CITY OF MERCER ISLAND
COMMUNITY PLANNING & DEVELOPMENT
RESIDENTIAL CODE COVERSHEET

(206) 275-7605 WWW.MERCERISLAND.GOV/CPD
EPERMIT.TECH@MERCERISLAND.GOV
DOCUMENTS ARE SUBJECT TO PUBLIC DISCLOSURE AS REQUIRED BY RCW 42.56

INSPECTION REQUESTS
Request inspections online via QR code or voicemail
FIRE INSPECTION (206) 275-7979
ALL OTHER INSPECTION (206) 275-7730

SF1 BUILDING PERMIT NUMBER 2402-026

PROJECT NAME: HERNANDEZ REMODEL AND ADDITION
PROJECT ADDRESS: 7520 MERCER TERRACE DR, 98040

PROJECT DESCRIPTION
This scope should match the Building Permit Application Form

Roof remodel, demo existing lower roof line and reconstruction maintaining the existing footprint with a new design. 2- story addition, 632 SF of conditioned gross floor area and 316 SF total lot coverage. 316 SF ADU on level 1 and 316 SF addition to the existing bedroom on level 2. The proposed addition is in a geo-hazard area on the site.

PROJECT CONTACT INFORMATION
The Applicant shall provide the following information for each type of contact (Engineer and Geotech dependent on scope)

Permitting Contact: Diego Pineda	Email: diego@buildstuffstudios.com	Phone: 206-771-5014
Construction Contact: Rodolfo Hernandez McIntyre	Email: rodolfo@kw.com	Phone: 206-291-8329
Engineer: Evan Apolis	Email: episoen@gmail.com	Phone: (206) 369-3984
Geotech: Phil Haberman	Email: phil@cobaltgeo.com	Phone: (206) 331-1097

DEFERRED SUBMITTALS
The Applicant is required to indicate all deferred submittals / shop drawings for submittal to the City for review and approval prior to item fabrication / construction. All deferred submittals require pre-approval from the City during the permit review process.

☒ No Deferred Submittals - all design included in these construction documents

☐ Connector plate wood roof trusses
☐ Metal joist / metal trusses
☐ Premanufactured structures (stairs, etc.)
☐ Exterior cladding
☐ Window wall / curtain wall construction
☐ Other:

ENERGY CODE AND WHOLE HOUSE VENTILATION INFORMATION
Indicate where the following information is located within the drawing set and select one box per line below.

Building Envelope- Define all components of the thermal envelope. Include U-factors, insulation and moisture control *WSEC Table 402.1.2* Sheet: A000

Energy Credit Information- Include complete information on plan for options selected and equipment specified *WSEC Tables 406.2 and 406.3* Sheet: A102

☐ No Credits Required ☒ Small Dwelling Unit ☐ Medium Dwelling Unit ☐ Large Dwelling Unit ☐ < 500 sf addition

New Construction Tests- The following are mandatory testing and reporting requirements of WSEC Ch 4 for new construction

● Certificate of Energy Efficiency *WSEC R401.3* ● Duct Leakage Testing *WSEC R403.3.5* ● Air Leakage Testing *WSEC R402.4.1.2*

☒ Air Leakage test report not to exceed 5 changes per hour *WSRC 1505.4.1.2* ☐ Air Leakage per selected energy credits

Whole House Ventilation- Specify system type below and include all system requirements on sheet noted *WSRC Section M1505.4* Sheet: A102

☐ Exhaust fans *WSRC 1505.4.1.2* ☐ Supply fans *WSRC 1505.4.1.3* ☒ Balanced system *WSRC 1505.4.1.4* ☐ Other permitted system

REQUIRED SPECIAL INSPECTIONS
The Applicant shall complete the following section. One of the options below must be selected prior to permit intake. Chapter 17 of the International Building Code (IBC) requires Special Inspection to evaluate components of construction that are critical to the safety of the structure. The project owner shall be responsible for contracting with and hiring the Special Inspection agents. Structural Special Inspectors are required to be certified by the Washington Association of Building Officials (WABO). Geotechnical Special Inspectors shall be a licensed Washington State Professional Engineer. Where Special Inspection is required, all reports shall be emailed to InspectionReports@mercergov.org **and** provided to the City Building Inspector at time of the City inspection.

Inspections by the City Building Inspector are required in addition to the Special Inspection.
Do not cover or conceal any work prior to the City inspection.

PRESCRIPTIVE DESIGN
☐ This project is entirely non-structural, or is designed following the prescriptive gravity and lateral provisions of the International Residential Code (IRC) only. There are no engineered components that have been designed to the IBC or its referenced standards, e.g. American Concrete Institute (ACI), National Design Specifications (NDS), etc. No Special Inspections are required by IRC.

MINOR STRUCTURAL WORK
☐ This project has limited engineered design as permitted by IRC Section R301.1.3 and the construction is of a minor nature as excepted by IBC Section 1704.2. This option must be reviewed and accepted by the building official prior to permit issuance and shall be reevaluated for project revisions and deferred submittals.

ENGINEERED DESIGN
☒ This project is engineered to the provisions of the IBC and its referenced standards. Per IBC Chapter 17, a *Statement of Special Inspection* shall be completed by the Registered Design Professional (RDP) in responsible charge. The *Statement of Special Inspections* on coversheet SF2 has been reviewed and completed by the RDP.

REQUIRED STRUCTURAL OBSERVATION
Structural Observation may be required by the Registered Design Professional (RDP) in responsible charge or by the building official per IBC Section 1704.6.1. The RDP shall submit written statements to the building official prior to the commencement of observations (identifying frequency and extent of observations) and at the conclusion of work included in the permit (describing the site visit(s) performed and identifying any deficiencies that have not been resolved). Submit all statements to inspectionreports@mercerisland.gov

Structural Observation for this project is required by the:
☒ Registered Design Professional ☐ Building Official *(City use only)*

GEOTECHNICAL INFORMATION
Per Mercer Island City Code, designated geologic hazard areas require a geotechnical report and a statement of risk from a geotechnical professional be included with the project submittal. Refer to MICC 19.07.160 (B)(3) for statement of risk, and City GIS at https://www.mercerisland.gov/igs for hazard mapping. Some proposals may require a site restoration bond.

NO GEOTECHNICAL REPORT REQUIRED
☐ No geotechnical report is required due to either: 1. The absense of geologic hazards on site or 2. Scope of project does not include foundation construction, excavation, or alterations to a hazard (if a report is available or referenced it should be provided)

GEOTECHNICAL REPORT IS REQUIRED AND INCLUDED WITH SUBMITTAL
☒ A geotechnical report is required and has been provided. All construction must comply with the recommendations of the geotechnical report, and a copy of the report and any other geotechnical information must be kept on site at all times.

Geotechnical Engineer: Phil Haberman	Phone: (206) 331-1097	Project or report #:

SEASONAL DEVELOPMENT LIMITATION - MICC 19.07.160(F)(2) limits certain development between Oct 1 and Apr 1
☐ An application for Seasonal Development Limitation Waiver will be submitted and approved prior to any such activity.
☒ No grading or excavation will occur between October 1st and April 1st. SDL waiver not applicable.

The City requires an applicant paid peer review when the Building Official determines any of the following are present:
- Advanced excavation or foundation systems, i.e. soil nail walls, tieback shoring systems, etc.
- Foundation systems not supported on competent soils, i.e. over-excavation, soil preloading, etc.
- Projects that require slope stability analysis or those which could pose a significant risk to adjacent properties or structures.
- Where liquifaction presents significant risk (at waterfront or other high water table with seismic mapping)

TO BE COMPLETED BY APPLICANT
TO BE COMPLETED BY CITY

GENERAL REQUIREMENTS FOR ☐ NEW SINGLE FAMILY BUILD ☐ DEMOLITION/REBUILD ☒ ADDITION ☒ REMODEL ☐ REPAIR ☐ DOCK ☐ SITE IMPROVEMENTS ☐ SEISMIC RETRO
Construction of the project shall be from ***approved plans only***. No deviation from the approved project plans is allowed without prior approval from the City of Mercer Island.
Approved plans must be kept on site and maintained in good condition.

☑ Refer to "Conditions of Permit Approval" provided at permit issuance for required construction rules and regulations, including:
- Site Considerations
- Hours of Work
- Construction Vehicle Parking Restrictions
- Access Road Requirements
- ROW restrictions
- Drainage Requirements
- Sewer Requirements
- Water Service Requirements
- Additional Fire Code Requirements
- Planning Requirements
- Noise Abatement Certification
- Tree Requirements

☐ PRECONSTRUCTION MEETING REQUIRED. Refer to the "Preconstruction Meeting Checklist" notes for additional requirements.
☑ Temporary site address with minimum 6" high numbers visible from the street must be installed.
☑ Erosion control measures must be as shown on approved project drawings. All erosion control is to be in place and inspected prior to the start of any work.
☑ A City of Mercer Island Business License is required for all subcontractors. Call (206) 275-7602 for more information.
☑ Additional rockeries, patios, gravel or concrete paths, and other hardscape revisions to the project shall be submitted to the City for review and approval prior to installation.

LEGAL NONCONFORMANCE/STORMWATER THRESHOLD
Certain thresholds in the Land Use Code (MICC 19) or Stormwater Code (MICC 15.09) can have a significant impact on the requirements to conform with current code. Take special care to conform to the construction documents as-issued to avoid additional improvements.

☐ This project includes modification of legally nonconforming structures - MICC 19.01.050
☐ This project retains existing construction to limit calculation of *New Plus Replaced Hard Surface* - MICC 15.09

TREE REQUIREMENTS
TREE REMOVAL NOT SHOWN ON APPROVED PLAN MAY REQUIRE A SEPARATE TREE PERMIT - REFER TO MICC 19.10
☒ Tree protection as shown on approved drawings shall be installed at tree dripline prior to start of any site work and must remain in place throughout the project. Tree damage due to failure to follow approved plans shall result in fines per MICC 19.19.160.
☒ Replacement conifer trees must be a minimum of six feet tall at installation. Deciduous trees must have a minimum caliper of 1-1/2 inches. They must be planted and approved prior to final inspection.
For this project, 2 trees are authorized to be removed and replaced with 4 trees.
This project may be within a protected eagle nest area. Contact Federal Fish and Wildlife at (360) 534-9304 or visit their website at www.fws.gov/pacific/eagle.

FIRE PROTECTION REQUIREMENTS
Separate Permits are required for ***ALL*** fire protection systems. Fire Inspections can be requested by calling (206) 275-7979 and require three (3) days advanced notice. Do not request fire inspections via MBP or on the general inspection line.

☐ Fire Sprinkler
☐ NFPA 13D
☐ Full Coverage
☐ NFPA 13R
☐ NFPA 13
☐ Approved Fire Code Alternatives (FCA):
☐ FCA1
☐ FCA2
☒ Monitored Household Fire Alarm per NFPA 72
☐ Monitored Sprinkler Water Flow Alarm
Separate FIRE permit required
☐ Other:
☐ FCA3
☐ FCA4

WATER SERVICE REQUIREMENTS
☐ New or upsized water supply system required.
☐ Water service pre-con meeting and parts inspection are required prior to scheduling the water tap with the City. Schedule these inspections under the water service permit
☐ Applicant Installation.
☐ Minimum Service Line Size (main to meter): _____
☐ Minimum Supply Line Size (meter to house): _____
☐ Minimum Required Meter Size: _____
☐ Abandonment of existing service and meter required at main.
☐ City Inspector must verify water supply line (water meter to the house) sizing prior to final inspection. Upsizing may be required.

Additional water supply requirements:
- Contractor shall provide water supply that meets the required fire sprinkler system fire flow. Fire calculations or fire flow testing outcome may require a larger water service/meter or water supply line.
- Pressure reducing valve required if water pressure exceeds 80 psi.
- Reduced pressure backflow assembly (RPBA) required for all waterfront lots and for lots with potential connection to non-city water supply. See mercerisland.gov/backflow

For additional information about Water Service Inspection process: https://www.mercerisland.gov/cpd/page/water-service

STORMWATER MANAGEMENT
The storm drainage system shown on the approved plans shall be constructed and approved by the City Inspector prior to the construction of the roof, driveway, and other impervious surface that generate runoff from the project.

☐ Dispersion / Infiltration system
☐ On-site detention system (MR #5)
☐ Direct discharge to lake
☐ Rain Garden / Bioretention / Permeable Pavement
☐ Flow control system (MR #7)
☐ Run-off treatment (MR #8)
☐ Connect / Extend public drainage system
☐ Full size storm drainage as-builts
☒ Drainage review not required
☐ Other:

SIDE SEWER REQUIREMENTS
☐ Side sewer requires a backflow preventer due to: a connection to the lake line, or elevation of the lowest plumbing fixture is lower than the elevation of the upstream manhole rim, or side sewer is shared with one or more properties
☒ Video tape of existing sewer required (see standard details)
☐ New connection ☒ Connect to existing ☐ Disconnect permit required ☒ Reconnect permit required
☐ Other:

APPROVED CODE ALTERNATIVES
Code alternatives must be approved by the Building Official prior to permit issuance. All code alternatives must be inspected. Refer to the adjacent Required Construction Inspections checklist.

☐ CA1:
☐ CA2:

PROJECT ALERTS AND NOTES TO INSPECTORS

WILDLAND/URBAN INTERFACE
-RESERVED FOR FUTURE USE-

REQUIRED CONSTRUCTION INSPECTIONS
It is the applicant's responsibility to contact CPD to schedule ALL inspections applicable to the project. Request inspections online at www.MyBuildingPermit.com or by calling the Inspection Hotline at (206) 275-7730. Each MBP inspection type is in [square brackets]. Refer to FIRE PROTECTION REQUIREMENTS for information on scheduling a fire inspection.

Inspections marked with "*" are not building permit inspections, and should be requested under the appropriate permit number. Refer to the packet provided at permit issuance or search by address at mybuildingpermit.com for other issued permit numbers.

INSPECTIONS: (Listed in order of typical sequencing)

Inspector	Date	Approved	N/A	Inspection Description	MBP.com Inspection Name	PARTIAL 1	PARTIAL 2	PARTIAL 3
		☐	☐	Pre-construction Meeting to Review Conditions of Permit Approval	[PRE-CON MTG GENERAL]	☐	☐	☐
		☐	☐	Tree protection	[TREE PROTECTION]	☐	☐	☐
		☐	☐	Erosion control	[EROSION CNTROL]	☐	☐	☐
		☐	☐	Sewer disconnect and cap	[SIDE SEWER DISCONNEC]	☐	☐	☐
		☐	☐	Right-of-way use or work / easement, material delivery, etc. If applicable, separate ROW permit required	[ROW OR UTILITY IMPRO]	☐	☐	☐
		☐	☐	Land clearing, grading and demolition	[FINAL DEMO]	☐	☐	☐
		☐	☐	Pilings / Shoring / Shotcrete. If applicable, provide survey letter (property line); Geotechnical Engineer / Special Inspector reports of inspections (pile and shoring installation, etc.)	[FOUNDATION WALLS/CON]	☐	☐	☐
		☐	☐	Footings, setbacks, UFER ground. If applicable, provide survey letter (building height and setbacks); Special Inspector reports of inspections (soil bearing capacity, compaction, earthwork, pile installation, etc.)	[FOOTINGS, SETBACKS, U]	☐	☐	☐
		☐	☐	Foundation walls / concrete columns	[FOUNDATION WALLS/CON]	☐	☐	☐
		☐	☐	Roof and footing drains	[CONVEYANCE FACILITIE]	☐	☐	☐
		☐	☐	Foundation dampproofing	[FOUND DAMP PROOFING]	☐	☐	☐
		☐	☐	Storm drainage, including (but not limited to): ∘ Connections to storm main in ROW ∘ Det systems / Conveyance / Flow control ∘ Infiltration systems / L.I.D. systems ∘ Catch basins ∘ Area drains ∘ Storm drain in ROW ∘ Pump systems ∘ Retaining wall drainage	[CONVEYANCE FACILITIE]	☐	☐	☐
		☐	☐	Water Service	[3. WATER SERVICE TAP]	☐	☐	☐
		☐	☐	Water Supply	[WATER SUPPLY LINE]	☐	☐	☐
		☐	☐	Side sewer installation, including (but not limited to): ∘ Connections to side sewer main ∘ Connections to existing side sewer ∘ Back-flow valves ∘ Grinder pump systems	[SIDE SEWER INSTALLAT]	☐	☐	☐
		☐	☐	Driveway / Access road	[ROW OR UTILITY IMPRO]	☐	☐	☐
		☐	☐	Underslab electrical / mechanical / plumbing	[UNDER-SLAB ELECT/MEC]	☐	☐	☐
		☐	☐	Underslab insulation / vapor barrier / reinforcing	[UNDER-SLAB INSULATIO]	☐	☐	☐
		☐	☐	Underfloor framing	[UNDER-FLOOR FRAMING]	☐	☐	☐
		☐	☐	Nailing-Roof sheathing (See SF2 for Required Agency Inspection)	[NAILING-ROOF SHEATHING]	☐	☐	☐
		☐	☐	Shear wall construction (See SF2 for Required Agency Inspection)	[NAILING-EXTERIOR WALL]	☐	☐	☐
		☐	☐	Rough hydronic installation	[ROUGH HYDRONIC PIPIN]	☐	☐	☐
		☐	☐	Rough electric installation	[ROUGH ELECTRIC]	☐	☐	☐
		☐	☐	Rough fire alarm (wiring inspection)	[ROUGH-IN LOW VOLTAGE]	☐	☐	☐
		☐	☐	Rough plumbing installation (DWV, water)	[ROUGH PLUMBING]	☐	☐	☐
		☐	☐	Rough mechanical	[ROUGH MECHANICAL/HVA]	☐	☐	☐
		☐	☐	Electrical service	[ELECTRICAL SERVICE]	☐	☐	☐
		☐	☐	Gas Piping & Test	[GAS PIPING/TEST]	☐	☐	☐
		☐	☐	Rough fire sprinkler / hydrostatic and flow (bucket) test	[ROUGH SPRINKLER RES/STATUS]	☐	☐	☐
		☐	☐	Framing and glazing. (See SF2 for Required Agency Inspection)	[FRAMING (& GLAZING)]	☐	☐	☐
		☐	☐	Masonry construction (fireplace / walls / veneer / etc.)	[MASONRY]	☐	☐	☐
		☐	☐	Insulation installation	[INSULATION]	☐	☐	☐
		☐	☐	Stucco (paper and lath)	[STUCCO]	☐	☐	☐
		☐	☐	Shower pan (or tub)	[SHOWER PAN (OR TUB)]	☐	☐	☐
		☐	☐	Weather exposed balcony and walking surface waterproofing	[ROOF DECK WATERPROOFING]	☐	☐	☐
		☐	☐	Code Alternative CA1	[CODE ALT 1]	☐	☐	☐
		☐	☐	Code Alternative CA2	[CODE ALT 2]	☐	☐	☐

FINAL INSPECTIONS

Inspector	Date		
		☐	**Final Tree Inspection:** Tree Restoration [FINAL_TREE]
		☐	**Final Fire Inspection:** Fire protection [FINAL FIRE_ALL SYSTEMS/ACCESS] ∘ Sprinkler ∘ Access Road ∘ Fire Code Alternatives (see below) ☐ FCA1 ☐ FCA2 ∘ Fuel Tank Installation ∘ Fire Extinguishing System ∘ Fire Alarm System ☐ FCA3: ☐ FCA4:
		☐	**Final Civil Inspection:** Site and utility, landscape, utilities, ROW, and Site [FINAL_CIVIL] Water supply protection/Backflow devices for: ∘ Waterfront property ∘ Fire / lawn sprinkler ∘ Well water on property ∘ Boiler
		☐	**Final Building Inspection:** [FINAL_BUILDING] provide closeout (summary) letters from Engineer, Special Inspectors, Geotechnical Engineer, and EIFS inspectors. **Final MEP Inspections:** ☐ Mech ☐ Electrical ☐ Plumbing
		☐	**Impact Fees Paid** (If applicable)

TCO APPROVALS

Inspector	Date		
		☐	[TCO_TREE]
		☐	[TCO_FIRE]
		☐	[TCO_CIVIL]
		☐	[TCO_BLDG]

90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO)
Applicant option. Additional fees required. All TCO Approvals above must be complete.

Approved *Start Date* *End Date*

ADDITIONAL REQUIRED CITY INSPECTIONS
Use the contact information below to arrange these additional inspections.

Required Inspection(s):	Contact:	Contact email:
Landscaping for disturbed areas outside building footprint and hardscape	Planning - Molly McGuire	molly.mcguire@mercerisland.gov

IMPACT FEES
If required for the project but deferred beyond permit issuance.

☐ Impact fees apply and are due ***prior*** to Final Inspection or on _____ *Date*, whichever occurs first.

PLAN REVIEW APPROVALS
Not all review disciplines may be required to review the documents.

Building	*Planning*	*Engineering*	*Tree*	*Fire*
JHA	MM	RD	J.Kenney	J. Hicks
12/9/24	12/9/2024	5/16/24	4/29/24	2-06-2024
Date	*Date*	*Date*	*Date*	*Date*

CERTIFICATE OF OCCUPANCY
Issued after all required inspections have been performed and approved.
Date *Approved*

APPROVED DRAWINGS MUST BE KEPT ON THE BUILDING SITE AT ALL TIMES

REVIEWED FOR CODE COMPLIANCE
12/9/24 *Date*
JHA *Approved*

FILE NAME: *CPD CVR PG1 2023v1a.dwg Code Revision: 2021 WSRC*

CITY OF MERCER ISLAND
COMMUNITY PLANNING & DEVELOPMENT
THIRD PARTY INSPECTIONS

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INSPECTION REQUESTS
Request inspections online via QR code or voicemail
FIRE INSPECTION
(206) 275-7979
ALL OTHER INSPECTION
(206) 275-7730

REQUIRED SPECIAL INSPECTIONS

Indicate on the form below the required Special Inspections for this project. Special Inspections are regulated by IBC Section 1705. If the method of construction is included in project scope, the inspections are required.

REGISTERED DESIGN PROFESSIONAL

IBC Section 1704.2.3 requires the Registered Design Professional (RDP) in Responsible Charge to complete a *Statement of Special Inspections*. For City of Mercer Island permitting purposes, submitting this document is confirmation that the RDP has completed and reviewed the Special Inspections requirements and acknowledges this information complies with IBC Section 1705.

Name: Evan Booth Apolis | License Number: 52101 | License Type: Professional Engineer | License Expiration: August 26, 2025

SPECIAL INSPECTION DESCRIPTION		APPROVALS: Special Inspector sign-off	APPROVALS: City Inspector sign-off
ALTERNATIVE MATERIALS AND SYSTEMS (IBC 1705.1)			
Construction materials and systems that are alternatives to materials and systems prescribed by the IBC.	Notes:		
Unusual design applications of materials described in the code.	Notes:		
Materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in the IBC or in standards referenced by the IBC.	Notes:		

SPECIAL INSPECTION DESCRIPTION	REFERENCES	SPECIAL INSP REQUIRED	FREQUENCY	APPROVALS: Special Inspector sign-off	APPROVALS: City Inspector sign-off
STEEL CONSTRUCTION (IBC 1705.2)					
Structural Steel: Special Inspections for structural steel shall be in accordance with the inspection requirements of AISC 360 Chapter N.	AISC 360 Chapter N	☐	Per Standard		
Quality Control: Procedures specified by the fabricator and erector to ensure that work is performed in accordance with AISC specification and the construction documents	AISC 360 Section N5 (1)	☐	Per Standard		
Quality Assurance: Review and inspection performed by an agency hired by the owner to ensure work is performed in accordance with the construction documents	AISC 360 Section N5 (2)	☐	Per Standard		
Cold Formed Steel Deck: Special Inspections and qualifications or welding special inspectors for cold form set floor and roof deck shall be in accordance with Steel Deck Institute QA/QC.	Steel Deck Institute QA/QC	☐	Per Standard		
Open-Web Steel Joists and Joist Girders:	SJI Specification per IBC 2207.1	☐	Periodic		
End connections: welding or bolting.	SJI Specification per IBC 2207.1	☐	Periodic		
Bridging: horizontal or diagonal.	SJI Specification per IBC 2207.1	☐	Periodic		
Standard Bridging.	SJI Specification per IBC 2207.1	☐	Periodic		
Bridging that differs from SJI Specifications listed in Section 2207.1.	IBC 1705.2.4	☐	Periodic		
Temporary and permanent restraint / bracing of cold-formed trusses over 60 feet.					
CONCRETE CONSTRUCTION (IBC 1705.3) [a.]					
Inspect reinforcement, including prestressing tendons, and verify placement	ACI 318 Ch 20, 25.2, 25.3, 26.5.1-26.5.3	☐	Periodic		
Reinforcing bar welding: *Verify weldability of reinforcing bars other than ASTM A706.*	AWS D1.4 ACI 318 Ch 26.6.4	☐	Periodic		
Inspect single-pass fillet welds, maximum 5/16 inches.	AWS D1.4 ACI 318 Ch 26.6.4	☐	Periodic		
Inspect all other welds.	AWS D1.4 ACI 318 Ch 26.6.4	☐	Continuous		
Inspect anchors cast in concrete.	ACI 318 Ch 17.8.2	☐	Periodic		
Anchors post-installed in hardened concrete members: *Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.*	ACI 318 Ch 17.8.2.4	☐	Continuous		
All other post-installed mechanical and adhesive anchors.	ACI 318 Ch 17.8.2	☐	Periodic		
Verify use of required design mix.	ACI 318 Ch 19, 26.4.3, 26.4.4; IBC 1904.1, 1904.2, 1908.2, 1908.3	☐	Periodic		
Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	ASTM C 172, ASTM C31 ACI 318 Ch 26.5, 26.12	☐	Continuous		
Inspect concrete and shotcrete placement for proper application techniques.	ACI 318 Ch 26.5	☐	Continuous		
Verify maintenance of specified curing temperature and techniques.	ACI 318 Ch 26.5-26.5.5	☐	Periodic		
Prestressed concrete: *Application of prestressing fores.*	ACI 318 Ch. 26.10	☐	Continuous		
Grouting of bonded prestressing tendons.	ACI 318 Ch. 26.10	☐	Continuous		
Inspect erection of precast concrete members.	ACI 318 Ch. 26.9	☐	Periodic		
Precast concrete diaphragm connections	ACI 318 Ch. 26.13.1.3	☐	Periodic		
Precast diaphragm installation tolerances	ACI 550.5	☐	Continuous		
Verify in-situ concrete strength prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	ACI 318 Ch. 26.11.2	☐	Periodic		
Inspect formwork for shape, location and dimensions of the concrete member being formed	ACI 318 Ch. 26.11.2(b)	☐	Periodic		
MASONRY CONSTRUCTION (IBC 1705.4) [b.]					
Empirically designed masonry, glass unit masonry, or masonry veneer as part of a Risk Category IV structure requiring Level B Quality Assurance per ACI 530	ACI 530 Chapter 3 IBC 1705.4	☐	Per Standard		
Vertical masonry foundation elements requiring Quality Assurance per ACI 530	ACI 530 Chapter 3 IBC 1705.4	☐	Per Standard		
WOOD CONSTRUCTION (IBC 1705.5)					
High-Load diaphragms: *Panel thickness, framing member sizes, and nail or staple diameters and patterns (includes any diaphragms utilizing more than one row of fasteners at edges designed per IBC Section 2306.2/SDPWS 4.2.7.1.2);*	IBC 1705.5.1	☐	Periodic		
Metal-plate-connected wood trusses spanning 60 feet or greater: *Verify temporary and permanent individual truss member restraint / bracing are installed in accordance with approved truss submittal package.*	IBC 1705.5.2	☐	Periodic		
Mass timber construction per IBC Table 1705.5.3	IBC 1705.5.3	☐	Periodic		
Mass timber (upwardly inclined adhesive anchors)	IBC 1705.5.3	☐	Continuous		

a. Concrete special inspection not required where work meets the exceptions listed in IBC Section 1705.3

b. Masonry special inspection not required where work meets the exceptions listed in IBC Section 1705.4

SPECIAL INSPECTION DESCRIPTION	REFERENCES	SPECIAL INSP REQUIRED	FREQUENCY	APPROVALS: Special Inspector sign-off	APPROVALS: City Inspector sign-off
SOILS (IBC 1705.6)					
Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Geotechnical Report	☐	Periodic		
Verify excavations are extended to proper depth and have reached proper material.	Geotechnical Report	☐	Periodic		
Perform classification and testing of compacted fill materials.	Geotechnical Report	☐	Periodic		
Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	Geotechnical Report	☐	Continuous		
Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	Geotechnical Report	☐	Periodic		
DRIVEN DEEP FOUNDATIONS (IBC 1705.7)					
Verify element materials, sizes and lengths comply with the requirements noted in the drawings and geotechnical report.	Geotechnical Report, Construction Documents	☐	Continuous		
Determine capacities of test elements and conduct additional load tests, as required.	Geotechnical Report, Construction Documents	☐	Continuous		
Inspect driving operations and maintain complete and accurate records for each element.	Geotechnical Report, Construction Documents	☐	Continuous		
Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element.	Geotechnical Report, Construction Documents	☐	Continuous		
For steel elements, perform additional Special Inspections in accordance with Section 1705.2.	Geotechnical Report, Construction Documents	☐			
For concrete elements and concrete-filled elements, perform additional Special Inspections in accordance with Section 1705.3.	Geotechnical Report, Construction Documents	☐			
For specialty elements, perform additional Special Inspections as determined by the Registered Design Professional in responsible charge.	Geotechnical Report, Construction Documents	☐			
CAST-IN-PLACE DEEP DRIVEN FOUNDATIONS (IBC 1705.8)					
Inspect drilling operations and maintain complete and accurate records for each element	Geotechnical Report, Construction Documents	☐	Continuous		
Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable), and adequate end-bearing strata capacity. Record concrete or grout volumes.	Geotechnical Report, Construction Documents	☐	Continuous		
For concrete elements, perform additional Special Inspections in accordance with Section 1705.3.	Geotechnical Report, Construction Documents	☐			
HELICAL PILE FOUNDATIONS (IBC 1705.9)					
Record installation equipment used, pile dimension, tip elevations, final depth, final installation torque and other pertinent installation information as determined by the Registered Design Professional in responsible charge.	Geotechnical Report, Construction Documents	☐	Continuous		
SPECIAL INSPECTION FOR WIND RESISTANCE (IBC 1705.11) [c.]					
Structural wood wind resistance elements: *Field gluing of wood elements of the windforce-resisting system.*	IBC 1705.11.1, Construction Documents	☐	Continuous		
Nailing, bolting, anchoring and other fastening of wood elements of the main windforce-resisting system, including wood shear walls, wood diaphragms, drag struts, braces and hold-downs. [d.]	IBC 1705.11.1, Construction Documents	☒	Periodic		
Cold-formed steel light-frame wind resistance elements: *Welding operations of cold-formed steel light-frame elements of the main windforce-resisting system.*	IBC 1705.11.2, Construction Documents	☐	Periodic		
Screw attachment, bolting, anchoring, and other fastening of elements of cold-formed steel light-frame elements of the main windforce-resisting system, including shear walls, braces, diaphragms, drag struts and hold-downs. [d.]	IBC 1705.11.2, Construction Documents	☐	Periodic		
Fastening of the following systems and components: *Roof covering, roof deck and roof framing connections.*	IBC 1705.11.3 (1), Construction Documents	☐	Periodic		
Exterior wall covering and wall connections to roof and floor diaphragms and framing.	IBC 1705.11.3 (2), Construction Documents	☐	Periodic		

c. Special inspection required in wind Exposure Category C or D per IBC Section 1705.11 (2).
d. Special inspection not required where wood or steel structural panels are on only one side of the shear wall and the fastener spacing for the sheathing is greater than 4 inches on center.

SPECIAL INSPECTION DESCRIPTION	REFERENCES	SPECIAL INSP REQUIRED	FREQUENCY	APPROVALS: Special Inspector sign-off	APPROVALS: City Inspector sign-off
SPECIAL INSPECTION FOR SEISMIC RESISTANCE (IBC 1705.12) [e.]					
Structural steel seismic force-resisting systems: *Special Inspections of MLFRS shall be in accordance with AISC 341 Chapter J. Submit all documents referenced in Section J3 "Quality Assurance Agency Documents" to the city for review.*	IBC 1705.12.1.1, AISC 341 *Seismic Provisions for Structural Steel Buildings*	☐	Per Standard		
Special inspection of structural steel elements shall be in accordance with AISC 341 Chapter J. Submit all documents referenced in Section J3 "Quality Assurance Agency Documents" to the city for review.	IBC 1705.12.1.2, AISC 341 *Seismic Provisions for Structural Steel Buildings*	☐	Per Standard		
Structural wood seismic force-resisting systems: *Special inspection during field gluing operations for elements of the seismic force-resisting system.*	IBC 1705.12.2 (1)	☐	Continuous		
Special inspection required for nailing, bolting, anchoring, and other fastening of elements of the seismic force-resisting system including wood shear walls, wood diaphragms, drag struts, braces, shear panels and hold-downs. [f.]	IBC 1705.12.2 (2)	☐	Periodic		
Cold-formed steel light-frame seismic force-resisting systems: *Special inspection during welding operations for elements of the seismic force-resisting system.*	IBC 1705.12.3 (1)	☐	Periodic		
Special inspection required for screw attachment, bolting, anchoring, and other fastening of elements of the seismic force-resisting system including shear walls, drag struts, braces, diaphragms and hold-downs.	IBC 1705.12.3 (2)	☐	Periodic		
SPRAYED FIRE-RESISTANT MATERIALS (IBC 1705.14)					
Special inspection and testing shall be per IBC Sections 1705.14.1 through 1705.14.6 as applicable.	IBC 1705.14	☐			
MASTIC AND INTUMESCENT FIRE RESISTANT COATINGS (IBC 1705.15)					
Special inspection is required for fire-resistant coatings applied to structural elements and decks.	AWCI 12-B, Construction Documents	☐			
EXTERIOR INSULATION AND FINISH SYSTEMS (IBC 1705.16)					
Special inspection and testing shall be provided for all EIFS applications. [g. h.]		☐			
Special inspection is required for water-resistive barrier complying with ASTM E 2570 when installed over a sheathing substrate.	ASTM E 570	☐			

e. Required where any of the following conditions exist (refer ASCE 7 Section 12.3): *Torsional or extreme torsional irregularity* *Nonparallel systems irregularity* *Stiffness (soft story) or extreme stiffness (extreme soft story) irregularity* *Discontinuity in lateral strength (weak story irregularity)*
f. Special inspection not required where wood or steel structural panels are on only one side of the shear wall and the fastener spacing for the sheathing is greater than 4 inches on center.
g. Special inspection not required for EIFS applications where installed over water-resistive barrier with a means of draining moisture to the exterior.
h. Special inspection is not required for EIFS applications installed over masonry or concrete walls.

TO BE COMPLETED BY RDP
TO BE COMPLETED BY CITY

MERCER ISLAND REQUIRED AGENCY INSPECTIONS:

Reports documenting the quality of these types of construction are required by the Building Official as authorized by IRC Section R104.4x. The reports must be prepared by a WABO certified inspector for the specific type of construction, as indicated in the description, or as otherwise authorized by the Building Official.

