

Structural Engineer

All Japanese knotweed (Polygonum cuspidatum) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, shall be removed from the property.

development proposals for a new single-family home shall remove japanese knotweed (polygonum cuspidatum) and regulated class a, regulated class b, and regulated class c weeds identified on the king county noxious weed list, as amended, from required landscaping areas established pursuant to subsection 19.02.020(f)(3)(a). new landscaping associated with new single-family home shall not incorporate any weeds identified on the king county noxious weed list, as amended. provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion.

	EL @ MIDPOINT	Segment	wia symm
Α	168.00	20.81	3496.08
A B	169.00	25.30	4275.70
С	169.00	21.40	3616.60
D	169.00	2.40	405.60
E F	169.00	24.70	4174.30
F	169.00	2.40	405.60
G	168.00	20.00	3360.00
Н	167.50	13.90	2328.25
	162.50	23.20	3770.00
J	159.00	12.25	1947.75
K	159.00	4.70	747.30
L	159.00	20.94	3329.46
M	159.00	4.70	747.30
N	159.60	15.06	2403.58
0	159.60	23.30	3718.68
Р	160.00	9.00	1440.00
Q	168.00	19.63	3297.84
R	168.00	12.81	2152.08
S	159.80	25.70	4106.86
T	167.50	12.81	2145.68
		315.01	51868.65

164.6572 AVG. EL =

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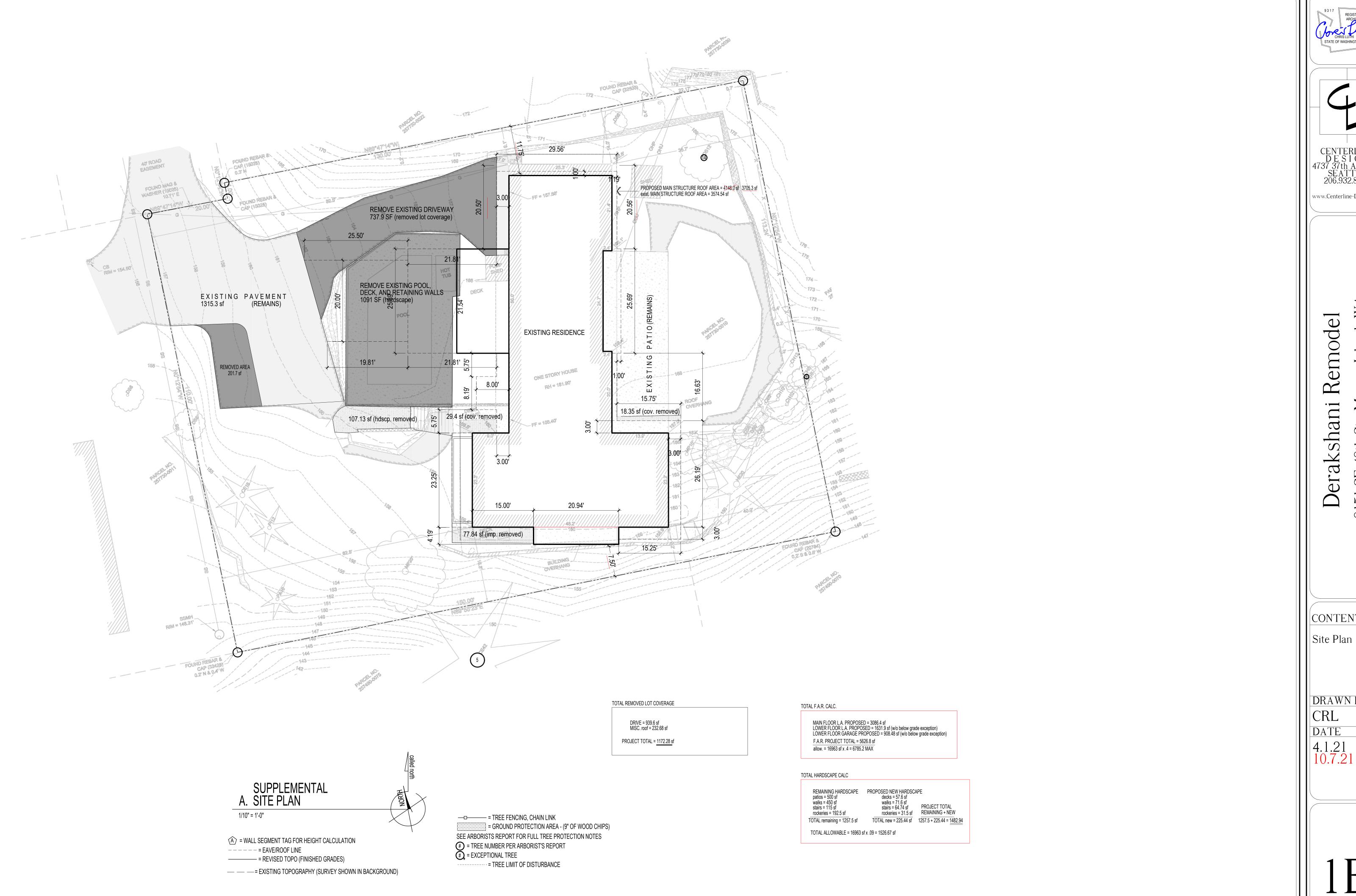
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CONTENTS Site Plan

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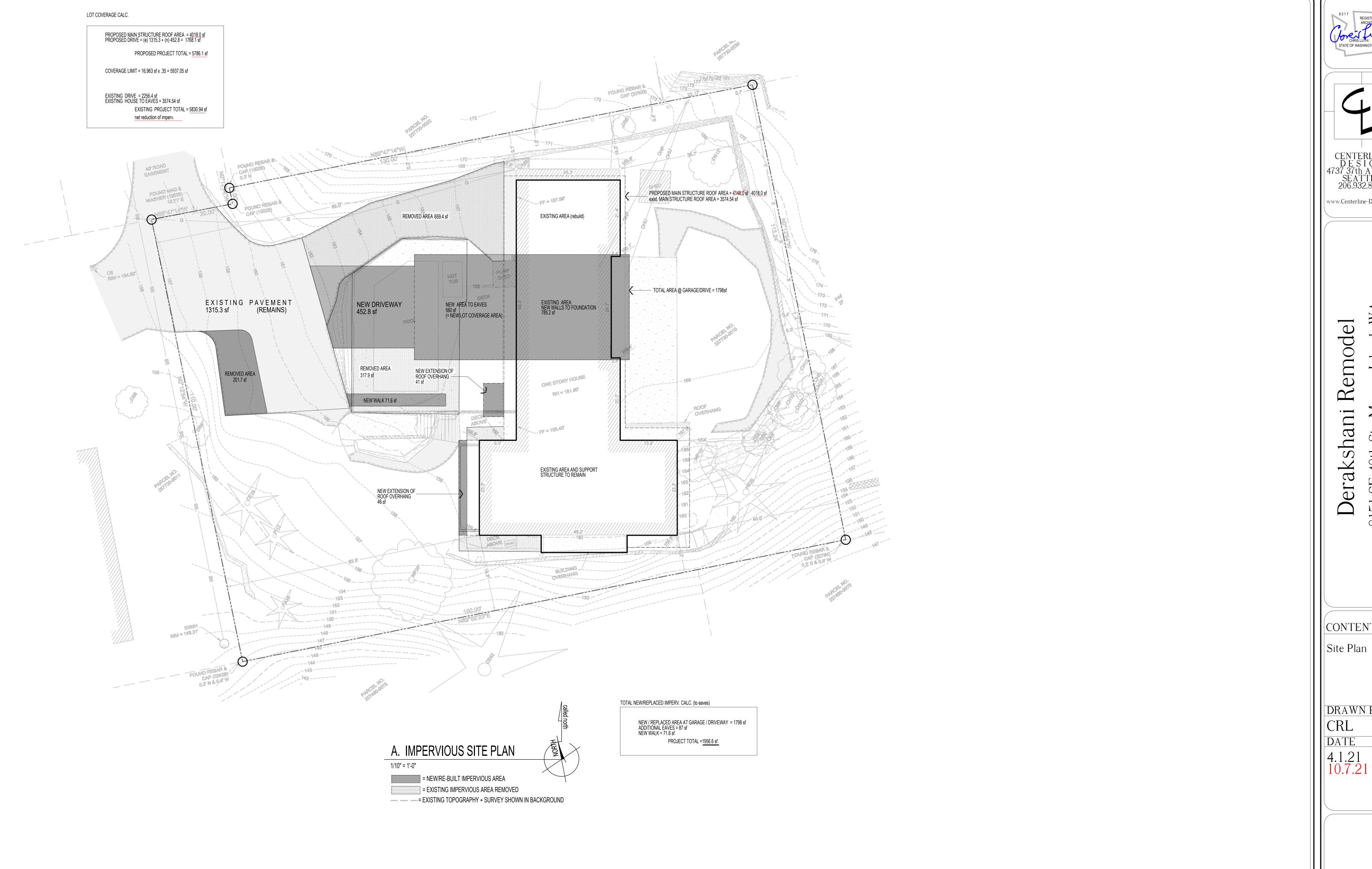
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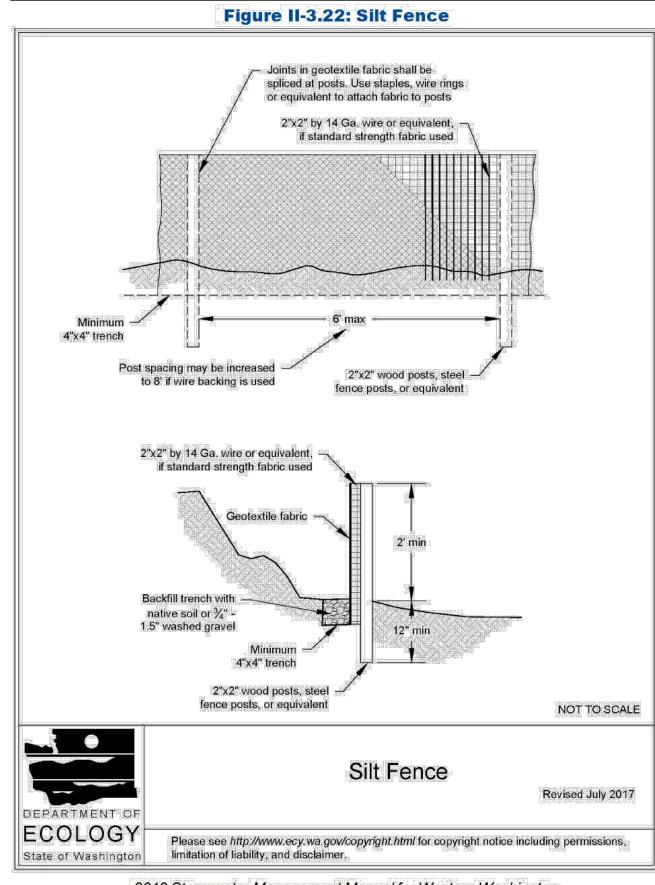
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SILT FENCE DETAIL

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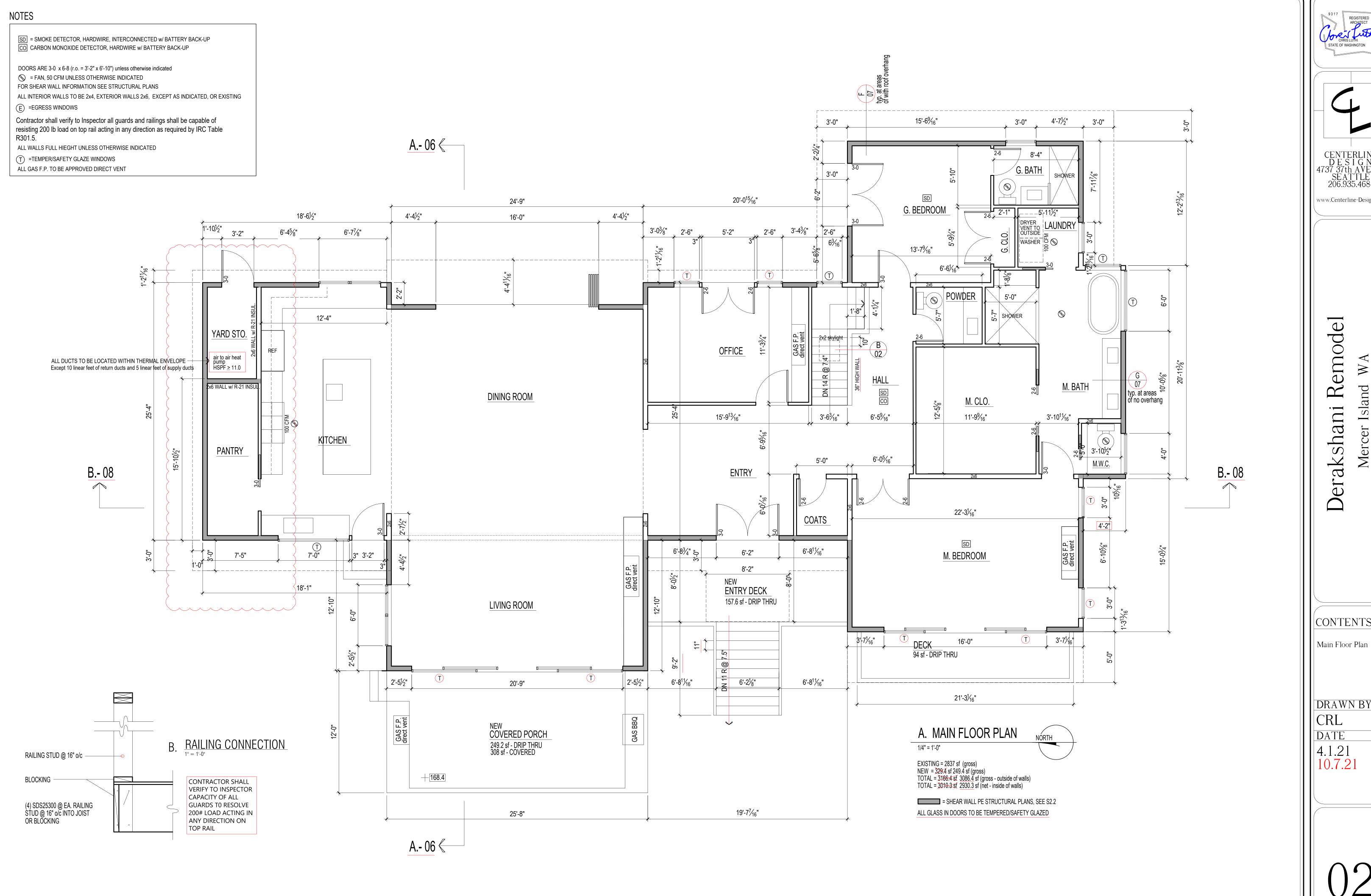
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Drainage and TESC Plan

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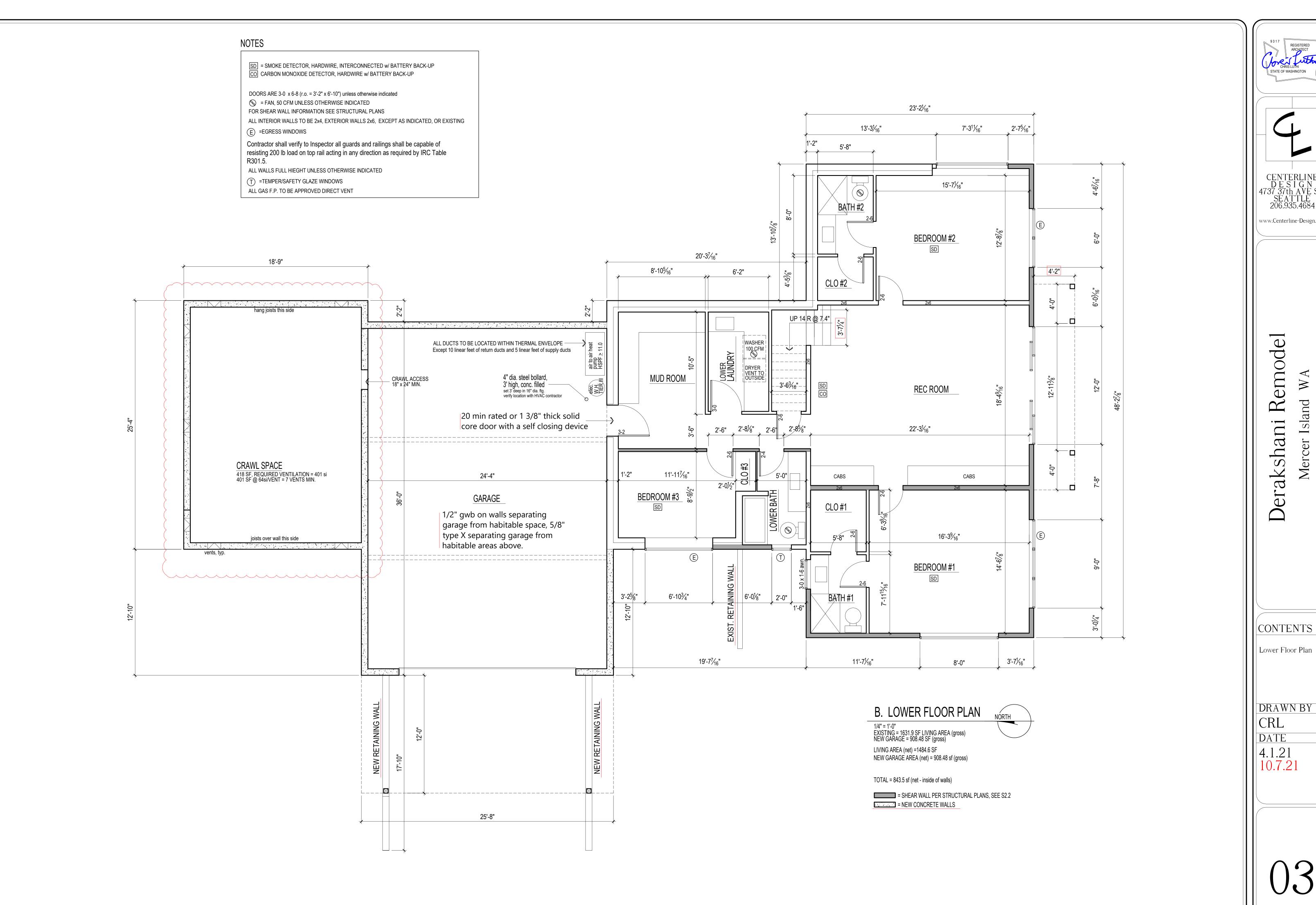
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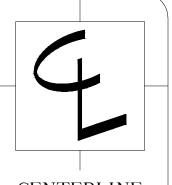
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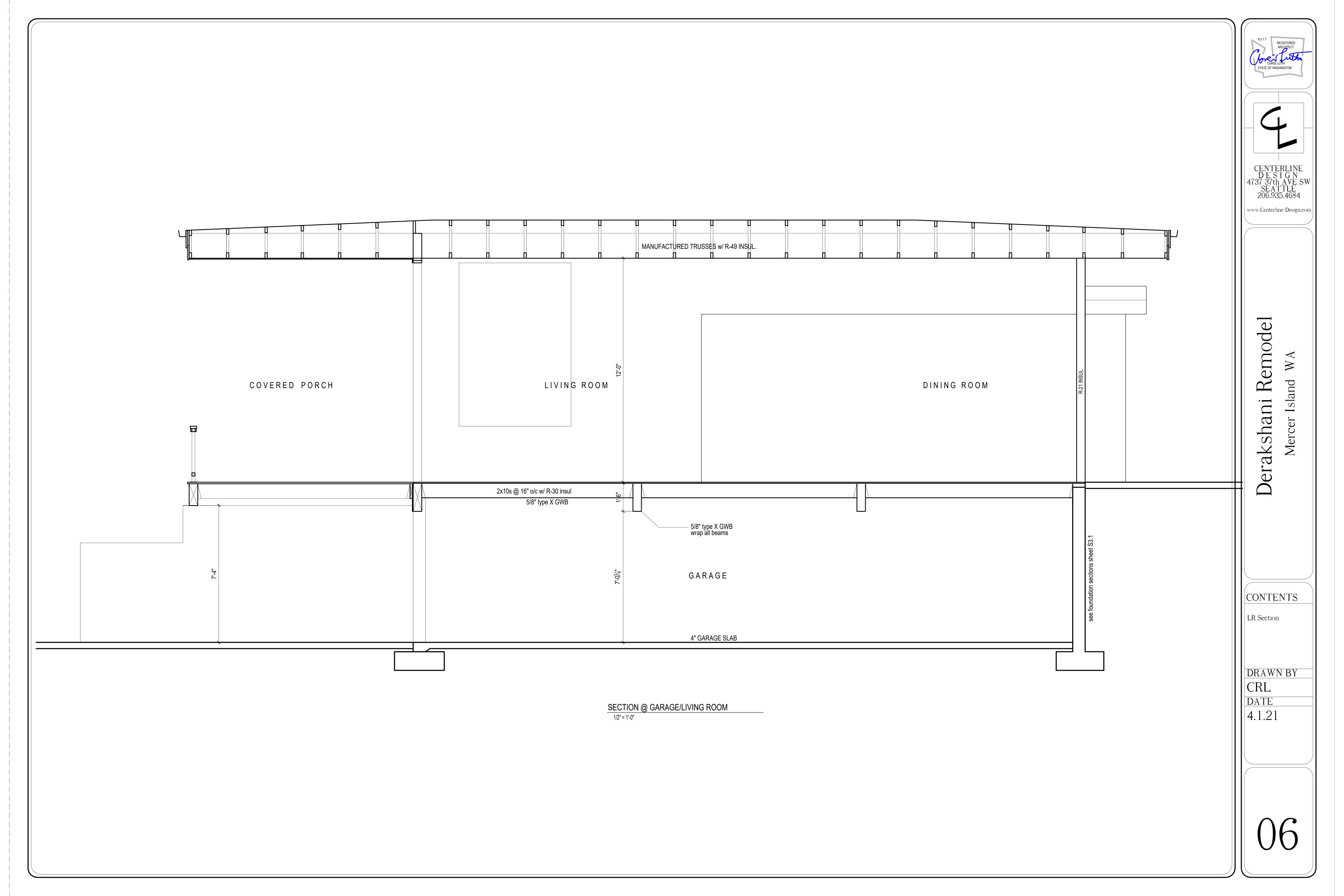
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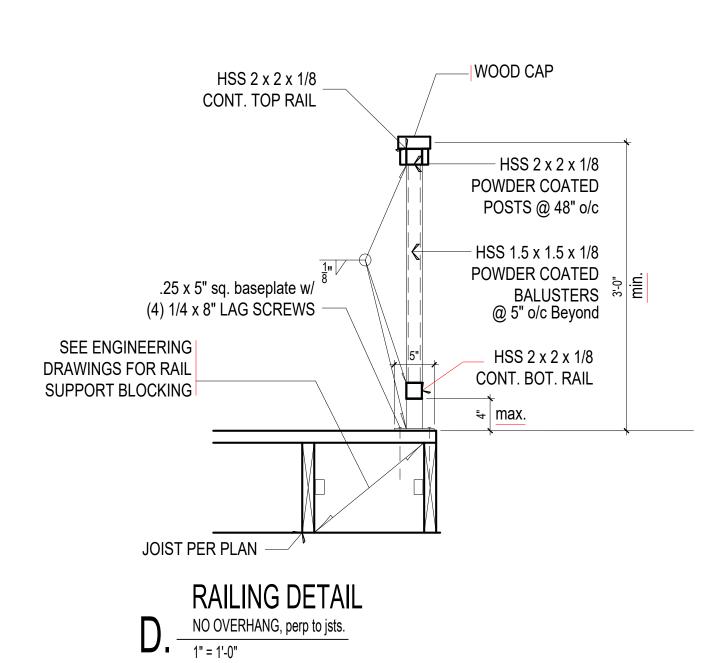
N and E Elevations

