

GENERAL REQUIREMENTS

- THE STRUCTURAL NOTES SUPPLEMENT THE PLANS AND SPECIFICATIONS. ANY DISCREPANCY FOUND BETWEEN THE DRAWINGS, NOTES, SITE CONDITIONS, AND ARCHITECTURAL PLANS SHALL BE REPORTED TO THE ARCHITECT OR ENGINEER WHO SHALL CORRECT THE DISCREPANCY IN WRITING. ANY WORK COMPLETED AFTER DISCOVERY OF THE DISCREPANCY SHALL BE DONE AT THE CONTRACTORS RISK. REFER TO ARCHITECTURAL PLANS FOR OPENINGS, ARCHITECTURAL TREATMENTS, AND DIMENSIONS NOT SHOWN.
- THE CONTRACTOR SHALL PROVIDE BRACING AND SUPPORT REQUIRED FOR TEMPORARY CONSTRUCTION LOADS AND FOR STRUCTURAL COMPONENTS AS REQUIRED DURING ERECTION. BACKFILL BEHIND WALLS SHALL NOT BE PLACED UNTIL THE WALLS ARE PROPERLY SUPPORTED BY FLOOR, SYSTEM AND FLOOR DIAPHRAGM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE EXCAVATION, SHORING, AND OTHER WORK WITH ALL UTILITIES AND ADJACENT PROPERTIES. CALL THE UTILITY LOCATE SERVICE PRIOR TO ANY WORK AT (800) 332-2344
- MANUFACTURERS INSTALLATION INSTRUCTIONS FOR ALL HARDWARE AND MANUFACTURED STRUCTURAL PRODUCTS SHALL BE AVAILABLE ON THE JOBSITE AT THE TIME OF INSPECTION, FOR THE INSPECTORS USE AND REFERENCE.

CODE REQUIREMENTS

- ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL RESIDENTIAL CODE (2018 IRC) AND THE INTERNATIONAL BUILDING CODE 2021 (IBC 2021), BOTH AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION

DESIGN LOADS

LIVE LOADS	
ROOF (SNOW + RAIN-ON-SNOW SURCHARGE)	25 PSF
FLOORS (SLEEPING)	30 PSF
FLOORS (NON-SLEEPING)	40 PSF
UNINHABITABLE ATTICS WITHOUT STORAGE(b)	10 PSF
UNINHABITABLE ATTICS WITH LIMITED STORAGE (b,c)	20 PSF
HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS	30 PSF

(b) UNINHABITABLE ATTICS WITHOUT STORAGE ARE THOSE WHERE THE MAXIMUM CLEAR HEIGHT BETWEEN JOISTS AND RAFTERS IS LESS THAN 42 INCHES, OR WHERE THERE ARE NOT TWO OR MORE ADJACENT TRUSSES WITH WEB CONFIGURATIONS CAPABLE OF ACCOMMODATING AN ASSUMED RECTANGLE 42 INCHES HIGH BY 24 INCHES IN WIDTH, OR GREATER, WITHIN THE PLANE OF THE TRUSSES. THIS LIVE LOAD NEED NOT BE ASSUMED TO ACT CONCURRENTLY WITH ANY OTHER LIVE LOAD REQUIREMENTS.

(c) UNINHABITABLE ATTICS WITH LIMITED STORAGE ARE THOSE WHERE THE MAXIMUM CLEAR HEIGHT BETWEEN JOISTS AND RAFTERS IS 42 INCHES OR GREATER, OR WHERE THERE ARE NOT TWO OR MORE ADJACENT TRUSSES WITH WEB CONFIGURATIONS CAPABLE OF ACCOMMODATING AN ASSUMED RECTANGLE 42 INCHES IN HEIGHT BY 24 INCHES IN WIDTH, OR GREATER, WITHIN THE PLANE OF THE TRUSSES. THE LIVE LOAD NEED ONLY BY APPLIED TO THOSE PORTIONS OF THE JOISTS OR TRUSS BOTTOM CHORDS WHERE ALL OF THE FOLLOWING CONDITIONS ARE MET: 1) THE ATTIC AREA IS ACCESSIBLE FROM AN OPENING NOT LESS THAN 20 INCHES IN WIDTH BY 30 INCHES IN LENGTH THAT IS LOCATED WHERE THE CLEAR HEIGHT IN THE ATTIC IS A MINIMUM OF 30 INCHES, 2) THE SLOPES OF THE JOISTS OR TRUSS BOTTOM CHORDS ARE NOT GREATER THAN 2:12, 3) REQUIRED INSULATION DEPTH IS LESS THAN THE JOIST OR TRUSS BOTTOM CHORD MEMBER DEPTH. THE REMAINING PORTIONS OF THE JOISTS OR TRUSS BOTTOM CHORDS SHALL BE DESIGNED FOR A UNIFORMLY DIST. CONCURRENT LIVE LOAD OF NOT LESS THAN 10 PSF.

WIND DESIGN DATA (BASED ON ASCE7-16 SIMPLIFIED METHOD):	
BASIC WIND SPEED:	110 MPH (LRFD)
WIND IMPORTANCE FACTOR:	I = 1.0
WIND EXPOSURE:	C
ADJUSTMENT FACTOR	$\lambda = 1.0$
TOPOGRAPHICAL FACTOR	$K_{zt} = 1.0$
EARTHQUAKE DESIGN DATA (BASED ON ASCE7-16 EQUIVALENT FORCE METHOD)	
SEISMIC IMPORTANCE FACTOR	I = 1.0
SPECTRAL RESPONSE ACCELERATIONS	$S_s = 1.33 \text{ \& S1} = 0.481$
SEISMIC SITE CLASS	D2
SEISMIC FORCE RESISTING SYSTEM	BEARING WALL SYSTEM
RESPONSE MODIFICATION FACTOR	R = 6.5
DESIGN BASE SHEAR	V = 0.137W

GEOTECHNICAL INFORMATION

- ALL FOUNDATIONS ARE TO BE FOUNDON ON COMPETENT NATIVE MATERIAL OR BY OTHER MEANS AS DEFINED BY A LICENSED GEOTECHNICAL ENGINEER.
- CONVENTIONAL FOUNDATIONS HAVE BEEN DESIGNED WITH THE FOLLOWING PARAMETERS:
 - ALLOWABLE BEARING PRESSURE 1500 PSF
 - ACTIVE EARTH PRESSURE (YIELDING) 40 PSF/FT
 - ACTIVE EARTH PRESSURE (AT-REST) 60 PSF/FT
 - PASSIVE EARTH PRESSURE 100 PSF/FT
 - COEFFICIENT OF FRICTION 0.30
 - SOIL SITE CLASS D

SHOP DRAWING SUBMITTAL PROCESS

- SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION. IF SHOP DRAWINGS DIFFER FROM THE APPROVED DESIGN DRAWINGS, NEW DESIGN DRAWINGS BEARING THE SEAL AND SIGNATURE OF A LICENSED STATE OF WASHINGTON ENGINEER COMPETENT IN STRUCTURAL DESIGN SHALL BE SUBMITTED ALONG WITH THE SHOP DRAWINGS TO THE APPROPRIATE JURISDICTION FOR APPROVAL PRIOR TO FABRICATION
- SHOP DRAWINGS ARE REQUIRED FOR THE PREFABRICATED WOOD TRUSSES
- CALCULATIONS BEARING THE SEAL AND SIGNATURE OF A LICENSED STATE OF WASHINGTON ENGINEER COMPETENT IN STRUCTURAL DESIGN SHALL BE SUBMITTED ALONG WITH THE SHOP DRAWINGS FOR PREFABRICATED PLATED WOOD TRUSSES

INSPECTIONS AND SPECIAL INSPECTIONS

- THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL INSPECTIONS REQUIRED BY THE LOCAL BUILDING DEPARTMENT
- SPECIAL INSPECTIONS ARE REQUIRED FOR ALL POST-INSTALLED ANCHORS INTO EXISTING CONCRETE.
- THE MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION.
- SPECIAL INSPECTIONS REQUIRED FOR ALL EPOXY ANCHORS INTO EXISTING CONCRETE.