AGENCY INSPECTION DESCRIPTION	REFERENCES	AGENCY INSPECTION REQUIRED	FREQUENCY	APPROVALS: Agency Inspector sign-off	APPROVALS: City Inspector sign-off
EXTERIOR PLASTER (IRC 703.7) [i.]					
Installation: *Lath and lath attachment.*	ASTM C 926, ASTM C 1063 IRC R703.7.1	☐	Periodic		
Portland Cement plaster mix, number of coats, thickness of coats.	IRC Tables R702.1(1), 702.1(3) IRC R703.7.2				
Weep screed material, attachment and location.	ASTM C 926, IRC R703.7.2.1				
Water resistive barrier installation, flashing installation, and drainage.	IRC R703.2, IRC R703.4, IRC R703.7.3				
Application of each coat and minimum curing.	ASTM C 926, IRC R703.7.4, IRC R703.7.5				
EXTERIOR INSULATION AND FINISH SYSTEM (IRC 703.7) [j.]					
Installation: *Installed in accordance with EIFS manufacturer's instructions.*	ASTM E 2568 IRC R703.9	☐	Periodic		
Drainage provided over all wall assemblies except substrates of masonry or concrete. Drainage shall have a 90 percent efficiency. EIFS and EIFS drainage shall terminate not less than 6 inches above finish grade.	ASTM 2273, ASTM E 2570, IRC R703.2				
Flashing shall be shall be provided per IRC R703.8. Decorative trim shall not be face-nailed through the EIFS.	IRC R703.8, IRC R703.4, IRC R703.7.3				
LATERAL RESISTING SYSTEM					
Installation: *Shearwall and diaphragm sheathing, panel edge and field nailing.*	Construction Documents	☐	Periodic		
Lateral load path continuity, i.e. roof and floor diaphragm to shearwall top plate below, shearwall to foundation.	Construction Documents				
Collector / drag strut nailing and connections. Holdown installation and location.	Construction Documents				
RESIDENTIAL WASHINGTON STATE ENERGY CODE					
Air Leakage Control: *Tested and verified as having an air leakage rate not exceeding 5 air changes per hour.*	WSEC R402.4.1.2	☐			
Tested and verified as having an air leakage rate not exceeding 3 air changes per hour as required by Energy Credit 2a.	WSEC R402.4.1.2, WSEC Table 406.3	☐			
Tested and verified as having an air leakage rate not exceeding 2 air changes per hour as required by Energy Credit 2b.	WSEC R402.4.1.2, WSEC Table 406.3	☐			
Tested and verified as having an air leakage rate not exceeding 1.5 air changes per hour as required by Energy Credit 2c.	WSEC R402.4.1.2, WSEC Table 406.3	☐			
Duct testing shall be provided in accordance with WSU RS-33 using the maximum duct leakage rates specified in WSEC R403.3.4. Written results shall be signed by the tester and provided to the code official.	WSEC R403.3.3, WSEC R403.3.4	☐			

i. Includes stucco installation.

j. Not required for EIFS applications installed over a water-resistive barrier draining moisture to the exterior or where installed over masonry of concrete.

MERCER ISLAND ADDITIONAL CIVIL ENGINEERING REQUIREMENTS:

The following civil engineering inspections and documentation shall be performed by the indicated Design Professional. Associated inspection reports and documentation shall be provided to the code official prior to final inspection.

CIVIL ENGINEERING INSPECTIONS				APPROVALS: Agency Inspector sign-off	APPROVALS: City Inspector sign-off
Project Civil Engineer or Geotechnical Engineer shall inspect and certify that the lawn and landscape areas meet the specified post-construction soil quality and depth requirements.	Construction Documents BMP T5.13 (2017 DOE manual)	☐	Periodic		
Project Civil Engineer shall inspect and certify the construction of the infiltration system, dispersion system, rain garden, bioretention, permeable pavement system and all LID systems for conformance to approved plans.	Construction Documents, Infiltration Report, Geotechnical Report	☐	Periodic		
Project Geotechnical Engineer shall observe and certify the infiltration system, dispersion system, rain garden, bioretention, permeable pavement system, and all LID systems to verify suitablity of existing soil conditions.	Construction Documents, Infiltration Report, Geotechnical Report	☐	Periodic		
CIVIL ENGINEERING DOCUMENTATION					
The Declaration of Covenant for the inspection and maintenance of private stormwater facilities must be signed, recorded and received by the City prior to final inspection.		☐			
A Right-of-Way Encroachment Agreement must be recorded for all private improvements in the right-of-way prior to final inspection.		☐			
Other as Specified:		☐			

SURVEY REQUIREMENTS (The following survey information must be submitted to planner when checked):

Surveyor shall verify points chosen for height calculations and point verification shall be submitted at the time of City foundation Inspection. A property survey may be required to verify setbacks and in some cases buildings must be surveyed onto the lot. The City reserves the right to request a lot coverage and hardscape area survey at any time prior to issuance of Certificate of Occupancy.

Land Use Planning Contact: Molly McGuire email: molly.mcguire@mercerisland.gov

- ☐ Building height survey
- ☐ Building setback survey
- ☐ Lot coverage survey
- ☒ Hardscape survey
- ☒ Gross floor area survey

☒ **MAXIMUM 40 PERCENT ALTERATION INSPECTION:** *MICC 19.01.050(D)(1)(b)(i)*
A Building Inspection prior to demolition is required for all legally nonconforming single family dwelling to ensure no more than 40 percent of the dwelling's exterior walls are structurally altered. Contact the Building Inspector at (206) 275-7730.

TO BE COMPLETED BY RDP
FIELD USE ONLY

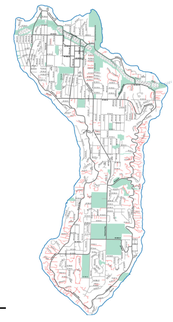
SPECIAL INSPECTOR AND AGENCY INSPECTOR CONTACTS:

Each inspector designated in the field to perform any of the above Special Inspections or City initiated Agency Inspections shall provide the following information:

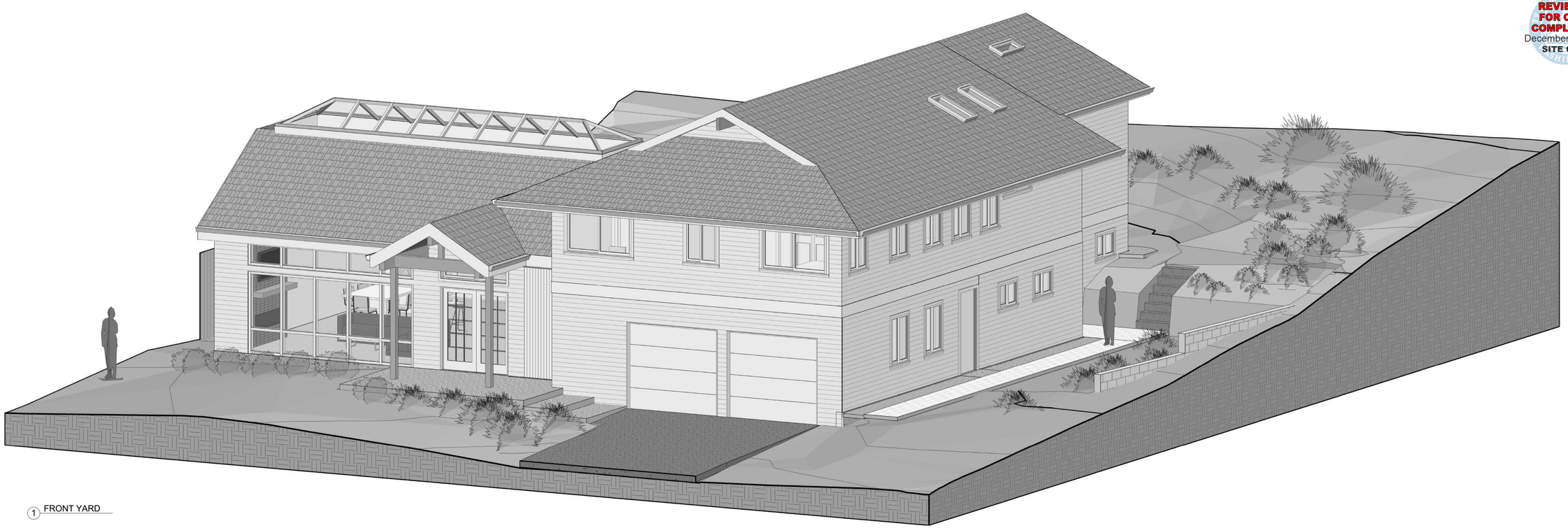
INSPECTOR NAME	INITIALS	COMPANY NAME	PHONE NUMBER	EMAIL ADDRESS

SF2
BUILDING PERMIT NUMBER
2402-026

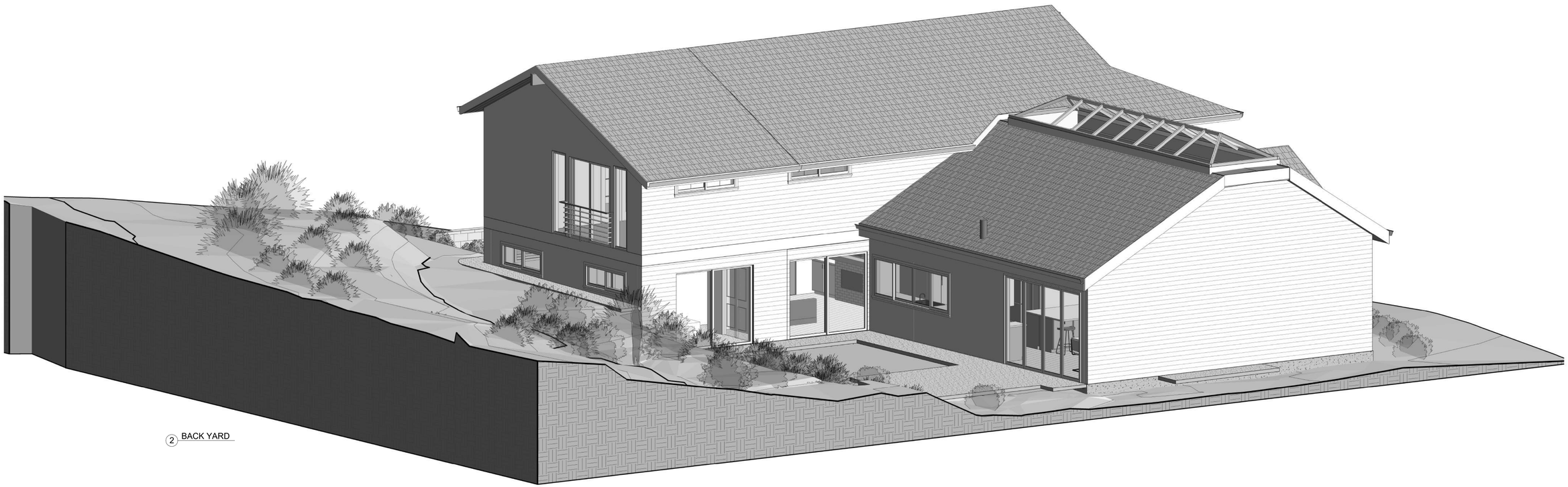
PROJECT NAME: HERNANDEZ REMODEL AND ADDITION
PROJECT ADDRESS: 7520 MERCER TERRACE DR, 98040



APPROVED DRAWINGS MUST BE KEPT ON THE BUILDING SITE AT ALL TIMES
REVIEWED FOR CODE COMPLIANCE
12/9/24 Date
JHA Approved



1 FRONT YARD



2 BACK YARD

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
SITE COPY

BUILD STUFF

BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com

REVISION TABLE

Revision #	Date	Revision Description

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026

Date: 09/19/24

PROPOSED 3D AXON

A001

Scale:

ABBREVIATIONS:

&	AND
<	ANGLE
@	AT
∅	DIAMETER
#	POUND OR NUMBER
(E)	EXISTING
CL	CENTERLINE
A.B.	ANCHOR BOLT
ABV	ABOVE
AC	AIR CONDITIONING
ACT	ACOUSTIC CEILING TILE
ACU	AIR CONDITION UNIT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATELY
BLDG	BUILDING
BLW	BELOW
B.O.	BOTTOM OF
CB	CATCH BASIN
CBB	CEMENT BACKER BOARD
CEM	CEMENT
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
COND	CONDITION
CONT	CONTINUOUS
CPT	CARPET
CT	CERAMIC TILE
CS	COMPOSITE SIDING
DBL	DOUBLE
DEMO	DEMOLISH
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIFF	DIFFUSER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN DOOR
DRDS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
E	EAST
EA	EACH
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMERG	EMERGENCY
EQ	EQUAL
EXP	EXPANSION
FBP	FIBER BOARD PANEL
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FF	FINISH FLOOR
FH	FIRE HYDRANT
FIN	FINISH
FLR	FLOOR
F.O.	FACE OF
FOIC	FURNISHED BY OWNER, INSTALL BY CONTRACTOR
FOIO	FURNISHED BY OWNER INSTALL BY OWNER
FR	FIRE RESISTANT
FS	FLOOR SINK
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GL	GLASS
GLB	GLU-LAM BEAM
GND GR GRT'D	GROUND GRADE GROUTED
GWB	GYPSUM WALL BOARD
HB	HOSE BIBB
HC	HANDICAP
HCMU	HOLLOW CLAY MASONRY UNIT
HDWD	HARDWOOD
HDWE	HARDWARE
HT	HEIGHT
HM	HOLLOW METAL
HR	HOUR
HORIZ	HORIZONTAL
I.D.	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIR
JAN	JANITOR
JT	JOINT
KIT	KITCHEN
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LKR	LOCKER
LOC	LOCATE
LT	LIGHT
LVL	LAMINATED VENEER LUMBER
M	MEN'S
MATL	MATERIAL
MAX	MAXIMUM
MC	MEDICINE CABINET
MECH	MECHANICAL
MEMB	MEMBRANE
MFR	MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MH	MANHOLE
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
MULL	MULLION
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
NR	NOT RATED
OA	OVERALL
OBS	OBSCURE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OH	OVERHANG
OFF	OFFICE
OPNG	OPENING
OPP	OPPOSITE
PC	PRECAST CONCRETE
PL	PLATE
PLAS	PLASTER
PLY	PLYWOOD
P.LAM	PLASTIC LAMINATE
PNT	PAINT
PR	PAIR
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PTN	PARTITION
QT	QUARRY TILE
R, RAD	RADIUS
RB	RESILIENT BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED
RELOC	RELOCATE
REQ'D	REQUIRED
RES	RESILIENT
RM	ROOM
RO	ROUGH OPENING
RV	ROOF VENT
RL	RAIN WATER LEADER
S	SOUTH
SA	SMOKE ALARM
SC	SOLID CORE
SCHED	SCHEDULE
SECT	SECTION
SG	SAFETY GLASS
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
S.S.	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
STN	STAIN
STOR	STORAGE
STRUCT	STRUCTURE
SOG	SLAB ON GRADE
SUSP	SUSPENDED
SYM	SYMMETRICAL
T, TMP	TEMPERED
T&G	TONGUE & GROOVE
TEL	TELEPHONE
TER	TERRAZZO
THK	THICK
T.O.	TOP OF
TS	TUBE STEEL
TV	TELEVISION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VTR	VENT THRU ROOF
W	WEST
W/	WITH
WC	WATER CLOSET
WD	WOOD
WF	WIDE FLANGE
W/O	WITHOUT
WOM	WALK OFF MAT
WM	WOMEN'S
WP	WATERPROOFING
WR	WATER RESISTANT
WSCT	WAINSCOT
WT	WEIGHT

GENERAL CODE REQUIREMENTS:

CODES:
ALL WORK SHALL COMPLY WITH THE CURRENT CODES:

-2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
-2018 INTERNATIONAL MECHANICAL CODE (IMC)
-2018 UNIFORM PLUMBING CODE (UPC)
-2020 WASHINGTON CITIES ELECTRICAL CODE (WCEC)
-2018 INTERNATIONAL FIRE CODE (IFC)
-2018 WASHINGTON STATE ENERGY CODE (WSEC)
-ALL OTHER APPLICABLE CODES WITH LOCAL AMENDMENTS

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PRESCRIPTIVE INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT: (TABLES R402.1.1 AND 402.1.3 AND 40353 FOR PIPING)
CLIMATE ZONE 5 AND MARINE 4

FENESTRATION U-FACTOR---------- .30
WINDOWS VERTICAL U-FACTOR---------- .30
DOORS SOLID U-FACTOR---------- .30
SKYLIGHTS U-FACTOR---------- .50

INSULATION VALUES
CEILINGS W/ ATTICS---------- R49
CEILINGS VAULTED - SCISSOR TRUSSES---------- R38
CEILINGS VAULTED - SINGLE RAFTER---------- R38
WALLS ABOVE GRADE (2X6)---------- R21 INT
WALLS BELOW GRADE---------- 10/15/21 INT + 5TB
FLOORS---------- R30
SLAB ON GRADE---------- R10, 2FT PERIMETER
EXT. WALL HEADERS---------- R10 WHERE HEADERS ARE NOT FULL WIDTH

MECHANICAL PIPE INSULATION---------- R-6 (WRAPPED)
HOT WATER PIPE (ALL LOCATIONS)---------- R-3 (OK DISCONT. THROUGH STRUCT. MEMBERS (PER 403.5.3)

ALL FENESTRATION TO BE NFRC-CERTIFIED.
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.

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MODIFIED PRESCRIPTIVE VALUES AT ADDITION PER CREDIT OPTION (1.3)
VERTICAL FENESTRATION = U-FACTOR: (.28)
FLOORS - R-38
SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB BELOW GRADE
SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB

ENERGY CODE REQUIREMENTS (PER 2018 WSEC RESIDENTIAL PROVISIONS)
PRESCRIPTIVE REQUIREMENTS (CREDIT OPT. PER COVERSHEET A000):
401.3 A PERMANENT ENERGY COMPLIANCE CERTIFICATE SHALL BE POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING AND INCLUDING THE FOLLOWING: PREDOMINATE R-VALUES, U-VALUE, OR FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, AND EFFICIENCIES OF HTG/COOLING/WATER HEATING EQUIPMENT.

AIR LEAKAGE TESTING PER (WSEC R402.4.1.2) THE DWELLING SHALL BE TESTED AND VERIFIED AIR LEAKAGE RATE OF NOT EXCEEDING 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2" w.g. (50 PASCALS). JOINTS AND SEAMS SHALL COMPLY WITH (IRC SECTION M1601.4). PROVIDE A WRITTEN REPORT OF THE TEST RESULTS, SIGNED BY THE TESTING PARTY, TO THE BUILDING INSPECTOR, PRIOR TO APPROVED FINAL INSPECTION.

SOILS & EXCAVATION WORK:
REFER TO GEOTECH REPORT DATED 08.22.23 FOR GEO-HAZARD MITIGATION STRATEGIES AND RECOMMENDATIONS ON EXCAVATION, AND FOUNDATION BACKFILL.

TREE REQUIREMENTS:
REFER TO ARBORIST REPORT DATED 11.10.23 FOR TREE PROTECTION PLAN, TREE INVERNTORY, AND REPLACEMENT REQUIREMENTS. TREE RETENTION AND REPLACEMENT PLANS PER SHEET L102 & L103

HAZMAT:
HAZARDOUS MATERIAL REMOVAL & DISPOSAL: BEFORE COMMENCING ANY DEMOLITION OR OTHER WORK, COMPLY WITH DOCUMENTS PREPARED BY THE OWNER'S HAZARDOUS MATERIALS CONSULTANT. APPLIES TO DEMOLITION, DISPOSAL AND CONSTRUCTION OPERATIONS ASSOCIATED WITH THE PROJECT.

DEMOLITION:
ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE.
CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

PLUMBING | MECHANICAL | ELECTRICAL INSTALLATION
ALL PLUMBING, MECHANICAL, AND ELECTRICAL PERMITS SHALL BE OBTAINED SEPARATELY FROM THE BUILDING PERMIT AS NECESSARY AND SHALL COORDINATE REQUIRED INSPECTIONS.

FIRE AND DRAFT STOPS (PER IRC R302.11 AND R302.12)
FIREBLOCKING PROVIDED TO CUT OFF BOTH VERTICAL AND HORIZONTAL CONCEALED DRAFT OPENINGS AND TO FORM A FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE.
DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQUARE FEET. FIRE BLOCKS SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS, INCLUDING STAIRS, TUBS, SHOWERS, FIREPLACES, BALLOON FRAMED WALLS, FURRED WALLS, VOIDS, SOFFITS, ETC.

NATURAL LIGHT (PER IRC R303):
ALL HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF MINIMUM 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS.
EXCEPT, IN ROOMS WHERE ARTIFICIAL LIGHT IS PROVIDED WITH AN AVERAGE ILLUMINATION OF 6 FOOTCANDLES (65 LUX) OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES ABOVE THE FLOOR LEVEL.

GENERAL CODE REQUIREMENTS:

BUILDING SEPARATION REQUIREMENTS: (PER IRC R302.1)
ONE HOUR WALL IS REQUIRED IF LESS THAN 5' FROM THE PROPERTY LINE. NO OPENINGS ALLOWED IN WALLS LESS THAN 3' FROM PROPERTY LINE EAVES CAN EXTEND NO CLOSER THAN 2' TO PROPERTY LINE. WHERE EAVES EXTEND AT 5' OR LESS TO PROPERTY LINE FIRE-BLOCKING SHALL BE PROVIDED FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING. GABLES ENDING AT 5' OR LESS TO PROPERTY LINE SHALL NOT HAVE GABLE VENT OPENINGS INSTALLED. EAVES/SOFFIT VENTS NOT ALLOWED AT 5' OR LESS FROM PROPERTY LINE.

GARAGE / HOUSE REQUIREMENTS (PER IRC R302.5 AND TABLE R302.6)
1/2" REGULAR GYP BOARD SHALL BE INSTALLED ON THE GARAGE SIDE AT WALLS SEPERATING GARAGE AND DWELLING.
GARAGE CEILINGS WITH DWELLING ABOVE REQUIRES INSTALLATION OF 5/8" "TYPE X" GYPSUM BOARD. SUPPORTING STRUCTURE REQ. 1/2" REGULAR GYP BOARD.DOOR (PER IRC R302.5.1) 1-3/8" THICK SOLID CORE OR 20 MIN. DOOR SHALL BE INSTALLED BETWEEN GARAGE AND DWELLING

CEILING HEIGHT (PER IRC R305):
HABITABLE SPACE, HALLWAYS AND BASEMENTS CONTAINING THESE SPACES SHALL HAVE A MINIMUM CEILING HEIGHT OF 7 FEET. BATHROOMS, TOILET ROOMS AND LAUNDRY ROOMS SHALL HAVE A MIN CEILING HEIGHT OF 6 FEET 8 INCHES. EXCEPTIONS: ROOMS WITH SLOPED CEILINGS, FLOOR AREA OF THE ROOM TO HAVE A MIN CEILING HEIGHT OF 5 FEET AND MIN 50 PERCENT OF THE FLOOR AREA SHALL HAVE A MIN CEILING HEIGHT OF 7 FEET.

BATH FIXTURE SPACE REQUIRED (PER IRC R307.1)
FIXTURES SHALL BE SPACED IN ACCORDANCE WITH FIGURE R307.1, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE PLUMBING CODE SECTION 402.5.
BATHTUB AND SHOWER SPACES (PER IRC R307.2)
TUB/SHOWER SURROUND WALLS TO HAVE FIBER-CEMENT BACKER BOARD AND FINISHED WITH A SMOOTH NON-ABSORBENT SURFACE TO A MINIMUM HEIGHT OF 72" ABOVE THE FLOOR.

SAFETY GLAZING (PER IRC R308.1)
ALL SIDE-LITES, SLIDING GLASS DOORS, AND TUB/SHOWER ENCLOSURE IN WET AREAS TO COMPLY WITH SAFETY GLAZING REQUIREMENTS.
GLAZING AND WET SURFACES (PER IRC R308.4.5)
GLAZING IN WALLS, ENCLOSURES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND SIMILAR. WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE CONSIDERED A HAZARDOUS LOCATION. APPLIES TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

EMERGENCY ESCAPE AND RESCUE OPENINGS (PER IRC R310)
REQ'D IN BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE A MINIMUM OF ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. OPENING MUST BE OPERABLE EXTERIOR WINDOW, DOOR OR SIMILAR. EGRESS WINDOW: MINIMUM NET CLEAR OPENING OF 5.7 SF SQFT. MIN NET CLEAR HEIGHT SHALL BE 24". MIN NET CLEAR WIDTH SHALL BE 20". MAX FINISHED SILL HEIGHT ABOVE FLOOR SHALL BE 44".
WHERE THE SILL OF A WINDOW IS GREATER THAN 72" ABOVE FINISHED GRADE, MINIMUM SILL HEIGHT ABOVE FINISH FLOOR SHALL BE 24" OR BE PROVIDED WITH A WINDOW FALL PREVENTION DEVICE (PER IRC R312.2). DOORS SHALL BE A SIDE-HINGED DOOR OR A SLIDER. WINDOW WELLS AND AREA WELLS FOR DOORS REQUIRED WHEN THE OPENING IS BELOW THE ADJACENT GRADE.

EGRESS DOORS (PER IRC R311.2)
MINIMUM ONE EGRESS DOOR PROVIDED FOR EACH DWELLING UNIT. SHALL BE SIDE-HINGED, AND PROVIDE A CLEAR WIDTH OF MIN 32 INCHES, MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES (1.57 RAD).
CLEAR HEIGHT OF DOOR OPENING SHALL BE MIN 78 INCHES MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP. EGRESS DOORS SHALL BE READILY OPENABLE FROM INSIDE THE DWELLING WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

STAIRWAYS (PER IRC R311.7)
HEADROOM IN STAIRWAYS SHALL BE MINIMUM 6 FEET 8 INCHES.
MIN WIDTH IS 36". MAX RISER IS 7-3/4".
MIN TREAD RUN IS 10". MIN HEAD CLEARANCE IS 6'-8".
HANDRAIL SHALL BE BETWEEN 34" TO 38" ABOVE TREAD NOSING.
NOSING AT TREADS, LANDINGS, AND FLOORS OF STAIRWAYS PER R311.7.5.3 TYPE I. HANDRAILS: CIRCULAR HANDRAIL W/ DIAMETER OF MIN 11/4 INCHES AND MAX 2 INCHES. NON CIRCULAR HANDRAIL W/ PERIMETER OF MIN 4 INCHES AND MAX 61/4 INCHES, AND CROSS SECTION OF MAX 21/4 INCHES. EDGE RADIUS OF MIN 0.01 INCH.

GUARDS (PER IRC R312.1)
GUARDS PROVIDED FOR OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS AND LANDINGS, LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPEN SIDE.
REQUIRED HEIGHT: MAX 36 INCHES AS MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE NOSINGS.
MAX OPENINGS: FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.
MAX OPENINGS AT STAIRS: THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF STAIR, FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD, SHALL NOT ALLOW PASSAGE OF A SPHERE 6 INCHES IN DIAMETER.
GUARDS ON THE OPEN SIDE OF STAIRS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 43/8 INCHES IN DIAMETER.

GYPSUM WALL BOARD (PER IRC R702.3)
PER TABLE R702.3.5 MINIMUM THICKNESS AND APPLICATION OF GYPSUM BOARD AND GYPSUM PANEL PRODUCTS. SUPPORTS AND FASTENERS SHALL COMPLY WITH TABLE R702.3.5. SHALL BE APPLIED AT RIGHT ANGLES OR PARALLEL TO FRAMING MEMBERS. INTERIOR GYPSUM BOARD SHALL NOT BE INSTALLED WHERE IT IS DIRECTLY EXPOSED TO THE WEATHER OR TO WATER.

FACTORY BUILT FIREPLACES (PER IMC SECTION 903)
SHALL BE LISTED,LABELED AND INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. SHALL BE TESTED IN ACCORDANCE WITH UL 127. OUTSIDE COMBUSTION AIR REQ'D. (MIN 6 SQ. IN.) DUCTED DIRECTLY TO THE FIREBOX W/OPERABLE OUTSIDE DAMPER, TIGHTLY FITTING FLUE DAMPER, AND TIGHT FITTING GLASS OR METAL DOORS OR FLUE DRAFT INDUCTION FAN.

GENERAL CODE REQUIREMENTS:

1

NFPA 72 MONITORED FIRE ALARM SYSTEM:
A NFPA 72- CHAPTER 29 MONITORED FIRE ALARM SYSTEM IN COMPLIANCE WITH NFPA 72 AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

CARBON MONOXIDE ALARM & COMBINED ALARMS (PER IRC R315):
CO ALARM SHALL MEET UL LISTING 2034, COMBINATION CO-SMOKE ALARM SHALL ALSO MEET UL 217.TO BE POWERED BY INTERCONNECTED BUILDING WIRING AND PROVIDED W/ BATTERY BACKUP AND INSTALLED PER MFG LISTING. TO BE PROVIDED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

CRAWL SPACE VENTILATION (PER IRC R408)
MINIMUM NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 S.F. FOR EACH 300 S.F. OF UNDER FLOOR AREA. VENTILATION OPENINGS SHALL PROVIDE INSECT AND CORROSION PROTECTION WHERE THE LEAST DIM OF THE COVERING SHALL NOT EXCEED 1/4". ONE SUCH VENTILATING OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING. VETNILATION OPENINGS NOT REQ'D GIVEN, AN APPROVED GLASS | VAPOR RETARDER MATERIAL SHALL BE INSTALLED OVER THE GROUND SURFACE AND CONTINUOUSLY OPERATED MECHANICAL EXHAUST VENTILATION IS PROVIDED AT A RATE EQUAL TO 1 CUBIC FOOT PER MINUTE FOR EACH 50 SQUARE FEET OF CRAWLSPACE FLOOR AREA.

ROOF VENTILATION (PER IRC R806)
ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES: (PER R806.1)
OPENINGS DIMENSION MIN 1/16 INCH AND MAX 1/4 INCH. OPENINGS LARGER THAN 1/4 INCH PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, PERFORATED VINYL OR SIMILAR WITH MIN OPENINGS DIMENSION OF 1/16 INCH MINIMUM AND 1/4 INCH MAX.
VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND BE PROTECTED TO PREVENT THE ENTRY OF CREATURES.
MIN NET FREE VENTILATION AREA SHALL BE 1/300 PROVIDED:
NOT LESS THAN 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQ'D VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. SHALL BE LOCATED NOT MORE THAN 3 FEET BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, BALANCE OF REQ'D VENTILATION IN THE BOTTOM ONE-THIRD OF THE ATTIC SPACE. WHERE THE LOCATION OF WALL OR ROOF FRAMING MEMBERS CONFLICTS WITH THE INSTALLATION OF UPPER VENTILATORS, INSTALLATION MORE THAN 3 FEET BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE. EAVE BAFFLES PROVIDING MIN 1" CLEARANCE SHALL BE PROVIDED FOR FREE FLOW OF AIR BETWEEN THE INSULATION AND THE ROOF SHEATHING AND THE LOCATION OF THE VENT. CROSS VENTILATION REQ'D.

UNVENTED ENCLOSED ROOF FRAMING ASSEMBLIES: (PER R806.5)
IN CLIMATE ZONES 5, 6, 7 AND 8, ANY AIR-IMPERMEABLE INSULATION SHALL BE A CLASS II VAPOR RETARDER, OR SHALL HAVE A CLASS II VAPOR RETARDER COATING OR COVERING IN DIRECT CONTACT WITH THE UNDERSIDE OF THE INSULATION.

ATTIC ACCESS (PER IRC R807)
ATTIC AREAS WITH A VERTICAL HEIGHT OF 30" OR GREATER OVER AN AREA OF 30 S.F. MIN. MUST HAVE A MINIMUM ATTIC ACCESS OPENING OF 22" X 30"

EXHAUST SYSTEMS - OUTDOOR DISCHARGE (PER M1501.1)
AIR REMOVED BY EVERY MECHANICAL EXHAUST SYSTEM SHALL BE DISCHARGED TO THE OUTDOORS IN ACCORDANCE WITH SECTION M1504.3. AIR SHALL NOT BE EXHAUSTED INTO AN ATTIC, SOFFIT, RIDGE VENT OR CRAWL SPACE.

M1504.3 EXHAUST OPENINGS:
AIR EXHAUST OPENINGS TERMINATION:
NOT LESS THAN 3 FEET FROM PROPERTY LINES.
NOT LESS THAN 3 FEET FROM GRAVITY AIR INTAKE OPENINGS, OPERABLE WINDOWS AND DOORS.
NOT LESS THAN 10 FEET FROM MECHANICAL AIR INTAKE OPENINGS UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURER'S INSTRUCTIONS
M1505.4 WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM:
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4.
M1505.4.3 MECHANICAL VENTILATION RATE
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE AS DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(1) OR EQUATION 15-1.
M1505.4.4 LOCAL EXHAUST RATES
LOCAL EXHAUST SYSTEMS SHALL HAVE THE MINIMUM AIRFLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M1505.4.4(1). LOCAL EXHAUST FANS INCLUDED IN THE WHOLE-HOUSE VENTILATION SYSTEM, IN ACCORDANCE WITH SECTION 1505.4.1, THE EXHAUST FAN SHALL BE CONTROLLED TO OPERATE AS SPECIFIED IN SECTION M1505.4.2.PRESCRIPTIVE EXHAUST DUCT SIZING PER TABLE M1505.4.4(2)

OWNER/CONTRACTOR NOTES:

1. CONTRACTOR / OWNER TO INSPECT SITE PRIOR TO STARTING CONSTRUCTION AND SHALL REPORT ANY DISCREPANCY TO THE DESIGNER. ANY QUESTIONS SHOULD BE DIRECTED THE DESIGNER TO CROSS REFERENCE WITH CITY APPROVED PLANS FOR ANY CHANGES AND/ OR ADDITIONAL REQUIREMENTS BY CITY.
2. ALL WORK SHALL COMPLY WITH THE STATE AND LOCAL ORDINANCES AND SHALL BE DONE TO THE HIGHEST STANDARDS OF CRAFTSMANSHIP.
4. NO DEVIATIONS FROM THESE DOCUMENTS SHALL BE MADE WITHOUT WRITTEN APPROVAL FROM DESIGNER. ANY CHANGES CAN AFFECT THE STRUCTURAL INTEGRITY AND CODE COMPLIANCE.
5. DIMENSIONS. DIMENSIONS THAT ARE NOT STATED AS "MAXIMUM" OR "MINIMUM" ARE ABSOLUTE. ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL TOLERANCES. VERIFY AND COORDINATE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO CONSTRUCTION. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED LENGTHS AND HEIGHTS IN ALL CASES. DO NOT SCALE DRAWINGS.
6. IN THE EVENT OF DISCREPANCIES OR CONTRADICTORY INFORMATION IN THE DRAWINGS, NOTES, OR SPECIFICATIONS, THE CONTRACTOR/OWNER TO NOTIFY THE DESIGNER TO OBTAIN CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

PROJECT CONTACTS:

REVIEWED FOR CODE COMPLIANCE
September 09, 2024
SITE COPY

PROJECT OWNER / CONTRACTOR:
RODOLFO HERNANDEZ MCINTYRE
206-291-8329
SHANNON HERNANDEZ MCINTYRE
206-240-9332
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

DESIGNER:
BUILD STUFF LLC
31212 1ST PL SW
FEDERAL WAY, WA 98023
CONTACT: DIEGO PINEDA
(206) 771-5014

SURVEYOR:
TERRANE LLC
10801 MAIN ST #102,
BELLEVUE, WA 98004
CONTACT: DEREK GLADSJO
(425) 765-6433

GEOTECHNICAL ENGINEER:
COBALT GEOSCIENCES LLC
P.O. BOX 1792
NORTH BEND WA 98045
CONTACT: PHIL HABERMAN
(206) 331-1097

ARBORIST
SCOTT SELBY CONSULTING LLC
11129 31ST ST SE
LAKE STEVENS, WA 98258
CONTACT: SCOTT SELBY
(206) 849-4718

STRUCTURAL ENGINEER:
CSES ENGINEERING INC
6311 17TH AVE NE
SEATTLE WA 98115
CONTACT: EVAN APOLIS
(206) 369-3984

GENERAL NOTES:

1. SCOPE: SFR REMODEL AND ADDITION W/ADU.
2. OWNER TO COORDINATE REQUIRED INSPECTIONS AND VERIFY COMPLIANCE.
3. MATERIALS, ASSEMBLIES AND NOTED ITEMS ARE NEW UNLESS NOTED OTHERWISE.
4. OWNER/CONTRACTOR TO VERFIY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
5. PROVIDE CLOSURE MEETING THE REQUIREMENT OF GOVERNING FIRE AUTHORITIES BETWEEN FIRE RATED FLOORS, SHAFTS AND BUILDING PARTITIONS AND PENETRATING DUCTS, PIPES, CONDUIT, MECHANICAL, ELECTRICAL, AND OTHER ITEMS.