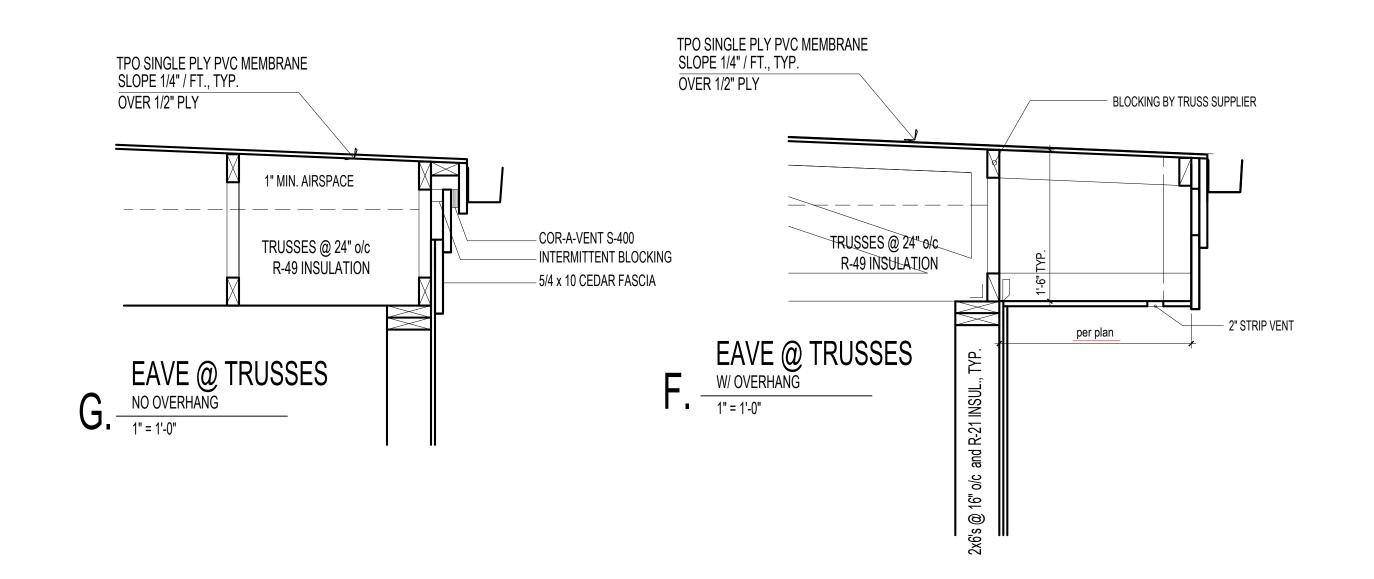
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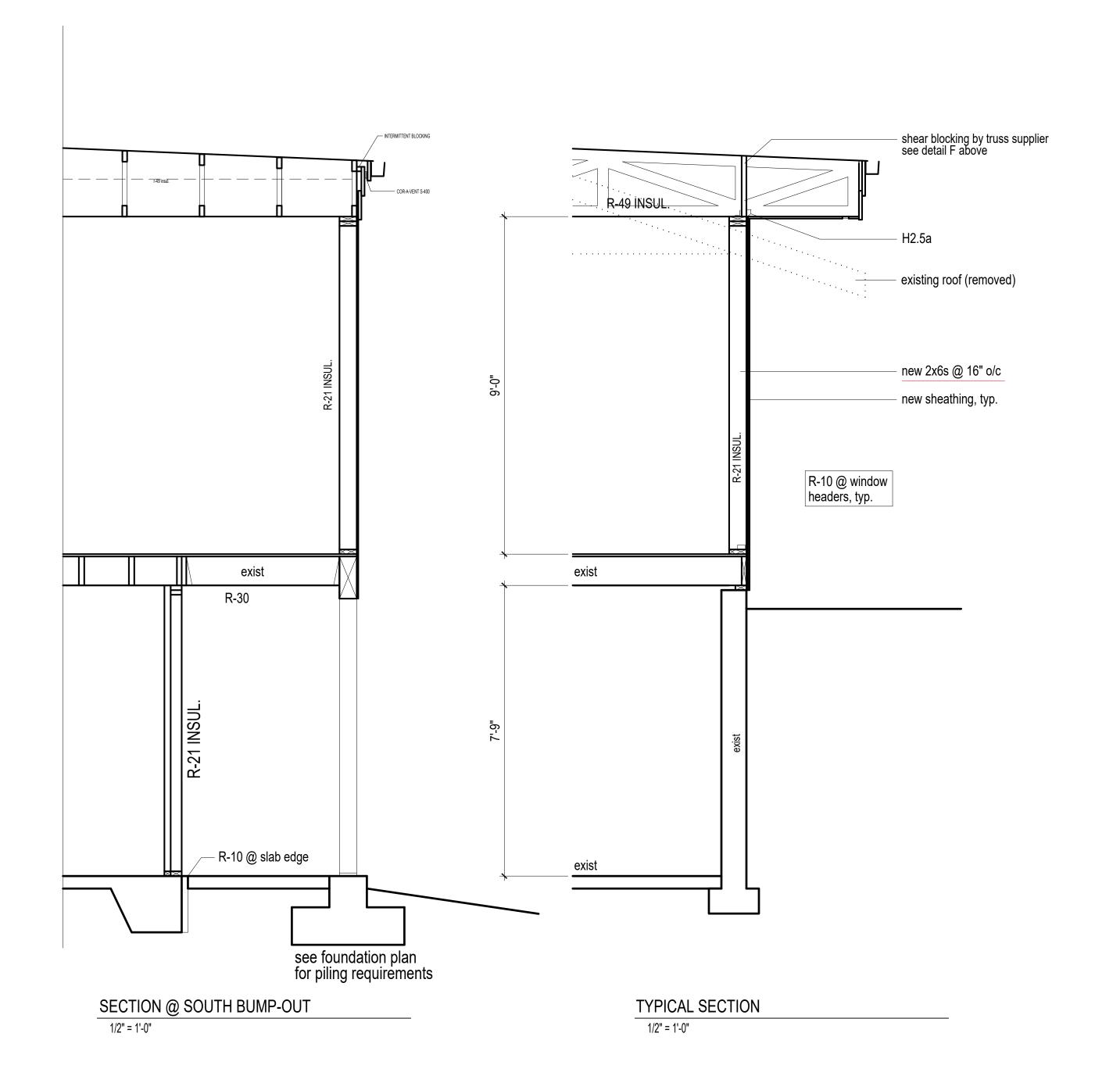
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2018 WA STATE PRESCRIPTIVE PATH FOR ALL CLIMATE ZONES
ENERGY CREDIT OPTIONS =
1.7(.5),2(1),2.1(.5),3.6(2),5.5(2) = 6 CREDITS
Vertical fenestration U = 0.30
Floor R-30

PRIMARY RESIDENCE HVAC NOTES

DUCTED HEAT PUMP (HSPF>9.0) INT. AIR HANDLER INTEGRATED VENTILATION REQUIRED VENTILATION = CONTINUOUS 120CFM SET TO OPERATE AT 240 CFM FOR 2 HOURS IN EA. 4 HR PERIOD (50%) PROVIDED BY VARIABLE SPEED HIGH EFF. FAN (MAX .35 WATTS/CFM) CONTOLLED TO OPERATE AT LOW SPEED IN VENTILATION MODE ONLY.

design professional or builder shall complete and

post an "Insulation Certificate for Residential Construction" within 3' of the electrical panel prior to final inspection.

Maximum flow rates for shower heads and kitchen sink - 1.75 GPM or less. All other lavatory faucets - 1.0 GPM or less.

A minimum of 75 percent of permanently installed lamps in lighting fixtures shall be high-efficacy lamps.

Air leakage shall not exceed 3 air changes/ hour and shall be tested as such. A written report of the test results, shall be signed by the testing party and provided to the building inspector, prior to call for final inspection.

Per WSEC R402.4, The building thermal Envelope shall be constructed to limit air leakage to 3.0 air changes per hour maximum. The results of the test shall be signed by the party conducting the test and provided to the code official (R402.4.1.2). Per WSEC R403.1.1, at least one thermostat per dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule. Per WSEC R403.2.2, Ducts, air handlers, and filter boxes shall be sealed. Per WSEC R404.1, A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.

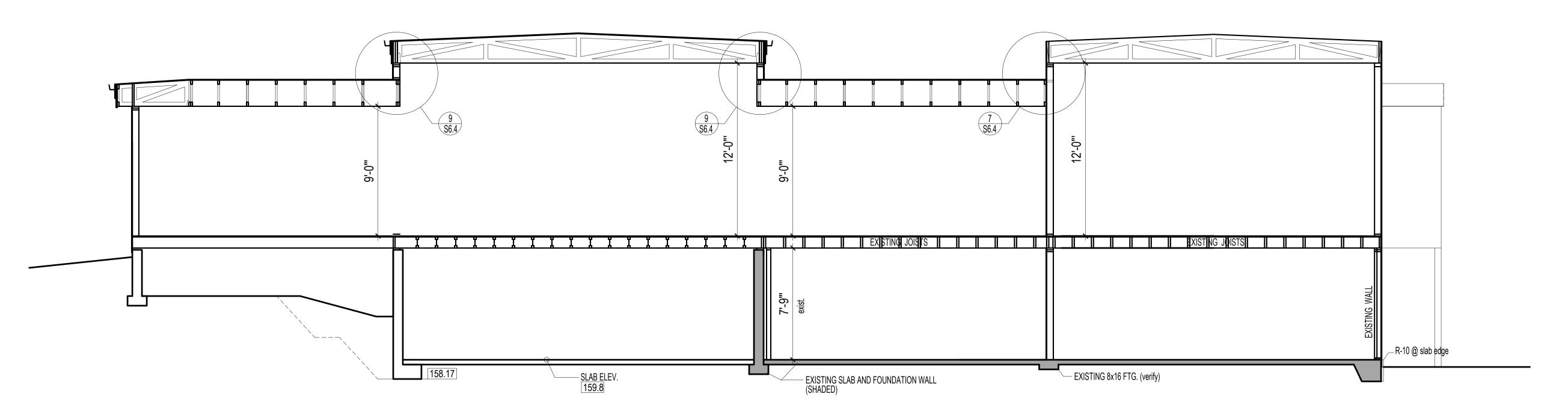
All Climate Zones (Table R402.1.1)							
	R-Value ^a	U-Factor ^a					
Fenestration U-Factor ^b	n/a	0.30					
Skylight U-Factor ^b	n/a	0.50					
Glazed Fenestration SHGC b,e	n/a	n/a					
Ceiling ^e	49	0.026					
Wood Frame Wall g,h	21 int	0.056					
Floor	30	0.029					
Below Grade Wall c,h	10/15/21 int + TB	0.042					
Slab ^{d,f} R-Value & Depth	10, 2 ft	n/a					

R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity that is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.

b The fenestration *U*-factor column excludes skylights.

"10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at

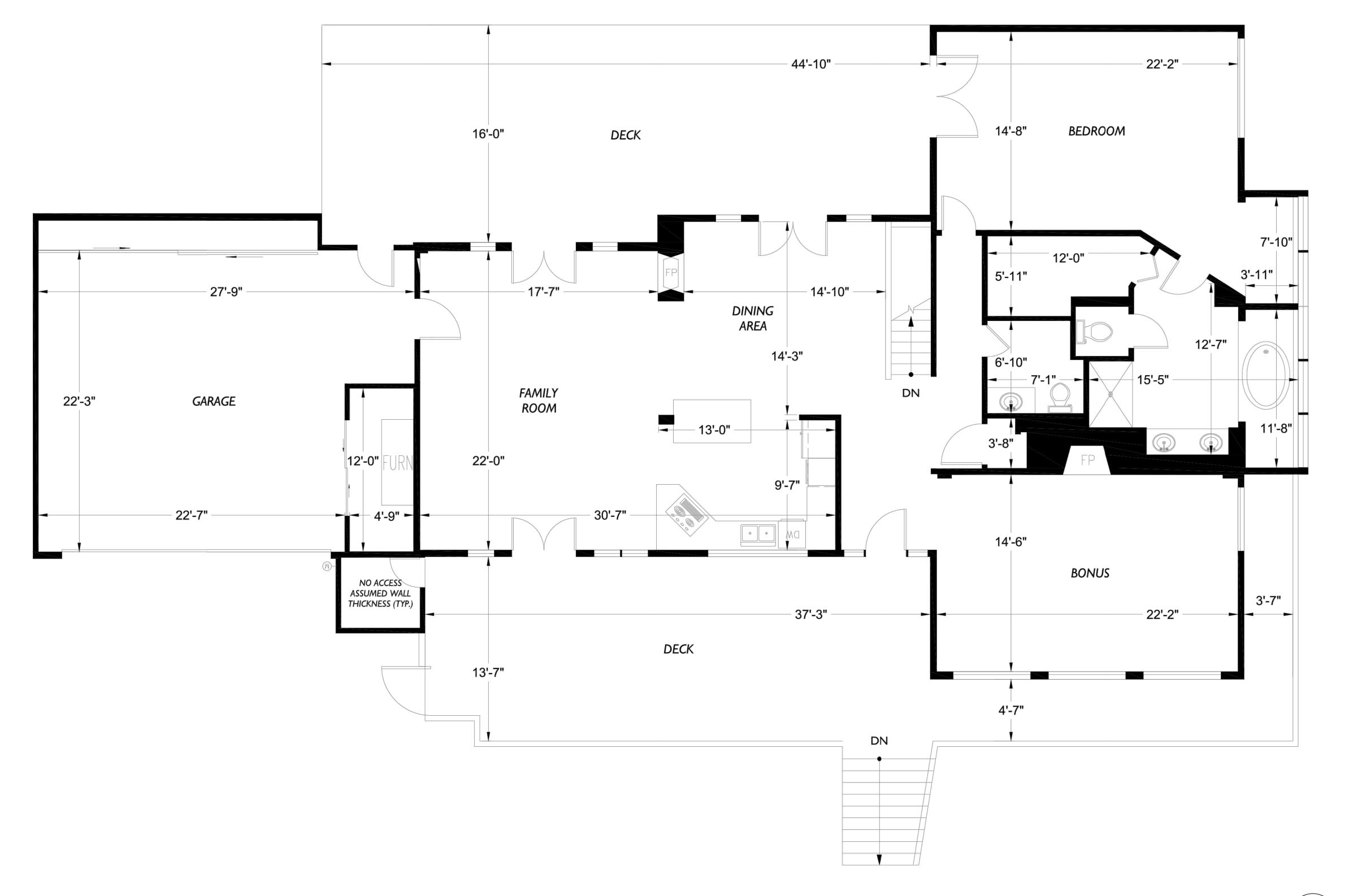
- the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.
- d R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.
- e For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.
- R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.
- For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.
- Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.



LONGITUDINAL SECTION B

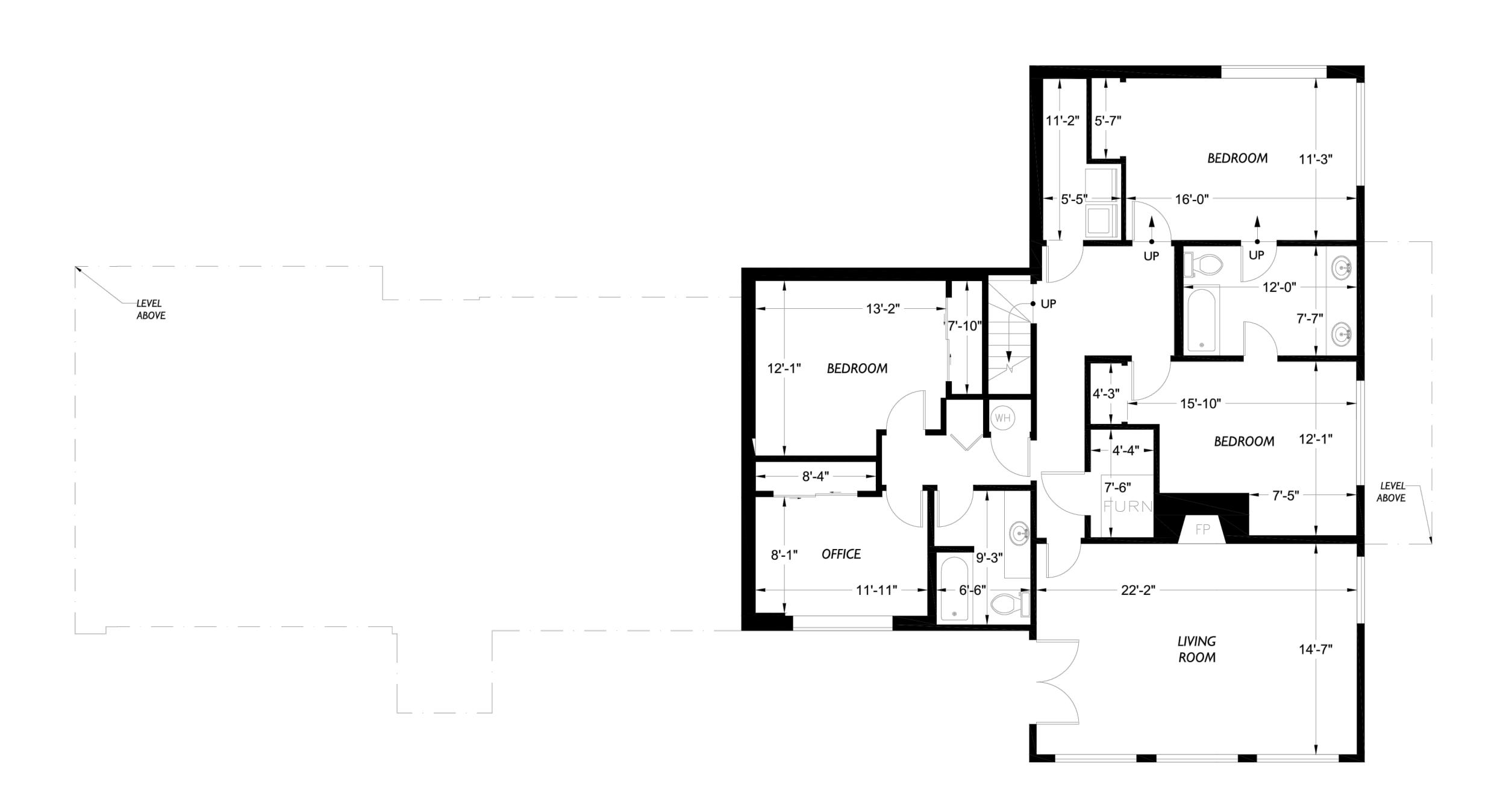
Shoring Layouts

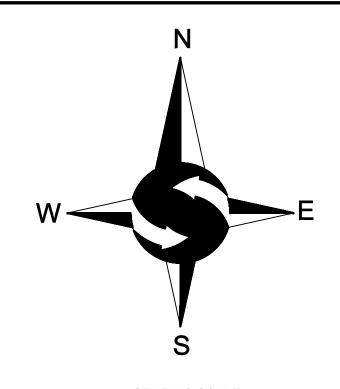
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GRAPHIC SCALE
5 0 5 10 2

1INCH = 10 FT.

LEGEND

─ OHP─ OVERHEAD POWER FOUND MONUMENT AS DESCRIBED ─OHU─ OVERHEAD UTILITIES FOUND REBAR AS DESCRIBED —X— CHAINLINK FENCE FOUND MAG & WASHER —□— WOOD FENCE SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP CONCRETE WALL SET MAG NAIL AS DESCRIBED ROCKERY **GUY WIRE** POWER METER ASPHALT SURFACE UTILITY POLE CONCRETE SURFACE GAS METER SANITARY SEWER MANHOLE **GRAVEL SURFACE** CATCH BASIN APPROXIMATE LOCATION UNDERGROUND GAS LINE APPROXIMATE LOCATION SANITARY DS DECIDUOUS SEWER LINE APPROXIMATE LOCATION STORM HE HEMLOCK TIMBER WALL PI PINE

LEGAL DESCRIPTION

THAT PORTION OF GOVERNMENT LOT 7, SECTION 24, TOWNSHIP 24 NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF GOVERMENT LOT 7 IN SAID SECTION 24, THENCE SOUTH 0°00'35" WEST ALONG THE EAST LINE THEREOF, 96 FEET; THENCE NORTH 89°33'45" WEST PARALLEL WITH THE NORTH LINE OF SAID SECTION, 208

FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING NORTH 89°33'45" WEST 130 FEET; THENCE SOUTH 0°00'35" WEST 4 FEET;

THENCE NORTH 89°33'45" WEST 20 FEET;

THENCE SOUTH 0°00'35" WEST 110.05 FEET TO A POINT BEARING NORTH 89°51'58" WEST FROM A POINT ON THE EAST LINE FO SAID SECTION 208.4 FEET SOUTH OF THE NORTHEAST CORNER THEREOF;
THENCE SOUTH 89°51'08" EAST TO A POINT BEARING SOUTH 0°00'35" WEST FROM THE

TRUE POINT OF BEGINNING;
THENCE NORTH 0°00'35" EAST 113.00 FEET, MORE OR LESS, TO THE TRUE POINT OF

BEGINNING;

TOGETHER WITH AN EASEMENT FOR ROAD PURPOSES OVER THE WEST 40 FEET OF THE EAST 378 FEET OF THE NORTH 100 FEET OF SAID SECTION 24.

BASIS OF BEARINGS

RECORD OF SURVEY FOR HELEN SCHWEDENBERG BY NORTH POINTE SURVEYING AS RECORDED UNDER RECORDING NUMBER 20111108900002, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

SURVEYOR:

SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412

* INDICATES MULTI-TRUNK

PROPERTY OWNER: KAM DERAKSHANI 8151 SE 48TH STREET

MERCER ISLAND, WA 98040
TAX PARCEL NUMBER: 257730-0010

PROJECT ADDRESS: 8151 SE 48TH STREET
MERCER ISLAND, WA 98040

ZONING: R-

JURISDICTION: CITY OF MERCER ISLAND

PARCEL ACREAGE: 16,963 S.F. (0.389 ACRES) AS SURVEYED

GENERAL NOTES

MAY EXIST ON THIS SITE.

- 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.

THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN AUGUST 2020 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
- 5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE

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 NE CORNER OF SECTION 24.

POINT ID NO. 8; ELEVATION: 202,49 FEET NAVD 88

1.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL
ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS
/ MINUS 0.5' FOR THIS PROJECT.