EXCAVATION SUPPORT AND PROTECTION

- EXCAVATION SLOPES SHALL BE SAFE AND SHALL NOT BE GREATER THAN THE LIMITS SPECIFIED BY LOCAL, STATE, AND NATIONAL SAFETY REGULATIONS
- INSTALLATION OF CONSTRUCTION SHORING, IF REQUIRED, SHALL BE PER THE SHORING DRAWINGS, NOTES, AND SPECIFICATIONS

BACKFILL AND COMPACTION

- BACKFILL SHALL NOT BE PLACED UNTIL THE REMOVAL OF FORMWORK AND OF ANY DEBRIS. BACKFILL BEHIND ALL WALLS SHALL NOT BE PLACED UNTIL THE WALLS ARE PROPERLY SUPPORTED. ALL BACKFILL MATERIAL AND PLACEMENT PROCEDURES SHALL BE CONSISTENT WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS

CONCRETE

- CONCRETE CONSTRUCTION SHALL CONFORM TO THE ACI 318-14 STANDARD
- CEMENT AND CONCRETE SHALL CONFORM TO IBC SECTION 1903. ADMIXTURES SHALL BE APPROVED BY THE ENGINEER OF RECORD AND SHALL COMPLY WITH ACI 318-14 SECTION 3.6. CONCRETE EXPOSED TO FREEZING AND THAWING SHALL HAVE AN AIR ENTRAINING ADMIXTURE CONFORMING TO IBC SECTION 1904.2. THE USE OF WATER SOLUBLE CHLORIDE ION SHALL NOT BE USED.
- CONCRETE MIX DESIGNS SHALL MEET THE FOLLOWING REQUIREMENTS:

28-DAY STRENGTH (PSI)	MAX. W/C RATIO	MAX. SLUMP (INCHES)	AIR ENTR. (PERCENT)	SPECIAL INSP. REQUIRED?	LOCATION/ APPLICATION
3000	0.45	4 +/- 1	0 +/- 1	NO	FOOTINGS
3000	0.45	4 +/- 1	5 +/- 1	NO	FOUNDATION & STEM WALLS
3000	0.45	4 +/- 1	5 +/- 1	NO	EXT SLAB ON GRADE, DRIVEWAY, CURBS, WALKWAYS, PATIOS, PORCHES, STEPS EXPOSED TO WEATHER, GARAGE FLOORS

- RESHORING, WHERE REQUIRED, SHALL CONFORM TO ACI 301 SECTION 4.6. SUBMIT PROPOSED RESHORING PLANS TO THE ENGINEER OF RECORD FOR REVIEW.
- FOUNDATION WAS DESIGNED FOR A $f_c = 2500 \text{ psi}$ THEREFORE NO SPECIAL INSPECTION IS REQUIRED.
- CHAMFER ALL EXPOSED CORNERS PER THE ARCHITECTURAL PLANS OR 3/4 INCH IF NOT SPECIFIED BY THE ARCHITECT

EXISTING CONDITION NOTES (APPLIES TO RENOVATION AND REMODELS)

- STRUCTURAL PLANS ARE BASED ON EXISTING CONDITIONS THAT WERE READILY ACCESSIBLE AND VISIBLE DURING RECONSTRUCTION OF THE SITE VISITS.
- ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE G.C. PRIOR TO STRUCTURAL DEMO.
- NOTIFY THE E.O.R. OF ANY EXISTING CONDITIONS THAT DIFFER FROM THOSE SHOWN IN THE PLANS AND DETAILS.
- PRAXIS ENGINEERING, LLC, IS NOT RESPONSIBLE FOR CHANGES DUE TO CONCEALED EXISTING CONDITIONS.
- THE G.C. IS RESPONSIBLE FOR SEQUENCING AND TEMPORARY SHORING AS REQUIRED TO ENSURE STABILITY OF THE EXISTING STRUCTURE DURING DEMOLITION.

REINFORCING STEEL

- REINFORCING STEEL DETAILING, FABRICATION, AND PLACEMENT SHALL BE PER ACI 318-14.
- #3 AND #4 BARS SHALL BE ASTM A615 DEFORMED BARS, MINIMUM GRADE 60
- #5 BARS AND LARGER SHALL BE ASTM A615 DEFORMED BARS, MINIMUM GRADE 60
- REINFORCING FOR SLABS ON GRADE SHALL BE 6x6 W/1.4w/1.4 W.W.F., UNLESS NOTED OTHERWISE.
- ALL #3 BARS SHALL HAVE CLASS B SPLICES A MINIMUM 21" IN LENGTH
- ALL #4 BARS SHALL HAVE CLASS B SPLICES A MINIMUM 28" IN LENGTH
- REINFORCING STEEL COVER SHALL BE AS FOLLOWS:
 - CAST AGAINST EARTH: 3"
 - FORMED SURFACE EXPOSED TO EARTH OR WEATHER: 1 1/2"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER: 1"

TREATED WOOD

- TREATED WOOD SHALL BE REQUIRED FOR:
 - ALL WOOD THAT FORMS THE STRUCTURAL SUPPORT OF THE BUILDING, BALCONIES, PORCHES, OR SIMILAR PERMANENT BUILDING APPURTENANCES THAT ARE EXPOSED TO THE WEATHER WITHOUT ADEQUATE PROTECTION FROM A ROOF, EAVE, OVERHANG, OR OTHER COVERING TO PREVENT MOISTURE OR WATER ACCUMULATION AT THE SURFACE OR AT JOINTS BETWEEN MEMBERS
 - ALL WOOD INSTALLED ABOVE GROUND AND RESTING ON AN EXTERIOR CONCRETE OR MASONRY FOUNDATION WALL LESS THAN EIGHT INCHES FROM EXPOSED EARTH.
 - POSTS OR COLUMNS SUPPORTING PERMANENT STRUCTURES AND SUPPORTED BY A CONCRETE SLAB OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, EXCEPT:
 - IF LOCATED IN BASEMENTS ON A CONCRETE PIER OR METAL PEDESTAL ONE INCH ABOVE THE SLAB AND SEPARATED BY AN IMPERVIOUS MOISTURE BARRIER
 - IF IN AN ENCLOSED CRAWL SPACE OR AN UNEXCAVATED AREA WITHIN THE BUILDING PERIPHERY AND SUPPORTED BY A CONCRETE PIER OR PEDESTAL MORE THAN 8 INCHES FROM EXPOSED GROUND AND SEPARATED BY AN IMPERVIOUS MOISTURE BARRIER
 - SLEEPERS AND SILLS ON A CONCRETE SLAB ON GRADE THAT DOES NOT HAVE AN IMPERVIOUS MOISTURE BARRIER SEPARATION WITH EXPOSED EARTH
 - LEDGERS AND FURRING ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR CONCRETE OR MASONRY WALLS BELOW GRADE
 - PRESERVATIVE TREATMENT SHALL BE PER AWPA SPECIFICATION C2 AND C9, OR APPLICABLE STANDARDS
 - ALL FASTENERS IN CONTACT WITH TREATED LUMBER SHALL BE CORROSION RESISTANCE G-185 HOT-DIPPED GALVANIZED PER ASTM A153, OR STAINLESS STEEL