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A100.2	LOT COVERAGE CALCULATIONS
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S-4	MAIN FLOOR FRAMING AND FOUNDATION PLAN
S-5	UPPER FLOOR FRAMING AND MAIN FLOOR WALL PLAN
S-6	ROOF FRAMING AND UPPER FLOOR WALL PLAN

BUILD STUFF
BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com

REVISION TABLE

Revision #	Date	Revision Description
1	5/22/2024	Revision 1

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

COVER SHEET

A000

Scale:

TOPOGRAPHIC & BOUNDARY SURVEY

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
SITE COPY

LEGAL DESCRIPTION

LOT 10, BLOCK 1, MERCER TERRACE, ACCORDING TO THE PLAT RECORDED IN VOLUME 72 OF PLATS, PAGE 86, IN KING COUNTY, WASHINGTON.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

ACCEPTED THE BEARING OF N 32°22'39" W, BETWEEN MONUMENTS FOUND ALONG THE CENTERLINE OF MERCER TERRACE DR, PER REFERENCE NO. 1.

REFERENCES

R1. MERCER TERRACE, VOL. 72 OF PLATS, PG. 86, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD 88 PER CITY OF MERCER ISLAND BENCHMARK NO. 2332
DESCRIPTION: ¼" COPPER PLUG IN CONC IN CASE
LOCATION: MERCER TERRACE DR, OPP HSE #7449
ELEVATION: 250.006'

SURVEYOR'S NOTES

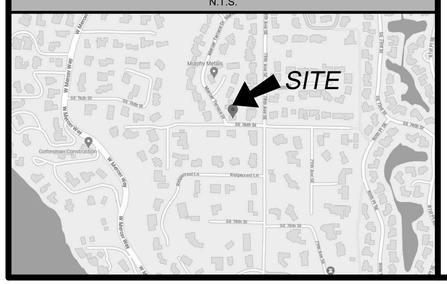
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN AUGUST OF 2023. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 545360-0100
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 9,701 ±S.F. (0.22 ACRES)
6. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM FIRST AMERICAN TITLE INSURANCE COMPANY'S "COMMITMENT", ORDER NO. 4209-4091530, DATED JULY 31, 2023. IN PREPARING THIS MAP, TERRANE, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS TERRANE, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY THE REFERENCED "COMMITMENT". TERRANE, INC. HAS RELIED WHOLLY ON FIRST AMERICAN TITLE INSURANCE COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND TERRANE, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
7. EXISTING STRUCTURE(S) LOCATION AND DIMENSIONS ARE MEASURED FROM THE FACE OF THE SIDING UNLESS OTHERWISE NOTED.
8. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 3-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

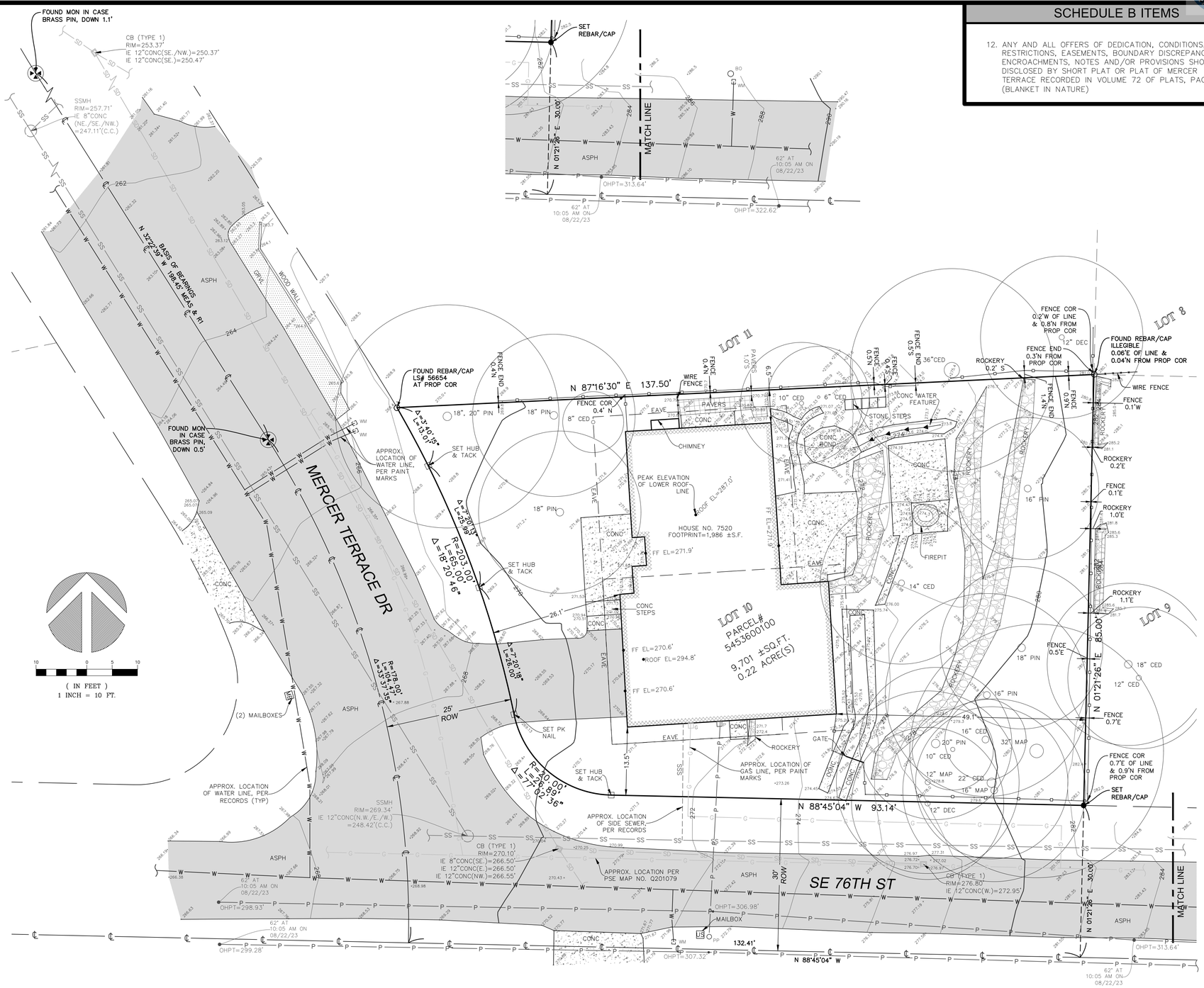
LEGEND

	ASPHALT SURFACE	•OHPT	OHP TRANSMISSION ELEVATION
BO ○	BLOW OFF		PAVER SURFACE
	BUILDING	P □	POWER METER
℄	CENTERLINE ROW	P	POWER (OVERHEAD)
	CONCRETE SURFACE	PP ○	POWER POLE
	DITCH (FLOWLINE)	●	REBAR & CAP (SET)
-x-x-x-	FENCE LINE (CHAIN LINK)	○	REBAR AS NOTED (FOUND)
-o-o-o-	FENCE LINE (WOOD)		RETAINING WALL
G	GAS LINE		ROCKERY
G □	GAS METER	SS	SEWER LINE
	GRAVEL SURFACE	◯	SEWER MANHOLE
	INLET (TYPE 1)	SD	STORM DRAIN LINE
⊡	LINESTAKES (AS NOTED)	SIZE TYPE ○	TREE (AS NOTED)
MB	MAILBOX (RESIDENTIAL)	W	WATER LINE
US	MAILBOX (US POSTAL)	WM □	WATER METER
	MONUMENT (IN CASE, FOUND)		

VICINITY MAP

N.T.S.





SCHEDULE B ITEMS

12. ANY AND ALL OFFERS OF DEDICATION, CONDITIONS, RESTRICTIONS, EASEMENTS, BOUNDARY DISCREPANCIES OR ENCROACHMENTS, NOTES AND/OR PROVISIONS SHOWN OR DISCLOSED BY SHORT PLAT OR PLAT OF MERCER TERRACE RECORDED IN VOLUME 72 OF PLATS, PAGE(S) 86. (BLANKET IN NATURE)

STEEP SLOPE/BUFFER DISCLAIMER:

THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.

INDEXING INFORMATION

NW 1/4 SE 1/4
SECTION: 25
TOWNSHIP: 24N
RANGE: 04E, W.M.
COUNTY: KING

We are the measure | terrane.net

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 5453600100

HERNANDEZ RESIDENCE

7520 MERCER TERRACE DR
MERCER ISLAND, WA 98040

TERRANE
10801 Main Street, Suite 102
Bellevue, WA 98004
p: 425-458-4488 | e: info@terrane.net

JOB NUMBER:	231287
DATE:	09/01/23
DRAFTED BY:	IDV / RPM
CHECKED BY:	CSP / TLR
SCALE:	1" = 10'

REVISION HISTORY

SHEET NUMBER
1 OF 1

SITE PLAN LEGEND

	EXISTING FOOTPRINT
	ADDITION FOOTPRINT
	GRAVEL / DRAIN ROCK
	CONCRETE HARDSCAPE
	PAVERS

STRUCTURAL ALTERATION CALCULATION:
PER MICC 19.01.050 (D)(1)(b)(iii)
REFERENCE DEMO PLANS ON SHEET A101 & A103 FOR DIMENSIONS OF STRUCTURALLY ALTERED WALLS

PERCENTAGE OF EXTERIOR WALLS ALTERED =
(SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED) ÷ (SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS)

(65.4 FEET) ÷ (204.21 FEET) **= 32%**

(A) THE "SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED" IS THE SUM OF EACH WALL SEGMENT THAT IS COMPLETELY DEMOLISHED.
(B) THE "SUM OF THE LENGTH OF EXTERIOR WALLS" IS THE SUM OF THE LENGTHS OF EACH EXTERIOR WALL SEGMENT OF A STRUCTURE OR BUILDING.

YARD REQUIREMENTS:

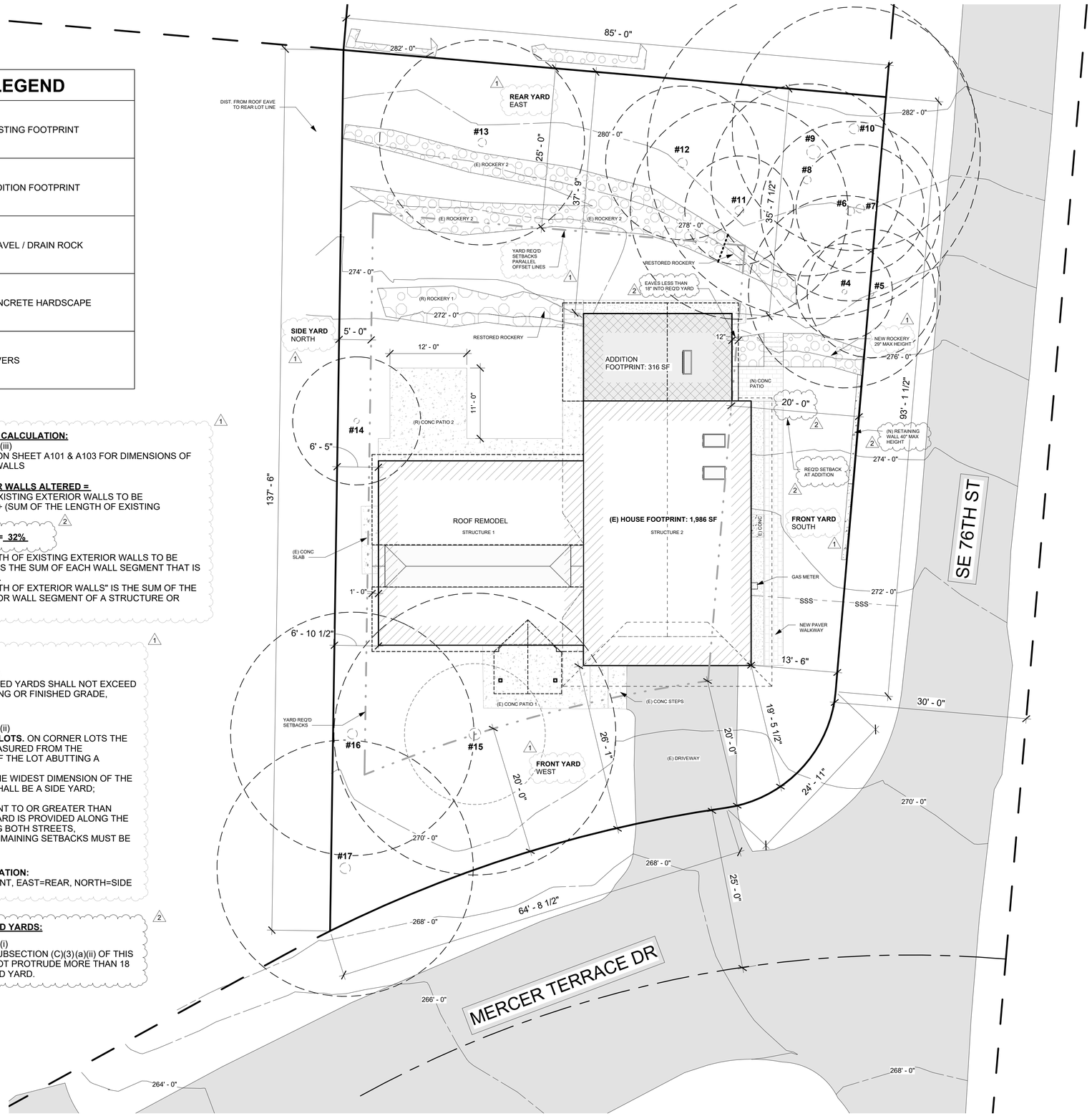
PER MICC 19.02.020(C)(3)(b)
ALL HARDSCAPE IN REQUIRED YARDS SHALL NOT EXCEED 30" IN HEIGHT FROM EXISTING OR FINISHED GRADE, WHICHEVER IS LOWER.

PER MICC 19.02.020(C)(2)(a)(ii)
II.FRONT YARD — CORNER LOTS. ON CORNER LOTS THE FRONT YARD SHALL BE MEASURED FROM THE NARROWEST DIMENSION OF THE LOT ABUTTING A STREET.
THE YARD ADJACENT TO THE WIDEST DIMENSION OF THE LOT ABUTTING A STREET SHALL BE A SIDE YARD;
PROVIDED:
(A)IF A SETBACK EQUIVALENT TO OR GREATER THAN REQUIRED FOR A FRONT YARD IS PROVIDED ALONG THE PROPERTY LINES ABUTTING BOTH STREETS,
THEN ONLY ONE OF THE REMAINING SETBACKS MUST BE A REAR YARD.

PROPOSED LOT CONFIGURATION:
WEST=FRONT, SOUTH=FRONT, EAST=REAR, NORTH=SIDE

INTRUSIONS INTO REQUIRED YARDS:

PER MICC 19.02.020(C)(3)(a)(i)
EXCEPT AS PROVIDED IN SUBSECTION (C)(3)(a)(ii) OF THIS SECTION... EAVES SHALL NOT PROTRUDE MORE THAN 18 INCHES INTO ANY REQUIRED YARD.



1 Site
1/8" = 1'-0"

PROJECT DATA:

1. **PROJECT ADDRESS:** 7520 MERCER TERRACE DR, MERCER ISLAND WA, 98040
2. **PARCEL #:** 545360-0100
3. **LEGAL DESCRIPTION:**
   MERCER TERRACE ADD
   PLAT BLOCK: 1
   PLAT LOT: 10
4. **NET LOT AREA:** 9,701 SF
5. **ZONE:** R-9.6 SINGLE FAMILY RESIDENTIRAL
6. **PRESENT USE:** SINGLE FAMILY RESIDENTIAL
7. **YEAR BUILT:** 1965
8. **BUILDING AREA:** 1,986 SF
9. **SITE SLOPE: 12.05 %**
10. **GENERAL DEVELOPMENT STANDARDS:**
    FRONT SETBACK: 20'-0"
    SIDE SETBACK: 15'-0" SUM, MINIMUM 5'-0" EACH SIDE
    REAR SETBACK: 25'-0"
    HEIGHT LIMIT: 30'-0" TO HIGHEST POINT OF ROOF
    EXISTING BUILDING HEIGHT = 25'
11. **ALLOWABLE LOT COVERAGE**
    (FOR LOTS <15 % SLOPE - MAX 40% OF LOT AREA)
    LOT AREA: 9,701 SF
    ALLOWED LOT COVERAGE: 3,880 SF
12. REFER TO SITE CALCULATION SHEETS A101.1 - A101.4 FOR LOT COVERAGE, HARDSCAPE, GROSS FLOOR AREA, AND AVERAGE BUILDING ELEVATION CALCULATIONS.

PROJECT DESCRIPTION:

SCOPE:
ROOF REMODEL & ADDITION W/ ADU

PROJECT NARRATIVE:
THE SCOPE OF WORK INCLUDES A ROOF REMODEL OF EXISTING "STRUCTURE 1" AND AN ADDITION OF 316 SF TO "STRUCTURE 2" WITH PROPOSED INTERIOR MODIFICATIONS TO LEVEL 1 AND LEVEL 2 OF THE HOUSE. REFER TO PLANS FOR LABELS OF "STRUCTURE 1" AND "STRUCTURE 2". THESE LABELS SPLIT UP THE HOUSE INTO 2 SECTIONS DIFFERENTIATING BETWEEN THE SINGLE-STORY AND THE DOUBLE-STORY STRUCTURE.

REMODEL OF THE LOWER ROOF LINE AND 2-STORY ADDITION WITH ADU. THE ROOF REMODEL ENTAILS A COMPLETE DEMO OF THE EXISTING LOWER ROOF LINE AND RECONSTRUCTION MAINTAINING THE EXISTING FOOTPRINT WITH A NEW DESIGN. THE ADDITION IS 632 SF OF CONDITIONED GROSS FLOOR AREA AND 316 SF TOTAL LOT COVERAGE. 316 SF ADU ON LEVEL 1 AND 316 SF ADDITION TO THE EXISTING PRIMARY BEDROOM ON LEVEL 2. THE PROPOSED ADDITION IS IN A GEO-HAZARD AREA ON THE SITE.
THE PROPOSAL INCLUDES MINOR MODIFICATIONS TO HARDSCAPE AREAS AND INTERIOR SPACES. MODIFICATIONS/NEW INTERIOR PARTITION WALLS, PLUMBING FIXTURES, APPLIANCES, AND WINDOWS.

VICINITY MAP

NOT TO SCALE

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REVISION TABLE

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2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

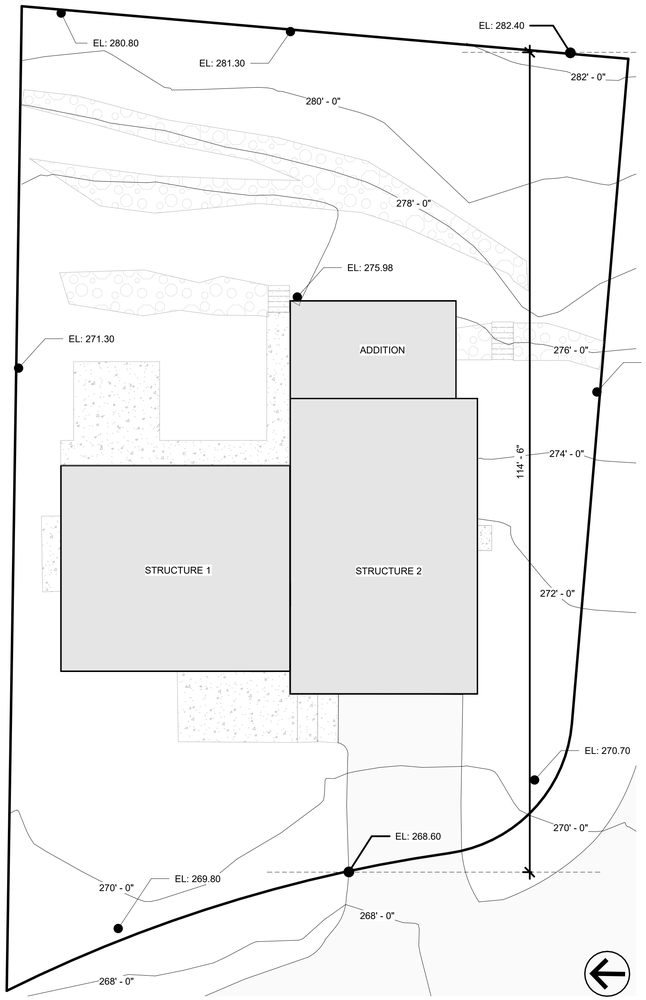
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

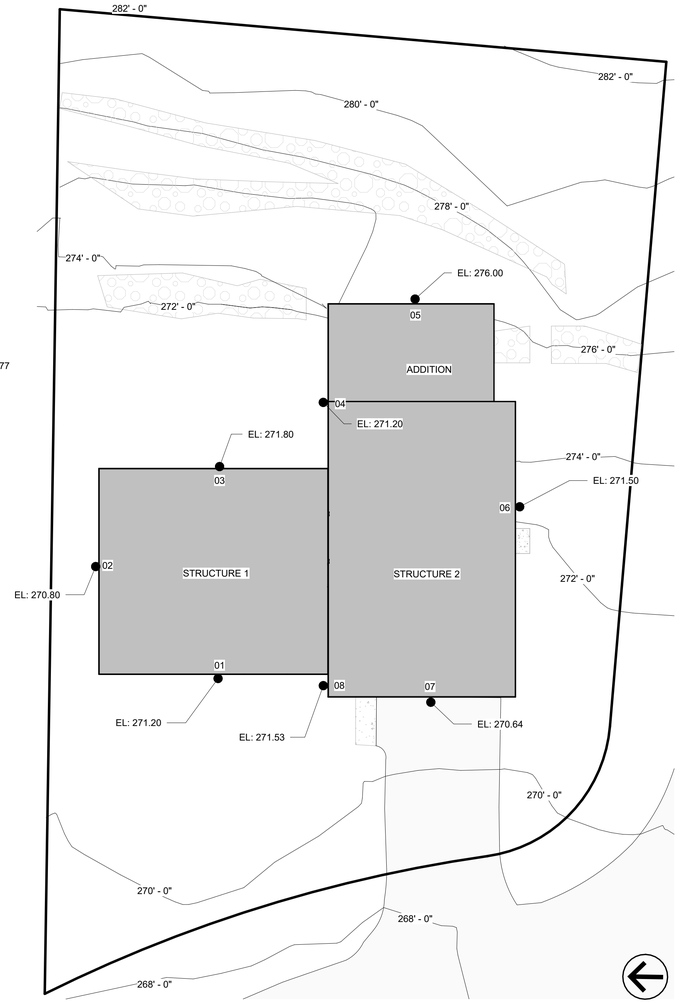
SITE PLAN

A100

Scale: As indicated



3 SITE SLOPE CALCULATION
1" = 10'-0"



2 ABE CALCULATIONS
1" = 10'-0"

SITE SLOPE CALCULATION

ELEVATION POINTS REFRENCED FROM SITE SURVEY ATTACHED TO THIS PLAN SET

HIGHEST ELEVATION POINT OF LOT: 282.40 FT

LOWEST ELEVATION POINT OF LOT: 268.60 FT

ELEVATION DIFFERENCE: 13.80 FT

HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS: 114.50 FT

LOT SLOPE = ELEVATION DIFFERENCE / HORIZONTAL DISTANCE X 100

LOT SLOPE = 12.05 %
(13.80 / 114.50) * 100

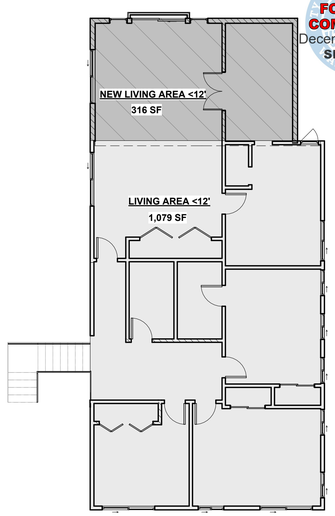
ABE CALCULATIONS

WALL	MIDPOINT ELEVATION	WALL LENGTH	ME x WL
01	271.20	32.00	8678.40
02	270.80	28.75	7785.50
03	271.80	32.00	8697.60
04	271.20	21.42	5809.10
05	276.00	26.17	7222.92
06	271.50	53.33	14479.10
07	270.64	26.17	7082.65
08	271.53	3.17	860.75
TOTAL	2174.67	223.01	60616.02

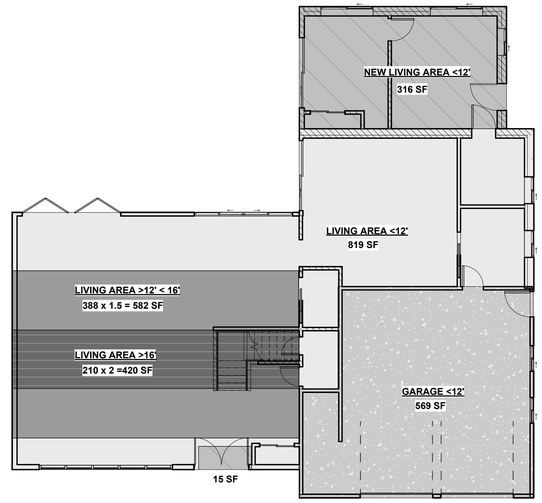
TOTAL MIDPOINT ELEVATION * WALL LENGTH:	60616.02
TOTAL LENGTH OF WALLS:	223.01
AVERAGE BUILDING ELEVATION (ABE)	**271.81**
FT-IN	271' - 9 3/4"

GROSS FLOOR AREA

	EXISTING LIVING AREA < 12'
	EXISTING LIVING AREA >12' < 16'
	EXISTING LIVING AREA >16'
	EXISTING GARAGE < 12'
	NEW LIVING AREA < 12'



4 LEVEL 2 - GFA
1/8" = 1'-0"



1 LEVEL 1 - GFA
1/8" = 1'-0"

ALLOWABLE GFA:

NET LOT AREA: 9,701 SF

GROSS FLOOR AREA: (40% OF NET LOT AREA):
ALLOWABLE GROSS FLOOR AREA: **3,880 SF**
PER MICC 19.02.020.D.1

ALLOWABLE INCREASE OF GROSS FLOOR AREA W/ADU:
PER MICC 19.02.020.D.3.b
LESSER OF FIVE PERCENTAGE POINTS OR THE ACTUAL FLOOR AREA OF THE PROPOSED ACCESSORY DWELLING UNIT
ALLOWABLE GROSS FLOOR AREA (45%): **4,365 SF**
ALLOWABLE GROSS FLOOR AREA (40 % + ADU SF): **4,196 SF**

PROVIDED:
II.THE LOT WILL CONTAIN AN ACCESSORY DWELLING UNIT ASSOCIATED WITH THE APPLICATION FOR A NEW OR REMODELED SINGLE-FAMILY HOME; AND
III.THE TOTAL GROSS FLOOR AREA SHALL NOT EXCEED 4,500 SQUARE FEET OR 45 PERCENT OF THE LOT AREA, WHICHEVER IS LESS.

GFA CALCULATION HEIGHT MODIFIERS:
< 12' = 100% GFA MODIFIER
>12' < 16 = 150% GFA MODIFIER
> 16' = 200% GFA MODIFIER

GFA CALCULATIONS:

LEVEL 1:	**2,720 SF**
EXISTING LIVING AREA <12'	819 SF
EXISTING GARAGE <12'	569 SF
EXISTING LIVING AREA >12' < 16'	582 SF
EXISTING LIVING AREA >16'	420 SF
NEW LIVING AREA (ADU) < 12'	316 SF
NEW LIVING AREA < 12'	15 SF

LEVEL 2:	**1,395 SF**
EXISTING LIVING AREA <12'	1,079 SF
NEW LIVING AREA < 12'	316 SF

GRAND TOTAL	**4,116 SF**

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MERCER ISLAND WA, 98040

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Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

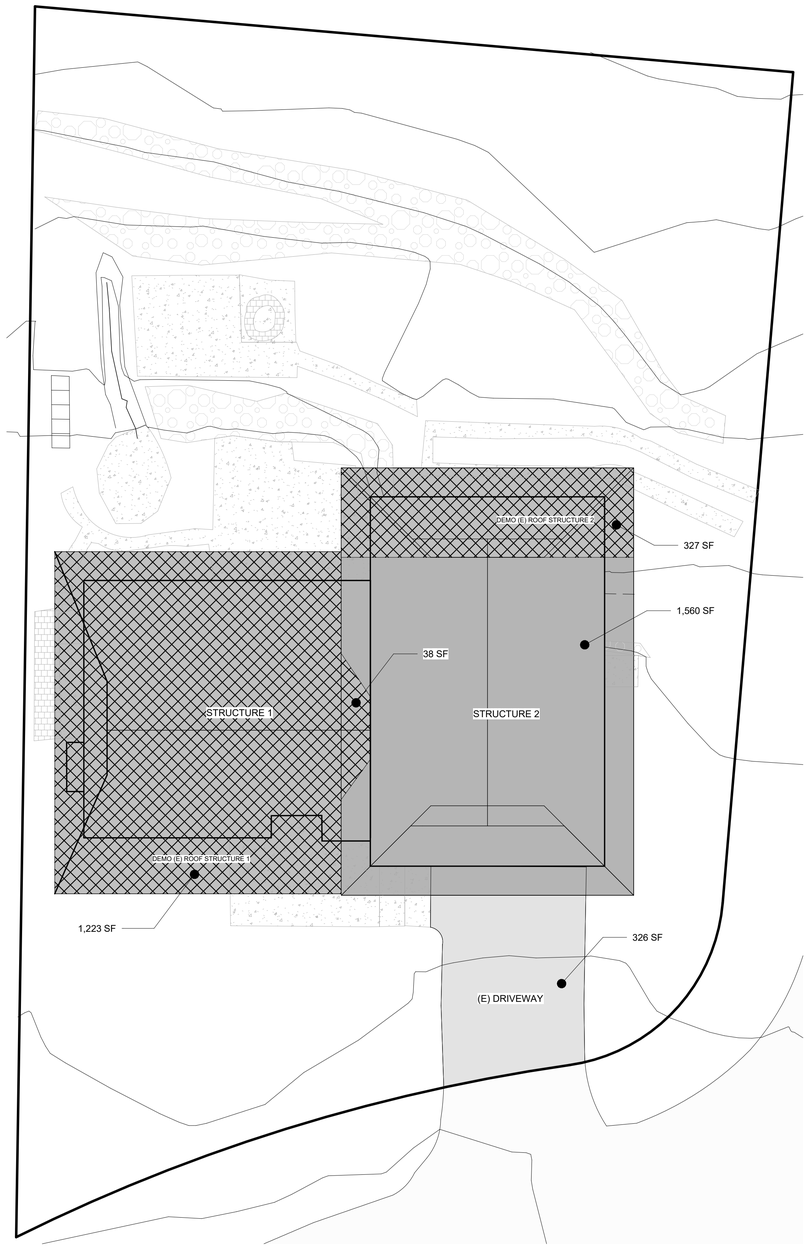
Record #: 2402-026
Date: 09/19/24

SLOPE / ABE / GFA CALCULATIONS

A100.1

Scale: As indicated

LOT COVERAGE CALCULATIONS



1 EXISTING - LOT COVERAGE
1/8" = 1'-0"

ALLOWABLE LOT COVERAGE
(FOR LOTS <15 % SLOPE - MAX 40% OF LOT AREA)
GROSS LOT AREA: 9,701 SF
NET LOT AREA (B): 9,701 SF
ALLOWABLE LOT COVERAGE AREA: 3,880 SF

TOTAL EXISTING LOT COVERAGE AREA: (E5)
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 1,560 SF

(E) TOTAL ROOF AREA: 2,783 SF
(E) DRIVEWAY: 326 SF
TOTAL: **3,109 SF**

TOTAL LOT COVERAGE AREA REMOVED: (F)
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 327 SF
(E) ROOF STRUCTURE 2: 38 SF

TOTAL: **1,588 SF**

TOTAL NEW/REPLACED LOT COVERAGE: (I5)
(R) ROOF STRUCTURE 1: 1,024 SF
(R) ROOF STRUCTURE 2: 312 SF
(N) ROOF STRUCTURE 2: 331 SF

MAIN STRUCTURE ROOF AREA:
TOTAL: **1,667 SF**

TOTAL PROJECT LOT COVERAGE AREA: (E5 - F) + I5
(3,109 - 1,588) + 1,667
TOTAL: **3,188 SF**

PROPOSED LOT COVERAGE % : (J/B) X100
(3,188 / 9,701) X 100
= **32.86 %**

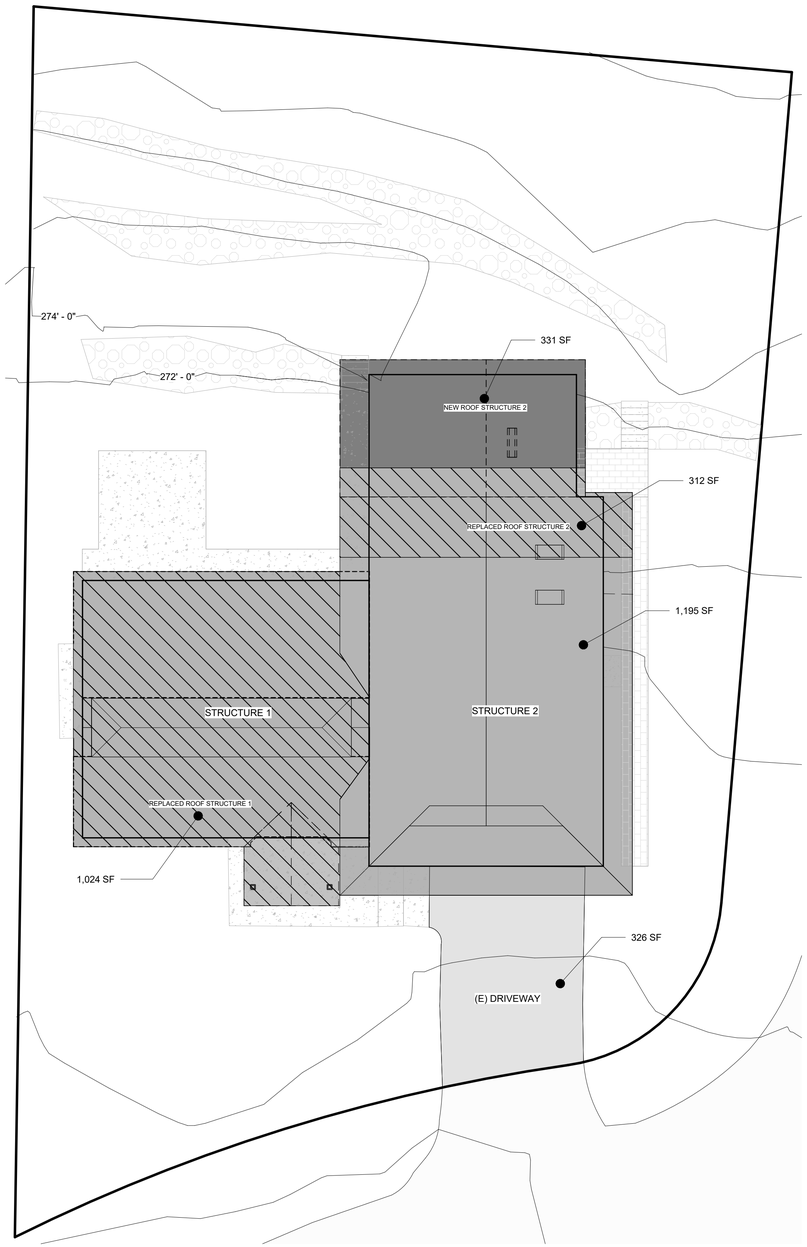
REMAINING ALLOWABLE LOT COVERAGE:
ALLOWED LOT COVERAGE (-) PROPOSED LOT COVERAGE
3,880 - 3,188 = **692 SF**