VICINITY MAP

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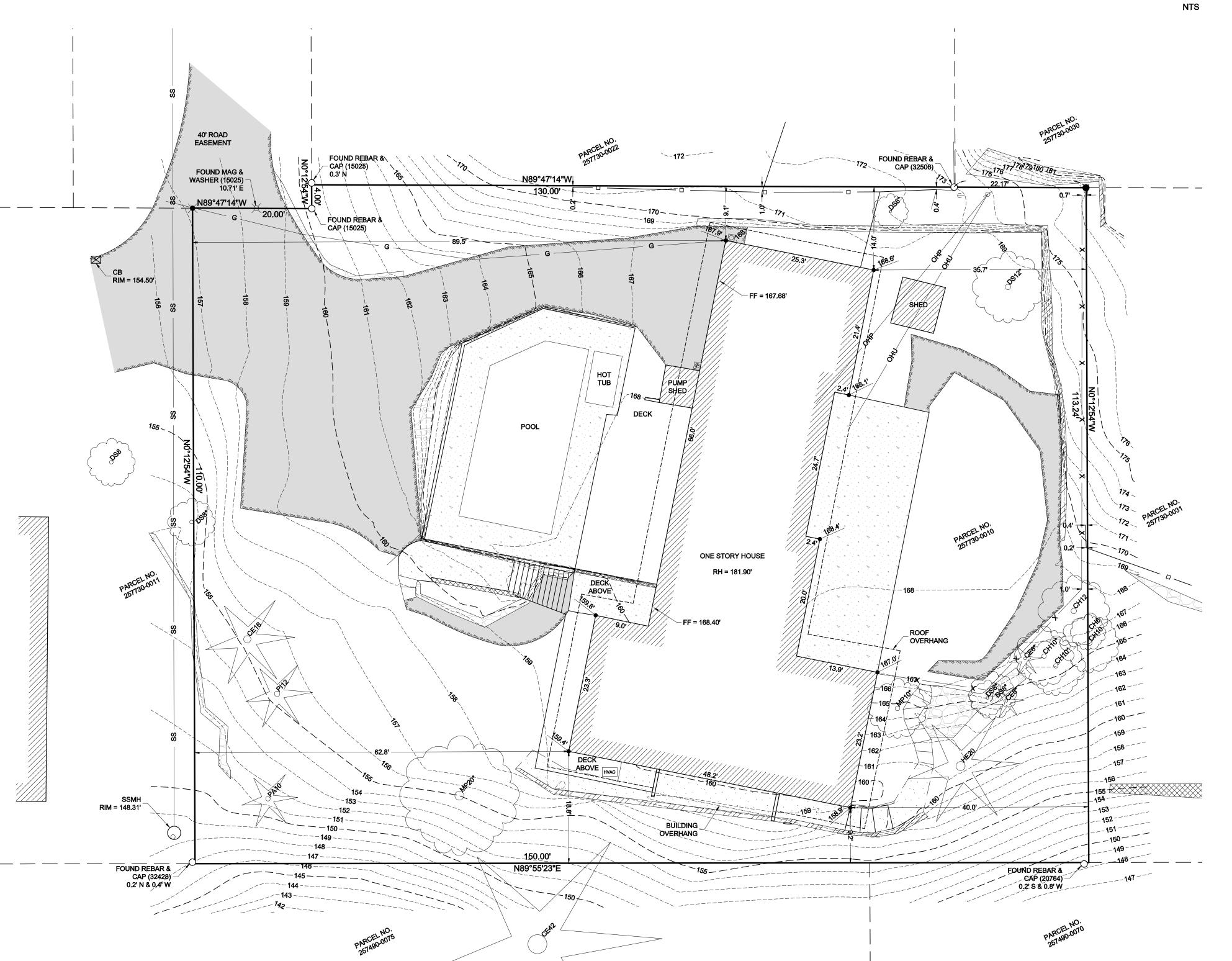
OGRAPHIC SURVEY
FRANK IMANI
8151 SE 48TH STREET

PROJECT NO. 20-346

DRAWN BY: MTS
CHECKED BY: TNW
DATE: 8/18/2

SHEET

8/18/2020 1 OF 1



2. DESIGN LOADING CRITERIA ROOF RAIN ON SNOW SURCHARGE 5 PSF 1

 $S_S = 1.443$, $S_1 = 0.501$, $S_{DS} = 1.155$, $S_{D1} = 0.601$ EQUIVALENT LATERAL FORCE PROCEDURE LIGHT FRAME (WOOD) WALLS AND ROOFS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR R = 6.5, $\Omega_0 = 2\frac{1}{2}$, $I_E = 1.0$, $C_d = 4$, $C_s = 0.178$ BASE SHEAR V = 39.0 K - LRFD

COMPONENTS & CLADDING -34.4/-20.7 PSF MAX. AT WALLS (LRFD/ASD) -58.3/-35.0 GROSS UPLIFT AT ROOF (LRFD/ASD) WIND PRESSURES BASED ON LESS THAN 10 SQUARE FOOT TRIBUTARY AREAS NEAR WALL CORNERS OR ROOF EDGES (EXCLUDING CORNER ZONES AT ROOF). REDUCED DESIGN PRESSURES MAY BE CALCULATED IN ACCORDANCE WITH ASCE 7-10 CHAPTER 30.

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ENGINEER OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BUILDING LAYOUT DIMENSIONS (GRID LAYOUTS, SITE COORDINATES, ETC.) AMONGST ALL TRADES, INCLUDING SHOP FABRICATED ITEMS.

4. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, BOTH FOR VERTICAL LOADS AND LATERAL STABILITY, FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS.

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

6. 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.

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

8. SEISMIC BRACING AND/OR GRAVITY SUPPORT AND ANCHORAGE OF ALL MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON, EXCEPT FOR ELEMENTS SPECIFICALLY SHOWN AND DETAILED ON THE STRUCTURAL DRAWINGS. THE MECHANICAL/ELECTRICAL CONTRACTOR MUST HIRE THE ENGINEER AND IS RESPONSIBLE FOR ALL COSTS RELATED TO THE PURCHASE AND INSTALLATION OF NECESSARY SUPPORTS, BRACING AND ANCHORAGE. SEISMIC BRACING AND ANCHORAGE DESIGN AND CONSTRUCTION SHALL COMPLY WITH CHAPTER 13 OF ASCE 7-10.

9. SHOP DRAWING REVIEW: SHOP DRAWINGS FOR TRUSSES SHALL BE SUBMITTED TO THE CONTRACTOR, ARCHITECT, AND ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS, DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, AND THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY. THE REPRODUCIBLE SHALL BE MARKED AND RETURNED. 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.

10. DEFERRED SUBMITTALS SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF WASHINGTON. THE COMPONENT DESIGNER SHALL BE A REGISTERED STRUCTURAL ENGINEER IF REQUIRED BY THE BUILDING OFFICIAL OF THE LOCAL JURISDICTION. BUILDING COMPONENT SUBMITTALS SHALL INCLUDE THE DESIGNING PROFESSIONAL ENGINEER'S STAMP AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE INCLUDING ACCOMMODATION FOR STRUCTURAL DISPLACEMENT PER ASCE 7-10 SECTION 13.3.2. AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. DEFERRED SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE INCLUDED IN THE SUBMITTAL. THE CONTRACTOR SHALL FORWARD DEFERRED SUBMITTALS TO THE BUILDING OFFICIAL AND HAVE THE DEFERRED SUBMITTALS ON SITE FOR THE GOVERNING JURISDICTIONS INSPECTORS USE AND REFERENCE. THE FOLLOWING BUILDING COMPONENTS SHALL BE DEFERRED SUBMITTALS FOR THIS PROJECT:

PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES (SEE NOTE 23)

GEOTECHNICAL: 11. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH THE RECOMMENDATIONS GIVEN IN THE SPECIFICATIONS OR AS DIRECTED BY THE OWNER APPOINTED GEOTECHNICAL ENGINEER. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH OR CONTROLLED, COMPACTED STRUCTURAL FILL AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. THE OWNER APPOINTED GEOTECHNICAL ENGINEER SHALL APPROVE FOOTING EXCAVATION/PREPARATION PRIOR TO PLACEMENT OF ALL FOOTINGS. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SPECIFICATIONS OR AS DIRECTED BY THE OWNER APPOINTED GEOTECHNICAL ENGINEER

LATERAL EARTH PRESSURE (RESTRAINED / UNRESTRAINED) 45 PCF / 35 PCF PASSIVE EARTH PRESSURE 300 PCF (ULTIMATE) SEISMIC SURCHARGE 8H PSF (UNIFORM) FACTOR OF SAFETY FOR SLIDING AND OVERTURNING 1.50 SOIL PROFILE TYPE SITE CLASS D GEOTECHNICAL REPORT REFERENCE: "Geotech Consultants, Inc. ... Geotechnical Engineering Study and Critical Area Study...Project JN21062...March 29, 2021"

11b. PIPE PILES SHALL BE 2" Ø EXTRA-STRONG STEEL WITH AN ALLOWABLE COMPRESSIVE LOAD OF 3-TONS. INSTALLATION, FINAL PENETRATION RATE, FINISH, CONNECTION, ETC. SHALL CONFORM STRICTLY WITH THE RECOMMENDATIONS GIVEN IN THE ABOVE GEOTECHNICAL REPORT REFERENCE. PIPES SHALL BE DRIVEN TO REFUSAL USING A METHOD APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER. ACTUAL LENGTH OF PILES TO ACHIEVE RECOMMENDED REFUSAL RATE SHALL NOT BE LESS THAN 7 FEEL BELOW THE EXISTING GRADE PER GEOTECHNICAL REPORT. PIPE PILE DEPTHS ARE SUBJECT TO ON—SITE VERIFICATION AND APPROVAL BY THE PROJECT GEOTECHNICAL ENGINEER. BATTERED PILES SHALL BE BATTERED DOWN TOWARD THE SOUTH AT A 1:5 (H:V) INCLINATION. DUE TO THE GROUND SURFACE SLOPING AWAY FROM THE SOUTHERN EDGE OF THE RESIDENCE, NO PASSIVE PRESSURE WAS ACCOUNTED FOR AGAINST THE PILE CAPS/GRADE BEAMS FOR THE SOUTHERN BUMP OUT ADDITION. THE LATERAL CAPACITY OF A BATTERED PILE IS EQUAL TO ONE-HALF OF THE LATERAL COMPONENT OF THE ALLOWABLE COMPRESSIVE LOAD, WITH A MAXIMUM ALLOWABLE LATERAL CAPACITY OF 500 POUNDS. THE ALLOWABLE VERTICAL CAPACITY OF BATTERED PILES DOES NOT NEED TO BE REDUCED IF THE PILES ARE BATTERED STEEPER THAN 1:5 (HORIZONTAL: VERTICAL).

12. DRIVE PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE ONE OF THE FOLLOWING INSTALLED IN STRICT ACCORDANCE WITH THE ICC-ES REPORTS INDICATED AND MANUFACTURER'S INSTRUCTIONS INCLUDING MINIMUM EMBED REQUIREMENTS: "TE SERIES" (0.157" DIAMETER) AS MANUFACTURED BY ITW RAMSET (ICC-ES NO. 1799); OR "X-U" (0.157" DIAMETER) AS MANUFACTURED BY HILTI, INC. (ICC-ES NO. 2269); OR "STRONG-TIE PDPA" (0.157" DIAMETER) AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. (ICC-ES NO. 2138): OR "CSI PIN" (0.157" DIAMETER) AS MANUFACTURED BY DEWALT/POWERS (ICC-ES NO. 2024); OR AN APPROVED EQUIVALENT IN STRENGTH AND EMBEDMENT. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3-1/2" TO NEAREST CONCRETE EDGE.

13. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318-14 CHAPTER 26 AND ACI 301. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 4,000 PSI (4,500 PSI AT ALL CONCRETE EXPOSED TO WEATHER). MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO FOR INTERIOR SLABS SHALL BE BETWEEN 0.40 AND 0.44. ALL CONCRETE SHALL BE EXPOSURE CLASSES FO. SO, WO, AND CO PER ACI 318-14 TABLES 19.3.1.1 AND 19.3.2.1 EXCEPT AS NOTED BELOW. ALL CONCRETE EXPOSED TO EARTH (FOUNDATIONS, ETC.): (F0, S0, W0, C1)

ALL CONCRETE EXPOSED TO WEATHER: (F1, S0, W0, C1) SEE SPECIFICATIONS FOR SHRINKAGE REDUCING CONCRETE MIX CRITERIA WHERE INDICATED ON DRAWINGS. CONCRETE MIXES SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFIED ABOVE. MIXES SHALL BE SUBMITTED TO THE ENGINEER AND BUILDING OFFICIAL FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE AND SHALL INCLUDE THE AMOUNTS OF CEMENT, CEMENTITOUS MATERIAL, 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 318-14, CHAPTER 26 AND 27. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

14. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, fy = 60,000 PSI. GRADE 60 REINFORCING BARS WHICH ARE TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCEMENT COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D1.4 ARE SUBMITTED. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.

15. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315-99 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT IN ACCORDANCE WITH "REINFORCEMENT SPLICE AND DEVELOPMENT LENGTH SCHEDULE" OF 10/S3.1. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 12" AT SIDES AND ENDS. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

16. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS: FOOTINGS AND OTHER UNFORMED SURFACES FORMED SURFACES EXPOSED TO EARTH

17. BONDING AGENT SHALL BE "MASTEREMACO ADH 326" BY BASF CORPORATION. OR EQUIVALENT, AND SHALL BE USED WHERE NEW CONCRETE IS PLACED AGAINST HARDENED CONCRETE. PLACE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, INCLUDING PREPARATION OF EXISTING SURFACES. CONCRETE SHALL BE CONSIDERED HARDENED AFTER 56 DAYS.

18. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (6,000 PSI MINIMUM).

19. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19. AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17 OR W.W.P.A. WESTERN LUMBER GRADING RULES. FURNISH TO THE FOLLOWING MINIMUM STANDARDS: DOUGLAS FIR NO. 3 OR STUD GRADE PLATES, LEDGERS & MISC. LIGHT FRAMING: MIN. BASIC DESIGN STRESS, $F_b = 525$ PSI, E = 1400 KSI

> $F_c = 775 \text{ PSI}, F_t = 325 \text{ PSI}$ JOISTS, BEAMS & POSTS: DOUGLAS FIR NO. 1 MIN. BASIC DESIGN STRESS, $F_b = 1000$ PSI, E = 1700 KSI $F_c = 1500 \text{ PSI}, F_t = 1000 \text{ PSI}$

20. MANUFACTURED LUMBER SHALL BE AS MANUFACTURED BY TRUS JOIST OR APPROVED EQUAL. REQUESTS FOR APPROVAL AS EQUAL WILL REQUIRE SUBMITTAL OF ICC REPORT EQUIVALENT TO ESR-1387 FOR LAMINATED VENNER LUMBER (LVL, LAMINATED STRAND LUMBER (LSL), OR PARALLEL STRAND LUMBER (PSL). THE MINIMUM ALLOWABLE DESIGN VALUES ARE AS FOLLOWS:

> LVL - $F_b = 2,600$ $F_v = 290$ PSI E = 2,000,000 PSI LSL - $F_b = 1,900$ $F_v = 150$ PSI E = 1,300,000 PSI

21. ENGINEERED WOOD I-JOISTS SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH ENGINEERED WOOD I-JOISTS PROVIDED. DESIGN SHOWN ON THE DRAWINGS IS BASED ON RESIDENTIAL JOISTS MANUFACTURED BY WEYERHAUSER IN ACCORDANCE WITH ICC-ES REPORT NO. ESR-1153. ALTERNATE ENGINEERED WOOD I-JOISTS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD

22. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND A.I.T.C. STANDARDS IN ACCORDANCE WITH IBC SECTION 2303.1.3. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. HORIZONTAL MEMBERS AND INCLINED MEMBERS OF LESS THAN 1:1 SLOPE SHALL HAVE A RADIUSED CAMBER OF 3.500 FT. UNLESS OTHERWISE NOTED.

 $F_b = 2400 \text{ PSI}$; $F_v = 265 \text{ PSI}$; E = 1,800,000 PSIGLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON-CORROSIVE. APPROVED PRESERVATIVE.

SIMPLE SPAN BEAMS DOUGLAS FIR COMBINATION 24F-VR

23. PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH ANSI/TPI I-2007 AND IBC SECTION 2303.4 FOR THE SPANS AND CONDITIONS SHOWN ON THE DRAWINGS.

DESIGN LOADS SHALL BE AS FOLLOWS: TOP CHORD LIVE LOAD 25 PSF, SNOW + 5 PSF, RAIN ON SNOW SURCHARGE BOTTOM CHORD LIVE LOAD 0 PSF TOP CHORD DEAD LOAD 15 PSF BOTTOM CHORD DEAD LOAD 5 PSF WIND UPLIFT (TOP CHORD) SEE NOTE#2 COMPONENTS & CLADDING ROOF LOADS

THE TRUSS MANUFACTURER SHALL COORDINATE LOCATIONS AND SUPPORT CONFIGURATIONS OF PLUMBING, MECHANICAL UNITS, DUCTS, AND/OR OTHER MISCELLANEOUS ITEMS WITH THE CONTRACTOR PRIOR TO TRUSS FABRICATION. THE TRUSS MANUFACTURER SHALL DESIGN TRUSSES TO SUPPORT ALL LOADS ASSOCIATED WITH SUCH ITEMS. THE TRUSS SHOP DRAWINGS SHALL INCLUDE ALL DESIGN LOADS AND APPROVED HANGER CONNECTION DETAILS TO TRUSS CHORDS FOR SUPPORT OF HUNG MECHANICAL SYSTEM COMPONENTS AS APPLICABLE.

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SHOP DRAWINGS AND CALCULATIONS SHALL BE PROVIDED AS A DEFERRED SUBMITTAL TO THE CONTRACTOR AND STRUCTURAL ENGINEER OF RECORD PER GENERAL STRUCTURAL NOTE 13. SHOP DRAWINGS SHALL INDICATE SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC. 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 OTHERWISE NOTED ON THE DRAWINGS. THE TRUSS MANUFACTURER SHALL PROVIDE ALL TRUSS-TO-TRUSS BEAM/JOIST CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. THE TRUSS MANUFACTURER SHALL DESIGN AND PROVIDE DETAILS FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

24. ROOF & WALL SHEATHING SHALL BE APA RATED, EXTERIOR OR EXPOSURE 1 PLYWOOD OR ORIENTED STRAND BOARD (OSB) IN CONFORMANCE WITH IBC SECTION 2303.1.5. SHEATHING SHALL BE MANUFACTURED UNDER THE PROVISIONS OF VOLUNTARY PRODUCT STANDARDS DOC PS 1-09, PS 2-10, OR APA PRP-108 PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL USE PANELS. SEE DRAWINGS FOR THICKNESS, SPAN RATING, AND NAILING REQUIREMENTS.

25. AT NON-SHEAR WALL EXTERIOR WALLS, UNLESS OTHERWISE NOTED, WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING OF 2%; WITH 8d @ 6" oc PANEL NAILING (APPLIES TO ALL SHEATHING PANEL EDGES); AND 8d @ 12" oc TO INTERMEDIATE FRAMING.

26. ALL PRESSURE-TREATED (P.T.) WOOD MEMBERS SPECIFIED ON THE DRAWINGS THAT OCCUR ABOVE

GROUND AND CONTINUOUSLY PROTECTED FROM MOISTURE (INTERIOR LOCATIONS) SHALL BE PRESSURE-TREATED WITH DOT SODIUM BORATE (SBX) WITHOUT NaSIO2. AT LOCATIONS PERMANENTLY EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, WOOD MEMBERS SHALL BE PRESSURE-TREATED WITH ALKALINE COPPER QUAT (ACQ-C FOR DOUGLAS-FIR) PRESERVATIVE UNLESS OTHERWISE NOTED, AMMONIACAL COPPER ZINC ARSENATE (ACZA) PRESERVATIVE OR OTHER PRESERVATIVES WITH AMMONIA CARRIERS, SHALL NOT BE USED. GLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON-CORROSIVE. APPROVED PRESERVATIVE. SEE NOTE #27 FOR MATERIAL REQUIREMENTS OF CONNECTORS AND FASTENERS IN CONTACT WITH PRESSURE-TREATED MEMBERS.

27. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED N THEIR WOOD CONSTRUCTION CONNECTORS CATALOG NO. C-C-2017-18. INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, CENTER STRAP ON JOINT AND INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER, WITH EQUAL NUMBER AND SIZE OF FASTENERS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL SHIMS SHALL BE SEASONED AND DRIED

ALL TIMBER CONNECTORS IN CONTACT WITH PRESSURE-TREATED WOOD THAT USED PRESERVATIVE CHEMICALS OTHER THAN DOT SODIUM BORATE (SBX) WITHOUT NaSIO2 SHALL BE MANUFACTURED FROM Z_{MAX} STEEL BY SIMPSON (G185 STEEL PER ASTM A653), OR TYPE 304 OR 316 STAINLESS STEEL. ALTERNATIVELY, CONNECTORS CAN BE POST HOT DIP GALVANIZED PER ASTM A123 OR MECHANICALLY GALVANIZED PER ASTM B695. CLASS 55 OR GREATER. STAINLESS STEEL FASTENERS SHALL BE USED WITH STAINLESS STEEL CONNECTORS, AND HOT DIP GALVANIZED FASTENERS PER ASTM A153 SHALL BE USED WITH GALVANIZED CONNECTORS.

AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

28. WOOD FRAMING NOTES: THE FOLLOWING SHALL APPLY UNLESS OTHERWISE NOTED ON THE DRAWINGS: A. ALL WOOD FRAMING DETAILS SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC. MINIMUM NAILING SHALL CONFORM TO IBC TABLE 2304.9.1 OR CURRENT ICC-ES REPORT NER-272. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF LAG SCREWS SHALL CONFORM TO 2012 NDS SECTION 11.1.4. AND INSTALLATION OF BOLTS SHALL CONFORM TO 2012 NDS

B. WALL FRAMING: TWO STUDS MINIMUM SHALL BE INSTALLED AT THE ENDS OF ALL WALLS, UNLESS NOTED OTHERWISE NOTED. INSTALL SOLID BLOCKING FOR WOOD COLUMN THROUGH FLOOR SPACES TO SUPPORTS BELOW.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS @ 12" oc STAGGERED OR BOLTED TO CONCRETE WITH 56" ANCHOR BOLTS @ 4'-0" oc PER IBC SECTION 2308.6 (EMBED 7"), UNLESS OTHERWISE NOTED. 3" x 3" x 0.229" PLATE WASHERS SHALL BE USED WITH ALL SILL PLATE ANCHOR BOLTS AND INSTALLED PER AF&PA SDPWS-2008 SECTION 4.3.6.4.3. INDIVIDUAL MEMBERS OF BUILT-UP STUD POSTS SHALL BE NAILED TO EACH OTHER WITH 16d @ 12" oc STAGGERED.

C. FLOOR AND ROOF FRAMING: INSTALL SOLID BLOCKING AT ALL BEARING POINTS. TOENAIL JOISTS TO SUPPORTS WITH (2)16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH 16d@12"oc STAGGERED.

ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AS SHOWN ON THE DRAWINGS. INSTALL APPROVED PANEL EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF LOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d@12"oc. IN ACCORDANCE WITH IBC SECTION 1604.8.3, DECKS SHALL BE POSITIVELY ANCHORED TO THE STRUCTURE BY MEANS OTHER THAN NAILS SUBJECT TO WITHDRAWAL. ANCHOR WITH MINIMUM (1) CS16 STRAP AT EACH END ATTACHED TO DECK JOISTS AND TO A SOLID BLOCKING MEMBER WITHIN THE BUILDING.

POST-INSTALLED ANCHORS AND EPOXY ADHESIVE

29. EPOXY-GROUTED RODS OR REBAR TO CONCRETE SPECIFIED ON THE DRAWINGS SHALL BE ONE OF THE FOLLOWING INSTALLED IN STRICT ACCORDANCE WITH THE ICC-ES REPORTS INDICATED AND MANUFACTURER'S INSTRUCTIONS INCLUDING MINIMUM EMBED REQUIREMENTS: "SET-XP" AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. (ICC-ES NO. 2508); OR "HIT-HY 200" AS MANUFACTURED BY HILTI, INC. (ICC-ES NO. 3187), "SAFE-SET" INSTALLATION WITH HOLLOW CARBIDE DRILL BIT IS PERMITTED; OR "PURE110+" AS MANUFACTURED BY DEWALT/POWERS (ICC-ES NO. 3298). SUBSTITUTES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH ICC-ES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. IN ADDITION, SUBSTITUTIONS SHALL MEET ICC-ES ACCEPTANCE CRITERIA AC308. SPECIAL INSPECTION OF EPOXY-GROUTED ANCHOR INSTALLATION IS REQUIRED. EPOXY GROUTED RODS OR REBAR SHALL NOT BE USED AS SUBSTITUTES FOR CAST-IN-PLACE ANCHOR BOLTS OR REINFORCING STEEL UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER. NOTIFY ENGINEER IF ANCHOR LOCATIONS CONFLICT WITH REINFORCING STEEL -DO NOT CUT REINFORCING OR REDUCE EMBEDMENT DEPTHS WITHOUT PRIOR APPROVAL. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY CERTIFIED PERSONNEL IN CONFORMANCE TO ACI 318-14 SECTION 17.8.2.2. HOLES SHALL BE HAMMER DRILLED AND DRY.