ROUGH FRAMING

- SAWN LUMBER SHALL CONFORM TO WCLB GRADING AND DRESSING RULES NO. 17, LATEST EDITION. SAWN LUMBER SHALL BE S4S AND DRIED, 19% MAX. MOISTURE CONTENT. PROTECT LUMBER FROM WEATHER AND PROVIDE FURTHER DRYING OF ASSEMBLED FRAMING TO MINIMIZE WOOD SHRINKAGE POTENTIAL. ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED U.N.O. PER PLAN. LUMBER SPECIES, GRADE, AND PROPERTIES FOR EACH USE/LOCATION SHALL BE AS FOLLOWS, U.N.O. PER PLANSCHEDULE:

USE/LOCATION	SPECIES	GRADE	Fb (PSI)	Fv (PSI)	Fcp (PSI)	Fc (PSI)	E
WALL STUDS/BLOCKING							
2x, 3x, 4" WIDE	HEM-FIR	STUD	675	150	405	800	1.2EG
2x, 3x, 6" 4" WIDER	HEM-FIR	#2	850	150	405	1300	1.3EG
WALL PLATES							
2x4, 3x4	HEM-FIR	STUD	675	150	405	800	1.2EG
2x6, 3x6	HEM-FIR	#2	850	150	405	1300	1.3EG
JOISTS							
2x, 3x	D-F-L	#2	850	150	405	1300	1.3EG
LEDGERS							
2x, 3x	D-F-L	#2	900	180	625	1350	1.6EG
4x	D-F-L	#1	1000	180	625	1500	1.7EG
BEAMS AND POSTS							
4x	D-F-L	#2	900	180	625	1350	1.6EG
6x	D-F-L	#1	1200	170	625	1000	1.6EG

STRUCTURAL FINGER JOINTED LUMBER

- STRUCTURAL FINGER JOINTED LUMBER SHALL BE PERMITTED TO BE USED INTERCHANGEABLY WITH SAWN LUMBER MEMBERS OF THE SAME SPECIES AND GRADE. STRUCTURAL FINGER JOINTED LUMBER SHALL BE GRADED UNDER AMERICAN LUMBER STANDARD COMMITTEE "PRODUCT STANDARD PS 20-99". LUMBER CLASSIFIED AS STUD USE ONLY SHALL BE LIMITED TO VERTICAL APPLICATIONS ONLY. LUMBER WITH CERTIFIED EXTERIOR JOINTS IS NOT RESTRICTED TO ANY TYPE OF LOADING.

FRAMING NOTES

- FRAMING CONNECTORS, ACCESSORIES, AND FASTENERS AS NOTED IN THE PLANS AND DETAILS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE UNLESS NOTED OTHERWISE. INSTALL ALL HARDWARE PER MANUFACTURERS SPECIFICATIONS. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS.
- TYPICAL NAILING NOT SHOWN PER PLAN, DETAIL, OR SCHEDULE SHALL CONFORM TO TABLE 2304.10.2 OF THE 2022 O55C.
- NAILS SHALL BE COMMON UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE PER SHEARWALL SCHEDULE OR PLANS, ANCHOR BOLTS AT SILL PLATES SHALL BE 3/4" DIAMETER WITH 7" MINIMUM EMBEDMENT INTO CONCRETE AND SHALL BE SPACED NOT MORE THAN 4 FEET APART. THERE SHALL BE A MINIMUM OF TWO BOLTS PER SILL PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12" NOR LESS THAN 6" FROM EACH END OF THE PIECE. A 3"x3"x0.229" PLATE WASHER SHALL BE PROVIDED FOR ALL ANCHOR BOLTS (DO NOT COUNTER-SINK PLATE WASHERS). A 1/2"x 1 1/2" DIAGONAL SLOTTED HOLE IN THE 3" x 3" PLATE WASHER IS ALLOWED WITH A STANDARD CUT WASHER.

JOIST AND BEAM HANGERS

- JOIST AND BEAM HANGERS AS NOTED IN THE PLANS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE UNLESS NOTED OTHERWISE. JOIST AND BEAM HANGERS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS AND SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE PER PLANS OR DETAILS:

MEMBER SIZE	HANGER
SAWN LUMBER	LUS SERIES TO MATCH LUMBER SIZE
3/4"-WIDE GLULAM BEAM	HGU5410
5/2"-WIDE GLULAM BEAM	HGU55.5Q10
MANUFACTURED WOOD I-JOIST	IUS SERIES TO MATCH I-JOIST SIZE
1 1/2"-WIDE PSL OR LVL BEAM	LBV SERIES TO MATCH DEPTH
3/2"-WIDE PSL OR LVL BEAM	GLTV SERIES TO MATCH DEPTH
5/2"-WIDE PSL OR LVL BEAM	GLTV SERIES TO MATCH DEPTH

SHRINKAGE OF WOOD FRAMING

- SHRINKAGE IN WOOD FRAMING IS DUE TO LOSS OF MOISTURE CONTENT AND TO COMPRESSION OF ASSEMBLIES OF WOOD COMPONENTS. PLUMBING, ELECTRICAL, AND MECHANICAL SYSTEMS AS WELL AS EXTERIOR FINISHES SHALL BE DESIGNED AND BUILT TO ACCOMMODATE 1/4" PER FLOOR OF WOOD SHRINKAGE. THE USE OF KILN-DRIED LUMBER AND PROVIDING A DRYING PROCESS TO THE FRAMING MEMBERS PRIOR TO APPLICATION OF FINISHES WILL HELP CONTROL BUT WILL NOT ELIMINATE SHRINKAGE.

WOOD SHEATHING

- STRUCTURAL WOOD SHEATHING PANELS SHALL HAVE APA-GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. WOOD SHEATHING PANELS SHALL BE C-D INT APA WITH EXTERIOR GLUE (CDX). ORIENTED STRAND BOARD (OSB) PANELS SHALL BE EXPOSURE 1. PANELS SHALL HAVE THE FOLLOWING THICKNESS, SPAN RATING, AND FASTENING UNLESS NOTED OTHERWISE PER PLAN:

	EDGE NAILS	FIELD NAILS
ROOF:	7/16" 24/16 C-D APA CDX	8d @ 6" O.C.
FLOOR:	3/4" APA-RATED STURD-I-FLOOR OSB 48/24 T&G	10d @ 6" O.C.
SHEARWALL:	7/16" C-D WITH EXTERIOR GLUE	SEE SCHEDULE

- ALL ROOF AND FLOOR SHEATHING PANELS SHALL BE INSTALLED FACE GRAIN PERPENDICULAR TO SUPPORTS AND IN A STAGGERED PATTERN UNLESS NOTED OTHERWISE PER PLAN. BLOCKING AT INTERMEDIATE FLOOR AND ROOF SHEATHING JOINTS SHALL NOT BE REQUIRED UNLESS NOTED OTHERWISE PER PLAN. SHEARWALL SHEATHING SHALL BE BLOCKED AT ALL EDGES WITH 2X OR 3X FRAMING PER SHEARWALL SCHEDULE

STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL BE:

MATERIAL GRADE	SHAPES
ASTM A992, GRADE 50	WIDE FLANGE SHAPES
ASTM A572, GRADE 50	PLATES WHERE NOTED
ASTM A36	CHANNELS, PLATES AND ANGLES, EXCEPT AS NOTED
ASTM A500, GRADE B (FY=46KSI)	HOLLOW STRUCTURAL SECTIONS (TUBES)
ASTM A53, GRADE B (FY=35 KSI)	PIPES
- DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE "AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" WITH "COMMENTARY" AND THE "CODE OF STANDARD PRACTICE", WITH EXCEPTIONS NOTED IN SPECIFICATIONS. REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR MEMBERS PART OF THE SEISMIC LOAD RESISTING SYSTEM (SLRS). STEEL FABRICATOR SHALL BE AISC CERTIFIED. STEEL ERECTOR DOES NOT NEED TO BE AISC CERTIFIED.
- BOLTS SHALL CONFORM TO THE ASTM AND RCSC SPECIFICATIONS FOR JOINTS USING A325 OR A490 HIGH STRENGTH BOLTS. BOLTS SHALL BE SNUG-TIGHT UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS USED AS PART OF THE SEISMIC LOAD RESISTING SYSTEM (SLRS) NOTED ON THE DRAWINGS AND DETAILS SHALL BE FULLY TENSIONED AND ALL FAYING SURFACES SHALL BE PREPARED AS REQUIRED FOR CLASS A OR BETTER SLIP-CRITICAL JOINTS
- WELDING SHALL CONFORM TO THE AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDED PROCEDURE SPECIFICATION (WPS) AS REQUIRED IN AWS D1.1 AND APPROVED BY THE STRUCTURAL ENGINEER. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL MANUFACTURER. FOR MEMBERS INCLUDED IN THE SEISMIC LOAD RESISTING SYSTEM (SLRS), REQUIREMENTS OF AWS D1.8 (SEISMIC SUPPLEMENT) SHALL APPLY.
- ALL WELDS USED IN MEMBERS AND CONNECTIONS THAT ARE PART OF THE SEISMIC LOAD RESISTING SYSTEM (SLRS) SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF 20 FT-LBS AT 0 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION. ALL COMPLETE JOINT PENETRATION WELDS DESIGNATED AS DEMAND CRITICAL SHALL BE MADE WITH FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT MINUS 20 DEGREES F, AND 40 FT-LBS AT 70 DEGREES. FOR COMPLETE JOINT PENETRATION WELDS ASSOCIATED WITH MEMBER SPLICES AND CONNECTIONS NOT PART OF THE SLRS, WELDS SHALL BE MADE WITH FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT 40 DEGREES F.
- FOR MEMBERS AND CONNECTIONS THAT ARE PART OF THE SEISMIC LOAD RESISTING SYSTEM, DISCONTINUITIES CREATED BY ERRORS OR BY FABRICATION OR ERECTION OPERATIONS, SUCH AS TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING, AND FLAME CUTTING, SHALL BE REPAIRED AS REQUIRED BY THE STRUCTURAL ENGINEER.
- WELDS SHALL BE MADE USING E70XX ELECTRODES AND SHALL BE 3/16" MINIMUM, UNLESS OTHERWISE NOTED. WELDING SHALL BE BY AWS CERTIFIED WELDERS.
- PROVIDE WEEP HOLES AT EXTERIOR CLOSED SECTIONS WHERE MOISTURE MAY ACCUMULATE.

METAL PLATE CONNECTED WOOD TRUSSES

- PRE-MANUFACTURED PLATED WOOD TRUSSES SHALL BE MANUFACTURER-DESIGNED AND SHALL COMPLY WITH THE TRUSS PLATE INSTITUTE (ANSI/TFI 1, NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION) AND IBC SECTION 2303.4. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED PER THE REQUIREMENTS OF THE PREVIOUSLY MENTIONED "SHOP DRAWING SUBMITTAL PROCESS". DESIGN FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS, PREVIOUSLY MENTIONED LOADS ON THIS SHEET, AND THE FOLLOWING:

TOP CHORD LIVE/SNOW LOAD:	25 PSF
TOP CHORD DEAD LOAD:	10 PSF
TOP CHORD DRAG LOAD:	SEE PLAN
TOP CHORD NET WIND UPLIFT:	7 PSF (NET)
BOTTOM CHORD DEAD LOAD:	5 PSF
BOTTOM CHORD LIVE LOAD:	PER LIVE LOAD TABLE, THIS SHEET

ROOF:
 - LIVE LOAD DEFLECTION: 1/60
- TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE FOLLOWING PLANS/DETAILS AND ON THE INDIVIDUAL TRUSS DESIGN DRAWINGS. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS, TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICES, SUCH AS THE SBCA BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES
- TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, SPLICED, OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE APPROVAL OF A REGISTERED DESIGN PROFESSIONAL. ALTERATIONS RESULTING IN THE ADDITION OF LOAD THAT EXCEED THE DESIGN LOAD FOR THE TRUSS, SHALL NOT BE PERMITTED WITHOUT THE VERIFICATION THAT THE TRUSS IS CAPABLE OF SUPPORTING THE ADDITIONAL LOADING.

STRUCTURAL GLUED LAMINATED TIMBER

- GLUE-LAMINATED MEMBERS SHALL HAVE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) IDENTIFICATION MARK. EXPOSED MEMBERS SHALL RECEIVE ONE COAT OF END SEALER APPLIED IMMEDIATELY AFTER TRIMMING IN EITHER SHOP OR FIELD. DESIGN MATERIAL PROPERTIES SHALL BE AS FOLLOWS:

COMBINATION SYMBOL	SPECIES	CAMBER
24F-V4	DF/DF	STANDARD
- UNEXPOSED GLUE-LAMINATED TIMBER SHALL BE INDUSTRIAL GRADE, UNLESS NOTED OTHERWISE. EXPOSED GLUE-LAMINATED TIMBER SHALL BE APPEARANCE CLASS PER ARCHITECT.

MANUFACTURED WOOD BEAMS

- MANUFACTURED/ENGINEERED WOOD BEAMS SHALL BE THE SIZE AND TYPE SHOWN ON THE DRAWINGS AS MANUFACTURED BY WEYERHAEUSER OR APPROVED EQUAL. STORAGE, ERECTION, AND INSTALLATION SHALL BE PER MANUFACTURER SPECIFICATIONS. MICROLAM AND PARALLAM MEMBERS SHALL NOT HAVE NOTCHES OR DRILLED HOLES WITHOUT PRIOR ENGINEER OF RECORD APPROVAL. DESIGN MATERIAL PROPERTIES SHALL BE AS FOLLOWS:

MEMBER	E (PSI)	Fb (PSI)	Fc (PSI)	Fv (PSI)
LVL (3 1/2" WIDE)	1.9 EG	2600	750	285
PSL (PARALLAM)	2.0 EG	2900	650	290
LSL (1 1/2" TIMBERSTRAND)	1.5 EG	2250	750	400

BEARING WALL STUD SCHEDULE

WALL TYPE	LOCATION	PLATE SIZE	STUD SIZE AND SPACING
EXTERIOR	TYPICAL, U.N.O. PER PLAN	2x6	2x6s @ 16" O.C.
CRAWL SPACE	TYPICAL	2x4 (e)	2x4s @ 16" O.C.
INTERIOR	TYPICAL, U.N.O.PER PLAN	2x4	2x4s @ 16" O.C.

- SEE SHEARWALL SCHEDULE FOR WALL SHEATHING, BLOCKING, AND PLATE NAILING
- SEE SAWN LUMBER STRUCTURAL NOTES ON THIS SHEET FOR SPECIES AND GRADE OF WALL PLATES AND STUDS
- SECURE SILL PLATES TO CONCRETE WITH ANCHOR BOLTS AS PREVIOUSLY DESCRIBED ON THIS SHEET. REFER TO SHEARWALL SCHEDULE FOR ADDITIONAL INFORMATION
- EXTERIOR WALLS AT VAULTED AREAS SHALL BE BALLOON-FRAMED
- FOUNDATION KNEE WALLS SHALL BE FRAMED OF STUDS OF SAME SIZE AS STUDS ABOVE. WHERE HEIGHT OF STUD EXCEEDS 4 FEET, CONTACT ENGINEER FOR PROPER STUD SIZE AND SPACING. PROVIDE SHEATHING, NAILING, AND MUDSILL ANCHORAGE AS SPECIFIED FOR WALL ABOVE.
- INTERIOR NON-BEARING WALLS MAY BE CONSTRUCTED OF 2x4s @ 24" O.C.