2

LOT COVERAGE

	EXISTING ROOF AREA TO REMAIN
	DEMO (E) LOT COVERAGE
	REPLACED EXISTING ROOF AREA
	NEW ROOF AREA
	VEHICULAR USE AREA TO REMAIN

(E) - EXISTING
(R) - REPLACED
(N) - NEW



2 PROPOSED - LOT COVERAGE
1/8" = 1'-0"

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Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

LOT COVERAGE CALCULATIONS

A100.2

Scale: As indicated

HARDSCAPE CALCULATIONS

HARDSCAPE CALCULATIONS (MAX 9% OF LOT AREA)
NET LOT AREA : **9,701 SF**
ALLOWABLE HARDSCAPE 9%: **873 SF**
AREA BORROWED FROM LOT COVERAGE: **692 SF**
TOTAL ALLOWED LOT COVERAGE SF: **1,565 SF**
TOTAL ALLOWED LOT COVERAGE %: **16.1 %**

2

EXISTING HARDSCAPE AREA: W/ EXISTING ROOFLINE
(E) CONC PATIO 1: 58 SF
(E) CONC PATIO 2: 199 SF
(E) CONC PATIO 3: 225 SF
(E) CONC WALKWAY 1: 97 SF
(E) CONC WALKWAY 2: 23 SF
(E) PAVER WALKWAY: 33 SF
(E) CONC SLAB: 10
(E) CONC STEP: 10 SF
(E) STONE STEPS: 16 SF
(E) ROCKERY 1: 130 SF
(E) ROCKERY 2: 528 SF
(E) CONC POND: 66 SF

TOTAL EXISTING HARDSCAPE AREA: (F7)
UNCOVERED PATIOS: 482 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 36 SF
ROCKERIES & RETAINING WALLS: 658 SF
OTHER - (CONC POND): 66 SF
TOTAL: **1,395 SF**

REMOVED HARDSCAPE:
(E) CONC PATIO 3: 225 SF
(E) CONC PATIO 2: 199 SF
(E) CONC WALKWAY 1: 97 SF
(E) CONC WALKWAY 2: 23 SF
(E) PAVER WALKWAY: 33 SF
(E) STONE STEPS: 16 SF
(E) ROCKERY 1: 130 SF
(E) ROCKERY 2: 100 SF
(E) CONC POND: 66 SF

TOTAL HARDSCAPE AREA REMOVED: (G)
UNCOVERED PATIOS: 424 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 230 SF
OTHER - (CONC POND): 66 SF

TOTAL: **889 SF**

NEW/REPLACED HARDSCAPE: W/ UPDATED ROOFLINE
(R) CONC PATIO 2: 201 SF
(N) CONC PATIO: 35 SF
(N) PAVER WALKWAY: 70 SF
(N) STONE STEPS: 16 SF
(R) ROCKERY 1: 145 SF
(R) ROCKERY 2: 46 SF
(N) ROCKERY: 79 SF
(N) RETAINING WALL: 18 SF
(EU) (UNCOVERED CONC SLAB): 17 SF

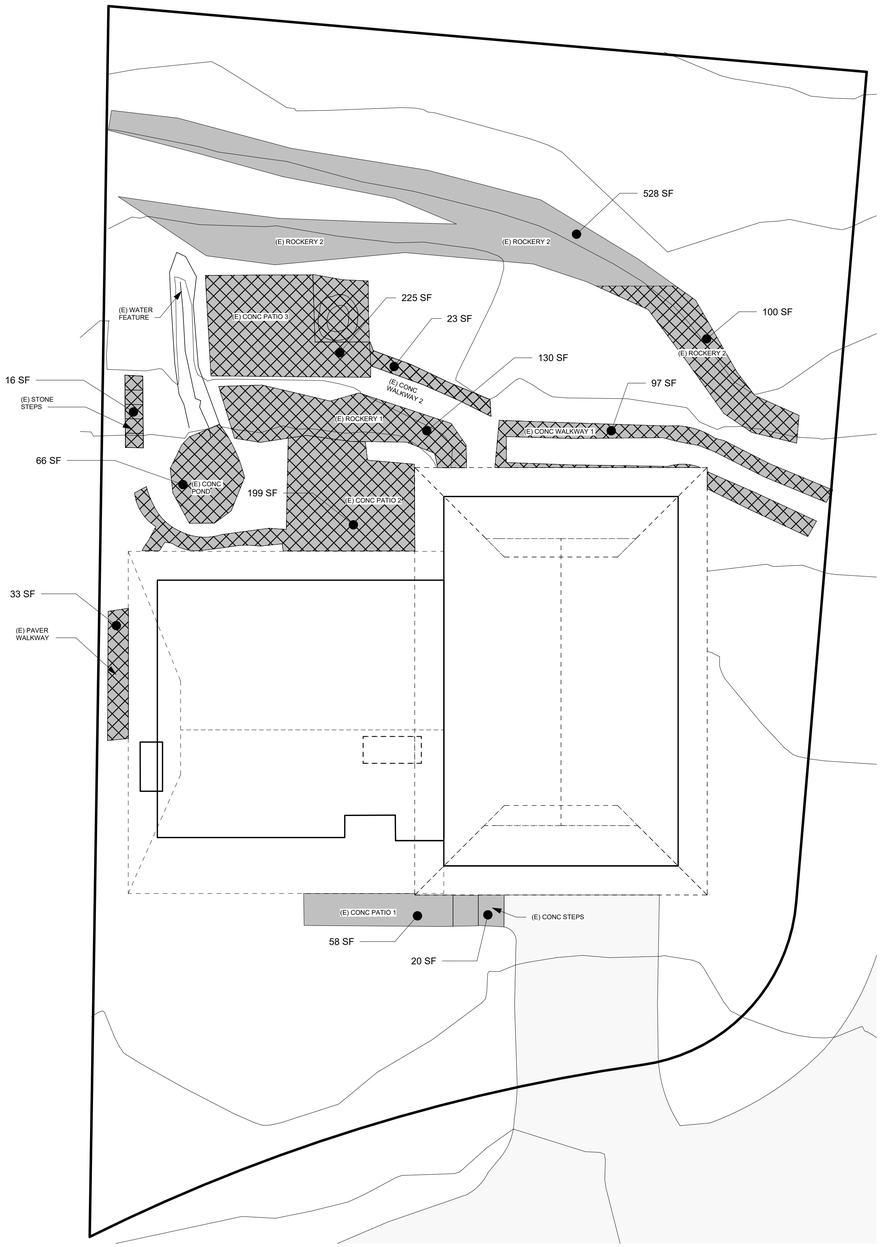
TOTAL NEW/REPLACED HARDSCAPE: (H7)
UNCOVERED PATIOS: 236 SF
WALKWAYS: 70 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 288 SF
OTHER - (UNCOVERED CONC SLAB): 17 SF

TOTAL: **627 SF**

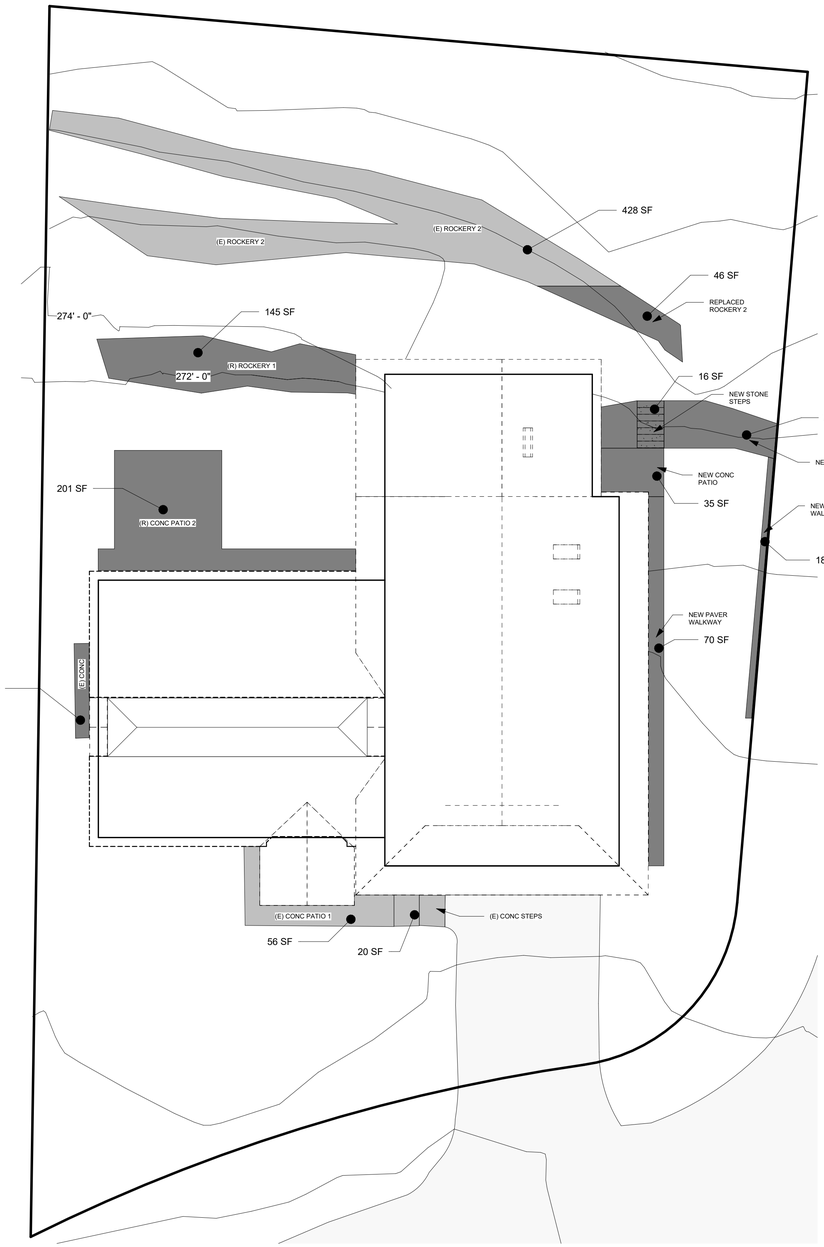
TOTAL PROJECT HARDSCAPE AREA: (F7 - G) + H7
(1,395 - 889) + 627
TOTAL: **1,133 SF**

PROPOSED HARDSCAPE % : (J/B) X100
(1,133 / 9,701) X 100
= **11.67 %**

2



1 EXISTING - HARDSCAPE
1/8" = 1'-0"



2 PROPOSED - HARDSCAPE
1/8" = 1'-0"

HARDSCAPE

	EXISTING HARDSCAPE TO RAMAIN
	DEMO (E) HARDSCAPE
	NEW/REPLACED HARDSCAPE UNCOVERED HARDSCAPE UNDER NEW ROOF OVERHANGS

(E) - EXISTING
(R) - REPLACED
(N) - NEW
(EU) - EXISTING UNCOVERED

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Record #: 2402-026
Date: 09/19/24

HARDSCAPE CALCULATIONS

A100.3

Scale: As indicated

STORM WATER CALCULATIONS

NET INCREASE IMPERVIOUS SURFACE: (<500 SF)

EXISTING IMPERVIOUS SURFACE AREA: (A)

ROOF & DRIVEWAY: 3,109 SF
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 1,560 SF
(E) DRIVEWAY: 326 SF

OTHER SURFACES: 1,395 SF
UNCOVERED PATIOS: 482 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 36 SF
ROCKERIES & RETAINING WALLS: 658 SF
OTHER - (CONC POND): 66 SF

TOTAL: **4,504 SF**

REMOVED IMPERVIOUS SURFACE AREA: (B)

ROOF & DRIVEWAY: 1,588 SF
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 327 SF
(E) ROOF STRUCTURE 2: 38 SF

OTHER SURFACES: 889 SF
UNCOVERED PATIOS: 424 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 230 SF
OTHER - (CONC POND): 66 SF

TOTAL: **2,477 SF**

NEW IMPERVIOUS SURFACE AREA: (C)

ROOF & DRIVEWAY: 1,667 SF
(R) ROOF STRUCTURE 1: 1,024 SF
(R) ROOF STRUCTURE 2: 312 SF
(N) ROOF STRUCTURE 2: 331 SF

OTHER SURFACES: 627 SF
UNCOVERED PATIOS: 236 SF
WALKWAYS: 70 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 288 SF
OTHER - (UNCOVERED CONC SLAB): 17 SF

TOTAL: **2,294 SF**

TOTAL PROPOSED IMPERVIOUS SURFACE AREA:
CALCULATION: (A - B) + C
(4,504 - 2,477) + 2,294

TOTAL: **4,321 SF**

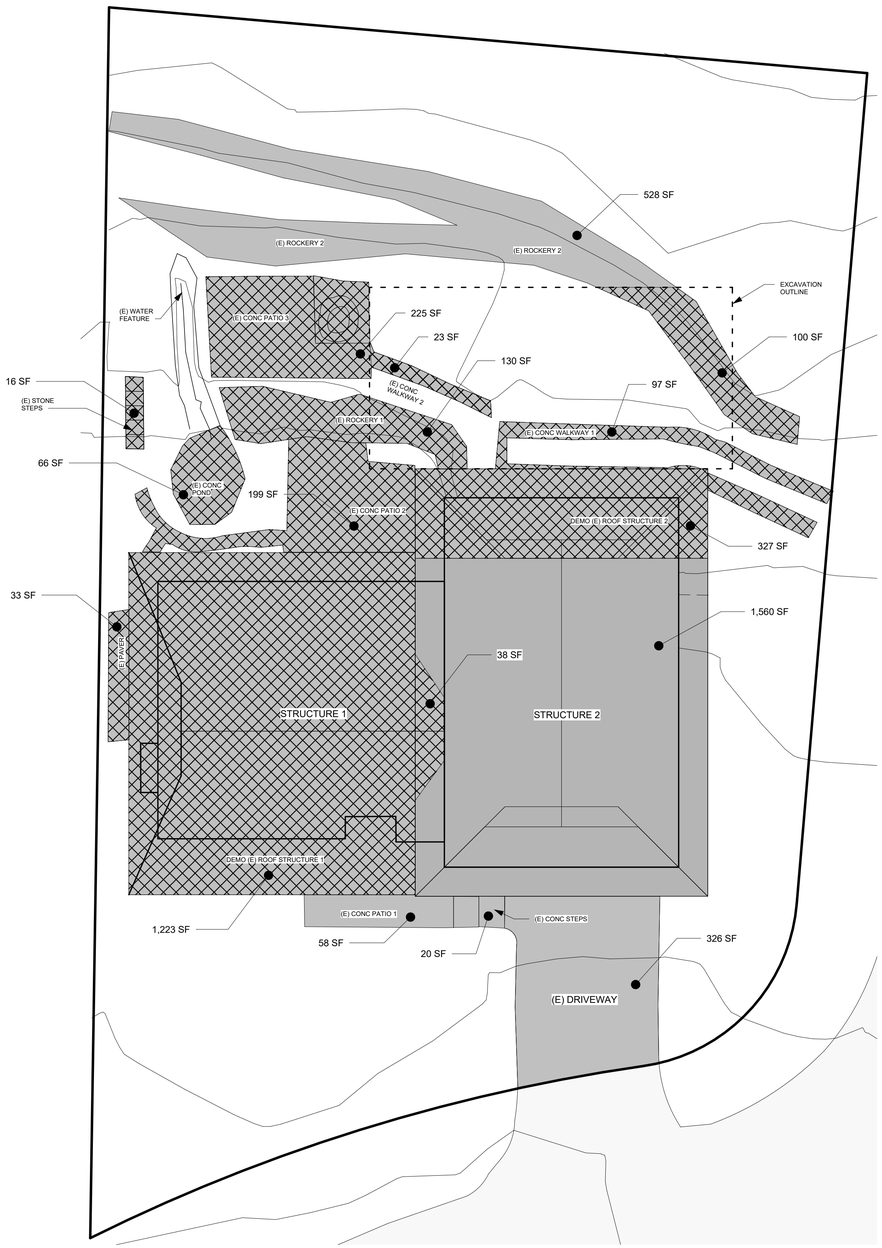
NET IMPERVIOUS SURFACE CALCULATION:
= PROPOSED (-) EXISTING:
4,321 - 4,504 = **-183 SF**

NEW + REPLACED HARD SURFACE AREA: (<2,000 SF)

NEW ROOF STRUCTURE 2: 331 SF
REPLACED ROOF STRUCTURE 1: 1,024 SF

OTHER HARD SURFACES: 627 SF
UNCOVERED PATIOS: 236 SF
WALKWAYS: 70 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 288 SF
OTHER - (UNCOVERED CONC SLAB): 17 SF

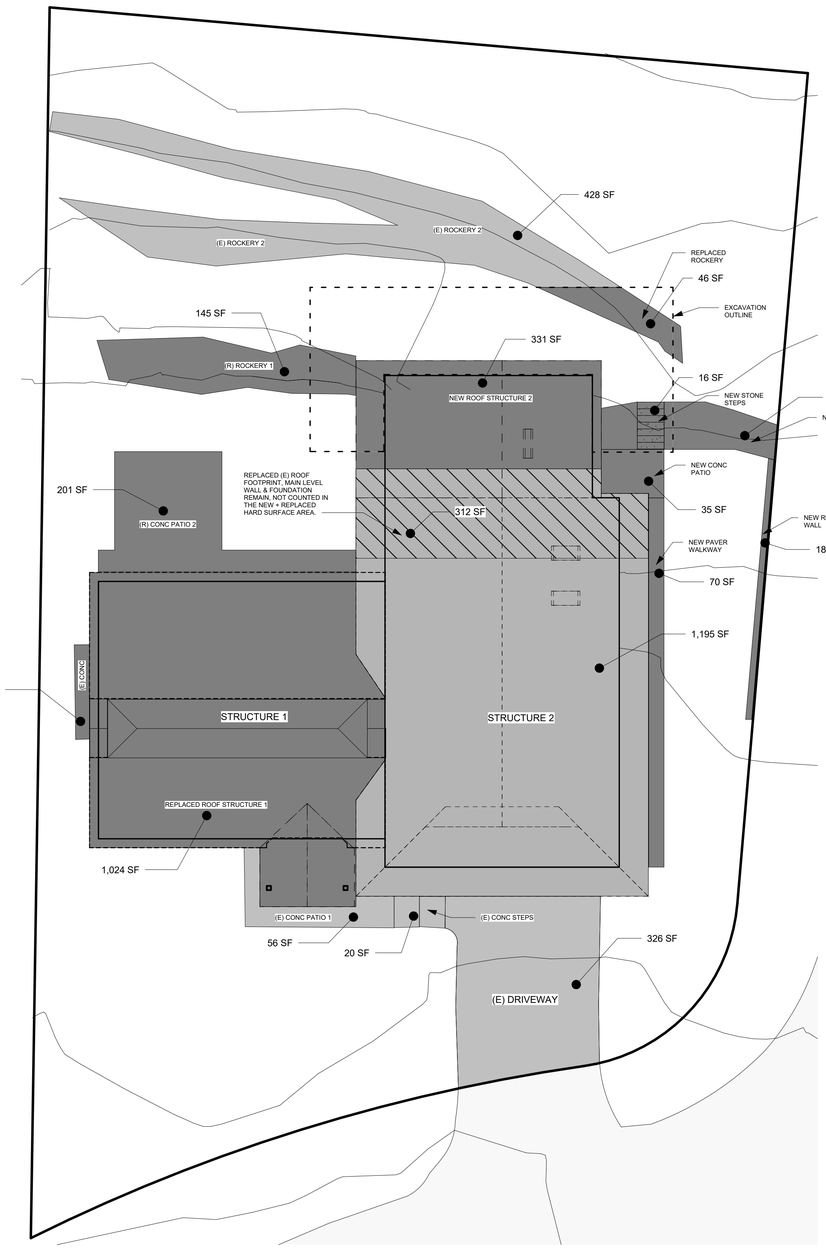
TOTAL: **1,982 SF**



2 EXISTING - IMPERVIOUS SURFACE
1/8" = 1'-0"

HARD SURFACES	
	EXISTING HARD SURFACES TO REMAIN
	DEMO EXISTING HARD SURFACES
	NEW/REPLACED HARD SURFACES

(E) - EXISTING
(R) - REPLACED
(N) - NEW



1 PROPOSED - IMPERVIOUS SURFACE
1/8" = 1'-0"

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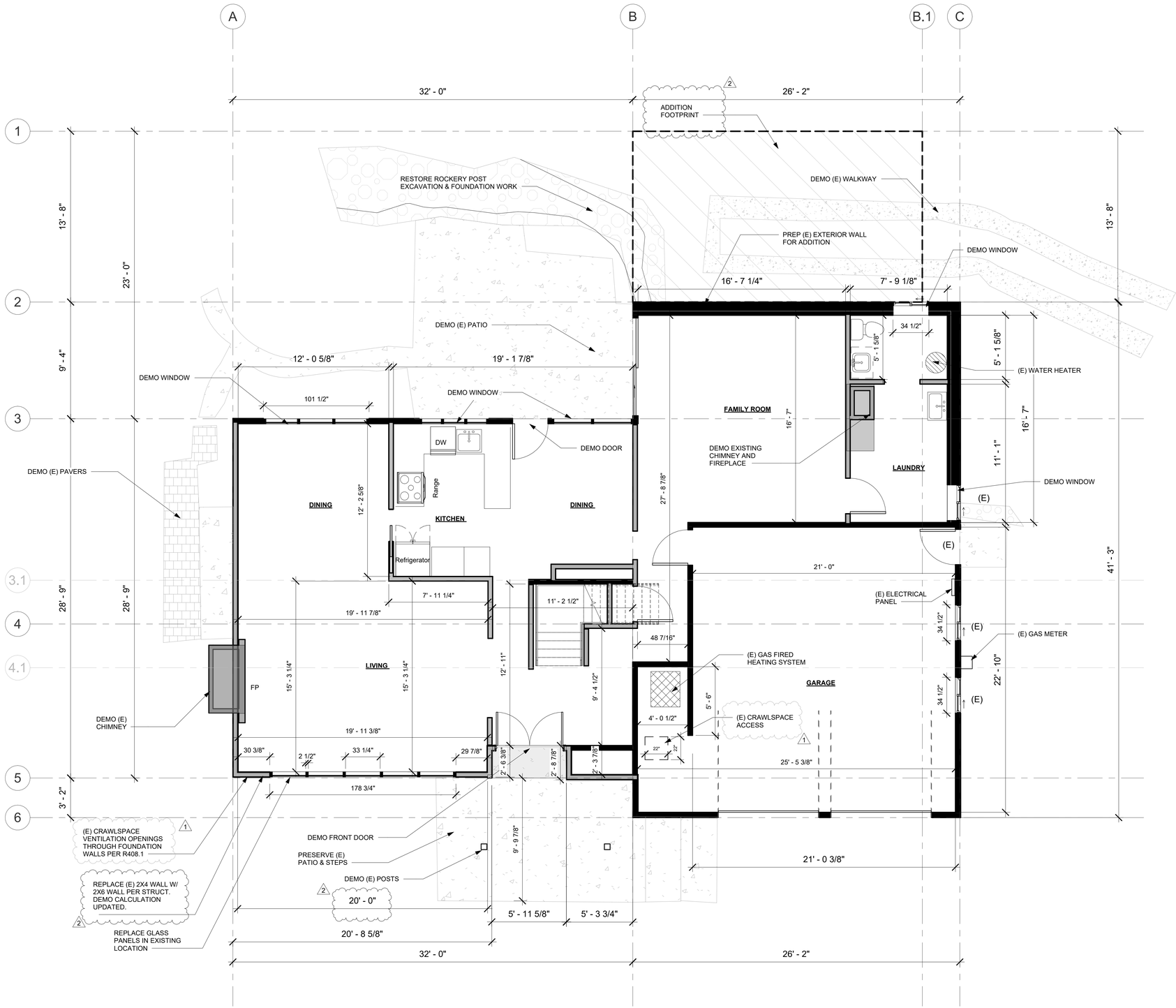
STORMWATER CALCULATIONS

A100.4

Scale: As indicated



1 LEVEL 1 - DEMO
1/4" = 1'-0"

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DEMO PLAN NOTES:

1. CONTRACTOR TO VERIFY MEASURMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.
3. DEMO ALL EXISTING BRICK FIREPLACES.
4. DEMOLITION: ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE. CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

EXISTING CONDITION NOTES:

1. (E) EXTERIOR WALLS: 2X4 STUD @16" O.C. 8" CONCRETE FOUNDATION WALLS WITH FOOTINGS.
2. (E) FLOOR STRUCTURE: WOOD FRAMED CRAWLSPACE FLOOR AT MAIN LEVEL, SLAB ON GRADE AT GARAGE, AND WOOD FRAMED FLOOR AT SECOND LEVEL.
3. (E) ROOF STRUCTURE: SITE-CUT ROOF TRUSSES.
4. (E) HEATING: CENTRAL FORCED AIR HEATING - NATURAL GAS - PUBLIC SUPPLY, GAS METER.
5. (E) HOT WATER UNIT: GAS FUELED.
6. (E) ATTIC: VENTED THROGH SOFFIT AND ROOF VENTS.

STRUCTURAL ALTERATION CALCULATION:
PER MICC 19.01.050 (D)(1)(b)(iii)
REFERENCE DEMO PLANS ON SHEET A101 & A103 FOR DIMENSIONS OF STRUCTURALLY ALTERED WALLS

PERCENTAGE OF EXTERIOR WALLS ALTERED =
(SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED) ÷ (SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS)

(65.4 FEET) ÷ (204.21 FEET) **= 32%**

(A) THE "SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED" IS THE SUM OF EACH WALL SEGMENT THAT IS COMPLETELY DEMOLISHED.
(B) THE "SUM OF THE LENGTH OF EXTERIOR WALLS" IS THE SUM OF THE LENGTHS OF EACH EXTERIOR WALL SEGMENT OF A STRUCTURE OR BUILDING.

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

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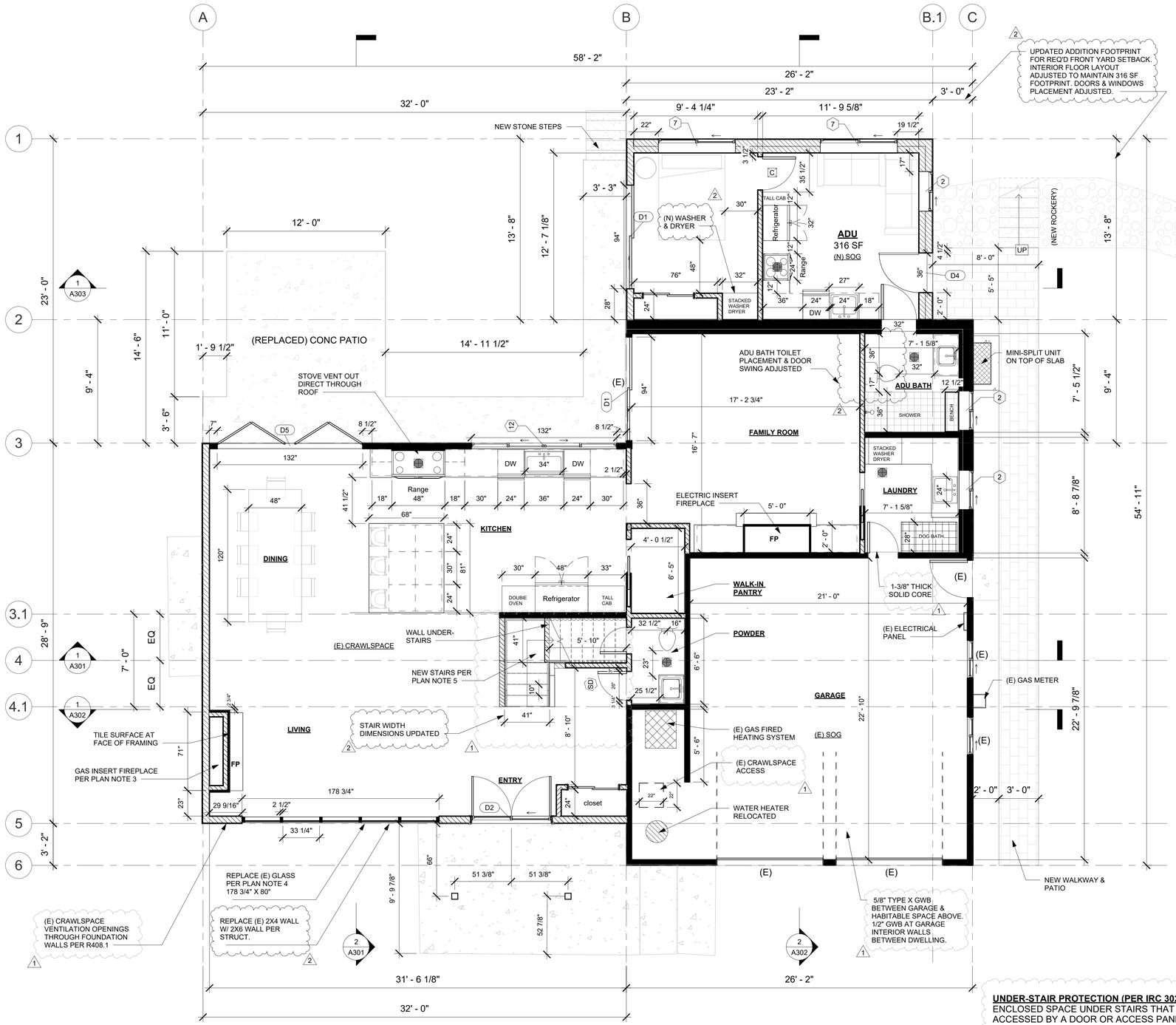
DEMO LEVEL 1

A101

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



PLAN NOTES:

1. CONTRACTOR TO VERIFY MEASURMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION. DIMENSIONS SHALL BE TO CONVENTIONAL TOLERANCES.
2. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES INCLUDING UNIT SIZE.
3. GAS INSERT FIREPLACE, VERIFY REQUIRED FRAMING WIDTH, HEIGHT, AND DEPTH PER MANUFACTURER SPECIFICATIONS.
4. REPLACE (E) GLASS PANELS IN NEW 2X6 WALL - CONTRACTOR TO VERIFY THE (E) GLASS FRAME AND PANEL DIMENSIONS FOR REPLACEMENT.
5. STAIR DIMENSIONS PER IRC R311.7, MAIN INTERIOR STAIR SHALL BE REBUILT AND NEW GUARDS WILL BE INSTALLED TO COMPLY WITH IRC R312.
6. AIR EXHAUST OPENINGS SHALL TERMINATE NOT LESS THAN 3 FEET FROM OPERABLE AND NONOPERABLE OPENINGS INTO THE BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKES EXCEPT WHERE THE OPENING IS LOCATED 3 FEET ABOVE THE AIR INTAKE.
7. PROVIDE FIREBLOCKING FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING.
8. SAFETY GLAZING REQUIRED AT WET SURFACES (PER IRC R308.4.5) GLAZING IN WALLS, ENCLOSURES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND SIMILAR. WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE CONSIDERED A HAZARDOUS LOCATION. APPLIES TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

ENERGY & FUEL NORMALIZATION CREDITS:
2018 WASHINGTON STATE ENERGY CODE - RESIDENTIAL

CREDITS REQUIRED
SMALL DWELLING UNIT: 3.0 CREDITS REQUIRED

PROPOSED:
HEATING OPTIONS:
DHP WITH ZONAL ELECTRIC RESISTANCE (4) PER OPT. (3.4) : 0.5 CREDITS
ENERGY OPTIONS:
EFFICIENT BUILDING ENVELOPE OPTION (1.3) : 0.5 CREDITS
HIGH EFFICIENCY HVAC OPTION (3.4) : 1.5 CREDITS
APPLIANCE PACKAGE (7.1) : 0.5 CREDITS

CREDIT OPTION (1.3): EFFICIENT BUILDING ENVELOPE
PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS:

VERTICAL FENESTRATION = U-FACTOR: (.28)
FLOORS - R-38
SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB
BELOW GRADE SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB
OR COMPLIANCE BASED ON SECTION R402.1.4: REDUCE THE TOAL CONDUCTIVE UA BY 5%

CREDIT OPTION (3.4): DUCTLESS MINI SPLIT SYSTEM SPECS

DUCTLESS MINI HEAT SPLIT SYSTEM
HEATING SEASONAL PERFORMANCE FACTOR: 11.5 HSPF
MODEL: BLUERIDGE BMM5519-9C-9C-9C-12C-18C
HEATING CAPACITY: 55,000 BTU (4.5 TON)
ENERGY EFFICIENCY RATIO: 10.5 EER
SEER: 19.0 SEER
ZONES: 5

CREDIT OPTION (7.1): APPLIANCE PACKAGE
ALL OF THE FOLLOWING APPLIANCES SHALL BE NEW AND INSTALLED IN THE DWELLING UNIT AND SHALL MEET THE FOLLOWING STANDARDS:
DISHWASHER – ENERGY STAR RATED
REFRIGERATOR (IF PROVIDED) – ENERGY STAR RATED
WASHING MACHINE – ENERGY STAR RATED
DRYER – ENERGY STAR RATED, VENTLESS DRYER WITH MINIMUM CEF RATING OF 5.2

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	FAN MIN 50 CFM, BATH,TOILET ROOM & LAUNDRY FAN MIN 100 CFM, KITCHEN
C	COMBINED CARBON MONOXIDE DETECTOR & SMOKE DETECTORS
SD	SMOKE DETECTOR INTERCONNECTED AND HARDWIRED W/ BATTERY BACKUP
	CARBON MONOXIDE DETECTOR, INTERCONNECTED AND HARDWIRED W/BATTERY BACKUP
W	WHOLE HOUSE VENTILATION 35 CFM CONTINUOUSLY

UNDER-STAIR PROTECTION (PER IRC 302.7):
ENCLOSED SPACE UNDER STAIRS THAT IS ACCESSED BY A DOOR OR ACCESS PANEL SHALL HAVE WALLS, UNDER-STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2-INCH GWB.