30. EXPANSION ANCHORS SHALL BE ONE OF THE APPROVED PRODUCTS BELOW: - KWIK BOLT TZ ANCHORS AS MANUFACTURED BY HILTI, INC. AND INSTALLED IN STRICT

AND INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

ACCORDANCE WITH ICC-ES REPORT NO. 1917, OR - STRONG-BOLT 2 AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. AND INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. 3037

IBC TABLE 1705.3 REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

REQUIRED?	VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC	REF STD.	IBC REF.
N*	INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS AND VERIFY PLACEMENT.		х	ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
N	2. REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706. B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM		х	AWSD1.4 ACI 318 26.5.4	
	5/16"; AND C. INSPECT ALL OTHER WELDS	х	х		
YES	3. INSPECT ANCHORS CAST IN CONCRETE.		х	ACI 318: 17.8.2	
YES	INSPECT ANCHORS POST—INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST	х	х	ACI 318: 17.8.2.4	
	SUSTAINED TENSION LOADS B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A			ACI 318:17.8.2	
N*	5. VERIFY USE OF REQUIRED DESIGN MIX.		х	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
N*	6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	х		ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12	1908.10
N*	7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	х		ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
N*	8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.		х	ACI 318: 26.4.7-26.4.9	1908.9
N	9. Inspect prestressed concrete for: A. Application of prestressing forces; and B. Grouting of Bonded prestressing tendons	X X		ACI 318: 26.9.2.1 ACI 218: 26.9.2.3	
N	10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.		х	ACI 318: CH. 26.8	
N*	11. 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.		х	ACI 318: 26.10.2	
N*	12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		х	ACI318: 26.10.1(b)	

14. BOTTOM PLATE TO JOIST, RIM JOIST, 16d COMMON (3½" x 0.162")"; or

18. TOP PLATES, LAPS AT CORNERS AND 2-16d COMMON (31/2" x 0.162"); or

19. 1" BRACE TO EACH STUD AND PLATE | 2-8d COMMON (2½" x 0.131"); or

20. 1" x 6" SHEATHING TO EACH BEARING 2-8d COMMON (21/2" x 0.131"); or

21. 1" x 8" AND WIDER SHEATHING TO 3-8d COMMON (2½" x 0.131"); or

16d BOX (3½" x 0.135")"; or

3" x 14 GAGE STAPLES, 7/6" CROWN

4-3" x 14 GAGE STAPLES, ¾6" CROWN

4-3" x 14 GAGE STAPLES, 7/6" CROWN

3-3" x 14 GAGE STAPLES, 7/6" CROWN

3-3" x 14 GAGE STAPLES, 7/6" CROWN

3-3" x 14 GAGE STAPLES, 1/6" CROWN

2-3" x 14 GAGE STAPLES, 7/6" CROWN

2-16d COMMON (3½" x 0.162"); or

3-10d BOX (3" x 0.128"); or

3-10d BOX (3" x 0.128"); or

2-10d BOX (3" x 0.128"); or

2-10d BOX (3" x 0.128"); or

3-10d BOX (3" x 0.128"); or

2-3" x 0.131" NAILS; or

3-3" x 0.131" NAILS; or

3-3" x 0.131" NAILS; or

2-16d COMMON ($3\frac{1}{2}$ " x 0.162"); or

2-16d COMMON ($3\frac{1}{2}$ " x 0.162"); or

4-8d COMMON ($2\frac{1}{2}$ " x 0.131"); or

4-10d BOX (3" x 0.128"); or

3-10d BOX (3" x 0.128"); or

4-3" x 0.131" NAILS; or

3-3" x 0.131" NAILS; or

 $3-16d BOX (3\frac{1}{2}$ " x 0.135"); or

4-3" x 0.131" NAILS; or

3" x 0.131" NAILS; or

BAND JOIST, OR BLOCKING NOT AT

15. BOTTOM PLATE TO JOIST, RIM JOIST,

16. STUD TO TOP OR BOTTOM PLATE

17. TOP OR BOTTOM PLATE TO STUD

INTERSECTIONS

EACH BEARING

SHEARWALL

BAND JOIST, OR BLOCKING AT

	DESCRIPTION OF BUILDING ELEMENT	NUMBER AND TYPE OF FASTENERS	SPACING & LOCATION		DESCRIPTION OF BLDG. ELEMENT	NUMBER AND TYPE OF FASTENERS	SPACING & LOCATION
1.	BLOCKING BETWEEN CEILING JOISTS, RAFTERS, OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	ROOF 3-8d COMMON (2½" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, ½6" CROWN	EACH END, TOENAIL	22.	JOIST TO SILL, TOP PLATE, OR GIRDER	FLOOR 3-8d COMMON (2½" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, ½6" CROWN	TOENAIL
	BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON (2½" x 0.131") 2-3" x 0.131" NAILS 2-3" x 14 GAGE STAPLES 2-16d COMMON (3½" x 0.162") 3-3" x 0.131" NAILS	EACH END, TOENAIL END NAIL	23.	RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL, OR OTHER FRAMING BELOW	8d COMMON (2½" x 0.131"); or 10d BOX (3" x 0.128"); or 3" x .131" NAILS; r 3" x 14 GAGE STAPLES, ¾6" CROWN	6" o.c., TOENAIL
	FLAT BLOCKING TO TRUSS AND	3-3" x 14 GAGE STAPLES 16d COMMON (3½" x 0.162") @ 6" oc	FACE NAIL	24.	1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON (2½" x 0.131"); or 2-10d BOX (3" x 0.128")	FACE NAIL
	WEB FILLER	3" x 0.131" NAILS @ 6" oc 3" x 14 GAGE STAPLES @ 6" oc		25.	2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON (3½" x 0.162")	FACE NAIL
2.	CEILING JOISTS TO TOP PLATE	3-8d COMMON (2½" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, ½6" CROWN	EACH JOIST, TOENAIL	26.	2" PLANKS (PLANK & BEAM — FLOOR & ROOF)	2—16d COMMON (3½" x 0.162")"	EA. BEARING, FACE NAIL
3.	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITION (NO THRUST) (SEE 2308.7.3.1)	3-16d COMMON (3½" x 0.162"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, ½6" CROWN	FACE NAIL	27.	BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4" x 0.192")	32" o.c., FACE NAIL TOP & BOT. STAGGERED ON OPPOSITE SIDES
4.	CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	PER TABLE 2308.7.3.1	FACE NAIL			10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 1/6" CROWN	24" o.c., FACE NAIL AT TOP & BOT. STAGGERED
5.	COLLAR TIE TO RAFTER	3-10d COMMON (3" x 0.148"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, ¾6" CROWN	FACE NAIL			AND: 2-20d COMMON (4" x 0.192"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or	ON OPP. SIDES ENDS AND AT EACH SPLICE, FACE NAIL
6.	RAFTER OR ROOF TRUSS TO TOP PLATE (SEE 2308.7.5, TABLE 2308.7.5)	$3-10d$ COMMON (3" x 0.148"); or $3-16d$ BOX ($3\frac{1}{2}$ " x 0.135"); or $4-10d$ BOX (3" x 0.128"); or $4-3$ " x 0.131" NAILS; or $4-3$ " x 14 GAGE STAPLES, $\frac{1}{16}$ " CROWN	TOENAIL	28.	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-3" x 14 GAGE STAPLES, 16" CROWN 3-16d COMMON (3½" x 0.162"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 16" CROWN	EACH JOIST OR RAFTER, FACE NAIL
7.	ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2" RIDGE BEAM	2-16d COMMON (3½" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131 NAILS; or 3-3" x 14 GAGE STAPES, ¾6" CROWN	END NAIL	29.	JOIST TO BAND JOIST OR RIM JOIST	3-16d COMMON (3½" x 0.162"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 1/6" CROWN	END NAIL
		3-10d COMMON (3½" x 0.148"); or 3-16d BOX (3½" x 0.135"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131 NAILS; or 4-3" x 14 GAGE STAPES, ½6" CROWN	TOENAIL	30.	BRIDGING OR BLOCKING TO JOIST, RAFTER, OR TRUSS	2-8d COMMON (2½" x 0.131"); or 2-10d BOX (3" x 0.128"); or 2-3" x 0.131" NAILS; or 2-3" x 14 GAGE STAPLES, ¾6" CROWN	EACH END, TOENAIL
8.	STUD TO STUD (NOT AT SHEARWALL CHORDS)	WALL 16d COMMON (3½" x 0.162")"	24" oc FACE NAIL				
	·	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, ¾6" CROWN	16" oc FACE NAIL				
9.	STUD TO STUD AND ABUTTING STUDS AT INTERSECTION WALL CORNERS	16d COMMON (3½" x 0.162")"; or 16d BOX (3½" x 0.135")"; or 3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, ¾6" CROWN	16" oc FACE NAIL 12" oc FACE NAIL 12" oc FACE NAIL				
10.	BUILT-UP HEADER (2" TO 2" HDR.)	16d COMMON (3½" x 0.162")"; or	16" oc EA. EDGE, FACE NAIL				
		16d BOX (3½" x 0.135")	12" oc EA. EDGE, FACE NAIL				
11.	CONTINUOUS HEADER TO STUD	4-8d COMMON (2½" x 0.131"); or 4-10d BOX (3" x 0.128")	TOENAIL				
12.	TOP PLATE TO TOP PLATE	16d COMMON (3½" x 0.162"); or	16" oc FACE NAIL				
		10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, ¾6" CROWN	12" oc FACE NAIL				
13.	TOP PLATE TO TOP PLATE, AT END JOINTS	8-16d COMMON (3½" x 0.162"); or 12-10d BOX (3" x 0.128"); or 12-3" x 0.131" NAILS; or 12-3" x 14 GAGE STAPLES, ½6" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EA. SIDE OF END JOINT				
14	BOTTOM PLATE TO JOIST, RIM JOIST,	16d COMMON (3½" x 0.162")" or	16" oc FACF NAII				

16" oc FACE NAIL

12" oc FACE NAIL

16" oc FACE NAIL

TOENAIL

END NAIL

END NAIL

FACE NAIL

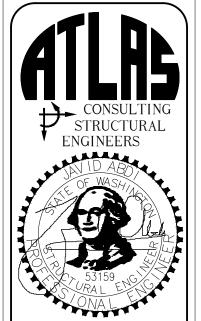
FACE NAIL

FACE NAIL

FACE NAIL





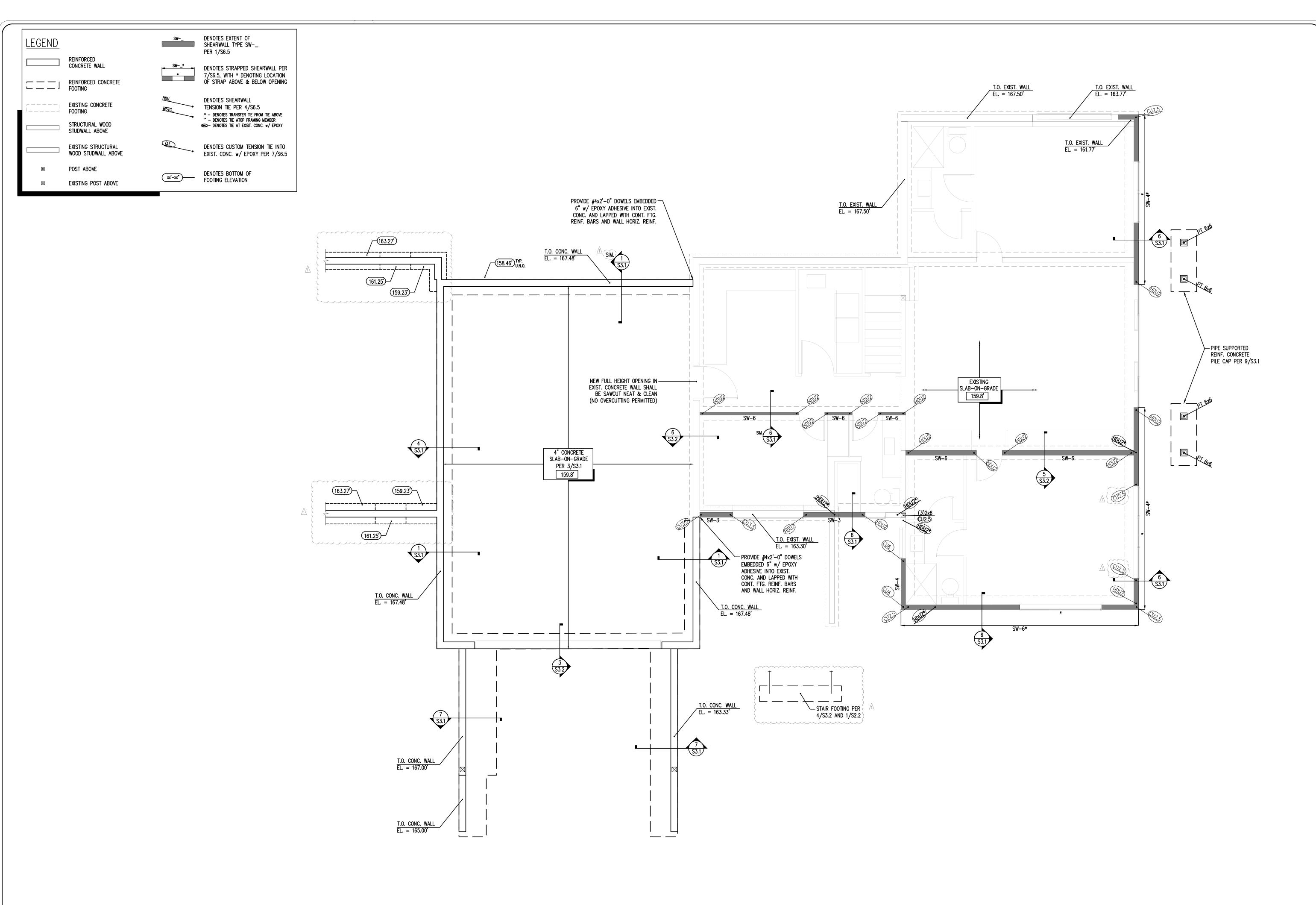


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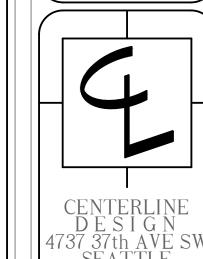
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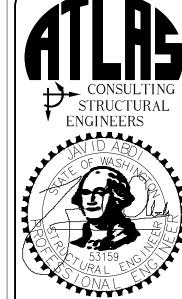
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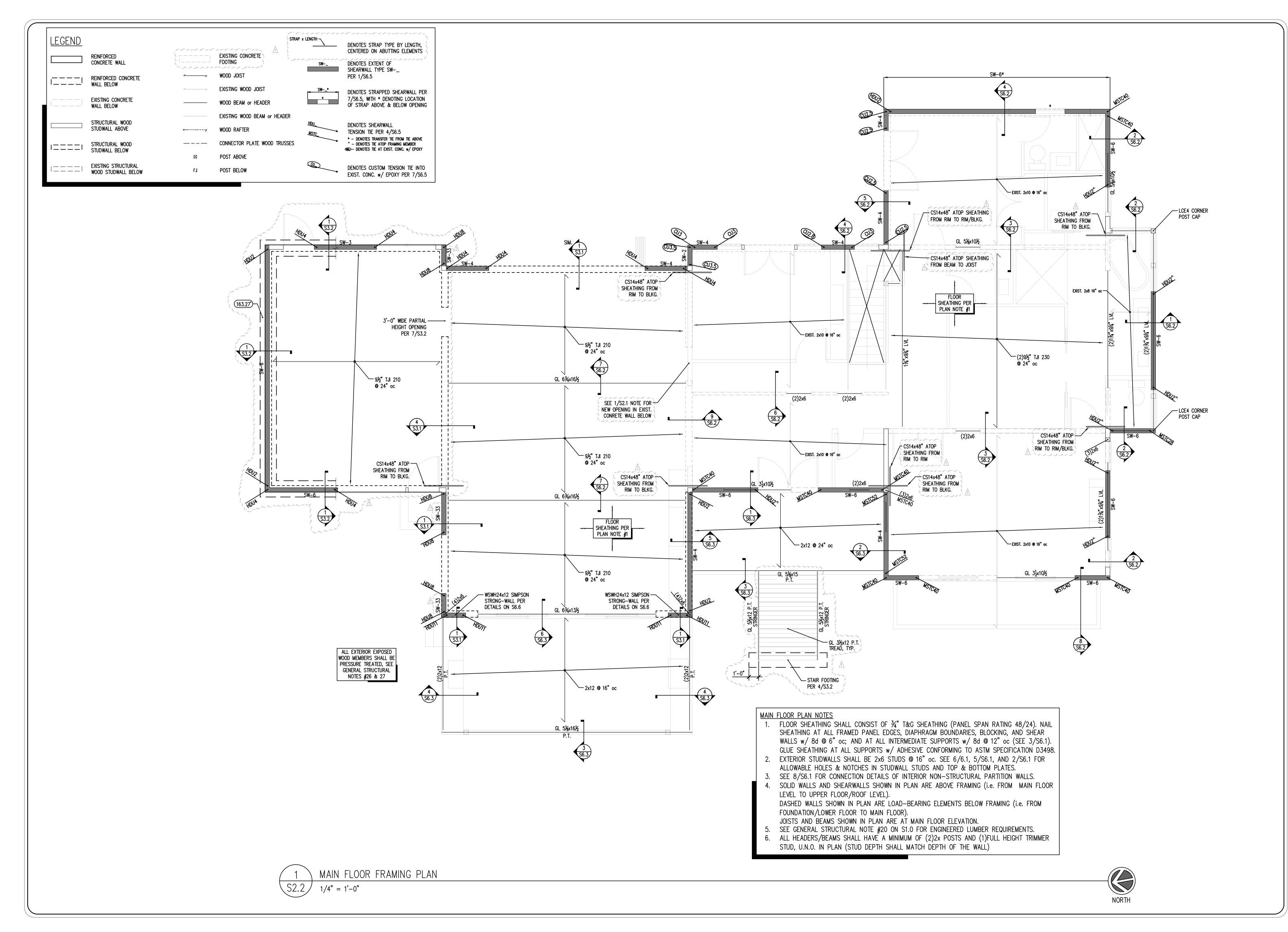
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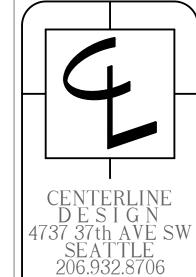
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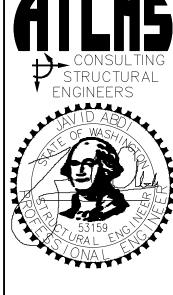
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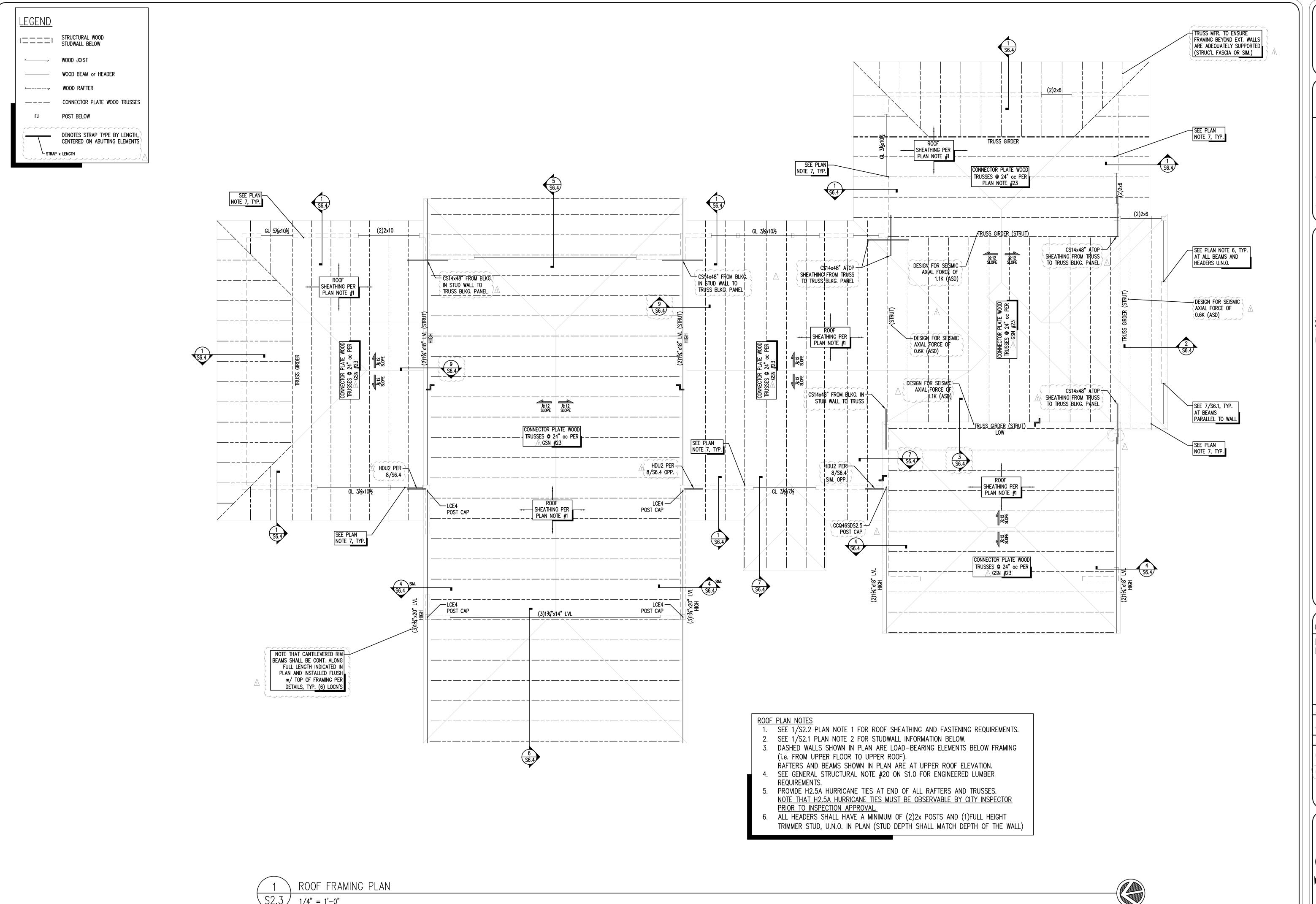
Main Floor Framing Plan

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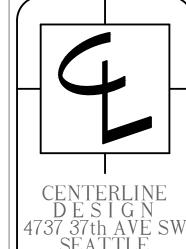
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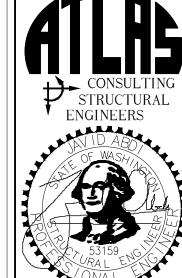
S2.2



