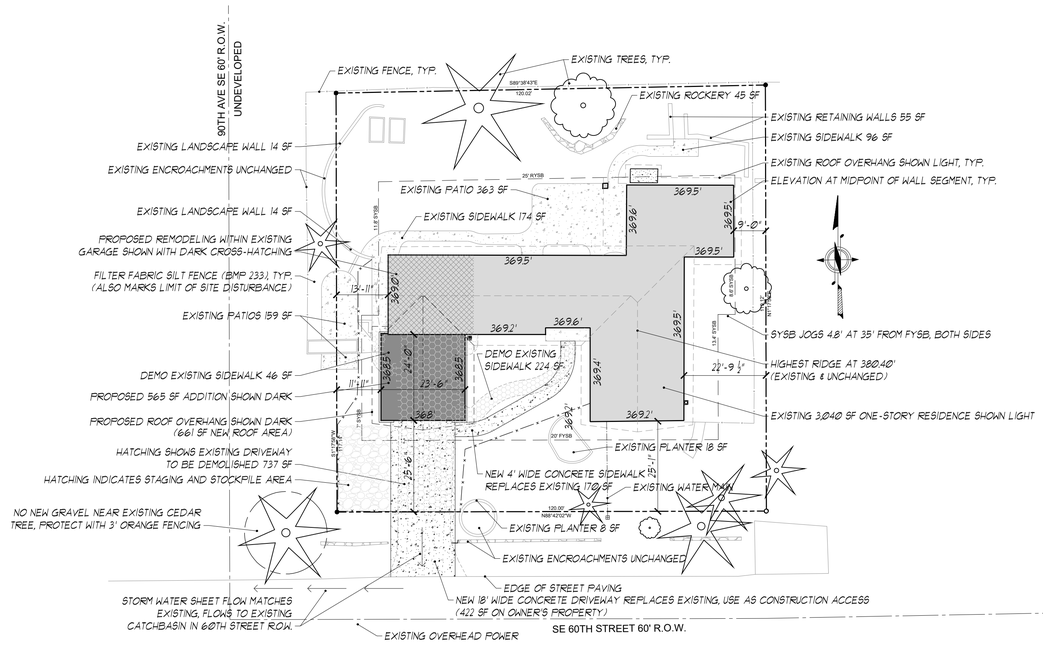
Hu Yu Residence

Addition and Remodel



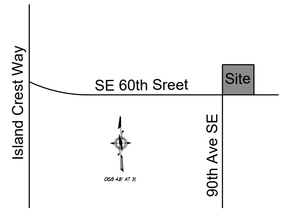
Site Plan

Scale: 1" = 20'

1. The site currently has a one-story single-family home. Property information based on available public records, deemed accurate but not guaranteed. Verify existing conditions as needed. Locate all utilities prior to any site disturbance. See also attached survey drawing for additional site information.
2. Lot size: 14,176 square feet.
3. Zoning: R-9.6.
4. King County Assessor Parcel Number: 8650700100.
5. Legal description: LOT 1, BLOCK 5, TIMBERLAND NO.2, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 58 OF PLATS, PAGE 27, RECORDS OF KING COUNTY, STATE OF WASHINGTON
6. Property Address: 9004 SE 60th Street, Mercer Island, Washington 98040.
7. Owner: Kent & Cindy Hu Yu.
8. Proposed improvements to comply with the 2018 IRC and other codes as adopted by the City of Mercer Island.
9. Proposed improvements include remodeling 174 net square feet of living area, converting 330 net square feet of garage to living area, and adding a 565 gross square foot garage.
10. Existing building height: 13'. No increase in building height proposed.
11. Proposed lot coverage: Roof: 4,666 SF; Driveway: 422 SF (7%) Total: 5,088 SF (36%).
    Proposed hardscape coverage: Patios: 522 SF; Walkways: 440 SF; Rockeries & Retaining Walls: 154 SF Total: 1,117 SF (7.9%).
    Calculations do not include areas of driveway or hardscape in the R.O.W. or under roof overhangs.
    Remaining lot area outside of roof overhangs shall be landscaped as required by the City of Mercer Island.
12. Gross floor area: 3,040 square feet existing + 565 proposed new = 3,605 square feet (25.4%).
13. Total Side Yard Setback = 120' x .17 = 20.4'. Side Yard Setbacks = 11.8' (west) + 8.6' (east) and 7' (west) + 13.4' (east) (jogs at 35' from FYSB). Maximum 18" eave encroachment.
14. No trees shall be removed as part of the proposed work effort.
15. Lot slope 2.8%. Lowest elevation: 366.8' at southwest corner; highest elevation: 371.5' at northeast corner; distance between: 169.13'. Vertical difference: 4.7'. See separate survey drawing.

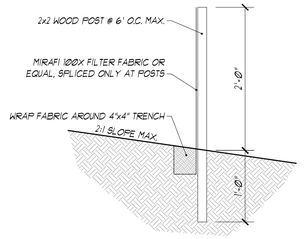
Erosion and Sediment Control Plan

1. See site plan for location of applicable BMPs. See separate SWPPP Short Form for additional details and applicable BMPs. All work to comply with applicable sections of the 2014 SWMMWW.
2. There are no identified areas of potential erosion problems. The ground surface adjacent to proposed construction activities is mulched or landscaped.
3. There are no surface waters, critical areas, or related buffers in the vicinity of the proposed construction activity.
4. There are no FEMA base flood boundaries or Shoreline Management boundaries in the vicinity of the proposed construction activity.
5. No changes to the existing topography are proposed or required. See site survey for additional site information.
6. The General Contractor will maintain and monitor the Stormwater Pollution Prevention Plan. All storm drain inlets within 50' of the site shall be protected as per detail above.
7. There are no stormwater flow paths through the site.



Vicinity Map

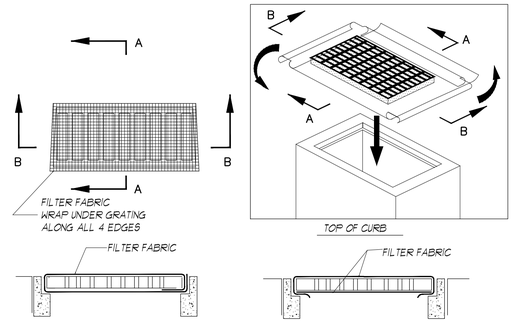
(No Scale)



BMP 233 Silt Fence

(No Scale)

1. Joints in filter fabric shall be overlapped 6" at post.
2. Use staples, wire rings, or equivalent to attach fabric to fence.
3. Remove sediment when it reaches 1/3 of fence height.
4. Location of fencing shall be as shown on approved plans or as directed by the City.



Storm Drain Inlet Protection

(No Scale)

1. Protect all drains within 50' of the site.

Deferred Submittals

1. Electrical permit (by subcontractor).
2. Plumbing permit (by subcontractor).
3. Mechanical permit (by subcontractor)

WSEC Table R402.1.1

Fenestration U-Factor	0.30
Skylight U-Factor	0.50
Ceiling R-Value	49
Wood Frame Wall R-Value	21 int
Floor R-Value	30
Below-Grade Wall R-Value	10/15/21 int + 5TB
Slab R-Value & Depth	10, 2 ft

Demolition Notes

1. Verify loadbearing condition of all building elements to be affected by the proposed work and provide appropriate bracing or other interim support as required.
2. Maintain required exiting from and access to the building during demolition as required.
3. Maintain practical use of the building and surrounding site as required by the Owner.
4. Verify condition of ground below elements to be demolished and verify minimum 1,500 PSF bearing capacity for all new foundations.
5. Protect remaining building elements from damage and exposure to weather.
6. Notify the Architect if any remaining structure is damaged or otherwise not suitable to accommodate the proposed new construction.

Construction Notes

1. New exterior walls 2x6 studs @ 16" o.c. with R-21 fiberglass batt insulation at conditioned space.
   Existing exterior walls 2x4 studs @ 16" o.c. (verify) with R-13 fiberglass batt insulation.
2. Verify load-bearing condition of affected building elements and provide interim support as needed.
3. New windows to match existing windows as closely as possible, vinyl-framed, double-glazed, low-e coating, U=.24 max., sizes as noted on plan.
   New exterior doors shall have weatherstripping, threshold, and sweep; U=.46 max.
4. All dimensions to face of stud framing unless noted otherwise. Verify all exisitng building dimensions and conditions as needed to ensure compatibility with the proposed work.
5. Provide sealant at all slab penetrations and otherwise provide suitable measures to prevent radon gas from migrating into the building enclosure.
6. Treat all cuts of pressure-treated lumber for uniform resistance to decay.
7. All new construction shall comply with the 2018 IRC, 2018 WSEC, and other codes as required. Standard insulation values as per WSEC Table R402.1.1 (above).
8. A minimum of 90% of permanently installed lamps in lighting fixtures shall be high-efficacy lamps.
9. Proposed new heated floor area is 330 square feet; 1.5 points in energy credits are required as specified in WSEC Section R406.2 (1). 1.5 points in energy credits proposed from Table R406.2, Option 1.1 (windows U=.24 or better) and Option 5.3 (Energy Star gas water heater UEF = .91 or better).
10. Heating in new spaces provided by ducted air from an existing gas furnace. New ducts in unconditioned space insulated to R-8 minimum.
11. Laundry and bathroom fans minimum 90 CFM, maximum 1 sone, 2.8 CFM/watt efficacy, controls per IRC M1505.4.4.1 (see mechanical permit for details).
12. Air barrier provided as per WSEC R402.4.1.1 and tested to allow no more than 5 ACH.

PWF Architecture

PO BOX 141
EDMONDS, WASHINGTON 98020
(206) 920.3554 P
WWW.PWFARCHITECTURE.COM

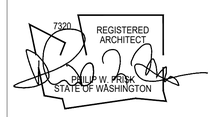
Member of the American Institute of Architects

PROJECT NAME:
Hu Yu Residence
Addition & Remodel
9004 SE 60th Street
Mercer Island, WA

PROJECT NUMBER:
01.21012

DATE:
January 21, 2022

STAMP:

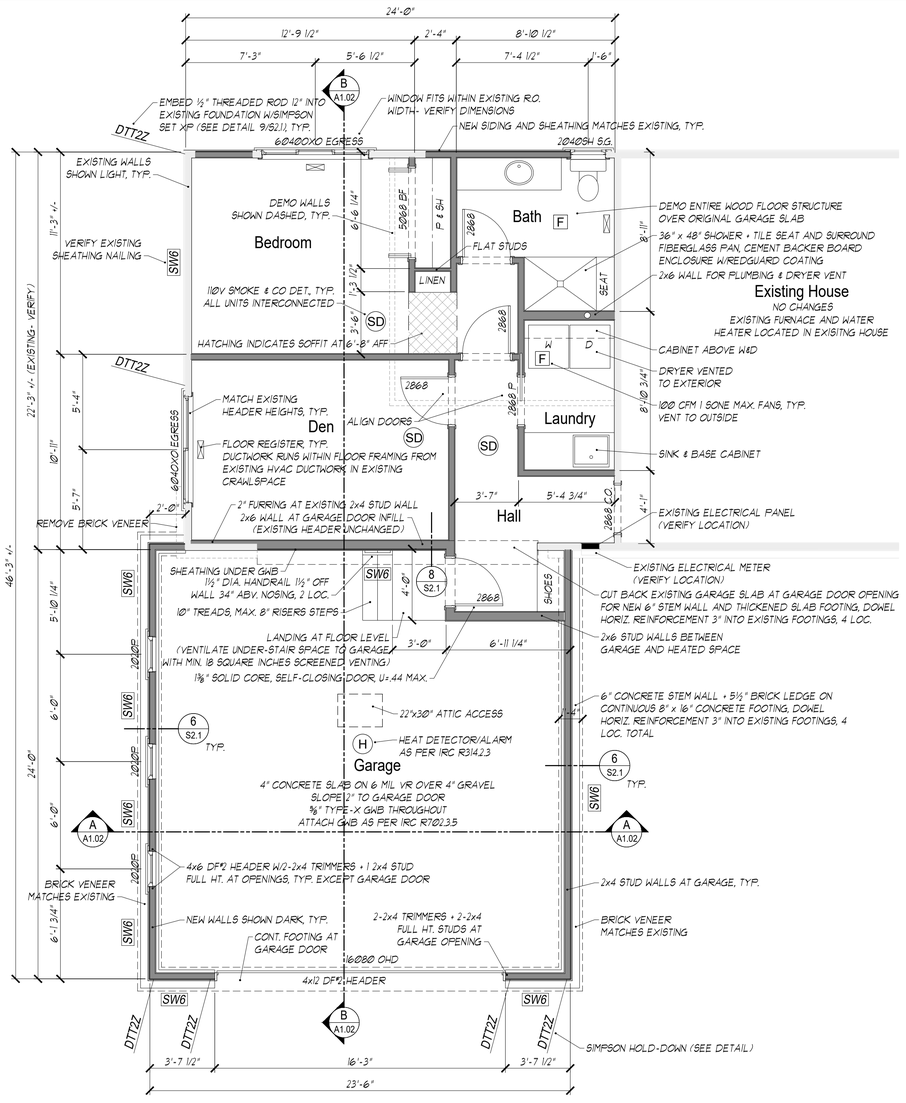


NOTE:
The information contained herein is intended to be used in conjunction with shop drawings, approved submittals, diagrams, specifications, and any other documents as required as a guide for construction in a manner consistent with applicable codes and generally-accepted industry standards of construction. Any conflicts within and between these documents and such codes and standards shall be brought to the attention of the Architect prior to construction for clarification as needed.