WHOLE HOUSE VENTILATION:
CALCULATION PER TABLE M1505.4.3(1)

PROPOSED ADDITION CONDITIONED SF: 632 SF
NUMBER OF BEDROOMS: 2
VENTILATION AIRFLOW RATE (CFM): 35 CFM

WHOLE HOUSE VENTILATION: 35 CFM CONTINUOUSLY

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
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BUILD STUFF
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REVISION TABLE

Revision #	Date	Revision Description
1	5/22/2024	Revision 1
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

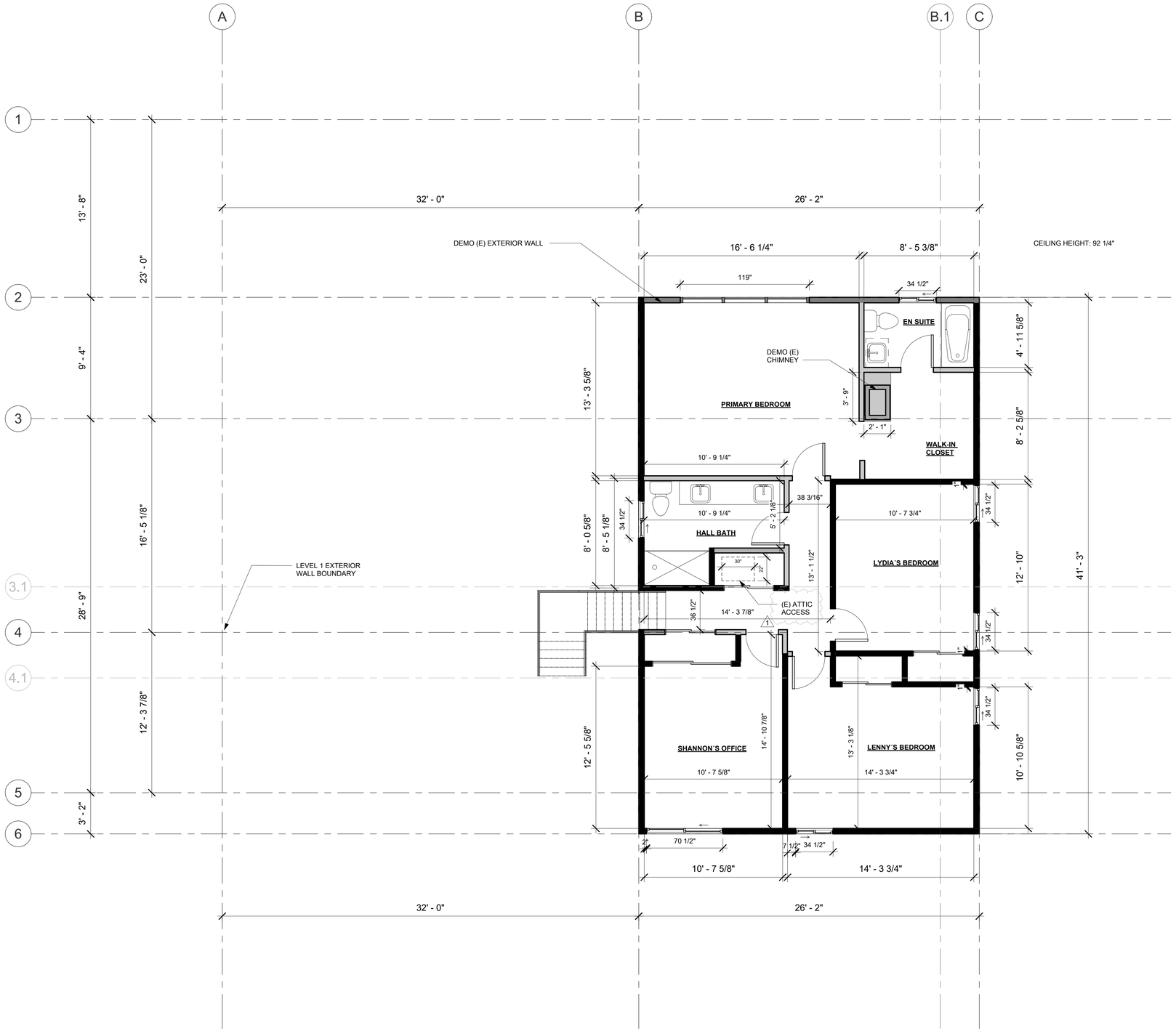
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

PROPOSED LEVEL 1

A102

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



1 LEVEL 2 - DEMO
1/4" = 1'-0"

DEMO PLAN NOTES:

1. CONTRACTOR TO VERIFY MEASURMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.
3. DEMO ALL EXISTING BRICK FIREPLACES.
4. DEMOLITION: ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE. CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

EXISTING CONDITION NOTES:

1. (E) EXTERIOR WALLS: 2X4 STUD @16" O.C. 8" CONCRETE FOUNDATION WALLS WITH FOOTINGS.
2. (E) FLOOR STRUCTURE: WOOD FRAMED CRAWLSPACE FLOOR AT MAIN LEVEL, SLAB ON GRADE AT GARAGE, AND WOOD FRAMED FLOOR AT SECOND LEVEL.
3. (E) ROOF STRUCTURE: SITE-CUT ROOF TRUSSES.
4. (E) HEATING: CENTRAL FORCED AIR HEATING - NATURAL GAS - PUBLIC SUPPLY, GAS METER.
5. (E) HOT WATER UNIT: GAS FUELED.
6. (E) ATTIC: VENTED THROGH SOFFIT AND ROOF VENTS.

STRUCTURAL ALTERATION CALCULATION:
PER MICC 19.01.050 (D)(1)(b)(iii)
REFERENCE DEMO PLANS ON SHEET A101 & A103 FOR DIMENSIONS OF STRUCTURALLY ALTERED WALLS

PERCENTAGE OF EXTERIOR WALLS ALTERED =
(SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED) ÷ (SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS)

(65.4 FEET) ÷ (204.21 FEET) **= 32%**

(A) THE "SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED" IS THE SUM OF EACH WALL SEGMENT THAT IS COMPLETELY DEMOLISHED.
(B) THE "SUM OF THE LENGTH OF EXTERIOR WALLS" IS THE SUM OF THE LENGTHS OF EACH EXTERIOR WALL SEGMENT OF A STRUCTURE OR BUILDING.

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

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HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

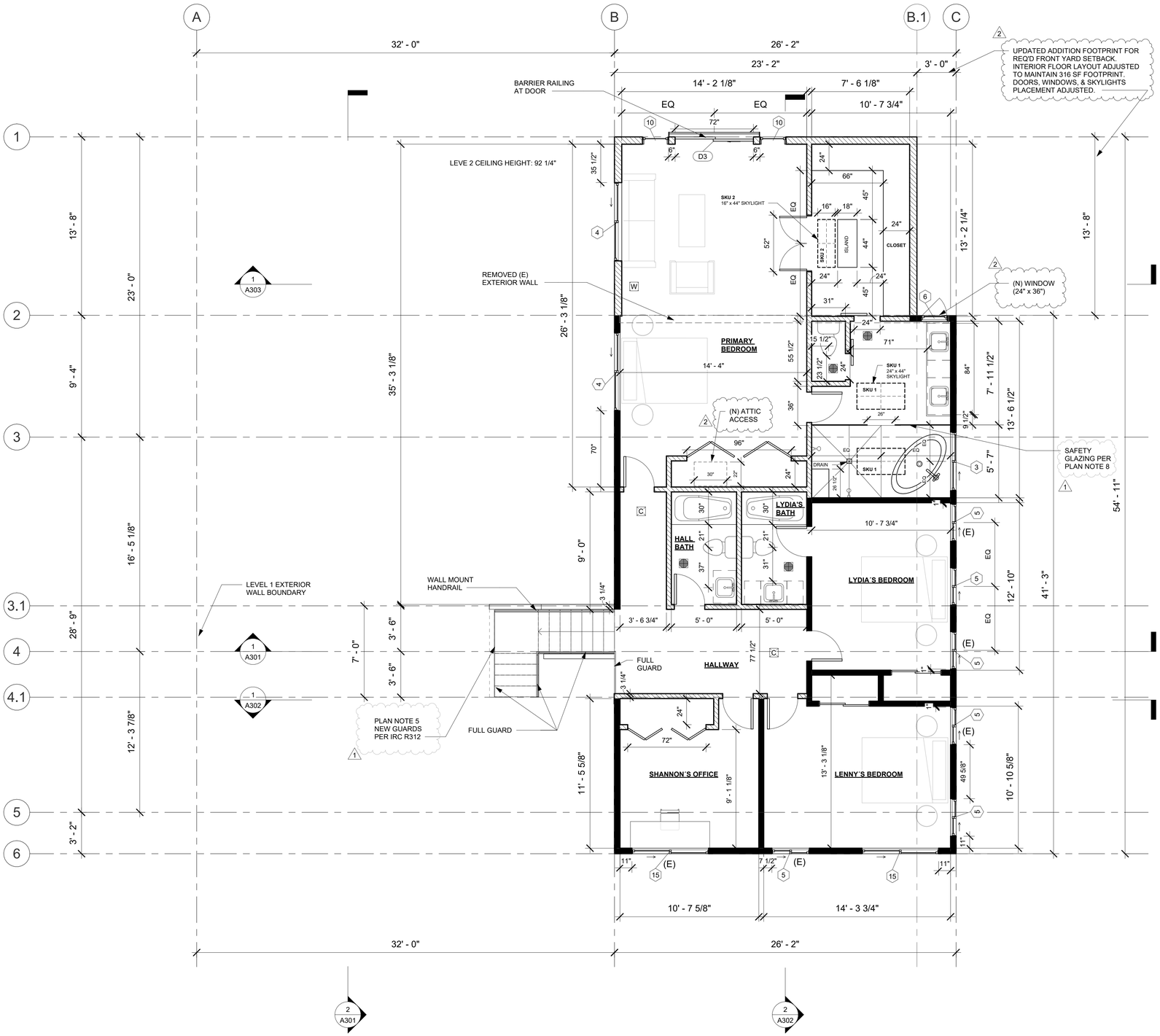
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

DEMO LEVEL 2

A103

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



PLAN NOTES:

1. CONTRACTOR TO VERIFY MEASURMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION. DIMENSIONS SUBJECT TO CONVENTIONAL TOLERANCES.
2. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES INCLUDING UNIT SIZE.
3. GAS INSERT FIREPLACE, VERIFY REQUIRED FRAMING WIDTH, HEIGHT, AND DEPTH PER MANUFACTURER SPECIFICATIONS.
4. REPLACE (E) GLASS PANELS IN NEW 2X6 WALL - CONTRACTOR TO VERIFY THE (E) GLASS FRAME AND PANEL DIMENSIONS FOR REPLACEMENT.
5. STAIR DIMENSIONS PER IRC R311.7, MAIN INTERIOR STAIR SHALL BE REBUILT AND NEW GUARDS WILL BE INSTALLED TO COMPLY WITH IRC R312.
6. AIR EXHAUST OPENINGS SHALL TERMINATE NOT LESS THAN 3 FEET FROM OPERABLE AND NONOPERABLE OPENINGS INTO THE BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKES EXCEPT WHERE THE OPENING IS LOCATED 3 FEET ABOVE THE AIR INTAKE.
7. PROVIDE FIREBLOCKING FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING.
8. SAFETY GLAZING REQUIRED AT WET SURFACES (PER IRC R308.4.5) GLAZING IN WALLS, ENCLOSURES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND SIMILAR. WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE CONSIDERED A HAZARDOUS LOCATION. APPLIES TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

GUARDS (PER IRC R312.1)

REQUIRED HEIGHT: MAX 36 INCHES AS MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE NOSINGS.
MAX OPENINGS: FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.
MAX OPENINGS AT STAIRS: THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF STAIR, FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD, SHALL NOT ALLOW PASSAGE OF A SPHERE 6 INCHES IN DIAMETER.
GUARDS ON THE OPEN SIDE OF STAIRS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 4 3/8 INCHES IN DIAMETER.

WHOLE HOUSE VENTILATION:
CALCULATION PER TABLE M1505.4.3(1)

PROPOSED ADDITION CONDITIONED SF: 632 SF
NUMBER OF BEDROOMS: 2
VENTILATION AIRFLOW RATE (CFM): 35 CFM

WHOLE HOUSE VENTILATION: 35 CFM CONTINUOUSLY

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	FAN MIN 50 CFM, BATH,TOILET ROOM & LAUNDRY FAN MIN 100 CFM, KITCHEN
C	COMBINED CARBON MONOXIDE DETECTOR & SMOKE DETECTORS
SD	SMOKE DETECTOR INTERCONNECTED AND HARDWIRED W/ BATTERY BACKUP
	CARBON MONOXIDE DETECTOR, INTERCONNECTED AND HARDWIRED W/BATTERY BACKUP
W	WHOLE HOUSE VENTILATION 35 CFM CONTINUOUSLY

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REVISION TABLE

Revision #	Date	Revision Description
1	5/22/2024	Revision 1
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

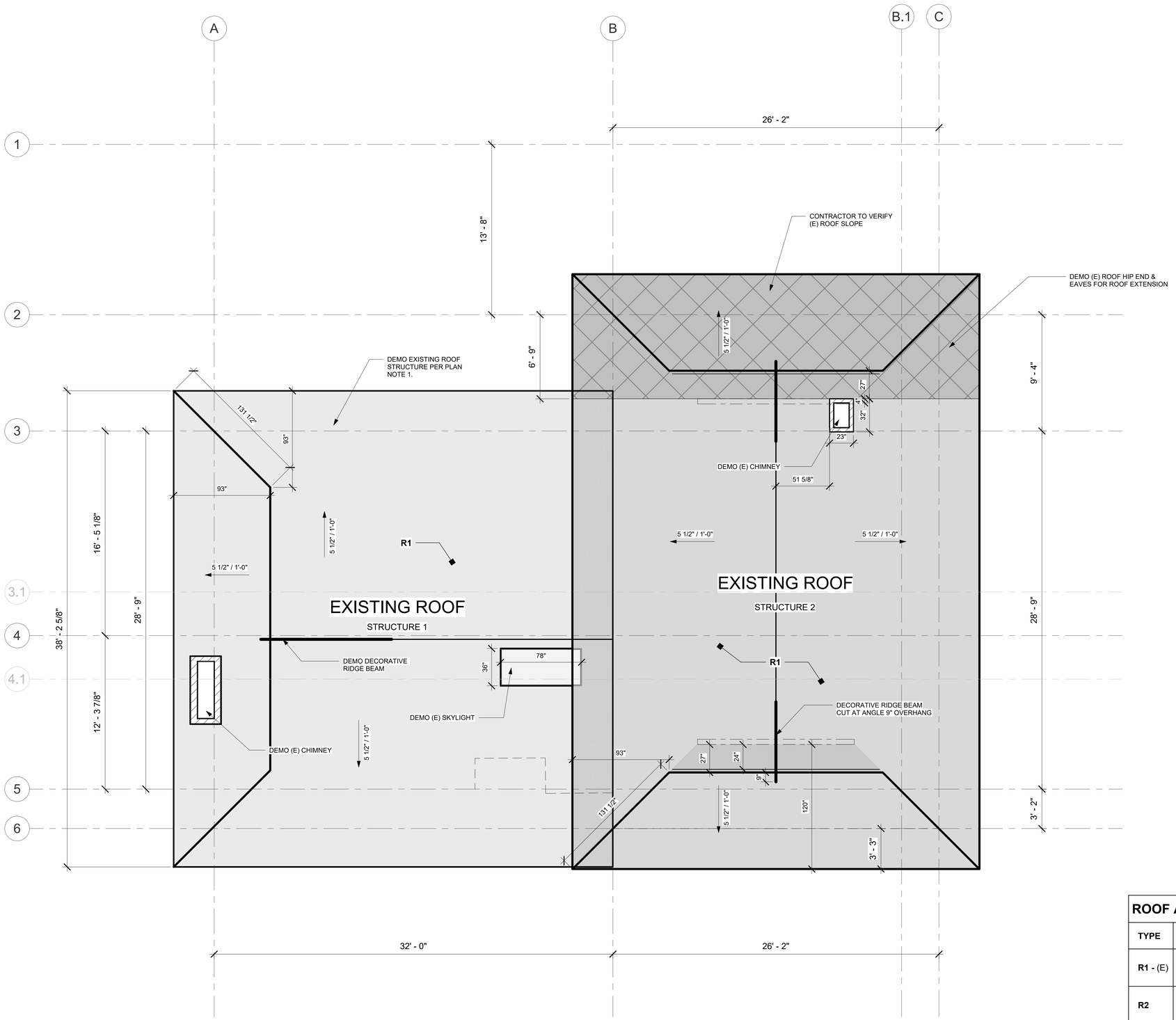
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

PROPOSED LEVEL 2

A104

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



1 ROOF - DEMO
1/4" = 1'-0"

PLAN NOTES:

1. DEMO EXISTING ROOF OF MAIN LEVEL STRUCTURE. SPECIAL PREACUTIONS MUST BE TAKEN WHEN CLIPPING EXISTING DUCTWORK AND ELECTRICAL WIRES DURING DEMOLITION.
2. EXISTING END HIP ROOF TO BE VERIFIED ON-SITE TO MATCH EXACT EXISTING CONDITIONS ONCE ROOFING MATERIAL HAS BEEN REMOVED AND EXISTING STRUCTURE IS EXPOSED.
3. DEMOLITION: ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE. CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

EXISTING CONDITION NOTES:

1. (E) EXTERIOR WALLS: 2X4 STUD @16" O.C.
   8" CONCRETE FOUNDATION WALLS WITH FOOTINGS.
2. (E) FLOOR STRUCTURE: WOOD FRAMED CRAWLSPACE FLOOR AT MAIN LEVEL, SLAB ON GRADE AT GARAGE, AND WOOD FRAMED FLOOR AT SECOND LEVEL.
3. (E) ROOF STRUCTURE: SITE-CUT ROOF TRUSSES.
4. (E) HEATING: CENTRAL FORCED AIR HEATING - NATURAL GAS - PUBLIC SUPPLY, GAS METER.
5. (E) HOT WATER UNIT: GAS FUELED.
6. (E) ATTIC: VENTED THROGH SOFFIT AND ROOF VENTS.

ROOF ASSEMBLIES

TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER SRTUCT. -2 X 12 RAFTERS PER SRTUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER SRTUCT. - 2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING

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7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

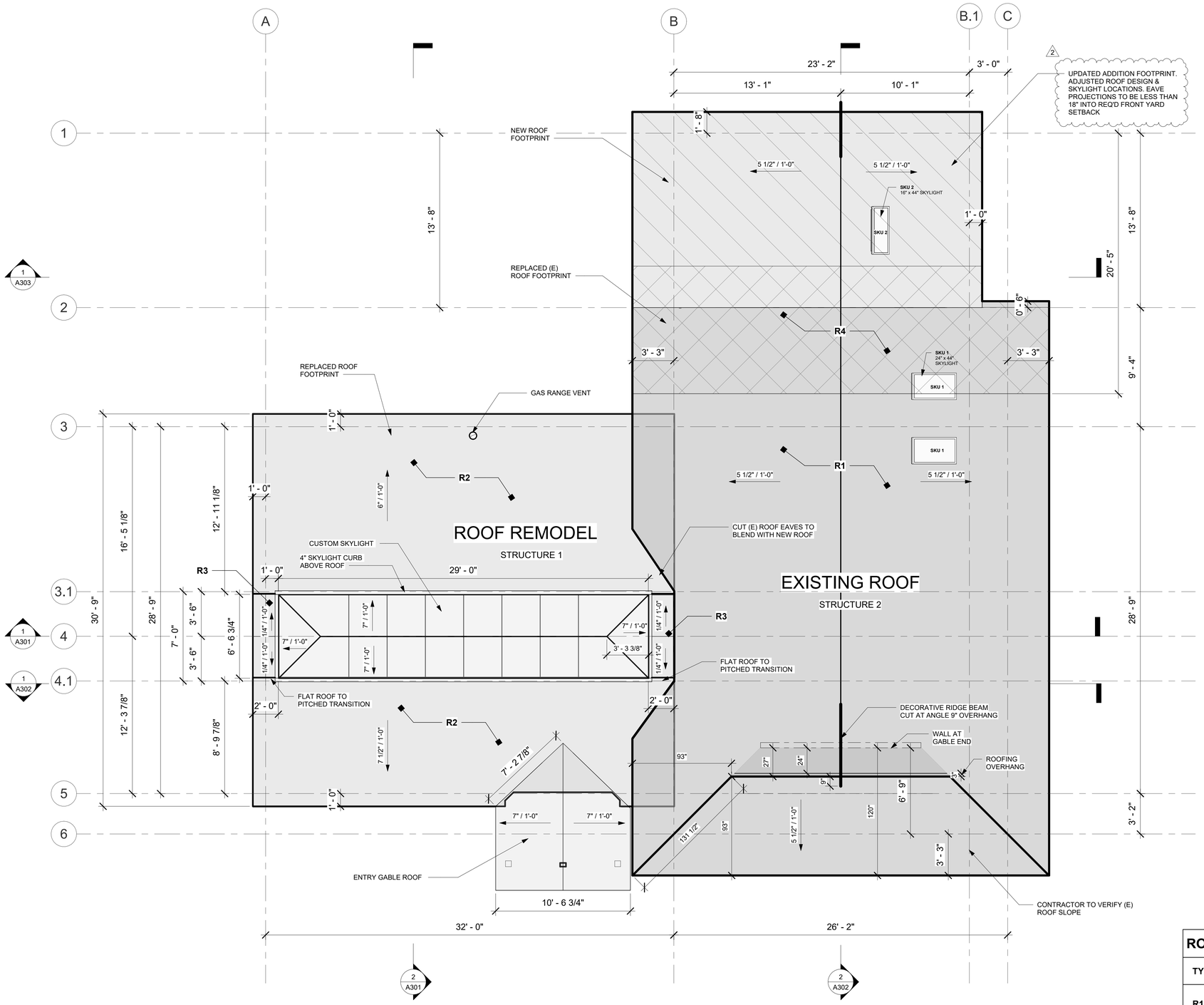
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

DEMO ROOF PLAN

A105

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



1 PROPOSED ROOF
1/4" = 1'-0"

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
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PLAN NOTES:

1. STRUCTURAL SPECIFICATIONS PER STRUCTURAL PLANS.
2. THERMOSET SINGLE-PLY MEMBRANE ROOFS SHALL HAVE A DESIGN SLOPE OF NOT LESS THAN ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE
3. CEILINGS VAULTED - SINGLE RAFTER MUST HAVE A MIN INSULATION VALUE OF R38 WITH THE FULL INSULATION DEPTH EXTENDING OVER THE TOP PLATE OF THE EXTERIOR WALL.
4. CEILINGS W/ ATTICS MINIMUM INSULATION VALUE OF R-49. PROVIDE FIREBLOCKING FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING.
5. ROOF PITCH PER PLAN UNLESS NOTED OTHERWISE.

SKYLIGHTS AND SLOPED GLAZING (PER IRC R308.6)
R308.6.2 MATERIALS: MORE THAN 12 FEET ABOVE A WALKING SURFACE THE INTERLAYER THICKNESS SHALL BE NOT LESS THAN:
LAMINATED GLASS WITH POLYVINYL BUTYRAL INTERLAYER THICKNESS NOT LESS THAN 0.030 INCH (0.76 MM).

CURBS FOR SKYLIGHTS (PER IRC R308.6.8)
UNIT SKYLIGHTS INSTALLED IN A ROOF WITH A PITCH OF LESS THAN THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT SLOPE) SHALL BE MOUNTED ON A CURB EXTENDING NOT LESS THAN 4 INCHES ABOVE THE PLANE OF THE ROOF, UNLESS SPECIFIED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

UNIT SKYLIGHTS TESTING AND LABELING (PER IRC R308.6.9)
SHALL BE TESTED BY AN APPROVED INDEPENDENT LABORATORY, AND BEAR A LABEL IDENTIFYING MANUFACTURER, PERFORMANCE GRADE RATING AND APPROVED INSPECTION AGENCY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF AAMA/WDMA/CSA 101/I.S.2/A440.

THERMOSET SINGLE-PLY ROOFING (PER IRC R905.12):
INSTALLATION OF THERMOSET SINGLE-PLY ROOFING SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION.
SHALL HAVE A DESIGN SLOPE OF MINIMUM ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE.
R905.12.3 APPLICATION: THERMOSET SINGLE-PLY ROOFS SHALL BE INSTALLED IN ACCORDANCE WITH THIS CHAPTER AND THE MANUFACTURER'S INSTRUCTIONS.

ROOF VENTILATION CALCULATIONS: (PER IRC R806)

ATTIC VENTILATION REQUIRED:
1 SF OF VENTILATION AREA FOR EACH 300 SF OF ATTIC AREA.
EXISTING VENTED ATTIC: VENTED THROGH SOFFIT AND ROOF VENTS.

NEW VENTED ATTIC AREA: **493 SQ.FT**
493 / 300 = **1.6 SQ.FT OF NFVA**

50% INTAKE		50% OUTLET	
REQUIRED INTAKE (SQ.FT)	0.8	REQUIRED OUTLET (SQ.FT)	0.8
SQ.IN PER (SQ.FT)	144	SQ.IN PER (SQ.FT)	144
REQUIRED INTAKE (SQ.IN)	115.2	**REQUIRED OUTLET (SQ.IN)**	115.2
LINEAR FT OF INTAKE	63.8	**LINEAR FT OF OUTLET**	12.1
INTAKE VENT SQ.IN PER LINEAR FT	1.8	OUTLET VENT SQ.IN PER LINEAR FT	9.5
INTAKE VENT SPECS: COR-A-VENT SOFFIT VENT R5-400 18.75 SQ.IN NFVA/LF OR SIMILAR		**OUTLET VENT SPECS:** COR-A-VENT RIDGE VENT V-300 13.5 SQ.IN NFVA/LF OR SIMILAR	

ROOF ASSEMBLIES

TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER SRTUCT. -2 X 12 RAFTERS PER SRTUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER SRTUCT. - 2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING

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REVISION TABLE

Revision #	Date	Revision Description
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

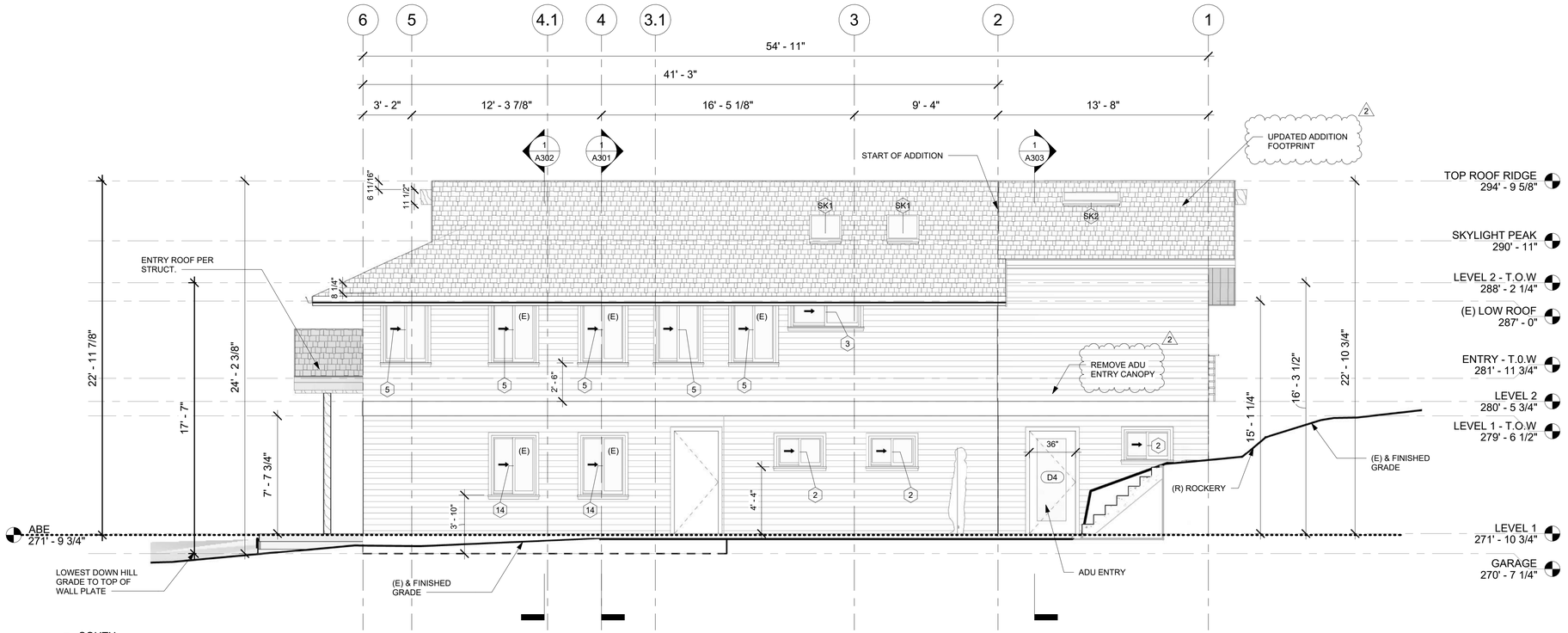
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

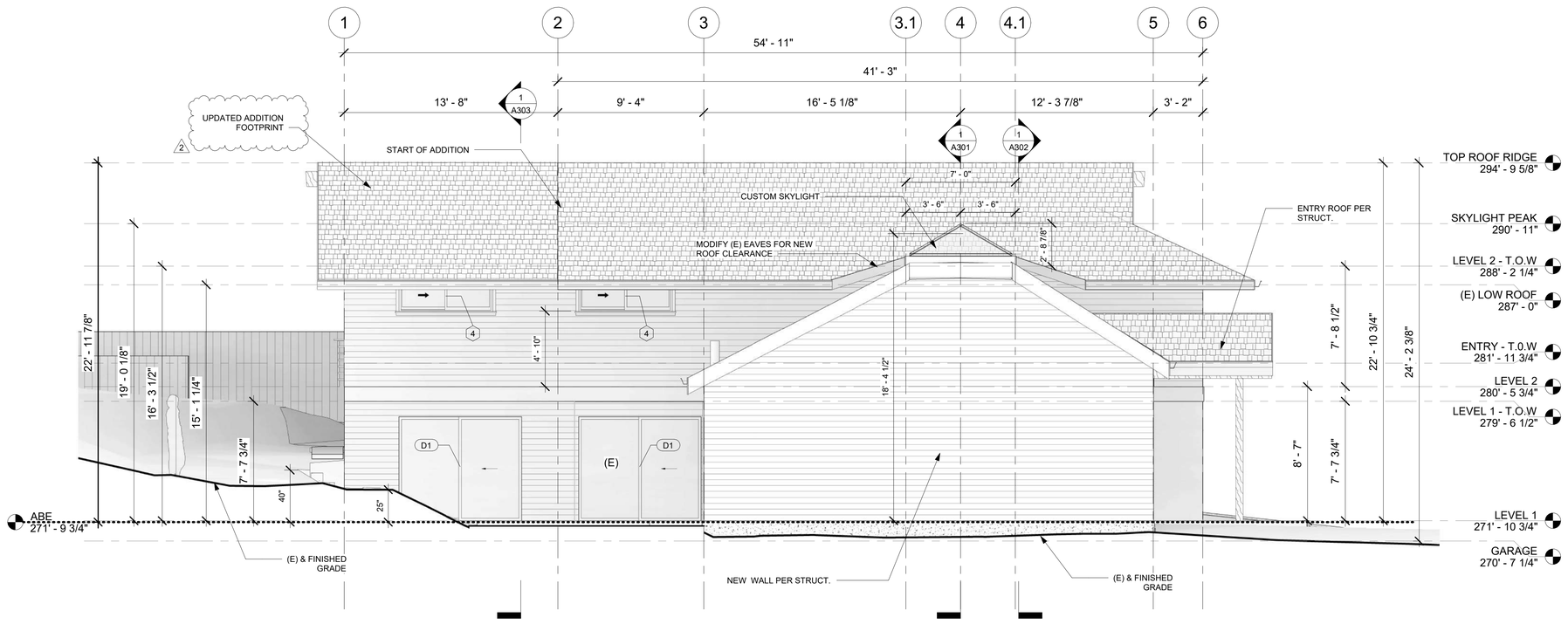
PROPOSED ROOF PLAN

A106

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



1 SOUTH
1/4" = 1'-0"



2 NORTH
1/4" = 1'-0"

WINDOW AND DOOR NOTES:

1. ALL FENESTRATION TO BE NFRC-CERTIFIED.
2. CONTRACTOR TO VERIFY (E) WINDOW ROUGH OPENING MEASURMENTS PRIOR TO PROCURMENT. VERIFY ROUGH OPENING DIMENSIONS AND FINISH REQUIREMENTS OF NEW WINDOWS.
3. HEADER SIZING PER STRUCTURAL PLANS.
4. REPLACE ALL EXISTING WINDOWS WITH UPDATED WINDOWS, IN EXISTING ROUGH OPENING U.N.O
5. (E) - REPLACE ALL EXISTING WINDOWS WITH U-FACTOR OF .30.
6. WINDOWS AT ADDITION TO HAVE A U-FACTOR OF .28 PER ENERGY CODE CREDIT OPTION 1.3.
7. THE ADDITION'S SIDING, ROOFING, & ARCHITECTURAL DETAILS TO MATCH EXISTING CONDITIONS.
8. AN AREA-WEIGHTED AVERAGE OF FENESTRATION PRODUCTS SHALL BE PERMITTED TO SATISFY THE U-FACTOR REQUIREMENTS PER R402.3.1.
9. SAFETY GLAZING SHALL BE PROVIDED ON ALL WINDOWS AND GLAZED DOORS AT HAZARDOUS LOCATIONS PER IRC 308.4
10. (IRC R310): EGRESS WINDOWS TO PROVIDE 5.7 SF MINIMUM NET OPENING; 20" MINIMUM CLEAR WIDTH; 24" MINIMUM CLEAR HEIGHT; SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WINTHOUT USE OF KEYS OR TOOLS.

