:***
1.1	Efficient Building Envelope		0.5 ☐	
1.2	Efficient Building Envelope		1.0 X	
1.3	Efficient Building Envelope		1.5 ☐	
1.4	Efficient Building Envelope	☒	2.5 ☐	
2.1	Air Leakage Control and Efficient Ventilation		1.0 ☐	
2.2	Air Leakage Control and Efficient Ventilation		1.5 ☐	
2.3	Air Leakage Control and Efficient Ventilation	☒	2.0 ☐	
3.1[e]	High Efficiency HVAC		1.0 ☐	
3.2[e]	High Efficiency HVAC		0.5 ☐	
3.3[e,c,d]	High Efficiency HVAC		0.5 ☐	
3.4[e,d]	High Efficiency HVAC		1.5 ☐	
3.5[e]	High Efficiency HVAC		1.5 ☐	
3.6[e]	High Efficiency HVAC		1.0 ☐	
3.7[e,c,]	High Efficiency HVAC		2.0 ☐	
3.8[e,d]	High Efficiency HVAC		1.0 ☐	
3.9[e]	High Efficiency HVAC		1.5 ☐	
3.10	High Efficiency HVAC	☒	2.5 ☐	
3.11	High Efficiency HVAC		0.5 ☐	
4.1	High Efficiency HVAC Distribution System		0.5 ☐	
5.1[e]	Efficient Water Heating		0.5 ☐	
5.2	Efficient Water Heating		0.5 ☐	
5.3	Efficient Water Heating		0.5 ☐	
5.4	Efficient Water Heating		1.0 X	
5.5	Efficient Water Heating		1.5 ☐	
5.6	Efficient Water Heating		2.0 ☐	
5.7	Efficient Water Heating		2.5 ☐	
5.8	Efficient Water Heating		2.5 ☐	
6.1[e]	Renewable Electric Energy (4.5 credits max)		0.5-4.5 0.0	
7.1	Appliance Package		0.5 ☐	
	Total Credits		2.0	Calculate Total

a. An alternative heating source sized at a maximum of 0.5 Watts/ft2 (equivalent) of heated floor area or 500 Watts, whichever is bigger, may be installed in the dwelling unit.
b. See Section R401.1 and residential building in Section R202 for Group R-2 scope.
c. Option 3.11 can only be taken with Options 3.1 and 3.3. To qualify to claim Option 3.11 with 3.3, the system shall be a 1-2 speed heat pump system. Variable capacity heat pumps are ineligible from claiming this option.
d. This option may only be claimed if serving System Type 4 or 5 from Table R406.2.
e. Primary living areas include living, dining, kitchen, family rooms, and similar areas.
f. Option 3.11 may only be taken with Efficient Water Heating Options 5.1 or 5.2. Equipment sizing for space heating shall be calculated as provided in Section R403.7 with increased capacity to provide a minimum of 75 percent of peak hot water demand or shall be sized in accordance with approved manufacturer's specifications or guidance. Supplementary heat for water heating system shall be in accordance with Section R403.5.7.

WARREN
W.
SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date

job no: 24001
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A 1.2

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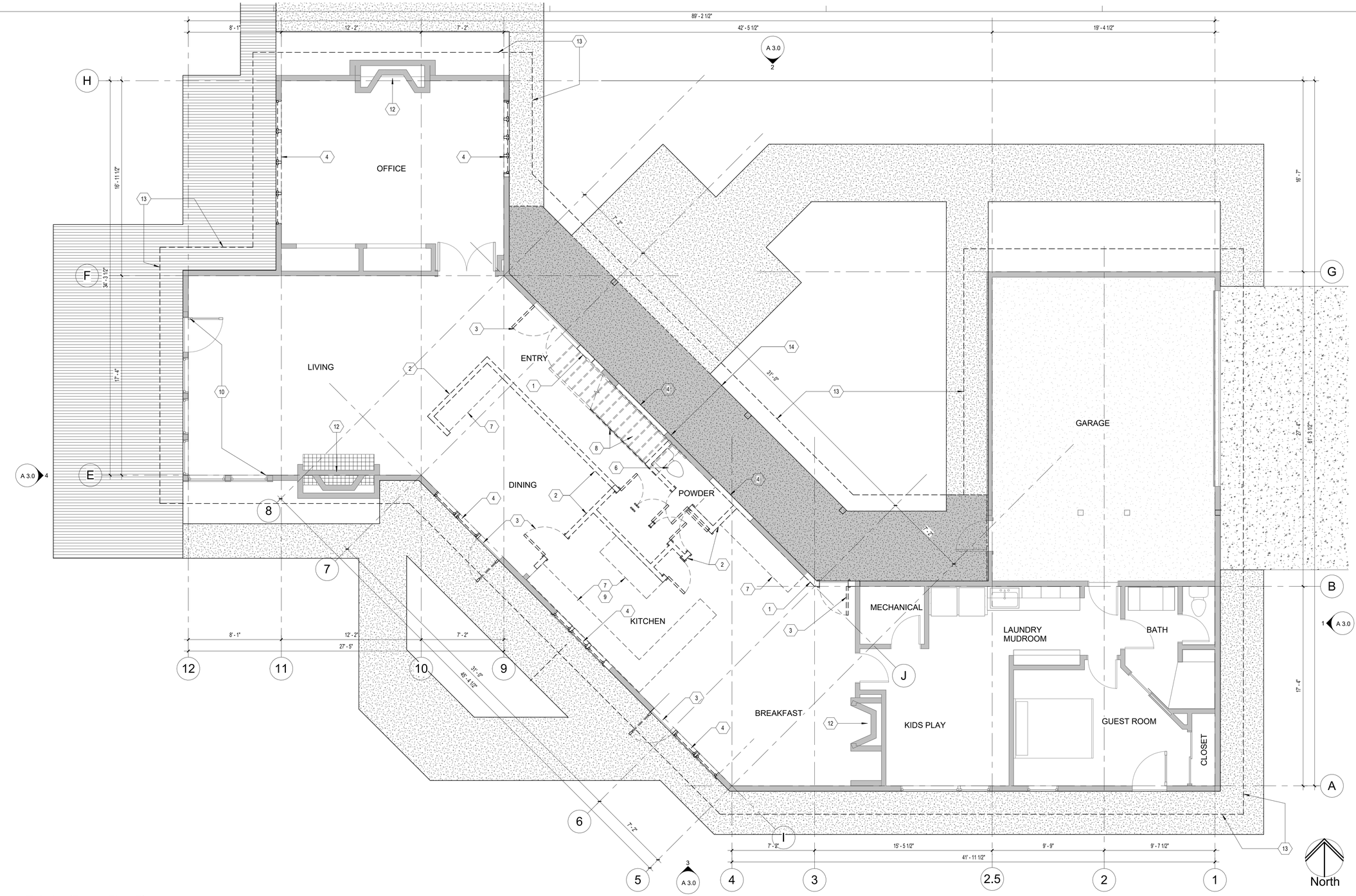

1 Existing/Demo First Floor
1/4" = 1'-0"

DEMO KEYNOTES FOR 1st AND 2nd FLOOR PLANS

1. REMOVE (E) EXTERIOR WALLS AS REQUIRED, PROVIDE TEMPORARY SUPPORT FOR BEARING CONDITIONS UNTIL NEW SUPPORTS ARE IN PLACE.
2. REMOVE (E) INTERIOR WALLS AS REQUIRED, INTERIOR WALLS ARE NON-BEARING.
3. REMOVE (E) DOOR, SAVE IF BEING REUSED.
4. REMOVE (E) WINDOW, TO BE RECYCLED IF POSSIBLE.
5. CUT (N) OPENING IN (E) WALL AS REQUIRED.
6. REMOVE (E) PLUMBING FIXTURES, CAP ANY WATER SUPPLY OR WASTE LINES AS REQUIRED.
7. REMOVE (E) CASEWORK, COUNTER TOPS. VERIFY IF ANY ARE TO BE REUSED.
8. REMOVE (E) STAIR AND RAILINGS TO ALLOW FOR NEW STAIR AND RAILINGS
9. REMOVE (E) KITCHEN APPLIANCES, TO BE RECYCLED IF POSSIBLE
10. REMOVE EXISTING WINDOW AND DOORS TO BE REPLACE WITH NEW WITHIN EXISTING OPENINGS.
11. NOT USED
12. (E) MASONRY FIREPLACE TO REMAIN.
13. LINE OF EXISTING LOWER AND UPPER ROOF OVERHANG. SEE SECOND FLOOR FOR PORTIONS OF EXISTING ROOF AREA TO BE REMOVED.
14. AREA OF EXISTING HARDSCAPE BEING REMOVED TO ACCEPT NEW BUILDING ADDITION AND BE CONVERTED TO LANDSCAPE AREA

DEMO PLAN LEGEND

- WALLS, DOORS, WINDOWS, CASEWORK, FIXTURES TO BE REMOVED
- WALLS TO REMAIN
- AREA OF EXISTING HARDSCAPE TO BE REMOVED FOR ADDITION AND LANDSCAPING (336 SF)
- PORTION OF ROOF TO BE REMOVED

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

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A 2.0.1

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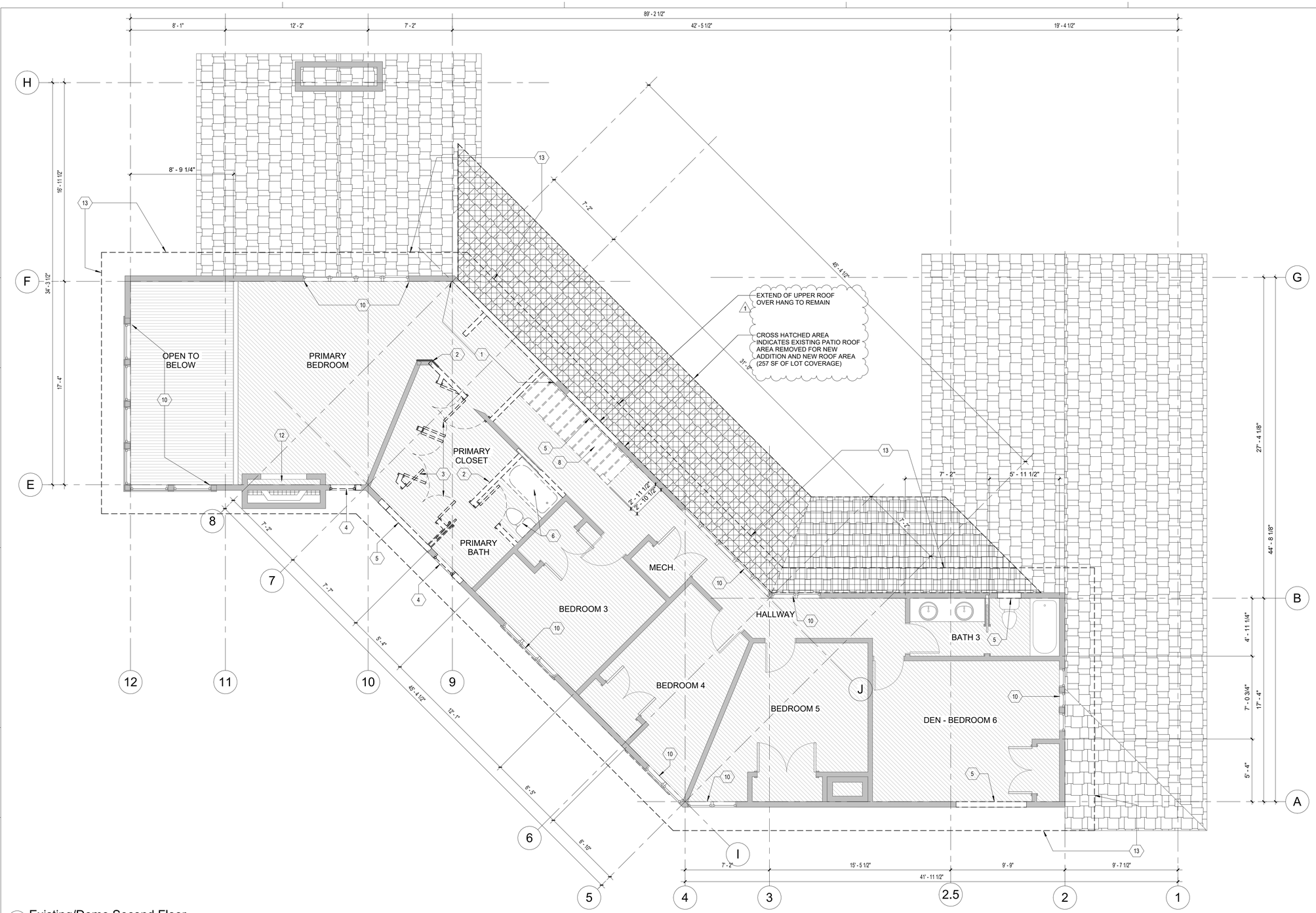

1 Existing/Demo Second Floor
1/4" = 1'-0"

DEMO KEYNOTES FOR 1st AND 2nd FLOOR PLANS

1. REMOVE (E) EXTERIOR WALLS AS REQUIRED, PROVIDE TEMPORARY SUPPORT FOR BEARING CONDITIONS UNTIL NEW SUPPORTS ARE IN PLACE.
2. REMOVE (E) INTERIOR WALLS AS REQUIRED, INTERIOR WALLS ARE NON-BEARING.
3. REMOVE (E) DOOR, SAVE IF BEING REUSED.
4. REMOVE (E) WINDOW, TO BE RECYCLED IF POSSIBLE.
5. CUT (N) OPENING IN (E) WALL AS REQUIRED.
6. REMOVE (E) PLUMBING FIXTURES, CAP ANY WATER SUPPLY OR WASTE LINES AS REQUIRED.
7. REMOVE (E) CASEWORK, COUNTER TOPS. VERIFY IF ANY ARE TO BE REUSED.
8. REMOVE (E) STAIR AND RAILINGS TO ALLOW FOR NEW STAIR AND RAILINGS
9. REMOVE (E) KITCHEN APPLIANCES, TO BE RECYCLED IF POSSIBLE
10. REMOVE EXISTING WINDOW AND DOORS TO BE REPLACE WITH NEW WITHIN EXISTING OPENINGS.
11. NOT USED
12. (E) MASONRY FIREPLACE TO REMAIN.
13. LINE OF EXISTING LOWER AND UPPER ROOF OVERHANG. SEE SECOND FLOOR FOR PORTIONS OF EXISTING ROOF AREA TO BE REMOVED.
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- WALLS TO REMAIN
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WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaala.com

Blake Family Residence

Carly & Patrick Blake

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Mercer Island, WA 98040

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A 2.0.2

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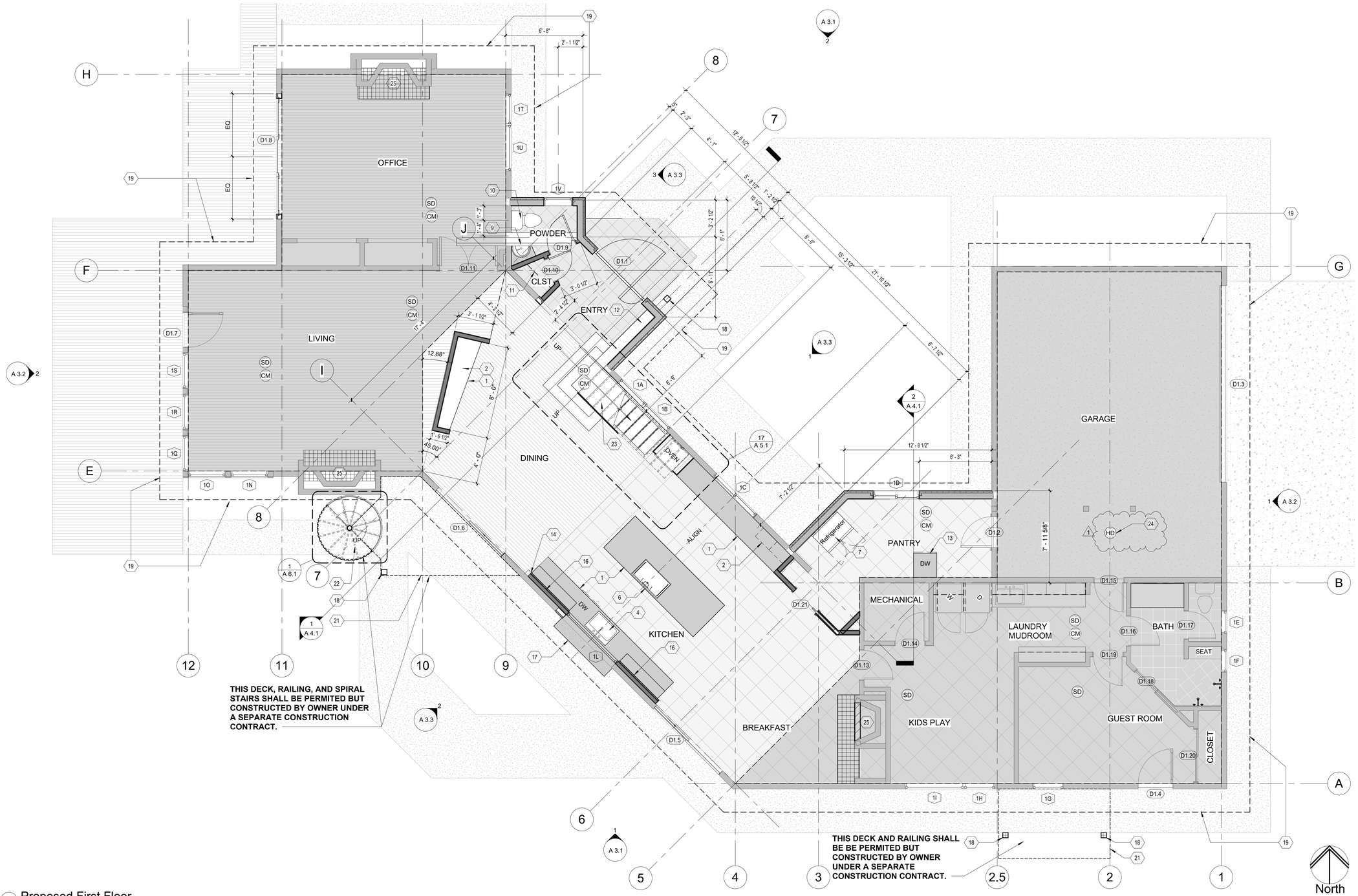

1 Proposed First Floor
1/4" = 1'-0"

1st FLOOR PLAN KEYNOTES

1. COUNTER TOP WITH BASE CABINETS BELOW
2. WALL MOUNTED UPPER CABINETS
3. UNDER COUNTER DISHWASHER
4. UNDER MOUNT SINGLE SINK WITH GARBAGE DISPOSAL,
5. BUILT-IN DOUBLE OVEN
6. ELECTRIC RANGE COOK TOP WITH EXHAUST HOOD ABOVE AND VENTED TO EXTERIOR
7. SPACE FOR REFRIGERATOR, WITH WATER CONNECTION
8. SERVICE SINK
9. LAV SINK WITH CABINET BELOW
10. 2-PIECE TANK TOILET
11. BUILT-IN SHELVING, (ROD/POLE FOR CLOTHES AT CLOSETS)
12. EXTENSION OF STAIR LANDING TO CREATE A POT SHELF.
13. COUNTER WITH DISHWASHER, PROVIDE CONNECTION FOR WATER AND WASTE AT BACK OF EXISTING CLOTHES WASHER
14. EXISTING AND NEW WALLS TO PROVIDE CHASE FOR PLUMBING WASTE FROM ABOVE TO UNDER FLOOR ACCESS BELOW.
15. FULL HEIGHT BUILT-IN CABINETS
16. DOUBLE WALL TO ACCEPT PLUMBING FROM ABOVE, VERIFY
17. EXTERIOR BAR COUNTER AS AN EXTENSION OF INTERIOR COUNTER TOP AT SAME HEIGHT.
18. EXPOSED STRUCTURAL POST, SEE STRUCTURAL
19. LINE OF ROOF OVERHANG ABOVE.
20. LINE OF EXTERIOR WALL OF FLOOR ABOVE.
21. LINE OF EXISTING DECK ABOVE
22. STEEL SPIRAL STAIR TO ACCESS 2nd FLOOR DECK ABOVE
23. NEW STAIR TO REPLACE EXISTING, SEE DETAIL STAIR PLAN FOR ADDITIONAL INFORMATION
24. PROVIDE HEAT DETECTOR. R314.2.3 A HEAT DETECTOR OR HEAT ALARM RATED FOR AMBIENT OUTDOOR TEMPERATURES AND HUMIDITY SHALL BE INSTALLED IN NEW GARAGES THAT ARE ATTACHED TO OR LOCATED UNDER NEW AND EXISTING DWELLINGS. HEAT DETECTORS AND HEAT ALARMS SHALL BE INSTALLED IN A CENTRAL LOCATION AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS
25. EXISTING WOOD BURNING ONLY FIREPLACES (NO GAS CONNECTIONS)

CONSTRUCTION LEGEND

THIS SHADED AREA INDICATES THE EXISTING INTERIOR OF RESIDENCE NOT TO BE MODIFIED AND ARE NOT A PART OF THIS PROJECT. EXTERIOR WINDOWS AND DOORS MAY BE REPLACED WHERE INDICATED.

SD — EXISTING AND/OR NEW SMOKE DETECTORS TO BE VERIFIED. SEE UTILITY PLAN FOR ADDITIONAL NOTES

CM — EXISTING AND/OR NEW CARBON MONOXIDE DETECTORS TO BE VERIFIED. SEE UTILITY PLAN FOR ADDITIONAL NOTES

WALL TYPE LEGEND

EXISTING EXTERIOR AND INTERIOR WALLS TO REMAIN, 2x4 STUDS AT 16"oc, FINISHES AS PER PLANS

EXTERIOR WALL WITH 2X6 STUDS AT 16"oc MIN. SPACING WITH EXTERIOR FINISH AS PER PLANS

EXTERIOR WALL WITH 2X4 STUDS AT 16"oc MIN. SPACING WITH EXTERIOR STONE FINISH

NOTE:
1. EXTERIOR AND INTERIOR FINISHES MAY VARY, SEE ELEVATIONS AND PLANS FOR SPECIFIC FINISHES.

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

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A 2.1

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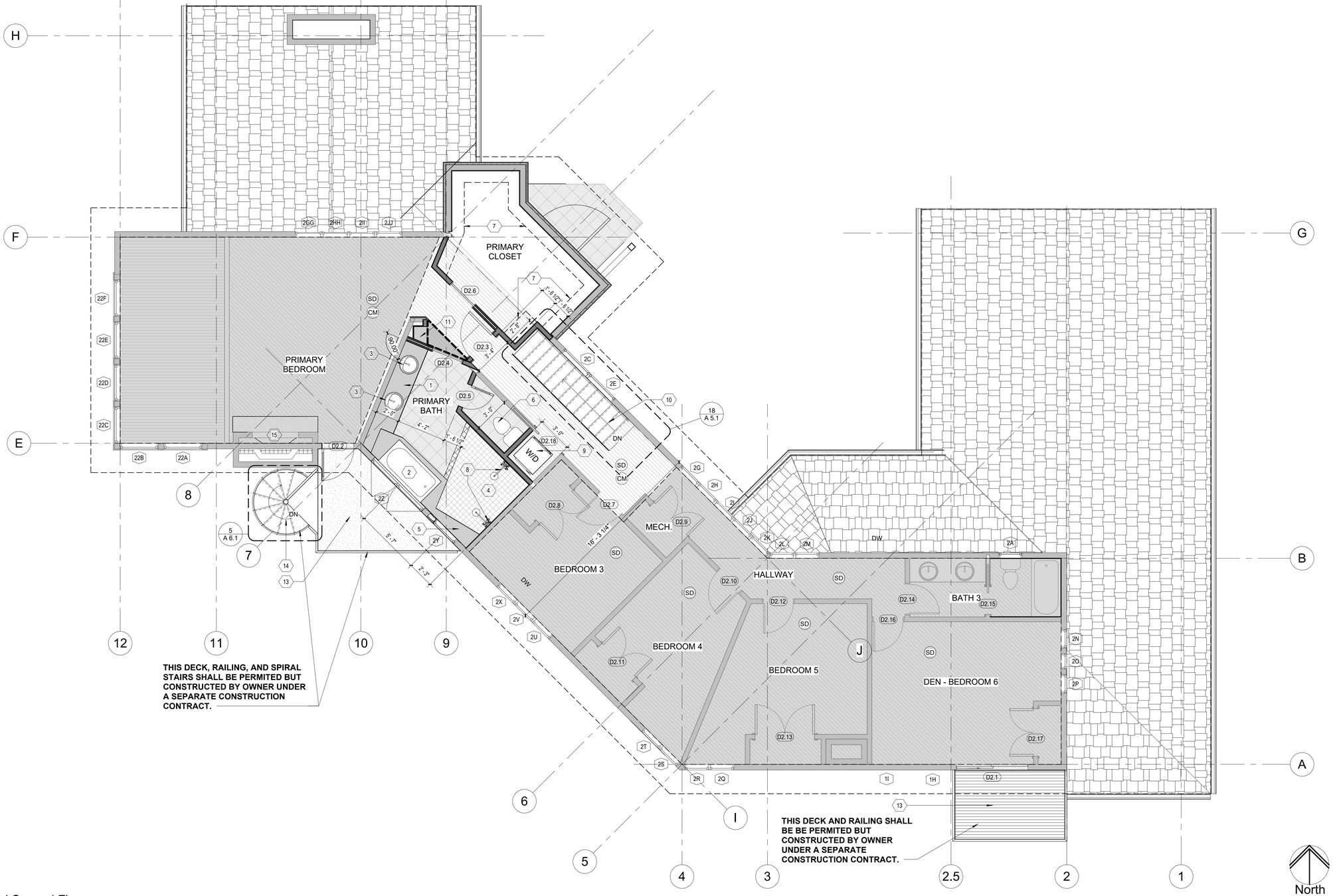

1 Proposed Second Floor
1/4" = 1'-0"

2nd FLOOR PLAN KEYNOTES

1. COUNTER TOP WITH BASE CABINETS BELOW
2. TUB WITH BUILT-IN CERAMIC TILE OR SOLID SURFACE SURROUND.
3. UNDER MOUNT LAV SINK
4. SHOWER WITH CERAMIC TILE SURROUND OVER WATER PROOF BACKING
5. SHOWER SEAT INCORPORATED WITH TUB SURROUND.
6. 2-PIECE TANK TOILET
7. BUILT-IN SHELVING, (ROD/POLE FOR CLOTHES AT CLOSETS)
8. DOUBLE SHOWER CONTROLS, VERIFY WITH OWNER
9. STACK WASHER/DRYER CLOSET, PROVIDE LOUVER DOOR FOR REQUIRED VENTILATION. SEE UTILITY PLAN FOR MORE INFORMATION.
10. NEW STAIR TO REPLACE EXISTING STAIR, SEE DETAIL PLAN FOR MORE INFORMATION.
11. BUILT-IN NICHE, VERIFY WITH OWNER
12. NEW DECK WITH SPACED DECK BOARDS
13. NEW DECK WITH WATERPROOF WALKING SURFACE INSTALLED AS PER MANUFACTURES REQUIREMENTS (
14. STEEL SPIRAL STAIR FOR ACCESS TO DECK
15. EXISTING WOOD BURNING ONLY FIREPLACES (NO GAS CONNECTIONS)

CONSTRUCTION LEGEND

THIS SHADED AREA INDICATES THE EXISTING INTERIOR OF RESIDENCE NOT TO BE MODIFIED AND ARE NOT A PART OF THIS PROJECT. EXTERIOR WINDOWS AND DOORS MAY BE REPLACED WHERE INDICATED.

