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

CONSTRUCTION (206) 275-7730

FIRE INSPECTION eastsidefire-rescue.org

SF1
BUILDING PERMIT NUMBER

PROJECT NAME: LAVERGNE RESIDENCE ADDITION

PROJECT ADDRESS: 4139 - 97TH AVE SE , MERCER ISLAND, WA 98040

PROJECT DESCRIPTION
This scope should match the Building Permit Application Form

AT MAIN FLOOR REMODEL EXIST. PRIMARY BDRM, BATH & CLOSET & 2 EXIST. BEDROOMS INTO A GUESTROOM WITH BATH, NEW POWDER AND OFFICE. ADD STAIR AND NEW 1,499SF SECOND FLOOR WITH NEW PRIMARY SUITE WITH 3/4 BATH, 2 KIDS' BEDROOMS, FULL BATH AND PLAYROOM.

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

Permitting Contact: SHELLY JOHNSON	Email: SHELLYLYNNJOHNSON@GMAIL.COM	Phone: 206-465-7221
Construction Contact: Orion Home Renovations	Email: info@orionhomereno.com	Phone:
Engineer: BRETT MOZDEN	Email: bmozden@ssfengineers.com	Phone: 206.956.3763
Geotech: n/a	Email: n/a	Phone:

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: A5

Energy Credit Information- Include complete information on plan for options selected and equipment specified *WSEC Tables 406.2 and 406.3* Sheet: A1

☐ 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: A2

☒ 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 absence 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:	Phone:	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, _____ trees are authorized to be removed and replaced with _____ 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 at eastsidefire-rescue.org using the QR above, and require 48 hour 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
☐ 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 ◦ Well water on property ◦ Fire / lawn sprinkler ◦ 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]

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

Approved _____ Date _____

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:

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
_____	_____	_____	_____	_____
Date	Date	Date	Date	Date

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

REVIEWED FOR CODE COMPLIANCE
Approved _____ Date _____

CITY OF MERCER ISLAND
COMMUNITY PLANNING & DEVELOPMENT
THIRD PARTY INSPECTIONS

(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

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: Brett Mozden | License Number: 45863 | License Type: PE | License Expiration: 10/29/26

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 forces.*	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		

e. Required where any of the following conditions exist (refer ASCE 7 Section 12.3): *Torsional or extreme torsional irregularity* *Stiffness (soft story) or extreme stiffness (extreme soft story) irregularity* *Nonparallel systems 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.

SPECIAL INSPECTION DESCRIPTION	REFERENCES	SPECIAL INSP REQUIRED	FREQUENCY	APPROVALS: Special Inspector sign-off	APPROVALS: City Inspector sign-off
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	☐			

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.

TO BE COMPLETED BY RDP
TO BE COMPLETED BY CITY

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: _____ email: _____

☐ Building height survey _____ ☐ Hardscape survey _____
☐ Building setback survey _____ ☐ Gross floor area survey _____
☐ Lot coverage 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

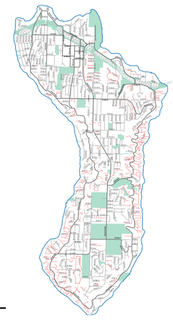
SPECIAL INSPECTOR AND AGENCY INSPECTOR CONTACTS:

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

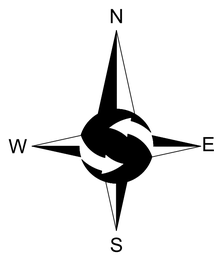
INSPECTOR NAME	INITIALS	COMPANY NAME	PHONE NUMBER	EMAIL ADDRESS

SF2
BUILDING PERMIT NUMBER

PROJECT NAME: LAVERGNE RESIDENCE ADDITION
PROJECT ADDRESS: 4139 - 97TH AVE SE , MERCER ISLAND, WA 98040



APPROVED DRAWINGS MUST BE KEPT ON THE BUILDING SITE AT ALL TIMES
REVIEWED FOR CODE COMPLIANCE
Date
Approved



GRAPHIC SCALE

5 0 5 10 20

1 INCH = 10 FT.

LEGEND

- FOUND MONUMENT IN CASE
- FOUND REBAR AS DESCRIBED
- FOUND NAIL AS DESCRIBED
- SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP
- POWER METER
- GAS METER
- HVAC UNIT
- UTILITY POLE
- CATCH BASIN
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SIGN
- MAILBOX
- ELECTRICAL PEDESTAL
- TELEPHONE PEDESTAL
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- IRRIGATION CONTROL VALVE
- SS — APPROXIMATE LOCATION SANITARY SEWER LINE
- SD — APPROXIMATE LOCATION STORM DRAIN LINE
- W — APPROXIMATE LOCATION UNDERGROUND WATER LINE
- G — APPROXIMATE LOCATION UNDERGROUND GAS LINE
- UGE — APPROXIMATE LOCATION UNDERGROUND POWER LINE
- WOOD FENCE
- ROCKERY
- ASPHALT SURFACE
- CONCRETE SURFACE
- GRAVEL SURFACE
- FF FINISH FLOOR
- RH RIDGE HEIGHT
- CE CEDAR
- CH CHERRY
- * INDICATES MULTI-TRUNK

LEGAL DESCRIPTION

LOT 13, BLOCK H, MERCER WOOD, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 52 OF PLATS, PAGE 32, RECORDS OF KING COUNTY, WASHINGTON;

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

BASIS OF BEARINGS

RECORD OF SURVEY BY CONCEPT ENGINEERING, RECORDED UNDER RECORDING NO. 20051220900009, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

PROPERTY OWNER:	BARRETT LAVERGNE 4139 97TH AVENUE SE MERCER ISLAND, WA 98040
TAX PARCEL NUMBER:	545600-0065
PROJECT ADDRESS:	4139 97TH AVENUE SE MERCER ISLAND, WA 98040
ZONING:	R-8.4
JURISDICTION:	CITY OF MERCER ISLAND
PARCEL ACREAGE:	8,938 S.F. (0.205 ACRES) AS SURVEYED

GENERAL NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 50 TOTAL STATION AND AN EMLID REACH RS2 GPS RECEIVER. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN APRIL 2025 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

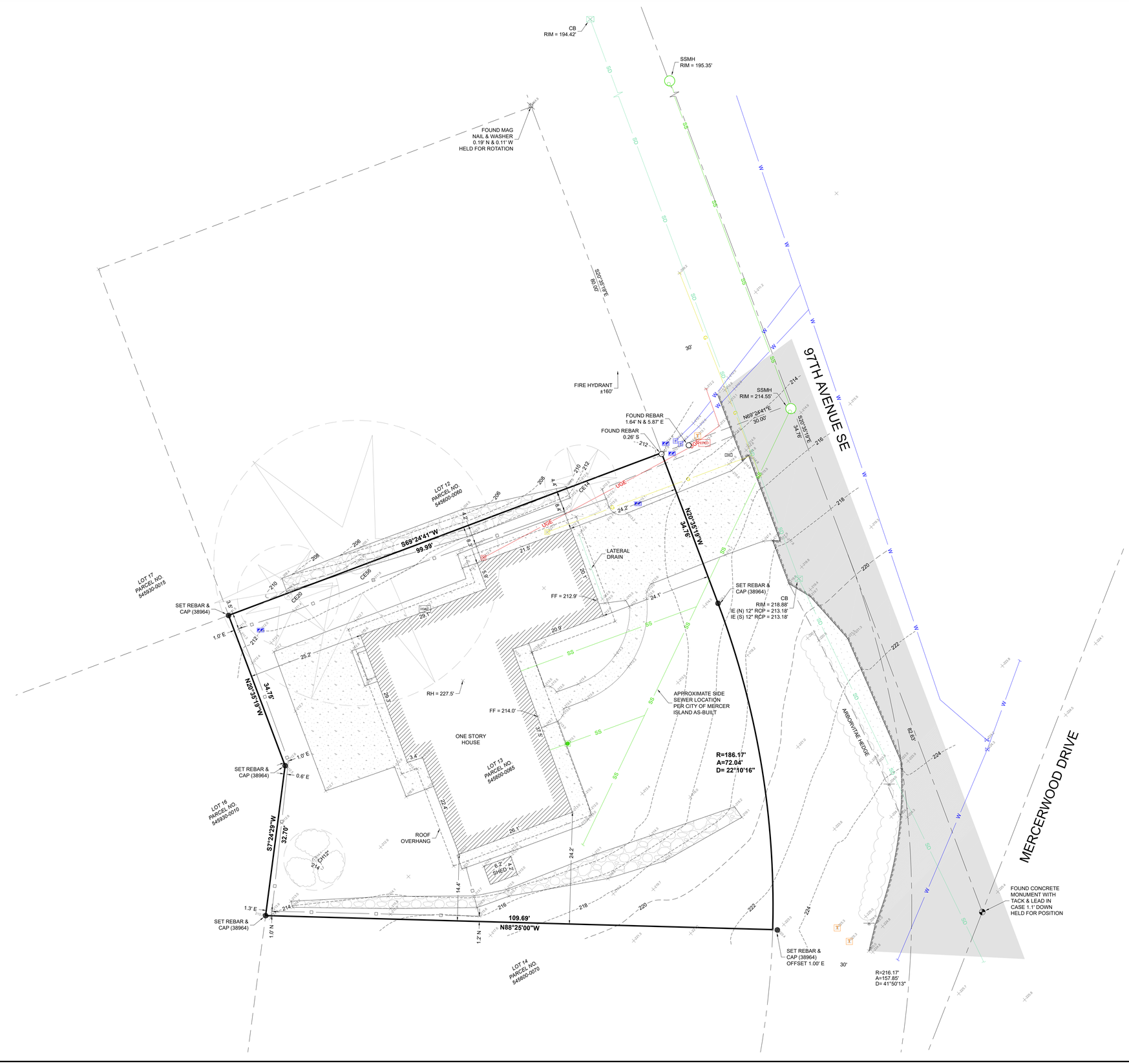
VERTICAL DATUM & CONTOUR INTERVAL

DATUM

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM GPS OBSERVATION USING THE WSRN.

DATUM - NAVD 88

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.



NW 1/4, NE 1/4, SEC 18, TWP 24N, RNG 5E, W.M.

Site Surveying, Inc.
Phone: 425.298.4412
21923 NE 11th Street Sammamish, WA 98074
www.sitesurveymapping.com

WOLDENDORP WOHL PROFESSIONAL LAND SURVEYOR

DRAFT

REVISION | DRN | DATE

TOPOGRAPHIC SURVEY

BARRETT LAVERGNE
4139 97TH AVENUE SE
MERCER ISLAND, WA 98040

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PROJECT NO. 25-257

DRAWN BY: MTS
CHECKED BY: TNW
DATE: 4/30/25

SHEET 1 OF 1

PROJECT OWNER:
BARRETT + KRISTIN LAVERGNE
4139 - 97TH AVE SE
MERCER ISLAND, WA 98040

PROPERTY ADDRESS:
SAME AS ABOVE

PROPERTY TAX ACCOUNT NO.:
545000-0065

LEGAL DESCRIPTION
MERCER WOOD ADD
PLAT BLOCK: H PLAT LOT: 13

LOT SIZE:
8,939 SQ FT

ZONING
R-8.4

PROJECT TEAM:

DESIGN/DRAWINGS:
SHELLY JOHNSON
4807 E MERCER WAY
MERCER ISLAND, WA 98040
TEL: 206.465.7221

GENERAL CONTRACTOR:
ORION HOME RENOVATIONS
28840 108TH AVE SE
AUBURN, WA 98092
LIC NO. #ORIONHR762P4
TEL: 206.650.6052

STRUCTURAL ENGINEER:
BRETT MOZDEN
SSF STRUCTURAL ENGINEERING
2124 THIRD AVE, STE 100
SEATTLE, WA 98121
TEL: 206.443.6212

PROJECT DESCRIPTION
1,499 SQ.FT. SECOND FLOOR ADDITION TO EXISTING 1-STORY SINGLE FAMILY HOME WITH ATTACHED GARAGE. ADDITION TO INCLUDE PRIMARY BEDROOM, BATH AND CLOSET, TWO ADDITIONAL BEDROOMS, FULL BATH AND PLAY ROOM. INTERIOR REMODEL AT EXISTING FIRST FLOOR TO INCLUDE NEW STAIR, RENOVATIONS TO 2 EXISTING BEDROOMS, 2 EXISTING BATHROOMS AND LAUNDRY ROOM.

REQUIRED SETBACKS:
FRONT YARD: 20'-0'
REAR YARD: 25'-0'
SIDE YARDS:
FOR IRREGULARLY SHAPED LOTS, THE LOT WIDTH CIRCLE METHOD IS USED TO DETERMINE LOT WIDTH. SEE DIAGRAM ON SHEET A1 FOR LOT WIDTH CIRCLE METHOD.
LOT WIDTH = 88'-9⅞" WHICH IS < 90'
FOR LOTS LESS THAN 90' IN WIDTH THE SUM OF THE SIDE YARDS WIDTH SHALL BE NO LESS THAN 15' WITH NEITHTER BEING LESS THAN 5'

GROSS FLOOR AREA
ALLOWABLE GROSS FLOOR AREA = 40% LOT SIZE = 8,939 SQ.FT. X .40 = 3,576 SQ.FT.

	EXISTING FLOOR AREA	PROPOSED ADDITIONS
MAIN FLOOR	1,463	0
GARAGE	435	0
NEW 2ND FLOOR	0	1,499
TOTAL	1,886	1,499

1,886 + 1,499 = 3,385 SQ.FT. OK

LOT SLOPE CALCULATIONS:
HIGH POINT 223.4' (SE PROPERTY CORNER)
LOW POINT 211.5' (NW PROPERTY CORNER)
DISTANCE BETWEEN HIGH AND LOW POINTS = 135.9'
(223.4-211.5)/135.9 = 0.08 OR 8.7% LOT SLOPE

LOT COVERAGE
ALLOWABLE COVERAGE (BUILDING + DRIVING SURFACES) = 40% LOT = 8,939 SQ.FT. X .04 = 3,576 SQ.FT.

PROPOSED BUILDING FOOTPRINT (TO EDGE OF EAVES): 2,128 SQ.FT.
MAIN STRUCTURE ROOF AREA = 2,004 SQ.FT.
FRONT PORCH = 124 SQ.FT.
TOTAL HOUSE = 2,128 SQ.FT.
EX. DRIVEWAY = 411 SQ.FT.
TOTAL PROPOSED LOT COVERAGE = 2,539 SQ.FT. : OK

ALLOWABLE HARDSCAPE COVERAGE = 9% LOT SIZE = 8,939 SQ.FT. X .09 = 805 SQ.FT.
EXIST. UNCOVERED PATIO = 567 SQ.FT.
EXIST. WALKWAYS = 205 SQ.FT.
TOTAL EXISTING HARDSCAPE = 772 SQ.FT.

NEW HARDSCAPE @ FRONT PORCH NOT UNDER ENTRY ROOF = 4.7 SQ.FT.

TOTAL FINAL HARDSCAPE = 772 + 4.7 = 776.7 SQ.FT. OK

ENERGY CODE COMPLIANCE - 2021 WA STATE ENERGY CODE
SMALL DWELLING UNIT - ADDITIONS GREATER THAN 500 SQ.FT. AND LESS THAN 1,500 HEATED SQ FT REQUIRE 5.0 CREDITS

2.0 CREDITS - 5 FOR HEATING SYSTEMS BASED ON ELECTRIC RESISTANCE WITH: 1 INVERTER-DRIVEN DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM INSTALLED INTHE LARGEST ZONE IN THE DWELLING.
1.0 CREDITS - 1.2 EFFICIENT BUILDING ENVELOPE
2.0 CREDITS - 2.3 AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION
1.5 CREDITS - 3.5 HIGH EFFICIENCY HVAC

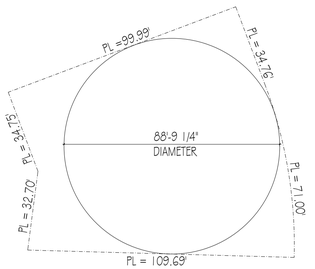
HEIGHT LIMIT
30-0' - SEE SHEET A1 FOR AVERAGE GRADE DIAGRAM + CALCS . SEE SHEET A4 FOR EXTEIOR ELEVATIONS.