ELEVATION LEGEND

SYMBOL	DESCRIPTION	NOTES
	(E) 4.5" CEDAR LAP SIDING	MATCH (E) SIDING AT ADDITION & NEW EXT. WALLS
	3" WOOD SLAT SIDING	NEW AT ENTRY ACCENT WALL
	(E) ASPHALT ROOF SHINGLES	MATCH EXISTING SHINGLES AT NEW & REPLACED ROOF

Window Schedule			
Type Mark	Type	Width	Height
2	36"x24"	3' - 0"	2' - 0"
3	54" x 24"	4' - 6"	2' - 0"
4	72" x 24"	6' - 0"	2' - 0"
5	34" x 52"	2' - 10 1/2"	4' - 4 1/2"
6	24" x 36"	2' - 0"	3' - 0"
7	70" x 22"	5' - 10"	1' - 10"
10	24" x 84"	2' - 0"	7' - 0"
11	36" x 48"	3' - 0"	4' - 0"
12	132" x 40"	11' - 0"	3' - 4"
14	34" x 46"	2' - 10 1/2"	3' - 10 1/2"
15	70" x 52"	5' - 10 1/2"	4' - 4 1/2"
16	72" x 18"	6' - 0"	1' - 6"
SK1	44" x 24"	3' - 8"	2' - 0"
SK2	44" x 16"	3' - 8"	1' - 4"

Exterior Door Schedule			
Type Mark	Type	Width	Height
D1	Exterior Double Sliding Door 94" x 80"	7' - 10"	6' - 8"
D2	Exterior Double Front Entry Door 72" x 80"	6' - 0"	6' - 8"
D3	Exterior Double Sliding Door 72" x 82"	6' - 0"	6' - 10"
D4	Exterior Single Entry Door 36" X 80"	3' - 0"	6' - 8"
D5	Bifold Door Full Glass 132" x 90"	11' - 0"	7' - 6"

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
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BUILD STUFF

BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com

REVISION TABLE

Revision #	Date	Revision Description
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

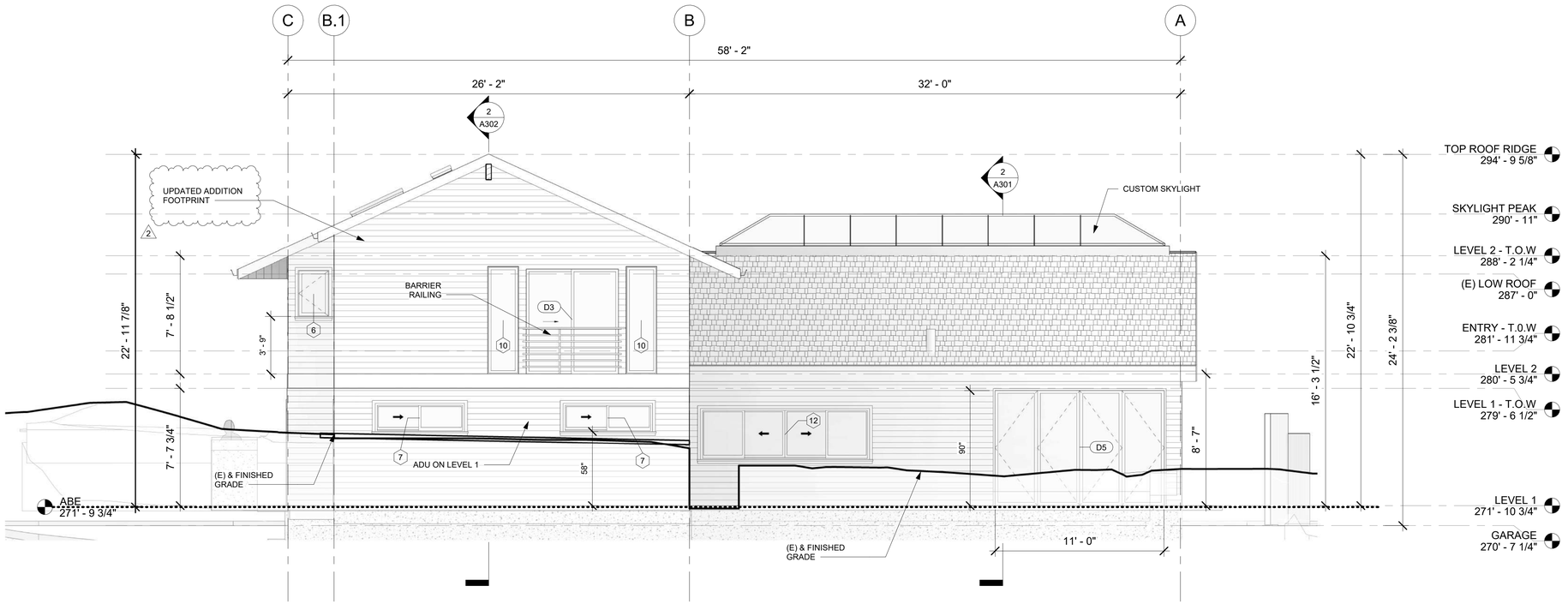
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

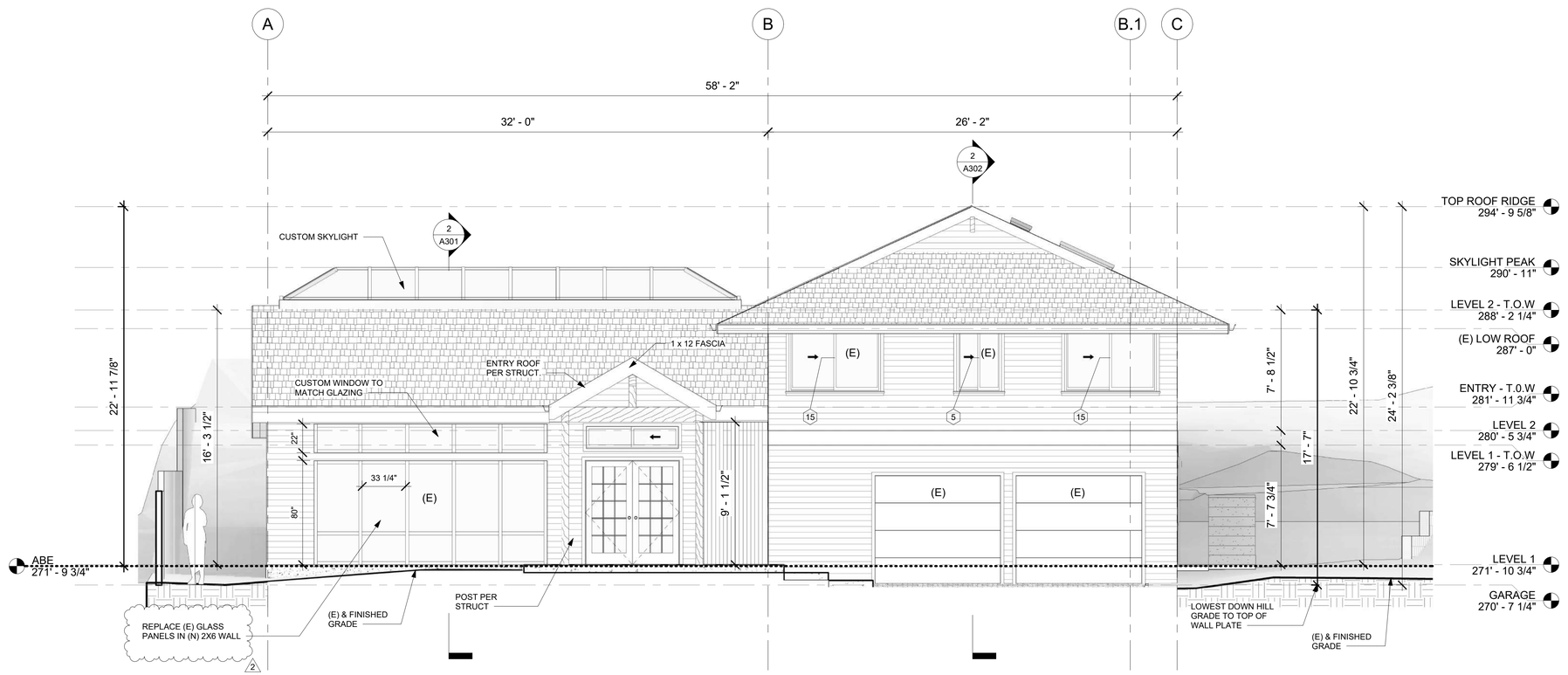
N-S ELEVATIONS

A201

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



1 EAST
1/4" = 1'-0"



2 WEST
1/4" = 1'-0"

WINDOW AND DOOR NOTES:

1. ALL FENESTRATION TO BE NFRC-CERTIFIED.
2. CONTRACTOR TO VERIFY (E) WINDOW ROUGH OPENING MEASURMENTS PRIOR TO PROCURMENT. VERIFY ROUGH OPENING DIMENSIONS AND FINISH REQUIREMENTS OF NEW WINDOWS.
3. HEADER SIZING PER STRUCTURAL PLANS.
4. REPLACE ALL EXISTING WINDOWS WITH UPDATED WINDOWS, IN EXISTING ROUGH OPENING U.N.O
5. (E) - REPLACE ALL EXISTING WINDOWS WITH U-FACTOR OF .30.
6. WINDOWS AT ADDITION TO HAVE A U-FACTOR OF .28 PER ENERGY CODE CREDIT OPTION 1.3.
7. THE ADDITION'S SIDING, ROOFING, & ARCHITECTURAL DETAILS TO MATCH EXISTING CONDITIONS.
8. AN AREA-WEIGHTED AVERAGE OF FENESTRATION PRODUCTS SHALL BE PERMITTED TO SATISFY THE U-FACTOR REQUIREMENTS PER R402.3.1.
9. SAFETY GLAZING SHALL BE PROVIDED ON ALL WINDOWS AND GLAZED DOORS AT HAZARDOUS LOCATIONS PER IRC 308.4
10. (IRC R310): EGRESS WINDOWS TO PROVIDE 5.7 SF MINIMUM NET OPENING; 20" MINIMUM CLEAR WIDTH; 24" MINIMUM CLEAR HEIGHT; SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WINTHOUT USE OF KEYS OR TOOLS.

ELEVATION LEGEND

SYMBOL	DESCRIPTION	NOTES
	(E) 4.5" CEDAR LAP SIDING	MATCH (E) SIDING AT ADDITION & NEW EXT. WALLS
	3" WOOD SLAT SIDING	NEW AT ENTRY ACCENT WALL
	(E) ASPHALT ROOF SHINGLES	MATCH EXISTING SHINGLES AT NEW & REPLACED ROOF

Window Schedule			
Type Mark	Type	Width	Height
2	36"x24"	3' - 0"	2' - 0"
3	54" x 24"	4' - 6"	2' - 0"
4	72" x 24"	6' - 0"	2' - 0"
5	34" x 52"	2' - 10 1/2"	4' - 4 1/2"
6	24" x 36"	2' - 0"	3' - 0"
7	70" x 22"	5' - 10"	1' - 10"
10	24" x 84"	2' - 0"	7' - 0"
11	36" x 48"	3' - 0"	4' - 0"
12	132" x 40"	11' - 0"	3' - 4"
14	34" x 46"	2' - 10 1/2"	3' - 10 1/2"
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D5	Bifold Door Full Glass 132" x 90"	11' - 0"	7' - 6"

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REVISION TABLE		
Revision #	Date	Revision Description
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

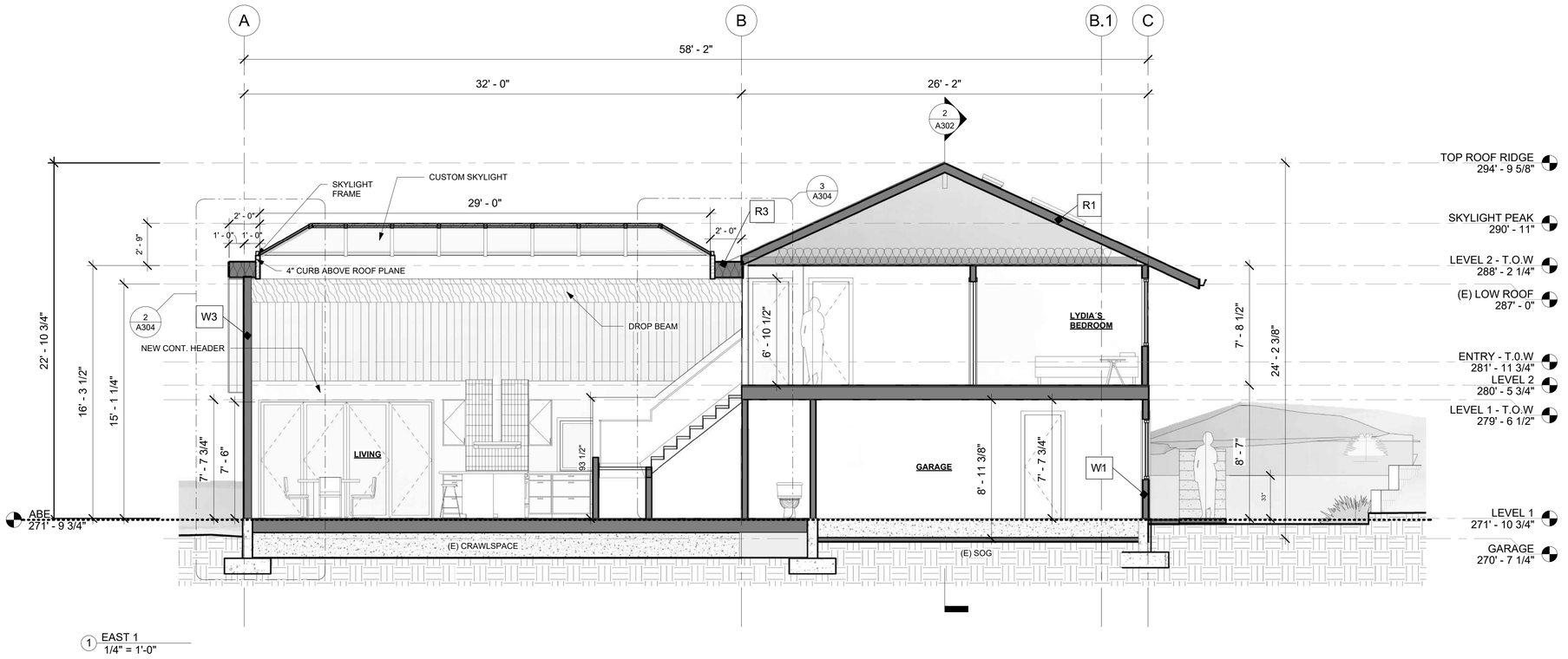
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

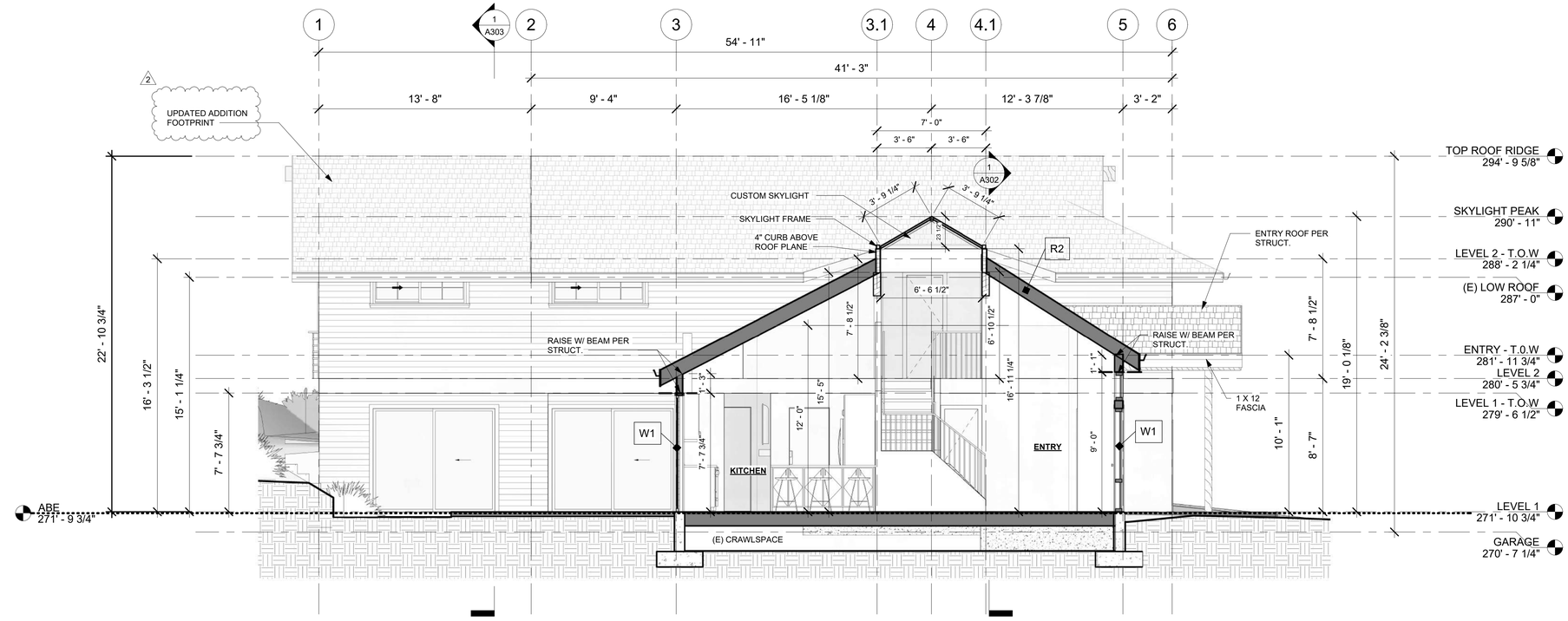
W-E ELEVATIONS

A202

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



1 EAST 1
1/4" = 1'-0"



2 SOUTH 1
1/4" = 1'-0"

SECTION NOTES:

1. REFER TO STRUCTURAL PLANS FOR STRUCTURAL SPECIFICATIONS
2. REFER TO PROPOSED FLOOR AND ROOF PLANS FOR WALL AND ROOF ASSEMBLIES.
3. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.

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Project Status:
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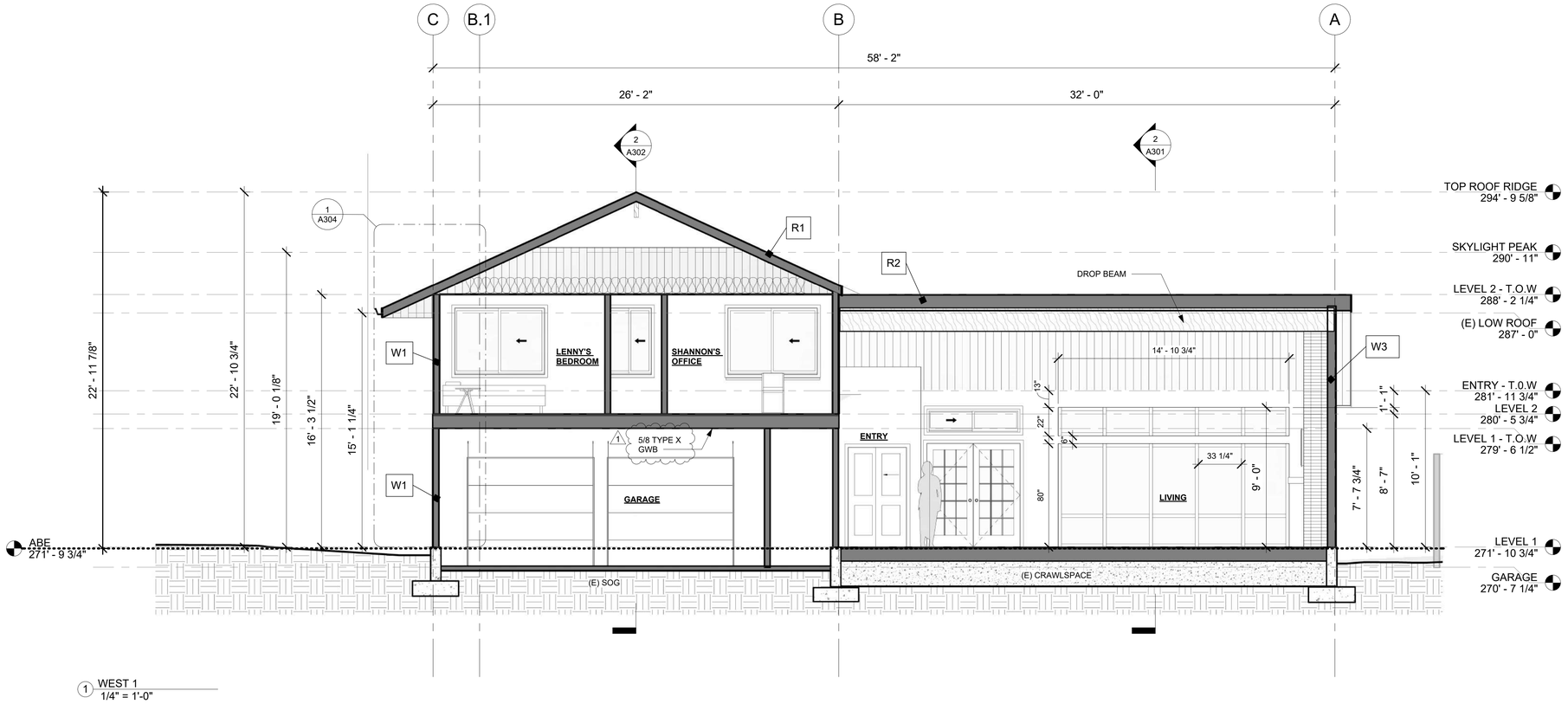
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

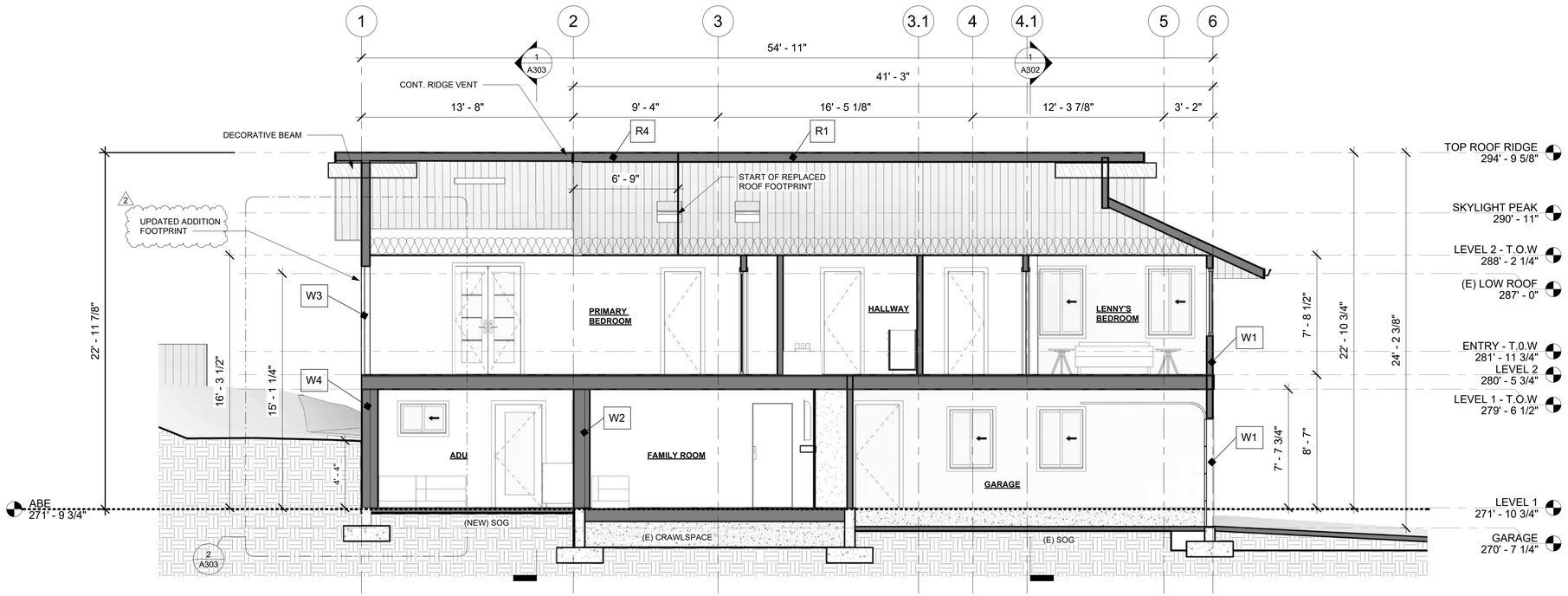
BUILDING SECTIONS 1

A301

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



1 WEST 1
1/4" = 1'-0"



2 SOUTH 2
1/4" = 1'-0"

SECTION NOTES:

1. REFER TO STRUCTURAL PLANS FOR STRUCTURAL SPECIFICATIONS
2. REFER TO PROPOSED FLOOR AND ROOF PLANS FOR WALL AND ROOF ASSEMBLIES.
3. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.

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REVISION TABLE

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1	5/22/2024	Revision 1
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HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

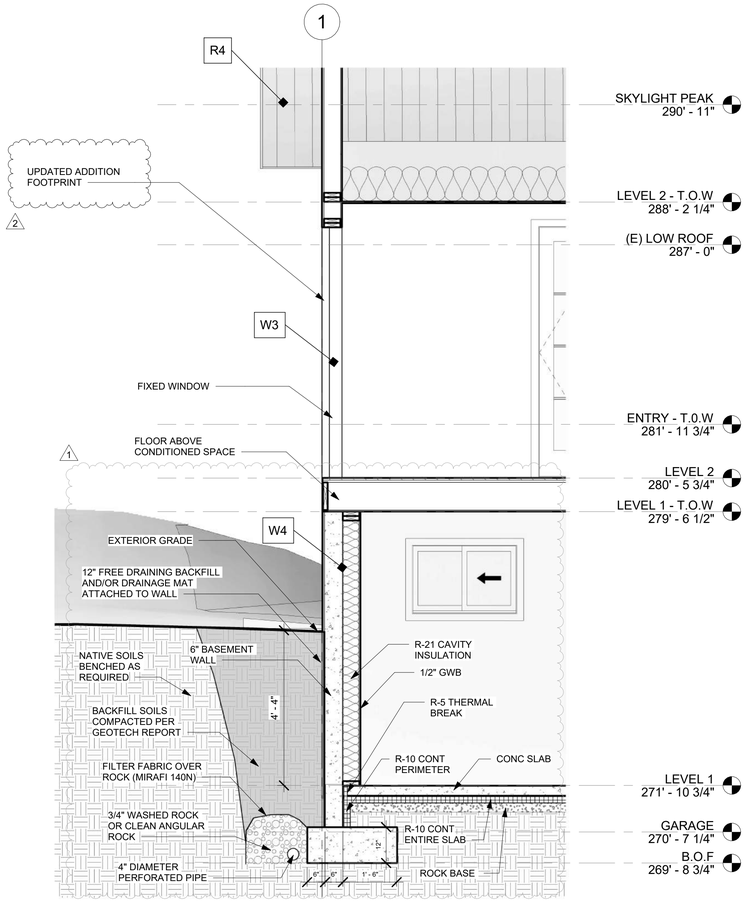
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

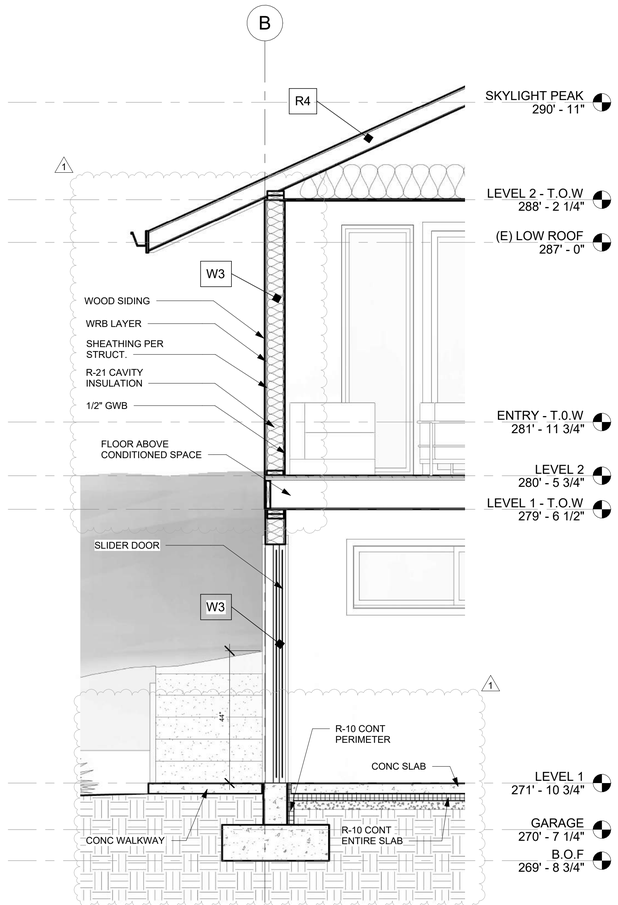
BUILDING SECTIONS 2

A302

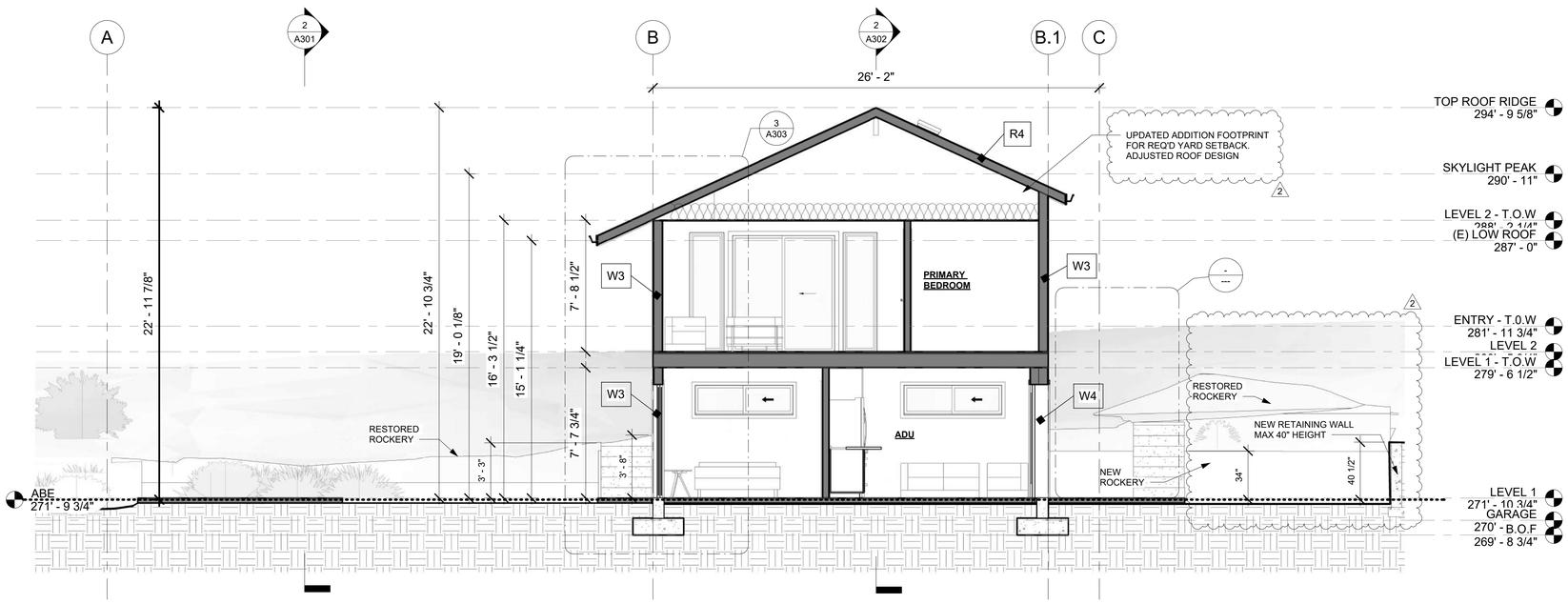
Scale: 1/4" = 1'-0"



ADDITION EAST WALL & TYPICAL W4
WALL DETAIL
2 1/2" = 1'-0"



ADDITION NORTH WALL & TYPICAL W3
WALL DETAIL
1/2" = 1'-0"



1 EAST 2
1/4" = 1'-0"

SECTION NOTES:

1. REFER TO STRUCTURAL PLANS FOR STRUCTURAL SPECIFICATIONS.
2. REFER TO PROPOSED FLOOR AND ROOF PLANS FOR WALL AND ROOF ASSEMBLIES.
3. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.

WALL ASSEMBLIES

TYPE	RATING	ASSEMBLY
W1 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C. -BATT INSULATION, 1/2" GWB
W2 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C., 8" CONCRETE RETAINING WALL -BATT INSULATION, 1/2" GWB
W3	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C. -BATT INSULATION R-21 INT, 1/2" GWB
W4	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C., 6" CONCRETE RETAINING WALL -BATT INSULATION R-21 INT + R-5 THERMAL BREAK, 1/2" GWB

1

ROOF ASSEMBLIES

TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER SRTUCT. -2 X 12 RAFTERS PER SRTUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER SRTUCT. - 2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
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BUILD STUFF
BUILD STUFF LLC
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diego@buildstuffstudios.com

REVISION TABLE

Revision #	Date	Revision Description
1	5/22/2024	Revision 1
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

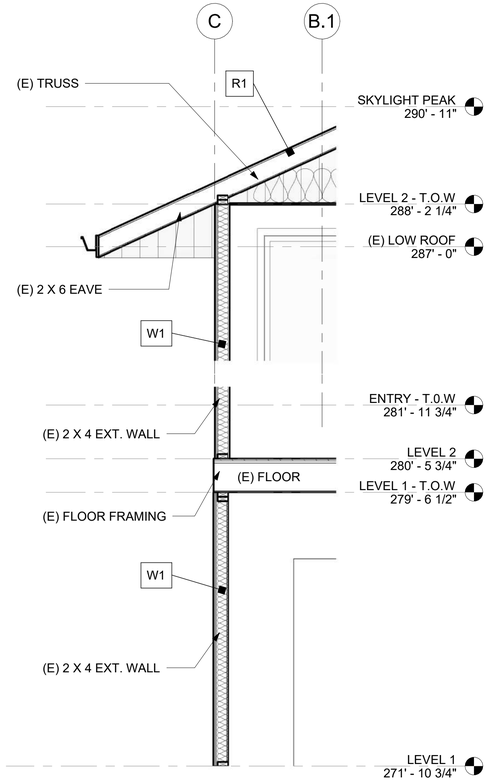
Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

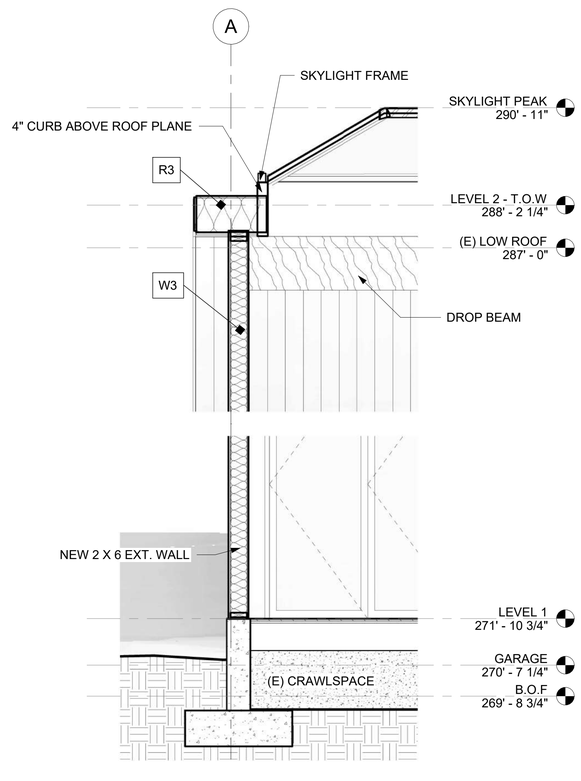
ADDITION SECTION & DETAILS

A303

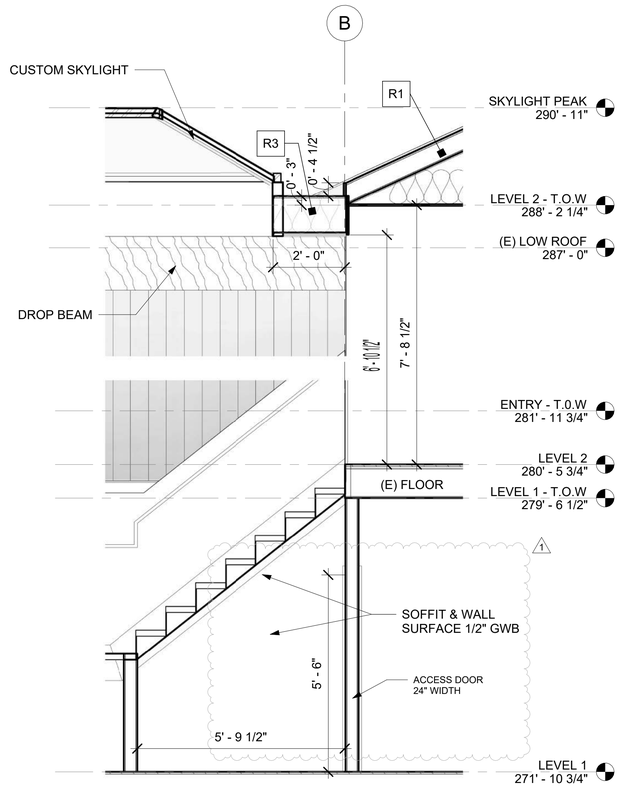
Scale: As indicated



1 (E) TYP. EXT 2-STORY WALL
1/2" = 1'-0"



2 NEW 2 X 6 WALL @ MAIN LEVEL
1/2" = 1'-0"



3 NEW ROOF & (E) ROOF INTERSECTION
1/2" = 1'-0"

WALL ASSEMBLIES

TYPE	RATING	ASSEMBLY
W1 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C. -BATT INSULATION, 1/2" GWB
W2 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C., 8" CONCRETE RETAINING WALL -BATT INSULATION, 1/2" GWB
W3	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C. -BATT INSULATION R-21 INT, 1/2" GWB
W4	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C., 6" CONCRETE RETAINING WALL -BATT INSULATION R-21 INT + R-5 THERMAL BREAK, 1/2" GWB