SD — EXISTING AND/OR NEW SMOKE DETECTORS TO BE VERIFIED. SEE UTILITY PLAN FOR ADDITIONAL NOTES

CM — EXISTING AND/OR NEW CARBON MONOXIDE DETECTORS TO BE VERIFIED. SEE UTILITY PLAN FOR ADDITIONAL NOTES

WALL TYPE LEGEND

EXISTING EXTERIOR AND INTERIOR WALLS TO REMAIN, 2x4 STUDS AT 16"oc, FINISHES AS PER PLANS

EXTERIOR WALL WITH 2X6 STUDS AT 16"oc MIN. SPACING WITH EXTERIOR FINISH AS PER PLANS

EXTERIOR WALL WITH 2X4 STUDS AT 16"oc MIN. SPACING WITH EXTERIOR STONE FINISH

NOTE:
1. EXTERIOR AND INTERIOR FINISHES MAY VARY, SEE ELEVATIONS AND PLANS FOR SPECIFIC FINISHES.

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

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job no: 24001
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A 2.2

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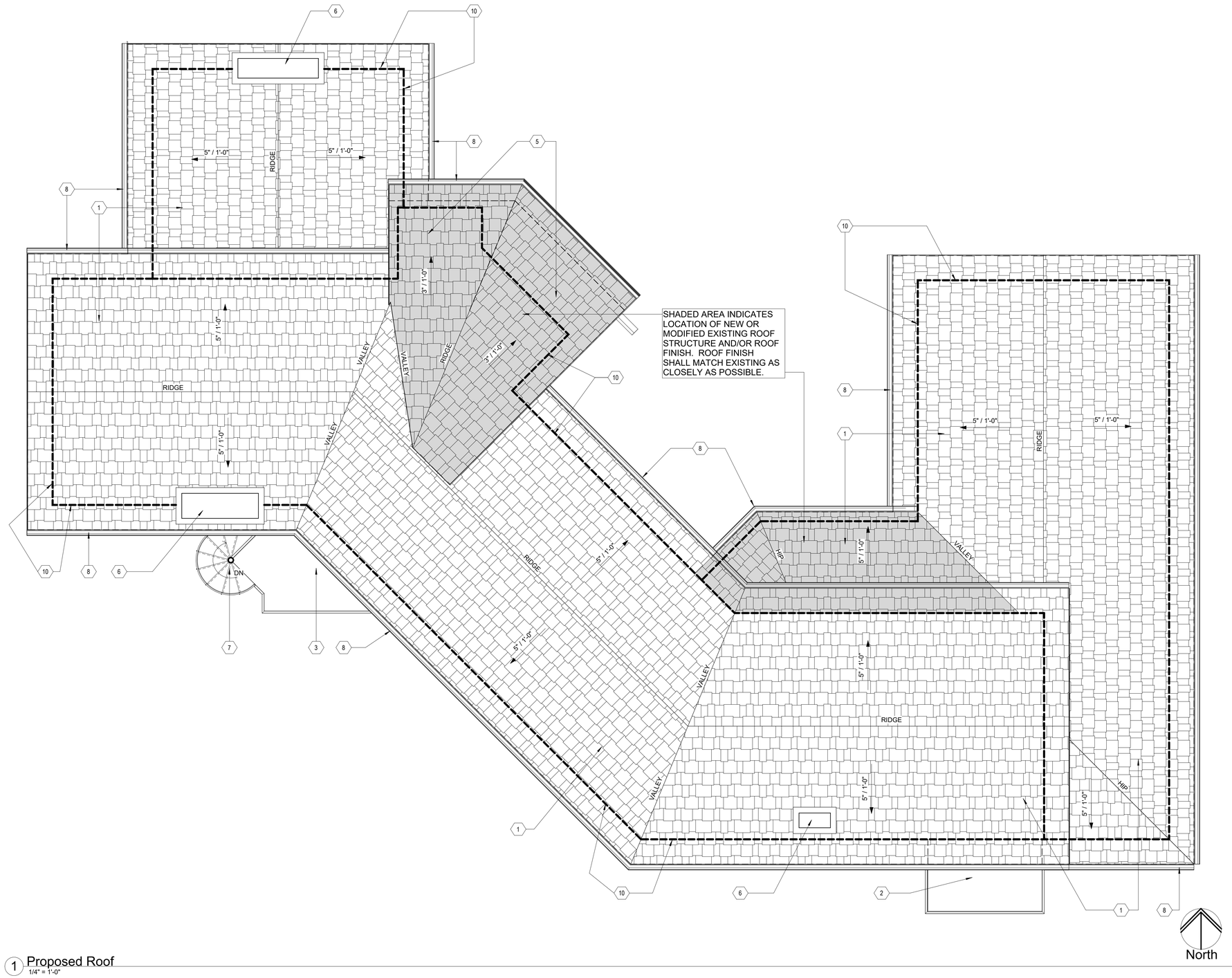

1 Proposed Roof
1/4" = 1'-0"

ROOF GENERAL NOTES:

1. **ROOFING**:
   A. **SLOPED ROOF** SHALL BE A COMPOSITION ROOFING: SHALL BE CLASS "A" ROOFING ASSEMBLY, BY GAF, **ESR-1475**, COLOR TO MATCH EXISTING (OR APPROVED EQUAL)
2. ALL NEW ROOFING SHALL BE INSTALLED AS PER MANUFACTURER AND PROPERLY INSTALLED WITH FLASHING TO BE WATERTIGHT AND QUALIFIED FOR MANUFACTURER'S WARRANTEE.
3. ALL ROOF FLASHING SHALL BE OF SIMILAR MATERIALS AND SHEET METAL TO MATCH EXISTING GAUGE AND MATERIAL, INSTALLED WATER TIGHT AS REQUIRED BY ROOFING MANUFACTURER.
4. FOR ROOF AND ATTIC VENTILATION, SEE **ATTIC VENTILATION PLAN 2/A2.1**

ROOF PLAN KEYNOTES

1. (E) COMPOSITION SHINGLE ROOFING, CLASS A ROOFING
2. (N) DECK AT SECOND FLOOR WITH OPEN SPACED SIMULATED WOOD DECKING OVER PRESSURE TREATED FRAMING.
3. (N) DECK AT SECOND FLOOR WITH WATERPROOF WALKING SURFACE (CLASS A SYSTEM).
4. NOT USED
5. (N) COMPOSITION SHINGLE ROOF TO MATCH EXISTING ROOFING.
6. (E) MASONRY CHIMNEY WITH SPARK ARRESTOR SHALL BE PROVIDED AT CHIMNEY CAP WITH A CORROSION RESISTANT SCREEN WITH OPENINGS NOT TO EXCEED 3/8"
7. (N) STEEL SPIRAL STAIR.
8. (E) AND (N) ROOF GUTTER WITH DOWNSPOUTS TO EXTEND TO EXISTING PLANTERS AND LANDSCAPING
9. NOT USED
10. LINE OF EXTERIOR WALL OF BUILDING BELOW ROOF

WARREN W. SCOTT

1117 Eolus Avenue
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760.943.8180
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A 2.3

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RESIDENTIAL PLUMBING NOTES:

1. THE CONTROL VALVES IN SHOWERS, BATHTUBS, AND BIDETS MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES.

2. WATER CONSERVING FIXTURES:

   A. NEW WATER CLOSETS SHALL USE NO MORE THAN 1.28 GALLONS OF WATER PER FLUSH,
   B. KITCHEN FAUCETS MAY NOT EXCEED 1.8 GPM,
   C. LAVATORIES ARE LIMITED TO 1.5 GPM, AND
   D. SHOWERHEADS MAY NOT EXCEED 2.0 GPM OF FLOW

3. FOR ALL NEW HOT WATER PIPING SIZED 3/4" OR LARGER IS REQUIRED TO BE INSULATED AS FOLLOWS: 1" PIPE SIZE OR LESS: 1" THICK INSULATION; LARGER PIPE SIZES REQUIRE 1-1/2" THICK INSULATION. NOTE: IN ADDITION, THE 1/2" SIZE HOT WATER PIPE TO THE KITCHEN SINK IS REQUIRED TO BE INSULATED. ES 150.0(J) 2

RESIDENTIAL ELECTRICAL NOTES:

1. SMOKE ALARMS: PROVIDE SMOKE ALARMS IN THE FOLLOWING LOCATIONS:

   1) IN EACH SLEEPING ROOM.
   2) OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
   3) ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS. [SEC. R314.3).

2. ALL SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE GOVERNING CRC AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72. SYSTEMS AND COMPONENTS SHALL BE CALIFORNIA STATE FIRE MARSHAL LISTED AND APPROVED IN ACCORDANCE WITH CCR, TITLE 19, DIVISION 1 FOR THE PURPOSE FOR WHICH THEY ARE INSTALLED. [SEC. R314.1)

3. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. SMOKE ALARMS WITH INTEGRAL STROBES THAT ARE NOT EQUIPPED WITH BATTERY BACKUP SHALL BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION. SMOKE ALARMS SHALL BE INTERCONNECTED [SEC. R314.4]

NOTE: ALL EXISTING SMOKE DETECTORS MORE THAN 10 YEARS OLD SHALL BE REPLACED (SEC. R314.3.2)

4. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. [SEC. R315.1].

5. CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS

6. SINGLE- AND MULTIPLE-STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL 2034. CARBON MONOXIDE DETECTORS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL 2075." [SEC. R315.3]

7. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. ALARM WIRING SHALL BE DIRECTLY CONNECTED TO THE PERMANENT BUILDING WIRING WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION. (SEC. R315.1 .1)

8. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARM SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. [SEC. R315.2.2].

9. ALL RECEPTACLES SHALL BE PROPERLY LOCATED AND TAMPER RESISTANT RECEPTACLES, NEC 210.52

10. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT TYPE AND GFCI PROTECTED

11. PROVIDE ARCH-FAULT PROTECTION FOR ALL OUTLETS IN ALL ROOMS DESCRIBED IN NEC 210.8(A), INCLUDING FAMILY, LIVING, KITCHEN, LAUNDRY AREAS, BEDROOMS, DINING, HALLS, ETC.

12. PROVIDE GFCI PROTECTED OUTLETS FOR LOCATIONS DESCRIBED IN NEC 210.8, INCLUDING KITCHENS, GARAGES, BATHROOMS, EXTERIOR, LAUNDRY AREAS, KITCHEN DISHWASHERS AND WITHIN 6' OF SINKS, ETC.

13. PROVIDE A SEPARATE 20 AMP CIRCUIT DEDICATED TO EACH BATHROOM,

14. RESIDENTIAL ENERGY LIGHTING REQUIREMENTS:
   - IN THE KITCHEN, ALL LIGHT FIXTURES SHALL BE **LED** TYPE FIXTURES,
   - IN BATHROOMS, ALL LIGHT FIXTURES SHALL BE **LED** TYPE FIXTURES AND BE CONTROLLED BY A VACANCY SENSOR.
   - ALL LIGHTING INSTALLED IN GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE **LED** TYPE FIXTURES AND BE CONTROLLED BY VACANCY SENSORS.
   - ALL OTHER ROOMS (NOT DESCRIBED ABOVE) SHALL BE **LED** TYPE FIXTURES WITH VACANCY SENSORS AND/OR DIMMERS
   - ALL OUTDOOR LIGHTING SHALL BE **LED** TYPE FIXTURES WITH A COMBINATION PHOTO-CONTROL / MOTION SENSOR

   NOTE: ALL **LED** TYPE FIXTURES SHALL BE CERTIFIED AS **HIGH EFFICACY** FIXTURES

16. DIMMERS OR VACANCY SENSORS SHALL CONTROL ALL LED STYLE LUMINARIES. TWO EXCEPTIONS: FIXTURES INSTALLED IN HALLWAYS OR (CLOSETS UNDER 70 SQFT.)

RESIDENTIAL VENTILATION REQUIREMENTS:

1. KITCHEN IS PROVIDED WITH A RANGE HOOD DUCTED TO THE EXTERIOR WITH A MINIMUM 100 CFM

2. BATHROOMS ARE TO BE PROVIDED WITH EXHAUST FANS (MINIMUM 50 CFM) TO BE DUCTED TO THE EXTERIOR. A BATHROOM IS DEFINED "AS A ROOM WITH A BATHTUB, SHOWER, OR SPA OR SOME SIMILAR SOURCE OF MOISTURE ".

3. RESIDENTIAL BATHROOM EXHAUST FANS SHALL BE ENERGY STAR RATED AND SHALL BE CONTROL BY A HUMIDISTAT CAPABLE OF AN ADJUSTMENT BETWEEN 50 AND 80% HUMIDITY. EXCEPTION: CONTROL BY A HUMIDISTAT IS NOT REQUIRED IF THE BATHROOM EXHAUST FAN IS ALSO THE DWELLING WHOLE HOUSE VENTILATION.

4. ALL FANS INSTALLED TO MEET ALL OF THE PRECEDING REQUIREMENTS MUST BE SPECIFIED AT A NOISE RATING OF A MAXIMUM 1 "SONE" (FOR THE CONTINUOUS USE CALCULATION) OR 3 "SONE" (FOR THE INTERMITTENT USE CALCULATION).

5. PROVIDE 5 AIR CHANGES PER HOUR FOR BATHROOM AND LAUNDRY ROOM VENTILATION.

UTILITY SYMBOL LEGEND:

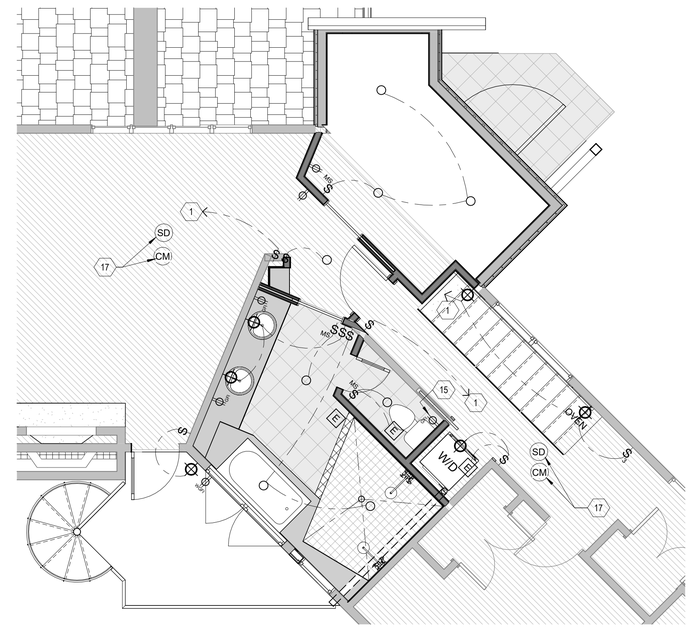
- DUPLEX OUTLET , 110V (15"ABOVE FIN. FLR. U.N.O.)
- OUTLET W/ GROUND FAULT INTERRUPTER
- SINGLE 220V APPLIANCE OUTLET
- 1/2 HOT - 1/2 SWITCHED OUTLET
- MULTIPLE DUPLEX OUTLET
- FLUSH FLOOR OUTLET W/ COVER
- SINGLE POLE SWITCH (44" ABOVE FIN. FLR. U.N.O.)
- DIMMER CONTROL SWITCH
- THREE WAY SWITCH
- THREE WAY DIMMER SWITCH
- FOUR WAY SWITCH
- SWITCH WITH MOTION SENSOR CONTROL
- WALL OR SURFACE MOUNTED LIGHT FIXTURE
- RECESSED LIGHT FIXTURE (6" DIA. ROUND)
- RECESSED WALL WASH LIGHT FIXTURE (4" DIA.)
- SURFACE MOUNTED ROOM MOTION SENSOR
- SMOKE DETECTOR PERMANENTLY WIRED WITH BACK-UP BATTERIES
- CARBON MONOXIDE ALARM/DETECTOR PERMANENTLY WIRED WITH BACK-UP BATTERIES
- EXHAUST FAN DUCTED TO EXTERIOR WITH BACK DRAFT BAFFLE
- TELE-DATA (RJ-JACK) (1) RJ JACK FOR TELEPHONE AND (1) RJ45 JACK FOR DATA
- T.V. OUTLET - 75OHM, TYPE F, FEMALE COAX JACK
- TRACK LIGHT, SIZE / LENGTH AS NOTED
- LED TROFFER FIXTURE, FIXTURE SIZE AS NOTED
- LED STRIP LIGHTING, UNDER CAB. FIXTURE
- FUEL GAS SUPPLY OUTLET
- HOSE BIB, W/ BACK FLOW PREVENTER
- BUTTON CONTROL
- GARBAGE DISPOSAL
- JUNCTION BOX WITH DIRECT WIRE TO EQUIPMENT
- CEILING FANS WITH LIGHT ON 3 WAY DIMMER (ALL FAN CONTROL SWITCHES SHALL BE WIRED FOR SEPARATE CONTROLS FOR LIGHT AND FAN) PLUS ALWAYS ON CIRCUIT FOR CEILING FAN.
- WALL MOUNTED MINI-SPLIT FAN COIL UNIT
- GROUND MOUNTED MINI-SPLIT COMPRESSOR UNIT

UTILITY PLAN KEYNOTES

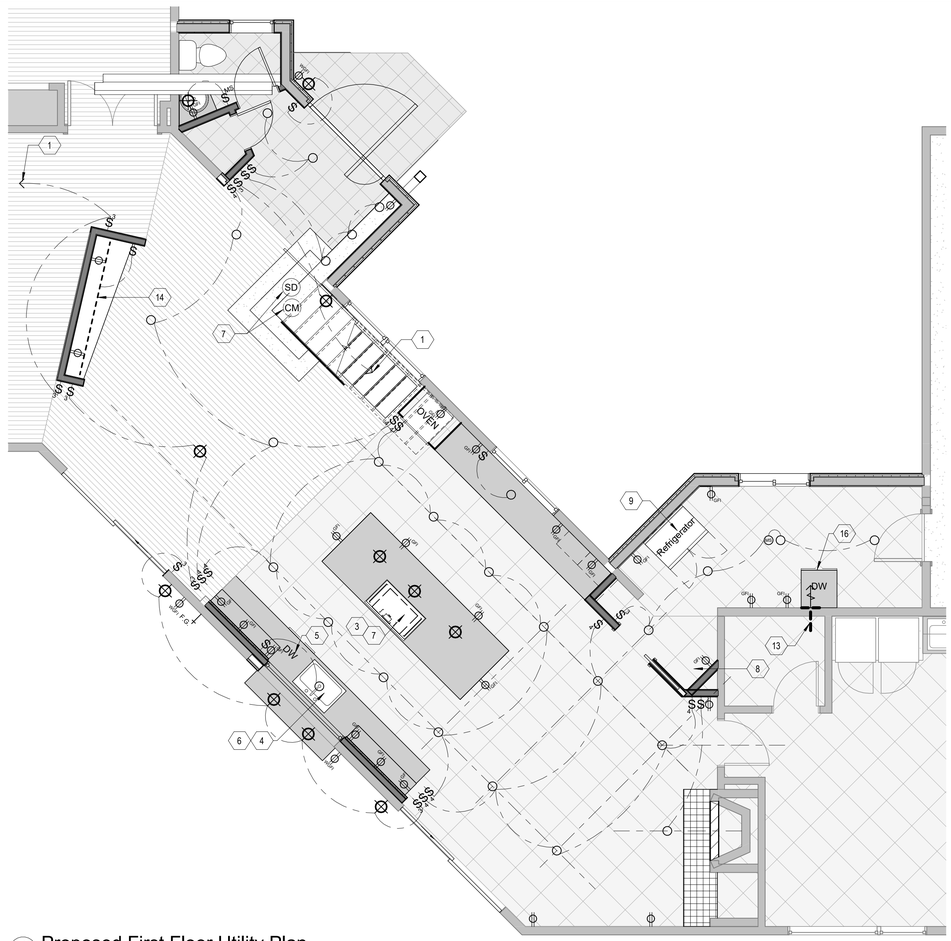
1. VERIFY THE CONNECTION TO EXISTING LIGHTING WHERE OCCURS
2. VERIFY EXISTING AND NEW SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR LOCATIONS TO MEET CODE REQUIREMENTS
3. PROVIDE EXHAUST HOOD AND LIGHTING AS PER OWNER. EXHAUST HOOD SHALL BE EXHAUSTED TO EXTERIOR.
4. PROVIDE GARBAGE DISPOSAL CIRCUIT AT SINK AND WASTE CONNECTION
5. PROVIDE DISHWASHER CIRCUIT AT DISHWASHER AND WASTE CONNECTION WITH AIR GAP
6. PROVIDE INSTA-HOT DENSENESS CIRCUIT IN SINK CABINET
7. PROVIDE REQUIRED CIRCUIT FOR COOK TOP
8. PROVIDE REQUIRED CIRCUIT FOR OVENS
9. PROVIDE CIRCUIT FOR REFRIGERATOR AND WATER CONNECTION
10. PROVIDE ELECTRIC/GAS CONNECTIONS FOR STACK WASHER DRYER
11. PROVIDE 4" DIA. SMOOTH METAL EXHAUST PIPE FOR DRYER VENT. VENT NOT TO EXCEED 14' WITH NO MORE THAN (2) 90° BENDS, AND PROVIDE BACK FLOW PREVENTER AT EXTERIOR.
12. DOOR TO LAUNDRY SHALL BE FULLY LOUVERED FOR MAKE UP AIR TO EQUIPMENT.
13. EXTEND A NEW DUCT FROM EXISTING INTO THE PANTRY
14. UNDER CABINET STRIP LIGHT
15. PROVIDE OUTLET FOR BIDET TOILET SEAT OPERATIONS
16. PROVIDE DISHWASHER CIRCUIT, WASTE WITH AIR GAP TO CONNECT TO EXISTING WASHER WASTE. WATER SUPPLY FROM EXISTING WASHER SUPPLY.
17. LOCATION OF EXISTING AND/OR NEW SMOKE AND CARBON MONOXIDE DETECTORS. SEE FULL PROPOSED FLOOR PLANS FOR ALL DETECTOR LOCATIONS.

GENERAL UTILITY NOTES:

1. ALL NEW OUTLETS, LIGHTING, FIXTURES AND APPLIANCES SHALL BE VERIFIED WITH OWNER AS TO FINAL LOCATIONS AND DOCUMENTATION REQUIRED FOR INSTALLATION.
2. VERIFY WITH OWNER ANY ADDITIONAL ITEMS NOT OTHERWISE SHOWN ON THESE PLANS.
3. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND LOCATION OF LIGHTS, OUTLETS, CIRCUITS THAT NEED TO BE COORDINATED WITH NEW CONSTRUCTION.
4. ALL SURFACE LIGHTING SHALL BE BY OWNER, INSTALLED BY CONTRACTOR.
5. EXISTING HVAC DUCTING AND REGISTERS SHALL BE VERIFIED AND MODIFICATION MAY BE REQUIRED BASED ON NEW INTERIOR LAYOUTS.
6. VERIFY WITH OWNER SWITCHING REQUIRING SPECIAL CONTROLS, INCLUDING DIMMERS, MOTION DETECTION, DAYLIGHT CONTROLS, INTERNET CONTROLS
7. FOR LOCATION OF EXISTING AND/OR NEW SMOKE AND CARBON MONOXIDE DETECTORS SEE PROPOSED FLOOR PLANS.