REVISIONS:
09/14/22

SHEET TITLE:
Site Plan, Notes

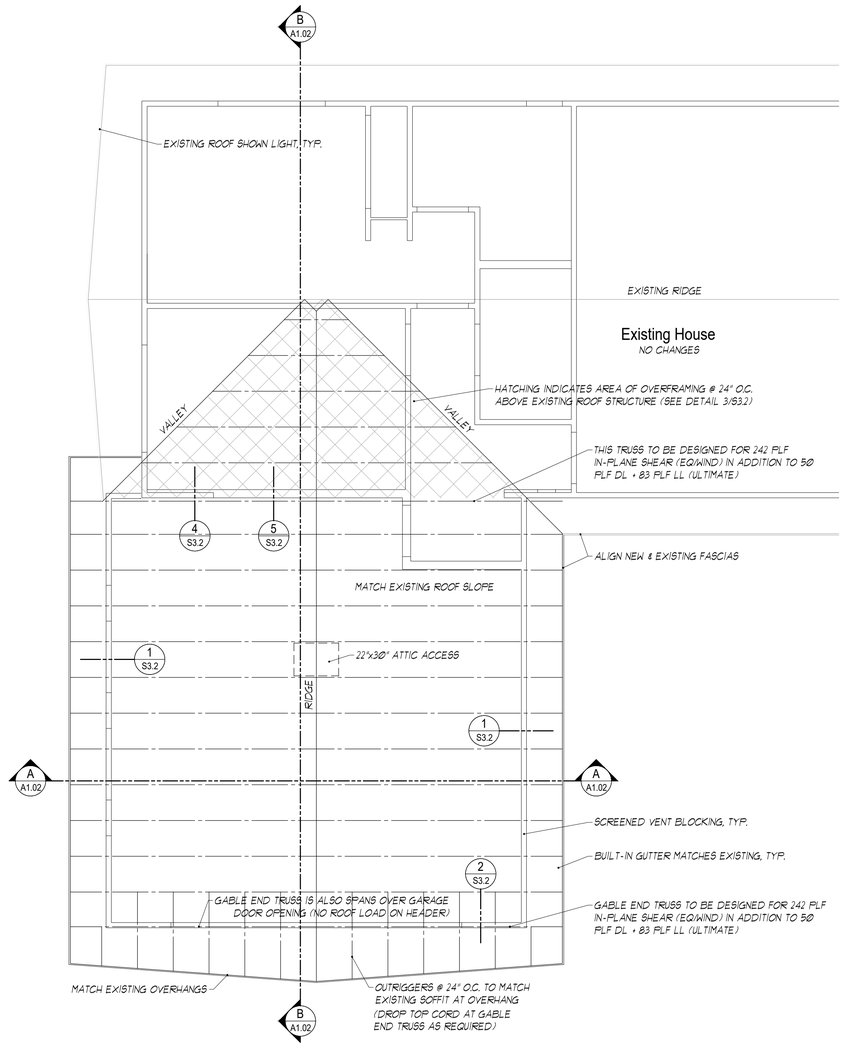
SHEET NUMBER:
A1.01



Foundation & Main Floor Plan

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

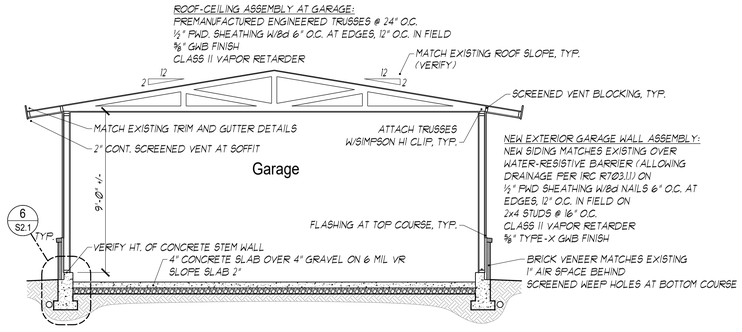
New footings to bear on undisturbed soil minimum 18" below finished grade.
Verify actual duct locations with mechanical contractor. New ducts within floor framing to be encapsulated with spray-foam insulation, min. R-8.
See structural engineering drawings for additional information.



Roof Framing Plan

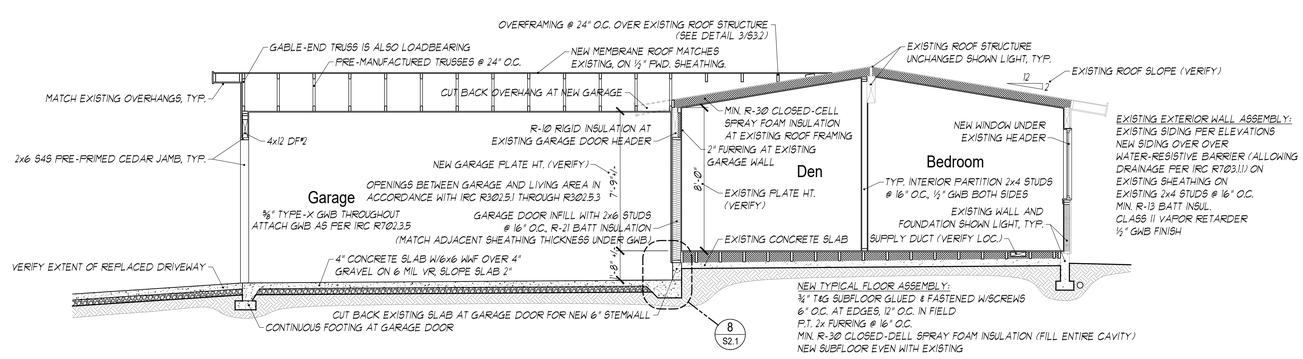
Scale: 1/4" = 1'-0"

876 SF attic & enclosed soffits; provide 841 square inches of screened vents at eaves.
Provide membrane roof to match exisiting, installed per manufacturer's specifications.
See structural engineering drawings for additional information.



Building Section A-A

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



Building Section B-B

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

PWF Architecture
PO BOX 141
EDMONDS, WASHINGTON 98020
(206) 920.3554 P
WWW.PWFARCHITECTURE.COM
Member of the American Institute of Architects

PROJECT NAME:
Hu Yu Residence
Addition and Remodel
9004 SE 60th Street
Mercer Island, WA

PROJECT NUMBER:
01.21012

DATE:
January 21, 2022

STAMP:

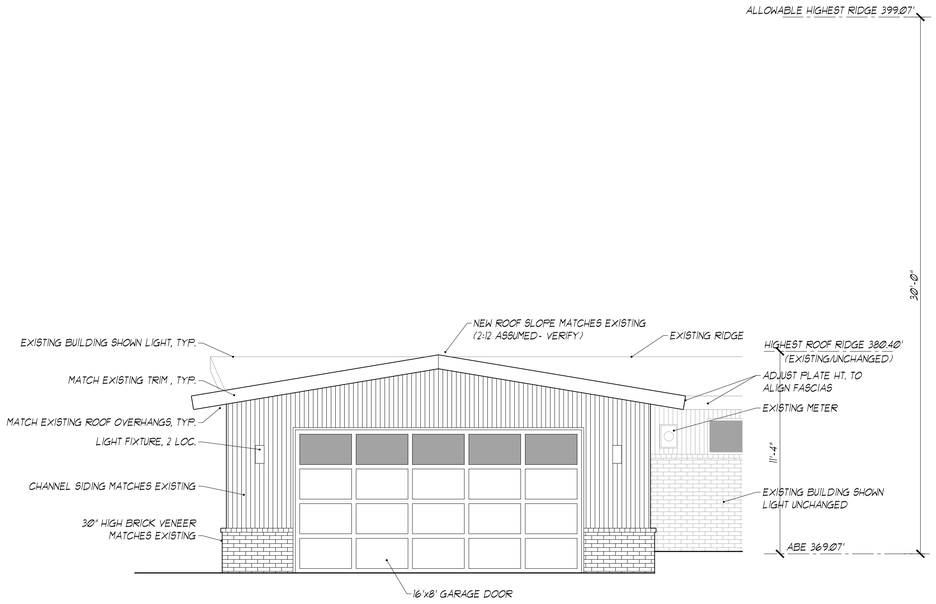
7320 REGISTERED ARCHITECT
PHILIP W. PFISK
STATE OF WASHINGTON

NOTE:
The information contained herein is intended to be used in conjunction with shop drawings, approved submittals, diagrams, specifications, and any other documents as required as a guide for construction in a manner consistent with applicable codes and generally-accepted industry standards of construction. Any conflicts within and between these documents and such codes and standards shall be brought to the attention of the Architect prior to construction for clarification as needed.

REVISIONS:
09/14/22

SHEET TITLE:
Floor & Roof Plans
Building Sections

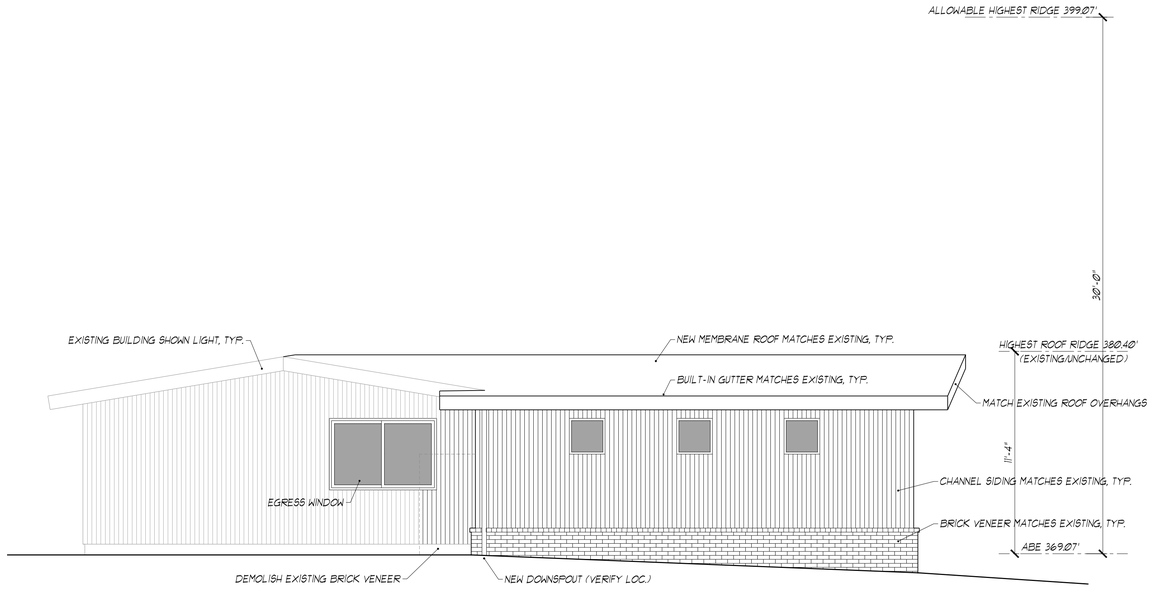
SHEET NUMBER:
A1.02



South Elevation

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

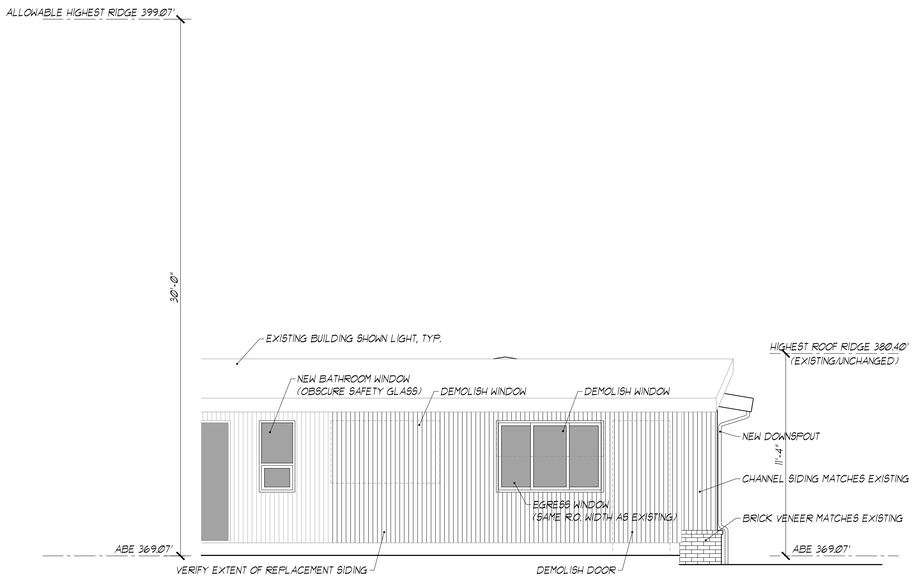
1. Install finishes, flashing, caulking, and sealants as required to prevent water penetration of the building envelope, typical.
2. Verify condition of existing building elements to remain under new finishes, typical.
3. Match existing finishes.
4. New windows match existing style, typical.
5. ABE = 369.07' (sum of wall segments x midpoint elevation = 139,138; perimeter = 377'). Allowable building height = 399.07'. Actual building height = 380.4'.