ROOF VENTING
NEW SECOND FLOOR ROOF AREA TO BE VENTED W/CONTINUOUS RIDGE VENT + EAVE VENTS
ROOF AREA= 1,460 SQFT/150 = 9.7 SF = 1,401 SQ.IN.NFVA REQ
RIDGE VENT PROVIDES 18 SQIN/FT NFVA FOR 51.75'
EAVE VENT PROVIDES 12 SQIN/FT NFVA FOR 88.5'
18(51.75)+12(88.5) = 931.5 SQ.IN. + 1,062 SQ.IN. = 1,993.5 SQ.IN. = OK

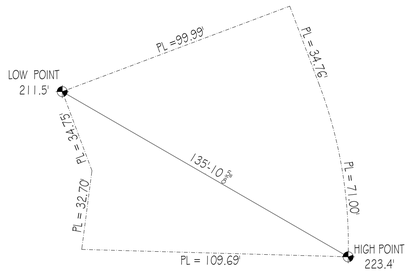
FIRE CODE COMPLIANCE
NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND CoMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

DRAWING INDEX

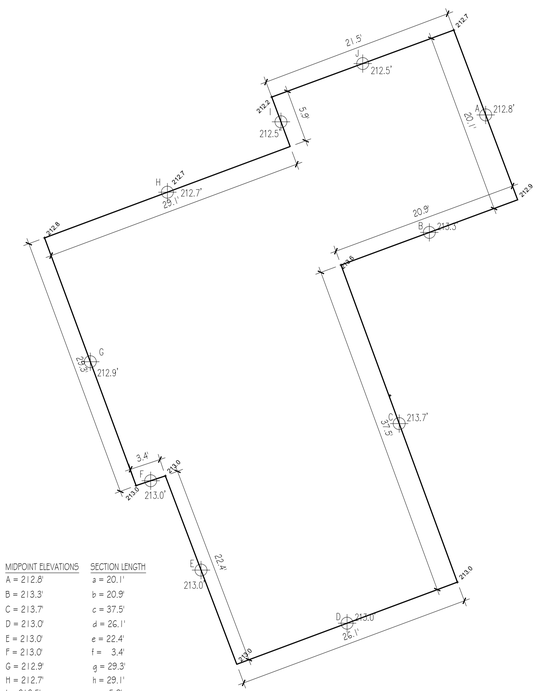
	TOPOGRAPHICAL SURVEY
A1	PROJECT INFORMATION, SITE PLAN, AVERAGE GRADE CALCS
A2	FIRST FLOOR DEMO PLAN, FIRST FLOOR PROPOSED PLAN
A3	SECOND FLOOR PLAN, ROOF PLAN
A4	ELEVATIONS, WINDOW SCHEDULE
A5	BUILDING SECTIONS
S1.1	STRUCTURAL NOTES
S2.1	FOUNDATION PLAN
S2.2	FIRST FLOOR FRAMING PLAN
S2.3	SECOND FLOOR FRAMING PLAN
S2.4	ROOF FRAMING PLAN
S3.1	FOUNDATION DETAILS
S4.1	TYPICAL WOOD FRAMING DETAILS
S4.2	WOOD FRAMING DETAILS
S4.3	WOOD FRAMING DETAILS



Lot Width Circle Diagram
no scale



Lot Slope Diagram
no scale



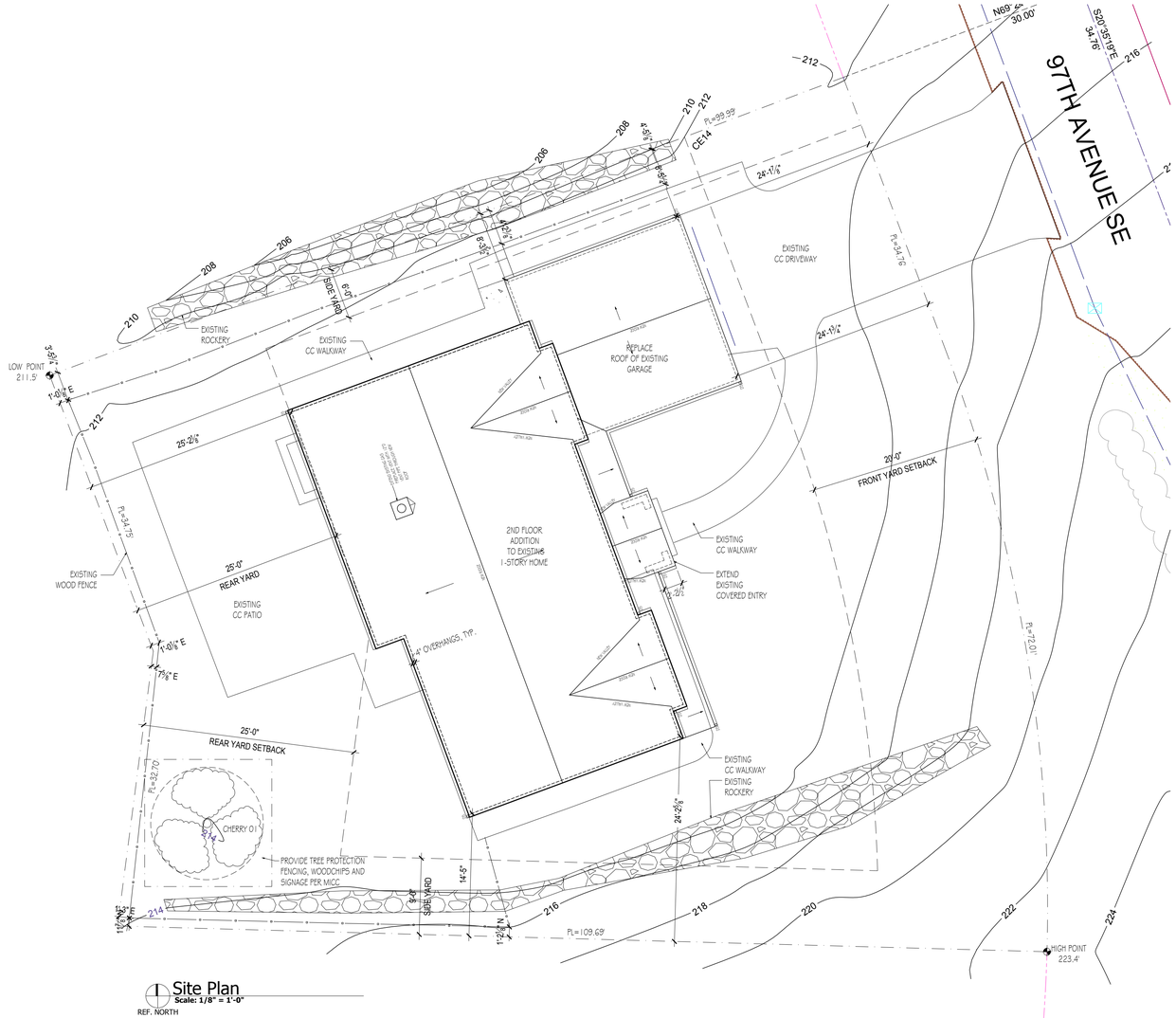
MIDPOINT ELEVATIONS	SECTION LENGTH
A = 212.8'	a = 20.1'
B = 213.3'	b = 20.9'
C = 213.7'	c = 37.5'
D = 213.0'	d = 26.1'
E = 213.0'	e = 22.4'
F = 213.0'	f = 3.4'
G = 212.9'	g = 29.3'
H = 212.7'	h = 29.1'
I = 212.5'	i = 5.9'
J = 212.5'	j = 21.5'

$$\frac{(Axa)+(Bxb)+(Cxc)+(Dxd)\ldots+(Jxj)}{a+b+c+d\ldots+j}$$

$$\frac{(4277)+(4458)+(8014)+(5559)+(4771)+(724)+(6238)+(6190)+(1254)+(4569)}{20.1+20.9+37.5+26.1+22.4+3.4+29.3+29.1+5.9+21.5}$$

$$\frac{46,054}{216.2} = \text{AVE GRADE} = 213.0'$$

Average Grade Diagram & Calcs
no scale



Site Plan
Scale: 1/8" = 1'-0"
REF. NORTH

TREE PROTECTION AREA (TPZ)

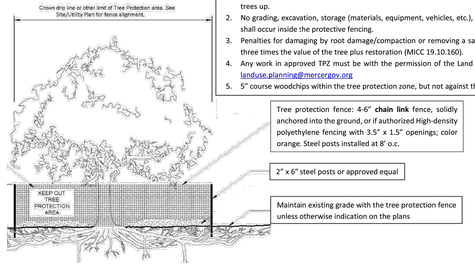
KEEP OUT!

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 Land Use and Planning Division at landuse.planning@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 Land Use and Planning Division at landuse.planning@mercergov.org

Tree Protection Guidelines and Signage Requirements

Lavergne Addition
Project Information, Site Plan, Demo Plan

4139 97th Ave SE
Mercer Island, WA 98040

Permit	9.5.25
REV 1	1.15.26

Shelly Johnson
206.465.7221

A1

PLAN KEY:

- NEW WALL
- EXISTING WALL TO REMAIN
- TO BE DEMOLISHED
- OVERHEAD
- SD — SMOKE DETECTOR
- CM — CARBON MONOXIDE DETECTOR
- EXHAUST FAN

PLAN NOTES:

1. INSULATE ALL EXISTING 2X4 EXTERIOR WALLS OPENED DURING CONSTRUCTION TO BE INSULATED TO A MINIMUM OF R-15. NEW WALLS TO BE INSULATED TO A MINIMUM OF R-20 CAVITY+R-5 CONTINUOUS INSULATION.

2. CONTRACTOR TO VERIFY THAT THERE IS A SMOKE DETECTOR INSIDE AND OUTSIDE EACH SLEEPING AREA AND ON ALL FLOORS, AND A CARBON MONOXIDE DETECTOR OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM AND ON EACH LEVEL OF THE DWELLING.

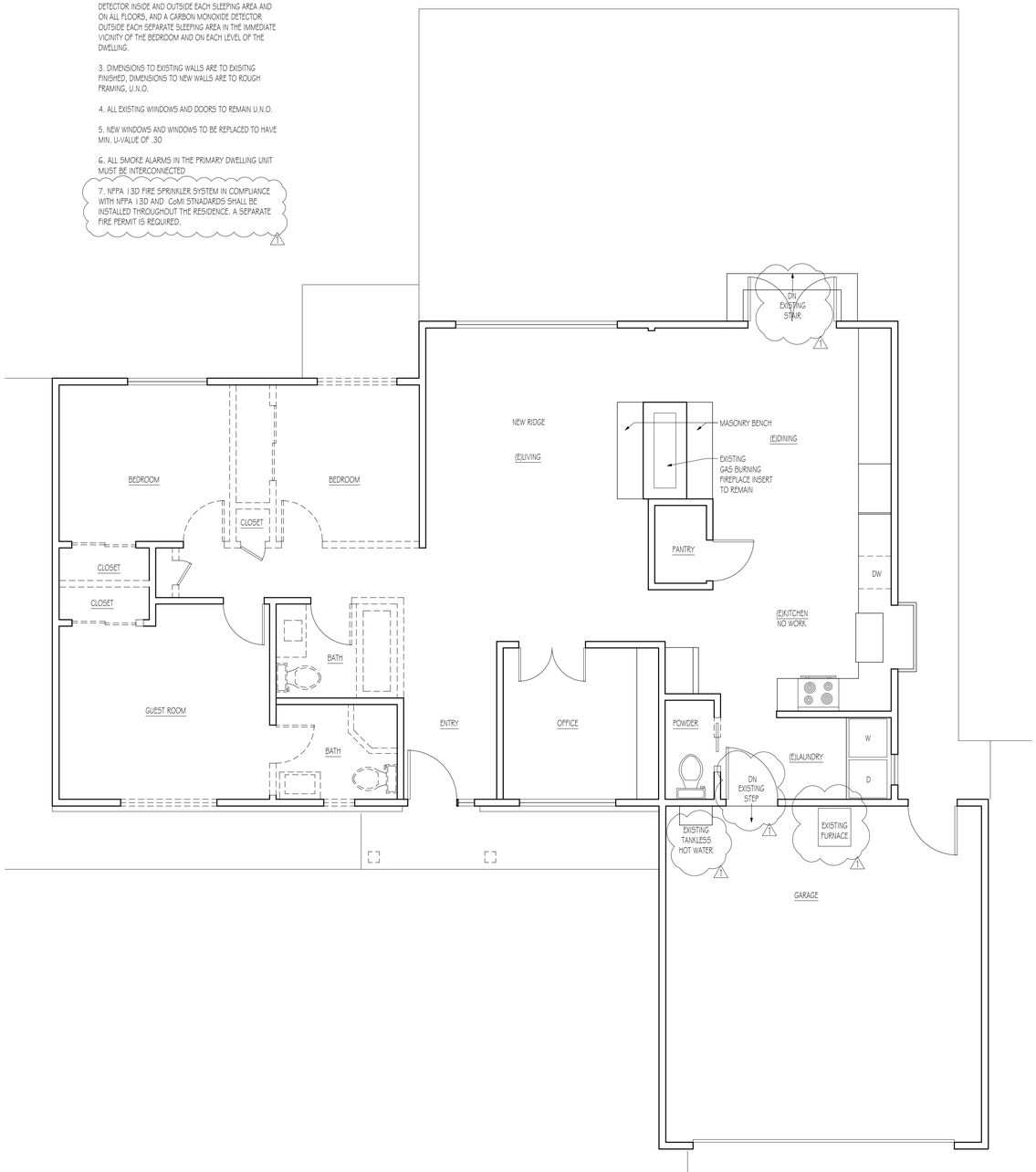
3. DIMENSIONS TO EXISTING WALLS ARE TO EXISITING FINISHED, DIMENSIONS TO NEW WALLS ARE TO ROUGH FRAMING, U.N.O.