2 Proposed 2nd Floor Utility Plan
1/4" = 1'-0"



1 Proposed First Floor Utility Plan
1/4" = 1'-0"

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date
1	Plan Check Corrections	12.05.2024

job no: 24001
date: 8 JULY 2024
title: Electrical - Utility Plan

A 2.4

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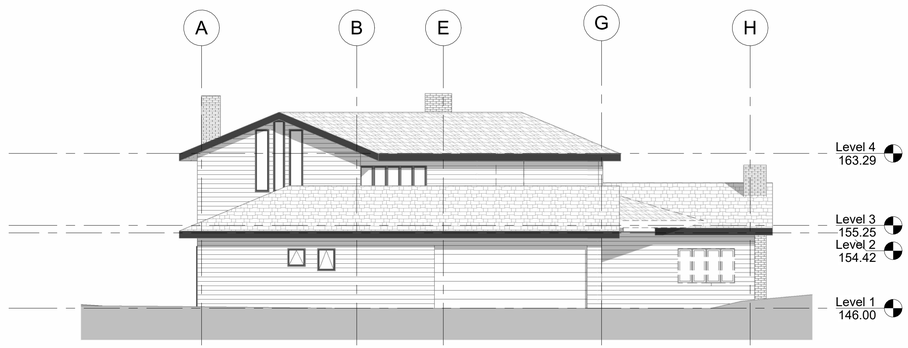
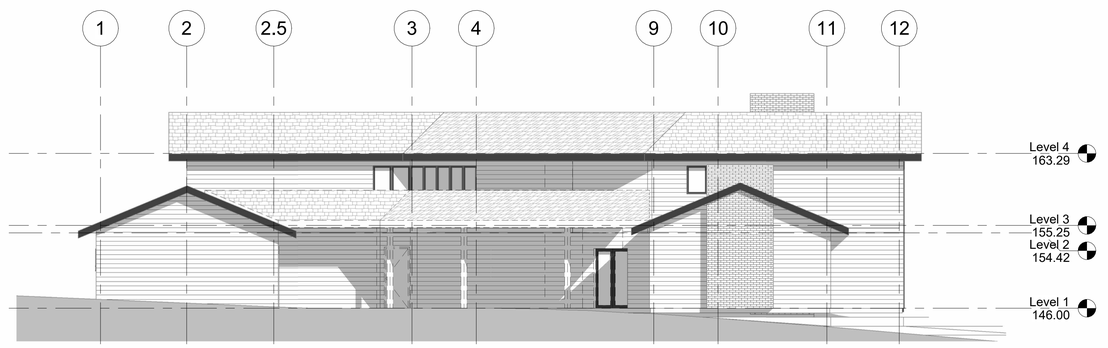
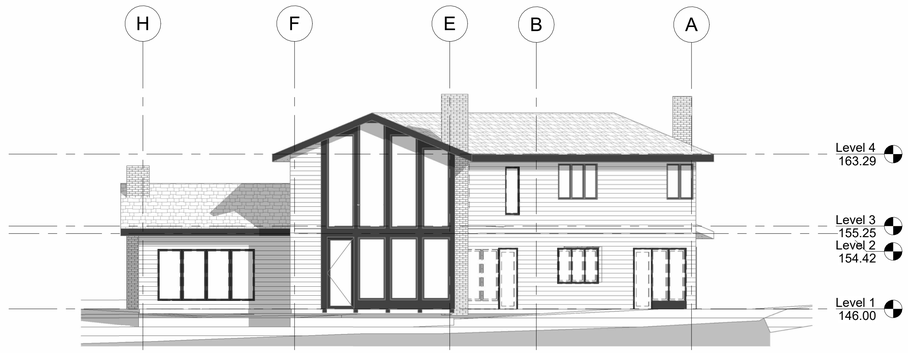


1 Elevation East -Existing
1/8" = 1'-0"



2 Elevation North-Existing
1/8" = 1'-0"



4 Elevation West-Existing
1/8" = 1'-0"

3 Elevation South-Existing
1/8" = 1'-0"

WARREN
W.
SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date

job no: 24001
date: 8 JULY 2024
title: Existing and Demo Elevations

A 3.0

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2 Elevation North-Overall
1/4" = 1'-0"

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

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ELEVATION AND SECTION KEYNOTES

1. EXISTING AND FINAL FINISHED GRADE, NO CHANGE TO EXISTING GRADES.
2. CALCULATED ABE SITE ELEVATION (145.6').
3. HEIGHEST ALLOWABLE STRUCTURE AT 30' ABOVE THE SITE ABE (175.6').
4. (E) EXTERIOR WALLS TO REMAIN
5. (N) SUPPORTING DECK AND ROOF POSTS.
6. (N) SECOND FLOOR DECK AND GUARDRAILS.
7. (E) MASONRY BRICK FINISHED CHIMNEY.
8. (N) AND (E) WINDOWS, SEE SCHEDULE.
9. (N) AND (E) DOORS, SEE SCHEDULE.
10. **(N) EXTERIOR SIDING FINISH TO BE BY OWNER UNDER A SEPARATE CONTRACT, STAINED CEDAR OR AS DETERMINED BY OWNER.**
11. (E) OR (N) COMPOSITION SHINGLE ROOF, SEE ROOF PLAN.
12. (E) ROOF EDGE WITH EXPOSED FRAMING.
13. (E) AND (N) GUTTER AND DOWNSPOUT FOR ROOF DRAINAGE
14. (N) INSULATION:
    - A. R-21 BATT INSULATION AT CAVITY SPACE AT EXTERIOR WALLS.
    - B. R-5 RIGID CONTINOUS INSULATION AT EXTERIOR WALLS.
    - C. R-38 RIGID OR SPRAY FOAM INSULATION AT SLOPED CEILING FRAMING.
    - D. R-38 BATT INSULATION AT ROOF FRAMING AT ATTIC SPACE.
    - E. R-10 RIGID INSULATION BELOW SLAB AND PERIMETER.
15. (N) EXPOSED BEAM ENTRY ROOF.
16. (N) ATTIC SPACE.
17. (E) CRAWL SPACE.
18. (N) SLAB ON GRADE AND FOUNDATIONS
19. (E) DECK RAILING NOT SHOWN TO CLEARLY SHOW BUILDING ELEVATION

WARREN
W.
SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaala.com

Blake Family Residence

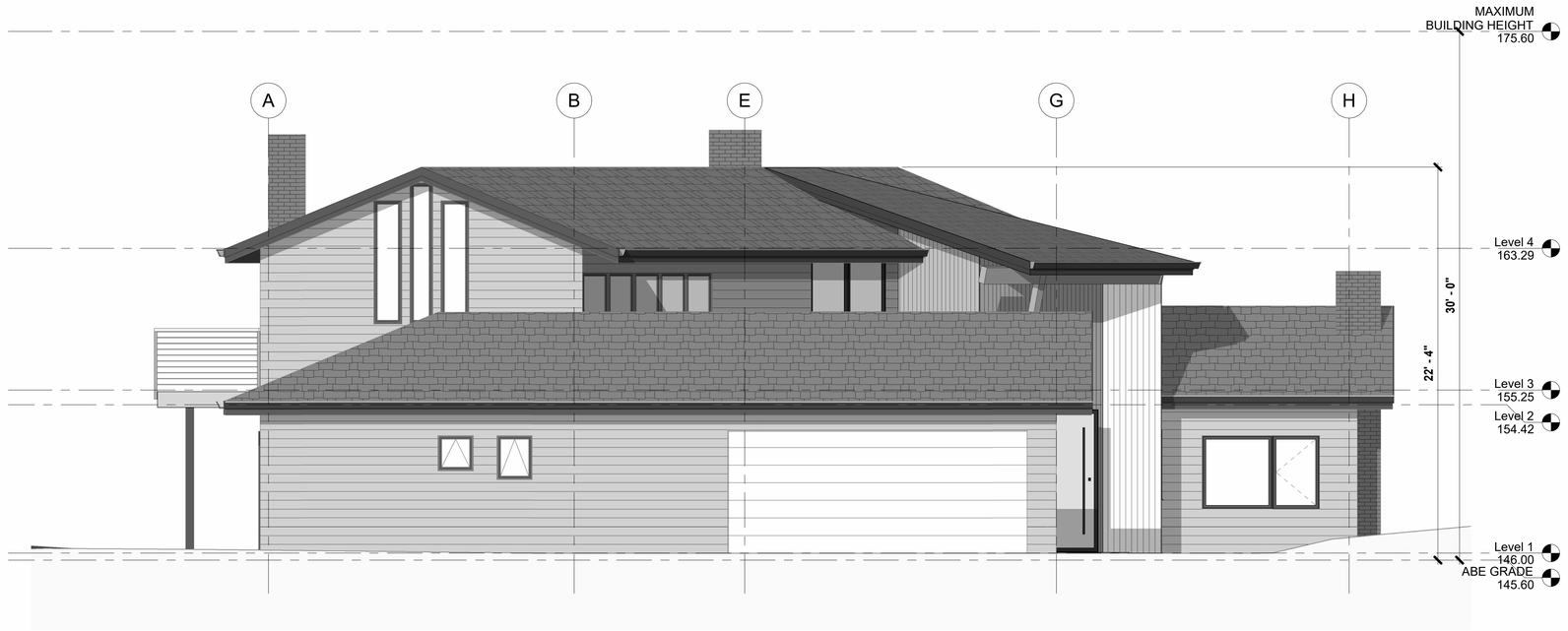
Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

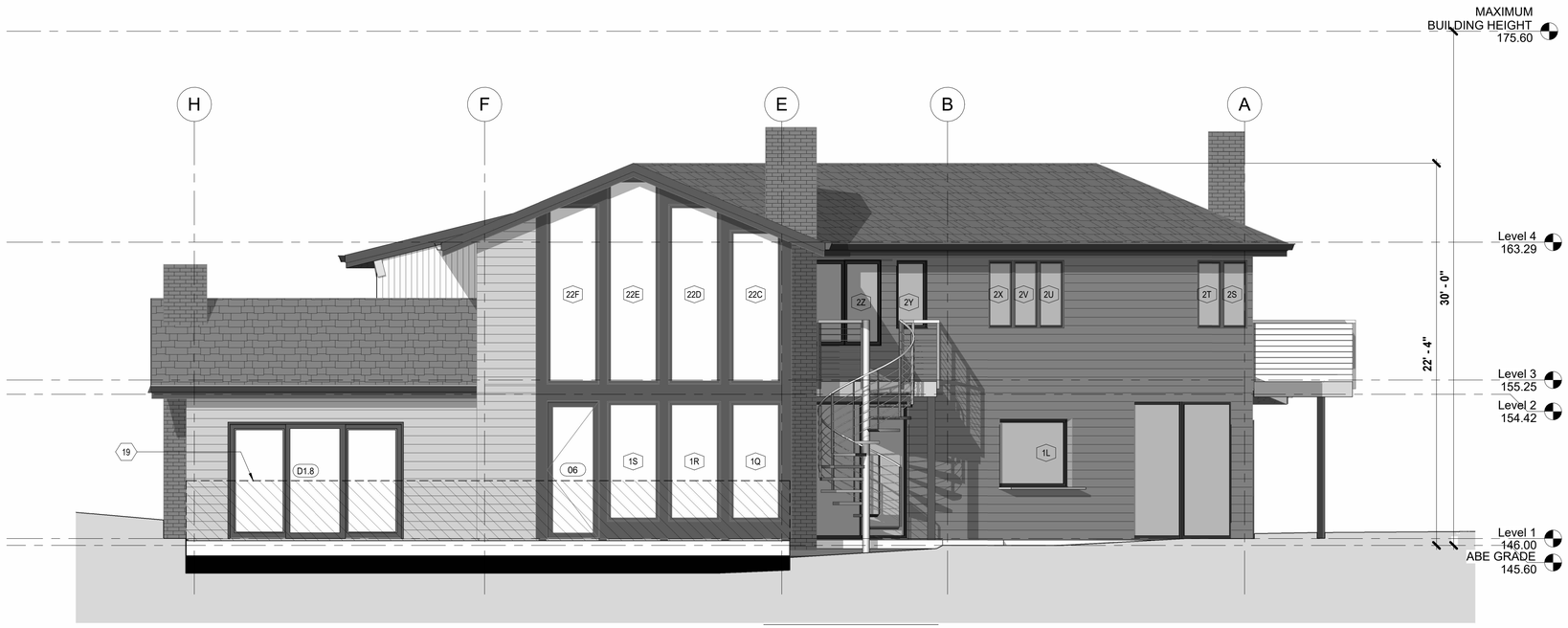
Rev	Description	Date

job no: 24001
date: 8 JULY 2024
title: Elevations

A 3.1



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



2 Elevation West Overall
1/4" = 1'-0"

ELEVATION AND SECTION KEYNOTES

1. EXISTING AND FINAL FINISHED GRADE, NO CHANGE TO EXISTING GRADES.
2. CALCULATED ABE SITE ELEVATION (145.6').
3. HEIGHEST ALLOWABLE STRUCTURE AT 30' ABOVE THE SITE ABE (175.6').
4. (E) EXTERIOR WALLS TO REMAIN
5. (N) SUPPORTING DECK AND ROOF POSTS.
6. (N) SECOND FLOOR DECK AND GUARDRAILS.
7. (E) MASONRY BRICK FINISHED CHIMNEY.
8. (N) AND (E) WINDOWS, SEE SCHEDULE.
9. (N) AND (E) DOORS, SEE SCHEDULE.
10. **(N) EXTERIOR SIDING FINISH TO BE BY OWNER UNDER A SEPARATE CONTRACT, STAINED CEDAR OR AS DETERMINED BY OWNER.**
11. (E) OR (N) COMPOSITION SHINGLE ROOF, SEE ROOF PLAN.
12. (E) ROOF EDGE WITH EXPOSED FRAMING.
13. (E) AND (N) GUTTER AND DOWNSPOUT FOR ROOF DRAINAGE
14. (N) INSULATION:
    - A. R-21 BATT INSULATION AT CAVITY SPACE AT EXTERIOR WALLS.
    - B. R-5 RIGID CONTINOUS INSULATION AT EXTERIOR WALLS.
    - C. R-38 RIGID OR SPRAY FOAM INSULATION AT SLOPED CEILING FRAMING.
    - D. R-38 BATT INSULATION AT ROOF FRAMING AT ATTIC SPACE.
    - E. R-10 RIGID INSULATION BELOW SLAB AND PERIMETER.
15. (N) EXPOSED BEAM ENTRY ROOF.
16. (N) ATTIC SPACE.
17. (E) CRAWL SPACE.
18. (N) SLAB ON GRADE AND FOUNDATIONS
19. (E) DECK RAILING NOT SHOWN TO CLEARLY SHOW BUILDING ELEVATION

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaala.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date

job no: 24001
date: 8 JULY 2024
title: Elevations

A 3.2

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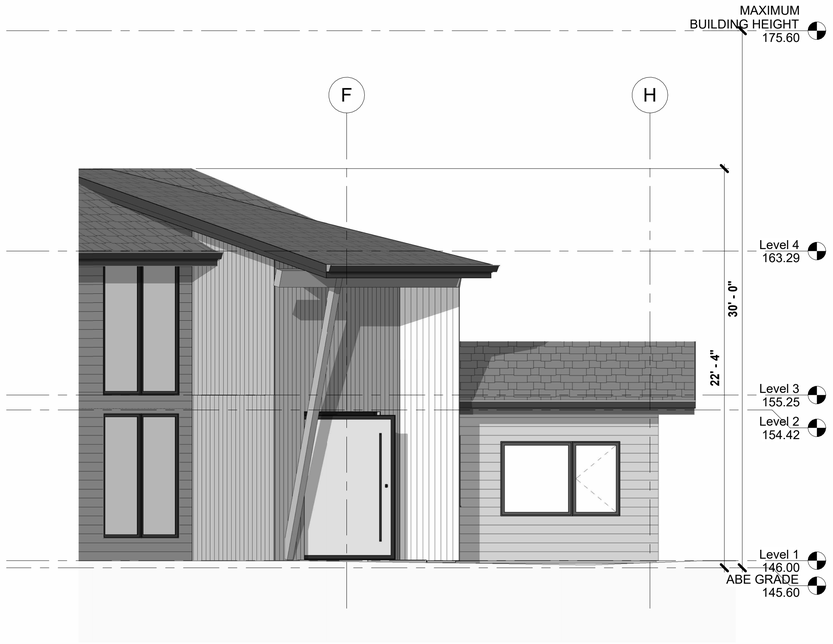
1 Elevation Southwest-Entry Courtyard
1/4" = 1'-0"

ELEVATION AND SECTION KEYNOTES

1. EXISTING AND FINAL FINISHED GRADE, NO CHANGE TO EXISTING GRADES.
2. CALCULATED ABE SITE ELEVATION (145.6').
3. HEIGHEST ALLOWABLE STRUCTURE AT 30' ABOVE THE SITE ABE (175.6').
4. (E) EXTERIOR WALLS TO REMAIN
5. (N) SUPPORTING DECK AND ROOF POSTS.
6. (N) SECOND FLOOR DECK AND GUARDRAILS.
7. (E) MASONRY BRICK FINISHED CHIMNEY.
8. (N) AND (E) WINDOWS, SEE SCHEDULE.
9. (N) AND (E) DOORS, SEE SCHEDULE.
10. **(N) EXTERIOR SIDING FINISH TO BE BY OWNER UNDER A SEPARATE CONTRACT, STAINED CEDAR OR AS DETERMINED BY OWNER.**
11. (E) OR (N) COMPOSITION SHINGLE ROOF, SEE ROOF PLAN.
12. (E) ROOF EDGE WITH EXPOSED FRAMING.
13. (E) AND (N) GUTTER AND DOWNSPOUT FOR ROOF DRAINAGE
14. (N) INSULATION:
    A. R-21 BATT INSULATION AT CAVITY SPACE AT EXTERIOR WALLS.
    B. R-5 RIGID CONTINOUS INSULATION AT EXTERIOR WALLS.
    C. R-38 RIGID OR SPRAY FOAM INSULATION AT SLOPED CEILING FRAMING.
    D. R-38 BATT INSULATION AT ROOF FRAMING AT ATTIC SPACE.
    E. R-10 RIGID INSULATION BELOW SLAB AND PERIMETER.
15. (N) EXPOSED BEAM ENTRY ROOF.
16. (N) ATTIC SPACE.
17. (E) CRAWL SPACE.
18. (N) SLAB ON GRADE AND FOUNDATIONS
19. (E) DECK RAILING NOT SHOWN TO CLEARLY SHOW BUILDING ELEVATION



3 Elevation East Entry Courtyard
1/4" = 1'-0"

2 Elevation Southwest - Backyard
1/4" = 1'-0"

WARREN
W.
SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaala.com

Blake Family
Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date

job no: 24001
date: 8 JULY 2024
title: Elevations

A 3.3

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Window Schedule

Mark	Window Type	Width	Height	Head Height	Window Install	Tempered Glass	Egress	Room Location	Comments
1A	FIXED	3' - 0"	7' - 0"	8' - 3"	New Construction	Yes			
1B	FIXED	3' - 0"	7' - 0"	8' - 3"	New Construction				
1C	SLIDER	5' - 0"	4' - 0"	7' - 0"	New Construction				
1D	SLIDER	4' - 0"	4' - 0"	7' - 6"	New Construction				
1E	AWNING	2' - 0"	2' - 6"	6' - 8"	New Construction				NEW WINDOW IN EXISITING OPENING
1F	AWNING	2' - 0"	2' - 0"	6' - 8"	Existing	Yes			
1G	CASEMENT	2' - 8"	4' - 2"	6' - 8"	Existing				
1H	CASEMENT	2' - 8"	4' - 2"	6' - 8"	Existing				
1I	FIXED	5' - 1"	4' - 2"	6' - 8"	Existing				
1L	AWNING	6' - 0"	4' - 0"	7' - 0"	New Construction				SILL TO ALIGN WITH COUNTER TOP
1N	FIXED	3' - 2 1/2"	7' - 0"	8' - 0"	Replace Existing	Yes			
1O	FIXED	3' - 2 1/2"	7' - 0"	8' - 0"	Replace Existing	Yes			
1Q	FIXED	3' - 0 1/2"	7' - 0"	8' - 0"	Replace Existing	Yes			
1R	FIXED	3' - 0 1/2"	7' - 0"	8' - 0"	Replace Existing	Yes			
1S	FIXED	3' - 0 1/2"	7' - 0"	8' - 0"	Replace Existing	Yes			
1T	CASEMENT	2' - 8"	4' - 2"	6' - 8"	Replace Existing				
1U	FIXED	4' - 0"	4' - 2"	6' - 8"	Replace Existing				
1V	CASEMENT	2' - 6"	4' - 0"	7' - 0"	New Construction				
2A	CASEMENT	2' - 0"	3' - 6"	6' - 8"	New Construction	Yes			
2C	FIXED	3' - 0"	8' - 0"	8' - 0"	New Construction	Yes			
2E	FIXED	3' - 0"	8' - 0"	8' - 0"	New Construction	Yes			
2G	CASEMENT	2' - 1"	3' - 2"	6' - 8"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2GG	CASEMENT	2' - 3"	3' - 2"	6' - 8"	Replace Existing				
2H	FIXED	2' - 1"	3' - 2"	6' - 8"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2HH	FIXED	2' - 3"	3' - 2"	6' - 8"	Replace Existing				
2I	FIXED	2' - 1"	3' - 2"	6' - 8"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2II	FIXED	2' - 3"	3' - 2"	6' - 8"	Replace Existing				
2J	FIXED	2' - 1"	3' - 2"	6' - 8"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2JJ	CASEMENT	2' - 3"	3' - 2"	6' - 8"	Replace Existing				
2K	FIXED	2' - 1"	3' - 2"	6' - 8"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2L	FIXED	2' - 1"	3' - 2"	6' - 8"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2M	CASEMENT	2' - 1"	3' - 2"	6' - 8"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2N	FIXED	1' - 7"	7' - 0"	10' - 9"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2O	FIXED	1' - 3 1/2"	8' - 0"	11' - 9"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2P	FIXED	1' - 7"	7' - 0"	10' - 9"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2Q	CASEMENT	2' - 1"	4' - 0"	7' - 0"	Replace Existing		YES		NEW WINDOW IN EXISITING OPENING
2R	CASEMENT	2' - 1"	4' - 0"	7' - 0"	Replace Existing		YES		NEW WINDOW IN EXISITING OPENING
2S	CASEMENT	2' - 1"	4' - 0"	7' - 0"	Replace Existing		YES		NEW WINDOW IN EXISITING OPENING
2T	CASEMENT	2' - 1"	4' - 0"	7' - 0"	Replace Existing		YES		NEW WINDOW IN EXISITING OPENING
2U	CASEMENT	2' - 1"	4' - 0"	7' - 0"	Replace Existing		YES		NEW WINDOW IN EXISITING OPENING
2V	FIXED	2' - 1"	4' - 0"	7' - 0"	Replace Existing				NEW WINDOW IN EXISITING OPENING
2X	CASEMENT	2' - 1"	4' - 0"	7' - 0"	Replace Existing		YES		NEW WINDOW IN EXISITING OPENING
2Y	AWNING	2' - 6"	4' - 0"	7' - 0"	New Construction	Yes			
2Z	CASEMENT	6' - 0"	5' - 0"	7' - 0"	New Construction	Yes			
22A	FIXED	3' - 2 1/2"	8' - 0"	17' - 0"	Replace Existing				NEW WINDOW IN EXISITING OPENING
22B	FIXED	3' - 2 1/2"	8' - 0"	17' - 0"	Replace Existing				NEW WINDOW IN EXISITING OPENING
22C	FIXED	3' - 0 1/2"	9' - 0"	18' - 0"	Replace Existing				NEW WINDOW IN EXISITING OPENING
22D	FIXED	3' - 0 1/2"	10' - 6"	19' - 6"	Replace Existing				NEW WINDOW IN EXISITING OPENING
22E	FIXED	3' - 0 1/2"	12' - 0"	21' - 0"	Replace Existing				NEW WINDOW IN EXISITING OPENING
22F	FIXED	3' - 0 1/2"	10' - 6"	19' - 6"	Replace Existing				NEW WINDOW IN EXISITING OPENING

Door Schedule

Mark	Door Type	Width	Height	Door Finish	Frame Type	Door Hardware	Phase of Construction	Comments
D1.1	PIVOT DOOR	6' - 0"	8' - 4"				New Construction	
D1.2	SLAB DOOR	2' - 8"	6' - 8"				Replace Existing	SOLID CORE, SELF CLOSING, SEALS
D1.3	SECTIONAL GARAGE DOOR	17' - 0"	7' - 0"				Existing	
D1.4	SINGLE FRENCH DOOR	3' - 0"	6' - 8"				Existing	
D1.5	SLIDING GLASS DOOR	8' - 0"	8' - 0"				New Construction	NEW DOOR IN AN EXISTING OPENING
D1.6	SLIDING GLASS DOOR	8' - 0"	8' - 0"				New Construction	NEW DOOR IN AN EXISTING OPENING
D1.7	SINGLE FRENCH DOOR	3' - 0"	8' - 0"				Replace Existing	REPLACE EXISTING DOOR
D1.8	3-PANEL SLIDING GLASS DOOR	10' - 0"	6' - 8"				New Construction	NEW DOOR IN AN EXISTING OPENING
D1.9	SLAB DOOR	2' - 4"	6' - 8"				New Construction	
D1.10	SLAB DOOR	2' - 0"	6' - 8"				New Construction	
D1.11	DOUBLE SLAB DOOR	5' - 0"	7' - 0"				Existing	
D1.13	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D1.14	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D1.15	SLAB DOOR	2' - 6"	6' - 8"				Existing	SOLID CORE, SELF CLOSING, SEALS
D1.16	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D1.17	SINGLE FRENCH DOOR	2' - 4"	6' - 8"				Existing	
D1.18	POCKET DOOR	2' - 6"	6' - 8"				Existing	
D1.19	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D1.20	BI-FOLD CLOSET DOOR	4' - 6"	6' - 8"				Existing	
D1.21	POCKET DOOR	2' - 8"	6' - 8"				New Construction	
D2.1	SLIDING GLASS DOOR	6' - 0"	6' - 8"				New Construction	
D2.2	SINGLE FRENCH DOOR	2' - 8"	6' - 8"				New Construction	
D2.3	SLAB DOOR	2' - 8"	6' - 8"				New Construction	
D2.4	POCKET DOOR	2' - 8"	6' - 8"				New Construction	
D2.5	SINGLE FRENCH DOOR	2' - 0"	6' - 8"				New Construction	FROSTED GLASS
D2.6	POCKET DOOR	2' - 8"	6' - 8"				New Construction	
D2.7	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D2.8	DOUBLE SLAB DOOR	4' - 0"	7' - 0"				Existing	
D2.9	DOUBLE SLAB DOOR	4' - 0"	7' - 0"				Existing	
D2.10	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D2.11	DOUBLE SLAB DOOR	4' - 0"	7' - 0"				Existing	
D2.12	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D2.13	DOUBLE SLAB DOOR	5' - 0"	7' - 0"				Existing	
D2.14	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D2.15	POCKET DOOR	2' - 4"	6' - 8"				Existing	
D2.16	SLAB DOOR	2' - 6"	6' - 8"				Existing	
D2.17	DOUBLE SLAB DOOR	4' - 0"	6' - 8"				Existing	
D2.18	POCKET DOOR	3' - 0"	6' - 8"				New Construction	DOOR SHALL BE LOUVERED FOR AIR SUPPLY

GLASS & GLAZING NOTES

1. ALL INTERIOR AND EXTERIOR GLASS AND GLAZING SHALL CONFORM TO LATEST CBC EDITION, CHAPTER-54. GLAZING SHALL CONFORM WITH TITLE 24 ENERGY CALCULATIONS AND REQUIREMENTS.