West Elevation

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

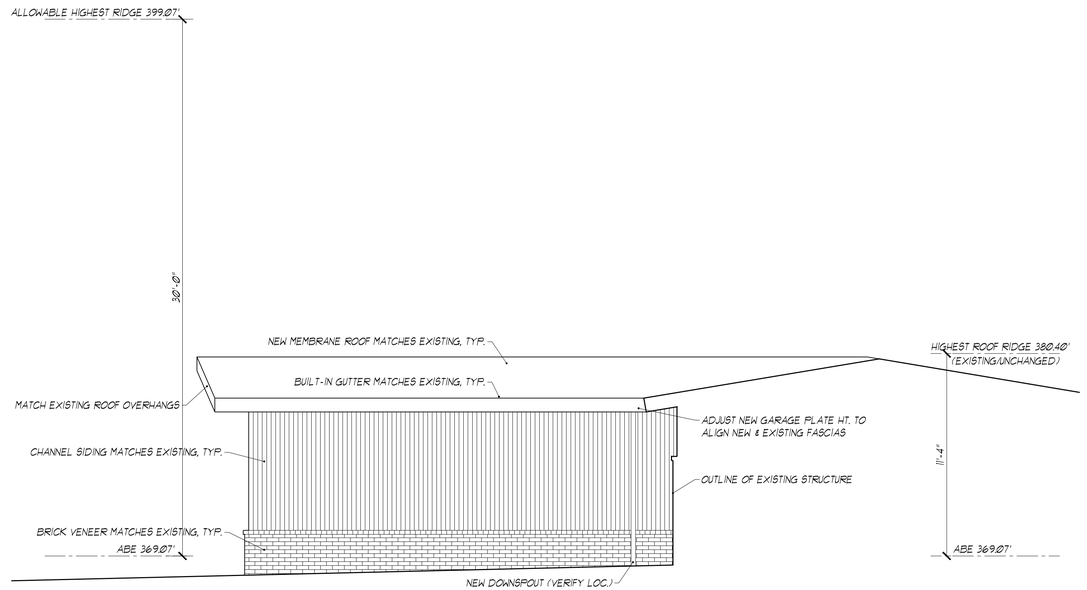
1. Install finishes, flashing, caulking, and sealants as required to prevent water penetration of the building envelope, typical.
2. Verify condition of existing building elements to remain under new finishes, typical.
3. Match existing finishes.
4. New windows match existing style, typical.



North Elevation

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

1. Install finishes, flashing, caulking, and sealants as required to prevent water penetration of the building envelope, typical.
2. Verify condition of existing building elements to remain under new finishes, typical.
3. Match existing finishes.
4. New windows match existing style, typical.



East Elevation

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

1. Install finishes, flashing, caulking, and sealants as required to prevent water penetration of the building envelope, typical.
2. Verify condition of existing building elements to remain under new finishes, typical.
3. Match existing finishes.
4. New windows match existing style, typical.

PWF Architecture
PO BOX 141
EDMONDS, WASHINGTON 98020
(206) 920.3554 P
WWW.PWFARCHITECTURE.COM
Member of the American Institute of Architects

PROJECT NAME:
Hu Yu Residence
Addition and Remodel
9004 SE 60th Street
Mercer Island, WA

PROJECT NUMBER:
01.21012

DATE:
January 21, 2022

STAMP:
7320 REGISTERED ARCHITECT PHILIP W. PWFK STATE OF WASHINGTON

NOTE:
The information contained herein is intended to be used in conjunction with shop drawings, approved submittals, diagrams, specifications, and any other documents as required as a guide for construction in a manner consistent with applicable codes and generally-accepted industry standards of construction. Any conflicts within and between these documents and such codes and standards shall be brought to the attention of the Architect prior to construction for clarification as needed.

REVISIONS:
09/14/22

SHEET TITLE:
Exterior Elevations

SHEET NUMBER:
A1.03

STRUCTURAL NOTES

CODE
ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE LOCAL JURISDICTION. SPECIFICATIONS AND STANDARDS WHERE REFERENCED ON THE DRAWINGS ARE TO BE THE LATEST EDITION.

DESIGN LOADS
LIVE LOADS:

RESIDENTIAL	40 PSF
SNOW	25 PSF

EARTHQUAKE LOADS:

SITE CLASS	D
SHORT PERIOD SPECTRAL RESPONSE (S_{DS})	1.164
ONE SECOND SPECTRAL RESPONSE (S_{DI})	0.604
OCCUPANCY CATEGORY	II
SEISMIC IMPORTANCE FACTOR (I_E)	1.00
SEISMIC DESIGN CATEGORY	D
BASIC SEISMIC FORCE-RESISTING-SYSTEM	WOOD S.W.
RESPONSE MODIFICATION FACTOR, (R)	6.5
SEISMIC RESPONSE COEFFICIENT (C_S)	0.179

WIND LOADS:

ULT. BASIC WIND SPEED (3 SECOND GUST)	100 MPH
EXPOSURE	B
K_{ZT}	1.30

SPECIAL INSPECTION
SPECIAL INSPECTION SHALL BE PERFORMED PER CHAPTER 17 OF THE IBC ONLY WHERE REQUIRED BY THE LOCAL JURISDICTION FOR THE FOLLOWING ITEMS:

- SOILS (SECTION/TABLE 1705.6)
- CONCRETE (SECTION/TABLE1705.3)
- WOOD (SECTION 1705.5)

REFER TO IBC SECTION 1705.10 AND 1705.11 FOR ADDITIONAL INSPECTION REQUIREMENTS FOR THE STRUCTURAL COMPONENTS OF THE LATERAL FORCE RESISTING SYSTEM.

ALL INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER. THE ARCHITECT, ENGINEER, AND BUILDING OFFICIAL SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION REPORTS. IF ANY INSPECTION FAILS TO MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, IT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGN TEAM.

STRUCTURAL OBSERVATION
STRUCTURAL OBSERVATION SHALL BE PERFORMED PER CHAPTER 17 OF THE IBC ONLY WHERE REQUIRED BY THE LOCAL JURISDITION. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY SPECIAL INSPECTIONS REQUIRED. NOTIFY THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE OBSERVATION.

FOUNDATIONS:
THE FOLLOWING SOIL DESIGN PARAMETERS HAVE BEEN ASSUMED. IF EXCAVATION SHOWS THAT SOIL CONDITIONS DO NOT MATCH THE LISTED DESIGN VALUES, A GEOTECHNICAL ENGINEER SHALL BE RETAINED TO EVALUATE THE SOIL CONDITIONS. NOTIFY THE ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

- 1,500 PSF (ALLOWABLE BEARING PRESSURE)
- 35 PCF + SURCHARGE (ACTIVE LATERAL PRESSURE)
- 200 PCF (PASSIVE PRESSURE)
- 0.35 (COEFFICIENT OF FRICTION)

FOOTINGS SHALL BEAR ON FIRM UNDISTURBED EARTH OR COMPACTED STRUCTURAL FILL AS REQUIRED BY THE GEOTECHNICAL ENGINEER. FOOTINGS SHALL BE PLACED AT A MINIMUM OF THE FROST DEPTH REQUIRED BY THE LOCAL JURISDICTION. FOOTING ELEVATIONS SHOWN IN THE DRAWINGS REPRESENT MINIMUM DEPTHS AND ARE FOR BIDDING ONLY. FINAL FOUNDATION ELEVATIONS ARE SUBJECT TO SITE CONDITIONS AND SHALL BE ESTABLISHED BY THE CONTRACTOR. FOOTINGS SHALL BE CENTERED BENEATH THE STRUCTURE ABOVE, UNLESS DIMENSIONED OTHERWISE.

THE CONTRACTOR SHALL LOCATE AND PROTECT ALL UTILITIES DURING EXCAVATION, PILE INSTALLATION, AND ANY OTHER CONSTRUCTION EARTHWORK. NOTIFY THE UNDERGROUND UTILITIES LOCATION SERVICE AT LEAST 1 WEEK PRIOR TO CONSTRUCTION AND INDEPENDENTLY VERIFY ALL UTILITIES WHICH MAY BE AFFECTED BY THIS PROJECT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DAMAGE DAMAGE TO UNDERGROUND UTILITIES RESULTING FROM THEIR WORK.

IMPORTED STRUCTURAL FILL AND BACKFILL MATERIAL SHOULD CONSIST OF CLEAN, WELL GRADED GRANULAR MATERIAL FREE OF DEBRIS OR ORGANICS WITH A MAXIMUM PARTICLE DIAMETER OF THREE INCHES AND NO MORE THAN 10% FINES (PASSING THE #200 SIEVE). FILL AND BACKFILL MATERIAL SHOULD BE PLACED IN LEVEL LIFTS NOT EXCEEDING TWELVE INCHES IN LOOSE THICKNESS AND COMPACTED TO A MINIMUM OF 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.

BACKFILL BEHIND ALL RETAINING WALLS WITH WELL-DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE. PROVIDE WATER PROOFING SYSTEM AT EXTERIOR FACE OF ALL FOUNDATION WALLS EXPOSED TO EARTH PER ARCHITECTURAL SPECIFICATIONS.

CONCRETE
ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE". THE CONCRETE SHALL HAVE A UNIT WEIGHT OF APPROXIMATELY 150 PCF. CONCRETE STRENGTHS AT 28 DAYS (f'c) AND MIX CRITERIA SHALL BE AS FOLLOWS:

- SLAB-ON-GRADE: f'c = 2,500 PSI 0.55 W/C RATIO
- FOUNDATION & WALLS: f'c = 2,500 PSI 0.55 W/C RATIO

A CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IF REQUIRED IN THE SUBMITTAL SPECIFICATIONS. THE MIX DESIGN SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER, AND ADMIXTURES AS WELL AS THE WATER-CEMENT RATIO, SLUMP, CONCRETE YIELD, AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI REQUIREMENTS.

ALL CONCRETE EXPOSED TO WEATHER OR TO FREEZING TEMPERATURES SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI TABLE 4.2.1 FOR MODERATE EXPOSURE CONDITION.

MINIMUM CONCRETE COVER ON REINFORCING STEEL SHALL BE AS FOLLOWS:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
- CONCRETE EXPOSED TO EARTH AND WEATHER:
  - #6 BARS AND LARGER 2"
  - #5 BARS AND SMALLER 1 1/2"
- CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
  - SLABS, WALLS, AND JOISTS 3/4"
  - BEAM/COLUMN TIES AND STIRRUPS 1 1/2"

REINFORCING STEEL
REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615 GRADE 60. REINFORCING BARS INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. WELDED WIRE REINFORCING SHALL CONFORM TO ASTM A185. PROVIDE WELDED WIRE FABRIC IN SHEETS WITH 12" LAPS AT SIDES AND ENDS.

REINFORCING STEEL SHALL BE DETAILED TO INCLUDE HOOKS AND BENDS IN ACCORDANCE WITH ACI SP-66 AND ACI 318. DEVELOPMENT LENGTHS AND LAP SPLICES SHALL BE PER THE SCHEDULE.

MECHANICAL SPLICING OF REINFORCING BARS, IF REQUIRED, SHALL BE BY AN ICBO APPROVED SYSTEM, AND SHALL DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR. ALL SPLICE DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

REINFORCING SHALL BE PLACED AND ADEQUATELY SUPPORTED PRIOR TO PLACING CONCRETE. WET-SETTING ITEMS IS NOT ALLOWED WITHOUT PRIOR ENGINEER APPROVAL. BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL NOT BE FIELD BENT UNLESS APPROVED BY THE ENGINEER. REFER TO ACI FOR PLACING TOLERANCES AND OTHER REINFORCING STEEL REQUIREMENTS.