ROOF ASSEMBLIES

TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER SRTUCT. -2 X 12 RAFTERS PER SRTUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER SRTUCT. - 2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING

TYP VENTED ROOF ASSEMBLY:
- ROOFING PER ROOF ASSEMBLY TYPE
- 30 LB BUILDING PAPER
- SHEATHING PER STRUCTURAL
- TRUSSES PER STRUCTURAL
- MIN 1" VENT SPACE (2" IF POSSIBLE), BAFFLES WHERE NEEDED
- R49 BATT OR CELLULOSE INSULATION
- KRAFT FACE CLASS 2 VAPOR RETARDER
- 1/2" GWB

TYP UNVENTED ROOF ASSEMBLY:
-ROOFING PER ROOF ASSEMBLY TYPE
-30 LB BUILDING PAPER
-SHEATHING PER STRUCTURAL
-RAFTERS PER STRUCTURAL
-R38 INSULATION/ CLASS II VAPOR RETARDER APPLIED DIRECTLY TO UNDERSIDE OF STRUCTURAL SHEATHING
-1/2" GWB W/ CLASS 3 PVA PRIMER

REVIEWED FOR CODE COMPLIANCE
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REVISION TABLE

Revision #	Date	Revision Description
1	5/22/2024	Revision 1

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

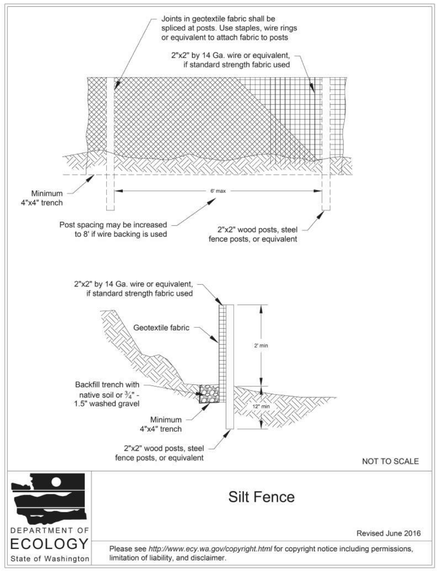
SECTION DETAILS

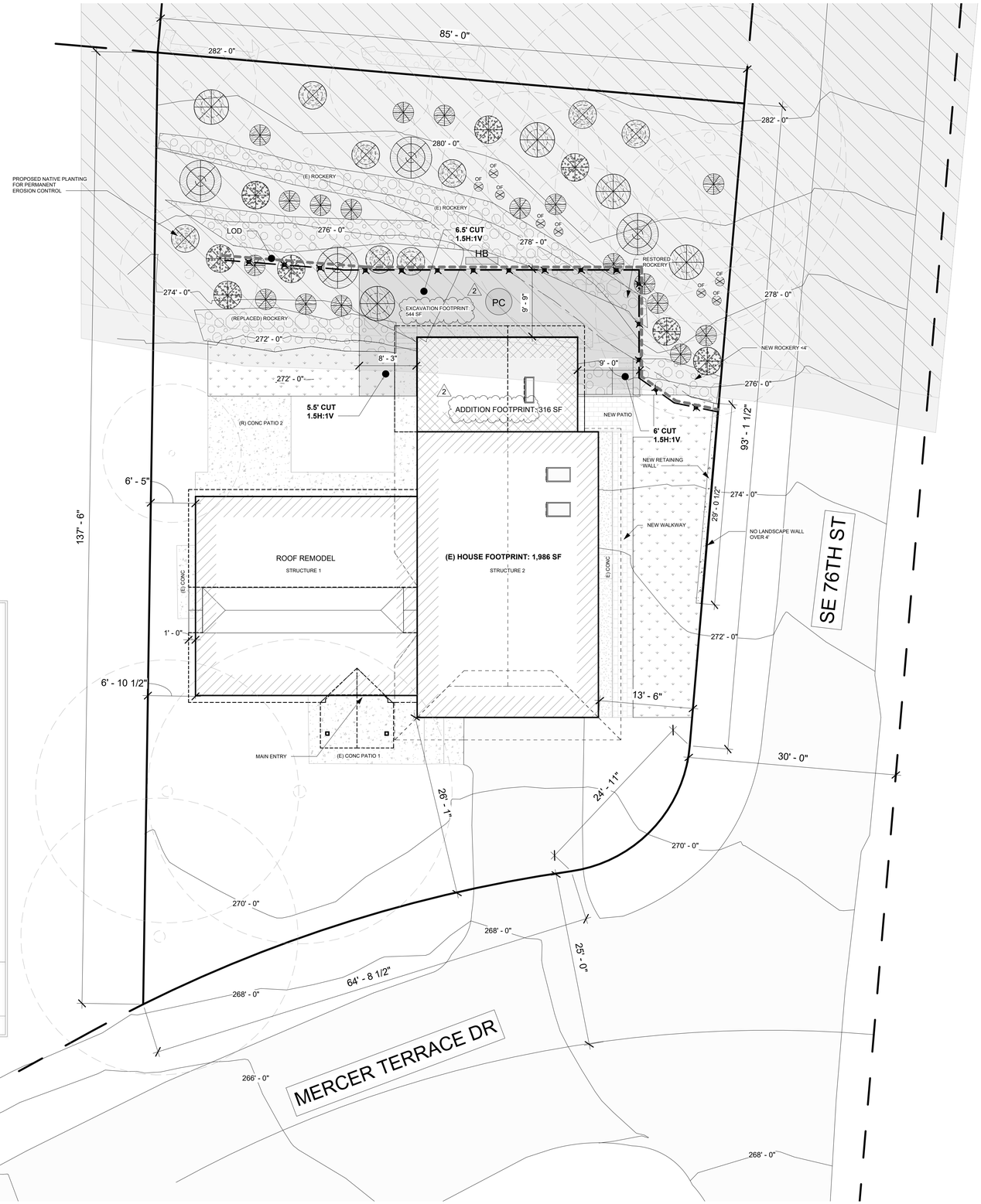
A304

Scale: 1/2" = 1'-0"

CRITICAL AREA LEGEND

	EROSION
	POTENTIAL SLIDE
	EXISTING FOOTPRINT
	ADDITION FOOTPRINT
	EXCAVATION FOOTPRINT >3'
	ROCKERY < 4'
	GRAVEL / DRAIN ROCK
	NEW PLANTING AREA





1 CRITICAL AREA & EROSION CONTROL
1/8" = 1'-0"

PLAN NOTES:

1. TEMPORARY EROSION CONTROL AND GEO HAZARD MITIGATION STRATEGIES PER GEOTECH REPORT DATE 08/22/2023
2. TYPICAL TEMPORARY EROSION CONTROL MEASURES TO BE IN PLACE DURING CONSTRUCTION AND ALL AREAS ARE RESURFACED WITH MULCHES/BARK/COMPOST AND PLANTINGS OR OTHER LANDSCAPING TO REDUCE THE RISK OF THESE HAZARDS.
3. TREES, SHRUBS AND OTHER VEGETATION TO BE REMOVED PRIOR TO STRIPPING OF SURFICIAL ORGANIC-RICH SOIL AND FILL. BASED ON OBSERVATIONS FROM THE SITE INVESTIGATION PROGRAM, IT IS ANTICIPATED THAT THE STRIPPING DEPTH WILL BE 6 TO 18 INCHES. DEEPER EXCAVATIONS WILL BE NECESSARY IN AREAS OF LOOSE SOILS AND FILL, IF AND WHERE PRESENT.
4. SOME OF THESE SOILS MAY ONLY BE SUITABLE FOR USE AS FILL DURING THE SUMMER MONTHS, AS THEY WILL BE ABOVE THE OPTIMUM MOISTURE LEVELS IN THEIR CURRENT STATE.
   THESE SOILS ARE VARIABLY MOISTURE SENSITIVE AND MAY DEGRADE DURING PERIODS OF WET WEATHER AND UNDER EQUIPMENT TRAFFIC.
5. TEMPORARY EXCAVATIONS DEEPER THAN 3 FEET SHOULD BE SLOPED NO STEEPER THAN 1.5H:1V (HORIZONTAL:VERTICAL) IN LOOSE NATIVE SOILS AND FILL AND 1H:1V IN MEDIUM DENSE NATIVE SOILS. IF AN EXCAVATION IS SUBJECT TO HEAVY VIBRATION OR SURCHARGE LOADS, WE RECOMMEND THAT THE EXCAVATIONS BE SLOPED NO STEEPER THAN 2H:1V, WHERE ROOM PERMIT
6. TEMPORARY CUTS SHOULD BE IN ACCORDANCE WITH THE WASHINGTON ADMINISTRATIVE CODE (WAC) PART N, EXCAVATION, TRENCHING, AND SHORING.
7. ADDITIONAL PERIMETER EROSION AND SEDIMENT CONTROL FEATURES MAY BE REQUIRED TO REDUCE THE POSSIBILITY OF SEDIMENT ENTERING THE SURFACE WATER. THIS MAY INCLUDE ADDITIONAL SILT FENCES, SILT FENCES WITH A HIGHER APPARENT OPENING SIZE (AOS), CONSTRUCTION OF A BERM, OR OTHER FILTRATION SYSTEMS
8. ANY RUNOFF GENERATED BY DEWATERING DISCHARGE SHOULD BE TREATED THROUGH CONSTRUCTION OF A SEDIMENT TRAP IF THERE IS SUFFICIENT SPACE. IF SPACE IS LIMITED OTHER FILTRATION METHODS WILL NEED TO BE INCORPORATED.

EROSION CONTROL LEGEND:

		LIMIT OF DISTURBANCE (LOD)
		TREE PROTECTION FENCING W/ SILT FENCE
HB	*USE AS NEEDED*	HAY BALES
PC	*USE AS NEEDED*	PLASTIC COVERING
TB	*USE AS NEEDED*	TEMPORARY BERN

PLANT SYBMOLS:	SPECIES NAME:	QUANTITY:	SPACING:
OF	WESTERN OAK FERN (16")	(8)	AS SHOWN
	WESTERN SWORD-FERN (3')	(18)	AS SHOWN
	LADY FERN (5')	(5)	AS SHOWN
	EVERGREEN HUCKLEBERRY (4')	(8)	AS SHOWN
	SALAL (4')	(8)	AS SHOWN
	THIMBLEBERRY (6')	(4)	AS SHOWN

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RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

CRTICAL AREA & EROSION CONTROL

L101

Scale: As indicated

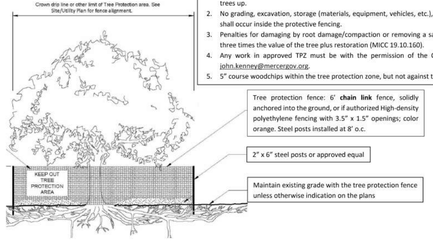
TREE PROTECTION AREA (TPZ)

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:

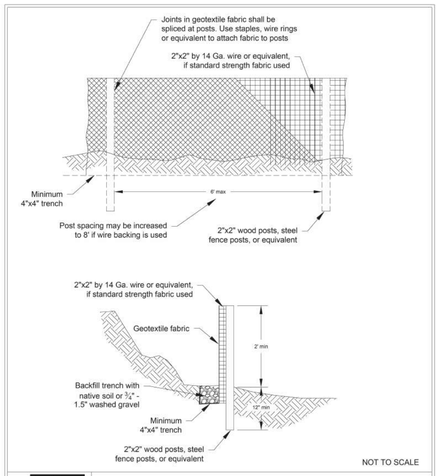
1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees/financial penalties
3. Arborist reports recommending mitigation



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



DEPARTMENT OF ECOLOGY
State of Washington

Silt Fence

Revised June 2016

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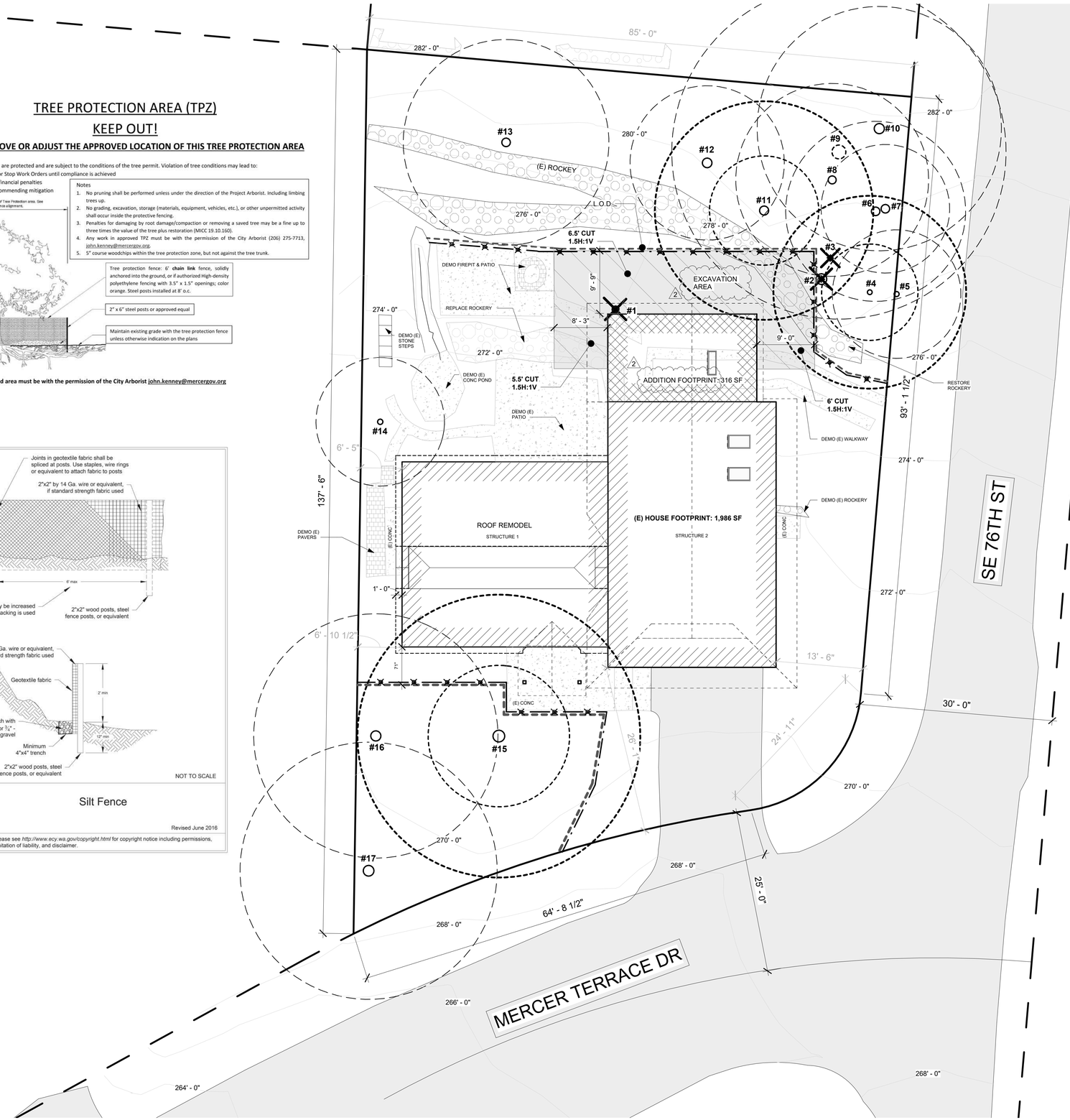

1 TREE RETENTION PLAN
1/8" = 1'-0"

PLAN NOTES:

1. TREE RETENTION PLAN PER ARBORIST REPORT DATED 11/10/2023 REFER TO REPORT FOR INFORMATION ON TREE PROTECTION PLAN AND SPECIFICATIONS. OUTLINE OF TREES SHOWN IN PLAN REPRESENTS RECOMMENDED LIMIT OF DISTURBANCE SHOWN ON TREE INVENTORY TABLE PROVIDED IN ARBORIST REPORT. INTERIOR CRITICAL ROOT ZONE DRAWN FOR TREES TO BE RETAINED AND MONITORED DURING CONSTRUCTION.
2. PER GEOTECH REPORT DATED 08/22/23 - TEMPORARY EXCAVATIONS DEEPER THAN 3 FEET SHOULD BE SLOPED NO STEEPER THAN 1.5H:1V (HORIZONTAL:VERTICAL) IN LOOSE NATIVE SOILS AND FILL AND 1H:1V IN MEDIUM DENSE NATIVE SOILS. IF AN EXCAVATION IS SUBJECT TO HEAVY VIBRATION OR SURCHARGE LOADS, WE RECOMMEND THAT THE EXCAVATIONS BE SLOPED NO STEEPER THAN 2H:1V, WHERE ROOM PERMIT
3. TEMPORARY CUTS SHOULD BE IN ACCORDANCE WITH THE WASHINGTON ADMINISTRATIVE CODE (WAC) PART N.
4. EXCAVATION CUT DEPTHS ARE BASED ON ELEVATION POINTS SHOWN IN THE ABE DIAGRAM ON SHEET A100.1 AND DEPTH TO THE BOTTOM OF FOUNDATION FOOTINGS PER STRUCTURAL PLANS.

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
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Client: McIntyre
Assignment: Tree Protection Plan

TABLE OF TREES
7520 Mercer Terrace Drive

Inventory Date: 10//11/2023
Report Date: 11/10/2023

Tree Tag	Common Name	Botanical Name	DSH*	Dripline**	Health	Recommended Limits of Disturbance (RLOD) (feet)
1	Sawara cypress	*Chamaecyparis pisifera 'Filifera'*	13	13	Good	tree within footprint of addition, **REMOVE**
2	Douglas-fir	*Pseudotsuga menziesii*	20	20	Good	encroachment into CRZ exceeds allowable threshold, **REMOVE**
3	Western recedar	*Thuja plicata*	9	6	Poor	encroachment into CRZ exceeds allowable threshold, **REMOVE**
4	Bigleaf maple	*Acer macrophyllum*	9	18	Fair	18 on sides N, E, and S; 7 on W side
5	English hawthorn	*Crataegus laevigata*	9.5	13	Good	10
6	Western recedar	*Thuja plicata*	16	9	Good	14
7	Bigleaf maple	*Acer macrophyllum*	16	10	Fair	10
8	Western recedar	*Thuja plicata*	15	8	Good	15
9	Bigleaf maple	*Acer macrophyllum*	26	15	Fair	26
10	Western recedar	*Thuja plicata*	19	6	Good	19
11	Douglas-fir	*Pseudotsuga menziesii*	17	20	Good	20 on sides E, S and W; 8 on NW side
12	Douglas-fir	*Pseudotsuga menziesii*	18	12	Good	12
13	Noble fir	*Abies procera*	16	12	Good	16
14	Sawara cypress	*Chamaecyparis pisifera 'Filifera'*	10	8	Good	10
15	Blue Atlas Cedar	*Cedrus atlantica 'Glauca'*	22	25	Good	22
16	Austrian pine	*Pinus nigra*	19	14	Good	19
17	Deodar cedar	*Cedrus deodara*	20	18	Good	20

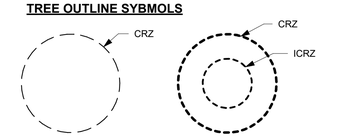
**DSH is Diameter at Standard Height (inches)*

***Dripline was measured from the center of the trunk to the outermost limits of the canopy on the side of construction (feet).*

TREE TRUNK SYBMOLS

- #15 ○ EXISTING TREE TO BE RETAINED <24"
- #9 ◌ EXISTING TREE TO BE RETAINED >24"
- #2 ⊗ EXISTING TREE TO BE REMOVED

TREE OUTLINE SYBMOLS



LIMIT OF DISTURBANCE (LOD)

TREE PROTECTION FENCING W/ SILT FENCE

REVISION TABLE		
Revision #	Date	Revision Description
2	9/19/2024	Revision 2

BUILD STUFF
BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

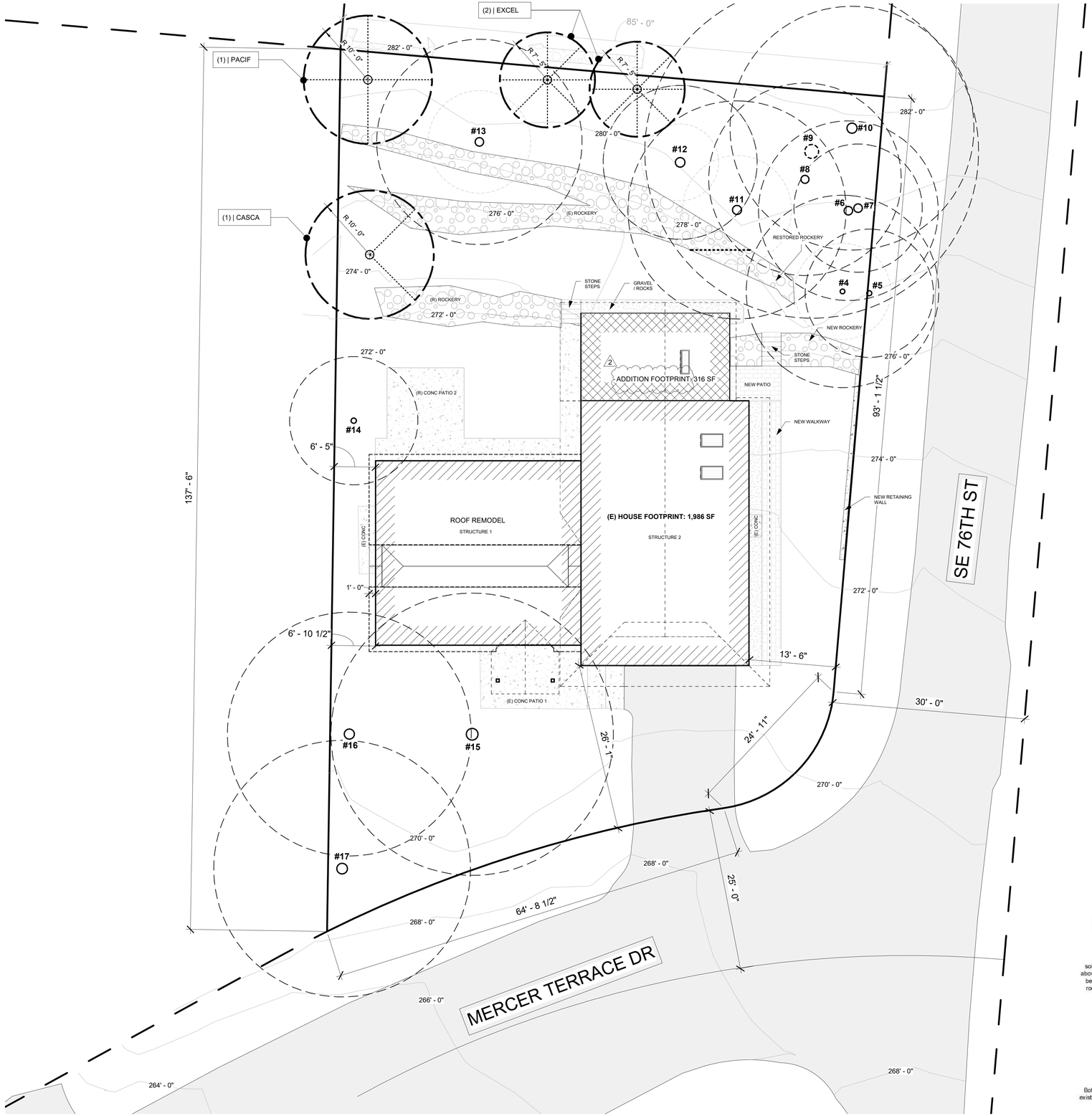
Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

TREE RETENTION & SITE DEMO PLAN

L102

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



1 TREE REPLACEMENT PLAN
1/8" = 1'-0"

PLAN NOTES:

1. TREE RETENTION PLAN PER ARBORIST REPORT DATED 11/10/2023 REFER TO REPORT FOR INFORMATION ON TREE PROTECTION PLAN AND SPECIFICATIONS. OUTLINE OF TREES SHOWN IN PLAN REPRESENTS RECOMMENDED LIMIT OF DISTURBANCE SHOWN ON TREE INVENTORY TABLE PROVIDED IN ARBORIST REPORT. INTERIOR CRITICAL ROOT ZONE DRAWN FOR TREES TO BE RETAINED AND MONITORED DURING CONSTRUCTION.
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NEW TREES: SPECIES TABLE

QUAN.	SYMBOL	SPECIES NAME	MATURE SPREAD
1	PACIF	PACIFIC YEW, TAXUS BREVIFOLIA	20 FEET
2	EXCEL	EXCELSA WESTERN RED CEDAR	15 FEET
1	CASCA	CASCARA RHAMNUS PURSHIANA	20 FEET

TREE TRUNK SYBMOLS:

#15 EXISTING TREE TO BE RETAINED <24"

#9 EXISTING TREE TO BE RETAINED >24"

TREE TAG SYBMOLS

(QUAN) | TYPE

TREE OUTLINE SYBMOLS:

TREE REPLANTING DETAIL

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
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BUILD STUFF

BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com

REVISION TABLE		
Revision #	Date	Revision Description
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026

Date: 09/19/24

TREE REPLACEMENT PLAN

L103

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

Structural Notes:

Applicable Codes and Standards:

2018 International Building Code (IBC) and other applicable local building codes.
ASCE/SEI 7-16 - "Minimum Design Loads for Buildings and Other Structures"
2018 NDS for wood structures.
American Wood Preservers Bureau - AWPB Standards for Pressure Treated Material.
American Concrete Institute - ACI 315, ACI 318, ACI 301, ACI 307.

Structural design shall be in accordance with the latest edition of above codes and standards. Contractor shall comply with the latest edition of all applicable codes and standards.

Special Inspections:

Special Inspections are required for:
Epoxy Grouted Anchor Bolt Installation

Design Loads:

Live load:	roof	25 psf (snow)
	floors	40 psf
Dead load:	as required	15 psf

Wind load: Basic wind speed 110 mph, exposure C, KzT=1.6
Building Category: Enclosed, Wind Important Factor Iw = 1.0
Refer to calculation page L1 for design wind forces.
Internal pressure 5 psf, Components and cladding design per 1609.6.4.4.1

Seismic loading per IBC Section 1613, Site Class D.
The basic structural type is a bearing wall system with light framed walls with shear panels. Rw = 6.5 (wood structural panels), soil type D.
Seismic importance factor 1.0, Seismic Use Group I
Design and Analysis by Simplified Design Procedure
Peak Ground Accelerations (PGA) based on USGS Hazards Program, by lat/long.
PGA 1 sec = .508 PGA .2 sec = 1.472
Seismic base shear = 0.181 * Dead Load

Foundations:

Soil parameters per the geotechnical report prepared by Cobaly Geosciences, dated August 22, 2023.

The subgrade should be prepared as follows, unless otherwise noted by the geotechnical report:

All soil conditions are to be field verified during construction. Footings shall bear on firm natural soils or on structural fill placed over firm natural soils, and inspected in place. Footings shall extend 18 inches minimum below adjacent exterior finished grade and shall extend 12 inches minimum below existing interior grade unless otherwise noted on plans. Structural fill shall be placed in 12-inch maximum horizontal lifts (loose thickness) and compacted to 95 percent of maximum dry density in accordance with ASTM D-1557. Imported structural fill shall be granular material containing no more than 5 percent fines, passing no. 200 sieve. Structural fill in place shall be tested by a licensed soil engineer or approved by the building inspector.

Drainage behind the concrete walls shall be provided conforming to the construction details.

Cast in Place Concrete:

Concrete shall attain a minimum compressive strength of 2,500 psi at 28 days (5-½ sack mix). An alternate mix provided by the concrete supplier and pre-approved by the building department is acceptable.

Reinforcing steel shall conform to ASTM A-615, Grade 60 (Fy=60,000 psi) for all bars. Provide all wall and footing horizontal bars with 2'-0" x 2'-0" corner bars of the same size at all corners and wall intersections. Minimum lap splice 48 bar diameters.

Concrete protection for reinforcement shall be:

Concrete exposed to earth or weather	1.5" (#5 & smaller) 2" (#6 & larger)
Concrete cast against earth	3"
Slabs	0.75"

Bolts:

Anchor bolts shall conform to F1554. All other bolts shall conform to ASTM A307.
Minimum anchor bolt size and spacing shall be ½" diameter bolts @ 6' o.c. Shear wall anchor bolts per the shear wall schedule.
For cast-in-place anchors, provide 7" minimum embedment into the new concrete foundation.
For retrofitted anchors, provide 5" minimum embedment into the existing concrete foundation. Epoxy grout with Simpson SET epoxy.
Provide 3"x3" square x 0.229" thick bolt washers where anchor bolts connect the sill plate to the concrete foundation.

Wood Framing Specifications:

All sill plates and other wood framing which is in contact with concrete or masonry must be preservative-treated in accordance with AWPA U1 and M4 standards. For anchor bolts connecting wood sill plates to concrete or masonry, provide galvanized steel washers and nuts on top of the sill, minimum washer size 3" x 3" x 1/4" thick.

Where toenails are used for stud wall construction, a minimum of (2) toenails at top and bottom of each stud shall be provided. Toenails shall be 16d nails driven at approximately a 45 degree angle, with a minimum of 1-1/2" of the nail shank shall be embedded in both the stud and the plate. End nails driven through the plate and into the stud end grain are not permitted. Simpson A34 clips at top and bottom of each stud are permitted where correct toenailing is not provided.

Wherever joists bear on a wall or beam, either a continuous rim joist or solid wood blocking must be provided. Blocking shall be connected to the joists with A35 angles at each end. Individual blocks may be omitted to allow for ducting or other openings. Consult with the engineer of record if more than 25% of the blocking is omitted.

Where a post aligns with a header on the floor below, provide full depth blocking through the floor framing and a full sized post above the header in the wall below
Unless noted otherwise, the following grades and species shall be used for structural lumber:

2x joists	Hem-Fir #2
2x, 3x, and 4x studs	DF/L standard for plywood or WSP shear walls
	Hem-Fir standard for other walls
4x and 6x beams	DF-L #2
Glu-lam lumber	24F-V4 for simple span beams, 24F-V8 for cantilever beams

All framing connections shall be per Table 2304.10.1 of the IBC, unless otherwise noted.

Preservative-Treated Wood and Fasteners:

All wood in contact with concrete or masonry shall be preservative-treated, in accordance with AWPA U1 and M4 standards.

All fasteners installed in preservative-treated wood shall be hotdipped zinc-coated galvanized with a minimum coating weight complying with ASTM A 153.

Fasteners other than nails and timber rivets are permitted to be mechanically deposited zinc-coated with coating weights complying with ASTM B 695, Class 55 minimum. Plain carbon steel fasteners in wood preservated-treated with SBX/DOT or zinc borate are not required to be galvanized.

Plywood Thickness, Grade, and Nailing:

Install plywood sheets with face grain perpendicular to framing. Stagger joints in adjacent sheets. If not otherwise noted, use nailing schedule, Table 2304.6.1 of the IBC.

Manufactured Trusses:

Manufactured trusses specified on the plans are prefabricated products manufactured by a truss manufacturer. The contractor shall submit shop drawings and stamped structural design calculations for review. The manufacturer's installation instructions shall be available on the job site at the time of inspection. Truss design and shop drawings shall include location and weight of all equipment being supported by these trusses.

The truss live loading shall be per IRC Section 301.5 and Table 301.5, especially noting footnotes b and g.

The truss design shall be per IRC Sections 502.11.1 and 802.10.2, especially indicating the truss design and manufacturing shall be per ANSI/TPI 1.

The truss temporary and permanent bracing shall be per IRC Sections 502.11.2 and 802.10.3 as well as the Truss Plate Institute's Building Component Safety Information.

Truss alterations shall not occur unless the approval of a designprofessional as indicated in IRC Sections 502.11.3 and 802.10.4.

Metal Framing Connectors:

Unless otherwise noted: Metal framing connectors shall be manufactured by the Simpson company, or approved equal. Unless noted otherwise, use U-series joist hangers to match joist size (e.g., U210 for 2x10 joist). Provide H1 or H2.5 hurricane ties, or other connectors with similar capacity, at every roof joist or truss, and H6 or H7 at ends of roof beams and girder trusses. Where supported by wood posts, wood beams shall be connected to the tops of the posts using Simpson AC, PCZ or EPCZ post caps, and to the bottoms of the posts bearing on wood framing using Simpson AC connectors or A35 clips. Where supported by perpendicular beams, wood beams shall be connected by HU-series face mount beam hangers. Provide Simpson AB_ or PB post bases to connect posts to concrete foundations. Unless otherwise specified, the maximum number of nails or screws should always be installed on any connector.

Bearing Walls:

All walls supported by continuous concrete footings shall be connected to the foundation per 2018 IRC section 403.1.6. 1/2" diameter anchor bolts shall be provided at 4' o.c., or two per wall segment, minimum. Anchor bolts shall penetrate 7" into the concrete foundation.

Connection of New Foundation to Existing, Note NF:

At each location where the new concrete foundation abuts the existing foundation, connect the new to the existing using minimum (3) #4 by 18" long rebar dowels, epoxy grouted into 5/8" diameter by 5" deep holes drilled into the existing foundation. Each dowel shall be no closer than 3" to any edge or corner of concrete. Minimum spacing between dowels shall be 6". For concrete wall intersections longer than 3'-0" in any direction, additional dowels shall be located at 12" o.c. for the full height or length of the new foundation concrete.

Contact the engineer (prior to construction) for evaluation and approval of the existing foundation system, if there are any significant cracks in the existing foundation within 6 feet of the new foundation, or if there is any indication that the existing foundation is in poor condition, including visible rock pockets, non-uniform concrete, spalling, noticeable settlement of the existing footing, or other distress.

Roof Over Framing Note, Note OF:

The new roof area shown in dashed lines consists of new roof framing constructed over the existing roof framing below. The over built framing shall be constructed in such a way as to distribute the roof loads from the new framing uniformly to the existing roof structure (for example, no new concentrated loads, such as from a beam, shall be added to the existing roof structure). This equal distribution may be accomplished by constructing the new overbuild roof using framed 2x4 cripple walls spaced at 2 feet on center, located on top of and perpendicular to the existing roof sheathing supported by the existing roof framing. No sheathing is required for these cripple walls.

The new cripple walls and roof rafters (spanning 2 feet, perpendicular to the cripple walls) may be constructed using 2x4 lumber, stud grade at minimum. The new plates shall be nailed to each existing rafter with (2) 16d nails minimum. New roof sheathing shall be per the diaphragm schedule.

A new 2x_ plate shall be constructed along the new valley lines, and nailed to each existing rafter, along its entire length, with (2) 16d nails per existing rafter.

If desired, an alternate method for distributing the loads may be submitted to the structural engineer of record, for review and approval prior to construction.

Hold Down Notes

Convention for showing shear walls and hold downs: Shear walls are shown on the framing plan for the floor above. (For example, first floor shear walls will be shown on the second floor framing plan, and the shear walls for the topmost floor will be shown on the roof framing plan.) Hold downs are located at the bottom of that shear wall, and connect the end of the shear wall to wall framing or a structural beam located in the floor below the shear wall. Contact the engineer of record for clarification if needed.

Hold downs for each floor must be continuously connected to hold downs on the floor below (or to other intermediate wood framing where so indicated), until they are finally connected to the concrete foundation.

Hold downs shall be installed so as to be as far apart as is reasonable. Hold downs may be located on either the near side or the far side of the post or double stud to which they are attached. In no case shall a hold down bolt be located farther than 6" from the end of the shear wall, except with prior written approval of the engineer. Refer to the latest edition of the Simpson Catalog for details.