SPECIAL INSPECTIONS	
TYPE OF INSPECTION	REQUIRED?
CONCRETE CONSTRUCTION	N
ANCHORS - ADHESIVE	N
ANCHORS - CAST-IN-PLACE	N
ANCHORS - EXPANSION/SCREW	N
WOOD CONSTRUCTION	N
GEOTECHNICAL (SEE REPORT)	N

APPROVED PER: NOTES ON PLAN

NISQUALLY BUILDING DEPARTMENT

ABBREVIATIONS	
P.E.N	PANEL EDGE NAILING
A.B.	ANCHOR BOLT
HORIZ.	HORIZONTAL
O.C.	ON CENTER
CONT.	CONTINUOUS
P.T.	PRESSURE TREATED
TYP	TYPICAL
PARA.	PARALLEL
PERP.	PERPENDICULAR
S.W.	SHEAR WALL
T.O.	TOP OF
STGRD	STAGGERED
EA	EACH
BLKG	BLOCKING
MANUF.	MANUFACTURER
SHTG	SHEATHING
E.W.	EACH WAY

P.L.D.	HOLD DOWN
SCHED.	SCHEDULE
FTG	FOOTING
T.N.	TOE-NAIL
BTWN	BETWEEN
W/	WITH
GALV.	GALVANIZED
(E)	EXISTING
V.I.F	VERIFY IN FIELD
(N)	NEW
S.O.G.	SLAB ON GRADE
T.B.K.	TO BE REWORKED
RECOM.	RECOMMENDATIONS
FND	FOUNDATION



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205 ALLEN STREET
KELSO, WA 98626

DATE: 1/23/2024
SCALE: AS NOTED
DRAWN BY: LB

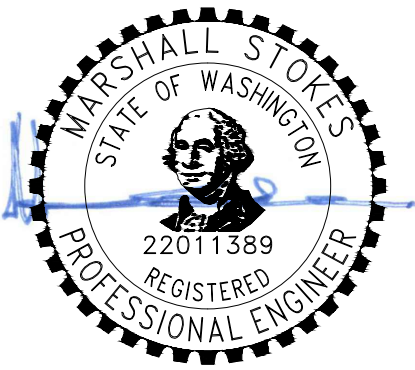
REVISIONS
1 - 7.8.25 - FLOOR JOIST CHANGES

CLIENT:
KEVIN SUTTERLICHT

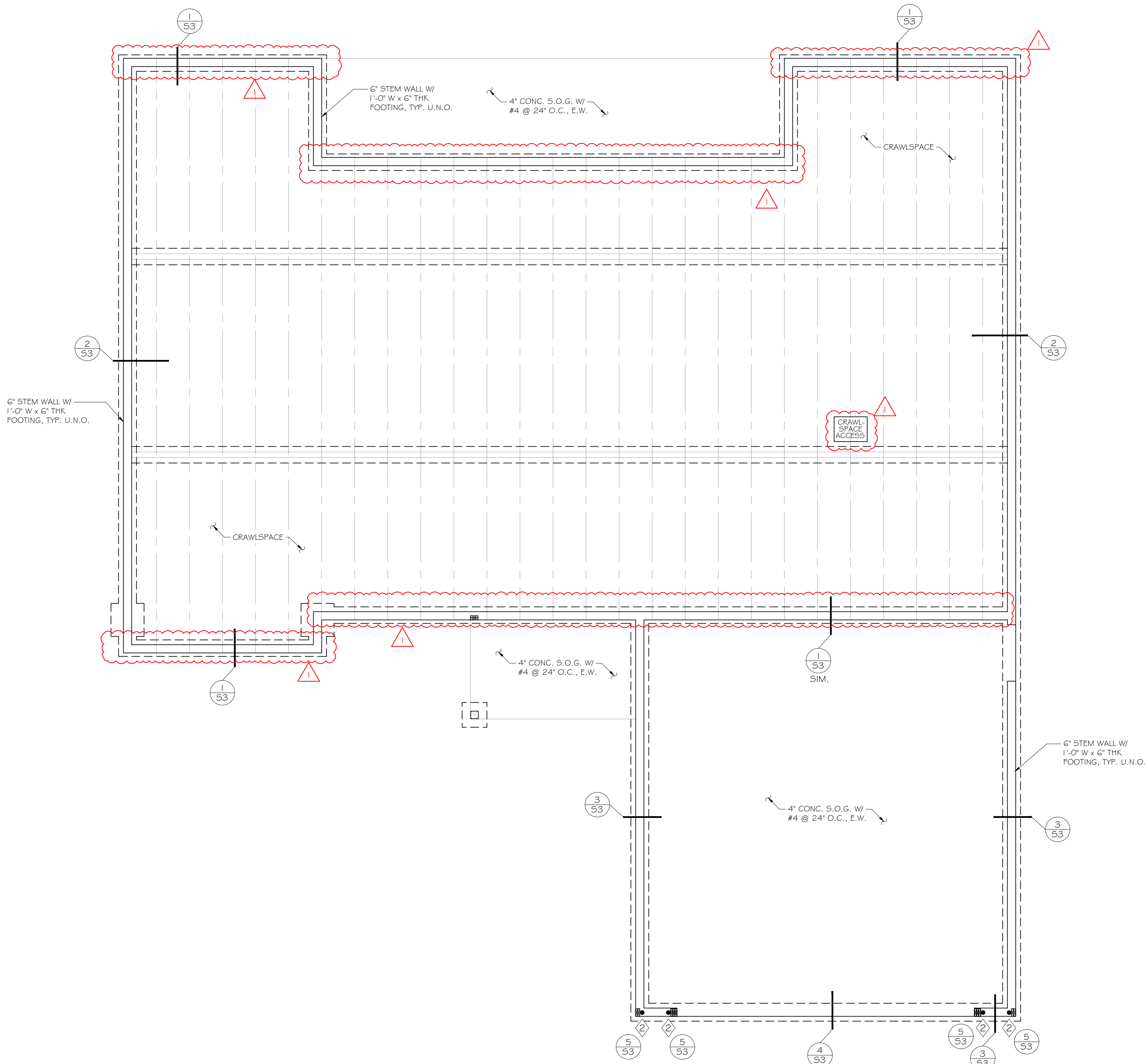
360.349.9306

JURISDICTION:
THURSTON COUNTY, WA

PROJECT: NISQUALLY TRIBE - SPEC PLAN G
ADDRESS: 12338 SQUALLI-ABSCH ROAD, OLYMPIA, WA 98513



SHEET NO.
50



1/51 FOUNDATION PLAN
1/4" = 1'-0"

LEGEND

- BEARING WALL
- SHEAR WALL
- SHEAR PANEL LOCATION
- SHEAR PANEL DESCRIPTION & NAILING (SEE SHEAR WALL SCHEDULE)
- HOLDOWN OR STRAP/TIE (SEE HOLDOWN SCHEDULE)
- DETAIL REFERENCE (SEE ATTACHED DETAIL)
- PSW - PERFORATED SHEARWALL - PROVIDE NAILING PER SHEARWALL SCHEDULE @ PANEL EDGES & AROUND OPENINGS FOR ENTIRE WALL LENGTH

NOTE:
THESE PLANS INCLUDE THE ENGINEERING FOR THE LATERAL FORCE RESISTANCE SYSTEM ONLY. PRAXIS ENGINEERING, LLC, DOES NOT ACCEPT RESPONSIBILITY FOR GRAVITY ENGINEERING PLANS OR OTHER ASPECTS OF THE PLANS PERFORMED BY OTHERS. USE OF THESE PLANS CONSTITUTES ACCEPTANCE OF THIS CONDITION BY ALL PARTIES INVOLVED, INCLUDING, BUT NOT LIMITED TO THE HOMEOWNER AND THE GENERAL CONTRACTOR.