DEVELOPMENT LENGTH AND LAP SPLICE
REINFORCING DEVELOPMENT LENGTHS AND LAP SPLICES SHALL BE AS FOLLOWS. ALL LENGTHS ARE IN INCHES BASED ON GRADE 60 REINFORCING. CONSULT ENGINEER FOR OTHER GRADES OF STEEL. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BAR.

	f'c = 2500 PSI				f'c = 3000 PSI			
BAR SIZE	DEVELOPMENT LENGTH		LAP SPLICE		DEVELOPMENT LENGTH		LAP SPLICE	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	23	18	30	23	22	17	28	22
#4	31	24	41	31	29	22	37	29
#5	39	30	51	39	36	28	47	36
#6	47	36	61	47	43	33	56	43

CONCRETE GENERAL NOTES
WALL AND COLUMN VERTICAL BARS SHALL START FROM THE TOP OF FOOTING. HORIZONTAL BARS SHALL START A DISTANCE OF 1/2 THE NORMAL BAR SPACING FROM TOP OF FOOTING AND/OR TOP OF FRAMED SLABS. THERE SHALL BE AN ADDITIONAL HORIZONTAL BAR AT A MAXIMUM OF 3" FROM EVERY TOP OF WALL AND BOTTOM OF FRAMED SLABS.

PROVIDE CORNER BARS TO MATCH AND LAP ALL HORIZONTAL REINFORCING ON EACH SIDE OF THE CORNER PER SCHEDULE OR BEND ONE SIDE OF HORIZONTAL AROUND CORNER TO PROVIDE LAP SPLICE.

PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP EACH SLAB INTO RECTANGULAR AREAS OF NOT MORE THAN 400 SQUARE FEET. AREAS SHALL BE AS SQUARE AS PRACTICAL AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO PLACEMENT.

ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED AND PROPERLY PREPARED IMMEDIATELY PRIOR TO POURING OF CONCRETE. DOWEL STEEL SHALL BE THE SAME SIZE AND SPACING AS MAIN REINFORCING DETAILED BEYOND JOINT UNLESS NOTED OTHERWISE IN PLAN.

SEE ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR EXACT SIZE AND LOCATION OF OPENINGS IN CONCRETE WALLS, FLOORS, AND ROOF. UNLESS INDICATED OTHERWISE, REINFORCE AROUND OPENINGS GREATER THAN 12" IN ANY DIRECTION WITH (1) #5 EACH SIDE AND (1) #5 x 4'-0" DIAGONAL AT EACH CORNER. EXTEND BARS 2'-0" BEYOND EDGE OF OPENING. IF 2'-0" IS UNAVAILABLE, EXTEND AS FAR AS POSSIBLE AND HOOK. HOOK ALL REINFORCING INTERRUPTED BY OPENINGS.

SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, STRIPS, TEXTURE, AND OTHER FINISH DETAILS AT EXPOSED CONCRETE SURFACES. PROVIDE 3/4" CHAMFER AT ALL CORNERS UNO.

STRUCTURAL STEEL
ALL STRUCTURAL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AWS D1.1 "STRUCTURAL WELDING CODE - STEEL". STEEL SHALL BE FABRICATED AND ERECTED WITHIN THE TOLERANCES DEFINED BY AISC. STRUCTURAL STEEL MATERIALS SHALL BE AS FOLLOWS:

- SHAPES SHALL CONFORM TO ASTM A992, Fy = 50 KSI.
- PLATES, ANGLES, AND RODS SHALL CONFORM TO ASTM A36, Fy = 36 KSI.
- STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B, Fy = 46 KSI.
- STRUCTURAL PIPE SHALL CONFORM TO ASTM A53 GRADE B, Fy = 35 KSI.
- BOLTS SHALL CONFORM TO ASTM A325-N (USE 5/8"Ø MINIMUM UNO)
- ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36, Fy = 36 KSI.

ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS AND WABO REQUIREMENTS. USE 70 KSI LOW HYDROGEN ELECTRODES APPROPRIATE FOR THE MATERIALS BEING WELDED. IF NOT SPECIFIED, MINIMUM WELD SIZE SHALL BE PER AWS D1.1. WELDING OF REINFORCING BARS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY CALLED OUT ON DRAWINGS.

ALL STEEL EXPOSED TO WEATHER SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A385 AND HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. FASTENERS AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153. ALL DAMAGED GALVANIZED COATINGS SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780 WITH AN APPLIED COATING THICKNESS DETERMINED BY THE ENGINEER.

WOOD FRAMING
ALL WOOD FRAMING SHALL BE PERFORMED IN ACCORDANCE WITH IBC CHAPTER 23, ANSI/AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", AND AITC "TIMBER CONSTRUCTION MANUAL".

SAWN LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF AN AGENCY APPROVED BY AN ACCREDITATION BODY COMPLIANT WITH DOC PS 20. ALL GRADES SPECIFIED IN THE STRUCTURAL DRAWINGS ARE MINIMUM STANDARDS AND SHALL BE AS FOLLOWS:

- STUDS, PLATES, AND BLOCKING HEM-FIR STUD GRADE
- JOISTS DOUG-FIR #2
- 4x OR SMALLER BEAMS AND HEADERS DOUG-FIR #2
- 6x OR LARGER BEAMS AND HEADERS DOUG-FIR #1
- POSTS AND TIMBERS DOUG-FIR #2

WOOD FRAMING SHALL BE KILN-DRIED TO A MAXIMUM MOISTURE CONTENT OF 19%. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY, OR EXPOSED TO EARTH OR WEATHER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD U1 AND M4 FOR THE SPECIES, PRODUCT, PRESERVATIVE, AND END USE REQUIRED.

GLUED LAMINATED TIMBER SHALL BE MANUFACTURED AND IDENTIFIED IN CONFORMANCE WITH ANSI/AITC A190.1 AND ASTM D3737. UNLESS OTHERWISE SPECIFIED, ALL GLUED LAMINATED TIMBERS SHALL BE DOUGLAS FIR SPECIES. SINGLE SPAN BEAMS SHALL BE COMBINATION 24F-V4 AND MULTI-SPAN BEAMS OR BEAMS THAT CANTILEVER SHALL BE COMBINATION 24F-V8. ALL EXPOSED GLULAMS SHALL HAVE AN ADDITIONAL TENSION LAMINATION SUBSTITUTED FOR A CORE LAMINATION ON THE TENSION SIDE OF UNBALANCED 24F-V4 BEAMS AND ON BOTH SIDES OF BALANCED 24F-V8 BEAMS.

STRUCTURAL WOOD PANEL SHEATHING USED ON WALLS, FLOORS, OR ROOFS SHALL CONFORM TO THEIR SPECIFIC REQUIREMENTS IN DOC PS 1, DOC PS 2, OR ANSI/APA PRP 210. PLYWOOD SHALL BE GRADE C-D WITH EXTERIOR GLUE. REFER TO IBC SECTIONS 2303.1.4, 2304.6, AND 2304.7 FOR ADDITIONAL COMPLIANCE REQUIREMENTS.

PRE-MANUFACTURED JOISTS, BEAMS, AND TRUSSES
PRE-MANUFACTURED JOISTS, BEAMS, AND TRUSSES SHALL BE SIZED, SPACED, AND DETAILED TO MATCH THE LOADING AND DIMENSIONAL REQUIREMENTS INDICATED ON THE STRUCTURAL DRAWINGS. TRUSSES SHALL COMPLY WITH IBC 2303.4, I-JOISTS SHALL COMPLY WITH IBC 2303.1.2, AND COMPOSITE BEAMS SHALL COMPLY WITH 2303.1.9. THE MANUFACTURER'S DESIGNER IS RESPONSIBLE FOR CODE COMPLIANCE AND SHALL PROVIDE SHOP DRAWING AND CALCULATION SUBMITTALS AS SPECIFIED. ENGINEER AND BUILDING OFFICIAL APPROVAL IS REQUIRED PRIOR TO FABRICATION OF PRE-MANUFACTURED COMPONENTS.

REFER TO THE DESIGN LOADS FOR BASIC STRUCTURAL LOADING REQUIREMENTS. REFER TO THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR ADDITIONAL LOADING AND OPENING REQUIREMENTS NOT SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. DEFLECTIONS SHALL NOT EXCEED L/480 FOR LIVE LOADS OR L/360 FOR TOTAL LOADS UNLESS APPROVED IN WRITING BY THE ENGINEER. ALL TRUSSES WITH A DEPTH EQUAL TO OR GREATER THAN 24" SHALL BE DESIGNED FOR A BOTTOM CHORD LIVE LOAD OF 10PSF, NOT APPLIED CONCURRENT WITH THE TOP CHORD LIVE LOAD.

PROVIDE TEMPORARY BRACING UNTIL SHEATHING AND PERMANENT BRACING IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE MANUFACTURER SHALL PROVIDE ALL SPECIALTY ITEMS REQUIRED FOR A COMPLETE INSTALLATION OF THE SYSTEM (INCLUDING BUT NOT LIMITED TO FULL DEPTH BRIDGING, BLOCKING, WEB STIFFENERS, AND PRODUCT SPECIFIC CONNECTORS.

NAILS, SCREWS, BOLTS, AND CONNECTORS
REFER TO THE PLANS, NOTES, SCHEDULES, AND DETAILS FOR ALL NAILING REQUIREMENTS. NAILING NOT SPECIFIED SHALL BE PER IBC TABLE 2304.10.1. ALL NAILS SHALL CONFORM TO THE STANDARD DIMENSIONS OF COMMON NAILS AS DEFINED BY THE NDS AND SHALL MEET THE FOLLOWING MINIMUM GUIDELINES:

- 8d = 0.131"Ø x 2 1/2"
- 10d = 0.148"Ø X 3"
- 16d = 0.162"Ø x 3 1/2"

10d BOX NAILS (0.128"Ø x 3") MAY BE SUBSTITUTED FOR 8d COMMON NAILS WITH NO CHANGE IN NAIL SPACING. FRAMING MEMBERS MAY BE NAILED WITH 16d SINKERS (0.148"Ø x 3 1/4"), BUT ONLY 16d COMMON NAILS SHALL BE USED WHERE 16d NAILS ARE INDICATED IN THE DRAWINGS. OTHER NAILS MAY BE SUBSTITUTED ONLY WITH THE ENGINEER'S APPROVAL PRIOR TO START OF CONSTRUCTION.

ALL LAG SCREWS AND BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE STANDARD CUT WASHERS UNDER THE HEADS AND NUTS OF ALL LAG SCREWS AND BOLTS BEARING ON WOOD. LEAD HOLES FOR BOLTS SHALL BE PROVIDED AND SHALL BE A MINIMUM OF 1/32" AND A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. LEAD HOLES FOR LAG SCREW SHANK AND THREADS SHALL BE PER NDS 12.1.4.2.

ALL WOOD CONNECTORS SHALL BE SIMPSON STRONG-TIE OR ENGINEER APPROVED EQUIVALENT. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS USING THEIR SPECIFIED NUMBER AND SIZE OF FASTENERS. IF STRAPS CONNECT TWO MEMBERS, PLACE 1/2 OF THE NAILS, SCREWS, OR BOLTS INTO EACH MEMBER.

ALL NAILS, SCREWS, BOLTS, AND METAL CONNECTORS IN CONTACT WITH PRESSURE TREATED OR FIRE RETARDANT TREATED WOOD SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.

WOOD FRAMING GENERAL NOTES
SILL PLATES BEARING ON CONCRETE FOUNDATIONS SHALL BE PRESSURE TREATED AND SHALL ATTACH TO THE CONCRETE WITH 1/2"Ø ANCHOR BOLTS EMBEDDED 7" MINIMUM. PLACE ANCHORS AT 4'-0" OC MAXIMUM FOR SHEAR WALLS AND AT 6'-0" OC FOR BEARING AND PARTITION WALLS. USE A MINIMUM OF (2) ANCHOR BOLTS PER SILL PLATE AND PLACE ONE WITHIN 12" OF EACH END OF EACH PIECE. REFER TO THE SHEAR WALL SCHEDULE FOR MORE STRINGENT ANCHORAGE SIZE AND SPACING REQUIREMENTS. CONTRACTOR SHALL INSTALL 3 GAUGE PLATE WASHERS BENEATH EACH NUT AT EACH ANCHOR BOLT IN A SHEAR WALL THAT EXTEND TO WITHIN 1/2" OF SHEATHED EDGE.

ALL SHEAR AND/OR BEARING WALLS SHALL BE FRAMED WITH 2x STUDS @ 16" OC. REFER TO PLAN NOTES FOR TYPICAL HEADER SIZES NOT SPECIFICALLY CALLED OUT. ALL HEADERS SHALL BE SUPPORTED BY A MINIMUM OF (1) CRIPPLE AND (1) FULL HEIGHT STUD. COLUMNS BELOW FLUSH FRAMED MULTIPLE JOIST BEAMS SHALL BE EQUAL IN WIDTH TO THE BEAM. ALL COLUMNS NOT CALLED OUT SHALL BE (2) STUDS. BEAMS SHALL HAVE FULL BEARING ON COLUMNS AND POSITIVE CONNECTION SHALL BE PROVIDED.