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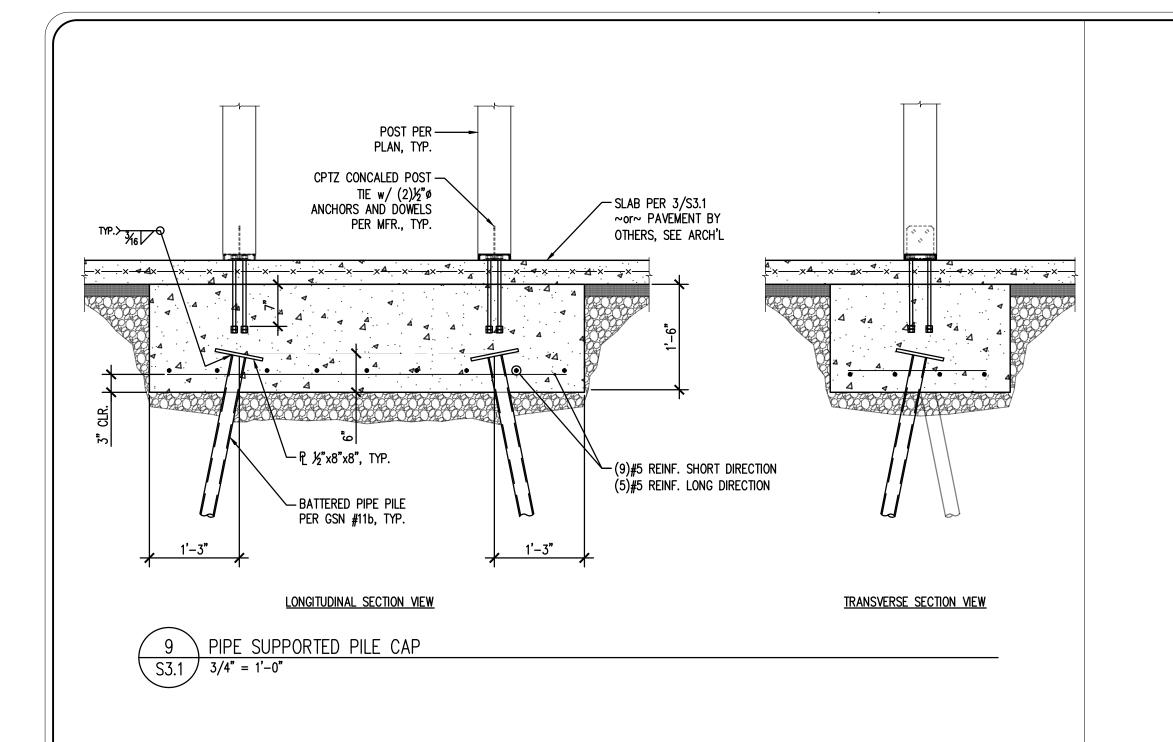
Roof Framing Plan

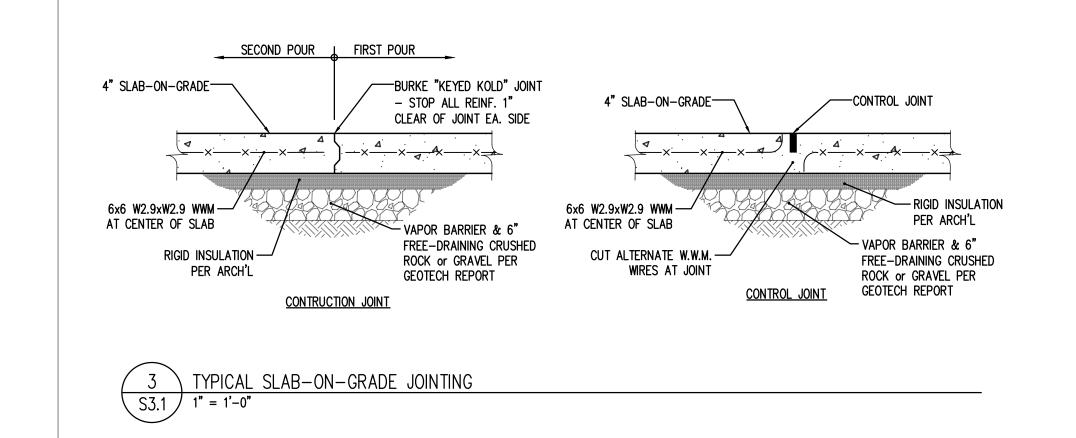
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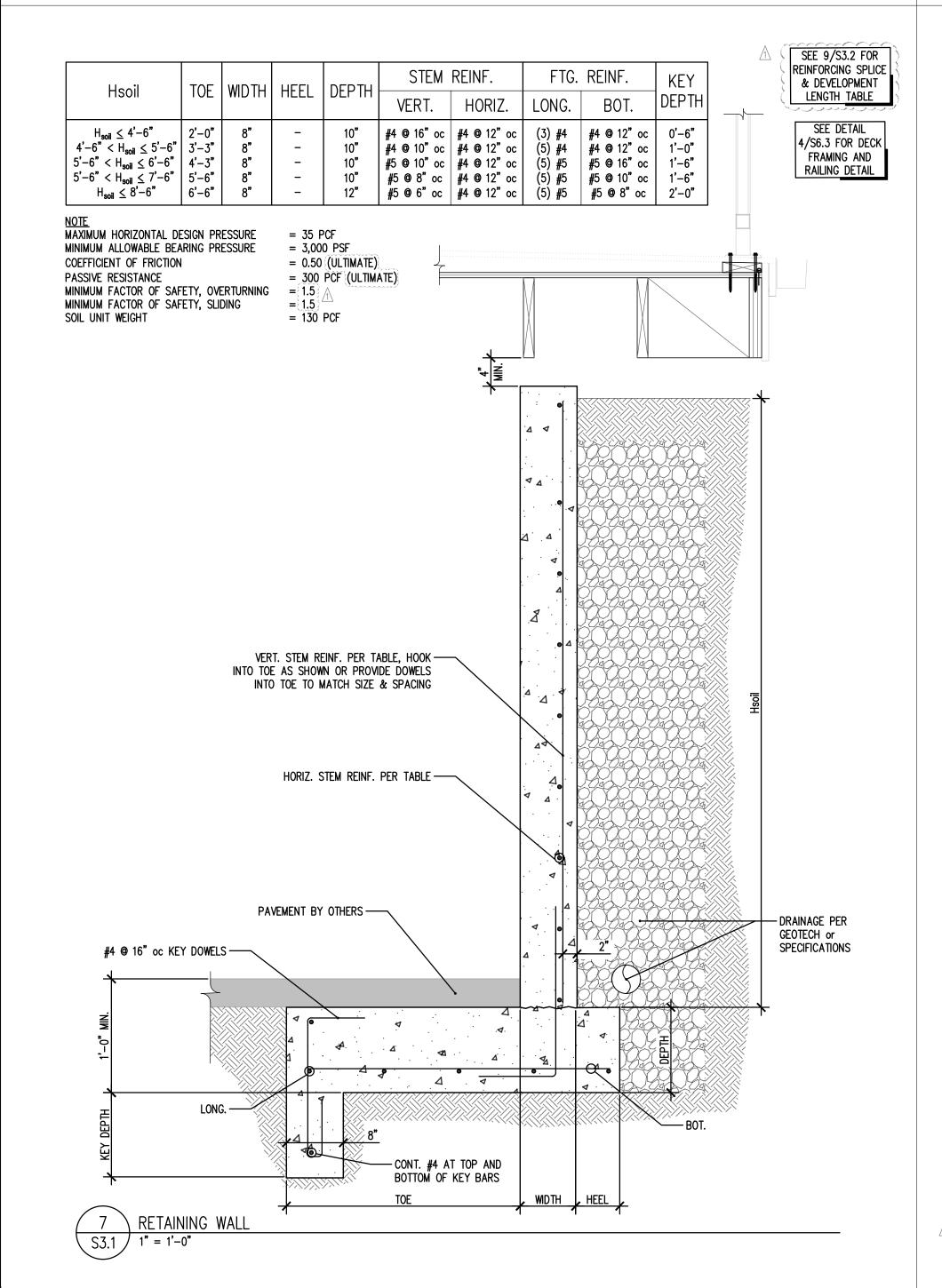
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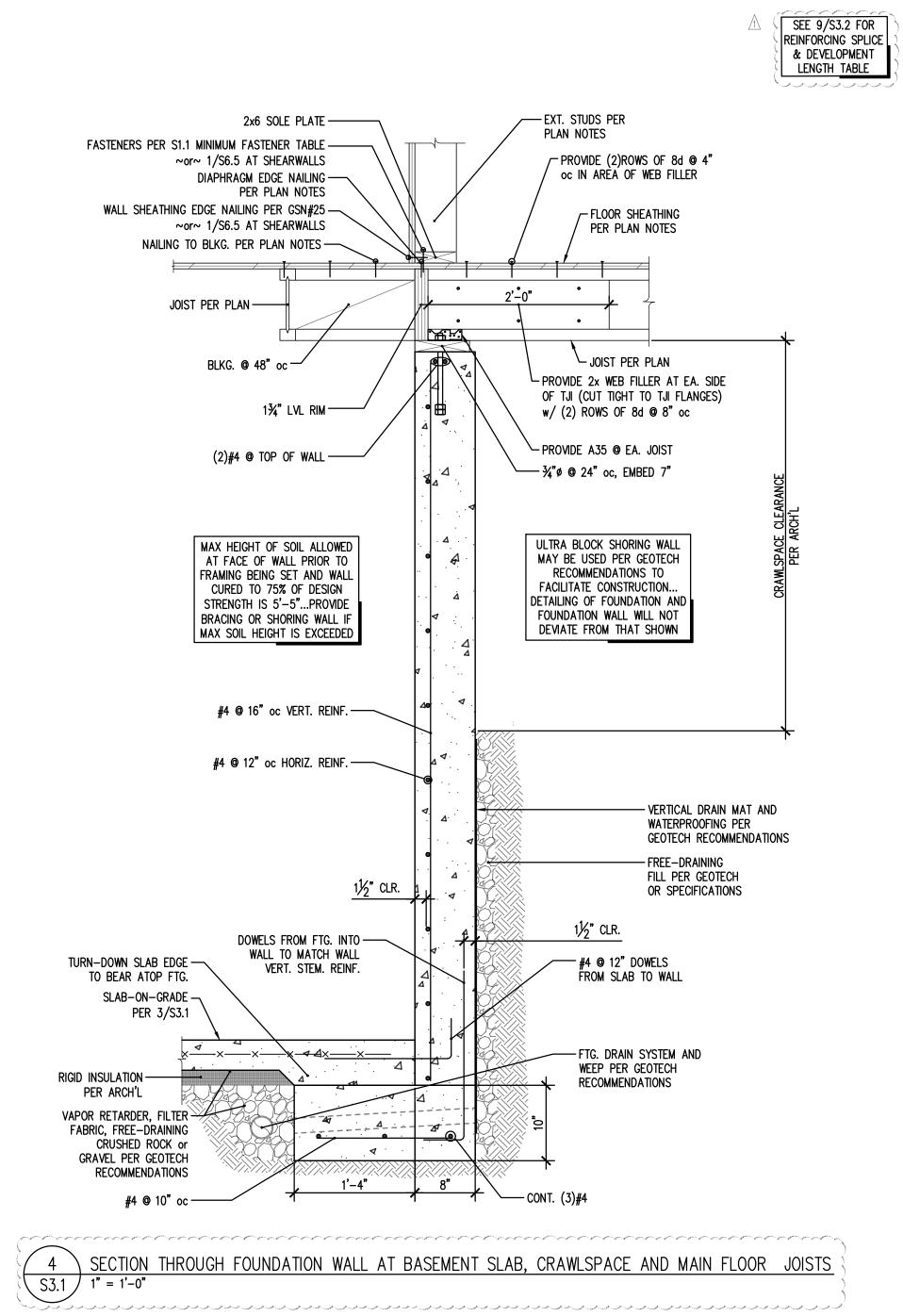
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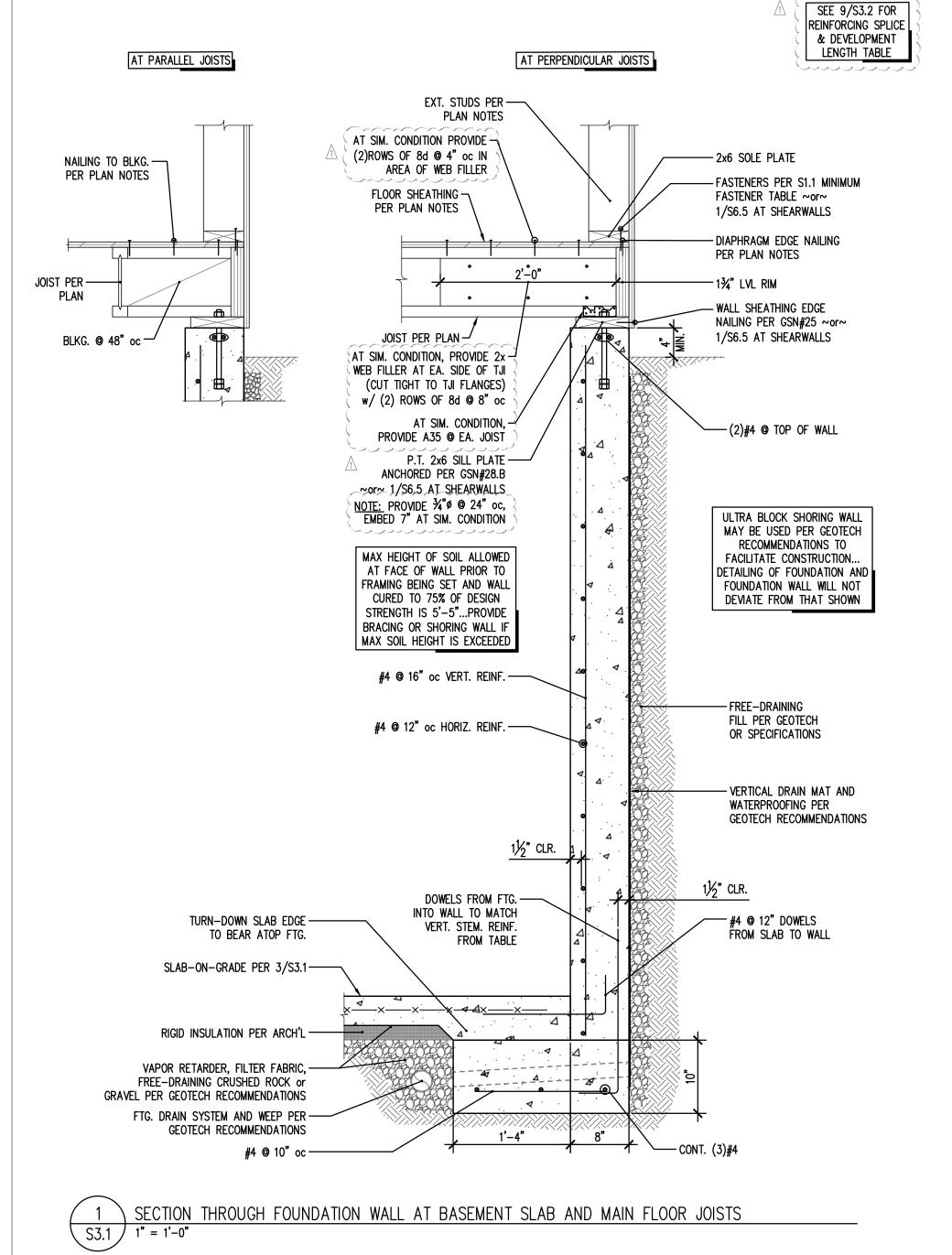
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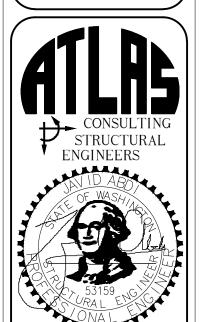












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CONTENTS Foundation Details

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MIN. STRAIGHT DEVELOPMENT LENGTH MIN. LAP SPLICE LENGTH (CLASS B) OTHER BARS

19"

'TOP BARS' ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM IF CLEAR CONCRETE COVER IS LESS THAN 1x THE DIAMETER OF THE BAR OR THE CENTER-TO-CENTER SPACING IS LESS THAN (3) BAR DIAMETERS, THEN VALUES SHALL BE INCREASED BY 50%

OTHER BARS

25"

MIN. EMBEDMENT LENGTH FOR STANDARD END HOOKS

#5

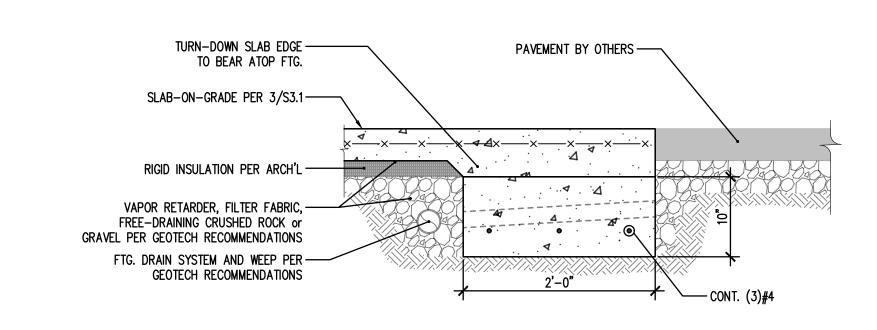
25"

1. SIDE COVER MUST BE EQUAL TO OR GREATER THAN 21/2" 2. END COVER FOR 90° HOOKS MUST BE EQUAL TO OR GREATER THAN 2"

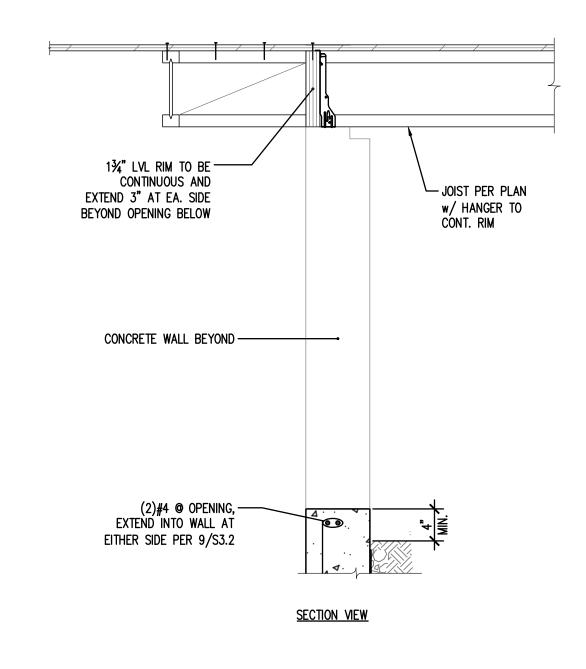
CONCRETE REINFORCING DEVELOPMENT AND SPLICE LENGTH TABLES S3.2 N/A

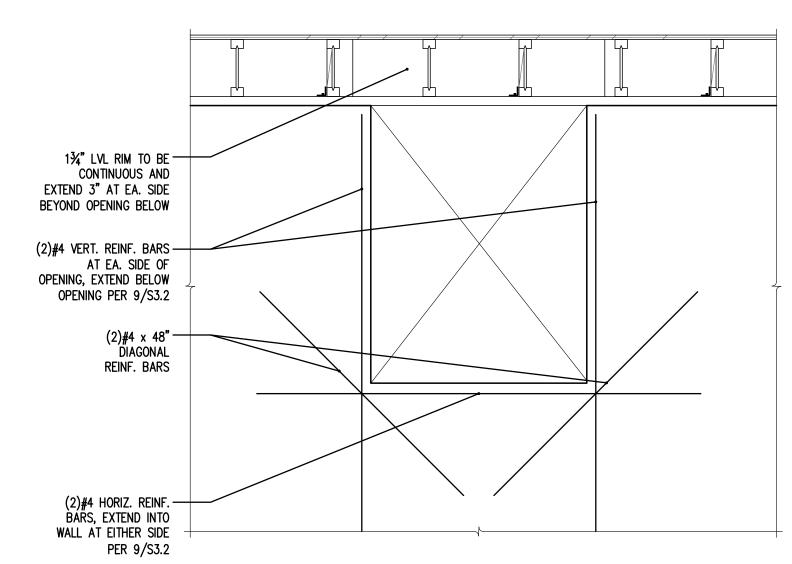
#4x2'-0" DOWELS @ 24"oc EXIST. CONC. — (MID-SLAB) EMBEDDED 6" w/ FOUNDATION WALL ÈPOXY ADHESIVE INTO EXIST. CONC. EXIST. CONC. — SLAB-ON-GRADE - SLAB-ON-GRADE PER 3/S3.1 PER ARCH'L AL YALYAL YAL - VAPOR RETARDER, FILTER FABRIC, FREE-DRAINING CRUSHED ROCK or GRAVEL PER GEOTECH RECOMMENDATIONS