2. PROVIDE TEMPERED GLASS FOR THE FOLLOWING CONDITIONS:
   a. GLAZING IN ALL DOORS.
   b. GLAZING WITHIN 18" OF FLOOR OR WALKING SURFACE.
   c. GLAZING WITHIN 24" OF ANY DOOR.
   d. GLAZING IN SHOWER OR TUB ENCLOSURES.
   e. GLAZING ADJACENT TO TUBS OR SHOWERS AND WITHIN 60" OF TUB OR SHOWER FLOOR.
   •

3. TEMPERED GLASS SHALL BE IDENTIFIED BY A SMALL MANUFACTURER'S LABEL IN LOWER CORNER OF GLASS DESIGNATING TYPE AND THICKNESS OF GLASS. TEMPERED GLASS SHALL CONFORM TO SECTION 2406 SAFETY GLAZING.

4. ALL WINDOWS AND DOOR GLAZING SHALL HAVE A REQUIRED MINIMUM: **0.25 U** RATING.

DOOR & WINDOW NOTES

1. ALL DOOR AND WINDOW OPENINGS TO EXTERIOR AND UNCONDITIONED AREAS, SUCH AS GARAGE, SHALL BE FULLY WEATHER STRIPPED, GASKETED, OR OTHERWISE TREATED TO LIMIT AIR INFILTRATION.

2. ALL DOOR AND WINDOW HEIGHTS AND WIDTHS CALLED FOR IN THE SCHEDULE ARE NOMINAL SIZES. THE CONTRACTOR SHALL FIELD VERIFY ALL DOOR AND WINDOW DIMENSIONS PRIOR TO FABRICATION ORDERS.

3. ALL GLASS DOOR LIGHTS SHALL BE 3/16 INCH TEMPERED FLOAT GLASS. ALL DOOR MIRRORS SHALL BE TEMPERED.

4. ALL HINGED DOORS SHALL HAVE 1 1/2" PAIR HINGES, MINIMUM.

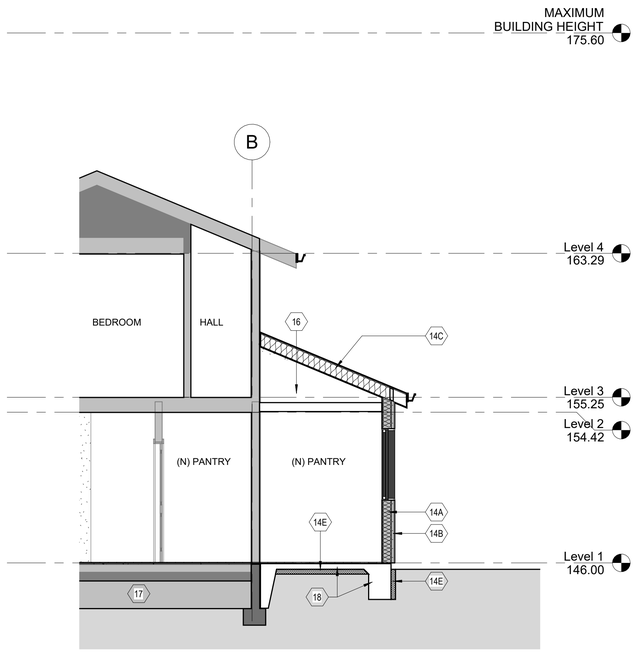
5. THE MANUFACTURED WINDOWS SHALL HAVE A LABEL ATTACHED CERTIFIED BY THE NATIONAL FENESTRATION RATING COUNCIL (NFRC) AND SHOWING COMPLIANCE WITH THE ENERGY CALCULATIONS FOR "U" AND "SHGC".

6. OPERABLE WINDOWS SHALL BE LOCATED A MINIMUM OF 10 ' FROM ANY PLUMBING VENTS, CHIMNEYS, ETC. AS PER SECTION R303.5, SEE EXCEPTIONS WHERE APPLY.

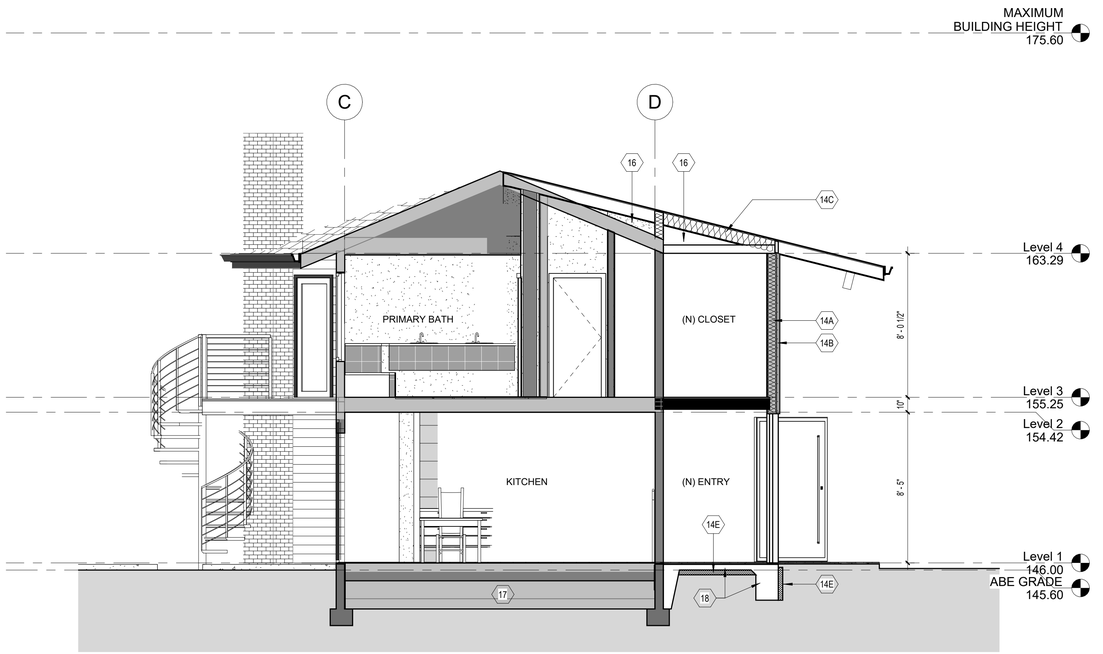
7. OPENINGS FROM A GARAGE TO A PRIVATE RESIDENCE SHALL HAVE A SELF-CLOSING, SELF LATCHING, 1 3/8" SOLID WOOD, OR 20 MINUTE RATED DOOR ASSEMBLY. (R302.5.1)

8. ALL WOOD DOORS TO BE SOLID CORE U.N.O.

9. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE. WINDOW OPENING CONTROL DEVICES AND FALL PREVENTION DEVICES COMPLYING WITH ASTM F2090 SHALL BE PERMITTED FOR USE ON WINDOWS SERVING AS A REQUIRED EMERGENCY ESCAPE AND RESCUE OPENING AND SHALL BE NOT MORE THAN 70 INCHES (178 CM) ABOVE THE FINISHED FLOOR. (R310.1.1)



2 Section at Addition
1/4" = 1'-0"



1 Building Cross Section at Addition
1/4" = 1'-0"

ELEVATION AND SECTION KEYNOTES

1. EXISTING AND FINAL FINISHED GRADE, NO CHANGE TO EXISTING GRADES.
2. CALCULATED ABE SITE ELEVATION (145.6').
3. HEIGHEST ALLOWABLE STRUCTURE AT 30' ABOVE THE SITE ABE (175.6').
4. (E) EXTERIOR WALLS TO REMAIN
5. (N) SUPPORTING DECK AND ROOF POSTS.
6. (N) SECOND FLOOR DECK AND GUARDRAILS.
7. (E) MASONRY BRICK FINISHED CHIMNEY.
8. (N) AND (E) WINDOWS, SEE SCHEDULE.
9. (N) AND (E) DOORS, SEE SCHEDULE.
10. **(N) EXTERIOR SIDING FINISH TO BE BY OWNER UNDER A SEPARATE CONTRACT, STAINED CEDAR OR AS DETERMINED BY OWNER.**
11. (E) OR (N) COMPOSITION SHINGLE ROOF, SEE ROOF PLAN.
12. (E) ROOF EDGE WITH EXPOSED FRAMING.
13. (E) AND (N) GUTTER AND DOWNSPOUT FOR ROOF DRAINAGE
14. (N) INSULATION:
    A. R-21 BATT INSULATION AT CAVITY SPACE AT EXTERIOR WALLS.
    B. R-5 RIGID CONTINOUS INSULATION AT EXTERIOR WALLS.
    C. R-38 RIGID OR SPRAY FOAM INSULATION AT SLOPED CEILING FRAMING.
    D. R-38 BATT INSULATION AT ROOF FRAMING AT ATTIC SPACE.
    E. R-10 RIGID INSULATION BELOW SLAB AND PERIMETER.
15. (N) EXPOSED BEAM ENTRY ROOF.
16. (N) ATTIC SPACE.
17. (E) CRAWL SPACE.
18. (N) SLAB ON GRADE AND FOUNDATIONS
19. (E) DECK RAILING NOT SHOWN TO CLEARLY SHOW BUILDING ELEVATION

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaala.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date

job no: 24001
date: 8 JULY 2024
title: Schedules, Building Sections

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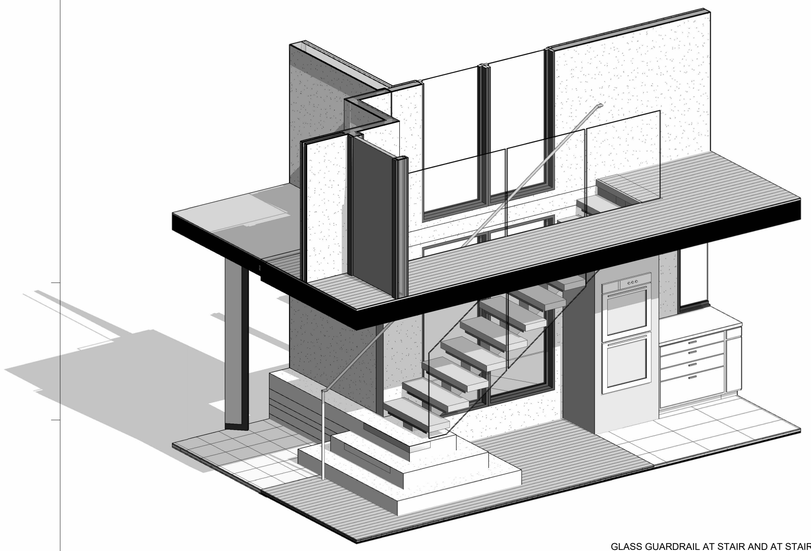
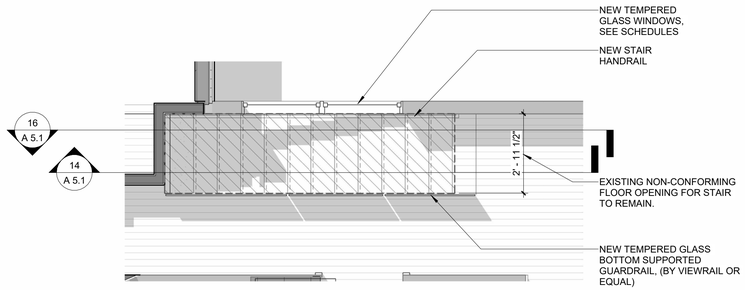
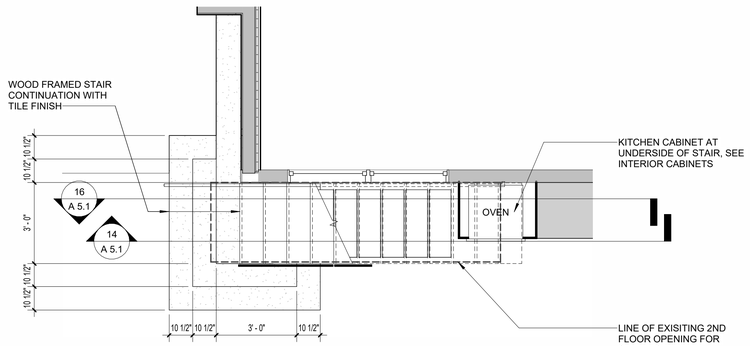


GLASS GUARDRAIL AT STAIR AND AT STAIR OPENING AT SECOND FLOOR SHALL BE BY **"VIEWRAIL"** AND SHALL BE INSTALLED AS PER MANUFACTURERS REQUIREMENTS AND PER ICC-ES REPRORT, **ESR-4799** OR APPROVED EQUAL

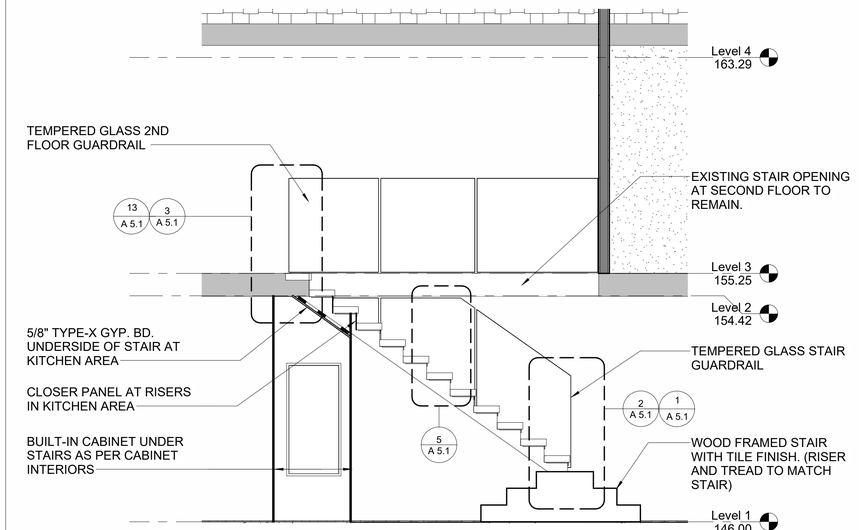
19 3D Internal Stairs



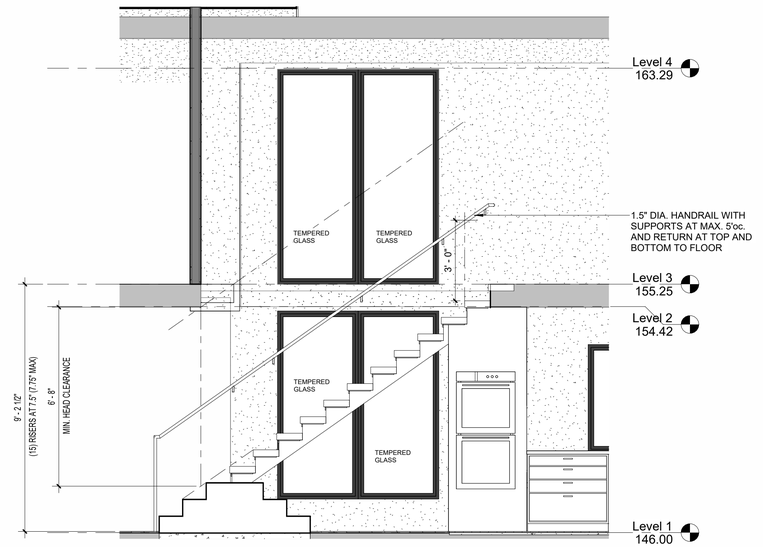
18 Second Floor Stair Plan
3/8" = 1'-0"



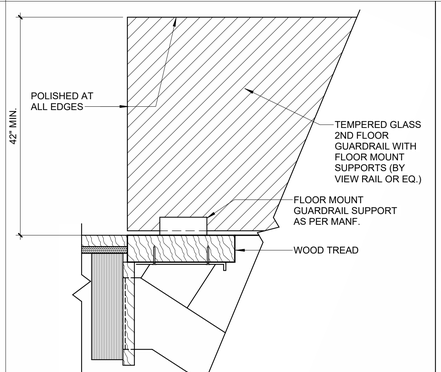
17 First Floor Stair Plan
3/8" = 1'-0"



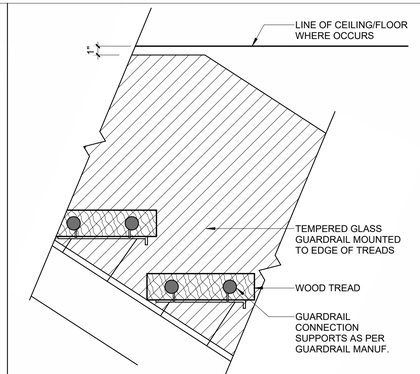
16 Stair Section 1
3/8" = 1'-0"



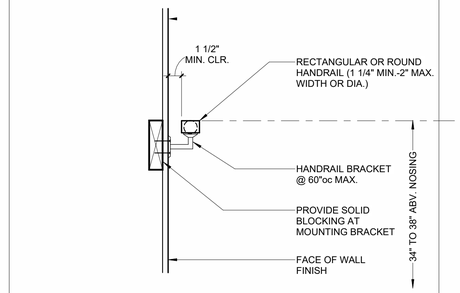
14 Stair Section 2
3/8" = 1'-0"



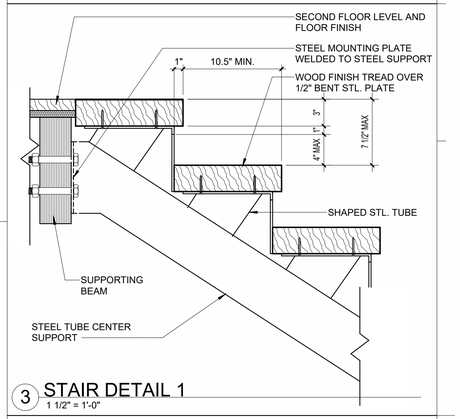
13 STAIR HANDRAIL DETAIL 3
1 1/2" = 1'-0"



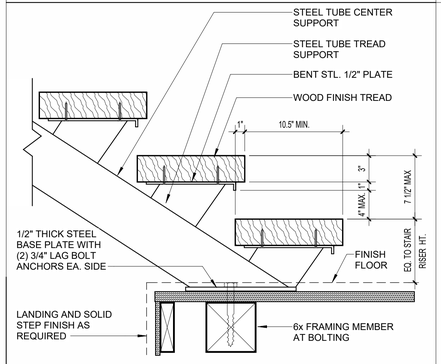
5 STAIR HANDRAIL DETAIL 2
1 1/2" = 1'-0"



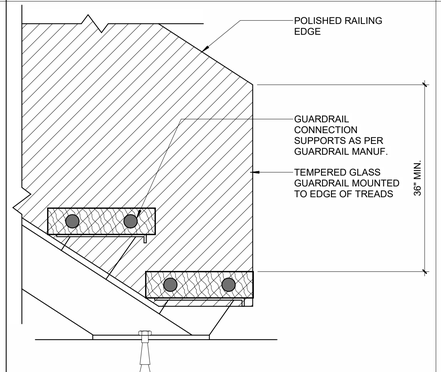
4 HANDRAIL DETAIL 1
1 1/2" = 1'-0"



3 STAIR DETAIL 1
1 1/2" = 1'-0"



2 STAIR DETAIL 4
1 1/2" = 1'-0"



1 STAIR HANDRAIL DETAIL
1 1/2" = 1'-0"

WARREN W. SCOTT

1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence

Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date

job no: 24001
date: 8 JULY 2024
title: Stair Plans, Sections, Details

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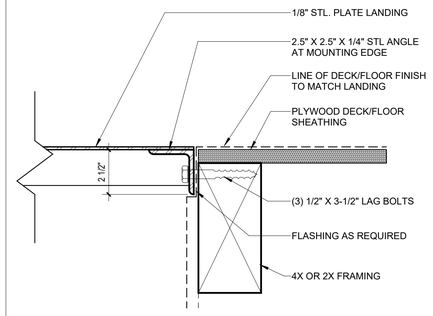
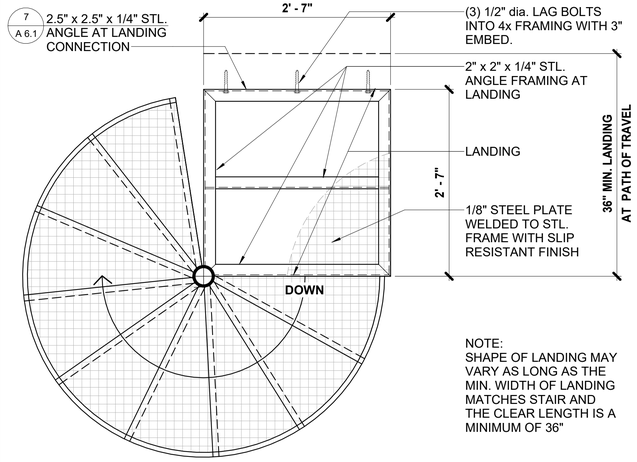
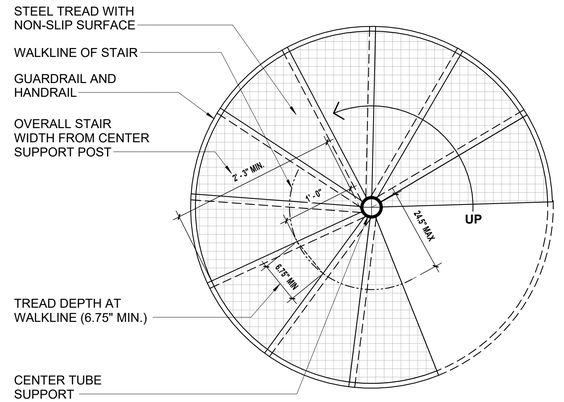


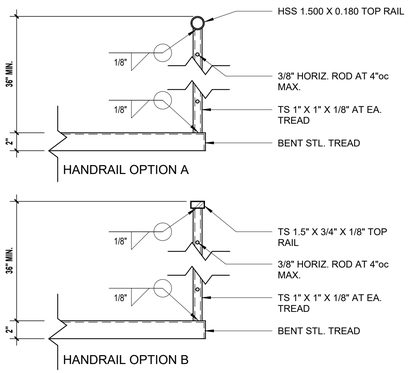
7 LANDING CONNECTION
3" = 1'-0"



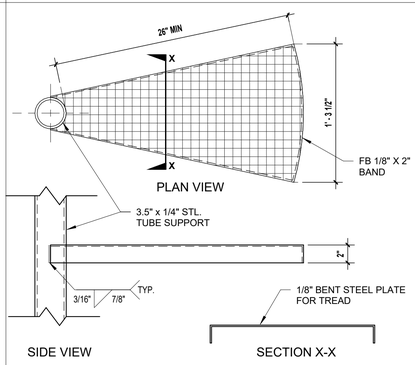
5 S-SPIRAL STAIR AT TOP LANDING
1" = 1'-0"



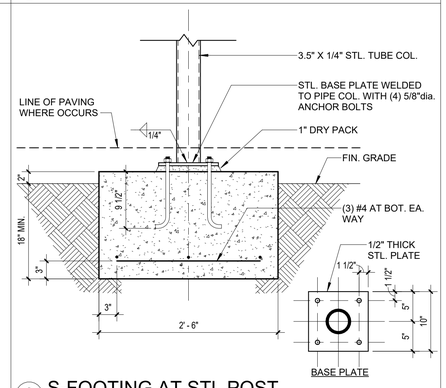
1 S-SPIRAL STAIR DIMENSIONS
1" = 1'-0"



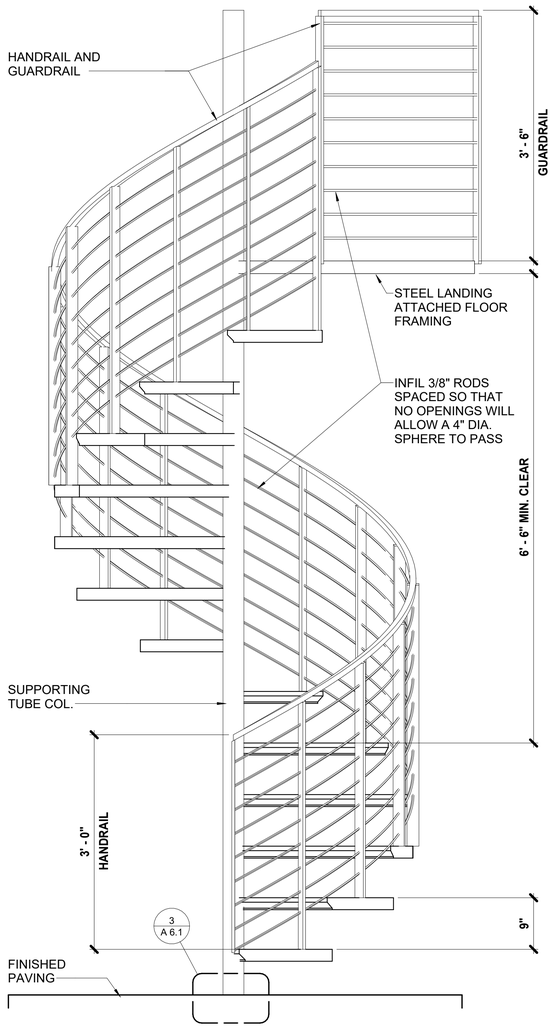
6 HANDRAIL DETAIL
1 1/2" = 1'-0"



4 STAIR TREAD
1 1/2" = 1'-0"



3 S-FOOTING AT STL POST
1" = 1'-0"



2 S-SPIRAL STAIR ELEVATION
1" = 1'-0"

BASIS FOR DESIGN:

DESIGN CODE:

2021 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE , AS ADOPTED BY THE STATE OF WASHINGTON.

R311.7.10.1 SPIRAL STAIRWAYS

SPIRAL STAIRWAYS ARE PERMITTED, PROVIDED THAT THE CLEAR WIDTH AT AND BELOW THE HANDRAIL IS NOT LESS THAN 26 INCHES (660 MM) AND THE WALKLINE RADIUS IS NOT GREATER THAN 24 1/2 INCHES (622 MM). EACH TREAD SHALL HAVE A DEPTH OF NOT LESS THAN 6 3/4 INCHES (171 MM) AT THE WALKLINE. ALL TREADS SHALL BE IDENTICAL, AND THE RISE SHALL BE NOT MORE THAN 9 1/2 INCHES (241 MM). HEADROOM SHALL BE NOT LESS THAN 6 FEET 6 INCHES (1982 MM).