PROVIDE SOLID BLOCKING BETWEEN JOISTS AND RAFTERS AT ALL SUPPORTS, AT 8'-0" OC MAXIMUM SPACING BETWEEN SUPPORTS, AND BENEATH PARTITIONS PERPENDICULAR TO THE DIRECTION OF FRAMING. INSTALL DOUBLE JOISTS UNDER PARTITIONS EXTENDING ONE HALF OR MORE OF THE JOIST SPAN.

MINIMUM NAILING REQUIREMENTS SHALL BE PER IBC TABLE 2304.10.1. THE USE OF NAIL GUNS IS APPROVED IF NAILING INTO THE DIAPHRAGMS IS FLUSH WITH FACE OF SHEATHING. NAIL PENETRATIONS GREATER THAN 1/16" ARE NOT ACCEPTABLE.

NOTCHES AND HOLES IN WALL STUDS ARE ALLOWED WITHIN THE PARAMETERS OF IBC SECTIONS 2308.5.9 AND 2308.5.10. NOTCHES AND HOLES IN JOISTS AND RAFTERS ARE ALLOWED WITHIN THE PARAMETERS OF IBC SECTIONS 2308.4.2 AND 2308.7.4.

VERTICAL SHRINKAGE WILL OCCUR AND ACCUMULATE AT EACH LEVEL FROM THE WOOD DRYING OVER TIME. THIS IS ESTIMATED TO BE APPROXIMATELY 0.15" PER FLOOR AND ASSUMES THE WOOD HAS AN INITIAL MOISTURE CONTENT OF 19% OR LESS. ADDITIONAL SHRINKAGE WILL OCCUR IF THE MOISTURE CONTENT IS HIGHER. THE CONTRACTOR SHALL ALLOW FOR THIS MOVEMENT IN THEIR INSTALLATION OF ALL VERTICAL ASSEMBLIES INCLUDING BUT NOT LIMITED TO PLUMBING, ELECTRICAL, MECHANICAL, AND ARCHITECTURAL SYSTEMS.

GENERAL NOTES
STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR BIDDING AND CONSTRUCTION. REFER TO THE ARCHITECTURAL DRAWINGS FOR ELEVATIONS, SLOPES, NON-BEARING WALLS, STAIRS, CURBS, DRAINS, RAILINGS, WATERPROOFING, FINISHES, ETC. REFER TO THE ARCHITECTURAL, CIVIL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPES, VENTS, DUCTS, AND OTHER OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND FIELD CONDITIONS FOR COMPATIBILITY WITH THE PLANS, SPECIFICATIONS, AND REFERENCED STANDARDS BEFORE PROCEEDING WITH ANY WORK. THE MOST STRINGENT REQUIREMENT SHALL GOVERN ANY CONFLICT UNLESS APPROVED IN WRITING OTHERWISE. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM BEFORE PROCEEDING.

CONTRACTOR SHALL BE RESPONSIBLE FOR STRENGTH AND STABILITY OF ANY PARTLY COMPLETED STRUCTURE. CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND SHALL PROVIDE TEMPORARY SHORING AND SUPPORT AS REQUIRED UNTIL THE STRUCTURE HAS BEEN COMPLETED.

CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE DESIGN TEAM FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES ON SHOP DRAWINGS DO NOT SATISFY THIS REQUIREMENT. REVIEW OF ALTERNATE SYSTEMS MAY BE AN ADDITIONAL SERVICE BY THE ENGINEER.

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

LEGEND

DEFINITION	SYMBOL	DEFINITION	SYMBOL
DIRECTION OF FRAMING		NATIVE SOIL	
EXTENT OF FRAMING		GRANULAR FILL	
COLUMNS		STRUCTURAL STEEL	
COLUMN BEARING ON BEAM	(A)	RATED SHEATHING	
BEAM CONTINUOUS OVER SUPPORT	CX (B)	SHEAR WALL (SEE SCHEDULE)	SWX
CONCRETE WALL		COLUMN MARK (SEE SCHEDULE)	CX
BEARING STUD WALL		FOOTING MARK (SEE SCHEDULE)	FX
NON-BEARING STUD WALL		HOLDOWN MARK (SEE SCHEDULE)	X
BEARING STUD SHEAR WALL		HANGER MARK (SEE SCHEDULE)	X
NON-BEARING STUD SHEAR WALL		FLAG NOTE (SEE PLAN NOTES)	X
CMU WALL		STEEL MOMENT FRAME CONN.	

ABBREVIATIONS

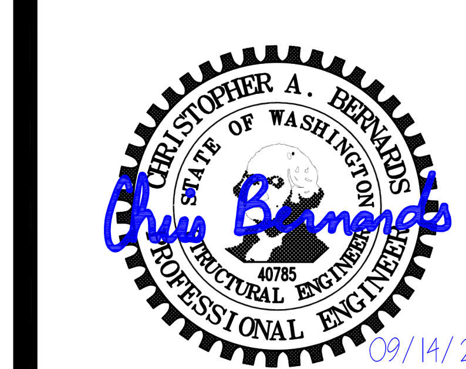
(A)	ABOVE	GLB	GLUE-LAMINATED BEAM
AB	ANCHOR BOLT	HORIZ	HORIZONTAL
ALT	ALTERNATE	KP	KING POST
ARCH	ARCHITECT	KSI	KIPS PER SQUARE INCH
(B)	BELOW	L	ANGLE
BD	BAR DIAMETER	MECH	MECHANICAL
BLKG	BLOCKING	MF	MOMENT FRAME
BM	BEAM	MTL	METAL
BOT	BOTTOM	NS	NEAR SIDE
BRNG	BEARING	OC	ON CENTER
BTWN	BETWEEN	OPP	OPPOSITE
CJP	COMPLETE JOINT PENETRATION	PL	PLATE
CLR	CLEAR	PLCS	PLACES
CMU	CONCRETE MASONRY UNIT	PSI	POUNDS PER SQUARE INCH
COL	COLUMN	PSF	POUNDS PER SQUARE FOOT
CONC	CONCRETE	P/T	POST TENSIONED
CONN	CONNECTION	PT	PRESSURE TREATED
CONT	CONTINUOUS	REINF	REINFORCING
COORD	COORDINATE	REQ'D	REQUIRED
DBL	DOUBLE	SCHED	SCHEDULE
DET	DETAIL	SIM	SIMILAR
DIA	DIAMETER	SOG	SLAB ON GRADE
DIM	DIMENSION	STD	STANDARD
DIR	DIRECTION	STIFF	STIFFENER
EA	EACH	STL	STEEL
ELEV	ELEVATION	SYMM	SYMMETRICAL
ES	EACH SIDE	SW	SHEARWALL
EX	EXISTING	TOC	TOP OF CONCRETE
EXP	EXPANSION	TOS	TOP OF STEEL
FLR	FLOOR	TOW	TOP OF WALL
FDN	FOUNDATION	TYP	TYPICAL
FTG	FOOTING	UNO	UNLESS NOTED OTHERWISE
FS	FAR SIDE	VERT	VERTICAL
GC	GENERAL CONTRACTOR	WF	WIDE FLANGE

VENEER
VENEER SHALL BE ANCHORED TO THE BACKING WALL USING CORROSION RESISTANT TIES WITH MINIMUM SPECIFIED DIMENSIONS REQUIRED BY IBC SECTION 1405. ANCHOR TIES SHALL BE SPACED SUCH THAT THEY DO NOT SUPPORT MORE THAN 2 SQUARE FEET OF WALL AREA AND THEIR SPACING DOES NOT EXCEED 24" OC HORIZONTALLY. ANCHOR TIES SHALL HAVE THE EXTENDED LEG ENGAGE HORIZONTAL JOINT REINFORCING OF NOT LESS THAN A NUMBER 9 GAUGE WIRE. JOINT REINFORCEMENT SHALL BE CONTINUOUS WITH BUTT SPLICES BETWEEN PERMITTED.

FOR WOOD STUD CONSTRUCTION, ANCHOR TIES SHALL BE SPACED AT 16" OC HORIZONTALLY TO ALIGN WITH AND ATTACH TO THE STUD FRAMING. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIREMENTS OF THE WEATHER RESISTANT BARRIER, FLASHING, WEEP HOLES, AND AIR SPACE WHICH SHALL BE INSTALLED PRIOR TO OR DURING INSTALLATION OF THE VENEER.

SIDESWAY ENGINEERING
www.sideswayengineering.com
(425) 673-4160

PROJECT:
YU RESIDENCE
9004 SE 60TH STREET
MERCER ISLAND, WA 98040



REV.	DATE	DESCRIPTION
0	09/14/22	PERMIT SUBMITTAL

PROJECT NO.: 22076.01
DESIGNED BY: LFM
DRAWN BY: LFM
CHECKED BY: JMD

SHEET TITLE:
STRUCTURAL NOTES

SHEET NO.:
S1.1

PLAN NOTES

FOUNDATION PLAN NOTES:

1. PLACE ALL REINFORCING STEEL, ANCHOR BOLTS, AND HOLDOWNS PER THE STRUCTURAL NOTES, PLANS, AND THE FOUNDATION DETAILS ON THE S2 SHEETS. REFER TO THE FRAMING PLANS FOR LOCATION OF SHEAR WALLS.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, WALL LOCATIONS, UTILITY PLACEMENT, AND CONCRETE ROUGH OPENINGS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION AND NOTIFY ALL PARTIES OF ANY DISCREPANCIES.

3. EXTERIOR FOOTINGS SHALL BEAR ON FIRM NATIVE SOIL OR COMPACTED STRUCTURAL FILL A MINIMUM OF 1'-6" BELOW GRADE. REFER TO THE STRUCTURAL NOTES FOR ADDITIONAL SUBGRADE PREPARATION REQUIREMENTS AND FOR CONDITIONS REQUIRING STRUCTURAL FILL.

4. SLAB ON GRADE SHALL BE A MINIMUM OF 4" THICK w/ 6x6 - W1.4xW1.4 WELDED WIRE FABRIC REINFORCING. PROVIDE 2" MINIMUM CLEARANCE FROM WWF TO BOTTOM OF SLAB. SLABS SHALL BE PLACED OVER A 10 MIL VAPOR BARRIER ATOP RIGID INSULATION PER ARCH OVER 4" OF SUITABLE DRAINING SUBGRADE MATERIAL.

5. T.O. FTG AND T.O. WALL ELEVATIONS ARE FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING FINAL FOOTING ELEVATIONS BASED ON FIELD CONDITIONS & FOR COORDINATING TOW & TOF ELEV W/ ARCH DRAWINGS.

6. CONTROL JOINTS ARE REQUIRED IN THE SLAB ON GRADE. REFER TO THE TYPICAL SLAB ON GRADE DETAILS FOR CONSTRUCTION REQUIREMENTS. ALL JOINT LOCATIONS SHALL BE APPROVED BY THE ENGINEER AND ARCHITECT PRIOR TO PLACING CONCRETE.

7. ALL CONTINUOUS FOOTING REINFORCING SHALL BE PLACED THRU SPREAD FOOTINGS IF APPLICABLE. PROVIDE CORNER, HOOKED, OR BENT BARS MATCHING FOOTING REINFORCING AT ALL INTERSECTIONS AND CHANGES IN FOOTING DIRECTION.

8. REFER TO ARCHITECTURAL DRAWINGS FOR VENTING SIZE AND LOCATION REQUIREMENTS.

FLOOR FRAMING PLAN NOTES:

1. REFER TO THE STRUCTURAL NOTES AND TO THE TYPICAL WOOD FRAMING DETAILS ON THE S3 SHEETS FOR FRAMING REQUIREMENTS NOT SPECIFICALLY SHOWN ON THE FLOOR FRAMING PLAN OR IN THESE PLAN NOTES.

2. FLOOR SHEATHING SHALL BE 3/4" MINIMUM THICKNESS WITH A 40/20 SPAN RATING. ATTACH TO FRAMING BELOW WITH 10d NAILS SPACED AT 6" OC AT ALL DIAPHRAGM BOUNDARIES, PANEL EDGES, SHEAR WALLS, AND COLLECTOR ELEMENTS INDICATED ON PLANS. NAILING AT INTERMEDIATE FRAMING SHALL BE 10d NAILS SPACED AT 12" OC. REFER TO TYPICAL FRAMING DETAILS FOR SHEATHING LAYOUT. PROVIDE ADHESIVE ATOP EACH JOIST AS SPECIFIED BY THE ARCHITECT BEFORE INSTALLING SHEATHING. FLOOR SHEATHING IS UNBLOCKED UNO ON PLAN.