SECTION AT NEW SLAB AND EXISTING FOUNDATION WALL



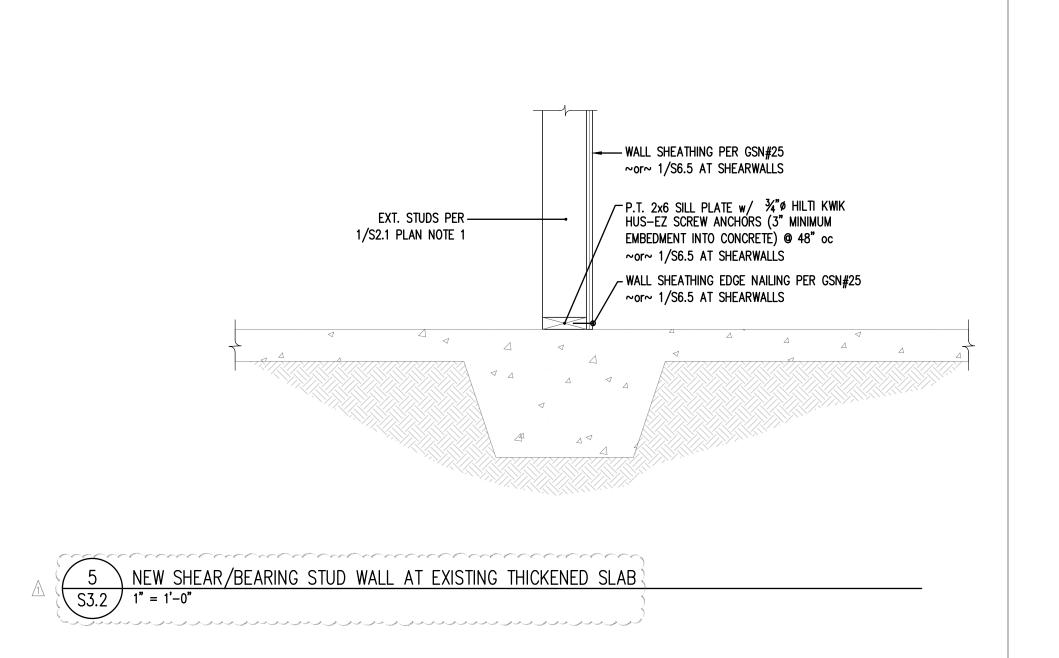
SECTION AT GARAGE ENTRANCE

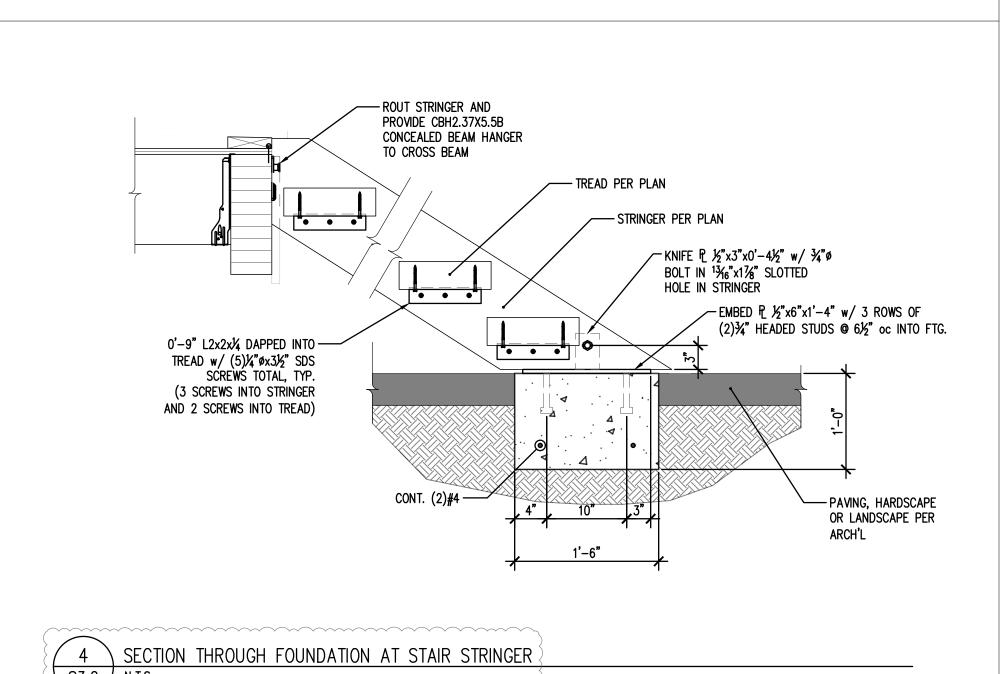


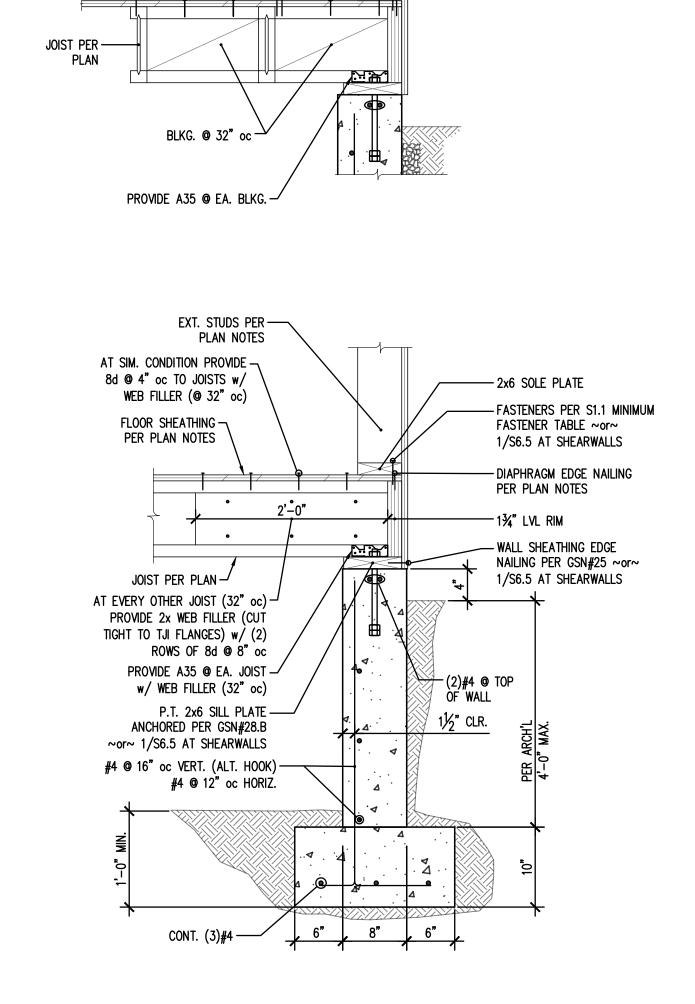


ELEVATION VIEW



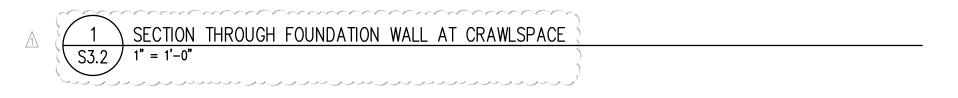






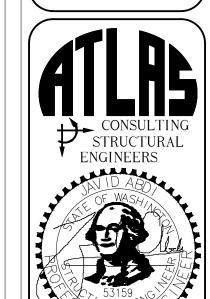
AT PARALLEL JOISTS

8d @ 4" oc TO BLKG. —







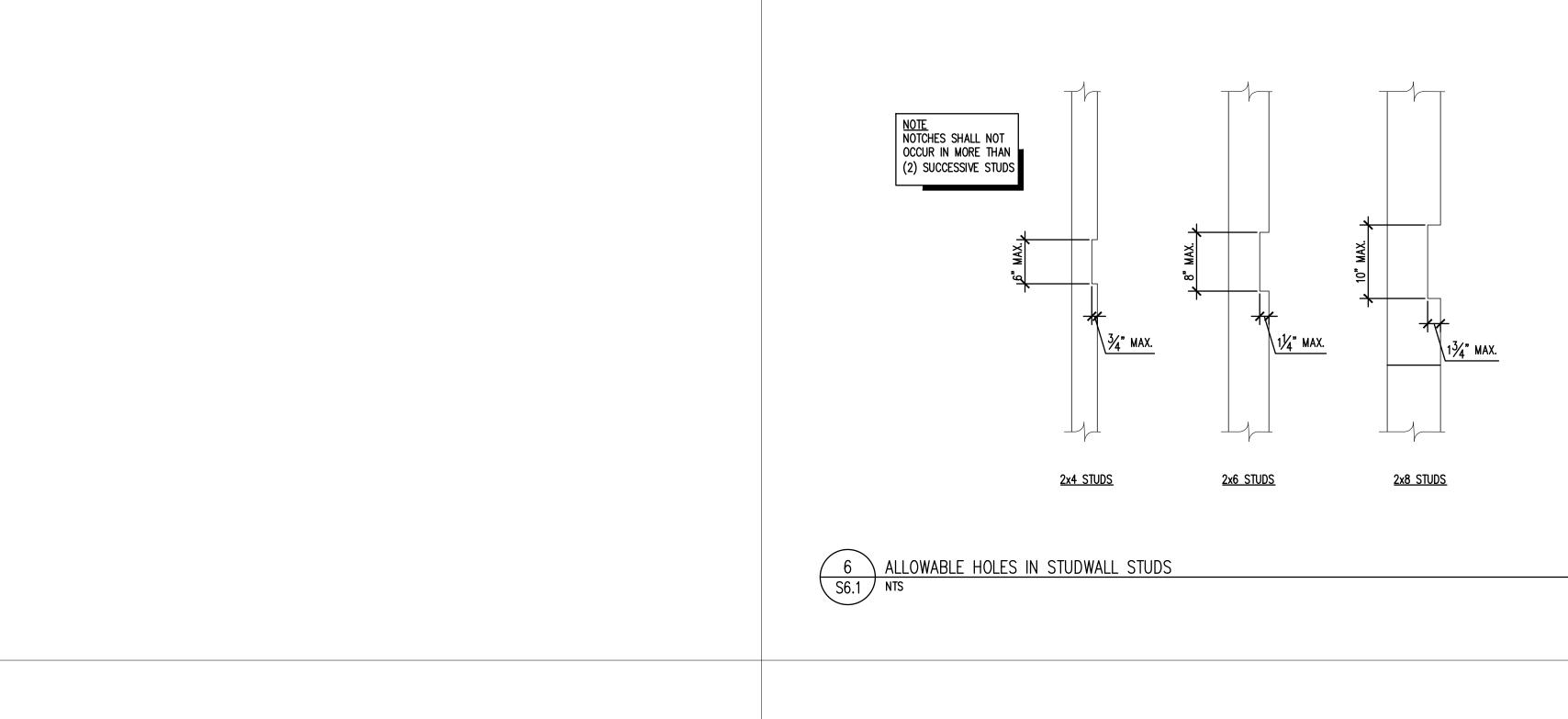


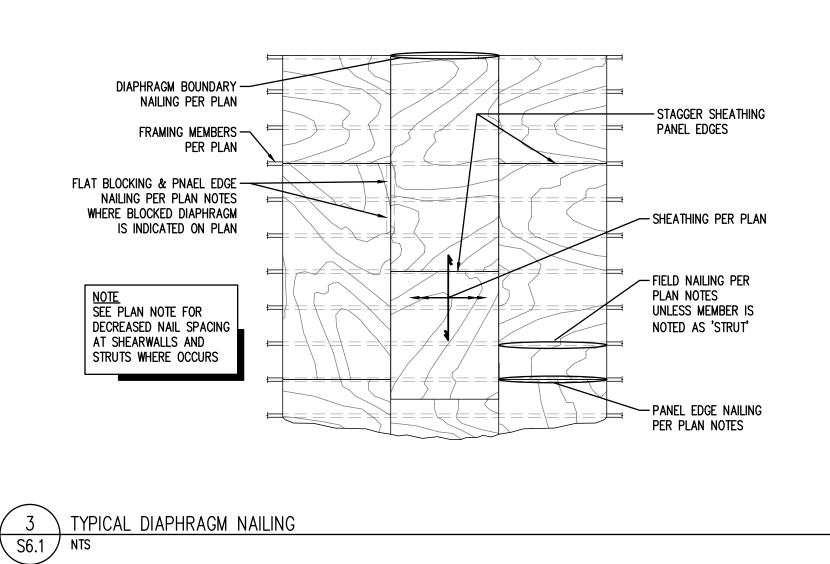


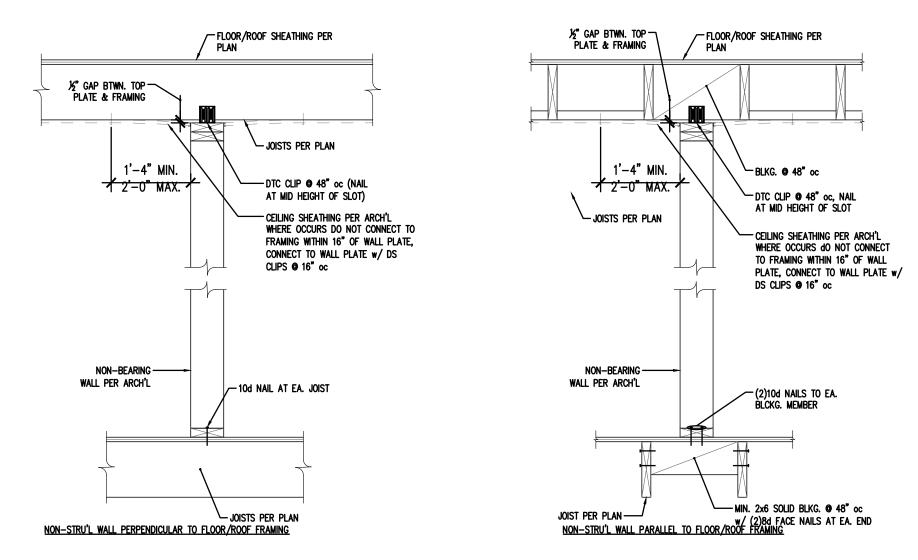
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CONTENTS Foundation Details

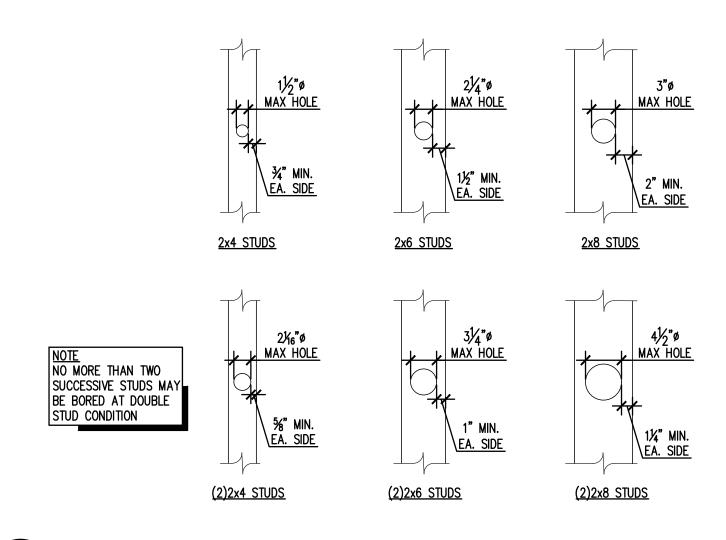
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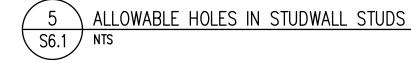


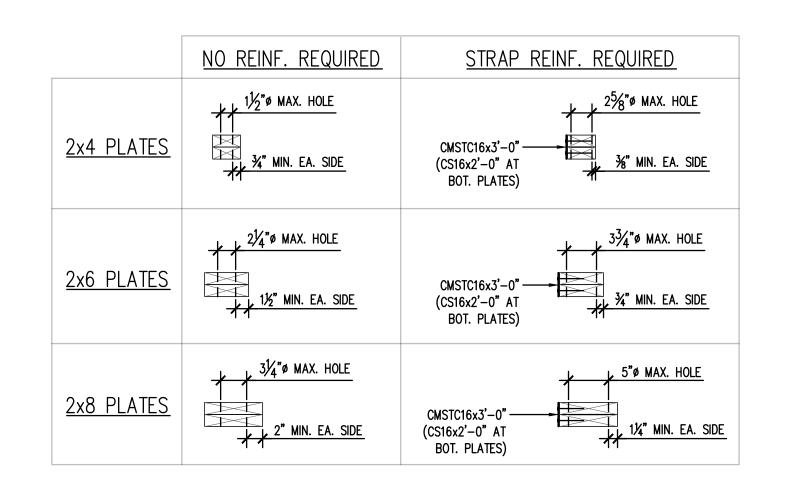




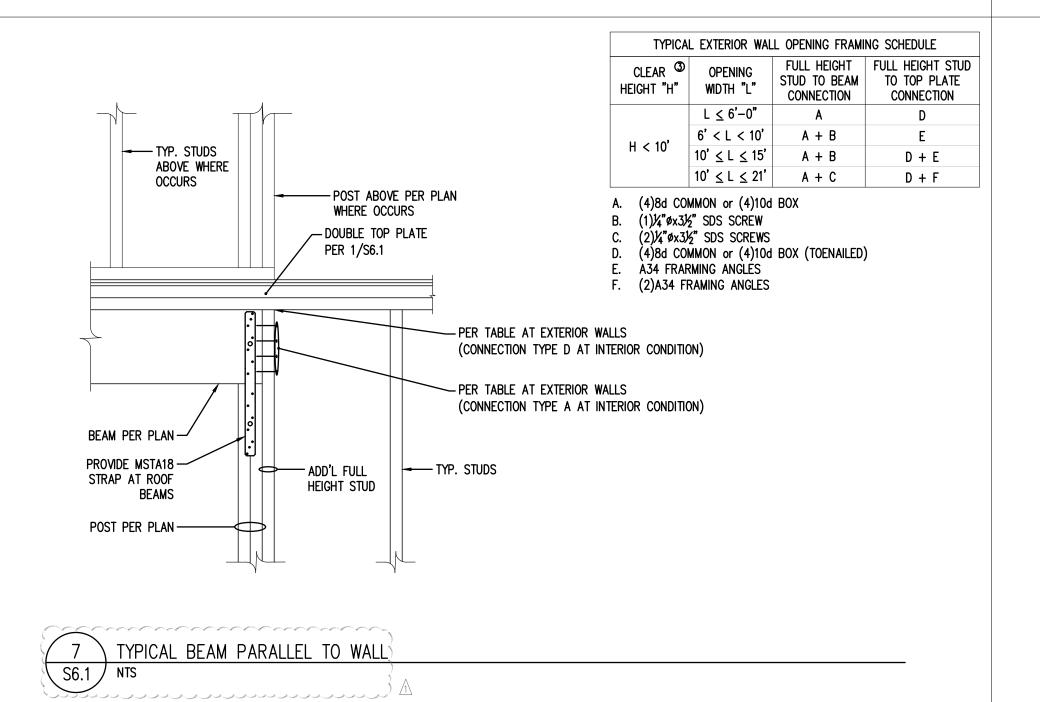


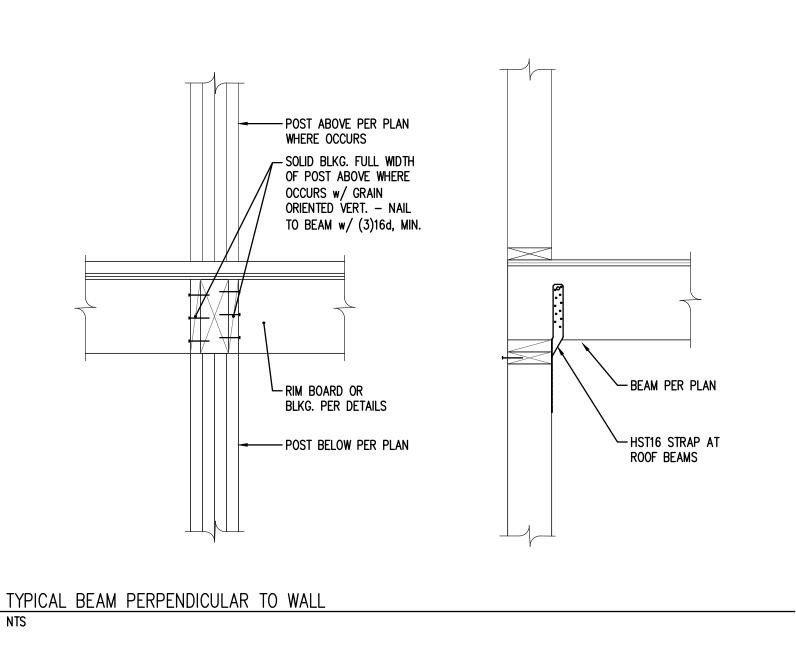


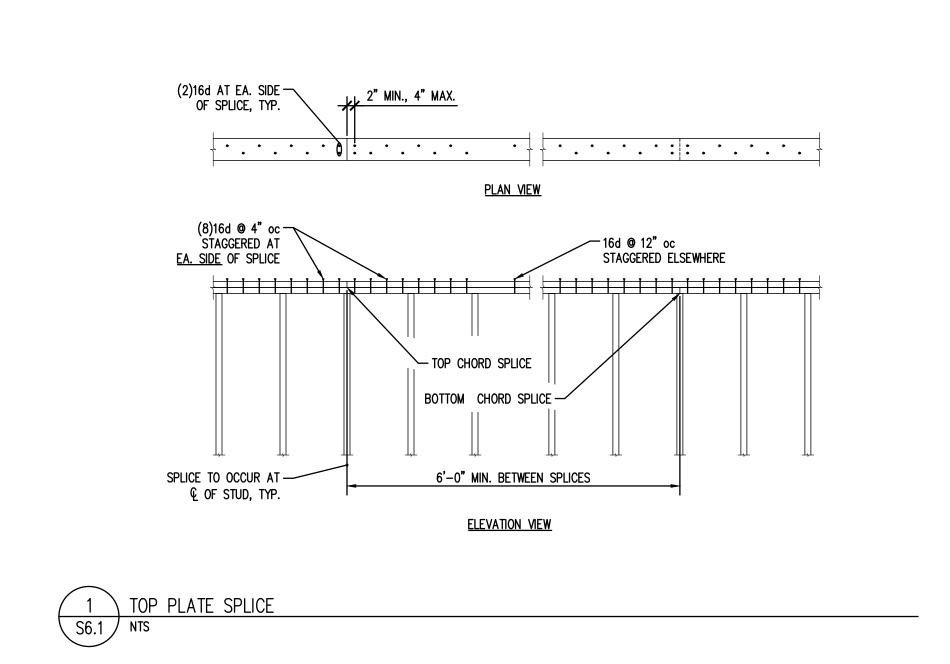












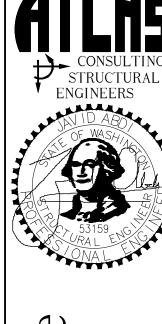
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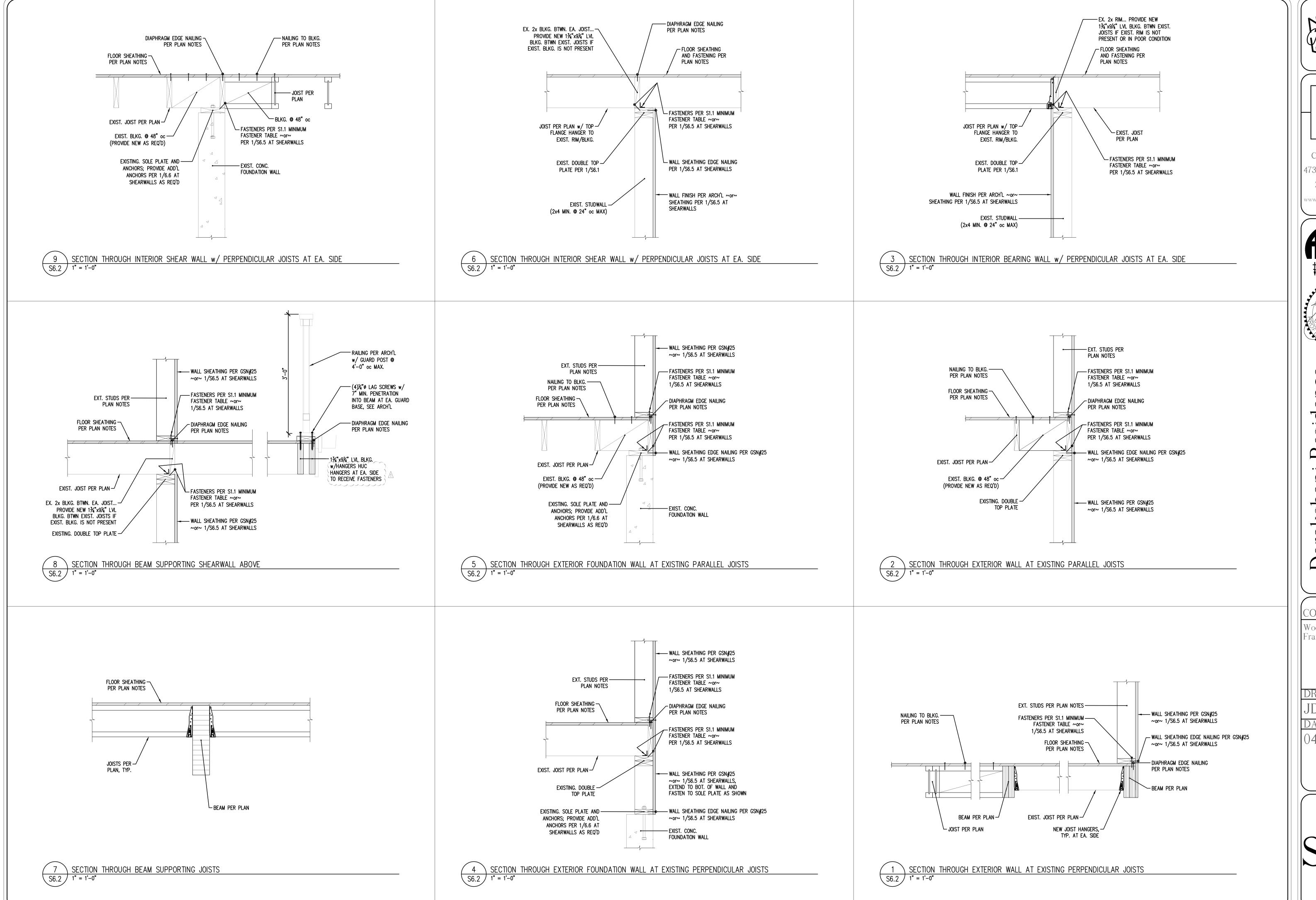
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Wood Typical

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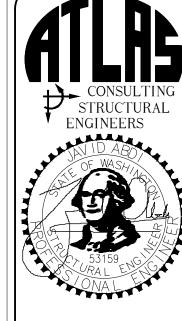
DATE 04.01.21