4. ALL EXISTING WINDOWS AND DOORS TO REMAIN U.N.O.

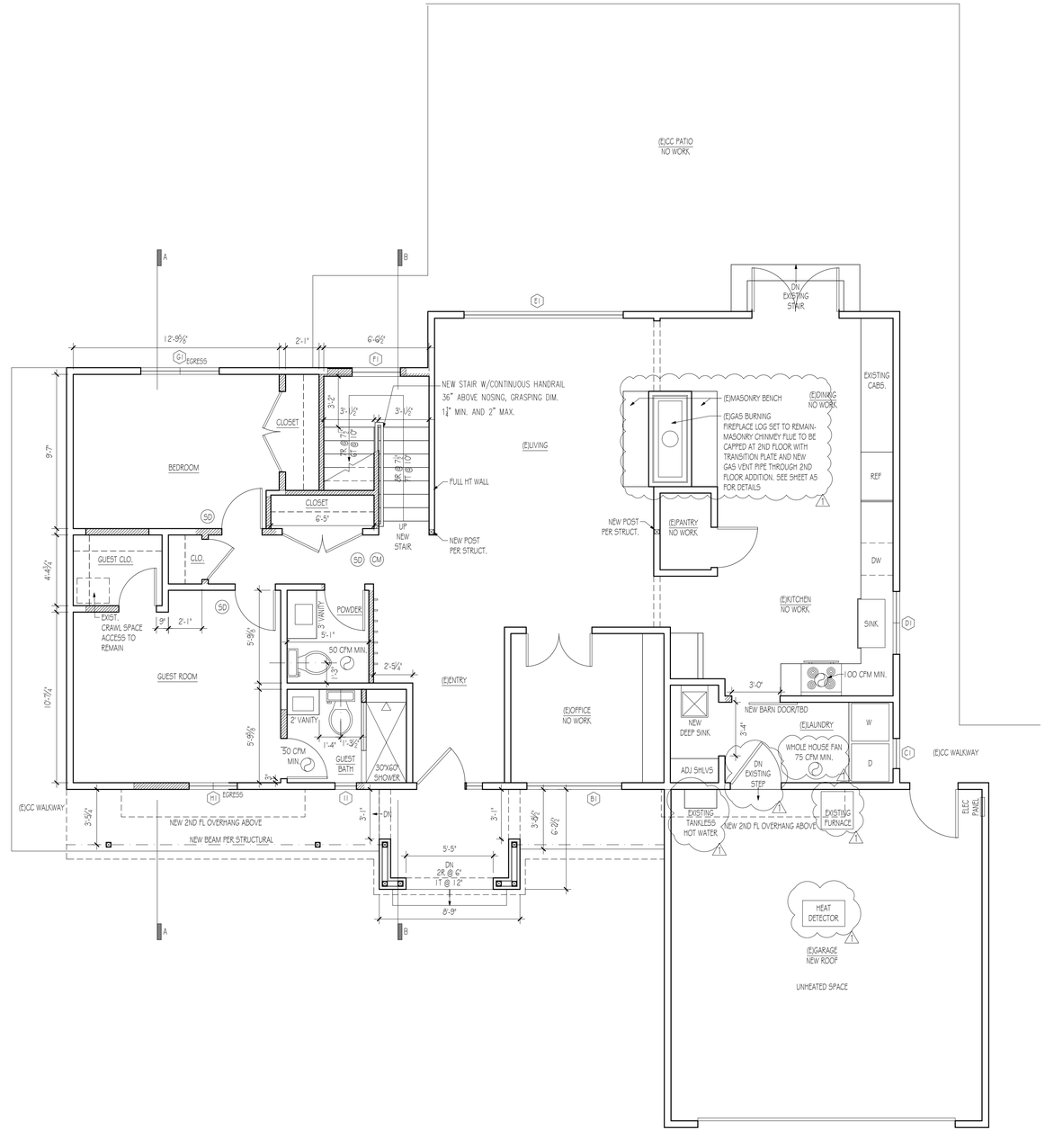
5. NEW WINDOWS AND WINDOWS TO BE REPLACED TO HAVE MIN. U-VALUE OF .30

6. ALL SMOKE ALARMS IN THE PRIMARY DWELLING UNIT MUST BE INTERCONNECTED

7. NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND CoMI STNADARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED. 1



First Floor Demo Plan
Scale: 1/4" = 1'-0"
REF. NORTH



First Floor Proposed Plan
Scale: 1/4" = 1'-0"
REF. NORTH

Lavergne Addition
First Floor Demo Plan and Proposed First Floor

4139 97th Ave SE
Mercer Island, WA 98040

Permit	9.5.25
REV 1	1.15.26

Shelly Johnson
206.465.7221

A2

PLAN KEY:

- NEW WALL
- EXISTING WALL TO REMAIN
- TO BE DEMOLISHED
- OVERHEAD
- (SD) SMOKE DETECTOR
- (CM) CARBON MONOXIDE DETECTOR
- EXHAUST FAN

PLAN NOTES:

1. INSULATE ALL EXISTING 2X4 EXTERIOR WALLS OPENED DURING CONSTRUCTION TO BE INSULATED TO A MINIMUM OF R-15. NEW WALLS TO BE INSULATED TO A MINIMUM OF R-20 CAVITY+R-5 CONTINUOUS INSULATION.

2. CONTRACTOR TO VERIFY THAT THERE IS A SMOKE DETECTOR INSIDE AND OUTSIDE EACH SLEEPING AREA AND ON ALL FLOORS, AND A CARBON MONOXIDE DETECTOR OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM AND ON EACH LEVEL OF THE DWELLING.

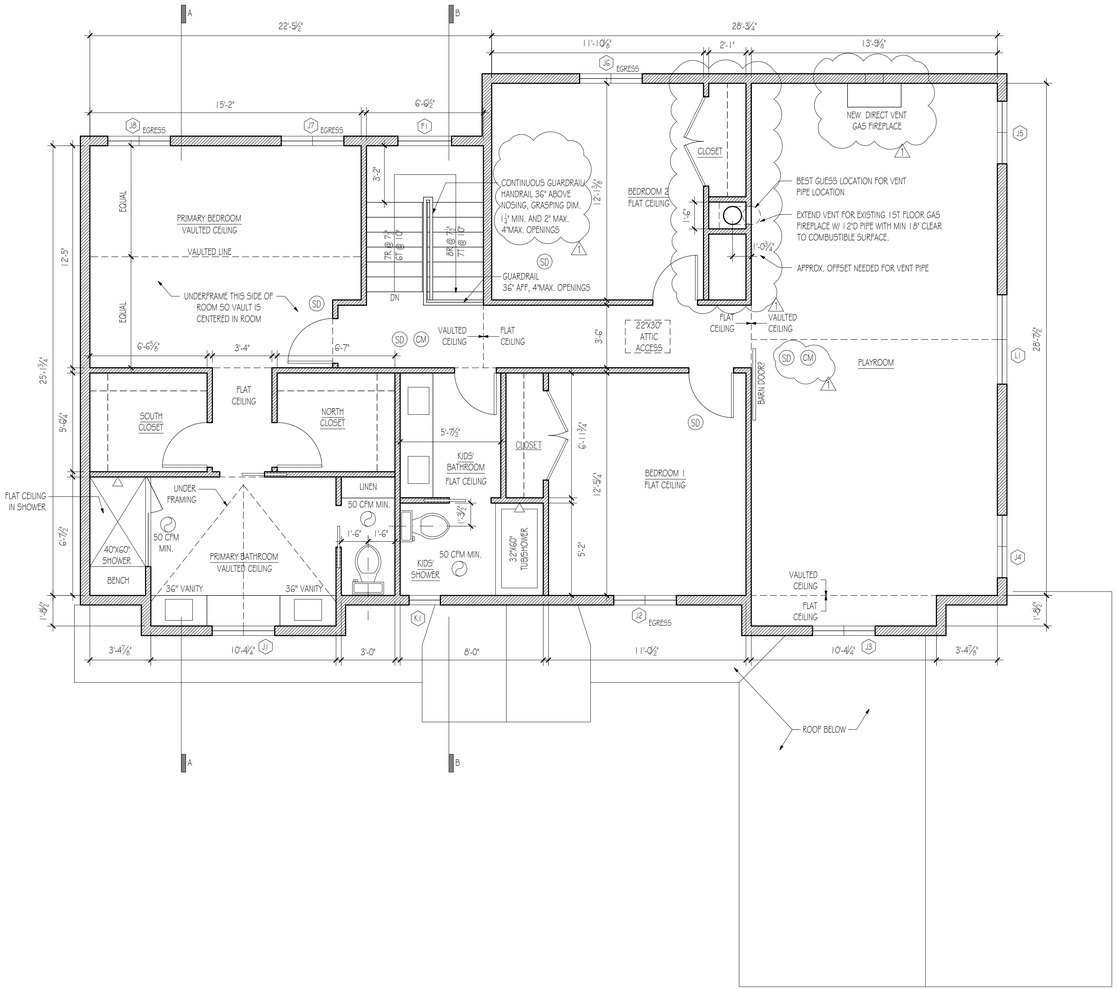
3. DIMENSIONS TO EXISTING WALLS ARE TO EXISITNG FINISHED, DIMENSIONS TO NEW WALLS ARE TO ROUGH FRAMING, U.N.O.

4. ALL EXISTING WINDOWS AND DOORS TO REMAIN U.N.O.

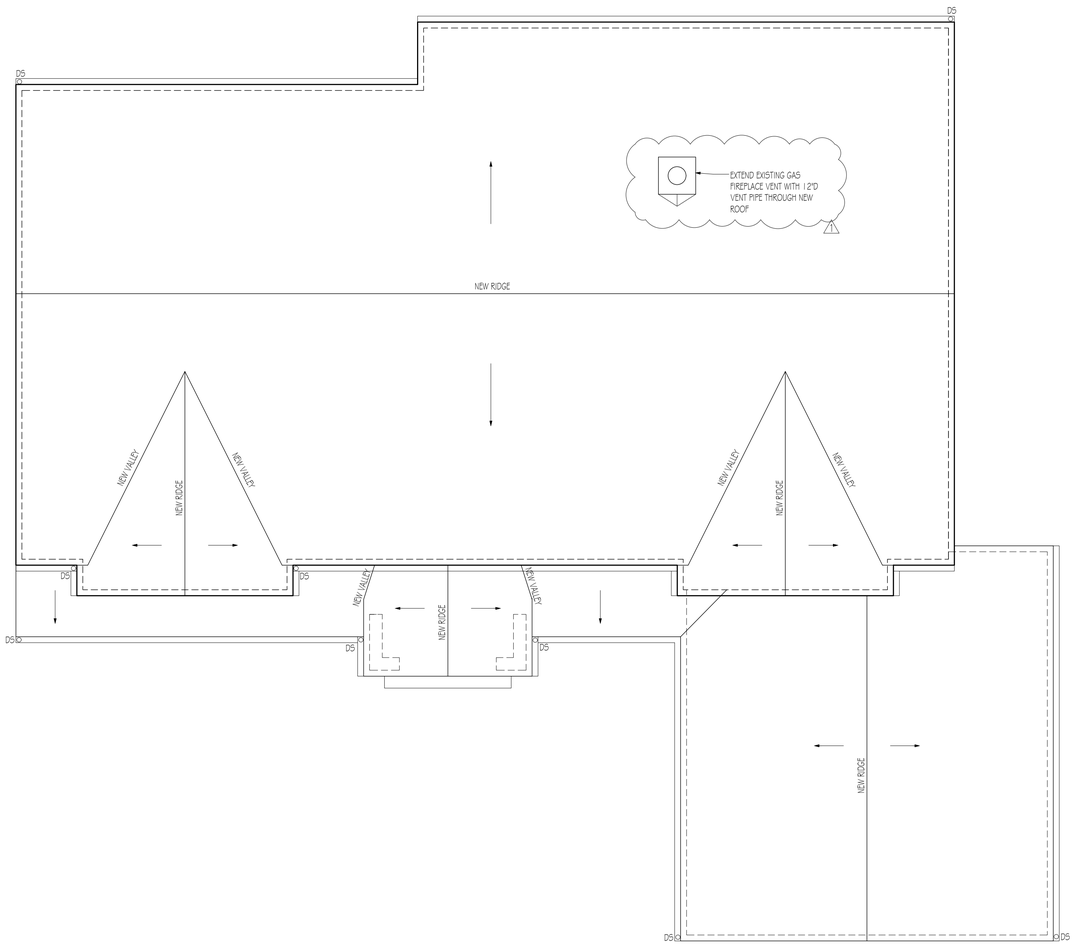
5. NEW WINDOWS AND WINDOWS TO BE REPLACED TO HAVE MIN. U-VALUE OF .30

6. ALL SMOKE ALARMS IN THE PRIMARY DWELLING UNIT MUST BE INTERCONNECTED

7. NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND CoMI STNADARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED. 1



Proposed 2nd Floor Plan
Scale: 1/4" = 1'-0"
REF. NORTH



Proposed Roof Plan
Scale: 1/4" = 1'-0"
REF. NORTH

Lavergne Addition
Proposed 2nd Floor and Roof Plan

4139 97th Ave SE
Mercer Island, WA 98040

Permit	9.5.25
REV 1	1.15.26

Shelly Johnson
206.465.7221

A3

WINDOW SCHEDULE

TAG	SIZE	TYPE	JAMB	U-VALUE	NOTES	AREA (SF)
B1	5'-10 1/2" X 3'-10 1/2" V.I.F.	CASEMENT / FIXED / CASEMENT	V.I.F.	.30	NEW WINDOW IN EXIST. OPENING	22.7
C1	1'-10 1/2" X 2'-10" V.I.F.	DOUBLE HUNG	V.I.F.	.30	NEW WINDOW IN EXIST. OPENING	5.3
D1	4'-4 1/2" X 2'-10" V.I.F.	PAIR OF CASEMENTS	V.I.F.	.30	NEW WINDOW IN EXIST. OPENING	12.5
E1	9'-10 1/2" X 5'-8 1/2" V.I.F.	3 EQUAL FIXED	V.I.F.	.30	NEW WINDOW IN EXIST. OPENING / TEMPERED GLASS	56.7
F1	3'-0" X 6'-0"	FIXED	7"	.30		15.0
G1	4'-10 1/2" X 3'-8"	PAIR OF CASEMENTS	V.I.F.	.30	NEW WINDOW IN EXIST. OPENING / EGRESS	17.9
H1	3'-6" X 3'-10"	PAIR OF CASEMENTS	V.I.F.	.30	EGRESS	13.4
I1	1'-4" X 2'-0"	AWNING	V.I.F.	.30		2.7
J1	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J2	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
J3	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J4	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J5	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J6	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
J7	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
J8	3'-6" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
K1	1'-9" X 3'-10"	CASEMENT	7"	.30	TEMPERED GLASS	6.7
L1	5'-0" X 5'-10"	(2)2' H FIXED OVER (2) 3'-10" H CSMTS	7"	.30		29.2

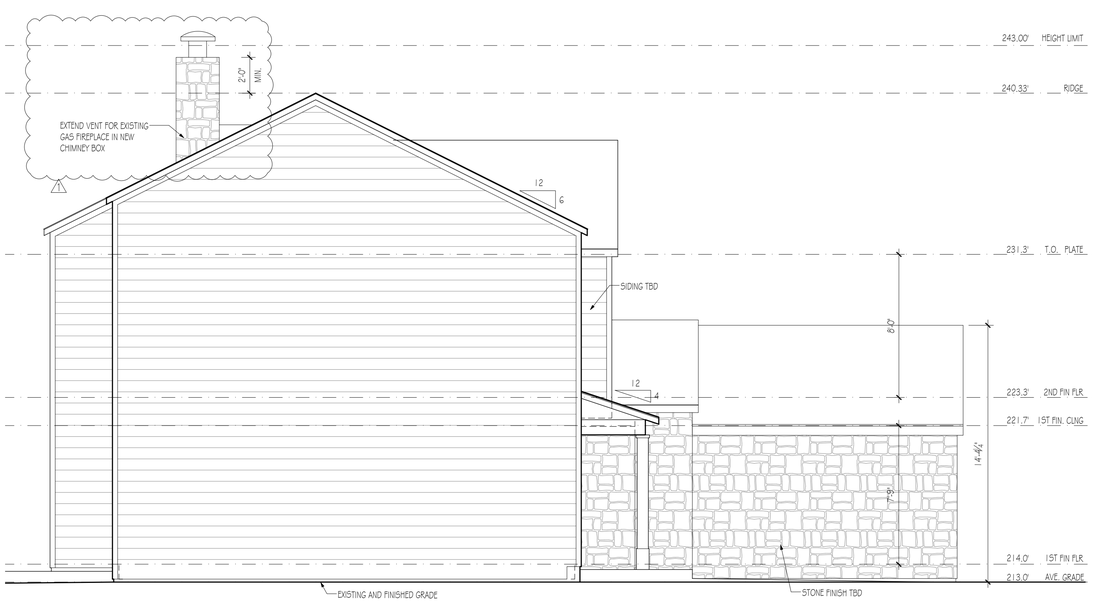
NOTE: VERIFY ALL SIZES IN FIELD
MANUFACTURER TO BE DETERMINED
WOOD CLAD OR FIBERGLASS UNITS
WIARGON FILLED LOW E DOUBLE GLAZING TO BE U VALUE .30 OR BETTER