STRUCTURAL PARAMETERS:

1. LIVE LOADS:

EXITS:	100 PSF
STAIRS:	100 PSF OR 300 LB VERT. LOAD
HANDRAILS/GUARDRAILS:	20 PLF OR 200 LB LATERAL LOAD

2. FOUNDATION:
   a. IF NO SOILS REPORT HAS BEEN PROVIDED, MAXIMUM ALLOWABLE SOIL BEARING PRESSURE SHALL BE 1000 PSF. ALLOWABLE BEARING MAY BE INCREASED BY 1/3 FOR WIND AND SEISMIC LOAD CASES.
   b. BOTTOM OF FOOTING SHALL BE EMBEDDED AT LEAST 18 INCHES BELOW LOWEST ADJACENT FINISH GRADE UNLESS NOTED OTHERWISE

3. REINFORCED CONCRETE:
   a. CEMENT SHALL CONFORM TO ASTM C-150 TYPE II, LOW ALKALI.
   b. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM WITH ASTM C-33
   c. READY MIX CONCRETE SHALL BE MIXED AND DELIVERED ACCORDING TO ASTM C-94
   d. MINIMUM CONCRETE SHALL BE:

FOOTINGS:	2500 PSI MIN. F'c	5" MAX. SLUMP	0.54 MAX. RATIO WATER / CEMENT

   NO SPECIAL INSPECTIONS REQUIRED FOR 2,500 PSI CONCRETE

4. STRUCTURAL STEEL:
   a. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS:

DESCRIPTION:	YIELD (Fy, KSI)	ASTM GRADE
BASE AND CONNECTION PLATES:	36	A36
ANGLES, CHANNELS, & WT SHAPES:	36	A36
PIPE SECTIONS:	35	A53, GR B
SQUARE TUBES:	50	A501, GR B
ROUND HSS	50	A500, GR B

   b. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GR 36
   c. NUTS SHALL CONFORM TO ASTM 536 HEX OR HEAVY HEX
   d. WASHERS SHALL CONFORM TO ASTM F436

5. WELDING:
   a. ALL WELDING SHALL CONFORM TO AWS D1.1, TABLE 4.1.1 AND FILLER METAL SHALL BE IN ACCORDANCE WITH AWS A5.1 OR A5.5 UTILIZING E70XX ELECTRODES OF THE LOW HYDROGEN TYPE AND SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR THE POSITION AND CONDITIONS OF USE.

WARREN W. SCOTT
1117 Eolus Avenue
Encinitas California 92024
760.943.8180
www.wsaaia.com

Blake Family Residence
Carly & Patrick Blake

6115 79th Ave SE
Mercer Island, WA 98040

Rev	Description	Date

job no: 24001
date: 8 JULY 2024
title: Spiral Stairs Details

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GENERAL STRUCTURAL NOTES:

CRITERIA:

1.1 ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

2021 INTERNATIONAL BUILDING CODE (IBC)

ASCE/SEI 7-16 (WITH SUPPLEMENTS) MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7)

ACI 318-19 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)

ANSI/AISC 341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS (AISC 341)

ANSI/AWC NDS-2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH 2018 SUPPLEMENT (NDS)

ANSI/AWC SDPWS-2021 SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC (SDPWS)

1.2 DESIGN LOADING CRITERIA
THE DESIGN LOADING OF THE STRUCTURE IS AS FOLLOWS:

LIVE LOADS (IN ACCORDANCE WITH IBC TABLE 1607.1 AND ASCE 7 TABLE 4.3-1)			
OCCUPANCY OR USE	**UNIFORM LIVE LOAD**	**CONCENTRATED LIVE LOAD**	**NOTES**
FLOOR, RESIDENTIAL	40-PSF	-	
BALCONIES & DECKS	60-PSF	-	1.5 x OCCUPANCY LOAD
UNINHABITABLE ATTIC, WITH STORAGE	20-PSF	-	CONCURRENT WITH SNOW LOADS
UNINHABITABLE ATTIC, WITHOUT STORAGE	10-PSF	-	NON-CONCURRENT WITH SNOW LOADS
HANDRAILS AND GUARDS	-	200-LBS	ANY POINT, ANY DIRECTION (ASCE 7-16, SECTION 4.5.1)

WIND DESIGN DATA ASCE 7, CHAPTER 28: SIMPLIFIED ENVELOPE PROCEDURE	
BASIC DESIGN WIND SPEED (3-SEC GUST), V	100-MPH
RISK CATEGORY	II
WIND EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	N/A
EXTERIOR COMPONENTS & CLADDING	25-PSF
TOPOGRAPHICAL FACTOR, K_{zt}	1.6

SNOW LOADS ASCE 7, CHAPTER 7		
GROUND SNOW LOAD, P_g		25-PSF
FLAT ROOF SNOW LOAD, $P_f = 0.7\ C_e C_t\ I_s P_g$		25-PSF
• SNOW EXPOSURE FACTOR, C_e	1.0	
• SNOW LOAD IMPORTANCE FACTOR, I_s	1.0	
• THERMAL FACTOR, C_t	1.2	
DO NOT ADJUST FOR SLOPE OR DRIFT UNLESS NOTED ON THE DRAWINGS.		

SEISMIC DESIGN DATA ASCE 7, CHAPTER 12.8: EQUIVALENT LATERAL FORCE PROCEDURE	
RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR, I_e	1.0
MAPPED SPECT ACCEL, SHORT PERIOD, S_s	1.468
MAPPED SPECT ACCEL, 1-SEC, S_1	0.509
SITE CLASS	D
SPECTRAL RESPONSE COEFF, SHORT PERIOD, S_{DS}	1.174
SPECTRAL RESPONSE COEFF, 1-SEC, S_{D1}	0.608
SEISMIC DESIGN CATEGORY	D
BASIC SEISMIC-FORCE-RESISTANCE SYSTEM	PLY. SHEAR WALLS
RESPONSE MODIFICATION FACTOR, R	6.5
SEISMIC RESPONSE COEFFICIENT, C_s	0.181
DESIGN BASE SHEAR, V_{S-T}	22.89 KIPS

SEE DRAWINGS FOR ADDITIONAL LOADING CRITERIA.

1.3 STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER PROJECT DOCUMENTS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION.

1.4 CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS.

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

1.6 CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

1.7 DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

1.8 ALL STRUCTURAL SYSTEMS COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

GEOTECHNICAL:

2.1 FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE, LATERAL EARTH PRESSURE, AND SOIL PROFILE TYPE ARE ASSUMED AND THEREFORE MUST BE VERIFIED. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

GEOTECHNICAL PROPERTIES	
SOIL SITE CLASS	D
ALLOWABLE SOIL BEARING PRESSURE	1500-PSF
ACTIVE LATERAL EARTH PRESSURE (UNRESTRAINED)	35-PCF
ACTIVE LATERAL EARTH PRESSURE (RESTRAINED)	60-PCF
SEISMIC LATERAL EARTH PRESSURE	6H-PSF
PASSIVE LATERAL EARTH PRESSURE	300-PCF
BASE FRICTION COEFFICIENT	0.35

CONCRETE:

3.1 CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH IBC CHAPTER 19 AND ACI 318. MIX SHALL BE PROPORTIONED SO THAT IT CAN BE PLACED WITHOUT SEGREGATION AND FULLY ENCASE THE REINFORCEMENT. ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-CONTENT CONFORMING TO ACI 318 TABLE 19.3.3.1. CONCRETE STRENGTH SHALL BE AS FOLLOWS:

TYPE OR LOCATION OF CONCRETE CONSTRUCTION	MIN. 28-DAY COMPRESSIVE STRENGTH, f'_c
INTERIOR SLABS-ON-GRADE	2500-PSI
FOOTINGS, BASEMENT WALLS, FOUNDATION/STEM WALLS	3000-PSI[1,2]

[1] IBC SECTION 1904.1, EXCEPTION FOR GROUP R-2 & R-3.
[2] SPECIFIED COMPRESSIVE STRENGTH (f'_c) SPECIFICATIONS ADDRESS SERVICEABILITY REQUIREMENTS. DESIGN STRENGTH OF CONCRETE IS 2500-PSI, THEREFORE, STRENGTH TESTS ARE NOT REQUIRED. PROVIDE CONCRETE MIX TICKETS VERIFYING STRENGTH SPECIFICATIONS.

3.2 REINFORCING STEEL SHALL CONFORM TO ASTM A615/A615M AND THE FOLLOWING:

BAR SIZE	STEEL GRADE
#5 BAR & LARGER	GRADE 60, f_y = 60,000-PSI
#4 BAR & SMALLER	GRADE 40, f_y = 40,000-PSI
WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A1064	

3.3 REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 318. LAP ALL CONTINUOUS REINFORCEMENT (#5 AND SMALLER) 2'-0" MINIMUM, U.O.N. LAPS OF LARGER BARS (#6 AND #7) SHALL BE 3'-0", U.O.N. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS AND LAP 2'-0" MINIMUM. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

3.4 CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

CONDITION	CLEAR COVER
FOOTINGS & UNFORMED SURFACES CAST AGAINST & PERMANENTLY EXPOSED TO EARTH	3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS & LARGER)	2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS & SMALLER)	1-1/2"
SLABS & INTERIOR FACE OF WALLS (#11 BARS & SMALLER)	3/4"
COLUMN TIES, COLUMN SPIRALS, BEAM STIRRUPS	1-1/2"

STEEL:

4.1 STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE FOLLOWING DOCUMENTS:

a. AISC 360: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
b. AISC 303: CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES

IN REFERENCE TO SECTION 3.1.6, FABRICATOR SHALL REVIEW PROJECT SPECIFICATIONS AND ARCHITECTURAL DRAWINGS TO DETERMINE PAINTING REQUIREMENTS. MEMBERS EMBEDDED IN CONCRETE OR TO RECEIVE SPRAY-ON FIREPROOFING SHALL NOT BE PAINTED.

IN REFERENCE TO SECTION 3.3, IF A STRUCTURAL MODEL OR CAD DRAWING IS PROVIDED, THE STRUCTURAL DESIGN DRAWINGS SHALL TAKE PRECEDENCE OVER THE MODEL OR CAD DRAWING IN THE EVENT OF ANY DISCREPENCIES.

4.2 STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	F_y
STANDARD SHAPES	A992	50-KSI
SHAPES NOTED AS GRADE 36	A36	36-KSI
PLATES, ANGLES & RODS	A36	36-KSI
PLATES NOTED AS GRADE 50	A572	50-KSI
PIPE MEMBERS	A53 (TYPE E or S, GRADE B)	35-KSI
HOLLOW STRUCTURAL SECTIONS (TUBE STEEL)	A500 (GRADE B)	46-KSI
ANCHOR BOLTS	F1554	36-KSI
CONNECTION BOLTS	A325-N	

4.3 DIMENSIONAL TOLERANCE FOR STRUCTURAL STEEL MEMBERS SHALL BE PER THE AISC 303, SECTION 6.4 AND ASTM SPECIFICATION A6/A6M. UNLESS SPECIFICALLY ALLOWED BY THE ENGINEER, COLUMN MEMBERS SHALL NOT BE MODIFIED BY THE ROTARY STRAIGHTENING PROCESS.

4.4 ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO AISC 303, SECTION 10. ANY STEEL THAT IS TO BE EXPOSED TO VIEW UPON COMPLETION OF THE PROJECT SHALL BE CONSIDERED ARCHITECTURALLY EXPOSED.

4.5 ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED.

WOOD:

6.1 FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLB STANDARD GRADING RULES FOR WEST COAST LUMBER NO 17. UNLESS OTHERWISE NOTED, FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

MEMBER USE	SIZE	SPECIES	GRADE
STUDS	2X, 3X	HEM-FIR OR SPF	STUD
JOISTS/RAFTERS	2X, 3X	HEM-FIR	NO. 2
PLATES/MISC.	2X, 3X	HEM-FIR	NO. 2
BEAMS	4X	DOUGLAS FIR-LARCH	NO. 2
POSTS	4X	DOUGLAS FIR-LARCH	NO. 2
TIMBER BEAMS	6X & LARGER	DOUGLAS FIR-LARCH	NO. 2
TIMBER POSTS	6X & LARGER	DOUGLAS FIR-LARCH	NO. 2

6.2 GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC CERTIFICATE OF CONFORMANCE. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

MEMBER USE	COMBINATION	SPECIES	F_{bx+}	F_{bx-}	$F_{c\perp x}$	F_{vx}	E_x
BEAMS	24F-V4	DF/DF	2400-PSI	1850-PSI	650-PSI	265-PSI	1800-KSI

6.3 ENGINEERED WOOD SHOWN ON THE DRAWINGS ARE DESIGNED BASED ON TRUS JOIST ENGINEERED LUMBER MANUFACTURED BY WEYERHAEUSER IN ACCORDANCE WITH ICC REPORT NO. ES ESR-1387. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. ALL HANGERS AND OTHER HARDWARE NOT SHOWN SHALL BE DESIGNED AND SUPPLIED BY THE JOIST MANUFACTURER. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, THE ICC REPORT NUMBER, AND THE QUALITY CONTROL AGENCY. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

MEMBER USE	PRODUCT	F_b	F_{vx}	F_c	E
BEAMS	1.55E LAMINATED STRAND LUMBER (LSL)	2325-PSI	800-PSI	310-PSI	1550-KSI
BEAMS	2.0E LAMINATED VENEER LUMBER (LVL)	2600-PSI	750-PSI	285-PSI	2000-KSI
BEAMS	2.0E PARALLEL STRAND LUMBER (PSL)	2900-PSI	750-PSI	290-PSI	2200-KSI
RIM BOARDS	LAMINATED STRAND LUMBER (LSL)	1700-PSI	680-PSI	400-PSI	1300-KSI

6.4 ROOF, FLOOR & WALL SHEATHING SHALL BE APA RATED, EXTERIOR OR EXPOSURE 1 PLYWOOD OR OSB MANUFACTURED UNDER THE PROVISIONS OF VOLUNTARY PRODUCT STANDARDS DOC PS-1 OR DOC PS-2, OR APA PRP-108 PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL USE PANELS. SEE DRAWINGS FOR THICKNESS, SPAN RATING, AND NAILING REQUIREMENTS. UNLESS OTHERWISE NOTED, WALL SHEATHING SHALL BE ½" (NOMINAL) WITH SPAN RATING OF 24/0. GLUE FLOOR SHEATHING TO ALL SUPPORTING MEMBERS WITH ADHESIVE CONFORMING TO APA SPECIFICATION AFG-01.

6.5 WOOD MEMBERS SHALL BE PROTECTED AGAINST DECAY AND TERMITES IN ACCORDANCE WITH IBC SECTION 2304.12. WHERE REQUIRED, MEMBERS SHALL BE NATURALLY DURABLE SPECIES OR SHALL BE TREATED WITH WATERBORNE PRESERVATIVES WOOD IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATION SPECIFICATION AWPA U1. MEMBERS SHALL BE CLEARLY LABELED. MODIFED TREATED MEMBERS (RIPPED OR END CUT) SHALL BE FIELD TREATED IN ACCORDANCE WITH SPECIFICATION AWPA M4.

6.6 TIMBER CONNECTORS AND PROPRIETARY FASTENERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CURRENT CATALOG. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY THE MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, CENTER STRAP ON JOINT AND PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER, WITH EQUAL NUMBER AND SIZE OF FASTENERS IN EACH MEMBER.

ALTERNATE HARDWARE MANUFACTURER SUBSTITUTIONS, SUCH AS USP CONNECTORS, SHALL BE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH SPECIFIED FRAMING MEMBERS. SEE HANGER CONVERSION TABLE FOR PRE-APPROVED SUBSTITUTIONS.

TIMBER CONNECTORS AND THEIR FASTENERS SHALL BE PROTECTED FROM CORROSION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS OR ASTM A 653, TYPE G185.

6.7 DOWEL-TYPE FASTENERS (BOLTS, LAG SCREWS, WOOD SCREWS AND NAILS) SHALL CONFORM TO SECTIONS 11 & 12 OF THE ANSI/AWC NDS-2018.

DOWEL TYPE FASTENER	GRADE	REQUIREMENTS AT EXTERIOR USE OR WHEN IN CONTACT w/ TREATED LUMBER	INSTALLATION
BOLTS	ASTM A307	ASTM B695, CLASS 55 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.3 HOLE = BOLT ⌀ + (1/32" to 1/16") WASHER @ BOLT HEAD & @ NUT
ALL-THREAD/THREADED ROD	ASTM F1554	ASTM B695, CLASS 55 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.3 HOLE = BOLT ⌀ + (1/32" to 1/16") WASHER @ BOLT HEAD & @ NUT
LAG SCREWS	ASTM A307	ASTM A153 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.4 LEAD HOLE = 0.5 SHANK ⌀; SHANK HOLE = SHANK ⌀ WASHER @ LAG HEAD
WOOD SCREWS		ASTM A153 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.5 PILOT HOLE = 0.5 ROOT ⌀ (UNLESS SELF- BORING)
NAILS	ASTM F1667	ASTM A153 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.6 AVOID OVERDRIVING or UNDERDRIVING AVOID WOOD SPLITTING TOENAILS 30°, 1/3 NAIL LENGTH FROM JOINT

NAILS SPECIFIED ON DRAWINGS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

NAIL USE	PENNY WEIGHT	SIZE
FRAMING NAILS	12d BOX	0.131"⌀ x 3-1/4"
SHEATHING NAILS	8d BOX	0.131"⌀ x 2-1/2"

ALL METAL FASTENERS EXPOSED TO WEATHER OR IN CONTACT WITH TREATED WOOD SHALL BE PROTECTED FROM CORROSION ACCORDING TO TABLE ABOVE. NUTS AND BOLTS EXPOSED TO WEATHER OR IN CONTACT WITH TREATED WOOD SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153/A153M-16a OR STAINLESS STEEL. SEE ABOVE FOR PROPRIETARY FASTENER REQUIREMENTS. DO NOT SUBSTITUTE STANDARD DOWEL-TYPE FASTENERS FOR PROPRIETARY FASTENERS UNLESS SPECIFICALLY ALLOWED.

QUALITY ASSURANCE:

7.1 SPECIAL INSPECTION IN ACCORDANCE WITH IBC SECTION 1704.2 IS NOT REQUIRED. STANDARD INSPECTIONS SHALL BE IN ACCORDANCE WITH IBC SECTION 110.

7.2 STRUCTURAL OBSERVATION IN ACCORDANCE WITH IBC SECTION 1704.6 IS NOT REQUIRED.

ERIC A. DANN
STATE OF WASHINGTON
33029
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
06/25/2024

Blake Family Residence
Remodel

6115 79th Ave SE
Mercer Island, WA 98040

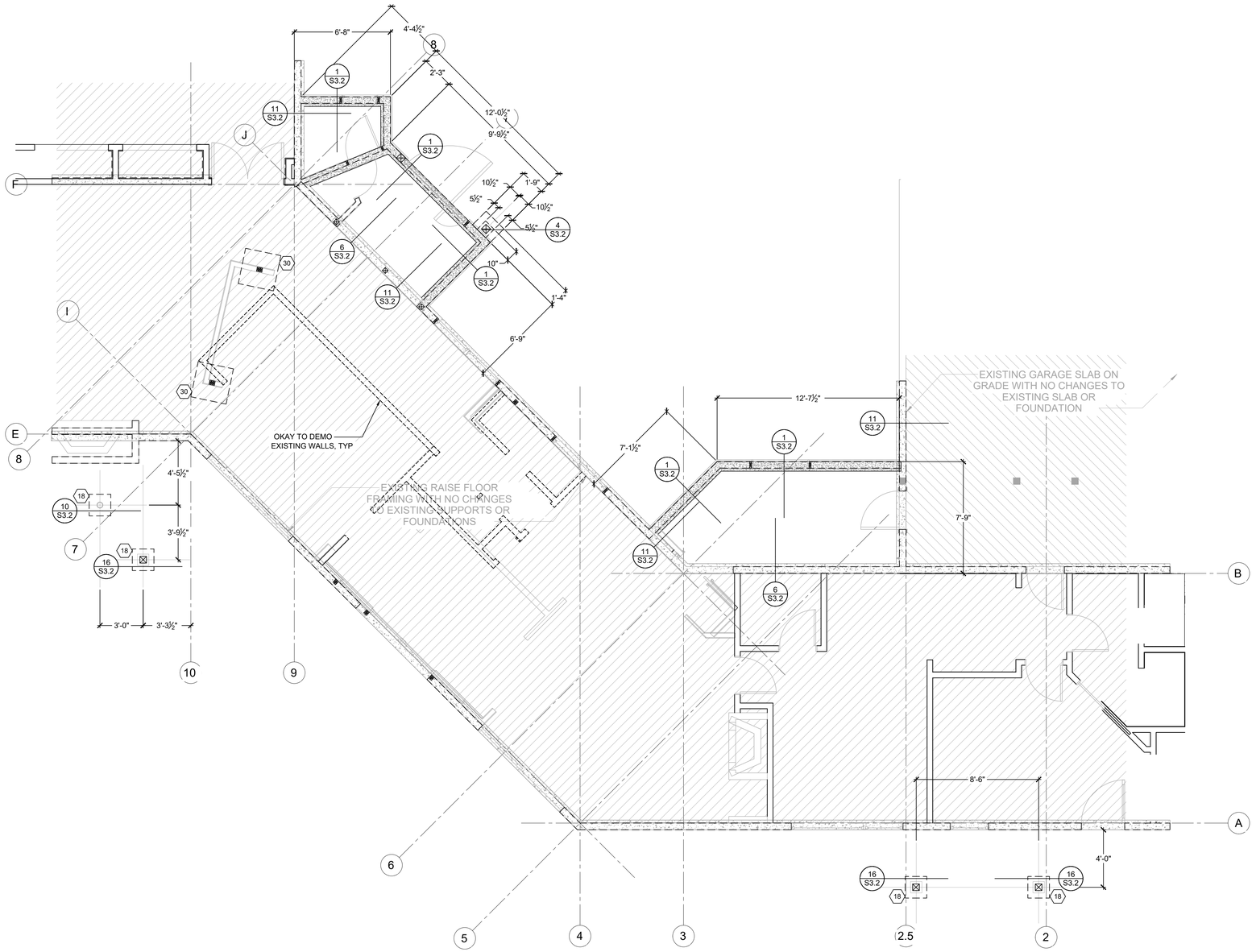
BTL
ENGINEERING P.S.
19011 Woodinville Snohomish Road NE, Suite 100
WOODINVILLE, WA 98072-4436
PHONE: 425-814-8448 FAX: 425-821-2120

PROJECT NUMBER: 24-805-02
PROJECT MANAGER: TSW
DRAWN BY: KLR/JLL
DATE: 06-25-2024

REVISIONS:
1 CITY COMMENTS 12-10-2024

GENERAL STRUCTURAL NOTES

S1.1



1 FOUNDATION PLAN - CRAWLSPACE FRAMING PLAN
1/4" = 1'-0"

FOUNDATION PLAN NOTES:

1. Bottom of New Footings shall be set on competent, properly compacted Bearing Soil below Frost Depth.
2. Anchor Bolts for Exterior Stud Walls shall be in accordance with P1-6 of the Shear Wall Schedule of 1/S3.1, u.o.n.

LEGEND

- DETAIL CALL-OUT
- ANCHOR BOLTS FOR SHEAR WALL ABOVE PER SCHEDULE OF 1/S3.1
- NEW FOUNDATION WALL AND FOOTING
- EXISTING FOUNDATION WALL AND FOOTING
- BEARING OR SHEAR WALL ABOVE
- POST BELOW
- FOOTING CALLOUT - SEE 3/S3.2

1/4"=1'-0" 0 1 2 4 8 16

FOUNDATION PLAN NOTES:

ERIC A. DANN
STATE OF WASHINGTON
33029
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
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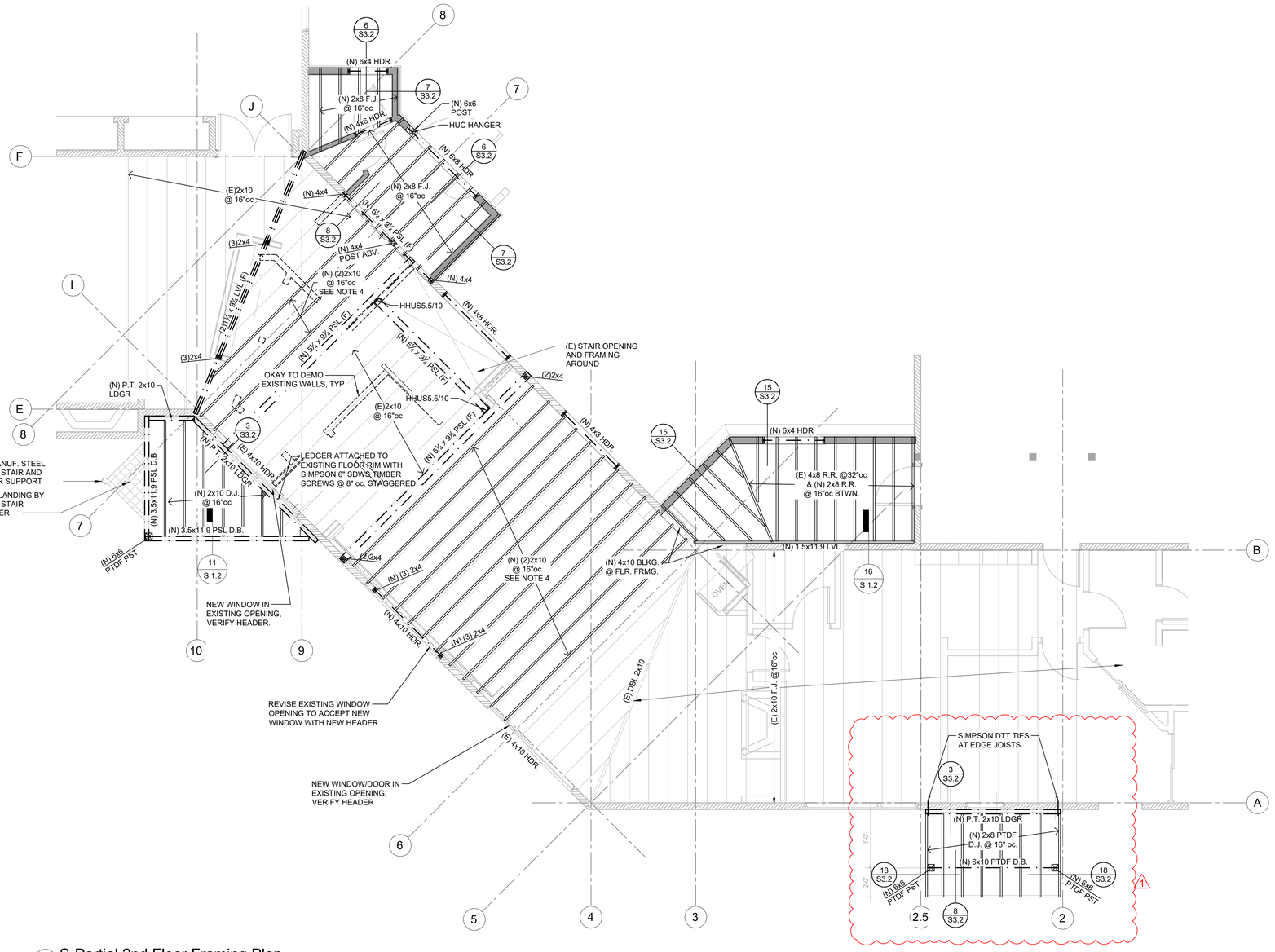
FOUNDATION PLAN CRAWLSPACE FRAMING PLAN

S2.0



1 S-Partial 2nd Floor Framing Plan
1/4" = 1'-0"

WALL FRAMING PLAN NOTES:

1. New Exterior Walls shall be Shear Wall type P1-6 with 2x6 Studs @ 16"oc, u.o.n.
   New Interior Walls shall be 2x4 Studs @ 16"oc, u.o.n.