PRAXIS ENGINEERING

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REVISIONS

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CLIENT:

KEVIN SUTTERLICHT

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THURSTON COUNTY, WA

PROJECT: NISQUALLY TRIBE - SPEC PLAN G

ADDRESS: 12338 SQUALLI-ABSCH ROAD, OLYMPIA, WA 98513

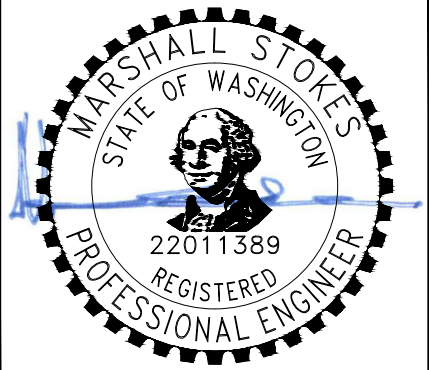
APPROVED PER: NOTES ON PLAN

NISQUALLY INDIAN TRIBE BUILDING DEPARTMENT

HOLDOWN SCHEDULE		
HOLDOWNS AT FOUNDATION		
MARK	HOLDOWN	FASTENERS
2	HDU2-SDS2.5	(6) SD5 1/4" x 2 1/2" # SIMPSON SB7/6X24
5	HDU5-SDS2.5	(14) SD5 1/4" x 2 1/2" # SIMPSON SB7/6X24
8	HDU8-SD2.5	(20) SD5 1/4" x 2 1/2" # SIMPSON SB7/6X24

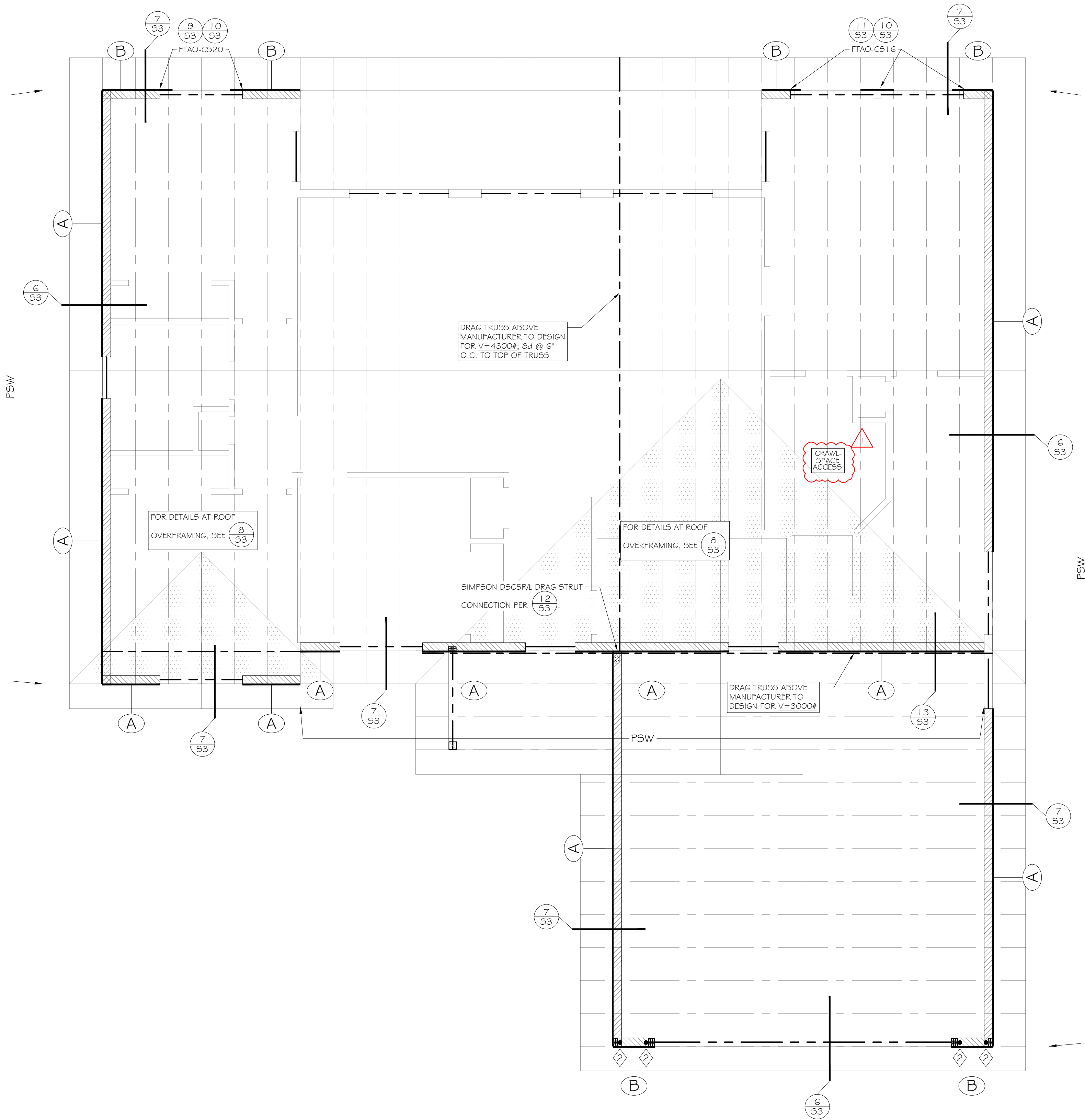
NOTES:

- "SIMPSON" PRODUCTS, OR EQUIVALENT, SHALL BE INSTALLED AS PER MFG. SPECS.
- HOLDOWNS SHALL FASTEN TO MINIMUM OF (2) STUDS LAMINATED TOGETHER WITH (1) @ AT 12" O.C., UNLESS NOTED OTHERWISE.
- FOR HDU8-SDS2.5" HOLDOWNS, USE MIN. 4 X OR TRIPLE 2 X STUD FOR HOLDOWN MEMBER.



SHEET NO.