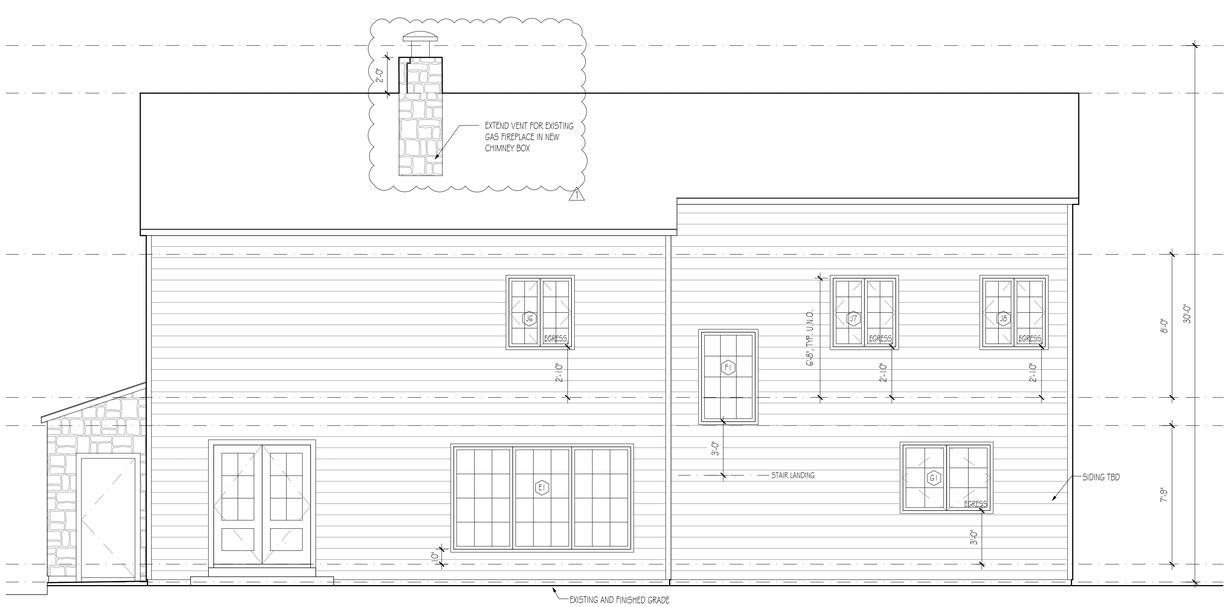
North Elevation
Scale: 1/4" = 1'-0"



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



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



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

Lavergne Addition
Proposed 2nd Floor and Roof Plan

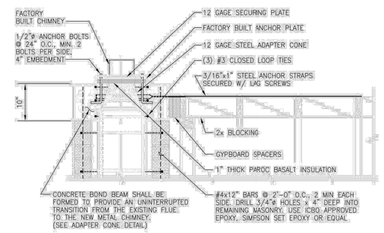
4139 97th Ave SE
Mercer Island, WA 98040

Permit	9.5.25
REV 1	1.15.26

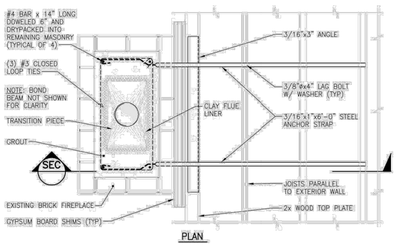
Shelly Johnson
206.465.7221

A4

City of Seattle
Department of Planning and Development



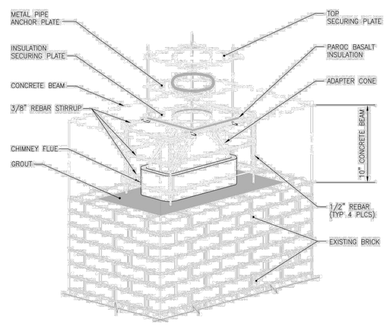
SEC SECTION AT BOND BEAM



PLAN

ATTACHMENT D
TRANSITION FROM MASONRY FIREPLACE TO METAL CHIMNEY

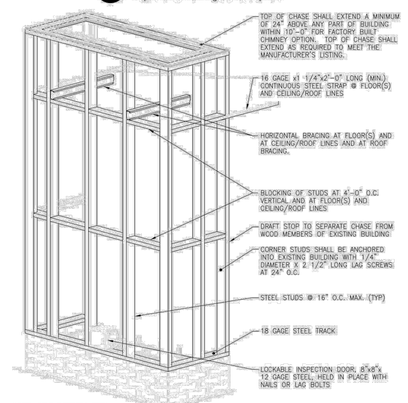
City of Seattle
Department of Planning and Development



NOTE:
REFER TO DETAIL A1 FOR ADDITIONAL INSTALLATION REQUIREMENTS.

ATTACHMENT E
ADAPTER KIT, TRANSITION FROM MASONRY FIREPLACE TO METAL CHIMNEY

City of Seattle
Department of Planning and Development



STEEL STUD SPECIFICATIONS:
- ALL STEEL STUDS SHALL BE EITHER GALVANIZED OR FACTORY PAINTED "C" TYPE GALVANIZED STUDS
- 3 1/2" WIDE x 18 GAGE MINIMUM, Fy = 33 KSI (MIN)

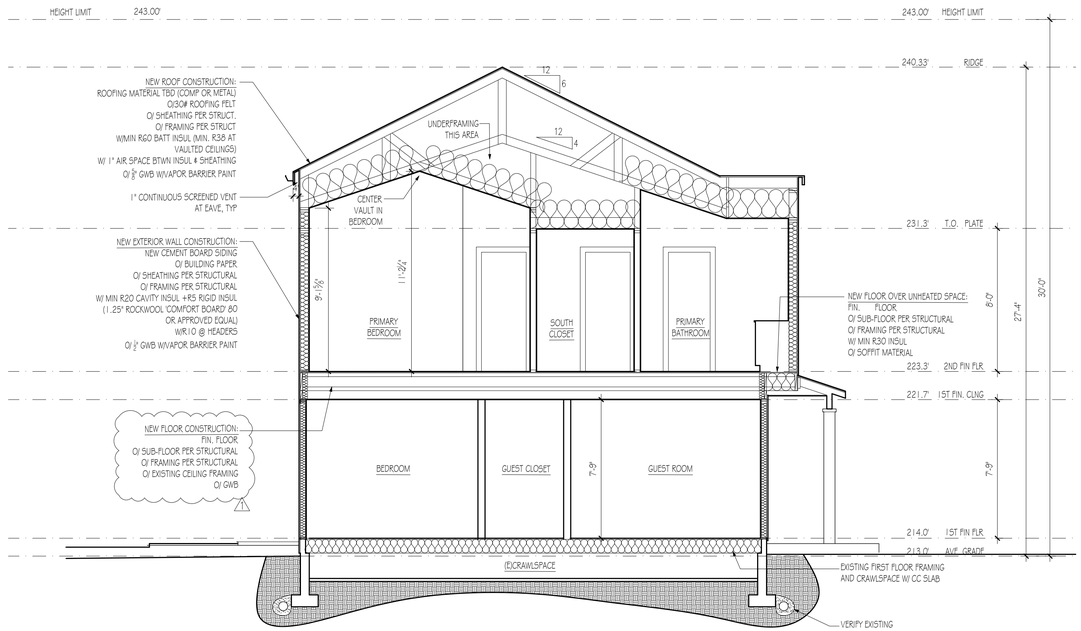
COVERING:
- WOOD STUD CHASE MAY BE COVERED WITH STUCCO OR ADHERED VENEER.

COVERING MATERIAL:
- LATHS FOR STUCCO: NO. 8 x 5/8" SHEET METAL SCREWS AT 6" O.C.
- PLYWOOD: NO. 6 BULGE HEAD SCREWS AT 6" O.C. AT CHASE AND 12" O.C. AT INTERIOR EDGES AND FIELDS.

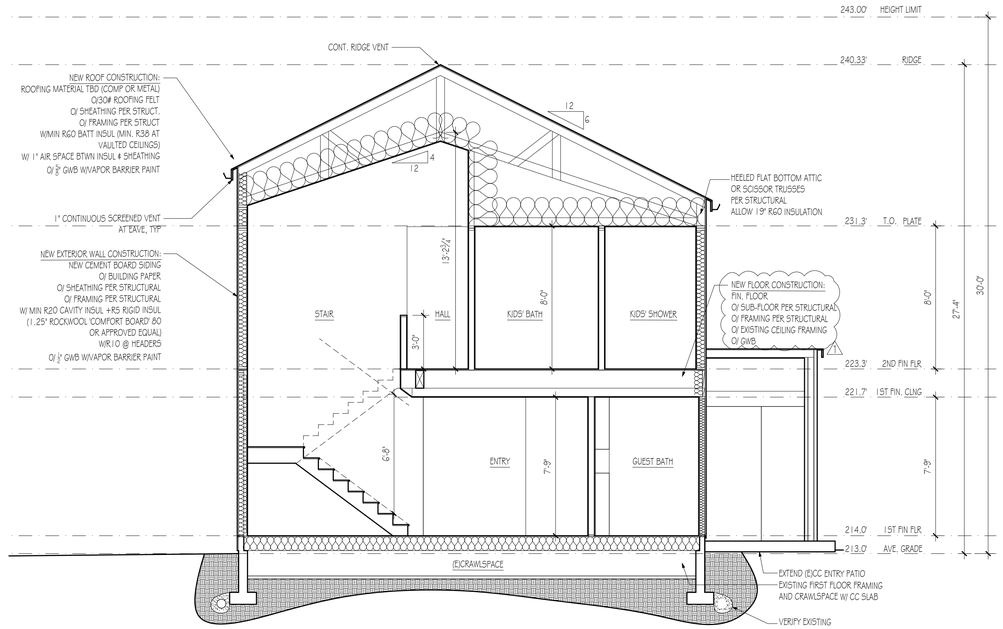
NOTE:
ADHERED VENEER SHALL BE A MAXIMUM OF 1" THICK WITH PLYWOOD BACKING (3/8" MINIMUM) AND SHALL BE INSTALLED PER UBC CHAPTER 14 AND MANUFACTURER'S LISTING.

ATTACHMENT F
STEEL STUD CHASE

Transition from Masonry Fireplace to Metal Chimney
No Scale



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



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

Lavergne Addition
Building Sections

4139 97th Ave SE
Mercer Island, WA 98040

Permit	9.5.25
REV 1	1.15.26

Shelly Johnson
206.465.7221

A5

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2021 EDITION).

2. DESIGN LOADING CRITERIA:
   FLOOR LIVE LOAD . . . . . 40 PSF
   ROOF LIVE LOAD . . . . . 25 PSF
   LIVE LOAD DEFLECTION L/360
   TOTAL LOAD DEFLECTION L/240
   RISK CATEGORY II
   SNOW . . Ce=1.0, Is=1.0, Ct=1.1, Cs=1.0, Pg=25 PSF, Pf=25 PSF, Ps=25 PSF
   WIND . . . . . GCpi=0.18, 100 MPH, EXPOSURE "C"
   EARTHQUAKE:
   ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
   LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS
   SITE CLASS=D (DEFAULT), Ss=1.41, Sds=1.13, S1=0.49,
   Sd1=0.89, Cs=0.173, SDC D, Ie=1.0, R=6.5

   SEE PLANS FOR ADDITIONAL LOADING CRITERIA

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.

4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".

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

8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.

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

10. SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

    CONNECTOR PLATE WOOD ROOF TRUSSES
    MANUFACTURED LUMBER (PSL'S, LSL'S, LVL'S)
    PLYWOOD WEB JOISTS

11. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

    SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

QUALITY ASSURANCE

12. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.

    EXPANSION BOLTS AND THREADED EXPANSION INSERTS — PER MANUFACTURER
    EPOXY GROUTED INSTALLATIONS — PER MANUFACTURER

    PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.

    CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.

GEOTECHNICAL

13. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

    FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

    BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

    ALLOWABLE SOIL PRESSURE. . . . . 1500 PSF

RENOVATION

14. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.

15. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.

16. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED.
    A. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE. CORNERS SHALL NOT BE OVERCUT.
    B. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
    C. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING.
    D. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, DRILL AND EPOXY DOWELS MATCHING THE NEW REINFORCING INTO THE EXISTING CONCRETE WITH 6" EMBED, UNLESS OTHERWISE NOTED ON PLANS.

17. CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL AREAS OF NEW WORK. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

CONCRETE

18. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS f'c = 2,500 PSI.

19. ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-19, TABLE 19.3.2.1 MODERATE EXPOSURE, F1.

20. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, FY = 40,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, FY = 60,000 PSI.

21. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315R-18 AND 318-19. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-19, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

    NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.

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

    FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . . 3"
    FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) . . . . 2"
    FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER). . 1-1/2"
    COLUMN TIES OR SPIRALS AND BEAM STIRRUPS. . . . . 1-1/2"
    SLABS AND WALLS (INT. FACE). . . GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

23. CONCRETE WALL REINFORCING--PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

6" WALLS	#4 @ 16 HORIZ.	#4 @ 18 VERTICAL	1 CURTAIN
8" WALLS	#4 @ 12 HORIZ.	#4 @ 18 VERTICAL	1 CURTAIN
10" WALLS	#4 @ 18 HORIZ.	#4 @ 18 VERTICAL	2 CURTAINS
12" WALLS	#4 @ 16 HORIZ.	#4 @ 18 VERTICAL	2 CURTAINS

24. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.

ANCHORAGE

25. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037 FOR CONCRETE AND IAPMO ER-240 FO MASONRY, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR LOCATION, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.

26. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) INTO CONCRETE SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-3G" HIGH STRENGTH EPOXY AS MANUFACTURED BY THE SIMPSON STRONG, TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-4057. MINIMUM BASE MATERIAL TEMPERATURE IS 40 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.

27. CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREW ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

WOOD

28. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD No. 17, GRADING RULES FOR WEST COAST LUMBER, 2018, OR WWPA STANDARD, WESTERN LUMBER GRADING RULES 2021. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS AND BEAMS	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1000 PSI
BEAMS	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1350 PSI
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI
STUDS, PLATES & MISC. FRAMING:		DOUGLAS FIR-LARCH NO. 2 OR HEM-FIR NO. 2

29. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.0E WS)	Fb = 2900 PSI,	E = 2000 KSI,	Fv = 290 PSI
LVL (2.0E-2600FB WS)	Fb = 2600 PSI,	E = 2000 KSI,	Fv = 285 PSI
LSL (1.55E)	Fb = 2325 PSI,	E = 1550 KSI,	Fv = 310 PSI

ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

30. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION, IN ACCORDANCE WITH ICC-ES REPORT ESR-1153. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

31. PREFABRICATED CONNECTOR PLATE WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI-1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:

	TYP ROOF	ATTIC ROOF
TOP CHORD SNOW/LIVE LOAD	25 PSF	25 PSF
TOP CHORD DEAD LOAD	10 PSF	10 PSF
BOTTOM CHORD DEAD LOAD	5 PSF	10 PSF
BOTTOM CHORD LIVE LOAD		20 PSF
TOTAL LOAD	40 PSF	65 PSF
WIND UPLIFT (TOP CHORD)	5 PSF	5 PSF
BOTTOM CHORD LIVE LOAD (BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF OR FLOOR LIVE LOAD)	10 PSF	

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (MITEK OR EQUAL). SUBMIT SHOP DRAWINGS INCLUDING TRUSS PLACEMENT DIAGRAM AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS.

TEMPORARY AND PERMANENT RESTRAINT/BRACING SHALL BE IN ACCORDANCE WITH BCSI-B3 AND BCSI-B7.

TEMPORARY AND PERMANENT RESTRAINT/BRACING SHALL BE A PROJECT SPECIFIC DESIGN PER 2.3.3.1.3 OF ANSI/TPI-1 AND SHALL BE PREPARED BY AN INDEPENDENT REGISTERED DESIGN PROFESSIONAL LICENSED IN THE STATE OF WASHINGTON. RESTRAINT/BRACING DESIGN SHALL BE A DEFERRED SUBMITTAL.