   Where adjacent Shear Walls are in contact, nail studs together per 20/S3.1. See 1/S3.1 for special stud requirements at Shear Wall types P1-3, P1-2, P2-4, P2-3, and P2-2.
2. New Headers shall be 4x6, u.o.n. See Detail 13/S3.1.
3. Built-up Stud Groups in Walls supporting Beams, Posts or Girder Trusses above shall be (2) Studs, u.o.n. See General Structural Notes for fastening requirements.
4. Replace all Joists where bottom half has any motch. (2)2x10 may consist of (1)one new Joist and (1)one existing Joists.

LEGEND

- xx / Sx.x — DETAIL CALL-OUT
- P1-x — SHEAR WALL BELOW PER SCHEDULE OF 1/S3.1
- NEW BEARING OR SHEAR WALL BELOW
- EXISTING BEARING ON SHEAR WALL BELOW
- xxx — POST BELOW
- (F) — FLUSH FRAMED (BOTTOM FLUSH W/ BOTTOM OF FRAMING)
- HDR — HEADER PER PLAN NOTE 8

1/4"=1'-0" 0 1 2 4 8 16

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STATE OF WASHINGTON
33029
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
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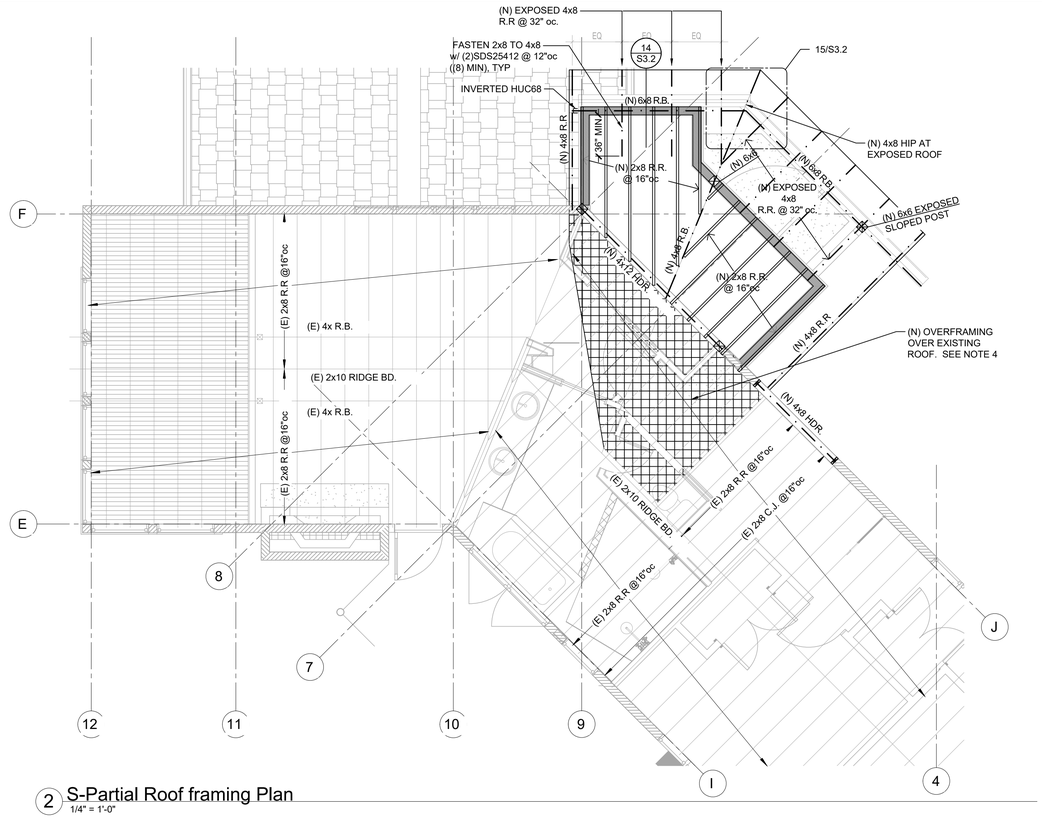
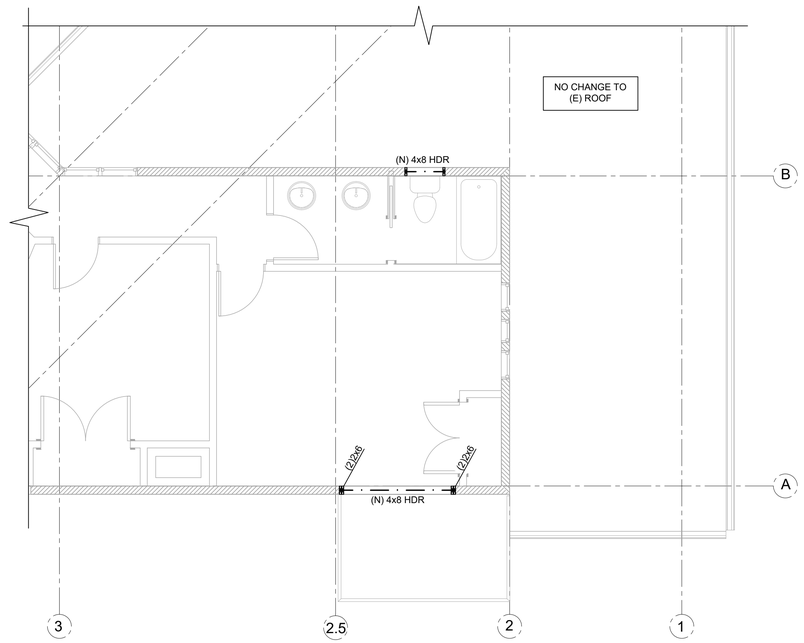
UPPER FLOOR FRAMING PLAN

S2.1



2 S-Partial Roof framing Plan
1/4" = 1'-0"



1 S-Partial Roof framing East End
1/4" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. New Roof Sheathing shall be 7/16" thick (Panel Span Rating 24/16). Fasten Sheathing to Framing with 0.131"Ø x 2½" Nails as follows:

Framing, Edges	6"oc
Framing, Field	12"oc
Boundaries, Blocking, Struts	6"oc

At Unframed Panel Edges, provide PSCA Framing Clips centered between each Framing Member. See Drawings for other Sheathing Nailing requirements.

At areas indicated as Blocked Diaphragm, provide 2x Flat Blocking (per General Structural Notes) at all Unframed Sheathing Panel Edges. Fasten Sheathing to Framing and Blocking with 0.131"Ø x 2½" Nails as follows:

Framing, Edges	4"oc
Framing, Field	12"oc
Boundaries, Blocking, Struts	4"oc

See Drawings for other Sheathing Nailing requirements.

2. New Roof Framing shall be as indicated on plan. Refer to General Structural Notes.
3. Trusses marked Strut shall be designed to accommodate the indicated loads and connections.
4. Overframing Members shall be 2x6 @ 24"oc. Post down to Framing Members below w/ 2x4 @ 48"oc, staggered.
5. Provide solid Flat Blocking at all Valleys. Fasten Sheathing to Blocking in accordance with Note 1.
6. Provide H2.5A Clip each side or TLOK6 Screw each ply at 2-ply or greater Girder Truss ends, typ.

WALL FRAMING PLAN NOTES:

7. New Exterior Walls shall be Shear Wall type P1-6 with 2x6 Studs @ 16"oc, u.o.n.
   New Interior Walls shall be 2x4 Studs @ 16"oc, u.o.n.

   Where adjacent Shear Walls are in contact, nail studs together per 20/S3.1. See 1/S3.1 for special stud requirements at Shear Wall types P1-3, P1-2, P2-4, P2-3, and P2-2.
8. New Headers shall be 4x6, u.o.n. See Detail 13/S3.1.
9. Built-up Stud Groups in Walls supporting Beams, Posts or Girder Trusses above shall be (2) Studs, u.o.n. See General Structural Notes for fastening requirements.

LEGEND

xx / Sx.x	DETAIL CALL-OUT
P1-x	SHEAR WALL BELOW PER SCHEDULE OF 1/S3.1
	NEW BEARING OR SHEAR WALL BELOW
	EXISTING BEARING ON SHEAR WALL BELOW
XXX	POST BELOW
(F)	FLUSH FRAMED (BOTTOM FLUSH W/ BOTTOM OF FRAMING)
HDR	HEADER PER PLAN NOTE 8

1/4"=1'-0" 0 1 2 4 8 16

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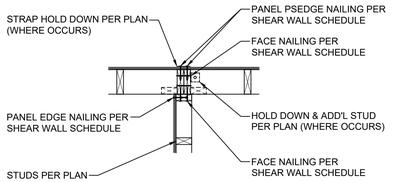
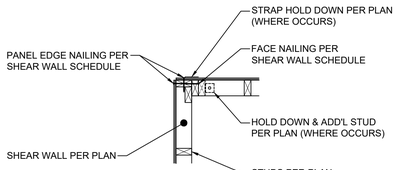
ROOF FRAMING PLAN

S2.2





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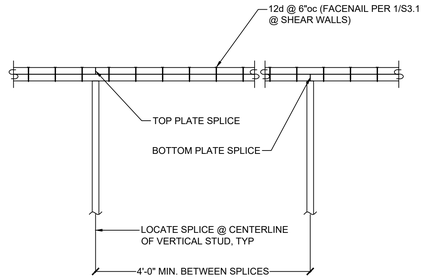

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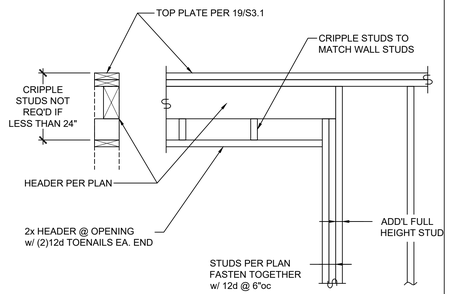

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10

9

8

PLAN CALLOUT	SIZE	REINFORCING	DETAIL REFERENCE
18	18" sq x 8" thick	(2)#4 EA. WAY BOTTOM	-
30	30" sq x 8" thick	(3)#4 EA. WAY BOTTOM	-

5

4

3

SHEAR WALL SCHEDULE

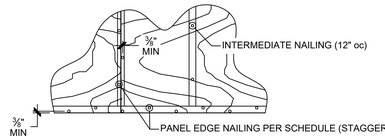
(IN ACCORDANCE w/ ANSI/AF&PA SDPWS-2021 SECTION 4.3)
Updated 4/1/2024

WALL TYPE	SHEATHING (1)	PANEL EDGE NAILING (2)	MINIMUM WIDTH OF NAILED FACE OF FRAMING @ ADJOINING PANEL EDGES (3)		MUDSILL PLATE	FACE NAILING (4)	FRAMING CLIPS (5)	ANCHORAGE TO CONCRETE (6)		SEISMIC CAPACITY - h/b = 2 h/b = 3.5	WIND CAPACITY - h/b = 2 h/b = 3.5
			SINGLE MEMBER	BUILT-UP MEMBER				ANCHOR BOLTS	MUDSILL ANCHORS		
P1-6	1 SIDE	6" oc	2x	2x	2x	6" oc	A35 @ 28" oc or LTP4 @ 28" oc	⅝"Ø @ 60" oc	MASAP @ 52" oc	240-plf 194-plf	240-plf 194-plf

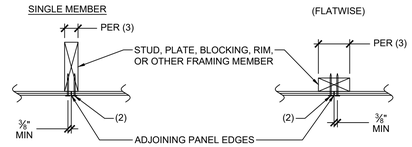
SHEAR WALL SCHEDULE NOTES

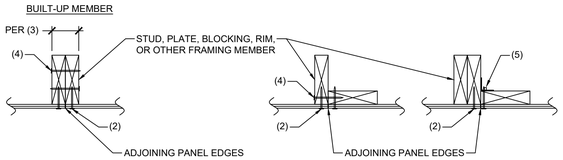
(1) SECTION 4.3.7.1.1
7/16" OSB or 15/32" PLYWOOD SHEATHING OR SIDING EXCEPT GROUP 5 SPECIES. MINIMUM PANEL SPAN RATING OF (24/0). PANELS SHALL NOT BE LESS THAN 4'x8', EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING. ALL EDGES OF ALL PANELS SHALL BE SUPPORTED BY AND FASTENED TO FRAMING MEMBERS OR BLOCKING.

(2) SECTION 4.3.7.1.2. & SECTION 4.3.7.1.3
PANEL EDGE NAILING APPLIES TO ALL SHEATHING PANEL EDGES. NAIL SHEATHING TO INTERMEDIATE FRAMING MEMBERS WITH SHEATHING NAILS @ 12"oc. MAXIMUM STUD SPACING SHALL BE 16"oc. SHEATHING NAILS SHALL BE 0.131"Ø x 2½". PLYWOOD EDGE NAILING SHALL BE STAGGERED. NAILS SHALL BE LOCATED AT LEAST ⅜" FROM THE PANEL EDGES.



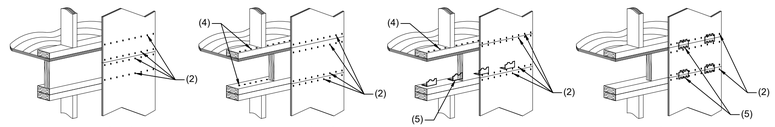
(3) SECTION 4.3.7.1.4
THE MINIMUM NOMINAL WIDTH OF THE NAILED FACE OF FRAMING AND BLOCKING AT ADJOINING PANEL EDGES SHALL BE AS INDICATED IN THE SCHEDULE.



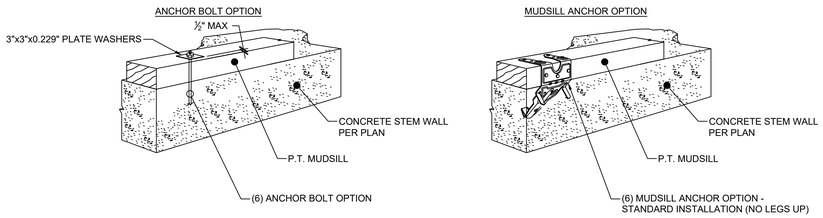


(4) FACE NAILING APPLIES TO CONDITIONS WHERE FRAMING NAILS CAN BE STRAIGHT DRIVEN THRU FIRST MEMBER AND PENETRATE MAIN MEMBER MINIMUM OF 1½". FRAMING NAILS SHALL BE 0.131"Ø x 3¼". 0.131"Ø x 3" NAILS MAY BE USED WHEN STITCHING TOGETHER (2)2x MEMBERS WITH NO SPACERS.

(5) AT ADJOINING PANEL EDGES WHERE SHEATHING CANNOT LAP ON SINGLE MEMBER AND FACE NAILING CANNOT BE ACCOMPLISHED, FRAMING CLIPS SHALL BE USED TO FASTEN BUILT-UP MEMBERS. USE 0.131"Ø x 2½" NAILS AT LTP4 CLIP WHEN INSTALLED OVER ½" SHEATHING.



(6) SECTION 4.3.6.4.3
ANCHOR BOLTS EMBEDMENT SHALL BE 7". U.O.N. ALL ANCHORS SHALL HAVE 3" x 3" x 0.229" PLATE WASHERS. PLATE WASHER SHALL EXTEND TO WITHIN ½" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. IF SHEATHING IS ON BOTH SIDES OF THE WALL, STAGGER THE ANCHOR BOLTS, AS REQUIRED, SO THAT HALF OF THE PLATE WASHERS ARE WITHIN ½" OF THE EDGE OF THE BOTTOM PLATE ON EACH SIDE. HOLE IN PLATE WASHERS MAY BE DIAGONALLY SLOTTED.



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ERIC A. DANN
STATE OF WASHINGTON
33029
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
06/25/2024

Blake Family Residence Remodel

6115 79th Ave SE
Mercer Island, WA 98040

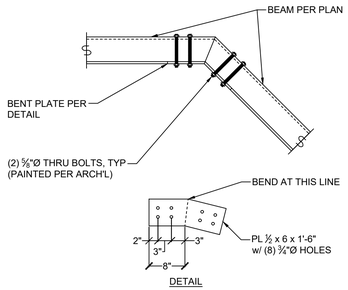
BTL
ENGINEERING P.S.
19011 Woodinville Snohomish Road NE, Suite 100
WOODINVILLE, WA 98072-4436
PHONE: 425-814-8448 FAX: 425-821-2120

PROJECT NUMBER: 24-805-02
PROJECT MANAGER: TSW
DRAWN BY: KLR/JLL
DATE: 06-25-2024

REVISIONS:
1 CITY COMMENTS 12-10-2024

DETAILS

S3.1



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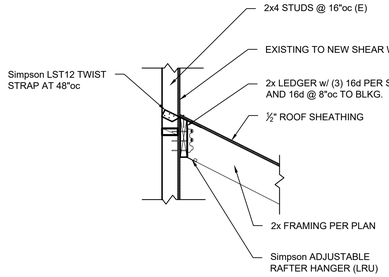

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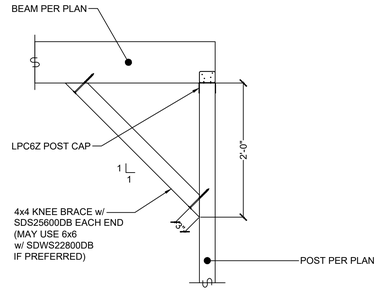

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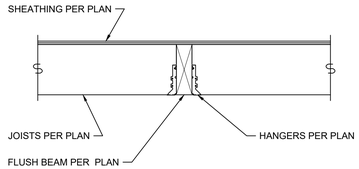

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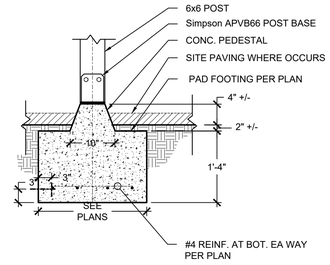

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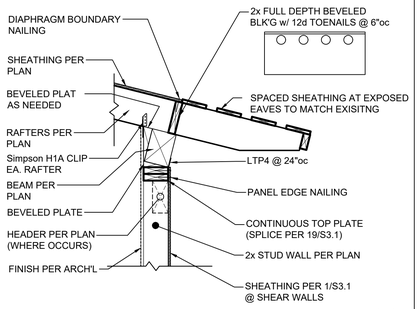

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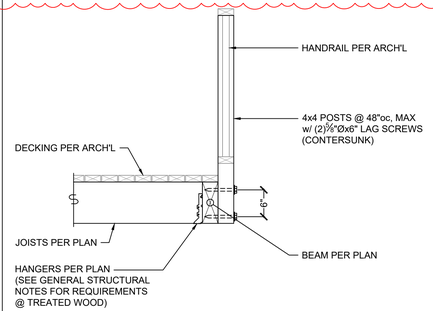

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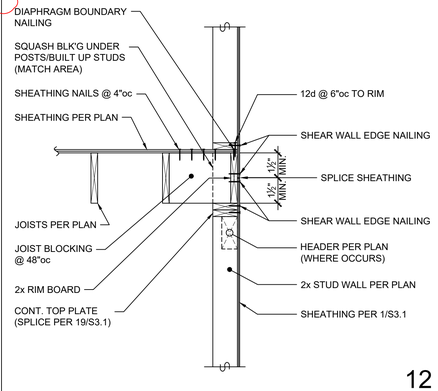

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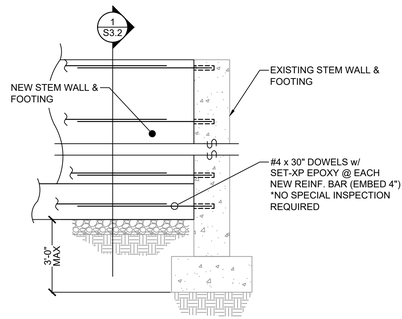

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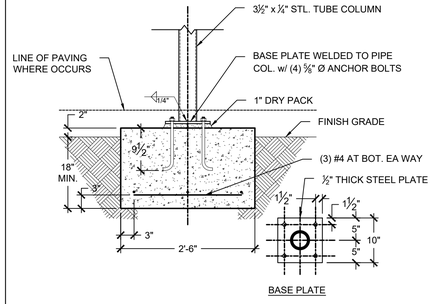

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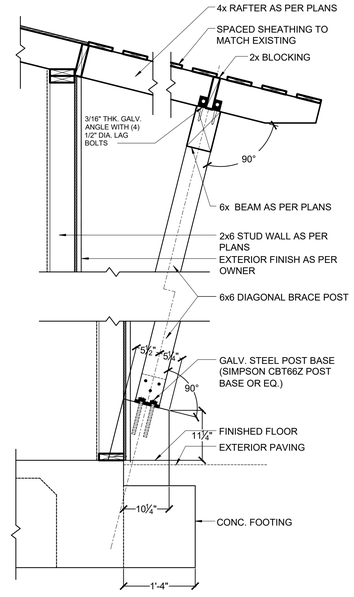

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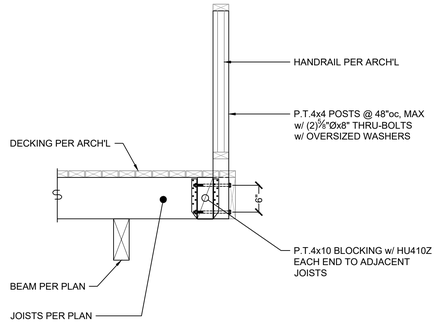

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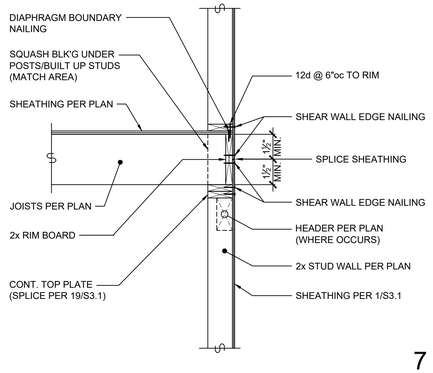

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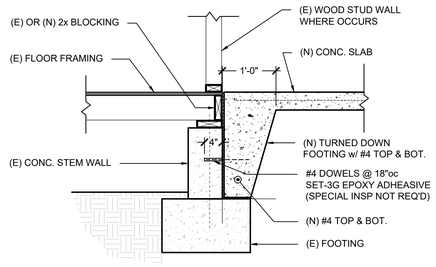

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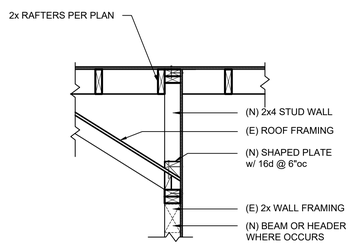

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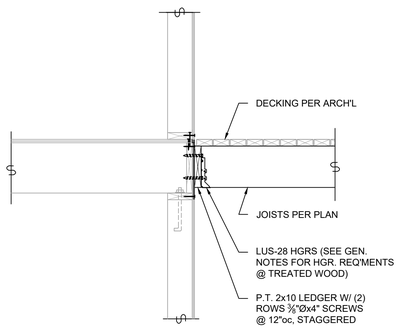

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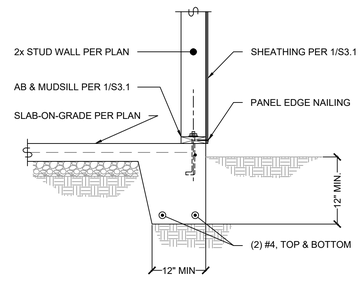

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STATE OF WASHINGTON
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STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
06/25/2024

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Mercer Island, WA 98040

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DETAILS

S3.2

GENERAL STRUCTURAL NOTES:

CRITERIA:

1.1 ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

2021 INTERNATIONAL BUILDING CODE (IBC)

ASCE/SEI 7-16 (WITH SUPPLEMENTS) MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7)

ACI 318-19 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)

ANSI/AISC 341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS (AISC 341)

ANSI/AWC NDS-2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH 2018 SUPPLEMENT (NDS)

ANSI/AWC SDPWS-2021 SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC (SDPWS)

1.2 DESIGN LOADING CRITERIA
THE DESIGN LOADING OF THE STRUCTURE IS AS FOLLOWS:

LIVE LOADS (IN ACCORDANCE WITH IBC TABLE 1607.1 AND ASCE 7 TABLE 4.3-1)			
OCCUPANCY OR USE	**UNIFORM LIVE LOAD**	**CONCENTRATED LIVE LOAD**	**NOTES**
FLOOR, RESIDENTIAL	40-PSF	-	
BALCONIES & DECKS	60-PSF	-	1.5 x OCCUPANCY LOAD
UNINHABITABLE ATTIC, WITH STORAGE	20-PSF	-	CONCURRENT WITH SNOW LOADS
UNINHABITABLE ATTIC, WITHOUT STORAGE	10-PSF	-	NON-CONCURRENT WITH SNOW LOADS
HANDRAILS AND GUARDS	-	200-LBS	ANY POINT, ANY DIRECTION (ASCE 7-16, SECTION 4.5.1)

WIND DESIGN DATA ASCE 7, CHAPTER 28: SIMPLIFIED ENVELOPE PROCEDURE	
BASIC DESIGN WIND SPEED (3-SEC GUST), V	100-MPH
RISK CATEGORY	II
WIND EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	N/A
EXTERIOR COMPONENTS & CLADDING	25-PSF
TOPOGRAPHICAL FACTOR, K_{zt}	1.6

SNOW LOADS ASCE 7, CHAPTER 7		
GROUND SNOW LOAD, P_g		25-PSF
FLAT ROOF SNOW LOAD, $P_f = 0.7\ C_e C_t\ I_s P_g$		25-PSF
• SNOW EXPOSURE FACTOR, C_e	1.0	
• SNOW LOAD IMPORTANCE FACTOR, I_s	1.0	
• THERMAL FACTOR, C_t	1.2	
DO NOT ADJUST FOR SLOPE OR DRIFT UNLESS NOTED ON THE DRAWINGS.		