S1



LEGEND

- BEARING WALL
- SHEAR WALL
- SHEAR PANEL LOCATION
- SHEAR PANEL DESCRIPTION # NAILING (SEE SHEAR WALL SCHEDULE)
- HOLDOWN OR STRAPTIE (SEE HOLDOWN SCHEDULE)
- DETAIL REFERENCE (SEE ATTACHED DETAIL)
- PSW - PERFORATED SHEARWALL - PROVIDE NAILING PER SHEARWALL SCHEDULE @ PANEL EDGES # AROUND OPENINGS FOR ENTIRE WALL LENGTH

NOTE:
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JURISDICTION:
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PROJECT: NISQUALLY TRIBE - SPEC PLAN G

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SHEET NO.
S2

APPROVED PER; NOTES ON PLAN

NISQUALLY INDIAN TRIBE BUILDING DEPARTMENT

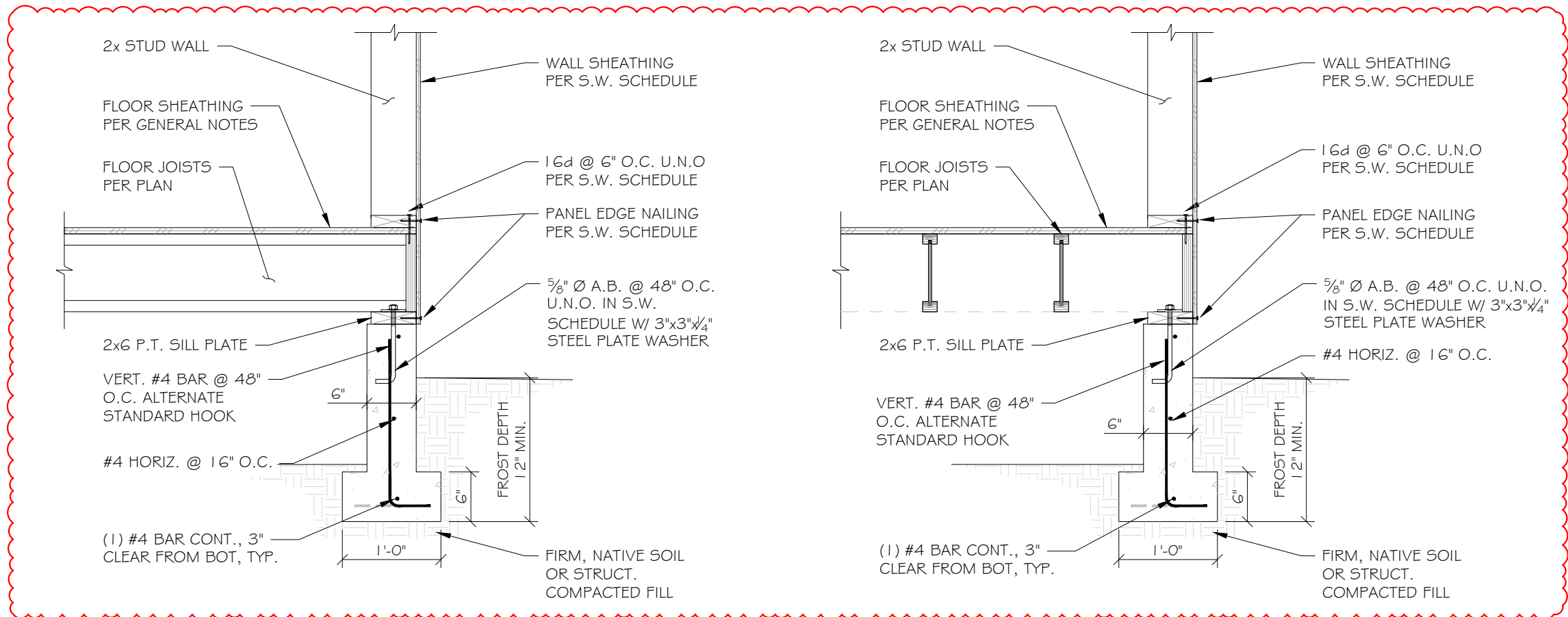
HOLDOWN SCHEDULE		
HOLDOWNS AT FOUNDATION		
MARK	HOLDOWN	FASTENERS
2	HDU2-SDS2.5	(6) SD5 1/2" x 2 1/2" # SIMPSON SB7/6X24
5	HDU5-SDS2.5	(14) SD5 1/4" x 2 1/2" # SIMPSON SB7/6X24
8	HDU8-SD2.5	(20) SD5 1/4" x 2 1/2" # SIMPSON SB7/6X24

NOTES:
1. "SIMPSON" PRODUCTS, OR EQUIVALENT, SHALL BE INSTALLED AS PER MFG. SPECS.
2. HOLDOWNS SHALL FASTEN TO MINIMUM OF (2) STUDS LAMINATED TOGETHER WITH 10d AT 12" O.C., UNLESS NOTED OTHERWISE.
3. FOR "HDU8-SDS2.5" HOLDOWNS, USE MIN. 4 X OR TRIPLE 2 X STUD FOR HOLDOWN MEMBER.

- CONTRACTOR NOTES**
- ALL WATERPROOFING, DAMP PROOFING, AND WEATHERPROOFING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - ALL EXTERIOR WALL AND INTERIOR BEARING WALL HEADERS ARE TO BE 4 X 8 MIN. U.N.O. (ONLY APPLIES IF BEAMS, POSTS, AND FOOTINGS ARE SPECIFIED ON ENGINEERED PLANS)
 - ALL EXTERIOR WALL STUDS SHALL BE FRAMED WITH 2 X 6 DFL #2 @ 16" O.C. WITH A DOUBLE 2 X 6 TOP PLATE UNLESS NOTED OTHERWISE.
 - ATTACH EACH TRUSS TO WALLS AND SUPPORT BEAMS WITH SIMPSON H1 HURRICANE TIES
 - PRAXIS ENGINEERING, LLC IS NOT RESPONSIBLE FOR ANY INTERIOR FINISH DAMAGE (NAIL HEAD PROTRUSIONS, JOINT SEPARATION, DRYWALL CRACKING, ETC.) DUE TO MOVEMENT AT TRUSS, INTERIOR NON-LOAD BEARING WALLS AND PARTITIONS, ETC.
 - ALL CONNECTIONS (HANGERS, HOLDOWNS, POST CAPS, ETC.) SHALL BE SIMPSON PRODUCTS OR AN APPROVED EQUIVALENT.