3. WALL STUD FRAMING SHALL BE AS FOLLOWS:
   - 2x6 HF STUD @ 16" OC FOR EXTERIOR HOUSE WALLS.
   - 2x6 HF STUD @ 12" OC FOR EXTERIOR WALLS GREATER THAN 12' IN HEIGHT.
   - 2x4 HF STUD @ 16" OC FOR EXTERIOR GARAGE WALLS.
   - 2x4 OR 2x6 HF STUDS @16" OC FOR INTERIOR NON-BEARING WALLS

   REFER TO ARCHITECTURAL DRAWING FOR DETERMINATION OF WALL TYPE. ALL SILL AND TOP PLATES SHALL BE HF STUD GRADE.

4. ALL COLUMNS, TRIMMER STUDS, AND BEARING WALLS SHALL BE CONTINUED DOWN TO THE FOUNDATION UNLESS SUPPORTED BY A BEAM BELOW. SOLID BLOCKING SHALL BE PROVIDED WITHIN JOIST SPACES AT THESE LOCATIONS. PROVIDE (2) STUDS MINIMUM AT FLUSH BEAMS UNO.

5. MULTIPLE PLY BEAMS SHALL BE FASTENED TOGETHER WITH (2) ROWS OF 10d @ 12" OC. PROVIDE 2" MINIMUM EDGE DISTANCE TOP & BOTTOM AND ALTERNATE NAILING ON EACH FACE OF BEAM.

6. PROVIDE CS16 STRAP AT LOCATIONS WHERE COLUMN OR BEAM CUTS DOUBLE TOP PLATE. EXTEND STRAP 12" BEYOND THE CUT EACH DIRECTION WITH (10) 10d EA SIDE.

ROOF FRAMING PLAN NOTES:

1. REFER TO THE STRUCTURAL NOTES AND TO THE TYPICAL WOOD FRAMING DETAILS ON THE S3 SHEETS FOR FRAMING REQUIREMENTS NOT SPECIFICALLY SHOWN ON THE ROOF FRAMING PLAN OR IN THESE PLAN NOTES.

2. ROOF SHEATHING SHALL BE 1/2" MINIMUM THICKNESS WITH A 32/16 SPAN RATING. ATTACH TO FRAMING BELOW WITH 8d NAILS SPACED AT 6" OC AT ALL DIAPHRAGM BOUNDARIES, PANEL EDGES, SHEAR WALLS, AND COLLECTOR ELEMENTS INDICATED ON PLANS. NAILING AT INTERMEDIATE FRAMING SHALL BE 8d NAILS SPACED AT 12" OC. REFER TO TYPICAL FRAMING DETAILS FOR SHEATHING LAYOUT. ROOF SHEATHING IS UNBLOCKED UNO ON PLAN.

3. TYPICAL HEADERS FOR EXTERIOR AND BEARING WALL LOCATIONS SHALL BE 4x6 DF#2 FOR SPANS LESS THAN 4' SUPPORTED BY A MINIMUM OF (1) 2x CRIPPLE STUD AND (1) 2x FULL HEIGHT STUD. FOR SPANS UP TO 6', USE 4x8 DF#2 SUPPORTED BY (1) CRIPPLE STUD AND (1) FULL HEIGHT STUD. ALL CRIPPLE AND FULL HEIGHT STUDS SHALL MATCH WIDTH OF WALL FRAMING.

4. WALL STUD FRAMING SHALL BE AS FOLLOWS:
   - 2x6 HF STUD @ 16" OC FOR EXTERIOR HOUSE WALLS.
   - 2x6 HF STUD @ 12" OC FOR EXTERIOR WALLS GREATER THAN 12' IN HEIGHT.
   - 2x4 HF STUD @ 16" OC FOR EXTERIOR GARAGE WALLS.
   - 2x4 OR 2x6 HF STUDS @16" OC FOR INTERIOR NON-BEARING WALLS

   REFER TO ARCHITECTURAL DRAWING FOR DETERMINATION OF WALL TYPE. ALL SILL AND TOP PLATES SHALL BE HF STUD GRADE.

5. ALL COLUMNS, TRIMMER STUDS, AND BEARING WALLS SHALL BE CONTINUED DOWN TO THE FOUNDATION UNLESS SUPPORTED BY A BEAM BELOW. SOLID BLOCKING SHALL BE PROVIDED WITHIN JOIST SPACES AT THESE LOCATIONS.

6. MULTIPLE PLY BEAMS SHALL BE FASTENED TOGETHER WITH (2) ROWS OF 10d @ 12" OC. PROVIDE 2" MINIMUM EDGE DISTANCE TOP & BOTTOM AND ALTERNATE NAILING ON EACH FACE OF BEAM.

7. PROVIDE CS16 STRAP AT LOCATIONS WHERE COLUMN OR BEAM CUTS DOUBLE TOP PLATE. EXTEND STRAP 12" BEYOND THE CUT EACH DIRECTION WITH (10) 10d EA SIDE.

8. ROOF TRUSSES SHALL BE PRE-ENGINEERED BY OTHERS AND SPACED AT 24" OC UNO. REFER TO THE DESIGN LOADS ON S1.1 FOR ADDITIONAL LOAD AND SUBMITTAL REQUIREMENTS. CONTRACTOR SHALL PROVIDE ALL TEMPORARY & SAFETY BRACING & BLOCKING AS REQ'D BY THE MANUFACTURER.

9. ATTACH EACH END OF EVERY OTHER ROOF TRUSS TO THE EXTERIOR WALL TOP PLATE BELOW WITH A SIMPSON H1 CLIP.

SHEAR WALL SCHEDULE

TYPE	APA-RATED SHEATHING	MIN FRAMING AT ADJOINING PANEL EDGES	NAILING AT PANEL EDGES	RIM JOIST OR BLOCK CONN TO TOP PLATE	SILL PLATE NAILING TO RIM/BLKG BELOW	SILL PLATE ANCHOR BOLT TO SLAB OR FOUNDATION	FOUNDATION SILL PLATE SIZE	SHEAR CAPACITY (PLF)
SW6	15/32" ONE SIDE	2x STUD AND BLKG	0.131"Ø x 2 1/2" @ 6" OC	LTP4 OR A35 @ 26" OC	0.131"Ø x 3 1/4" @ 6.5" OC	5/8"Ø AB @ 5'-8" OC OR 1/2"Ø AB @ 3'-10" OC	2x	242

NOTES:
1. REFER TO THE SHEAR WALL DETAIL IN THE TYPICAL WOOD FRAMING DETAILS.
2. THE VALUES IN THIS TABLE ARE BASED ON HF GRADE STUDS AND HF GRADE PLATES & RIM/BLOCKING.
3. NAILS AT ADJOINING PANEL EDGES SHALL BE STAGGERED EACH SIDE OF THE COMMON JOINT.
4. INTERMEDIATE FRAMING TO BE WITH 2x MINIMUM MEMBERS. FIELD NAILING 12" OC MAXIMUM.
5. AT ALL SILL PLATE ANCHOR BOLTS IN 2x6 WALLS, INSTALL 3 GA x 3" x 4 1/2" PLATE WASHERS WITH THE EDGE OF PLATE WASHER WITHIN 1/2" OF SHEATHED EDGE. FOR 2x4 STUD WALLS, INSTALL 3 GA. x 3" x 3" PLATE WASHERS.
6. PROVIDE A MINIMUM OF 7" EMBEDMENT FOR AB INTO FOUNDATION OR STEM WALL.
7. 7/16" SHEATHING MAY BE USED IN PLACE OF 15/32" SHEATHING PROVIDED ALL STUDS ARE SPACED 16" OC OR PANELS ARE APPLIED WITH LONG DIMENSION ACROSS STUDS.

HOLDOWN SCHEDULE

MARK	TYPE	MIN CHORD SIZE	STUD NAILS OR BOLTS	ANCHOR BOLT (SEE NOTE 2 & 3)	CAPACITY (LB)
1	DTT2Z	(2) 2x	(8) 1/4 x 2-1/2 SDS	1/2" Ø	2,105

NOTES:
1. REFER TO THE LATEST SIMPSON STRONG-TIE CATALOG FOR ADDITIONAL INSTALLATION REQUIREMENTS.
2. NEW ANCHOR BOLTS SHALL EXTEND INTO FOOTING OR FOUNDATION WALL PER DETAIL 10/S2.1. USE PABX-12 ANCHORS AT INTERIOR FOOTINGS AND PABX-24 ANCHORS EXTENDING THRU THE STEM AT EXTERIOR FOOTINGS. INCREASE FOOTING DEPTHS AS REQUIRED FOR ANCHORAGE.
3. POST-INSTALLED ANCHOR BOLTS SHALL BE 36KSI MIN AND EXTEND 24" INTO INTO FOOTING OR FOUNDATION WALL. REFER TO DETAIL 9/S2.1 FOR ADDITIONAL INFORMATION.
4. AT ALL HOLDOWN CHORDS, PROVIDE PANEL EDGE NAILING PER SHEAR WALL SCHED.

SIDESWAY ENGINEERING
(425) 673-4160
www.sideswayengineering.com

PROJECT:

YU RESIDENCE

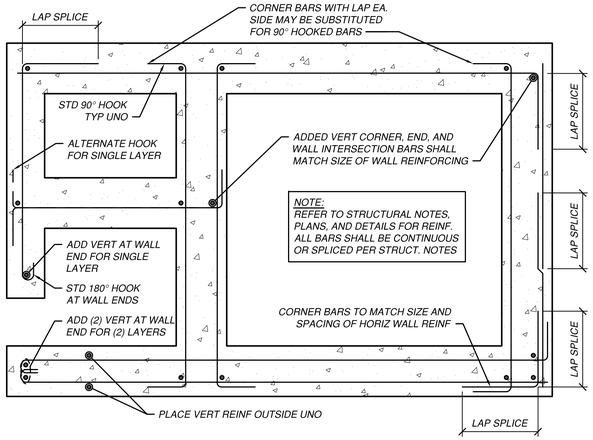
9004 SE 60TH STREET
MERCER ISLAND, WA 98040

REV.	DATE	DESCRIPTION
0	09/14/22	PERMIT SUBMITTAL

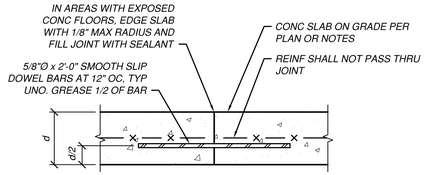
PROJECT NO.:	22076.01
DESIGNED BY:	LFM
DRAWN BY:	LFM
CHECKED BY:	JMD

SHEET TITLE:
PLAN NOTES & SCHEDULES

SHEET NO.:
S1.2

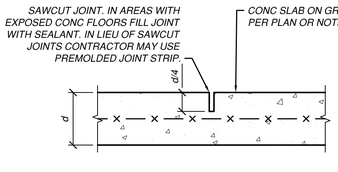


1 TYPICAL CONCRETE WALL REINFORCING DETAIL
SCALE: NTS

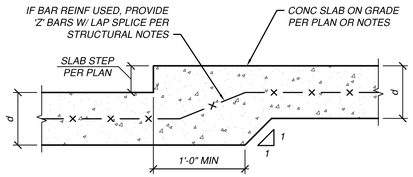


CONSTRUCTION JOINT

NOTE:
1. CONTROL OR CONSTRUCTION JOINTS ARE REQUIRED TO BREAK UP EACH SLAB INTO RECTANGULAR AREAS OF LESS THAN 400 SQUARE FEET. AREAS SHALL BE AS SQUARE AS PRACTICAL WITH NO ACUTE ANGLES. ALL JOINTS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO PLACEMENT.
2. PLACE SLAB ON GRADE ON VAPOR BARRIER OVER SUITABLE COMPACTED SUBGRADE MATERIAL. REFER TO PLAN NOTES.