SEISMIC DESIGN DATA ASCE 7, CHAPTER 12.8: EQUIVALENT LATERAL FORCE PROCEDURE	
RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR, I_e	1.0
MAPPED SPECT ACCEL, SHORT PERIOD, S_s	1.468
MAPPED SPECT ACCEL, 1-SEC, S_1	0.509
SITE CLASS	D
SPECTRAL RESPONSE COEFF, SHORT PERIOD, S_{DS}	1.174
SPECTRAL RESPONSE COEFF, 1-SEC, S_{D1}	0.608
SEISMIC DESIGN CATEGORY	D
BASIC SEISMIC-FORCE-RESISTANCE SYSTEM	PLY. SHEAR WALLS
RESPONSE MODIFICATION FACTOR, R	6.5
SEISMIC RESPONSE COEFFICIENT, C_s	0.181
DESIGN BASE SHEAR, V_{S-T}	22.89 KIPS

SEE DRAWINGS FOR ADDITIONAL LOADING CRITERIA.

1.3 STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER PROJECT DOCUMENTS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION.

1.4 CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS.

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

1.6 CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

1.7 DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

1.8 ALL STRUCTURAL SYSTEMS COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

GEOTECHNICAL:

2.1 FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE, LATERAL EARTH PRESSURE, AND SOIL PROFILE TYPE ARE ASSUMED AND THEREFORE MUST BE VERIFIED. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

GEOTECHNICAL PROPERTIES	
SOIL SITE CLASS	D
ALLOWABLE SOIL BEARING PRESSURE	1500-PSF
ACTIVE LATERAL EARTH PRESSURE (UNRESTRAINED)	35-PCF
ACTIVE LATERAL EARTH PRESSURE (RESTRAINED)	60-PCF
SEISMIC LATERAL EARTH PRESSURE	6H-PSF
PASSIVE LATERAL EARTH PRESSURE	300-PCF
BASE FRICTION COEFFICIENT	0.35

CONCRETE:

3.1 CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH IBC CHAPTER 19 AND ACI 318. MIX SHALL BE PROPORTIONED SO THAT IT CAN BE PLACED WITHOUT SEGREGATION AND FULLY ENCASE THE REINFORCEMENT. ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-CONTENT CONFORMING TO ACI 318 TABLE 19.3.3.1. CONCRETE STRENGTH SHALL BE AS FOLLOWS:

TYPE OR LOCATION OF CONCRETE CONSTRUCTION	MIN. 28-DAY COMPRESSIVE STRENGTH, f'_c
INTERIOR SLABS-ON-GRADE	2500-PSI
FOOTINGS, BASEMENT WALLS, FOUNDATION/STEM WALLS	3000-PSI[1,2]

[1] IBC SECTION 1904.1, EXCEPTION FOR GROUP R-2 & R-3.
[2] SPECIFIED COMPRESSIVE STRENGTH (f'_c) SPECIFICATIONS ADDRESS SERVICEABILITY REQUIREMENTS. DESIGN STRENGTH OF CONCRETE IS 2500-PSI, THEREFORE, STRENGTH TESTS ARE NOT REQUIRED. PROVIDE CONCRETE MIX TICKETS VERIFYING STRENGTH SPECIFICATIONS.

3.2 REINFORCING STEEL SHALL CONFORM TO ASTM A615/A615M AND THE FOLLOWING:

BAR SIZE	STEEL GRADE
#5 BAR & LARGER	GRADE 60, f_y = 60,000-PSI
#4 BAR & SMALLER	GRADE 40, f_y = 40,000-PSI
WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A1064	

3.3 REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 318. LAP ALL CONTINUOUS REINFORCEMENT (#5 AND SMALLER) 2'-0" MINIMUM, U.O.N. LAPS OF LARGER BARS (#6 AND #7) SHALL BE 3'-0", U.O.N. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS AND LAP 2'-0" MINIMUM. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

3.4 CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

CONDITION	CLEAR COVER
FOOTINGS & UNFORMED SURFACES CAST AGAINST & PERMANENTLY EXPOSED TO EARTH	3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS & LARGER)	2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS & SMALLER)	1-1/2"
SLABS & INTERIOR FACE OF WALLS (#11 BARS & SMALLER)	3/4"
COLUMN TIES, COLUMN SPIRALS, BEAM STIRRUPS	1-1/2"

STEEL:

4.1 STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE FOLLOWING DOCUMENTS:

a. AISC 360: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
b. AISC 303: CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES

IN REFERENCE TO SECTION 3.1.6, FABRICATOR SHALL REVIEW PROJECT SPECIFICATIONS AND ARCHITECTURAL DRAWINGS TO DETERMINE PAINTING REQUIREMENTS. MEMBERS EMBEDDED IN CONCRETE OR TO RECEIVE SPRAY-ON FIREPROOFING SHALL NOT BE PAINTED.

IN REFERENCE TO SECTION 3.3, IF A STRUCTURAL MODEL OR CAD DRAWING IS PROVIDED, THE STRUCTURAL DESIGN DRAWINGS SHALL TAKE PRECEDENCE OVER THE MODEL OR CAD DRAWING IN THE EVENT OF ANY DISCREPENCIES.

4.2 STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	F_y
STANDARD SHAPES	A992	50-KSI
SHAPES NOTED AS GRADE 36	A36	36-KSI
PLATES, ANGLES & RODS	A36	36-KSI
PLATES NOTED AS GRADE 50	A572	50-KSI
PIPE MEMBERS	A53 (TYPE E or S, GRADE B)	35-KSI
HOLLOW STRUCTURAL SECTIONS (TUBE STEEL)	A500 (GRADE B)	46-KSI
ANCHOR BOLTS	F1554	36-KSI
CONNECTION BOLTS	A325-N	

4.3 DIMENSIONAL TOLERANCE FOR STRUCTURAL STEEL MEMBERS SHALL BE PER THE AISC 303, SECTION 6.4 AND ASTM SPECIFICATION A6/A6M. UNLESS SPECIFICALLY ALLOWED BY THE ENGINEER, COLUMN MEMBERS SHALL NOT BE MODIFIED BY THE ROTARY STRAIGHTENING PROCESS.

4.4 ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO AISC 303, SECTION 10. ANY STEEL THAT IS TO BE EXPOSED TO VIEW UPON COMPLETION OF THE PROJECT SHALL BE CONSIDERED ARCHITECTURALLY EXPOSED.

4.5 ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED.

WOOD:

6.1 FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLB STANDARD GRADING RULES FOR WEST COAST LUMBER NO 17. UNLESS OTHERWISE NOTED, FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

MEMBER USE	SIZE	SPECIES	GRADE
STUDS	2X, 3X	HEM-FIR OR SPF	STUD
JOISTS/RAFTERS	2X, 3X	HEM-FIR	NO. 2
PLATES/MISC.	2X, 3X	HEM-FIR	NO. 2
BEAMS	4X	DOUGLAS FIR-LARCH	NO. 2
POSTS	4X	DOUGLAS FIR-LARCH	NO. 2
TIMBER BEAMS	6X & LARGER	DOUGLAS FIR-LARCH	NO. 2
TIMBER POSTS	6X & LARGER	DOUGLAS FIR-LARCH	NO. 2

6.2 GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC CERTIFICATE OF CONFORMANCE. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

MEMBER USE	COMBINATION	SPECIES	F_{bx+}	F_{bx-}	$F_{c\perp x}$	F_{vx}	E_x
BEAMS	24F-V4	DF/DF	2400-PSI	1850-PSI	650-PSI	265-PSI	1800-KSI

6.3 ENGINEERED WOOD SHOWN ON THE DRAWINGS ARE DESIGNED BASED ON TRUS JOIST ENGINEERED LUMBER MANUFACTURED BY WEYERHAEUSER IN ACCORDANCE WITH ICC REPORT NO. ES ESR-1387. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. ALL HANGERS AND OTHER HARDWARE NOT SHOWN SHALL BE DESIGNED AND SUPPLIED BY THE JOIST MANUFACTURER. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, THE ICC REPORT NUMBER, AND THE QUALITY CONTROL AGENCY. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

MEMBER USE	PRODUCT	F_b	F_{vx}	F_c	E
BEAMS	1.55E LAMINATED STRAND LUMBER (LSL)	2325-PSI	800-PSI	310-PSI	1550-KSI
BEAMS	2.0E LAMINATED VENEER LUMBER (LVL)	2600-PSI	750-PSI	285-PSI	2000-KSI
BEAMS	2.0E PARALLEL STRAND LUMBER (PSL)	2900-PSI	750-PSI	290-PSI	2200-KSI
RIM BOARDS	LAMINATED STRAND LUMBER (LSL)	1700-PSI	680-PSI	400-PSI	1300-KSI

6.4 ROOF, FLOOR & WALL SHEATHING SHALL BE APA RATED, EXTERIOR OR EXPOSURE 1 PLYWOOD OR OSB MANUFACTURED UNDER THE PROVISIONS OF VOLUNTARY PRODUCT STANDARDS DOC PS-1 OR DOC PS-2, OR APA PRP-108 PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL USE PANELS. SEE DRAWINGS FOR THICKNESS, SPAN RATING, AND NAILING REQUIREMENTS. UNLESS OTHERWISE NOTED, WALL SHEATHING SHALL BE ½" (NOMINAL) WITH SPAN RATING OF 24/0. GLUE FLOOR SHEATHING TO ALL SUPPORTING MEMBERS WITH ADHESIVE CONFORMING TO APA SPECIFICATION AFG-01.

6.5 WOOD MEMBERS SHALL BE PROTECTED AGAINST DECAY AND TERMITES IN ACCORDANCE WITH IBC SECTION 2304.12. WHERE REQUIRED, MEMBERS SHALL BE NATURALLY DURABLE SPECIES OR SHALL BE TREATED WITH WATERBORNE PRESERVATIVES WOOD IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATION SPECIFICATION AWPA U1. MEMBERS SHALL BE CLEARLY LABELED. MODIFED TREATED MEMBERS (RIPPED OR END CUT) SHALL BE FIELD TREATED IN ACCORDANCE WITH SPECIFICATION AWPA M4.

6.6 TIMBER CONNECTORS AND PROPRIETARY FASTENERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CURRENT CATALOG. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY THE MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, CENTER STRAP ON JOINT AND PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER, WITH EQUAL NUMBER AND SIZE OF FASTENERS IN EACH MEMBER.

ALTERNATE HARDWARE MANUFACTURER SUBSTITUTIONS, SUCH AS USP CONNECTORS, SHALL BE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH SPECIFIED FRAMING MEMBERS. SEE HANGER CONVERSION TABLE FOR PRE-APPROVED SUBSTITUTIONS.

TIMBER CONNECTORS AND THEIR FASTENERS SHALL BE PROTECTED FROM CORROSION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS OR ASTM A 653, TYPE G185.

6.7 DOWEL-TYPE FASTENERS (BOLTS, LAG SCREWS, WOOD SCREWS AND NAILS) SHALL CONFORM TO SECTIONS 11 & 12 OF THE ANSI/AWC NDS-2018.

DOWEL TYPE FASTENER	GRADE	REQUIREMENTS AT EXTERIOR USE OR WHEN IN CONTACT w/ TREATED LUMBER	INSTALLATION
BOLTS	ASTM A307	ASTM B695, CLASS 55 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.3 HOLE = BOLT ⌀ + (1/32" to 1/16") WASHER @ BOLT HEAD & @ NUT
ALL-THREAD/THREADED ROD	ASTM F1554	ASTM B695, CLASS 55 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.3 HOLE = BOLT ⌀ + (1/32" to 1/16") WASHER @ BOLT HEAD & @ NUT
LAG SCREWS	ASTM A307	ASTM A153 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.4 LEAD HOLE = 0.5 SHANK ⌀; SHANK HOLE = SHANK ⌀ WASHER @ LAG HEAD
WOOD SCREWS		ASTM A153 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.5 PILOT HOLE = 0.5 ROOT ⌀ (UNLESS SELF- BORING)
NAILS	ASTM F1667	ASTM A153 GALVANIZED or STAINLESS STEEL	ANSI/AWC NDS-2018 SECTION 12.1.6 AVOID OVERDRIVING or UNDERDRIVING AVOID WOOD SPLITTING TOENAILS 30°, 1/3 NAIL LENGTH FROM JOINT

NAILS SPECIFIED ON DRAWINGS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

NAIL USE	PENNY WEIGHT	SIZE
FRAMING NAILS	12d BOX	0.131"⌀ x 3-1/4"
SHEATHING NAILS	8d BOX	0.131"⌀ x 2-1/2"

ALL METAL FASTENERS EXPOSED TO WEATHER OR IN CONTACT WITH TREATED WOOD SHALL BE PROTECTED FROM CORROSION ACCORDING TO TABLE ABOVE. NUTS AND BOLTS EXPOSED TO WEATHER OR IN CONTACT WITH TREATED WOOD SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153/A153M-16a OR STAINLESS STEEL. SEE ABOVE FOR PROPRIETARY FASTENER REQUIREMENTS. DO NOT SUBSTITUTE STANDARD DOWEL-TYPE FASTENERS FOR PROPRIETARY FASTENERS UNLESS SPECIFICALLY ALLOWED.

QUALITY ASSURANCE:

7.1 SPECIAL INSPECTION IN ACCORDANCE WITH IBC SECTION 1704.2 IS NOT REQUIRED. STANDARD INSPECTIONS SHALL BE IN ACCORDANCE WITH IBC SECTION 110.

7.2 STRUCTURAL OBSERVATION IN ACCORDANCE WITH IBC SECTION 1704.6 IS NOT REQUIRED.

ERIC A. DANN
STATE OF WASHINGTON
33029
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
06/25/2024

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Remodel

6115 79th Ave SE
Mercer Island, WA 98040

BTL
ENGINEERING P.S.
19011 Woodinville Snohomish Road NE, Suite 100
WOODINVILLE, WA 98072-4436
PHONE: 425-814-8448 FAX: 425-821-2120

PROJECT NUMBER: 24-805-02
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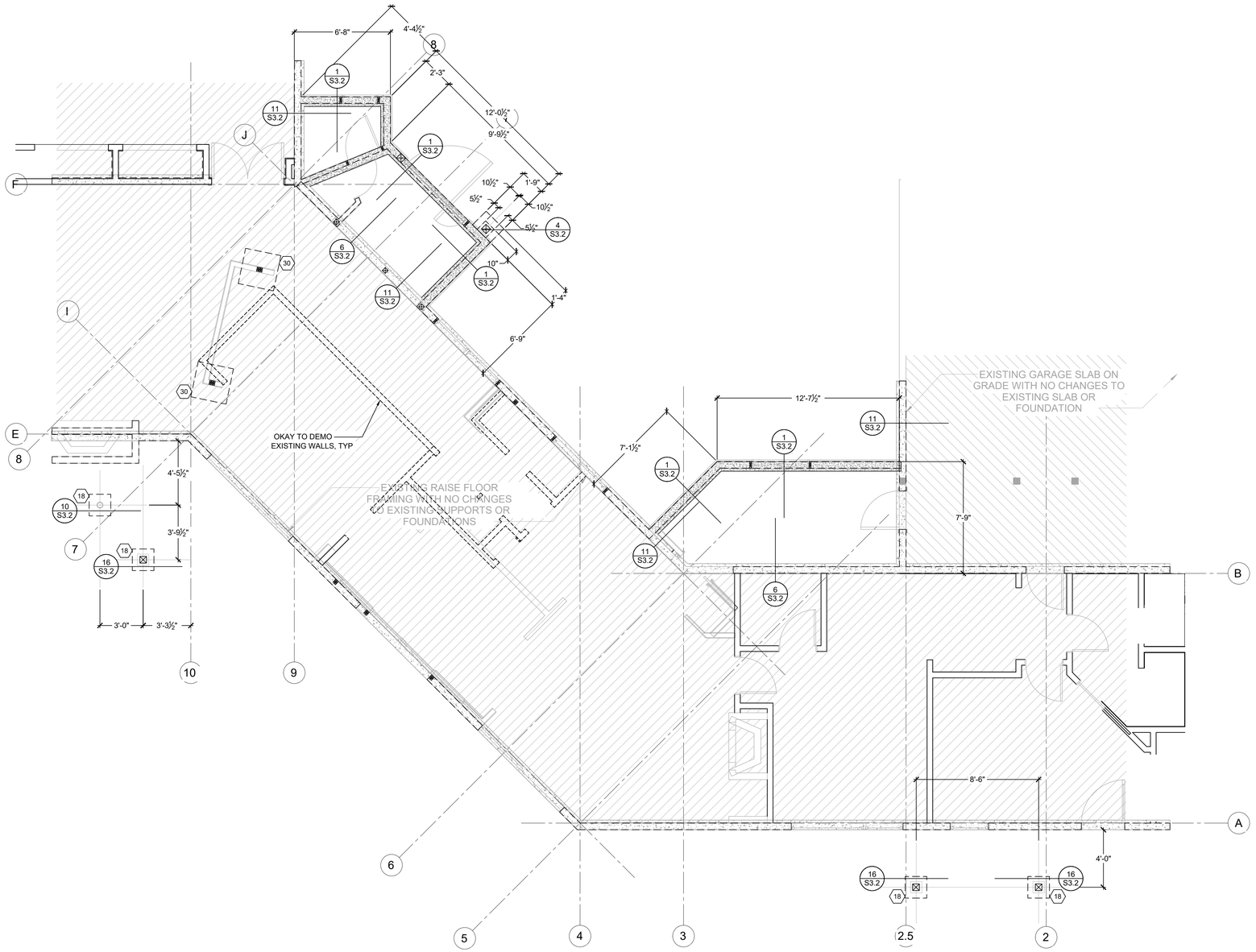
DRAWN BY: KLR/JLL
DATE: 06-25-2024

REVISIONS:
1 CITY COMMENTS 12-10-2024

GENERAL STRUCTURAL NOTES

S1.1



1 FOUNDATION PLAN - CRAWLSPACE FRAMING PLAN
1/4" = 1'-0"

FOUNDATION PLAN NOTES:

1. Bottom of New Footings shall be set on competent, properly compacted Bearing Soil below Frost Depth.
2. Anchor Bolts for Exterior Stud Walls shall be in accordance with P1-6 of the Shear Wall Schedule of 1/S3.1, u.o.n.

LEGEND

- DETAIL CALL-OUT
- ANCHOR BOLTS FOR SHEAR WALL ABOVE PER SCHEDULE OF 1/S3.1
- NEW FOUNDATION WALL AND FOOTING
- EXISTING FOUNDATION WALL AND FOOTING
- BEARING OR SHEAR WALL ABOVE
- POST BELOW
- FOOTING CALLOUT - SEE 3/S3.2

1/4"=1'-0" 0 1 2 4 8 16

FOUNDATION PLAN NOTES:

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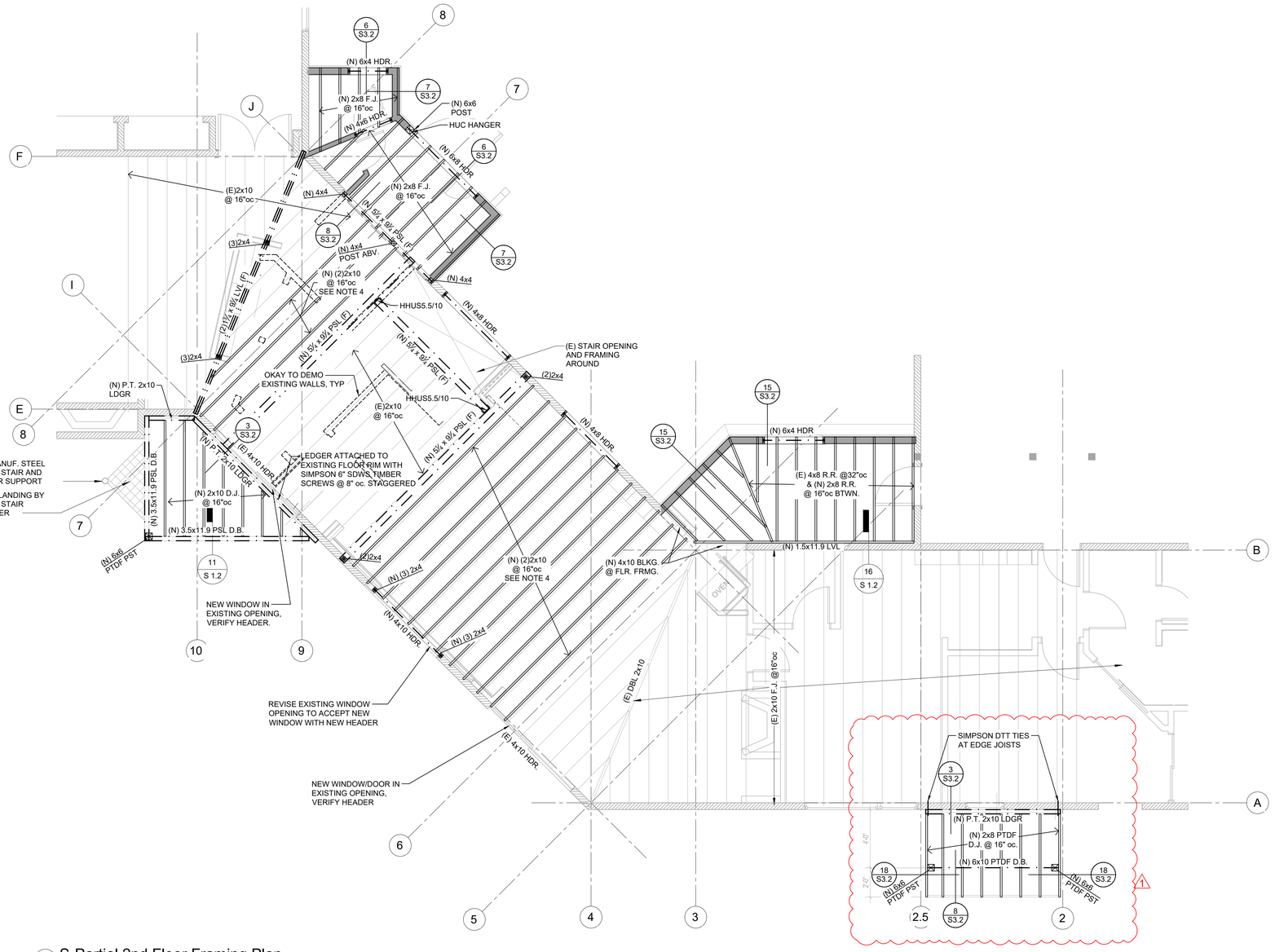
FOUNDATION PLAN CRAWLSPACE FRAMING PLAN

S2.0



1 S-Partial 2nd Floor Framing Plan
1/4" = 1'-0"

WALL FRAMING PLAN NOTES:

1. New Exterior Walls shall be Shear Wall type P1-6 with 2x6 Studs @ 16"oc, u.o.n.
   New Interior Walls shall be 2x4 Studs @ 16"oc, u.o.n.

   Where adjacent Shear Walls are in contact, nail studs together per 20/S3.1. See 1/S3.1 for special stud requirements at Shear Wall types P1-3, P1-2, P2-4, P2-3, and P2-2.
2. New Headers shall be 4x6, u.o.n. See Detail 13/S3.1.
3. Built-up Stud Groups in Walls supporting Beams, Posts or Girder Trusses above shall be (2) Studs, u.o.n. See General Structural Notes for fastening requirements.
4. Replace all Joists where bottom half has any motch. (2)2x10 may consist of (1)one new Joist and (1)one existing Joists.