S6 1







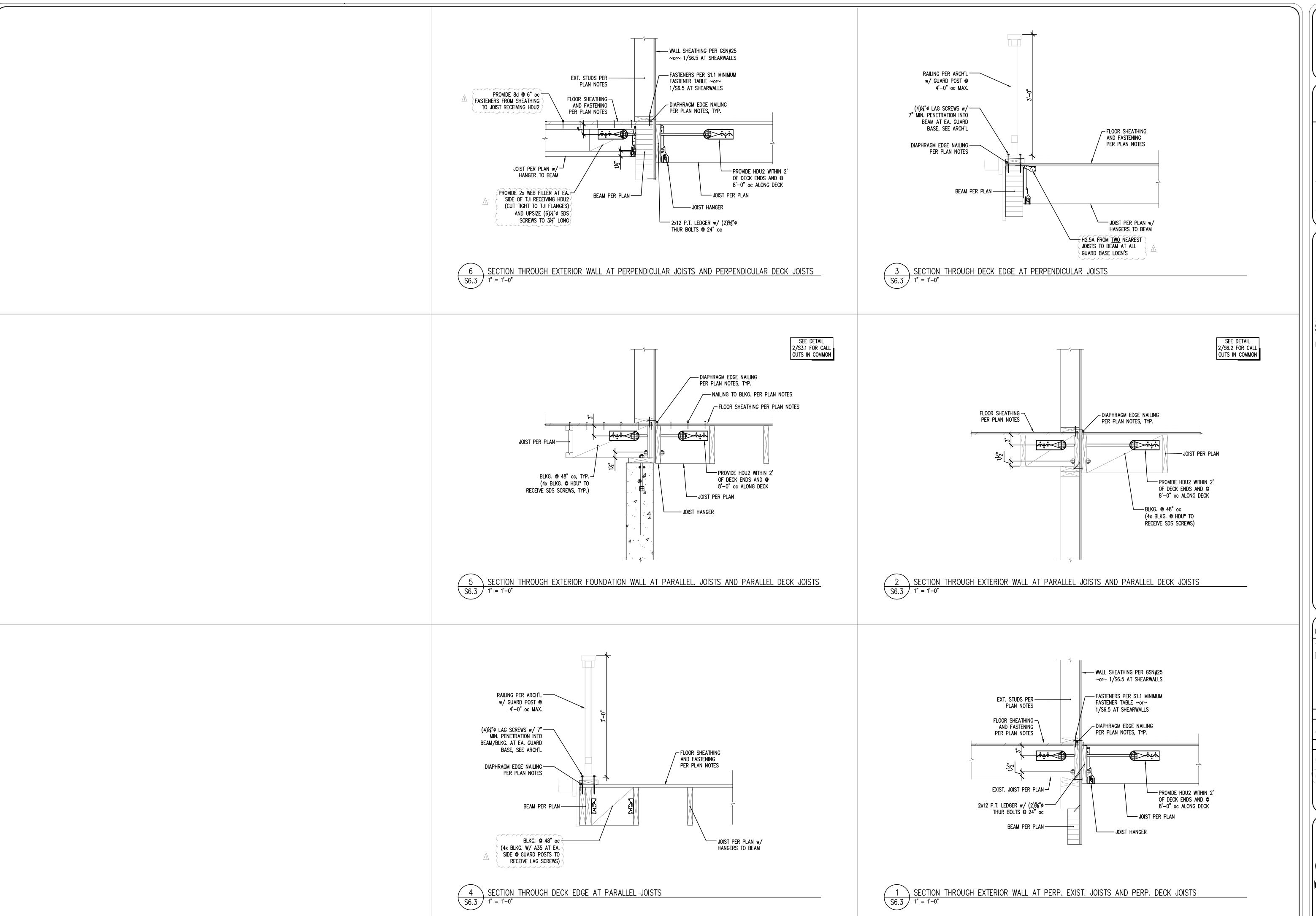


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Wood Floor Framing Details

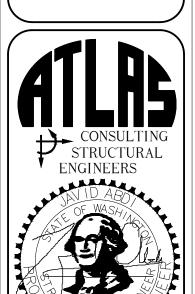
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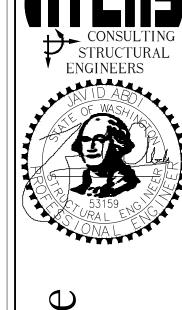






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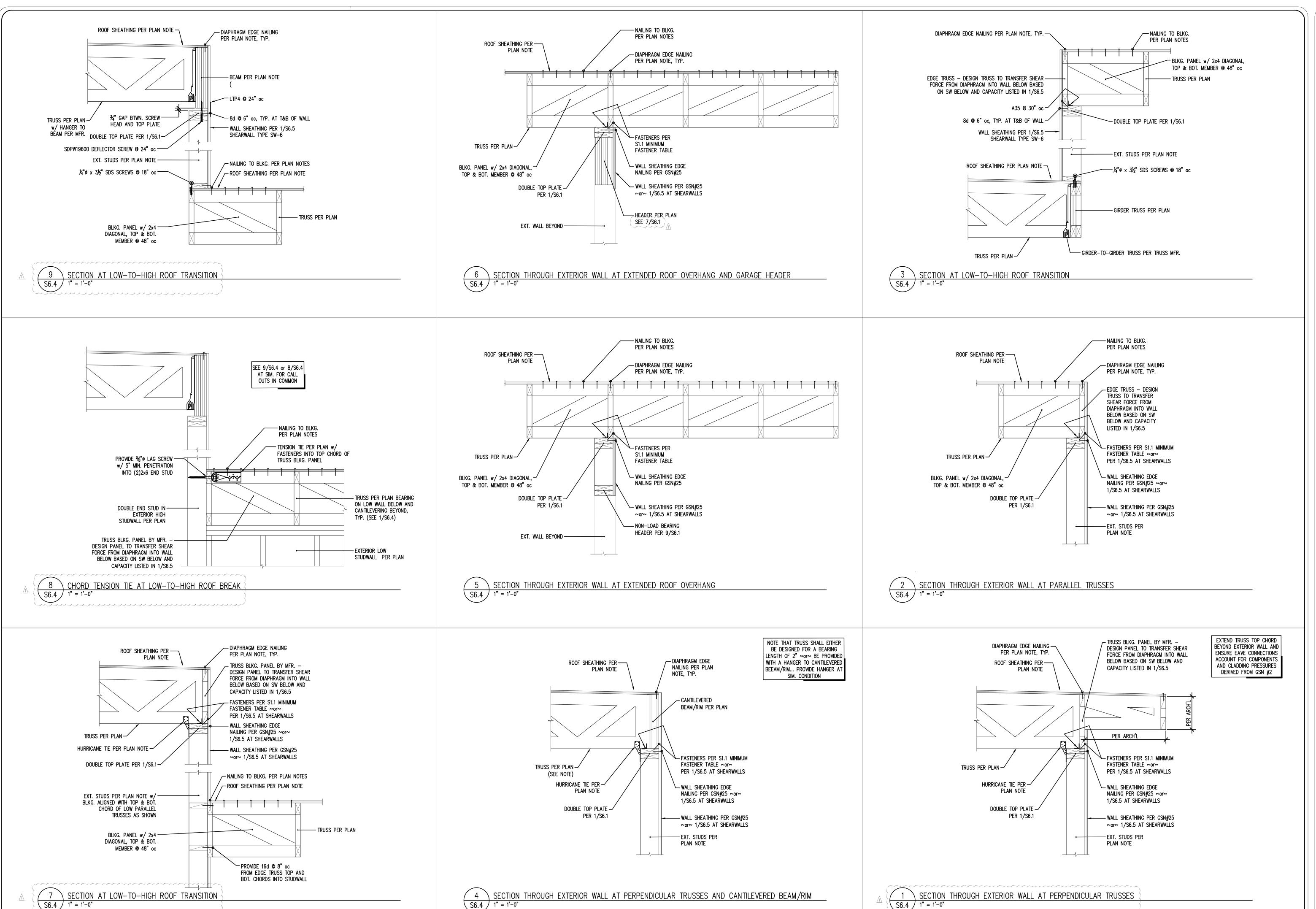
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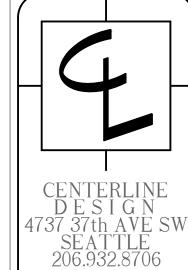
Wood Floor Framing Details

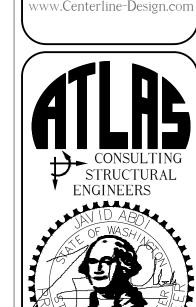
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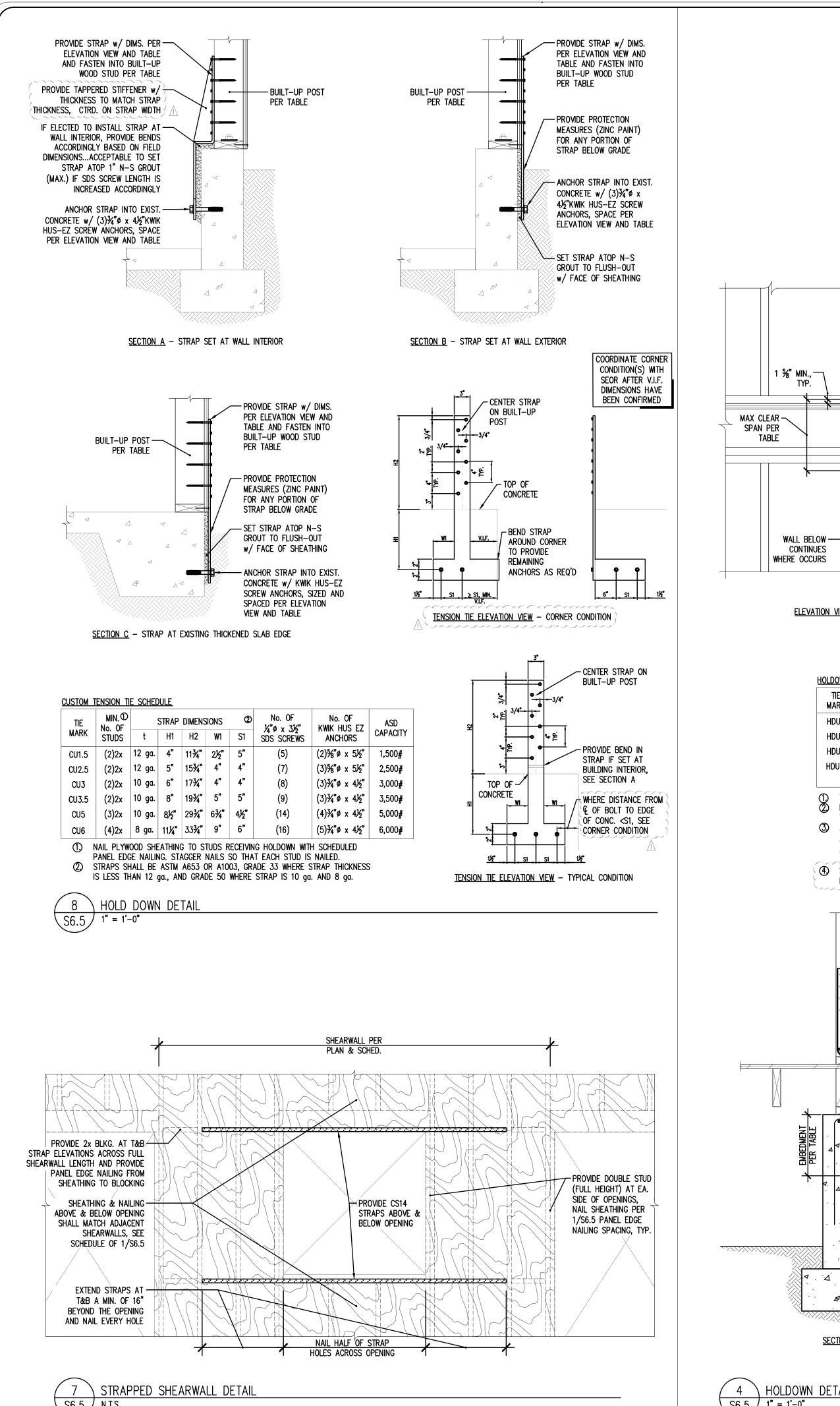
Wood Roof Framing Details

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S6.4



STRAP 1	TENSION TIE SCHEDU	<u>LE</u>		p of the second				
TIE ⁽ MARK		CLEAR SPAN - TOTAL	. FASTENERS C	ASD E	BUILT-UP STU NAILS or SC			
HDU2	(2)2x	(6)¼"ø x 2½" SDS	SCREWS	1,500#	10d @ 6"	ос		
MSTC2		16" - (16)0.148"	0 x 31/4"	1,330#	10d @ 6"	K	Δ	
MSTC4	0 (3)2x	16" - (32)0.148"	Ø x 31/4"	2,655#	(5)¼"øx4½"	SDS	<u>/1\</u>	
MSTC5	2 (3)2x	16" - (48)0.148"	Ø x 31/4"	3,985#	(8)¼"øx4½"	SDS		
MSTC6	6 (4)2x	16" - (68)0.148"	Ø x 3¼"	5,850#	(11)¼"øx6"	SDS		
	NAIL PLYWOOD SHI EDGE NAILING. STA FASTENERS NOTED HALF OF THE FAS SCREWS SHALL BE PROVIDE SCREWS 6" OC NAILS AT O DENOTES TENSIO	S REFER TO SIMPSON S EATHING TO STUDS REC IGGER NAILS SO THAT I IN TABLE ABOVE REP TENERS SHALL BE PROV SPACED EQUALLY ALO AS NOTED IN TABLE AT PPOSITE FACE OF BUIL IN TIE THAT OCCURS AT A %"Ø LAG SCREW WI	CEIVING HOLDOWN EACH STUD IS NA RESENT THE TOTA MIDED INTO EACH ING FULL HEIGHT ONE FACE OF B T UP STUD. TOP OF A FRAMIN	WITH SCHEINILED. L AMOUNT. STUD. OF STUD AI UILT-UP ST	DULED PANEL FOR STRAPS, BOVE TENSION TUD, AND 10d BELOW. FOR		- Tension tie pe	FR PIAN
	·	•	for fine for fine fores for			\int	AND TABLE, NO)TED w/ '*'
			CONNECT E		$\overline{}$		TO DENOTE OC ABOVE BEAM	CURRENCE
	- NAIL END STUDS	PER	STUDS TO PER TA	BLE AND				_
	NOTE 2 ABOVE		NOTE 4	4 ABOVE			Υ	
	STRAP TENSION TIE PER PLAN		MIN. NUI STUDS PE		 .			
	AND TABLE		OR PLAN			0		FASTENER
	NOTOLI CLICATIUM	C TO ALLOW	SIZE G	OVERNS)				PER TABL
	— NOTCH SHEATHIN STRAP TO PASS		NAII FNI	o studs —				
			PER NOTE		•		[2]	
<u> </u>			3" MIN.	1.			-	
	LL WIDTH BLKG. WN. POSTS		<u></u>	 	(•	-	\	(4)¼"øx3½
RE	CEIVING STRAPS					1		SDS SCRE
					\ \ 	+ 4" +	2,	1
								<u>/ 1 \</u>
				\mathbb{H}^{\prime}	/ F	BEAM PER	PI AN	
		FASTENE	ER PER —/ TABLE	$ \cdot $			TIE FROM BEAM	TO
			171022			POST BEL	OW TO MATCH	TENSION
				III			ED OUT IN PLAN TED w/ '*'	AROVE
				4			BER OF STUDS	DED
					_		R PLAN (LARGER	
Y	I		'	γ		GOVERNS)	AT EA. SIDE O	F BEAM
<u> VIEW</u> – TYPICAL	CONDITION			<u>ELEVATION</u>	<u>n view</u> – Ten	SION TIE A	BOVE BEAM	
DOWN TENSION TIE	SCHEDULE							
TIE (1) MIN. NUM		(ø x EMBEDMENT) 3	INSTEREN		ASD		UP STUD FACE	
MARK OF STU		F HAIRPIN DOWELS	TIE TO :		CAPACITY	7	or SCREWS ④	
1DU2 (2)2x		" – (2)#4 HAIRPIN	(6)¼"ø x 2½" \			(d @ 6" oc "avak" sos	
/ /7\A	: ∣ %‴øx20°	" – (2)#4 HAIRPIN	(10)¼"ø x 2½"	SUS SCREW	S 4,565#	("øx4½" SDS	\$
1DU4 (3)2x		/ 4\	(00)44H		7 070"	\ /a=\	1/"40" 000	Q.
HDU4 (3)2x HDU8 (4)2x HDU11 (5)2x	7⁄8″ø x 20″	(4)#4 HAIRPIN(4)#4 HAIRPIN	$(20)\frac{1}{4}$ "ø x $2\frac{1}{2}$ " $(30)\frac{1}{4}$ "ø x $2\frac{1}{2}$ "			#	¼"øx6" SDS ¼"øx8" SDS	Δ

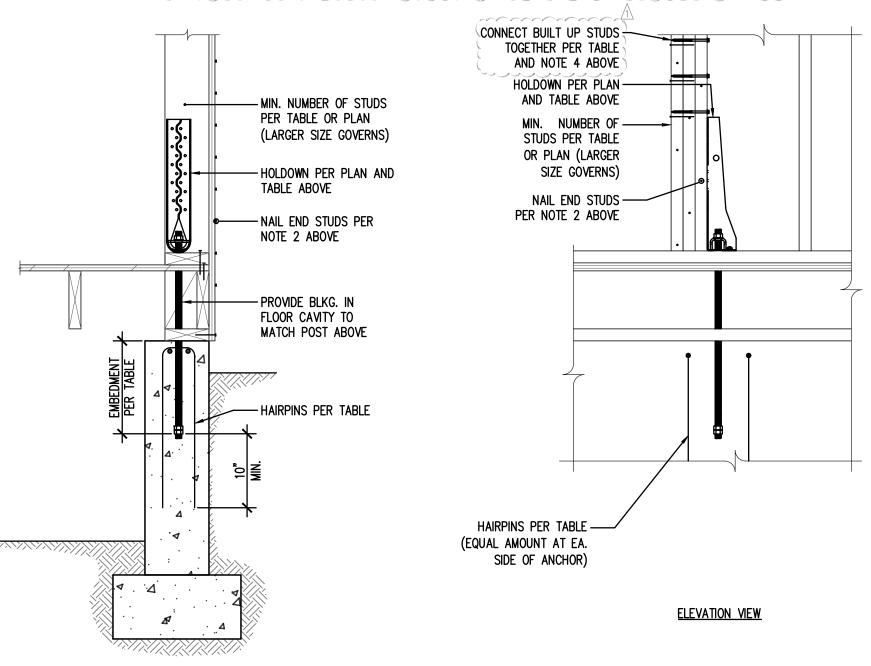
TIE ^① Mark	MIN. NUMBER ² OF STUDS	ANCHOR (Ø x EMBEDMENT) $^{rac{3}{2}}$ and No. OF HAIRPIN DOWELS	FASTENERS FROM TIE TO STUD	ASD CAPACITY	BUILT-UP STUD FACE NAILS or SCREWS @
HDU2	(2)2x	%"ø x 20" − (2)#4 HAIRPIN	(6)1/4"ø x 21/2" SDS SCREWS	3,075# >	10d @ 6" oc
HDU4	(3)2x	%"ø x 20" − (2)#4 HAIRPIN	(10)1/4" ø x 21/2" SDS SCREWS	4,565#	(9)¼"øx4½" SDS
HDU8	(4)2x	$\frac{7}{8}$ x 20" - (4)#4 HAIRPIN	(20)1/4" ø x 21/2" SDS SCREWS	7,870# ै	(15)¼"øx6" SDS
HDU11	(5)2x	1"ø x 20" – (4)#4 HAIRPIN	(30)1/4" ø x 21/2" SDS SCREWS	11,175# }	(21)¼"øx8" SDS

NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLDOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.

ANCHORS SHALL BE HEAVY HEX HEAD WITH DOUBLE NUT CAST INTO CONCRETE. ASTM F 1554 Gr. 36 FOR 5% ANCHOR

ASTM F 1554 Gr. 105 FOR 1/8" ANCHOR ASTM F 1554 Gr. 55 FOR 1"Ø ANCHOR

(4) SCREWS SHALL BE SPACED EQUALLY ALONG FULL HEIGHT OF STUD ABOVE TENSION TIE. PROVIDE SCREWS AS NOTED IN TABLE AT ONE FACE OF BUILT-UP STUD, AND 10d @ 6" oc NAILS AT OPPOSITE FACE OF BUILT UP STUD.