Where multiple studs are called out at a hold down, nail studs together with (2) 16d nails at 8" o.c. or 1/4" x 3" Simpson SDS Screws at 12" o.c.

Where a hold down post lands on a rim joist, provide full depth vertically oriented blocking under the post.

Strap Hold Downs:
Provide a vertically oriented strap hold down consisting of one or two of the Simpson vertical strap ties listed below, connecting the end stud or post of the shear wall indicated to new or existing studs in the wall framing below, or to a wood beam supporting the shear wall, where applicable.
Straps shall be installed so that the minimum end length is provided to both connected posts or studs. Where a strap is connected to a beam below, the strap shall be wrapped around the beam until the minimum end length is reached.

See Strap Hold Down Typical Detail.

CMSTC16 denotes a Simpson CMSTC16 strap, with a minim end length of 25", and (29) 16d sinker nails each end.

Rod Hold Downs:

HDUx denotes a Simpson HDU(2,4,5,8,or 11)-SDS2.5 hold down. For hold down bolts at existing concrete foundations, use the following bolts:

For HDU2,4,5: 5/8" diameter A307 threaded steel rod may be used, which shall be epoxy grouted into a 3/4" diameter hole with a minimum embedment of 10".
See Retrofit HDU Typical Detail.

For hold downs at new concrete foundations, provide the following bolts.

For HDU2,4,5: Simpson SB5/8x24 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature.
5/8" diameter A307 threaded steel rod may be used, which shall be embedded 8" into the concrete foundation.

For HDU11: Simpson SB1x30 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature.
Where the hold down is too high off of the concrete foundation to adequately connect to the specified anchor, A 1" diameter threaded rod and ASTM A194-2H coupler connecting to the specified anchor may be used.

Special Note:
All holes for hold down bolts which are installed into existing foundations must be inspected during the installation of the hold down. Either the building inspector, the structural engineer of record, or the special inspection agency must perform the inspection and approve it before the bolts may be epoxy grouted into the holes. The epoxy grout used must be Simpson SET-XP unless otherwise noted by the engineer of record.

For drilled holes into existing concrete, no less than 2" must be provided between the edge of the hole and the face of concrete. The Engineer of Record or Special Inspector must witness the installation of hold down bolts, including cleaning the holes with compressed air and a wire brush before the anchor is installed. The hole shall be filled with enough epoxy that when the anchor is inserted, the epoxy rises to the top of the concrete. Care shall be taken that no air bubbles persist in the epoxy.

The contractor must verify that the existing foundation stem wall is uncracked and continuous, and is sound and in good condition, within 5 feet of any retrofitted shear wall or hold down, in any direction, except with prior written approval of the engineer. The existing concrete foundation stem wall shall be at least 6" thick and 2'-6" in height. The concrete shall be of good quality, hard and uniform, with appropriate aggregate type, size and distribution, and with no visible rock pockets or other similar deficiencies.

Any existing cracks located within 10' of any hold down must be completely filled with an appropriate epoxy based concrete repair product. The product to be used shall be approved in writing by the engineer prior to filling the cracks.

Contact the engineer of record prior to proceeding if any of these requirements are not met, or if the installation of the hold downs results in any visible damage to the existing foundation.

SHEAR WALL SCHEDULE

(Lumber for shear walls is HF#2 or better, unless otherwise noted.)

Type	Material	Edge Nailing	Field Nailing	A.B. Size/Spacing	Plate Nailing	Plates	A35 Spacing	Shear Capacity
SW1	15/32" WSP one side	8d @ 6"	8d @ 12"	1/2"Ø @ 48"	(2) 16d @ 9"	2x_	24"	230 plf
SW2	15/32" WSP one side	8d @ 4"	8d @ 12"	1/2"Ø @ 32"	(2) 16d @ 6"	2x_	16"	350 plf
SW3	15/32" WSP one side	10d @ 3"	10d @ 12"	5/8"Ø @ 24"	(2) 16d @ 4"	3x_	12"	550 plf
SW3X	15/32" WSP one side	10d @ 2"	10d @ 12"	5/8"Ø @ 24"	5/8"Ø x 8" Lag @ 24"	3x_	9"	710 plf
SW5	15/32" WSP two sides	8d @ 3"	8d @ 12"	5/8"Ø @ 16"	5/8"Ø x 8" Lag @ 16"	3x_	8"	910 plf

For shear wall callouts on the Structural Framing Plans: SW x (y') denotes a shear wall type "x" with a minimum length of "y" feet. See Exterior Shear Wall Typical Detail.

• For SW3 and greater: studs, plates, and blocking where two WSP panels abut shall have a minimum 3" nominal thickness. Double 2x_ members may be used if the members are connected by plate nailing. Note 10d nails at WSP panel edges.

• "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.
• Provide double stud minimum at both ends of all shear walls.
• Provide blocking at all panel edges to match the depth of framing, unless otherwise noted.
• At the roof or top level of any shear wall, "A35 spacing", and all other relevant connector specifications, apply to assemblies at both the top and bottom of the shear wall. At lower levels, apply to the bottom of the wall only.
• Provide floor diaphragm edge nailing per diaphragm schedule through floor plywood into blocking, parallel joist framing, or top plates (whichever applies) of all shear walls.
• Provide 3x_ plates, and 4x_ rim joists, minimum, where lag screws are specified for plate nailing.
• Where shear wall edge nails are spaced closer than 3" o.c., or spaced 3" o.c. with 10d nails, foundation sill plates and all framing members receiving edge nailing from abutting panels shall not be less than a single 3x_ member.
• Provide 4x_ or double 2x_ framing where A35 angles are used on both sides of one piece of wood.
• Where a shear wall terminates above the foundation level (no shear wall below), provide minimum 4x_ blocking or double joist framing (as applicable) below the shear wall."&" Plate nailing per this schedule shall be nailed into this blocking at the bottom of the shear wall.
• Shear wall nails shall be placed no closer than 3/8" from a panel edge or perpendicular face of stud.
• Maximum spacing between nails shall not exceed 12".
• Shear wall nailing shall be common or galvanized box nails, unless lag screws are noted. Galvanized nails shall be hot dipped or tumbled.
• Lag screw plate connectors shall penetrate 3.5" minimum, and plates or beams receiving lag screws shall have a minimum width of 3.5".
• Where hold downs are specified, the shear wall bolt shall be located within 6 inches of the end of the shear wall, unless otherwise approved by the engineer of record. Minimum end studs shall be as specified in the most recent Simpson catalog.
• Shear wall edge nailing through shear wall sheathing shall be provided into all studs attached to a hold down.
•Retrofit anchor bolts shall have a minimum embedment of 5" into the concrete foundation.
• Cast in place anchor bolts shall have a minimum embedment of 7" into the concrete foundation.
• For SW3 and greater, foundation anchor bolt plate washers shall extend to within 1/2" of the edge of the sheathing.
• Plate nails shall be nailed into a solid wood rim joist.
• 2x_ plates may be substited for 3x_ plates if panels are nailed with edge nailing directly to the rim joist.
• Where 3x_ plates are used, (2) 20d common nails must be used instead of (2) 16d common nails to connect studs to the bottom plate.
• For SW3 and greater at existing walls, Retrofit High Strength Shear Wall Typical Detail may be used.
• Where Roof ventilation is required over a shear wall, see roof ventilation detail.

Diaphragm Schedule

(Lumber for diaphragm construction is HF#2 or better, unless otherwise noted.)

Type	Material	Edge Nailing	Field Nailing	Edge Blocking	Remarks
Roof	15/32" CDX 24/0	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard
Floor	23/32" CDX 48/24	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard

• "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.
• Rim joists at exterior walls shall be continuous for tension. At rim joist splice locations, provide (2) CS16 horizontal straps, minimum 24"
• Where roof or floor framing is cantilevered over an exterior wall below, provide solid blocking with Diaphragm edge nailing between joists.
• This is the minimum required diaphragm construction. Where otherwise noted on the plans, additional blocking or nailing may be required.

REVIEWED FOR CODE COMPLIANCE
December 09, 2024
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EVAN BOOTHAPOLIS STATE OF WASHINGTON 52101 STRUCTURAL ENGINEER PROFESSIONAL ENGINEER

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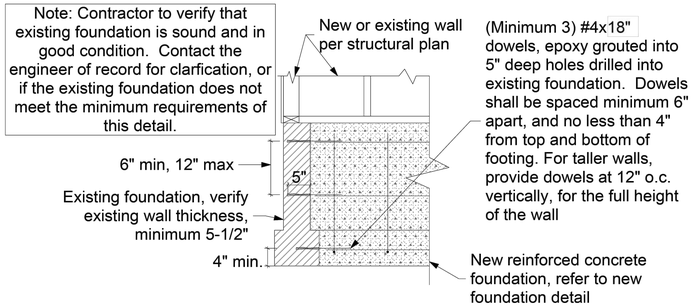
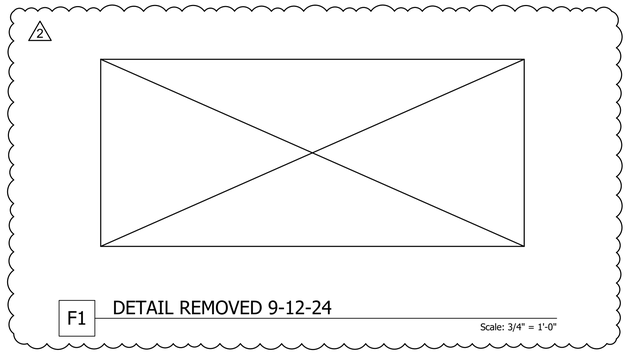
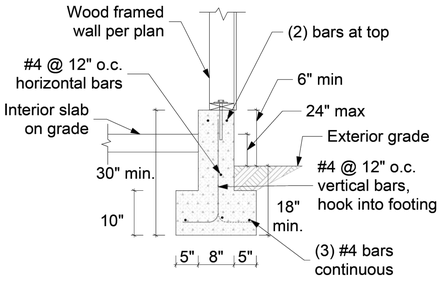


NF New Foundation to Existing Detail

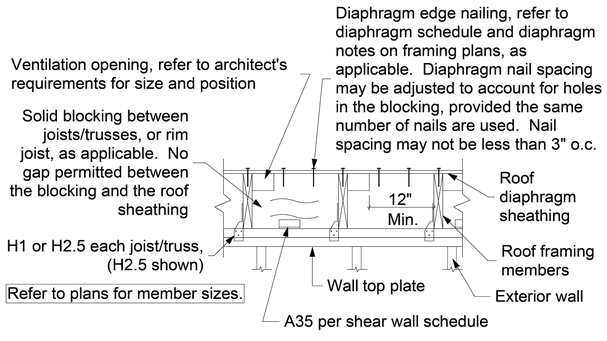
Scale: 3/4" = 1'-0"





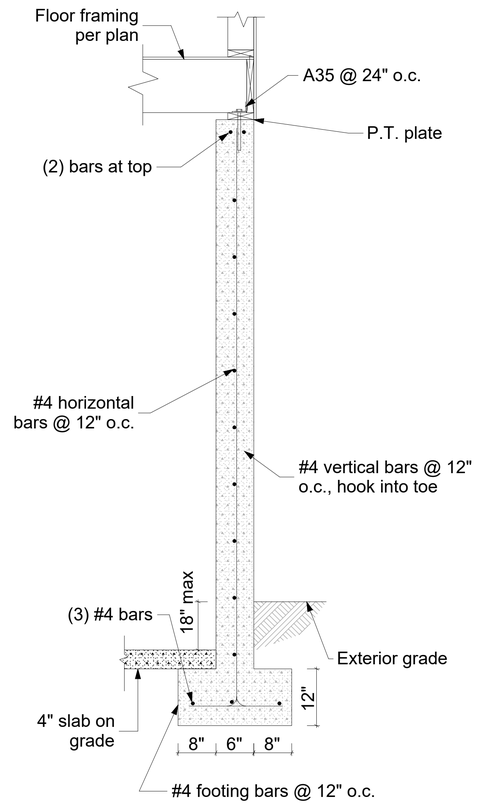
F3 Exterior Footing With Slab Detail

Scale: 3/4" = 1'-0"



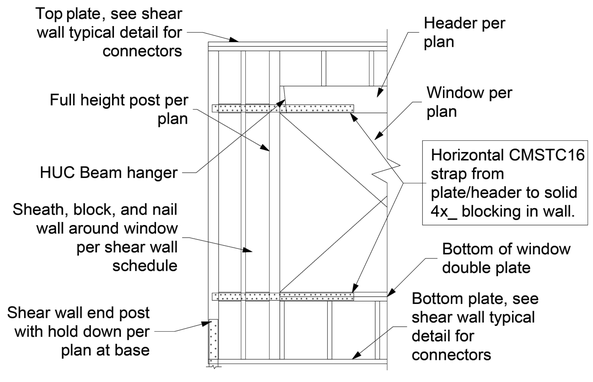
R1 Roof Ventilation Typical Detail

Scale: 1" = 1'-0"



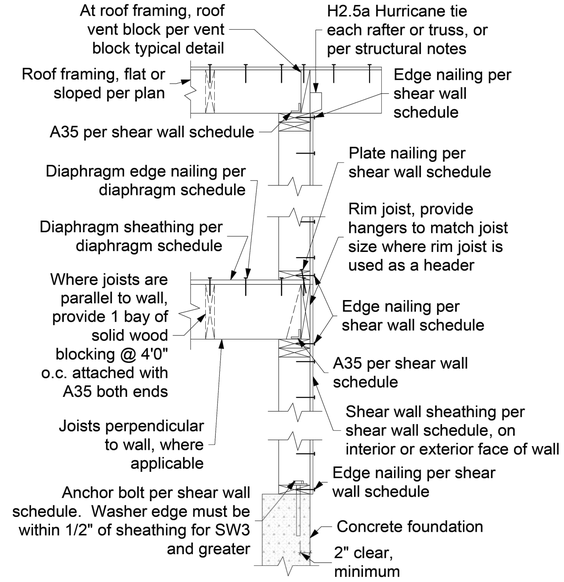
F2 Concrete Basement Wall Detail

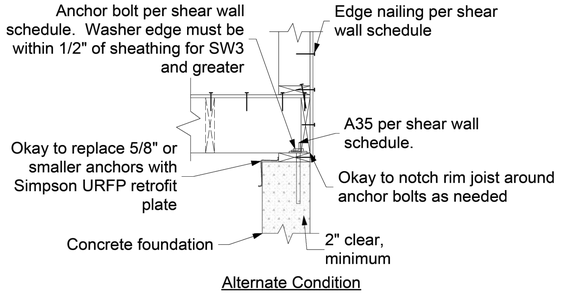
Scale: 1/2" = 1'-0"



SW1 Shear Wall Around Opening Detail

Scale: 1/2" = 1'-0"

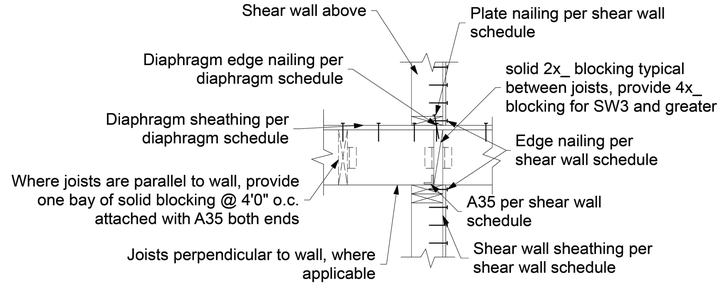




Alternate Condition

SW2 Exterior Shear Wall Typical Detail

Scale: 1" = 1'-0"



SW3 Interior Shear Wall Typical Detail

Scale: 1" = 1'-0"

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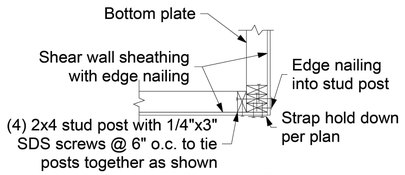
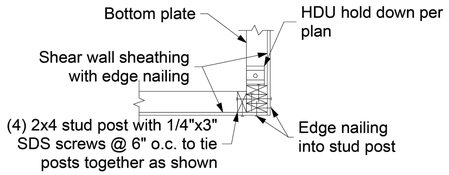


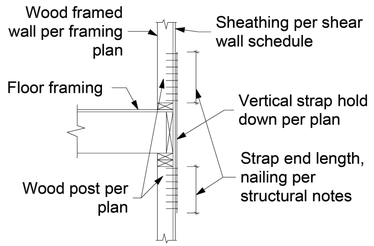
Strap Hold Down Configuration



HDU Configuration

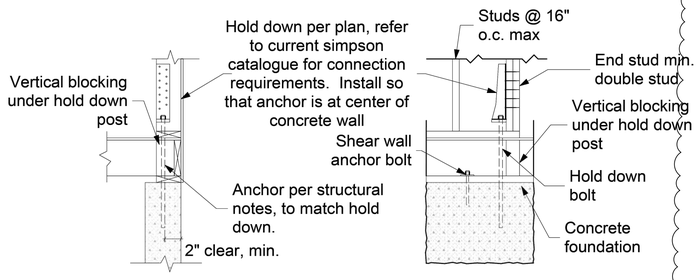
H1 Corner Hold Down Detail

Scale: 1" = 1'-0"



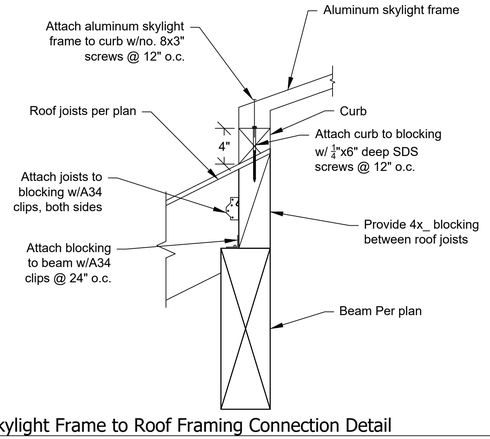
H2 Strap Hold Down Typical Detail

Scale: 3/4" = 1'-0"



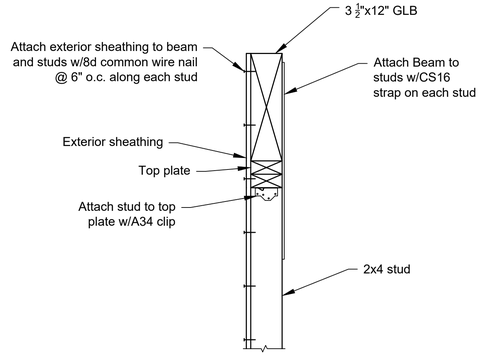
H3 Retrofit HDU Typical Detail

Scale: 3/4" = 1'-0"



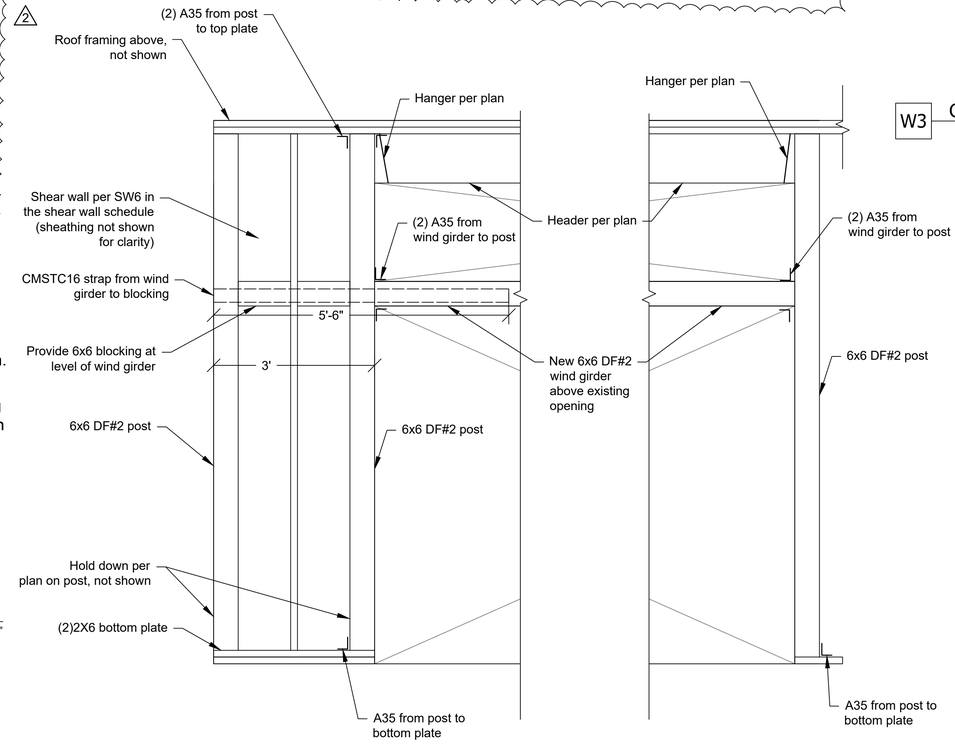
L1 Skylight Frame to Roof Framing Connection Detail

Scale: 1-1/2" = 1'-0"



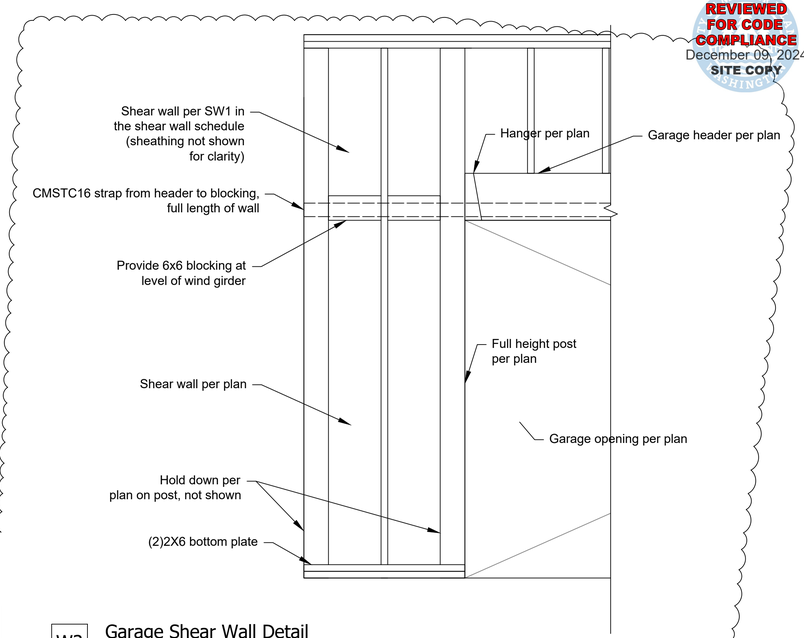
W1 East Wall Beam to Stud Connection

Scale: 1-1/2" = 1'-0"



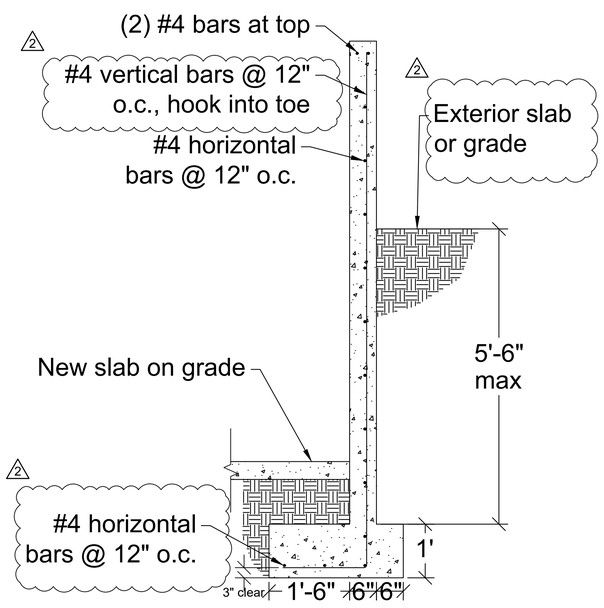
W2 West Wall Shear Wall & Wind Girder Detail

Scale: 3/4" = 1'-0"



W3 Garage Shear Wall Detail

Scale: 3/4" = 1'-0"



F4 East Retaining Wall Detail

Scale: 3/4" = 1'-0"

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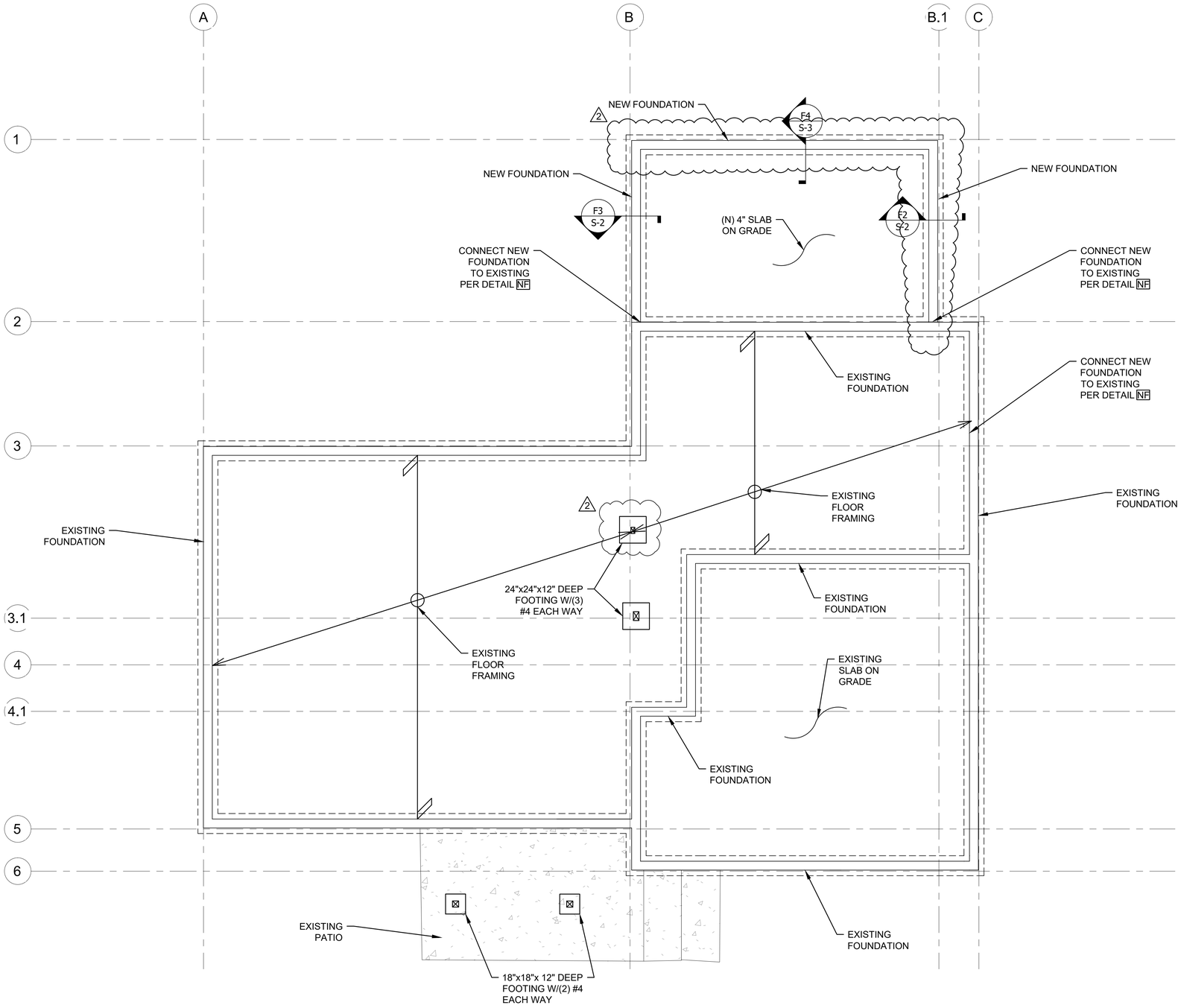

1 MAIN FLOOR FRAMING AND FOUNDATION PLAN

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

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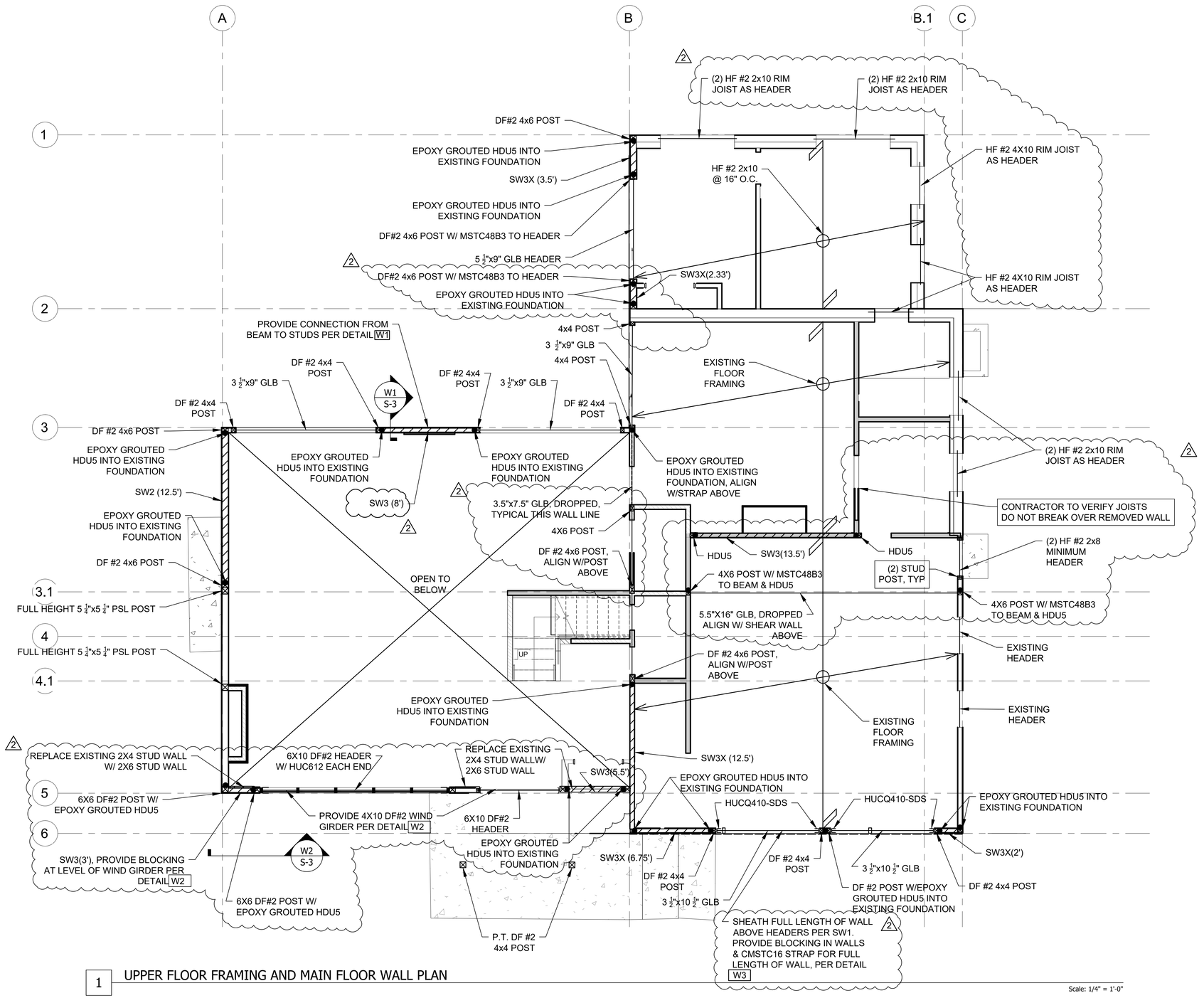

1 UPPER FLOOR FRAMING AND MAIN FLOOR WALL PLAN

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

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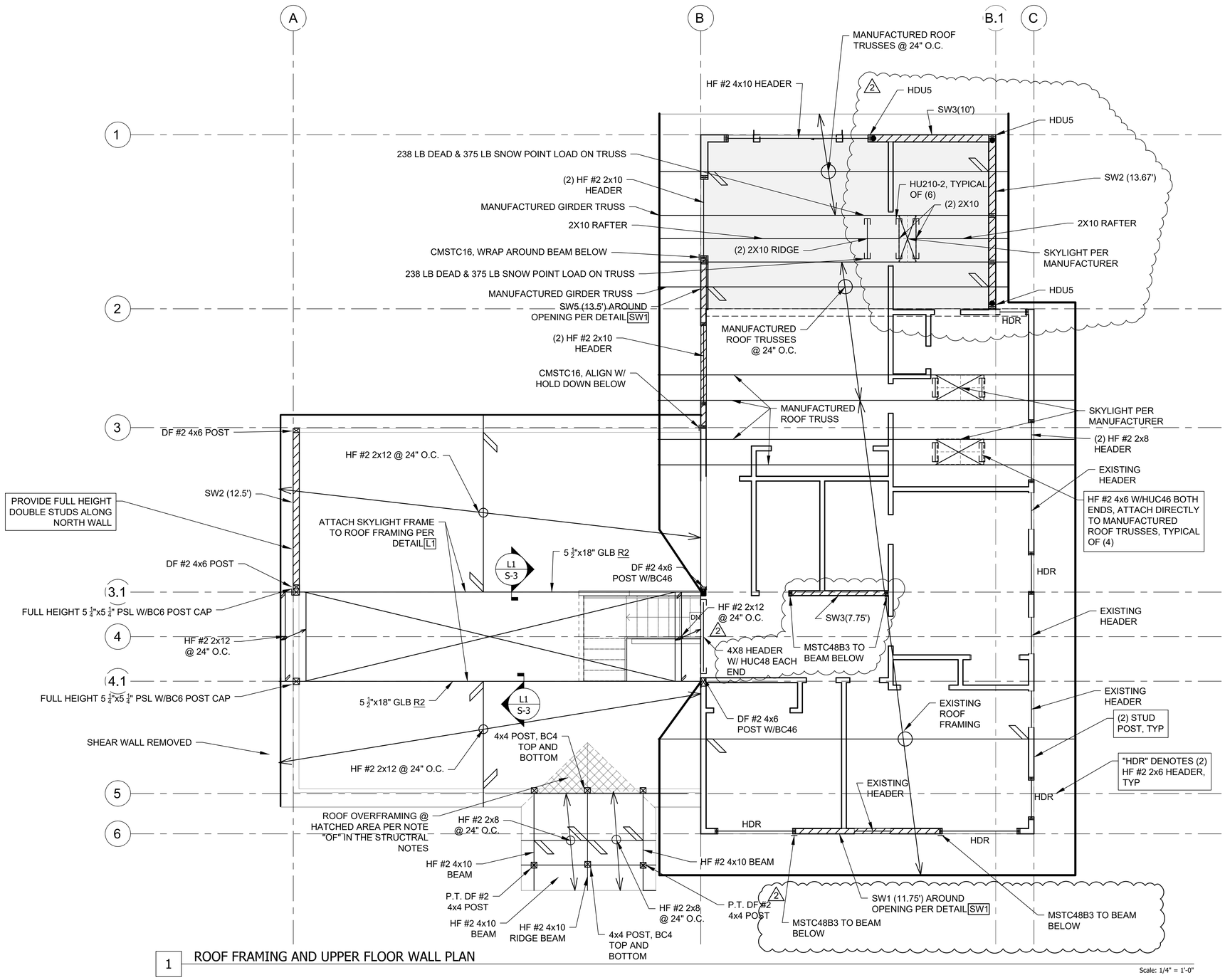

1 ROOF FRAMING AND UPPER FLOOR WALL PLAN

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

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