32. PLYWOOD SHEATHING SHALL BE EXPOSURE 1, PANEL GRADE C-D, AND EITHER SHEATHING, SINGLE-FLOOR, OR STRUCTURAL I GRADE IN CONFORMANCE WITH DOC PS 1 AND PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

33. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

34. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1-20 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

35. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

WOOD TREATMENT	CONDITION	PROTECTION
HAS NO AMMONIA CARRIER	INTERIOR DRY	G90 GALVANIZED
CONTAINS AMMONIA CARRIER	INTERIOR DRY	G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653
CONTAINS AMMONIA CARRIER	INTERIOR WET	TYPE 304 OR 316 STAINLESS
CONTAINS AMMONIA CARRIER	EXTERIOR	TYPE 304 OR 316 STAINLESS
AZCA	ANY	TYPE 304 OR 316 STAINLESS

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

36. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2021. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "ITS" SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

37. WOOD FASTENERS
    A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d BOX	3-1/2"	0.135"

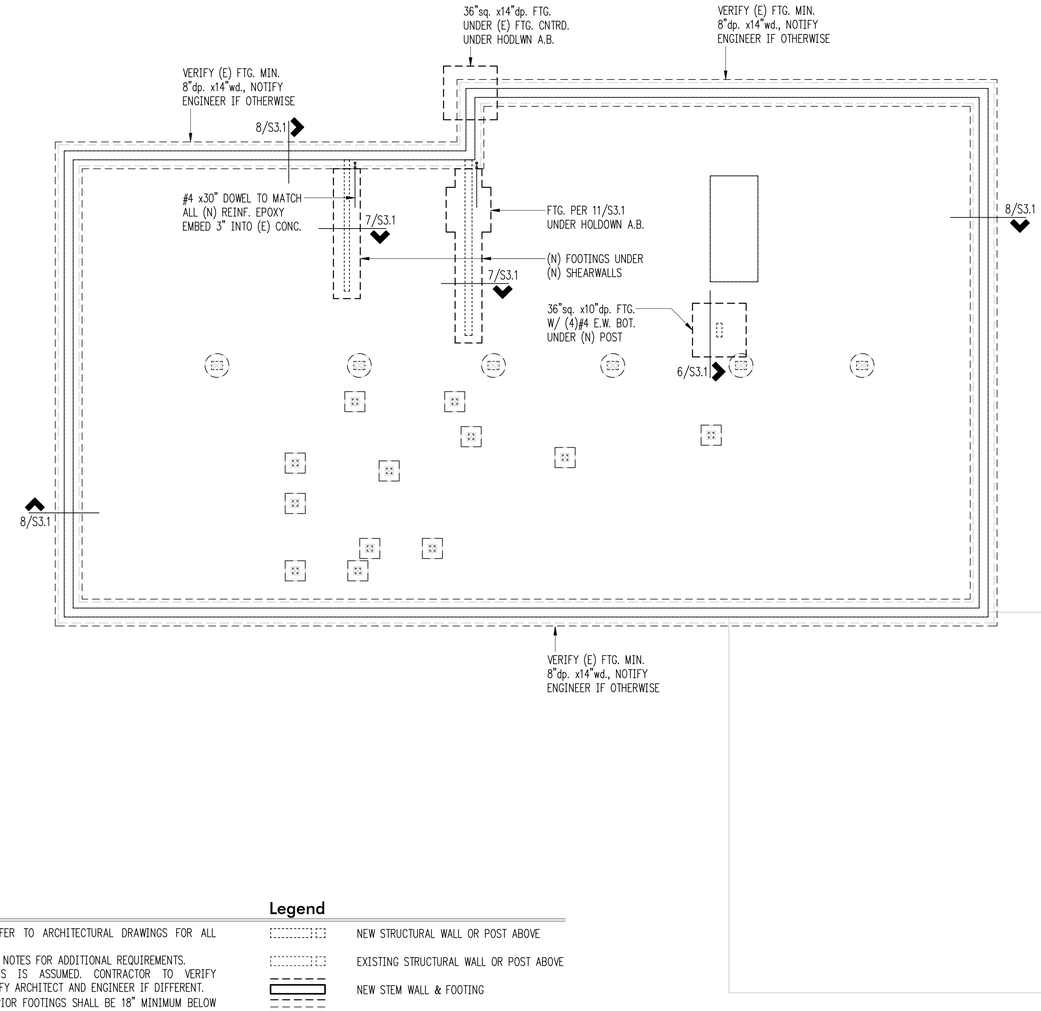
    IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

    NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

    B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

38. NOTCHES AND HOLES IN WOOD FRAMING:
    A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.
    B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.
    C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

39. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:
    A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTH



Plan Notes

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2. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
3. EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
4. THE BOTTOM OF ALL NEW EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW EXTERIOR GRADE.
5. ALL NEW POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.

Legend

- NEW STRUCTURAL WALL OR POST ABOVE
- EXISTING STRUCTURAL WALL OR POST ABOVE
- NEW STEM WALL & FOOTING
- EXISTING STEM WALL & FOOTING

Foundation Plan

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

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BRENT D. MOZDEN — STATE OF WASHINGTON — 43561 — REGISTERED PROFESSIONAL ENGINEER

DESIGN: BDM
DRAWN: NHD
CHECKED: BDM
APPROVED: BDM

REVISIONS:

1	Permit Corrections	Jan. 9, 2026

DPD:

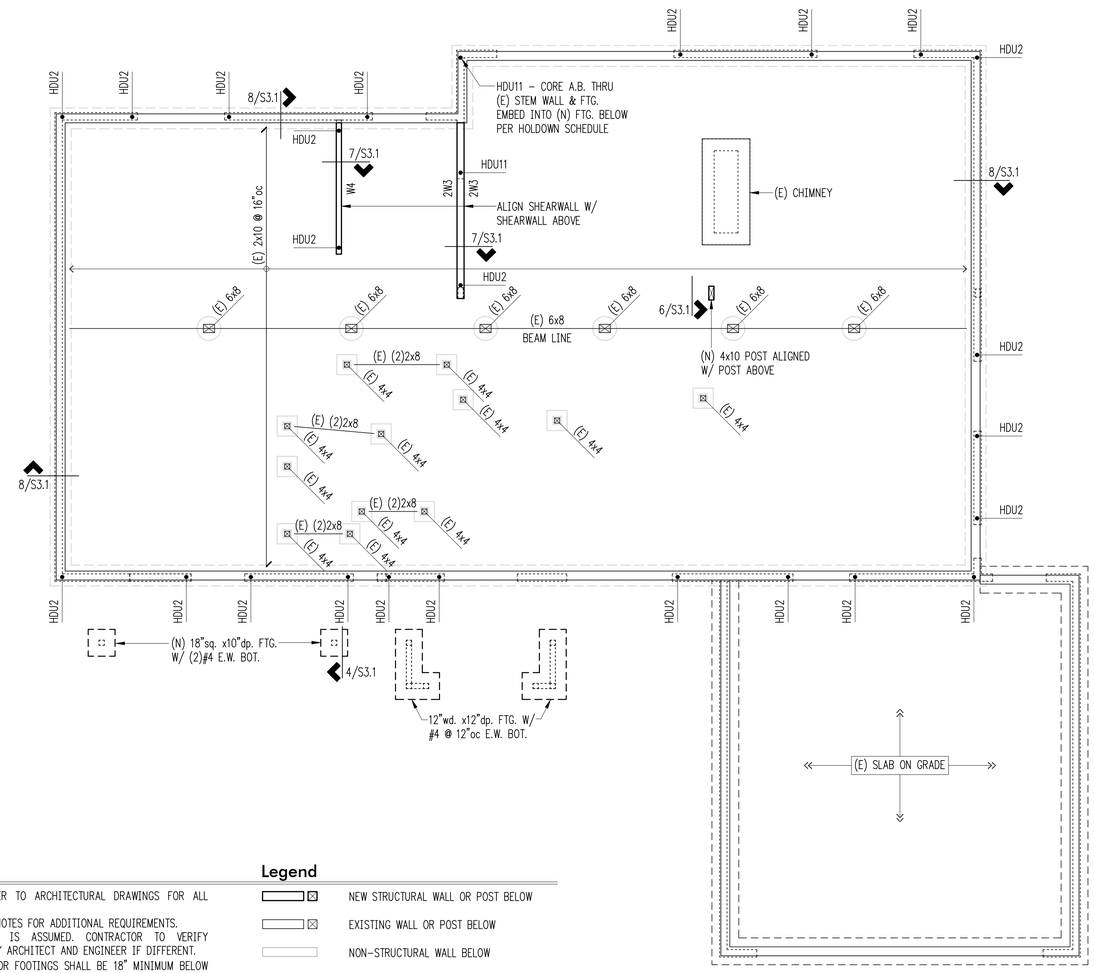
PROJECT TITLE:
Lavergne Addition
4139 97th Ave SE
Mercer Island, WA 98040

ARCHITECT:

ISSUE:
PERMIT

SHEET TITLE:
Foundation Plan

SCALE: 1/4" = 1'-0" U.N.O.
DATE: July 3, 2025
PROJECT NO: 13590-2025-01
SHEET NO:
S2.1



Plan Notes

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5. ALL NEW POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
6. PROVIDE AC, ACE, PC, EPC, LPC, OR LCE COLUMN CAP AND BASE AT ALL NEW BEAM TO COLUMN CONNECTIONS U.O.N.
7. PROVIDE (2) BEARING STUDS AT EACH END OF ALL GIRDER TRUSSES, HEADERS AND BEAMS OVER 3'–0" IN LENGTH, U.O.N.

Legend

- NEW STRUCTURAL WALL OR POST BELOW
- EXISTING WALL OR POST BELOW
- NON–STRUCTURAL WALL BELOW
- NEW STRUCTURAL WALL OR POST ABOVE
- EXISTING STRUCTURAL WALL OR POST ABOVE
- NEW STEM WALL & FOOTING
- EXISTING STEM WALL & FOOTING
- Wx — SHEARWALL PER 4/S4.1
- SPAN DIRECTION
- EXTENT OF JOISTS
- NEW HEADER/BEAM PER PLAN
- EXISTING HEADER/BEAM
- HANGER
- HDUx — HOLDOWN PER 11 OR 12/S3.1

First Floor Framing Plan

Scale: 1/4" = 1'–0"

SSF STRUCTURAL ENGINEERING

SEATTLE
2124 Third Avenue, Suite 100
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DESIGN: BDM
DRAWN: NHD
CHECKED: BDM
APPROVED: BDM

REVISIONS:

1	Permit Corrections	Jan. 9, 2026

DPD:

PROJECT TITLE:

Lavergne Addition

4139 97th Ave SE
Mercer Island, WA 98040

ARCHITECT:

ISSUE:

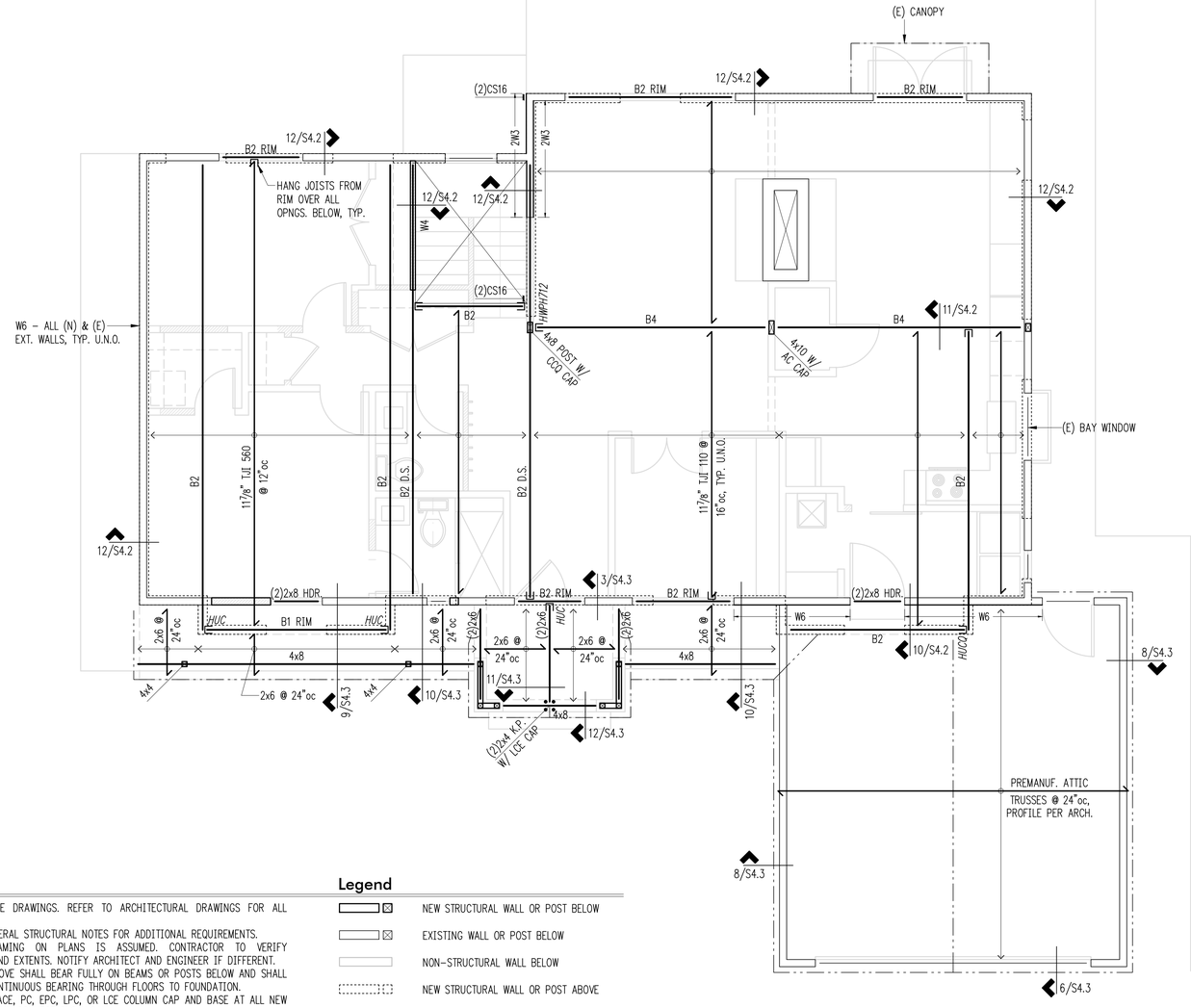
PERMIT

SHEET TITLE:

First Floor Framing Plan

SCALE: 1/4" = 1'–0" U.N.O.
DATE: July 3, 2025
PROJECT NO: 13590-2025-01
SHEET NO:

S2.2



Plan Notes

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2. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
3. EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
4. ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
5. PROVIDE AC, ACE, PC, EPC, LPC, OR LCE COLUMN CAP AND BASE AT ALL NEW BEAM TO COLUMN CONNECTIONS U.O.N.
6. MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%.
7. TYPICAL FLOOR FRAMING CONSISTS OF FLOORING PER ARCHITECT OVER 3/4" T&G APA RATED PLYWOOD FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.O.N.
8. NAIL FLOOR SHEATHING W/ 8D AT 6" OC AT FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12" OC IN FIELD.
9. PROVIDE BLOCKING/BRIDGING AT 8'-0" O.C. IN FLOOR FRAMING
10. TYPICAL ROOF FRAMING CONSISTS OF ROOFING PER ARCHITECTURAL DRAWINGS OVER 1/2" CDX APA RATED SHEATHING (EXPOSURE 1), FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.O.N.
11. NAIL ROOF SHEATHING WITH 8D AT 6" O.C. AT ALL FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12"O.C. FIELD.
12. PROVIDE H1 AT ENDS OF ALL NEW TRUSSES/RAFTERS, U.O.N.
13. "W_" INDICATES PLYWOOD SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE FOR WALL ATTACHMENTS. ALL EXTERIOR WOOD FRAMED WALLS ARE W6, U.O.N.
14. PROVIDE (2) BEARING STUDS AT EACH END OF ALL HEADERS AND BEAMS OVER 3'-0" IN LENGTH, U.O.N.