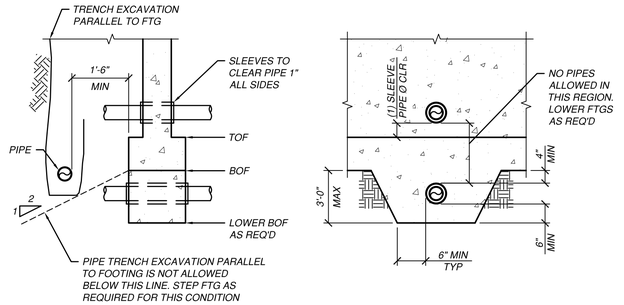


CONTROL/CONTRACTION JOINT

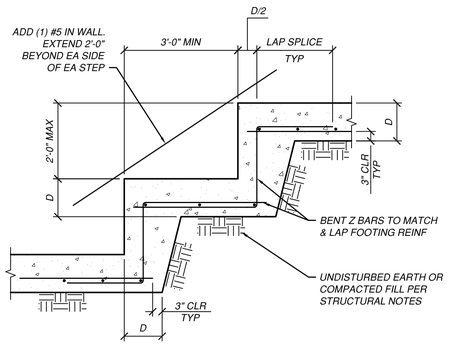


SLAB STEP

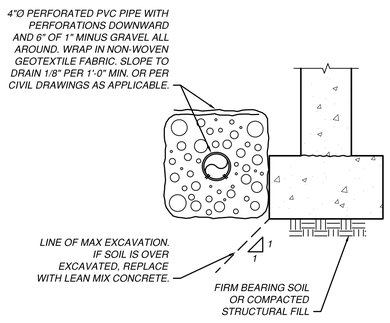
2 TYPICAL SLAB ON GRADE DETAILS
SCALE: 1" = 1'-0"



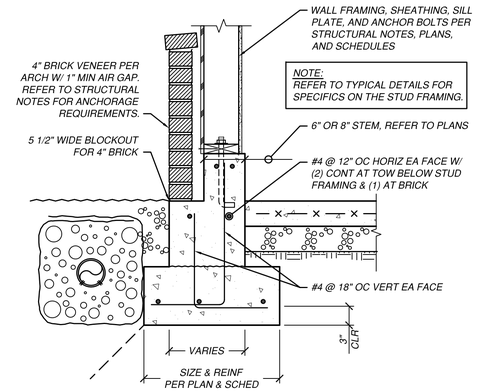
3 TYPICAL PIPE PENETRATION AT FOUNDATION/WALLS
SCALE: 1/2" = 1'-0"



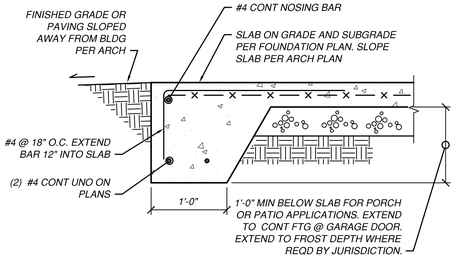
4 TYPICAL FOOTING STEP
SCALE: 1/2" = 1'-0"



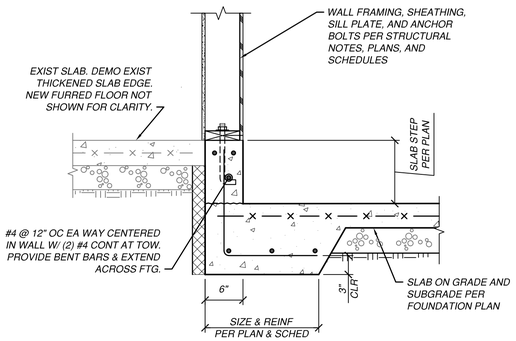
5 TYPICAL FOOTING DRAIN
SCALE: 1" = 1'-0"



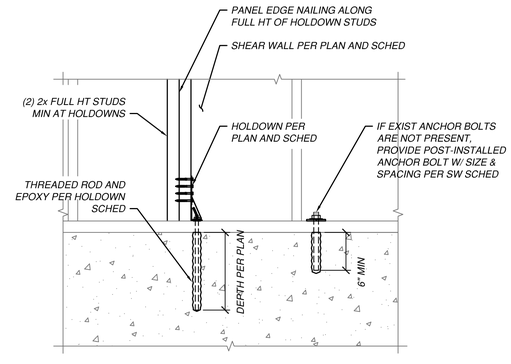
6 TYPICAL STEM WALL WITH BRICK
SCALE: 1" = 1'-0"



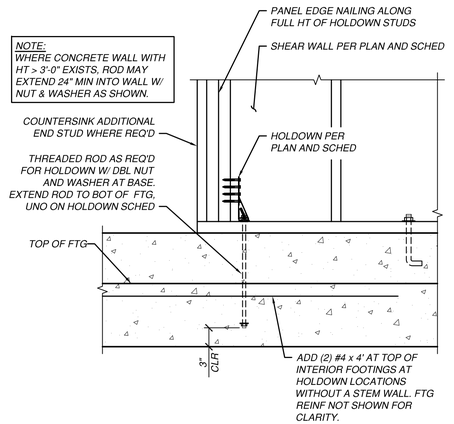
7 THICKENED SLAB EDGE
SCALE: 1" = 1'-0"



8 SLAB STEP SECTION
SCALE: 1" = 1'-0"



9 POST INSTALLED ANCHOR DETAIL
SCALE: NTS



10 HOLDOWN DETAIL
SCALE: 1" = 1'-0"

SIDEWAY ENGINEERING
(425) 673-4160
www.sidewayengineering.com

YU RESIDENCE
9004 SE 60TH STREET
MERCER ISLAND, WA 98040

PROJECT:

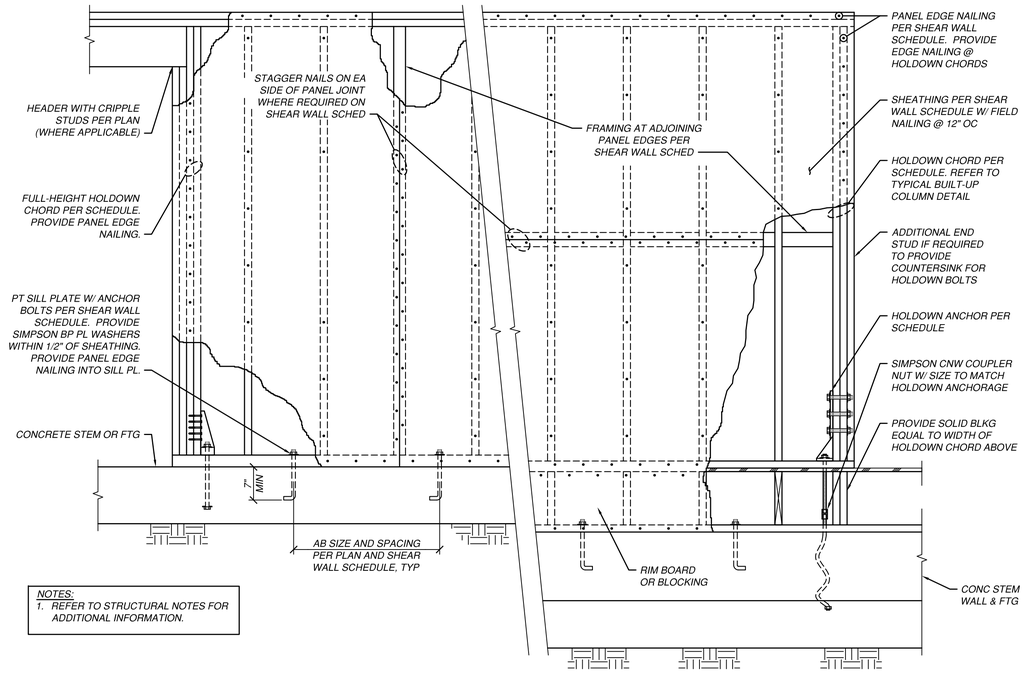
CHRISTOPHER A. HERRMANN — STATE OF WASHINGTON — 43785 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER
Chris Herrmann
09/14/22

REV.	DATE	DESCRIPTION
0	09/14/22	PERMIT SUBMITTAL

PROJECT NO.:	22076.01
DESIGNED BY:	LFM
DRAWN BY:	LFM
CHECKED BY:	JMD

SHEET TITLE:
FOUNDATION DETAILS

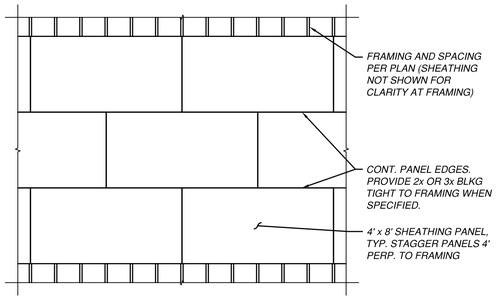
SHEET NO.:
S2.1



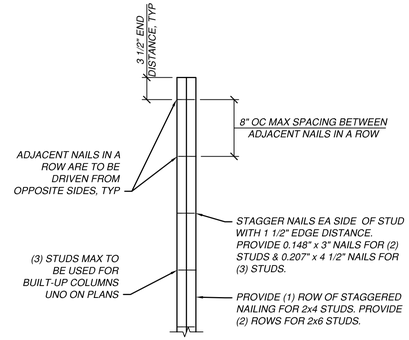
NOTES:
1. REFER TO STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

1 TYPICAL SHEAR WALL DETAIL
SCALE: 3/4" = 1'-0"

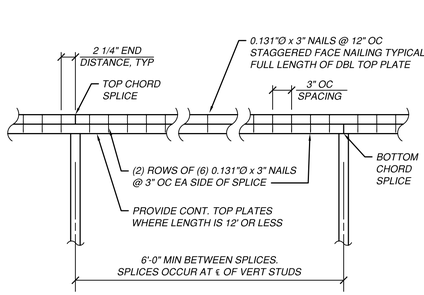
NOTES:
1. PANELS SHALL BE 4' x 8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING WHERE THE MINIMUM PANEL DIMENSION SHALL BE 24".
2. FASTENER PATTERN SHALL BE PER PLAN AND NOTES. MINIMUM SPACING IS 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE FRAMING, UNO.



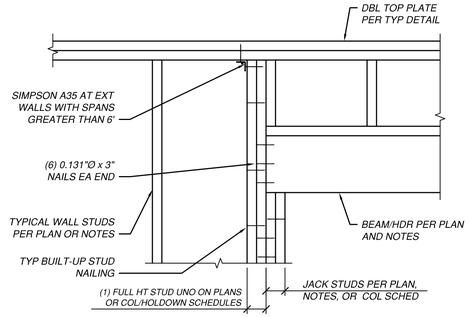
2 TYPICAL FLOOR/ ROOF SHEATHING DETAIL
SCALE: NTS



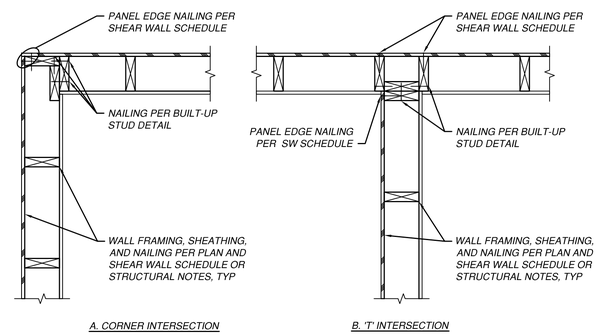
3 TYPICAL BUILT-UP STUD COLUMN DETAIL
SCALE: 1" = 1'-0"



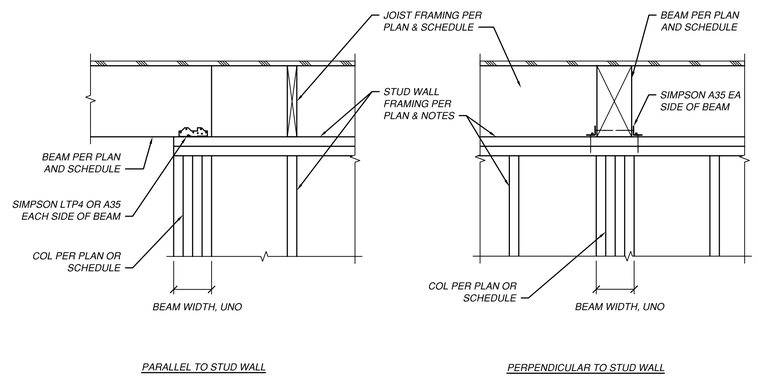
4 TYPICAL TOP PLATE SPLICE DETAIL
SCALE: 1" = 1'-0"



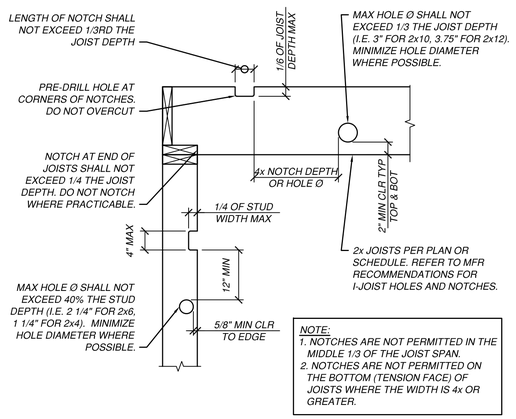
5 TYPICAL HEADER DETAIL
SCALE: 1" = 1'-0"



6 TYPICAL SHEAR WALL INTERSECTION DETAIL
SCALE: 1" = 1'-0"



7 TYPICAL FLUSH BEAM SUPPORT DETAILS
SCALE: 1" = 1'-0"



NOTE:
1. NOTCHES ARE NOT PERMITTED IN THE MIDDLE 1/3 OF THE JOIST SPAN.
2. NOTCHES ARE NOT PERMITTED ON THE BOTTOM (TENSION FACE) OF JOISTS WHERE THE WIDTH IS 4x OR GREATER.