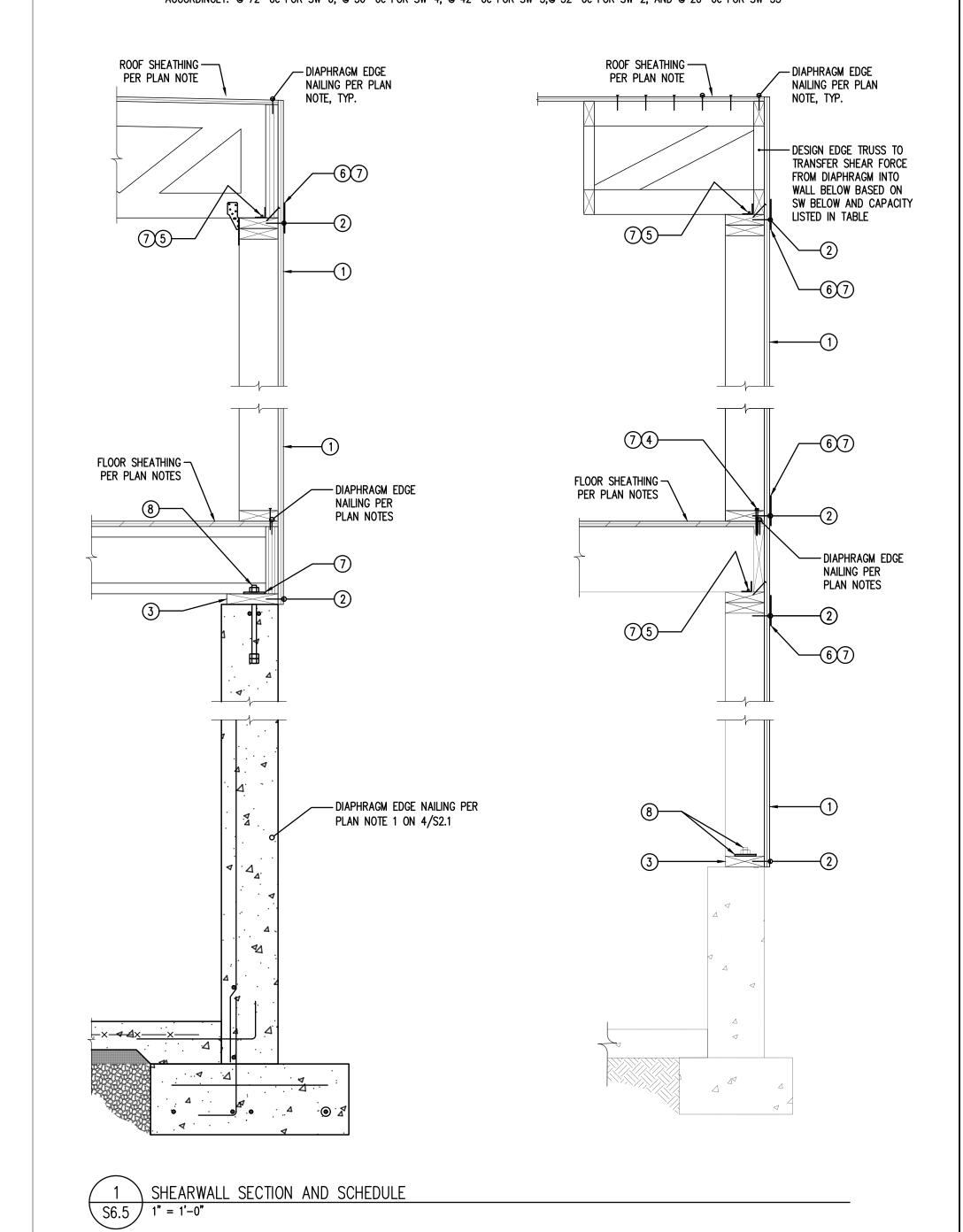




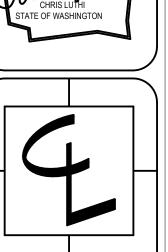
SECTION VIEW

	0	2	③ STUD/BLKG. AT ABUTTING PANEL	to .	. OF BLKG. OR FR TOP PLATE; AND S LATE TO SILL PLA	SOLE	ANC BOLT	S TO	ASD CAPACIT
SHEARWALL PANEL TYPE	SHEATHING THICKNESS	0.131" x 21/4" PANEL NAILING	EDGES & SILL PLATE THICKNESS	④ ¼"ø x 3½" SDS SCREWS	⑤ A35 CLIPS	6 LTP4 PLATES	COI 5%"ø	NC. 3⁄4"ø	PLF
SW-6	1/2"	6" oc	2x	18" oc	30" oc	28" oc	48" oc	48" oc	260
SW-4	1/2"	4" oc	3x	12" oc	20" oc	19" oc	46" oc	48" oc	380
SW-3	1/2"	3" oc	3x	9" oc	15" oc	14" oc	36" oc	48" oc	490
SW-2	1/2"	2" oc	3x	7" oc	12" oc	11" oc	27" oc	38" oc	640
SW-33	1/2"	3" oc EA. SIDE	3x	4" oc	7" oc	7" oc	18" oc	24" oc	980

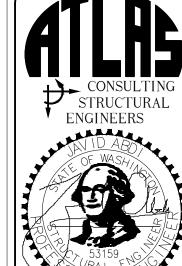
- (1) SHEATHING SHALL CONSIST OF ½" PLYWOOD AND HAVE A MINIMUM SPAN RATING OF 2%; PERMISSIBLE TO RE-USE EXISTING SHEATHING AT EXISTING STUDWALLS IF THICKNESS & SPAN RATING CAN BE VERIFIED AND STUDS & SHEATHING ARE IN SUITABLE CONDITION.
- (2) PANEL NAILING APPLIES TO ALL SHEATHING PANEL EDGES. IF RE-USING EXISTING SHEATHING PER NOTE 1 ABOVE, PROVIDE ADDITIONAL FASTENERS AS REQUIRED TO MEET SPACING REQUIREMENTS. INSTALL BLOCKING AT ALL UNFRAMED PANEL EDGES. ENSURE SHEATHING IS NAILED TO EXISTING INTERMEDIATE FRAMING WITH PANEL NAILS AT 12"oc.
- (3) DOUBLE 2x MEMBERS MAY BE SUBSTITUTED FOR 3x MEMBERS AT WALLS WITH ONLY ONE LAYER OF SHEATHING. 2x MEMBERS SHALL BE NAILED TOGETHER WITH 8d FACE: @ 5" oc FOR SW-6, @ 3½" oc FOR SW-4, @ 2½" oc FOR SW-3, AND @ 2" oc FOR SW-2 (116#/NAIL)
- (4) ROWS OF NAILS AND SDS SCREWS SHALL BE OFFSET AT LEAST 1/2" AND STAGGERED. MINIMUM EDGE DISTANCE FOR NAILS AND SDS SCREWS INTO EDGE OF MEMBERS SHALL BE %" (400#/SCREW)
- (5) A35 CLIPS SHALL BE INSTALLED w/ (12)0.131 x 1½ " NAILS (650#/CLIP)
- (6) LTP4 LATERAL TIE PLATES MAY BE INSTALLED OVER SHEATHING w/ (12)0.131 x 2½" NAILS (625#/CLIP)
- (7) CONTRACTOR SHALL USE A35 or LT4P CLIPS TO CONNECT ROOF TO DOUBLE TOP PLATE AND SDS SCRWS or LTP4 CLIPS TO CONNECT SOLE PLATE TO RIM BOARD AT MAIN FLOOR. EXTEND SHEATHING TO BOTTOM OF SOLE PLATE AT MAIN FLOOR FOUNDATION WALL AND PROVIDE EDGE FASTENING AS NOTED IN TABLE.
- (8) PLATE WASHERS IN 2x4 STUD WALLS AND ALL SINGLE SIDED SHEAR WALLS SHALL BE 3"x3"x0.229". DOUBLE SIDED 2x6 SHEAR WALLS SHALL HAVE 41/2"x3"0.229" PLATE WASHERS. THE EDGE OF PLATE WASHERS SHALL BE LOCATED WITHIN 1/2" OF THE EDGE OF BOTTOM PLATE ON THE SIDE WITH SHEATHING.
- (9) CAST ANCHORS A MINIMUM OF 7" INTO CONCRETE. INSTALL ADDITIONAL ANCHOR BOLTS AT EACH SIDE OF PLATE BREAKS AND PENETRATIONS EXCEEDING THE "NO REINFORCING" HOLE SIZE PER 2/S6.1. AT EXISTING STUD WALLS, A COMBINATION OF EXISTING AND NEW ANCHOR BOLTS CAN BE COUNTED TOWARDS THE SPACING REQUIREMENTS NOTE IN THE TABLE PROVIDED THEY ADHERE TO NOTE #8 ABOVE. NEW ANCHOR BOLTS SHALL BE 1/2 HILTI KWIK HUS-EZ SCREW ANCHORS WITH 3" MINIMUM EMBEDMENT INTO CONCRETE. AS AN ALTERNATVIE TO NEW ANCHOR BOLTS, SIMPSON FRFP RETROFIT FOUNDATION PLATES WITH (5)1/4" SDS SCREWS THAT PENETRATE THE SILL PLATE 21/2" MAY BE USED (#1810/PLATE) IF SPACED ACCORDINGLY: @ 72" oc FOR SW-6, @ 56" oc FOR SW-4, @ 42" oc FOR SW-3,@ 32" oc FOR SW-2, AND @ 20" oc FOR SW-33







CENTERLINE 4737 37th AVE SW SEATTLE 206.932.8706 www.Centerline-Design.com



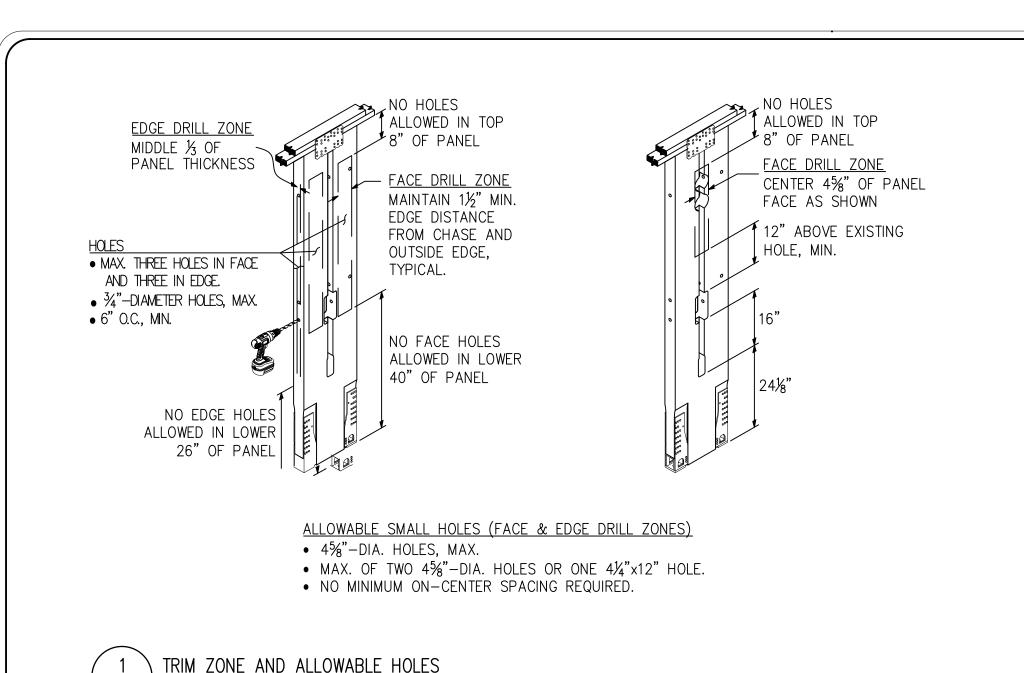


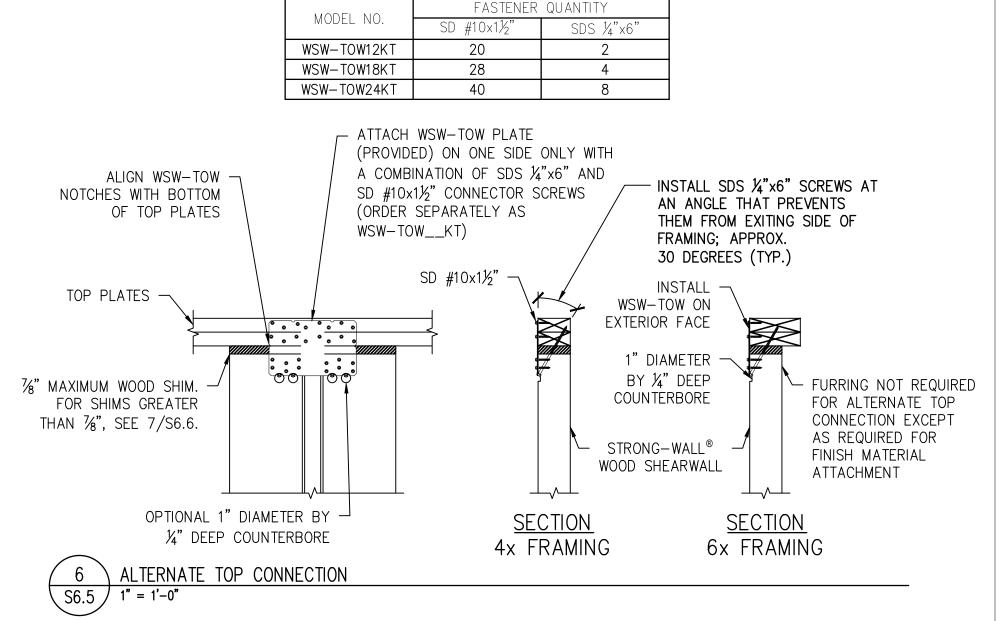
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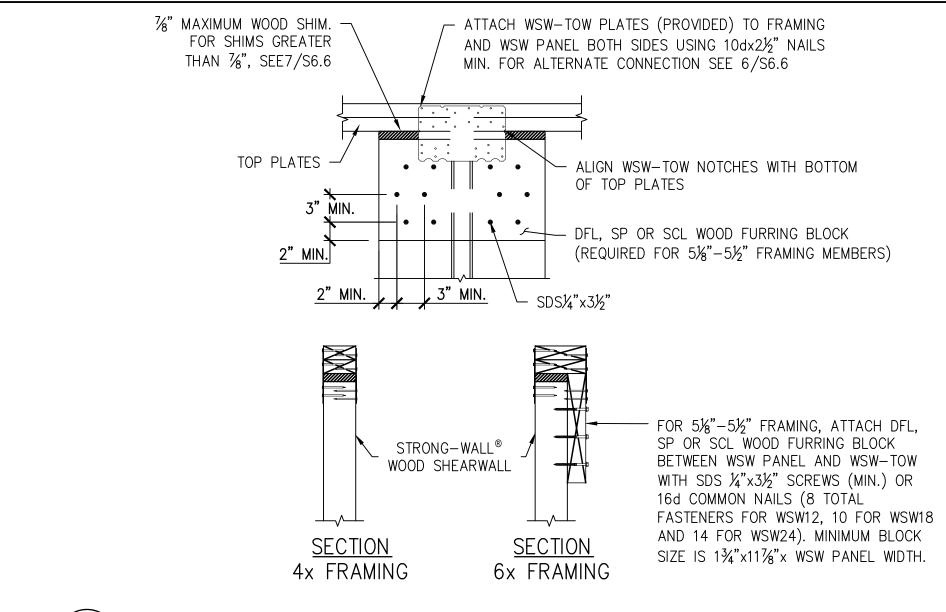
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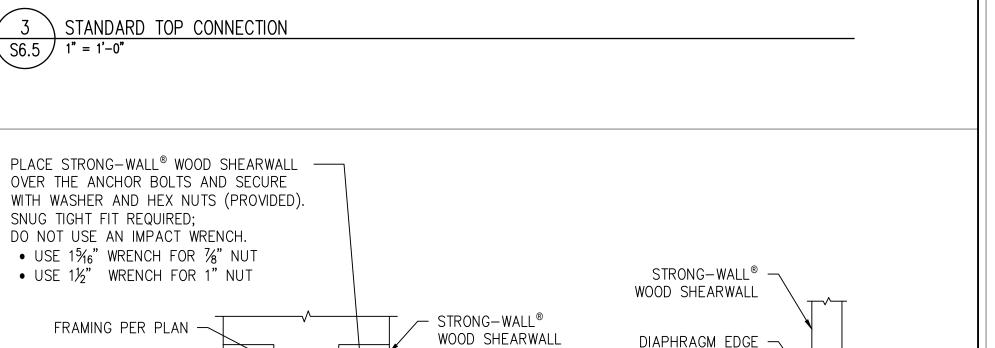
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WSW-TOW ALTERNATE CONNECTION KIT





SEE SHEETS WSW1 AND

WSW1.1 FOR ANCHORAGE

SOLUTIONS

STRONG-WALL® WOOD SHEARWALL HEIGHT TO INCLUDE THE DEPTH OF THE FLOOR SYSTEM AND SHALL BE INSTALLED

ALTERNATE INSTALLATION AT BASE OF STRONG-WALL

SINGLE STORY WSW ON CONCRETE

DIRECTLY ON THE FOUNDATION. SPECIFY PANEL HEIGHT FROM TOP OF FOUNDATION TO UNDERSIDE OF TOP PLATES OR BEAM.

NAILING PER PLAN NOTE

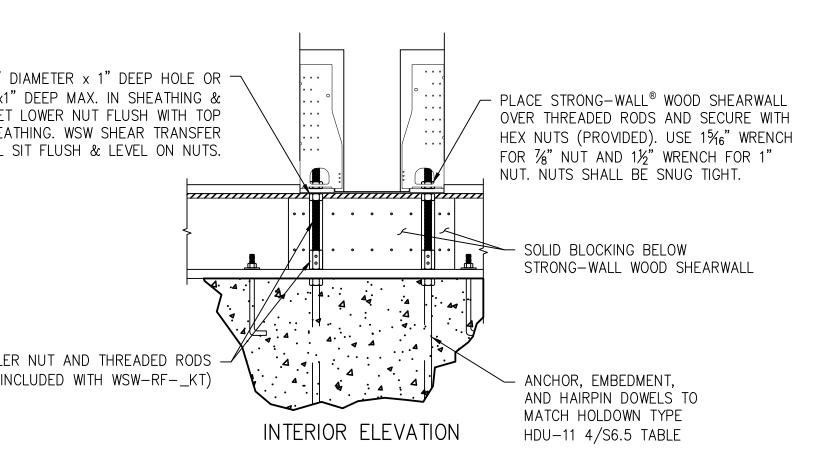
FRAMING

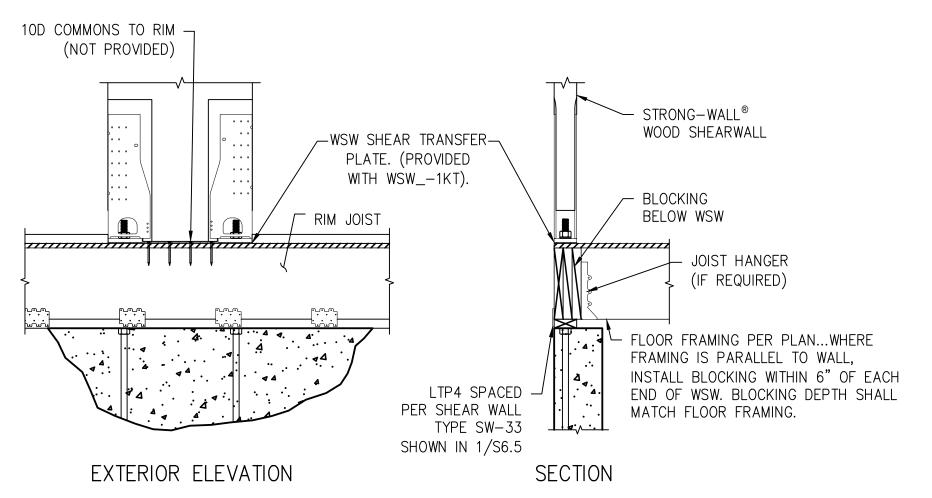
PER PLAN

JOIST HANGER (IF REQUIRED)

1.4.

SECTION

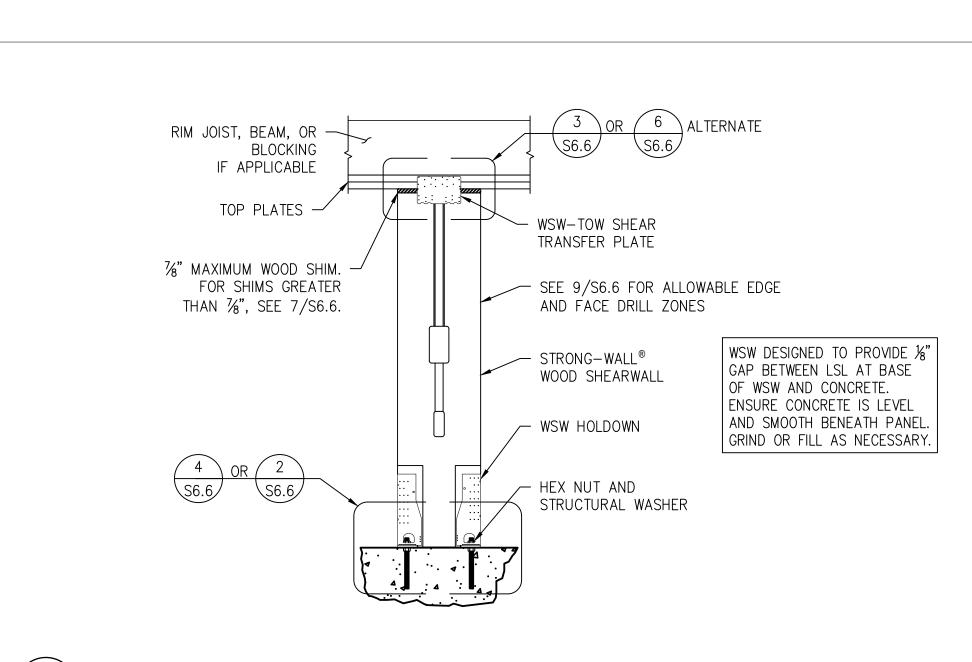


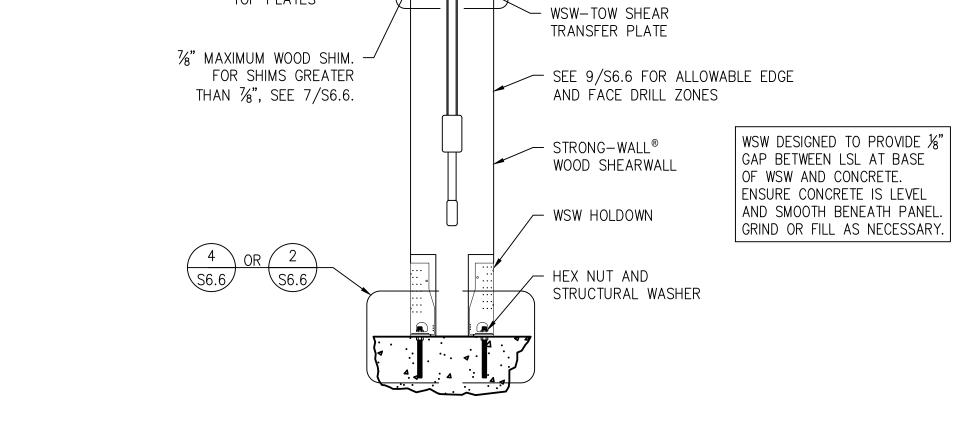


WALL WIDTH (in.)	MODEL NO.	CONTENTS
12	WSW-RF-12KT	EACH KIT CONTAINS (1) SHEAR TRANSFER PLATE
18	WSW-RF-18KT	(2) %" x 18" OR 1" x 18" THREADED RODS (ASTM A36) (2) COUPLER NUTS
24	WSW-RF-24KT	(a) HEAVY HEV MILTS

ORDER FIRST FLOOR CONNECTION KIT SEPARATELY. MODEL WSW-RF-_KT. EXAMPLE WSW-RF-18KT







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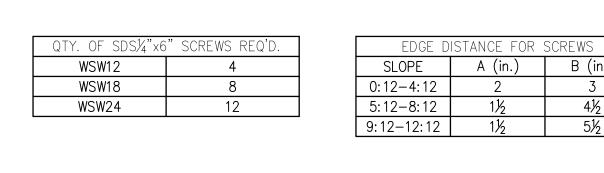
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Simpson Strong-Wall

Details



	5:12	-8:12	1½	4½	
	9:12-	-12:12	1½	5½	
			(MIN.) OF TH AND S	LL SDS ¼"x6" FROM THE T HE PLATES PE SPACING REQU N IN TABLES	OP SIDE R QTY.
DJACE	.—HEIGHT NT FRAMING OTHERS			4x SHIM	BLOCK

A (in.)

B (in.)

41/8" TO 12" SHIM BLOCK

LTP4 SPACED PER -

SHEAR WALL TYPE

4x SHIM —

BLOCK

SW-33 SHOWN IN 1/S6.5

1" TO 4" SHIM BLOCK

FOR 8" TO 12" BLOCK DEPTHS: ATTACH SIMPSON STRONG-TIE® CS16 STRAPS AT EDGE OF WSW PANEL (EACH SIDE) USING 10dx11/2" NAILS

- SEE 3 or 6/S6.6 FOR —

STRONG-WALL®

WOOD SHEARWALL

TOP CONNECTION

SHIM BLOCK HEIGHTS GREATER THAN 8" AND UP TO 10":

 8 NAILS INTO BLOCK 8 NAILS INTO WSW PANEL

SHIM BLOCK HEIGHTS GREATER THAN 10" AND UP TO 12":

 10 NAILS INTO BLOCK 10 NAILS INTO WSW PANEL

CRIPPLE SHEARWALL, BLOCKING - SEE 3 or 6/S6.6 FOR AND STRAP PER EOR TOP CONNECTION FULL-HEIGHT ADJACENT FRAMING BY OTHERS STRONG-WALL® WOOD SHEARWALL

CRIPPLE WALL

TOP OF WALL HEIGHT ADJUSTMENTS S6.6 1" = 1'-0"

FRAMING

(TYPICAL)

PER GSN#28.B

S6.6 1" = 1'-0"

SILL PLATE -ANCHORAGE

BY OTHERS

DRILL 2" DIAMETER x 1" DEEP HOLE OR NOTCH 2"x2"x1" DEEP MAX. IN SHEATHING & RIM JOIST. SET LOWER NUT FLUSH WITH TOP OF SHEATHING. WSW SHEAR TRANSFER PLATE SHALL SIT FLUSH & LEVEL ON NUTS. COUPLER NUT AND THREADED RODS (INCLUDED WITH WSW-RF-_KT)