Legend

	NEW STRUCTURAL WALL OR POST BELOW
	EXISTING WALL OR POST BELOW
	NON-STRUCTURAL WALL BELOW
	NEW STRUCTURAL WALL OR POST ABOVE
	EXISTING STRUCTURAL WALL OR POST ABOVE
Wx	SHEARWALL PER 4/S4.1
	SPAN DIRECTION
	EXTENT OF JOISTS
	NEW HEADER/BEAM PER PLAN
	EXISTING HEADER/BEAM
	HANGER
Bx	BEAM PER SCHEDULE, THIS SHEET
D.S.	DRAG STRUT/COLLECTOR: NAIL W/ 8d @ 3"oc THRU SHEATHING
CSxx	HOLDOWN STRAP PER 10/S4.1

Beam Schedule

MARK	BEAM	HANGER	BRG. STUDS
B1	LSL 1 3/4x11 7/8	HU11	2
B2	LSL 3 1/2x11 7/8	HHUS410	3
B3	(3)LVL 1 3/4x11 7/8	HGUS5.50/12	4
B4	(4)LVL 1 3/4x11 7/8	HGUS7.25/12	5
B5	(5)LVL 1 3/4x11 7/8	HGU9.00	6

Second Floor Framing Plan

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

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BRETT D. MOLDEN — STATE OF WASHINGTON — 43561 — REGISTERED PROFESSIONAL ENGINEER

DESIGN: BDM
DRAWN: NHD
CHECKED: BDM
APPROVED: BDM

REVISIONS:

1	Permit Corrections	Jan. 9, 2026

DPD:

PROJECT TITLE:

Lavergne Addition

4139 97th Ave SE
Mercer Island, WA 98040

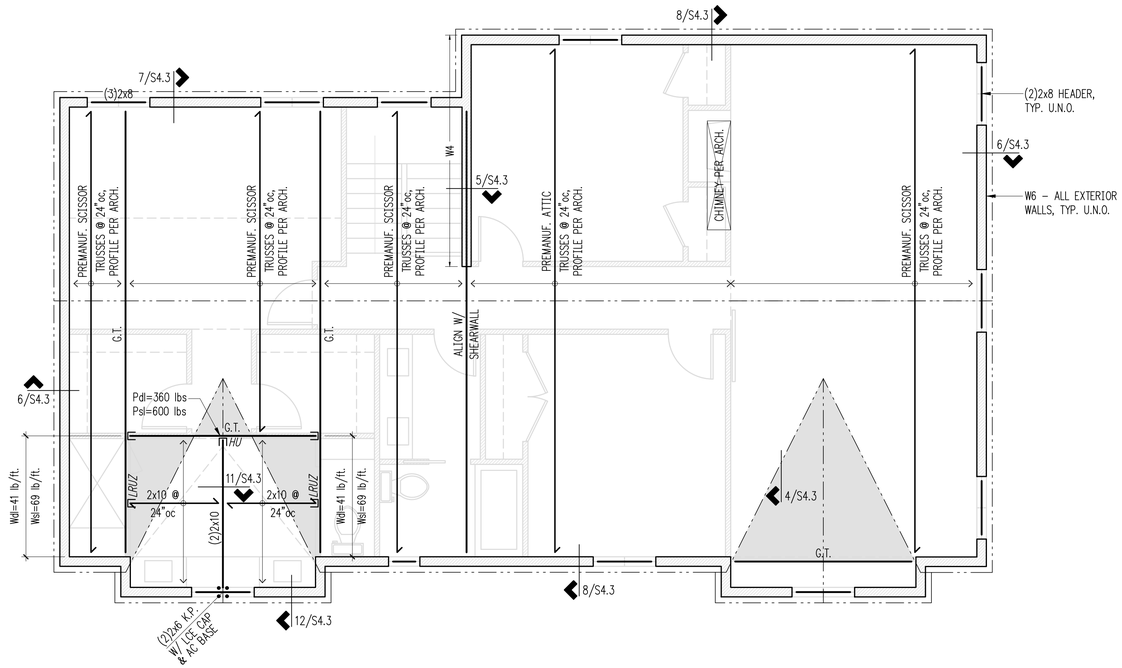
ARCHITECT:

ISSUE: PERMIT

SHEET TITLE: Second Floor Framing Plan

SCALE: 1/4" = 1'-0" U.N.O.
DATE: July 3, 2025
PROJECT NO: 13590-2025-01

SHEET NO: S2.3



Plan Notes

1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
3. ALL POSTS SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
4. PROVIDE AC, ACE, PC, EPC, LPC, OR LCE COLUMN CAP AND BASE AT ALL BEAM TO COLUMN CONNECTIONS U.O.N.
5. MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%.
6. TYPICAL ROOF FRAMING CONSISTS OF ROOFING PER ARCHITECTURAL DRAWINGS OVER 1/2" CDX APA RATED SHEATHING (EXPOSURE 1), FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.O.N.
7. NAIL ROOF SHEATHING WITH 8D AT 6" O.C. AT ALL FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12"O.C. FIELD.
8. PROVIDE H1 AT ENDS OF ALL NEW TRUSSES/RAFTERS, U.O.N.
9. "W_" INDICATES PLYWOOD SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE FOR WALL ATTACHMENTS. ALL EXTERIOR WOOD FRAMED WALLS ARE W6, U.O.N.
10. PROVIDE (2) BEARING STUDS AT EACH END OF ALL GIRDER TRUSSES, HEADERS AND BEAMS OVER 3'-0" IN LENGTH, U.O.N.

Legend

- NEW STRUCTURAL WALL OR POST BELOW
- NON-STRUCTURAL WALL BELOW
- Wx — SHEARWALL PER 4/S4.1
- SPAN DIRECTION
- EXTENT OF JOISTS
- NEW HEADER/BEAM PER PLAN
- HANGER
- OVERFRAME W/ 2x6 @ 24"oc. POST DOWN TO FRAMING BELOW AS NECESSARY @ 6'-0"oc MAX.

Roof Framing Plan

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

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BRETT D. MOZDEN — STATE OF WASHINGTON — 43561 — REGISTERED PROFESSIONAL ENGINEER

DESIGN: BDM
DRAWN: NHD
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REVISIONS:

1	Permit Corrections	Jan. 9, 2026

DPD:

PROJECT TITLE:
Lavergne Addition
4139 97th Ave SE
Mercer Island, WA 98040

ARCHITECT:

ISSUE:
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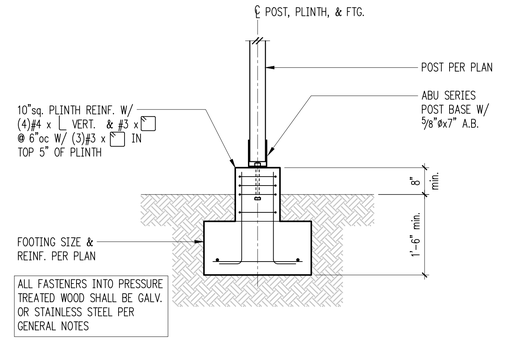
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Roof Framing Plan

SCALE: 1/4" = 1'-0" U.N.O.
DATE: July 3, 2025
PROJECT NO: 13590-2025-01
SHEET NO:
S2.4

1

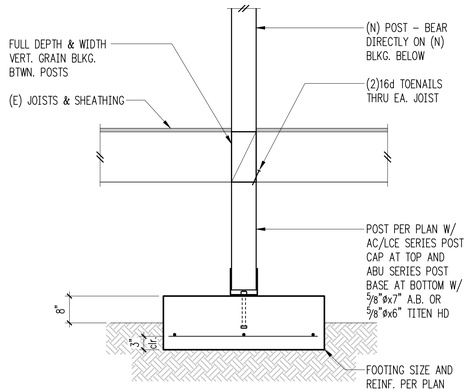
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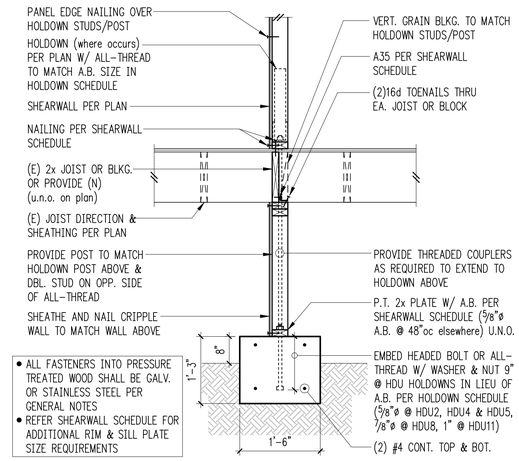


Deck or Canopy Post Footing - Square Plinth 4

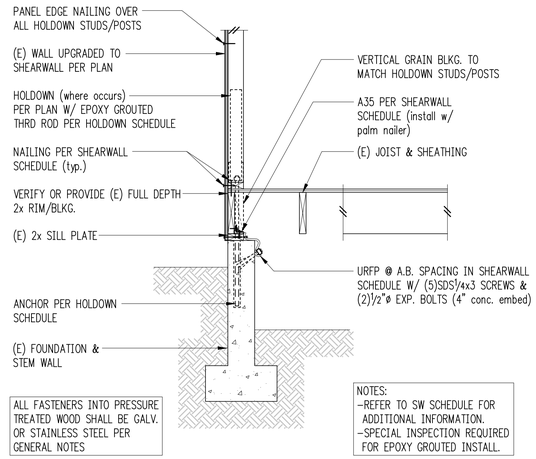
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Post Footing at Crawl Space 6

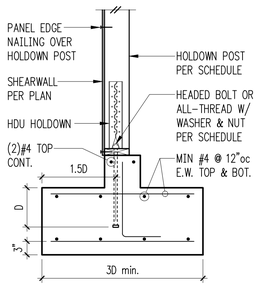


Interior Cripple Wall at Crawl Space 7

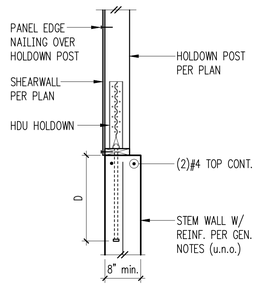


Existing Framing at Crawl Space 8

9



HDU Into Footing Option



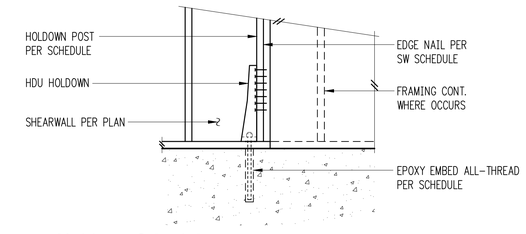
HDU Into Stem Wall Option

Holdown Schedule

Plan Mark	Screws	Anchor Bolt	Min. A.B. Embed (D)		Holdown Post ①	
			Stem Wall	Footing	if 2x4	if 2x6
HDU2-SDS2.5	(6)SDS ¼"x2½"	5/8"ø	12"	4"	(2) 2x4	(2) 2x6
HDU4-SDS2.5	(10)SDS ¼"x2½"	5/8"ø	18"	6"	4x4	4x6
HDU5-SDS2.5	(14)SDS ¼"x2½"	5/8"ø	SB5/8x24	7"	4x4	4x6
HDU8-SDS2.5	(20)SDS ¼"x2½"	7/8"ø	SSTB28	8"	4x6	6x6
HDU11-SDS2.5	(30)SDS ¼"x2½"	1"ø	SB1x30	10"	4x8	6x6
HDU14-SDS2.5	(36)SDS ¼"x2½"	1"ø	N/A	12"	4x8	6x6

① MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.

Typical HDU Holdown 11



Holdown Schedule

Plan Mark	Screws	Anchor Bolt	A.B. Embed	Holdown Post ①	
				if 2x4	if 2x6
HDU2-SDS2.5	(6)SDS ¼"x2½"	5/8"ø	12"	(2) 2x4	(2) 2x6

① MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.

Typical HDU Holdown 12

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BRETT D. MOLDEN — STATE OF WASHINGTON — 43561 — REGISTERED PROFESSIONAL ENGINEER

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DRAWN: NHD
CHECKED: BDM
APPROVED: BDM

REVISIONS:

1	Permit Corrections	Jan. 9, 2026

DPD:

PROJECT TITLE:

Lavergne Addition

4139 97th Ave SE
Mercer Island, WA 98040

ARCHITECT:

ISSUE:

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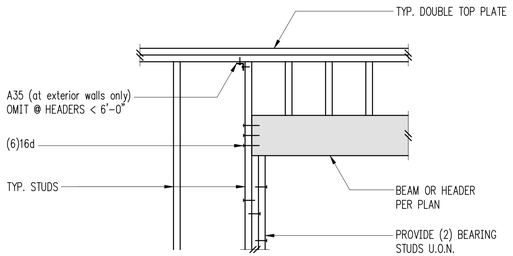
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Foundation Details

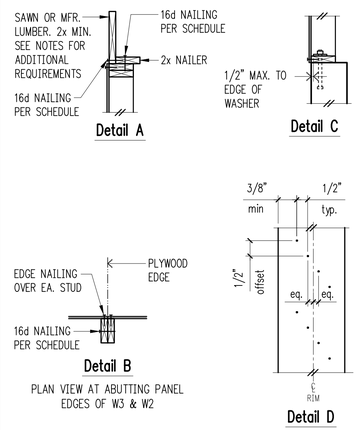
SCALE: 3/4" = 1'-0" U.N.O.
DATE: July 3, 2025
PROJECT NO: 13590-2025-01
SHEET NO:

S3.1

1



Typical Header Support w/2 Bearing Studs 2



Shearwall Schedule ①②③⑥⑦⑧

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection		Base Plate Connection	
			if TJI	if Wood ⑨	at Wood ⑪⑫	at Concrete
W6	15/32" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc ⑩	16d @ 6"oc	5/8"ø A.B. @ 48"oc
W4	15/32" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc ⑩	(2)rows 16d @ 6"oc	5/8"ø A.B. @ 32"oc
W3 ④	15/32" CDX PLYWOOD	8d @ 3"oc	(2)rows 16d @ 4"oc	A35 @ 12"oc ⑩	(2)rows 16d @ 6"oc	5/8"ø A.B. @ 24"oc
W2 ④	15/32" CDX PLYWOOD	8d @ 2"oc	(2)rows 16d @ 4"oc	A35 @ 9"oc ⑩	(2)rows 16d @ 4"oc ⑬	5/8"ø A.B. @ 16"oc
2W3 ⑤	15/32" CDX PLYWD. EA. SIDE	8d @ 3"oc EA. SIDE	n/a	A35 @ 6"oc	(3)rows 16d @ 4"oc ⑭	5/8"ø A.B. @ 16"oc
2W2 ⑤	15/32" CDX PLYWD. EA. SIDE	8d @ 2"oc EA. SIDE	n/a	HGA10KT @ 8"oc	(3)rows 16d @ 4"oc ⑭	5/8"ø A.B. @ 12"oc
2W2-10 ⑤	15/32" CDX PLYWD. EA. SIDE	10d @ 2"oc EA. SIDE	n/a	HGA10KT @ 6"oc	(4)rows 16d @ 4"oc ⑭	5/8"ø A.B. @ 12"oc

① BLOCK PANEL EDGES WITH 2x MIN. LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"o.c.
② 8d NAILS SHALL BE 0.131"ø x 2 1/2" (common) – 16d NAILS SHALL BE 0.135"ø x 3 1/2" (box) – 10d NAILS SHALL BE 0.148"ø x 3" (common).
③ EMBED ANCHOR BOLTS AT LEAST 7". DRILLED AND EPOXIED THREADED ROD MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 6" EMBEDMENT. TITEN HD SCREW ANCHORS MAY BE SUBSTITUTED FOR ANCHOR BOLTS W/ 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" MIN. PLATE WASHERS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. SEE DETAIL C.
④ 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF W3 AND W2. SEE DETAIL B. WHERE 3x STUDS ARE USED FOR W2, STAGGER NAILS AT ADJOINING PANEL EDGES.
⑤ 3x FOUNDATION SILL PLATES ARE REQUIRED FOR 2W3 AND 2W2. 3x STUDS ARE REQUIRED AT ABUTTING PANEL EDGES AND PANEL JOINTS SHALL BE OFFSET EACH SIDE OF WALL. STAGGER NAILS AT ADJOINING PANEL EDGES. 3x STUD, MIN., REQUIRED AT END OF SHEARWALL.
⑥ TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SINGLE-SIDED SHEARWALLS. ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
⑦ ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
⑧ 7/16" O.S.B. MAY BE SUBSTITUTED FOR 15/32" CDX, EXCEPT AT 10d PANEL EDGE NAILING.
⑨ LTP4's (HORIZONTAL ORIENTATION) W/ 8d COMMON MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
⑩ A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
⑪ AT MULTI-ROW NAILING, MINIMUM OFFSET BETWEEN ROWS AND ROW SPACING 1/2", SEE DETAIL D.
⑫ LVL RIMS PERMITTED AT SINGLE SIDED SHEAR WALLS ONLY.
⑬ PROVIDE (3) ROWS 16d @ 6"oc AT LVL RIMS.
⑭ MINIMUM RIM OR JOIST 3 1/2" WIDE BELOW SHEARWALL.