8 ALLOWABLE HOLES & NOTCHES
SCALE: 1" = 1'-0"

SIDESWAY ENGINEERING
(425) 673-4160
www.sidesswayengineering.com

YU RESIDENCE
9004 SE 60TH STREET
MERCER ISLAND, WA 98040

PROJECT:

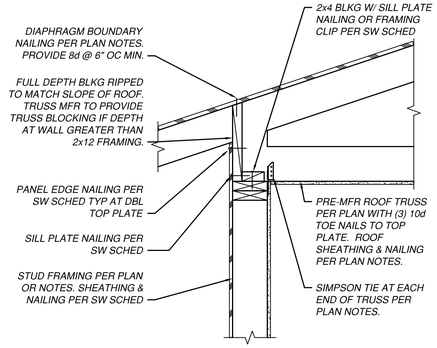
CHRISTOPHER A. BERNARDS — STATE OF WASHINGTON — 43785 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER
09/14/22

REV.	DATE	DESCRIPTION
0	09/14/22	PERMIT SUBMITTAL

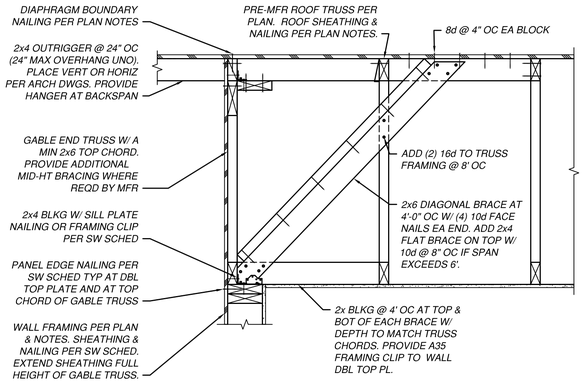
PROJECT NO.:	22076.01
DESIGNED BY:	LFM
DRAWN BY:	LFM
CHECKED BY:	JMD

SHEET TITLE:
WOOD FRAMING DETAILS

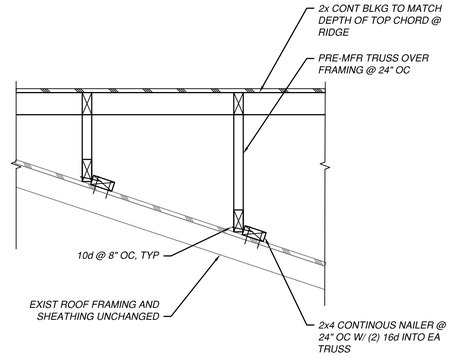
SHEET NO.:
S3.1



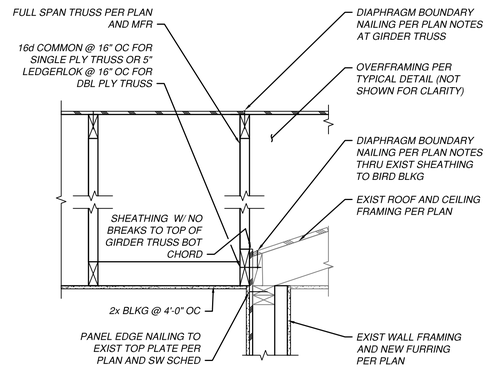
1 TRUSS BEARING WALL DETAIL
SCALE: 1" = 1'-0"



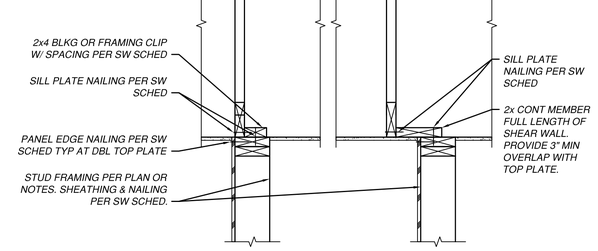
2 GABLE END DETAIL
SCALE: 1" = 1'-0"



3 TRUSS OVERFRAMING DETAIL
SCALE: 1" = 1'-0"



4 SECTION
SCALE: 1" = 1'-0"



TRUSS ALIGNS WITH SHEAR WALL TRUSS OFFSET FROM SHEAR WALL

5 DRAG TRUSS SECTION
SCALE: 1" = 1'-0"

SIDESWAY ENGINEERING
(425) 673-4160
www.sideswayengineering.com

PROJECT:

YU RESIDENCE

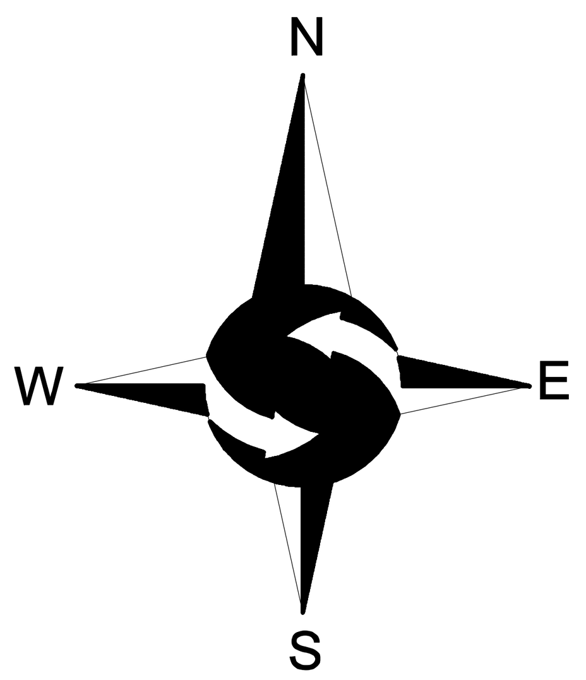
9004 SE 60TH STREET
MERCER ISLAND, WA 98040

REV.	DATE	DESCRIPTION
0	09/14/22	PERMIT SUBMITTAL

PROJECT NO.:	22076.01
DESIGNED BY:	LFM
DRAWN BY:	LFM
CHECKED BY:	JMD

SHEET TITLE:
WOOD FRAMING DETAILS

SHEET NO.:
S3.2



GRAPHIC SCALE
5 0 5 10 20
1 INCH = 10 FT.

LEGEND

	FOUND MONUMENT IN CASE	OHP	OVERHEAD POWER
	FOUND REBAR AS DESCRIBED	OHU	OVERHEAD UTILITIES
	SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP		WOOD FENCE
	POWER METER		CONCRETE WALL
	UTILITY POLE		ROCKERY
	GAS METER		ASPHALT SURFACE
	YARD DRAIN		CONCRETE SURFACE
	SANITARY SEWER MANHOLE		GRAVEL SURFACE
	WATER VALVE		BRICK SURFACE
	FIRE HYDRANT	CE	CEDAR
	WATER METER	DF	DOUGLAS FIR
SS	APPROXIMATE LOCATION SANITARY SEWER LINE	DS	DECIDUOUS
		PI	PINE

* INDICATES MULTI-TRUNK

LEGAL DESCRIPTION

LOT 1, BLOCK 5, TIMBERLAND NO. 2, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 58 OF PLATS, PAGE 27, RECORDS OF KING COUNTY, WASHINGTON;

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

BASIS OF BEARINGS

ACCEPTED MONUMENTS FOUND AND SET BY RECORD OF SURVEY BY HOLMVIG, DEWITT & ASSOCIATES, AS RECORDED ON DECEMBER 30, 2004, IN VOLUME 180 OF SURVEYS, PAGE 294, UNDER RECORDING NO. 20041230900002, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

SURVEYOR:	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412
PROPERTY OWNER:	YU HU & CINDY GOH 9004 SE 60TH STREET MERCER ISLAND, WA 98040
TAX PARCEL NUMBER:	865070-0100
PROJECT ADDRESS:	9004 SE 60TH STREET MERCER ISLAND, WA 98040
ZONING:	R-9.6
JURISDICTION:	CITY OF MERCER ISLAND
PARCEL ACREAGE:	14,176 S.F. (0.325 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 35 TOTAL STATION. 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 OCTOBER 2021 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

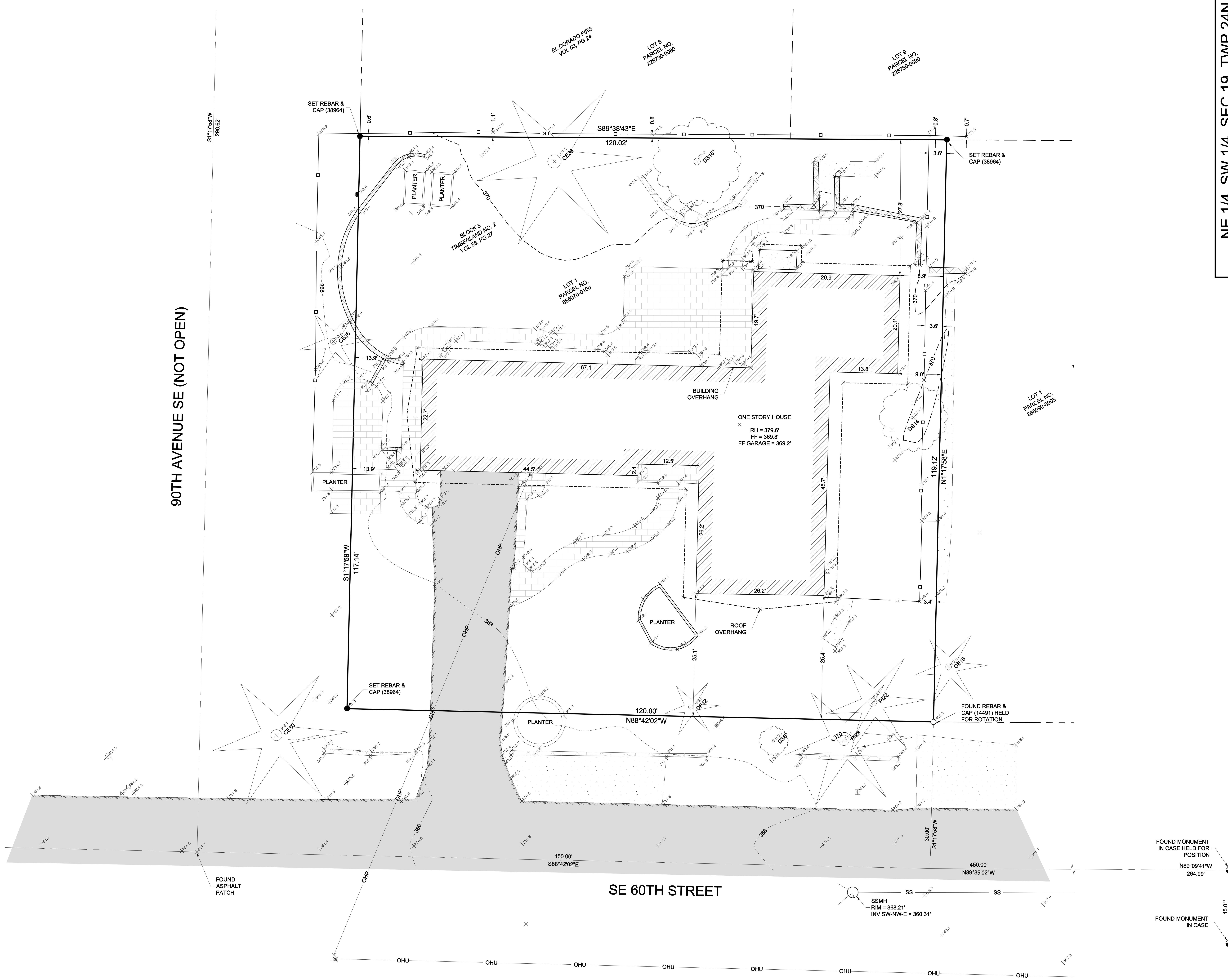
DATUM

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A MONUMENT IN CASE AT THE EAST END OF SE 60TH STREET, ± 150 FEET EAST OF THE INTERSECTION OF 92ND AVENUE SE.

POINT ID NO. MI-1063;
ELEVATION: 334.534 FEET NAVD 88

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO ½ THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.



NE 1/4, SW 1/4, SEC 19, TWP 24N, RNG 5E, W.M.
SE 1/4, SW 1/4, SEC 19, TWP 24N, RNG 5E, W.M.

DATE	REVISION	DRN

TOPOGRAPHIC SURVEY
KENT HU YU
9004 SE 60TH STREET
MERCER ISLAND, WA 98040

PROJECT NO. 21-593

DRAWN BY:	MTS
CHECKED BY:	TNW
DATE:	10/19/2021

SHEET 1 OF 1