LEGEND

- xx / Sx.x — DETAIL CALL-OUT
- P1-x — SHEAR WALL BELOW PER SCHEDULE OF 1/S3.1
- NEW BEARING OR SHEAR WALL BELOW
- EXISTING BEARING ON SHEAR WALL BELOW
- xxx — POST BELOW
- (F) — FLUSH FRAMED (BOTTOM FLUSH W/ BOTTOM OF FRAMING)
- HDR — HEADER PER PLAN NOTE 8

1/4"=1'-0" 0 1 2 4 8 16

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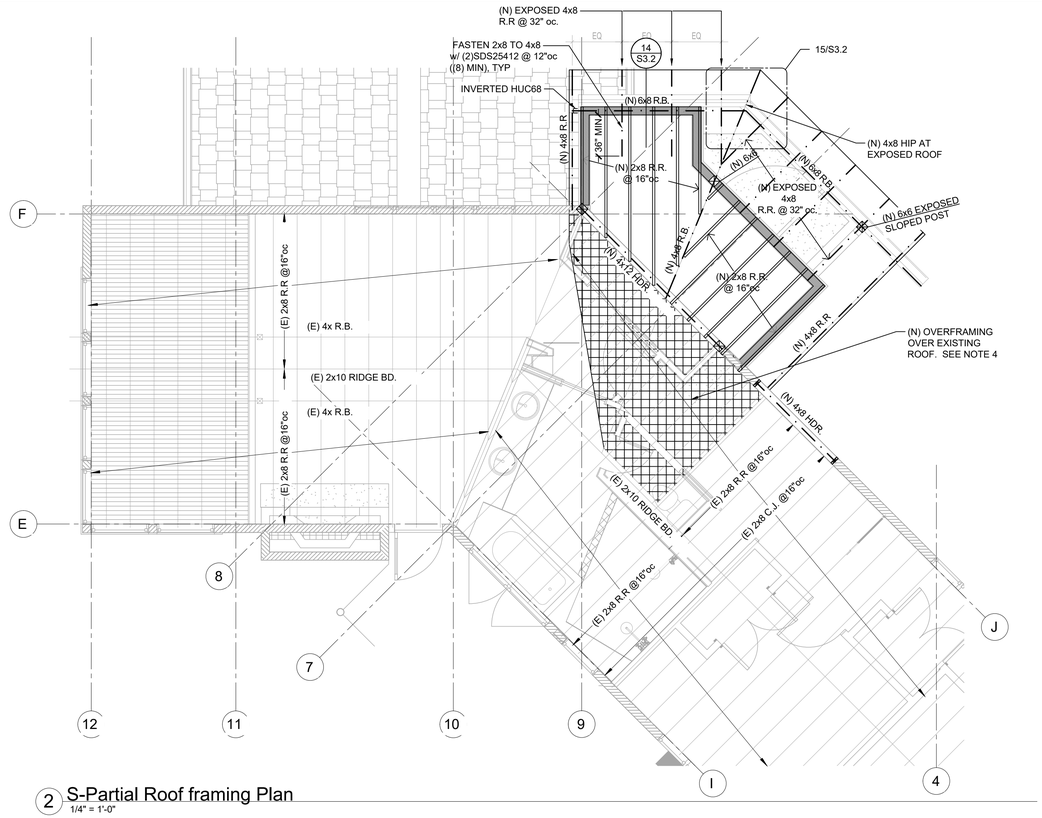
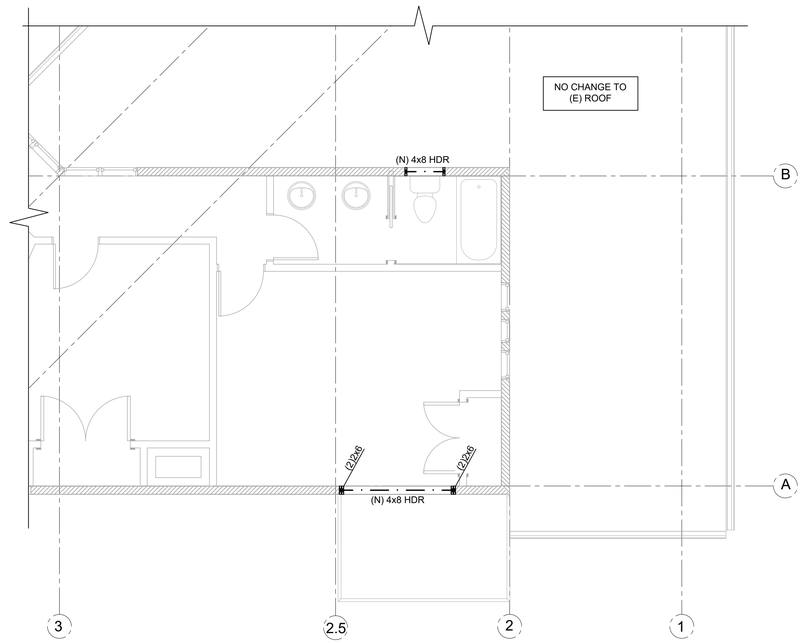
UPPER FLOOR FRAMING PLAN

S2.1



2 S-Partial Roof framing Plan
1/4" = 1'-0"



1 S-Partial Roof framing East End
1/4" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. New Roof Sheathing shall be 7/16" thick (Panel Span Rating 24/16). Fasten Sheathing to Framing with 0.131"Ø x 2½" Nails as follows:

Framing, Edges	6"oc
Framing, Field	12"oc
Boundaries, Blocking, Struts	6"oc

At Unframed Panel Edges, provide PSCA Framing Clips centered between each Framing Member. See Drawings for other Sheathing Nailing requirements.

At areas indicated as Blocked Diaphragm, provide 2x Flat Blocking (per General Structural Notes) at all Unframed Sheathing Panel Edges. Fasten Sheathing to Framing and Blocking with 0.131"Ø x 2½" Nails as follows:

Framing, Edges	4"oc
Framing, Field	12"oc
Boundaries, Blocking, Struts	4"oc

See Drawings for other Sheathing Nailing requirements.

2. New Roof Framing shall be as indicated on plan. Refer to General Structural Notes.
3. Trusses marked Strut shall be designed to accommodate the indicated loads and connections.
4. Overframing Members shall be 2x6 @ 24"oc. Post down to Framing Members below w/ 2x4 @ 48"oc, staggered.
5. Provide solid Flat Blocking at all Valleys. Fasten Sheathing to Blocking in accordance with Note 1.
6. Provide H2.5A Clip each side or TLOK6 Screw each ply at 2-ply or greater Girder Truss ends, typ.

WALL FRAMING PLAN NOTES:

7. New Exterior Walls shall be Shear Wall type P1-6 with 2x6 Studs @ 16"oc, u.o.n.
   New Interior Walls shall be 2x4 Studs @ 16"oc, u.o.n.

   Where adjacent Shear Walls are in contact, nail studs together per 20/S3.1. See 1/S3.1 for special stud requirements at Shear Wall types P1-3, P1-2, P2-4, P2-3, and P2-2.
8. New Headers shall be 4x6, u.o.n. See Detail 13/S3.1.
9. Built-up Stud Groups in Walls supporting Beams, Posts or Girder Trusses above shall be (2) Studs, u.o.n. See General Structural Notes for fastening requirements.

LEGEND

xx / Sx.x	DETAIL CALL-OUT
P1-x	SHEAR WALL BELOW PER SCHEDULE OF 1/S3.1
	NEW BEARING OR SHEAR WALL BELOW
	EXISTING BEARING ON SHEAR WALL BELOW
XXX	POST BELOW
(F)	FLUSH FRAMED (BOTTOM FLUSH W/ BOTTOM OF FRAMING)
HDR	HEADER PER PLAN NOTE 8

1/4"=1'-0" 0 1 2 4 8 16

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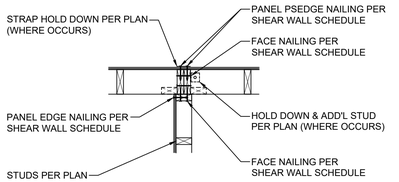
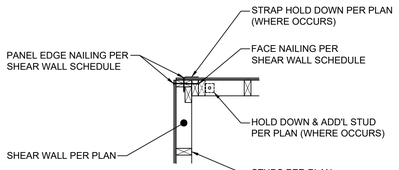
ROOF FRAMING PLAN

S2.2





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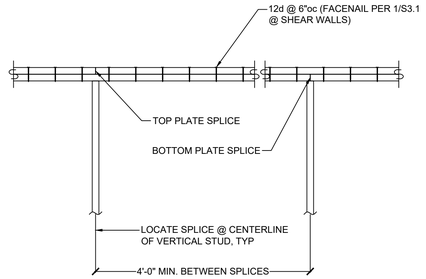

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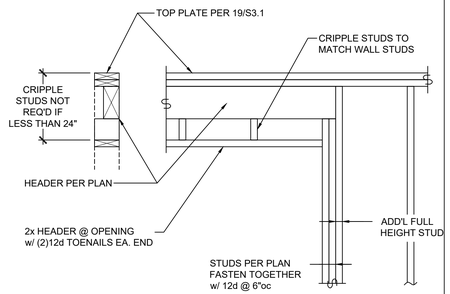

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PLAN CALLOUT	SIZE	REINFORCING	DETAIL REFERENCE
18	18" sq x 8" thick	(2)#4 EA. WAY BOTTOM	-
30	30" sq x 8" thick	(3)#4 EA. WAY BOTTOM	-

5

4

3

SHEAR WALL SCHEDULE

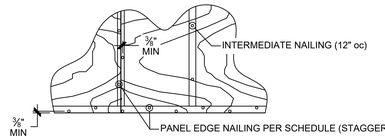
(IN ACCORDANCE w/ ANSI/AF&PA SDPWS-2021 SECTION 4.3)
Updated 4/1/2024

WALL TYPE	SHEATHING (1)	PANEL EDGE NAILING (2)	MINIMUM WIDTH OF NAILED FACE OF FRAMING @ ADJOINING PANEL EDGES (3)		MUDSILL PLATE	FACE NAILING (4)	FRAMING CLIPS (5)	ANCHORAGE TO CONCRETE (6)		SEISMIC CAPACITY - h/b = 2 h/b = 3.5	WIND CAPACITY - h/b = 2 h/b = 3.5
			SINGLE MEMBER	BUILT-UP MEMBER				ANCHOR BOLTS	MUDSILL ANCHORS		
P1-6	1 SIDE	6" oc	2x	2x	2x	6" oc	A35 @ 28" oc or LTP4 @ 28" oc	⅝"Ø @ 60" oc	MASAP @ 52" oc	240-plf 194-plf	240-plf 194-plf

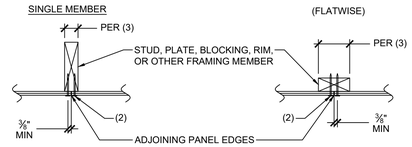
SHEAR WALL SCHEDULE NOTES

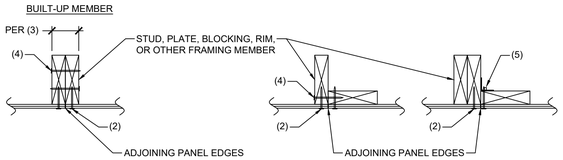
(1) SECTION 4.3.7.1.1
7/16" OSB or 15/32" PLYWOOD SHEATHING OR SIDING EXCEPT GROUP 5 SPECIES. MINIMUM PANEL SPAN RATING OF (24/0). PANELS SHALL NOT BE LESS THAN 4'x8', EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING. ALL EDGES OF ALL PANELS SHALL BE SUPPORTED BY AND FASTENED TO FRAMING MEMBERS OR BLOCKING.

(2) SECTION 4.3.7.1.2. & SECTION 4.3.7.1.3
PANEL EDGE NAILING APPLIES TO ALL SHEATHING PANEL EDGES. NAIL SHEATHING TO INTERMEDIATE FRAMING MEMBERS WITH SHEATHING NAILS @ 12"oc. MAXIMUM STUD SPACING SHALL BE 16"oc. SHEATHING NAILS SHALL BE 0.131"Ø x 2½". PLYWOOD EDGE NAILING SHALL BE STAGGERED. NAILS SHALL BE LOCATED AT LEAST ⅜" FROM THE PANEL EDGES.



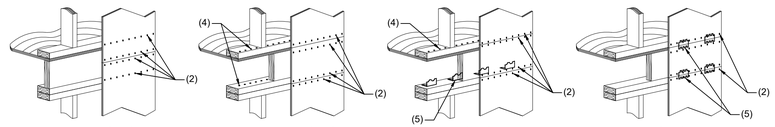
(3) SECTION 4.3.7.1.4
THE MINIMUM NOMINAL WIDTH OF THE NAILED FACE OF FRAMING AND BLOCKING AT ADJOINING PANEL EDGES SHALL BE AS INDICATED IN THE SCHEDULE.



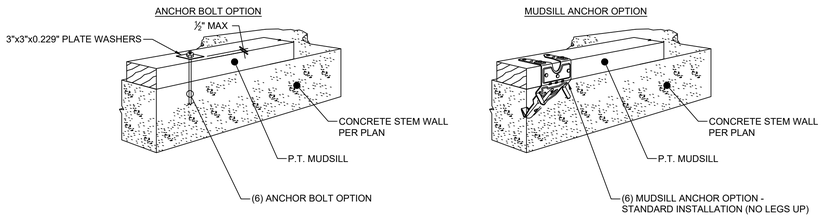


(4) FACE NAILING APPLIES TO CONDITIONS WHERE FRAMING NAILS CAN BE STRAIGHT DRIVEN THRU FIRST MEMBER AND PENETRATE MAIN MEMBER MINIMUM OF 1½". FRAMING NAILS SHALL BE 0.131"Ø x 3¼". 0.131"Ø x 3" NAILS MAY BE USED WHEN STITCHING TOGETHER (2)2x MEMBERS WITH NO SPACERS.

(5) AT ADJOINING PANEL EDGES WHERE SHEATHING CANNOT LAP ON SINGLE MEMBER AND FACE NAILING CANNOT BE ACCOMPLISHED, FRAMING CLIPS SHALL BE USED TO FASTEN BUILT-UP MEMBERS. USE 0.131"Ø x 2½" NAILS AT LTP4 CLIP WHEN INSTALLED OVER ½" SHEATHING.



(6) SECTION 4.3.6.4.3
ANCHOR BOLTS EMBEDMENT SHALL BE 7". U.O.N. ALL ANCHORS SHALL HAVE 3" x 3" x 0.229" PLATE WASHERS. PLATE WASHER SHALL EXTEND TO WITHIN ½" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. IF SHEATHING IS ON BOTH SIDES OF THE WALL, STAGGER THE ANCHOR BOLTS, AS REQUIRED, SO THAT HALF OF THE PLATE WASHERS ARE WITHIN ½" OF THE EDGE OF THE BOTTOM PLATE ON EACH SIDE. HOLE IN PLATE WASHERS MAY BE DIAGONALLY SLOTTED.



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STATE OF WASHINGTON
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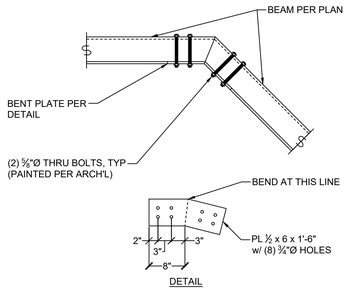
DETAILS

S3.1



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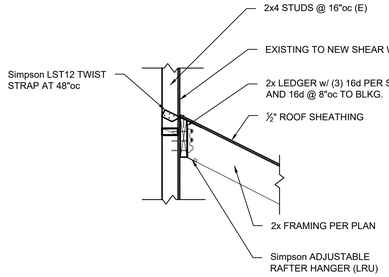

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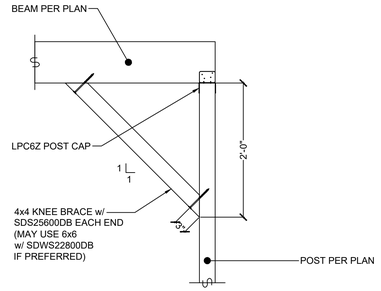

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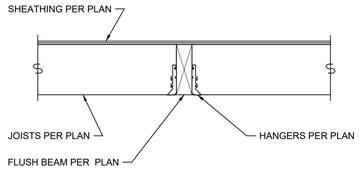

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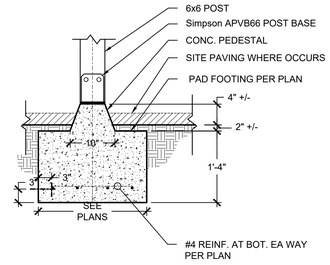

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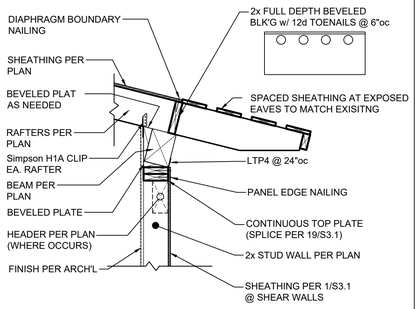

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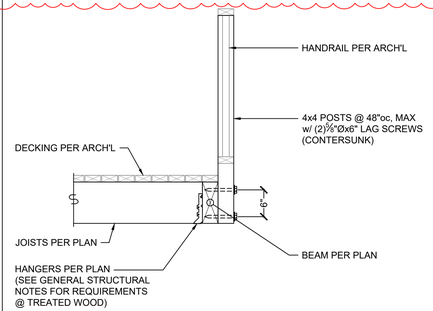

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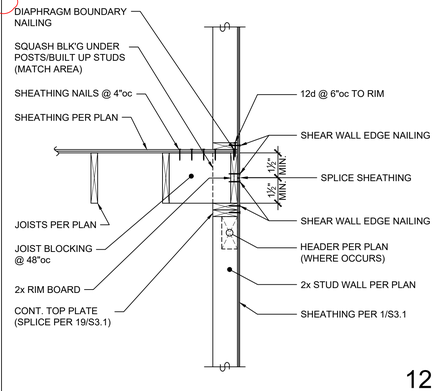

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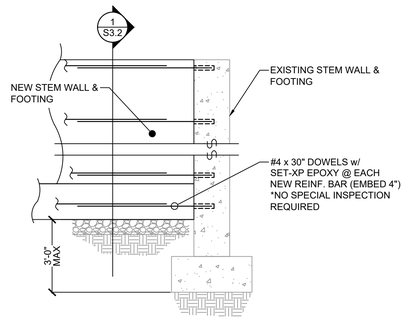

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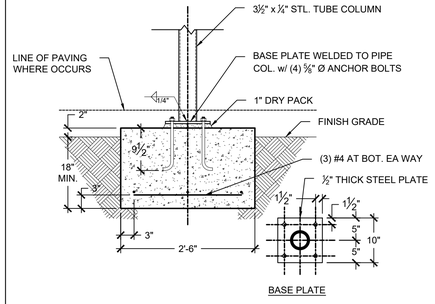

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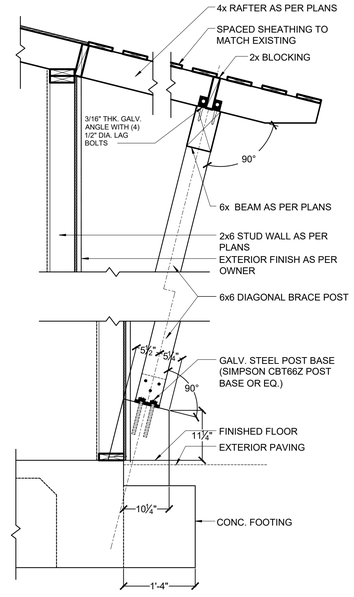

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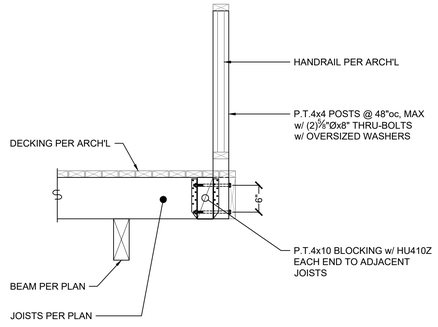

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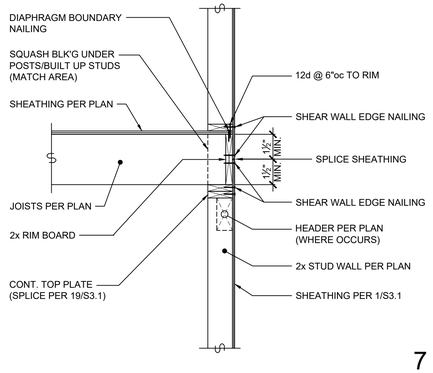

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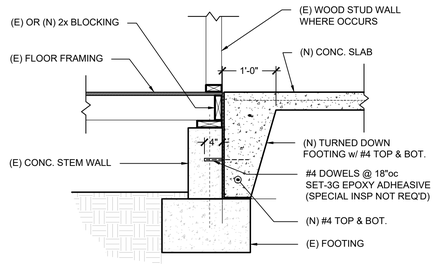

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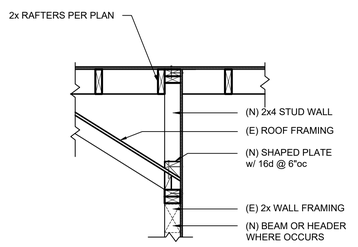

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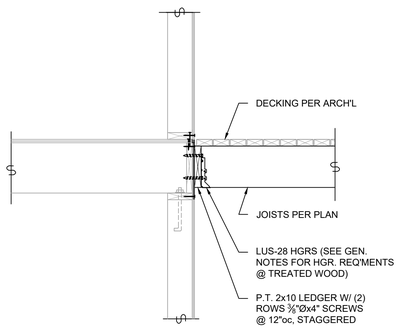

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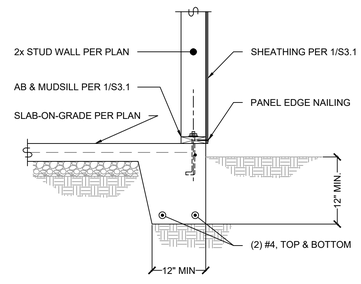


1

ERIC A. DAMM
STATE OF WASHINGTON
33029
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
06/25/2024

Blake Family Residence Remodel

6115 79th Ave SE
Mercer Island, WA 98040

BTL
ENGINEERING P.S.
19011 Woodinville Snohomish Road NE, Suite 100
WOODINVILLE, WA 98072-4456
PHONE: 425-814-8448 FAX: 425-821-2120

PROJECT NUMBER:	24-805-02
PROJECT MANAGER:	TSW
DRAWN BY:	KLR/JLL
DATE:	06-25-2024

REVISIONS:

1	CITY COMMENTS	12-10-2024

DETAILS

S3.2

TREE PROTECTION AREA (TPZ)

KEEP OUT!

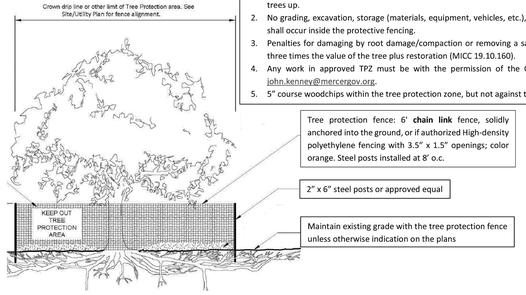
DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees/financial penalties
3. Arborist reports recommending mitigation

Notes

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
4. Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kenney@mercergov.org.
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.



Any Work in the protected area must be with the permission of the City Arborist john.kenney@mercergov.org

PARCEL NUMBER: 515470-0055
OWNERS NAME: CARLY AND PATRICK BLAKE
PARCEL NUMBER: 409480-0210
SITE ADDRESS: 6115 79TH AVE SE 98040
LEGAL DESCRIPTION: LAKE VIEW HIGHLANDS REPLAT OF & UND INT IN PRIVATE PARK LESS BEG SE COR LOT 21 TH NWLY 115 FT TH N 19-26-00 E 10 FT TH S 70-30-00 E TO E LN LOT 21 TH S TO BEG & POR LOT 22 BEG SE COR TH N 00-02-20 E ALG E LN 15 FT TH N 89-57-40 W 42.61 FT TO SLY LN LOT 22 TH S 70-34-00 E 45.17 FT TO POB

NOTES:

1. ALL EXISTING TREES TO BE RETAINED AND PROTECTED ON SITE DURING CONSTRUCTION.
2. REFERENCE SITE PLAN FOR TREE PROTECTION FENCING LOCATIONS.

1 TREE INVENTORY PLAN

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT
9611 SE 36TH STREET | MERCER ISLAND, WA 98040
PHONE: 206.275.7605 | www.mercergov.org

MERCER ISLAND TREE INVENTORY & REPLACEMENT SUBMITTAL INFORMATION

PROJECT INFORMATION	
Property Owner Name:	Carly and Patrick Blake
Site Address or Parcel Number:	6115 79th Ave S 98040
Project Contact Name:	Todd Martell - Plum Design LLC
Contact Email Address:	todd@plumdesignllc.com
Contact Phone Number:	206.619.3843

EXCEPTIONAL TREES

Exceptional Trees- means a tree or group of trees that because of its unique historical, ecological or aesthetic value constitutes an important community resource. A tree that is rare or exceptional by virtue of its size, species, condition, cultural/historical importance, age, and/or contribution as part of a tree grove. Trees with a diameter of more than 36 inches, or with a diameter that is equal to or greater than the diameter listed in the Exceptional Tree Table shown in MICC 19.16 under Tree, Exceptional.

List the total number of trees for each category and the tree identification numbers from the arborist report.

Number of trees 36" or greater: NONE
List tree numbers:

Number of trees 24" or greater (including 36" or greater): QTY. 3
List tree numbers: TREES #2, #3, #4

Number of trees from Exceptional Tree Table (MICC 19.16): NONE
List tree numbers:

LARGE REGULATED TREES

Large Regulated Trees- means any tree with a diameter of 10 inches or more, and any tree that meets the definition of an Exceptional Tree.

Number of Large Regulated Trees on site: (A)
List tree numbers: QTY. 4 TREES. TREE #1, #2, #3, #4

Number of Large Regulated Trees on site proposed for removal: (B)
List tree numbers: NONE PROPOSED FRO REMOVAL

Percentage of trees to be retained ((A-B)/Ax100) note: must be at least 30% 100%

RIGHT OF WAY TREES

Right of Way Trees- means a tree that is located in the street right of way adjacent to the project property.

Number of Large Regulated Trees in right of way: NONE
List tree numbers:

Number of Large Regulated Trees in right of way proposed for removal: NONE
List tree numbers:

Reason for removal:

NO TREES ARE PROPOSED FOR REMOVAL. TREE PROTECTION FENCING TO BE PROVIDED AS NECESSARY. SEE PLAN AND DETAIL.

TREE REPLACEMENT

Tree replacement- removed trees must be replaced based on the ratio in the table below. Replacement trees shall be conifers at least six feet tall and or deciduous at least one and one-half inches in diameter at base.

Diameter of Removed Tree (measured 4.5' above ground)	Tree replacement Ratio	Number of Trees Proposed for Removal	Number of Tree Required for Replacement Based on Size/Type
Less than 10"*	1	0	0
10" up to 24"	2	0	0
Greater than 24" up to 36"	3	0	0
Greater than 36" and any Exceptional Tree	6	0	0
	TOTAL TREE REPLACEMENTS		0

no replacement tree is needed if the tree fits all of the following;
***Less than 10 inches in diameter, not an exceptional tree, and not a replacement tree from another tree permit. ***

\\chfs1\share\CPD\FORMS\1Current Forms\Engineering Forms\Tree\MercerIslandTreeInventory.docx
02/2022

6B WORKSHOP
LANDSCAPE ARCHITECTURE
P: 509.866.6823 - www.6Bworkshop.com

STATE OF WASHINGTON · MICHAEL T. BROWN · 22615 EXPIRES: 6/6/2026 · REGISTERED LANDSCAPE ARCHITECT

BLAKE - RESIDENCE LANDSCAPE PLAN
PROJECT ADDRESS: 6115 79TH AVE S 98040
OWNER: CARLY AND PATRICK BLAKE

REVISIONS	DATE	DESCRIPTION

ISSUANCES

DATE	DESCRIPTION
-	-

ORIGINAL SHEET SIZE IS 22"x34"

PROJECT #: 2024018.00
SDCI PROJECT #:
PLOT DATE: 8.19.2024

SHEET NO.:

L0.01