Shearwall Schedule 4

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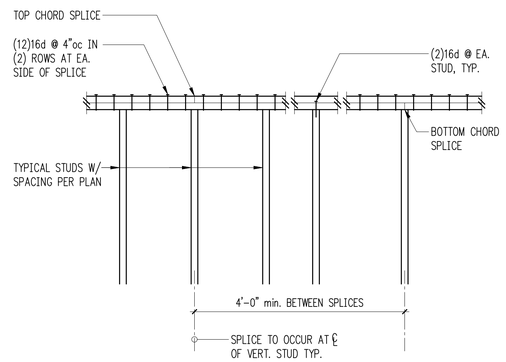


DESIGN: BDM
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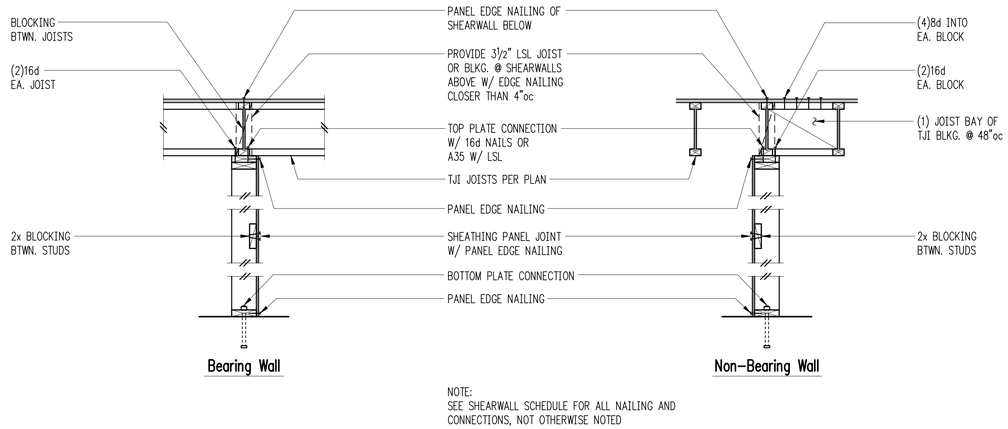
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1 Permit Corrections Jan. 9, 2026

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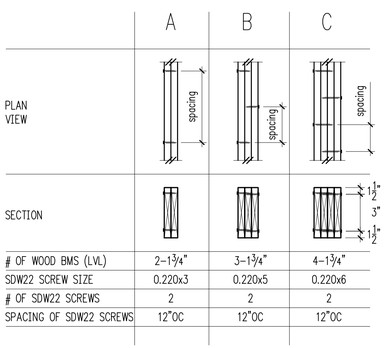


Typical Top Plate Splice 6



NOTE:
SEE SHEARWALL SCHEDULE FOR ALL NAILING AND CONNECTIONS, NOT OTHERWISE NOTED

Typical Shearwall Construction 8

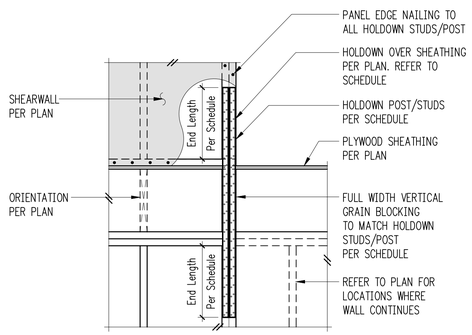


	A	B	C
PLAN VIEW	spacing	spacing	spacing
SECTION			1 1/2" 3" 1 1/2"
# OF WOOD BMS (LVL)	2-1 3/4"	3-1 3/4"	4-1 3/4"
SDW22 SCREW SIZE	0.220x3	0.220x5	0.220x6
# OF SDW22 SCREWS	2	2	2
SPACING OF SDW22 SCREWS	12"OC	12"OC	12"OC

NOTES:
– MIN. SCREW END DISTANCE = 6"

NOTE: MAY USE SDS 1/4" @ CONTRACTORS OPTION

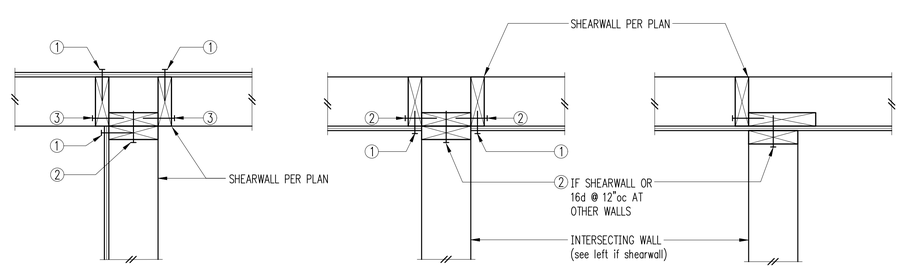
Sistering Schedule for Multi Beams (SDWS) 9



Holdown Strap Schedule

Plan Mark	End Length	#Nails Ea. End Length	Holdown Studs/Post	
			if 2x4	if 2x6
CS16	1'-2"	(13) 8d	(1) 2x4	(1) 2x6
CMST14	2'-6"	(33) 10d	4x6	4x6
CMST12	3'-3"	(43) 10d	4x8	6x6

Typical Holdown Schedule 10



① PLYWOOD PANEL EDGE NAILING PER SHEARWALL SCHEDULE
② BASE PLATE NAILING PER SHEARWALL SCHEDULE
③ 16d @ 8"oc

Typical Shearwall Intersections 12

PROJECT TITLE:
Lavergne Addition
4139 97th Ave SE
Mercer Island, WA 98040

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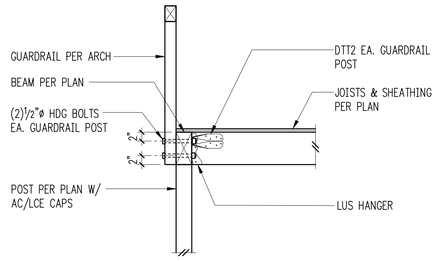
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Typical Wood Framing Details

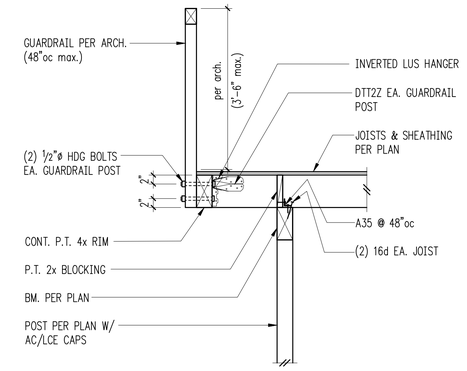
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DATE: July 3, 2025
PROJECT NO: 13590-2025-01
SHEET NO: S4.1

1

2



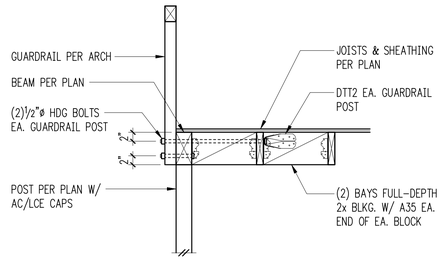
Typical Guardrail Detail 3



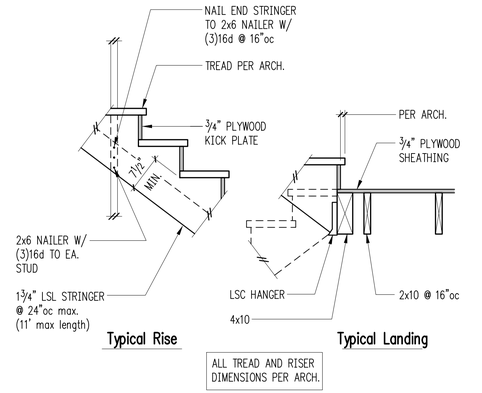
Typical Cantilevered Guardrail Detail 4

5

6

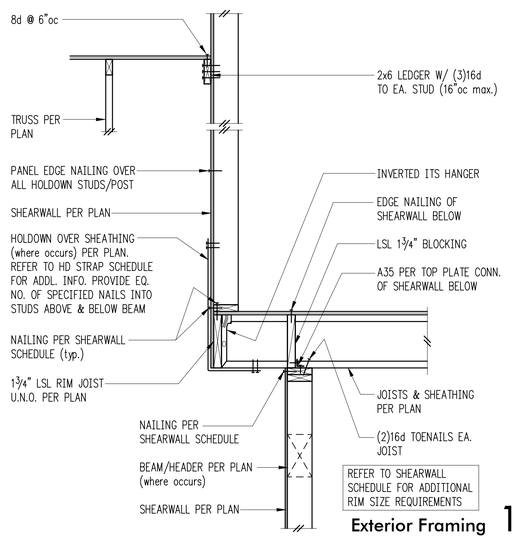


Typical Guardrail Detail 7

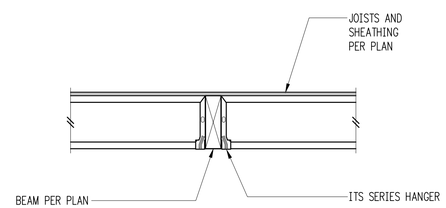


Typical Stair and Landing Detail 8

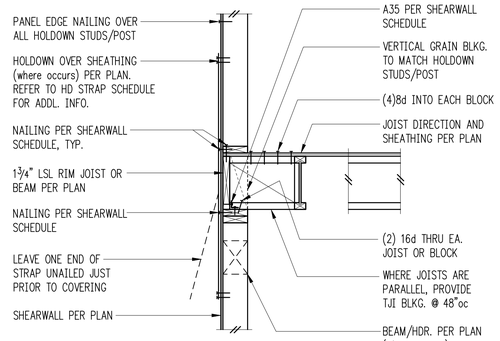
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Exterior Framing 10



Typical Flush Beam 11



- REFER TO SHEARWALL SCHEDULE FOR ADDITIONAL RIM & SILL PLATE SIZE REQUIREMENTS

Exterior Floor Framing 12

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DESIGN: BDM
DRAWN: NHD
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REVISIONS:

1	Permit Corrections	Jan. 9, 2026

DPD:

PROJECT TITLE:

Lavergne Addition

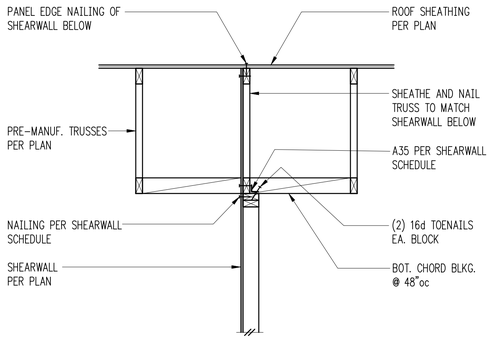
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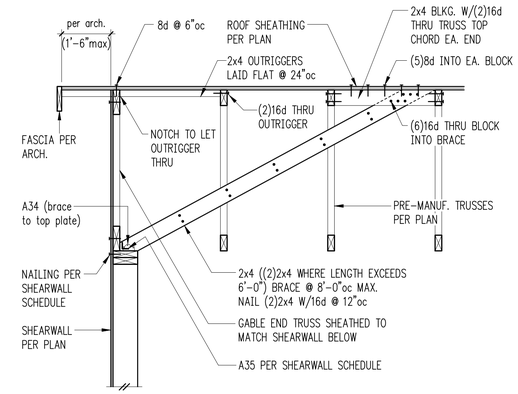
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SHEET TITLE: Wood Framing Details

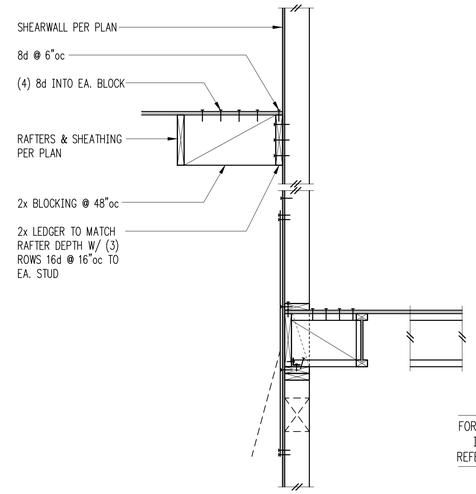
SCALE: 3/4" = 1'-0" U.N.O.
DATE: July 3, 2025
PROJECT NO: 13590-2025-01
SHEET NO: S4.2



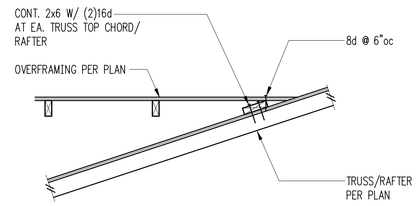
Shearwall Extension Thru Truss Depth (parallel to truss) 5



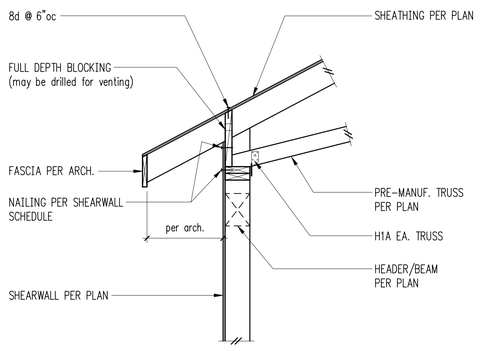
Exterior Non-Bearing Wall 6



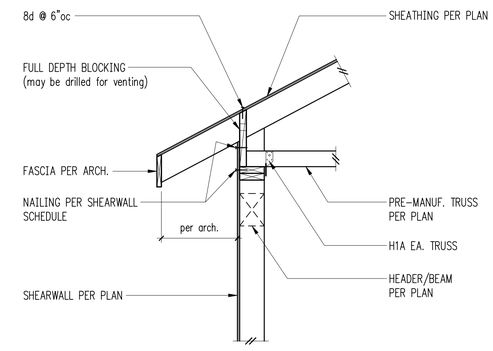
3



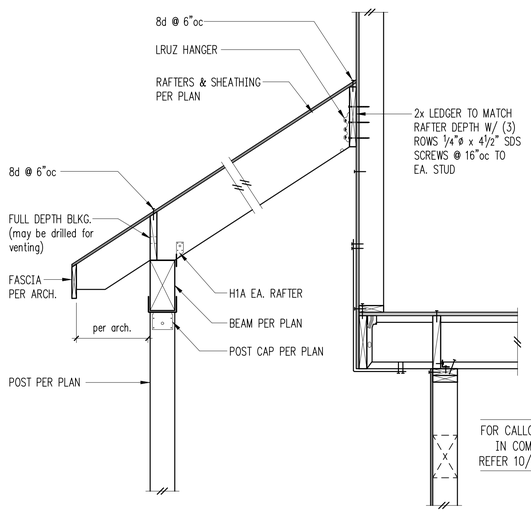
Overframing Connection 4



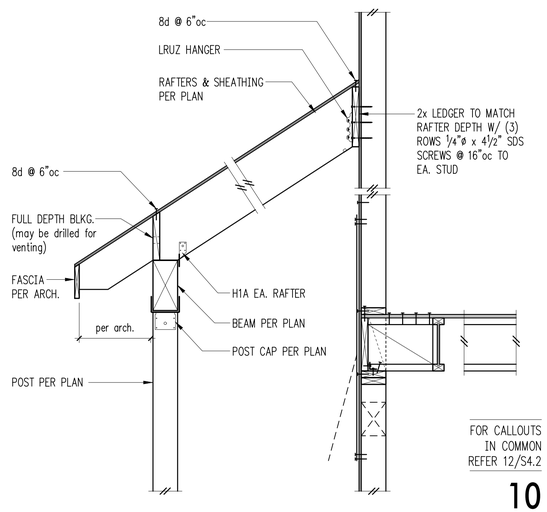
Raised Heel Scissors Trusses Exterior Bearing Wall 7



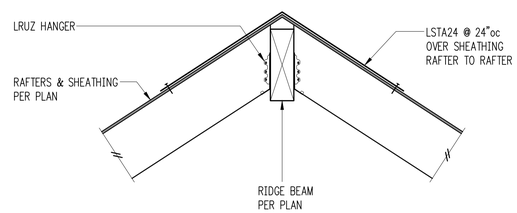
Raised Heel Exterior Bearing Wall 8



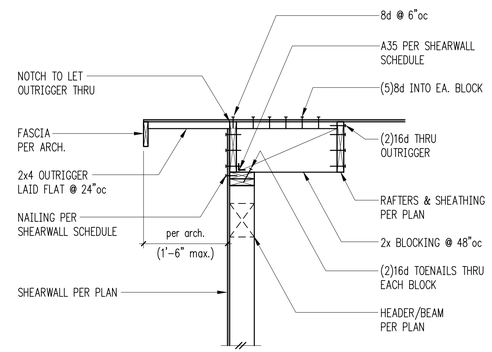
9



10



Ridge Beam w/ LRU Hangers 11



Exterior Non-Bearing Wall 12

STRUCTURAL ENGINEERING

SEATTLE
2124 Third Avenue, Suite 100
Seattle, WA 98121

TACOMA
1818 Tacoma Ave S., Suite 200
Tacoma, WA 98402

CENTRAL WASHINGTON
414 N Pearl Street, Suite 8
Ellensburg, WA 98926

206.443.6212
ssfengineers.com

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BRETT D. MOLDEN — STATE OF WASHINGTON — 43561 — REGISTERED PROFESSIONAL ENGINEER

DESIGN: BDM
DRAWN: NHD
CHECKED: BDM
APPROVED: BDM

REVISIONS:

1	Permit Corrections	Jan. 9, 2026

DPD:

PROJECT TITLE:
Lavergne Addition
4139 97th Ave SE
Mercer Island, WA 98040

ARCHITECT:

ISSUE:
PERMIT

SHEET TITLE:
Wood Framing Details

SCALE: 3/4" = 1'-0" U.N.O.
DATE: July 3, 2025
PROJECT NO: 13590-2025-01
SHEET NO: S4.3

PROJECT OWNER:
BARRETT + KRISTIN LAVERGNE
4139 - 97TH AVE SE
MERCER ISLAND, WA 98040

PROPERTY ADDRESS:
SAME AS ABOVE

PROPERTY TAX ACCOUNT NO.:
545000-0065

LEGAL DESCRIPTION
MERCER WOOD ADD
PLAT BLOCK: H PLAT LOT: 13

LOT SIZE:
8,939 SQ FT

ZONING
R-8.4

PROJECT TEAM:

DESIGN/DRAWINGS:
SHELLY JOHNSON
4807 E MERCER WAY
MERCER ISLAND, WA 98040
TEL: 206.465.7221

GENERAL CONTRACTOR:
ORION HOME RENOVATIONS
28840 108TH AVE SE
AUBURN, WA 98092
LIC NO. #ORIONHR762P4
TEL: 206.650.6052

STRUCTURAL ENGINEER:
BRETT MOZDEN
SSF STRUCTURAL ENGINEERING
2124 THIRD AVE, STE 100
SEATTLE, WA 98121
TEL: 206.443.6212

PROJECT DESCRIPTION
1,499 SQ.FT. SECOND FLOOR ADDITION TO EXISTING 1-STORY SINGLE FAMILY HOME WITH ATTACHED GARAGE. ADDITION TO INCLUDE PRIMARY BEDROOM, BATH AND CLOSET, TWO ADDITIONAL BEDROOMS, FULL BATH AND PLAY ROOM. INTERIOR REMODEL AT EXISTING FIRST FLOOR TO INCLUDE NEW STAIR, RENOVATIONS TO 2 EXISTING BEDROOMS, 2 EXISTING BATHROOMS AND LAUNDRY ROOM.

REQUIRED SETBACKS:
FRONT YARD: 20'-0'
REAR YARD: 25'-0'
SIDE YARDS:
FOR IRREGULARLY SHAPED LOTS, THE LOT WIDTH CIRCLE METHOD IS USED TO DETERMINE LOT WIDTH. SEE DIAGRAM ON SHEET A1 FOR LOT WIDTH CIRCLE METHOD.
LOT WIDTH = 88'-9½" WHICH IS < 90'
FOR LOTS LESS THAN 90' IN WIDTH THE SUM OF THE SIDE YARDS WIDTH SHALL BE NO LESS THAN 15' WITH NEITHTER BEING LESS THAN 5'

GROSS FLOOR AREA
ALLOWABLE GROSS FLOOR AREA = 40% LOT SIZE = 8,939 SQ.FT. X .40 = 3,576 SQ.FT.

	EXISTING FLOOR AREA	PROPOSED ADDITIONS
MAIN FLOOR	1,463	0
GARAGE	435	0
NEW 2ND FLOOR	0	1,499
TOTAL	1,886	1,499

1,886 + 1,499 = 3,385 SQ.FT. OK

LOT SLOPE CALCULATIONS:
HIGH POINT 223.4' (SE PROPERTY CORNER)
LOW POINT 211.5' (NW PROPERTY CORNER)
DISTANCE BETWEEN HIGH AND LOW POINTS = 135.9'
(223.4-211.5)/135.9 = 0.08 OR 8.7% LOT SLOPE

LOT COVERAGE
ALLOWABLE COVERAGE (BUILDING + DRIVING SURFACES) = 40% LOT = 8,939 SQ.FT. X .04 = 3,576 SQ.FT.

PROPOSED BUILDING FOOTPRINT (TO EDGE OF EAVES): 2,128 SQ.FT.
MAIN STRUCTURE ROOF AREA = 2,004 SQ.FT.
FRONT PORCH = 124 SQ.FT.
TOTAL HOUSE = 2,128 SQ.FT.
EX. DRIVEWAY = 411 SQ.FT.
TOTAL PROPOSED LOT COVERAGE = 2,539 SQ.FT. : OK

ALLOWABLE HARDSCAPE COVERAGE = 9% LOT SIZE = 8,939 SQ.FT. X .09 = 805 SQ.FT.
EXIST. UNCOVERED PATIO = 567 SQ.FT.
EXIST. WALKWAYS = 205 SQ.FT.
TOTAL EXISTING HARDSCAPE = 772 SQ.FT.

NEW HARDSCAPE @ FRONT PORCH NOT UNDER ENTRY ROOF = 4.7 SQ.FT.

TOTAL FINAL HARDSCAPE = 772 + 4.7 = 776.7 SQ.FT. OK

ENERGY CODE COMPLIANCE - 2021 WA STATE ENERGY CODE
SMALL DWELLING UNIT - ADDITIONS GREATER THAN 500 SQ.FT. AND LESS THAN 1,500 HEATED SQ FT REQUIRE 5.0 CREDITS

2.0 CREDITS - 5 FOR HEATING SYSTEMS BASED ON ELECTRIC RESISTANCE WITH: 1 INVERTER-DRIVEN DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM INSTALLED INTHE LARGEST ZONE IN THE DWELLING.
1.0 CREDITS - 1.2 EFFICIENT BUILDING ENVELOPE
2.0 CREDITS - 2.3 AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION
1.5 CREDITS - 3.5 HIGH EFFICIENCY HVAC

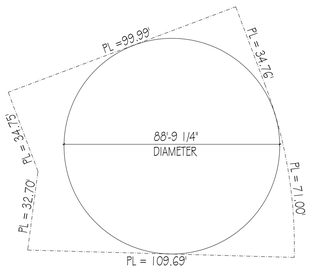
HEIGHT LIMIT
30-0' - SEE SHEET A1 FOR AVERAGE GRADE DIAGRAM + CALCS . SEE SHEET A4 FOR EXTEIOR ELEVATIONS.

ROOF VENTING
NEW SECOND FLOOR ROOF AREA TO BE VENTED W/CONTINUOUS RIDGE VENT + EAVE VENTS
ROOF AREA= 1,460 SQFT/150 = 9.7 SF = 1,401 SQ.IN.NFVA REQ
RIDGE VENT PROVIDES 18 SQIN/FT NFVA FOR 51.75'
EAVE VENT PROVIDES 12 SQIN/FT NFVA FOR 88.5'
18(51.75)+12(88.5) = 931.5 SQ.IN. + 1,062 SQ.IN. = 1,993.5 SQ.IN. = OK

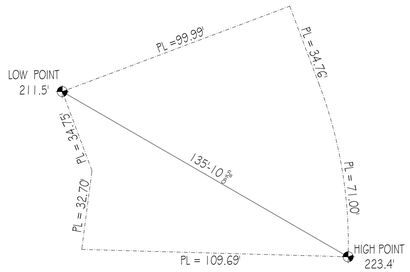
FIRE CODE COMPLIANCE
NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND CoMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

DRAWING INDEX

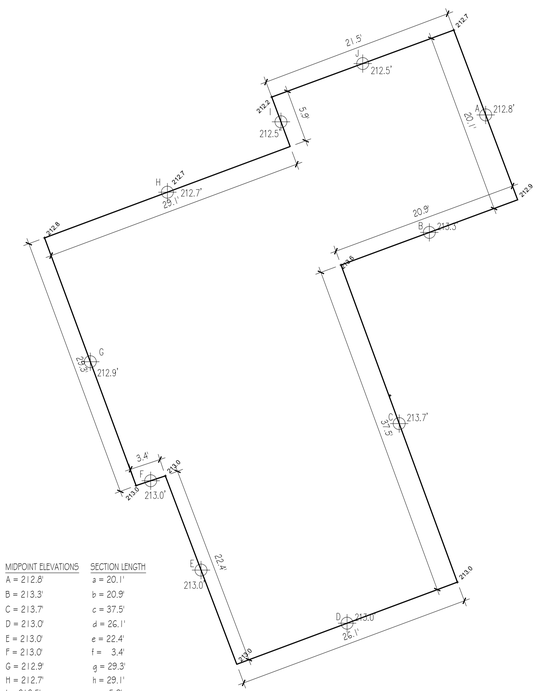
	TOPOGRAPHICAL SURVEY
A1	PROJECT INFORMATION, SITE PLAN, AVERAGE GRADE CALCS
A2	FIRST FLOOR DEMO PLAN, FIRST FLOOR PROPOSED PLAN
A3	SECOND FLOOR PLAN, ROOF PLAN
A4	ELEVATIONS, WINDOW SCHEDULE
A5	BUILDING SECTIONS
S1.1	STRUCTURAL NOTES
S2.1	FOUNDATION PLAN
S2.2	FIRST FLOOR FRAMING PLAN
S2.3	SECOND FLOOR FRAMING PLAN
S2.4	ROOF FRAMING PLAN
S3.1	FOUNDATION DETAILS
S4.1	TYPICAL WOOD FRAMING DETAILS
S4.2	WOOD FRAMING DETAILS
S4.3	WOOD FRAMING DETAILS



Lot Width Circle Diagram
no scale



Lot Slope Diagram
no scale



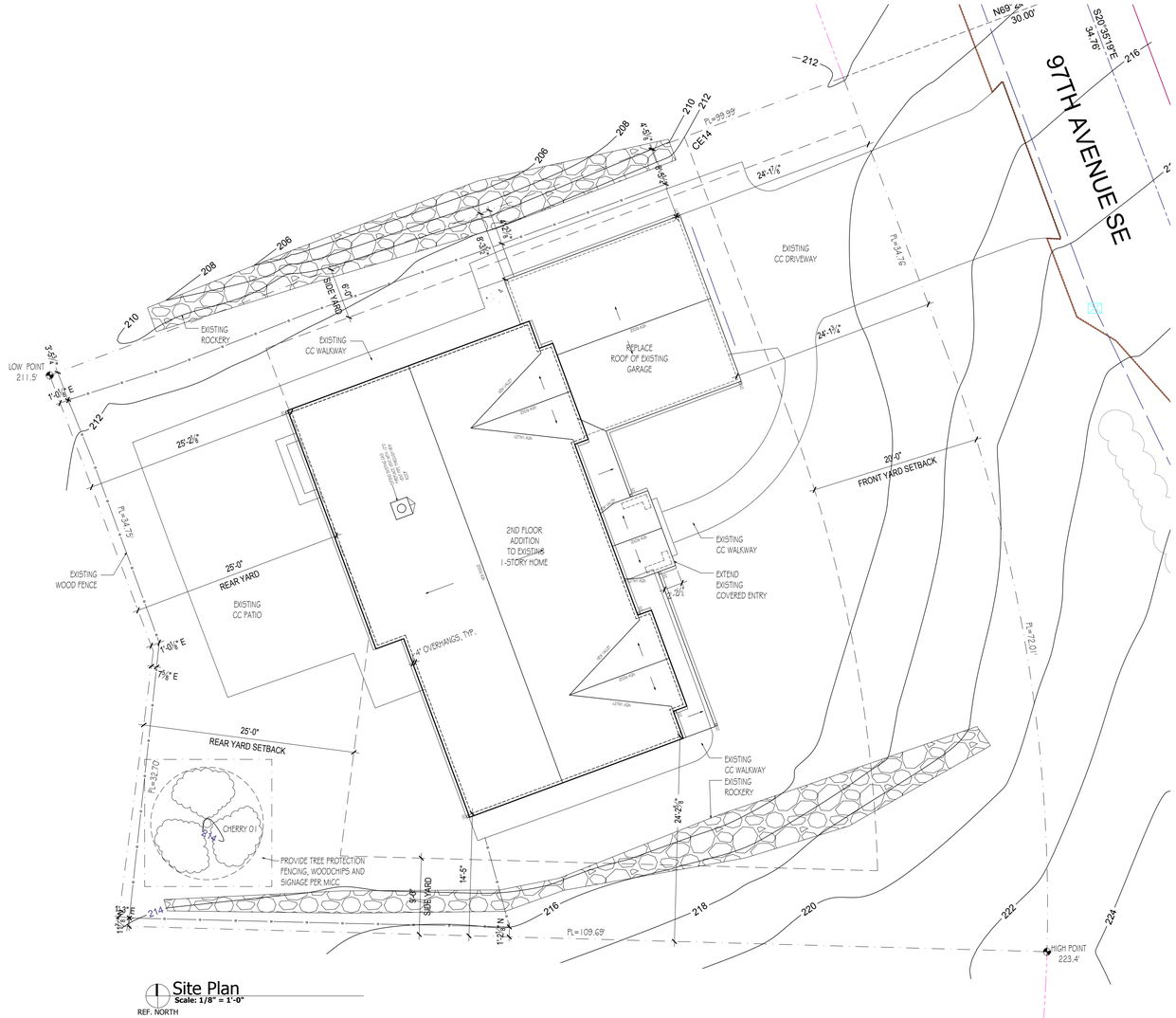
MIDPOINT ELEVATIONS	SECTION LENGTH
A = 212.8'	a = 20.1'
B = 213.3'	b = 20.9'
C = 213.7'	c = 37.5'
D = 213.0'	d = 26.1'
E = 213.0'	e = 22.4'
F = 213.0'	f = 3.4'
G = 212.9'	g = 29.3'
H = 212.7'	h = 29.1'
I = 212.5'	i = 5.9'
J = 212.5'	j = 21.5'

$$\frac{(Axa)+(Bxb)+(Cxc)+(Dxd)\ldots+(Jxj)}{a+b+c+d\ldots+j}$$

$$\frac{(4277)+(4458)+(8014)+(5559)+(4771)+(724)+(6238)+(6190)+(1254)+(4569)}{20.1+20.9+37.5+26.1+22.4+3.4+29.3+29.1+5.9+21.5}$$

$$\frac{46,054}{216.2} = \text{AVE GRADE} = 213.0'$$

Average Grade Diagram & Calcs
no scale



Site Plan
Scale: 1/8" = 1'-0"
REF. NORTH

TREE PROTECTION AREA (TPZ)

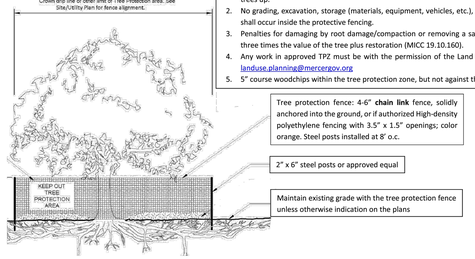
KEEP OUT!

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 Land Use and Planning Division at landuse.planning@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 Land Use and Planning Division at landuse.planning@mercergov.org

Tree Protection Guidelines and Signage Requirements

Lavergne Addition
Project Information, Site Plan

4139 97th Ave SE
Mercer Island, WA 98040

Permit	9.5.25
REV 1	1.15.26

Shelly Johnson
206.465.7221

A1