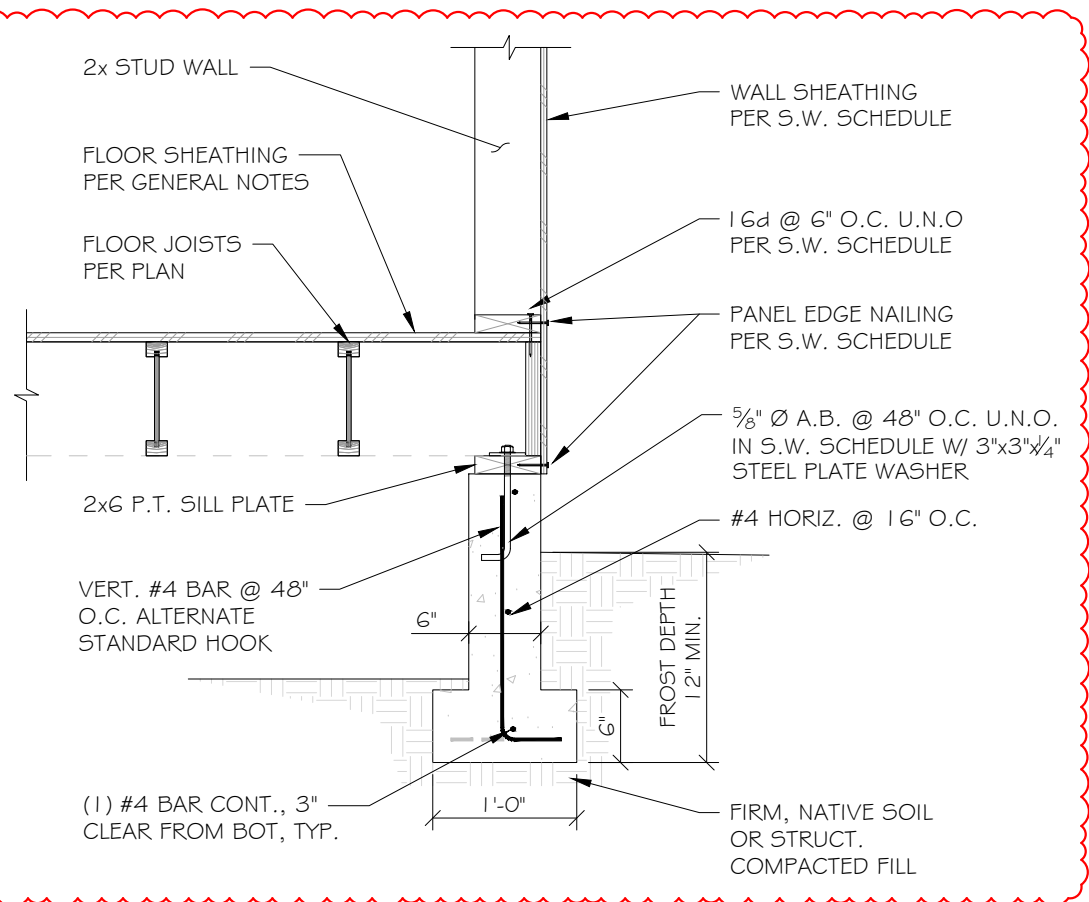
SHEARWALL SCHEDULE							
ALL PANEL EDGES MUST BE BLOCKED							
MARK	WALL COVER	FASTENERS	@ PANEL EDGES	INTERM. STUDS	BOT. PL. NAILING	A. BOLT SPACING	SHR. CLIP SPACING
A	7/8" A.P.A.-RATED SHTG	0.131" Ø 2-1/4" F. RH. P-NAIL	6" O.C.	12" O.C.	16d @ 6" O.C.	5/8" @ 3'-8" O.C.	A35 @ 1'-10" O.C.
B	7/8" A.P.A.-RATED SHTG	0.131" Ø 2-1/4" FULL ROUND-HEAD P-NAIL	4" O.C.	12" O.C.	16d @ 4" O.C.	5/8" @ 2'-6" O.C.	A35 @ 1'-3" O.C.
C	7/8" A.P.A.-RATED SHTG	0.131" Ø 2-1/4" FULL ROUND-HEAD P-NAIL	3" O.C.	12" O.C.	16d @ 3" O.C.	5/8" @ 2'-0" O.C.	A35 @ 0'-11" O.C.

- ALL EXTERIOR WALLS, UNLESS NOTED OTHERWISE, MUST HAVE TYPE 'A' SHEARWALL PANEL # NAILING AS A MINIMUM STANDARD OF CONSTRUCTION. BLOCKING ONLY REQUIRED AT DESIGNATED SHEAR WALLS.
- 'F,RH,P-NAIL' = DESIGNATES A FULL-ROUND HEAD PNEUMATIC-DRIVEN NAIL (8d COMMON OR GALVANIZED BOX NAIL MAY SUBSTITUTE FOR Ø 0.131 P-NAILS)
- SHEATHING ON SHEARWALLS MUST EXTEND DOWN TO SOLE # MUDDSILL PLATES AND SHALL NOT BE INTERRUPTED BY ANY WALL BUTTING INTO THE SHEARWALL.
- FASTEN ALL BLOCKING/RIM JOIST TO WALL BE BELOW WITH AT LEAST 16d TOENAILS @ 8" O.C., UNLESS NOTED OTHERWISE.
- WALLS WITH PLYWOOD ON EACH SIDE SHALL OFFSET PLYWOOD EDGE JOINTS ON ONE SIDE OF THE SHEARWALL FROM THOSE OF THE OTHER.
- SHEARWALLS WITH OVERDRIVEN NAILS PENETRATING SURFACE BY MORE THAN 1/8" WILL BE REQUIRED TO BE RENAILED. USE A RUBBER GROMMET IN HEAD OF NAIL-GUN AND ADJUST AIR-PRESSURE SO NAIL HEADS ARE FLUSH WITH OR SLIGHTLY RECESSED INTO SHEATHING.
- ALL STUD WALLS MUST HAVE DOUBLE TOP PLATES OF THE SAME DIMENSION AS THE STUD. PLATES SHALL BE FLUSH WITH OR SLIGHTLY RECESSED INTO SHEATHING.
- APA MINIMUM OF 2'-0" BETWEEN SPLICES WITH AT LEAST EIGHT 16d NAILS THROUGH BOTH PLATES EACH SIDE OF SPLICE.
- ALL ANCHOR BOLTS MUST HAVE MINIMUM 2"x2" WASHERS AND SHALL BE LOCATED WITHIN 12", BUT NOT LESS THAN 9" FROM ENDS OF SILL PLATE.
- ALL STUDS SHALL BE 2x STUDS PER PLAN @ 16" O.C. UNLESS NOTED OTHERWISE.



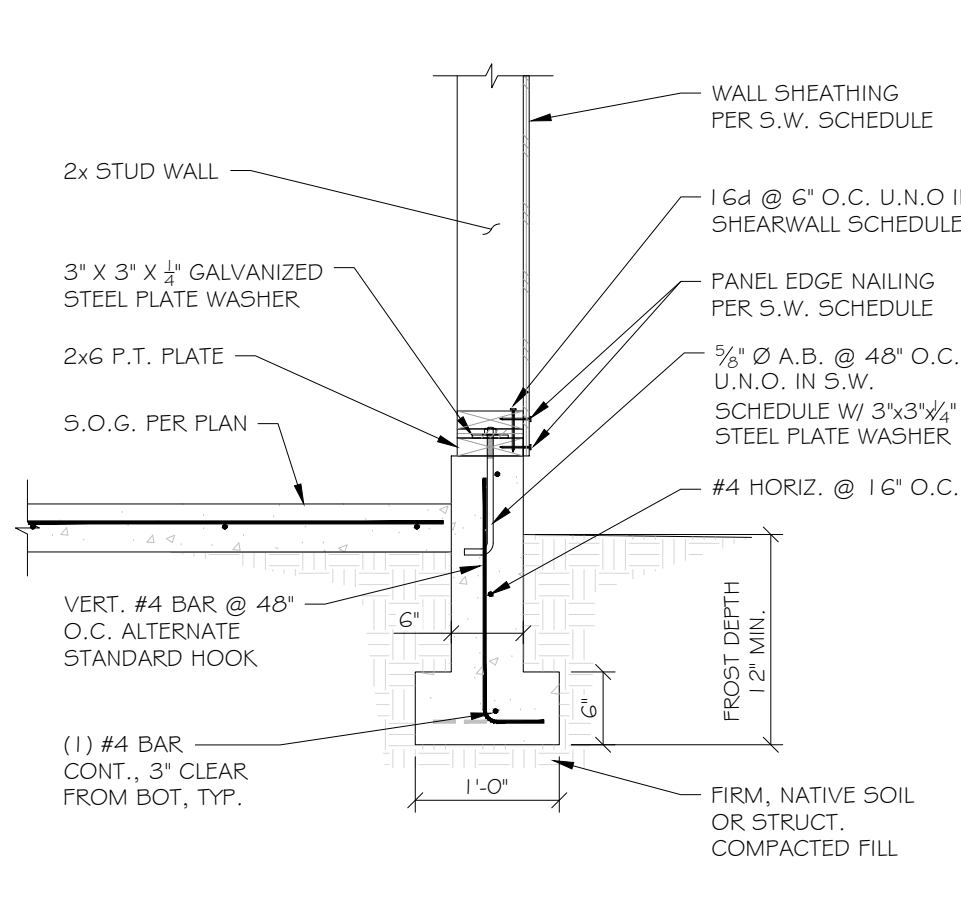
JOISTS PERP. @ FND

1/3 S3 3/4" = 1'-0"



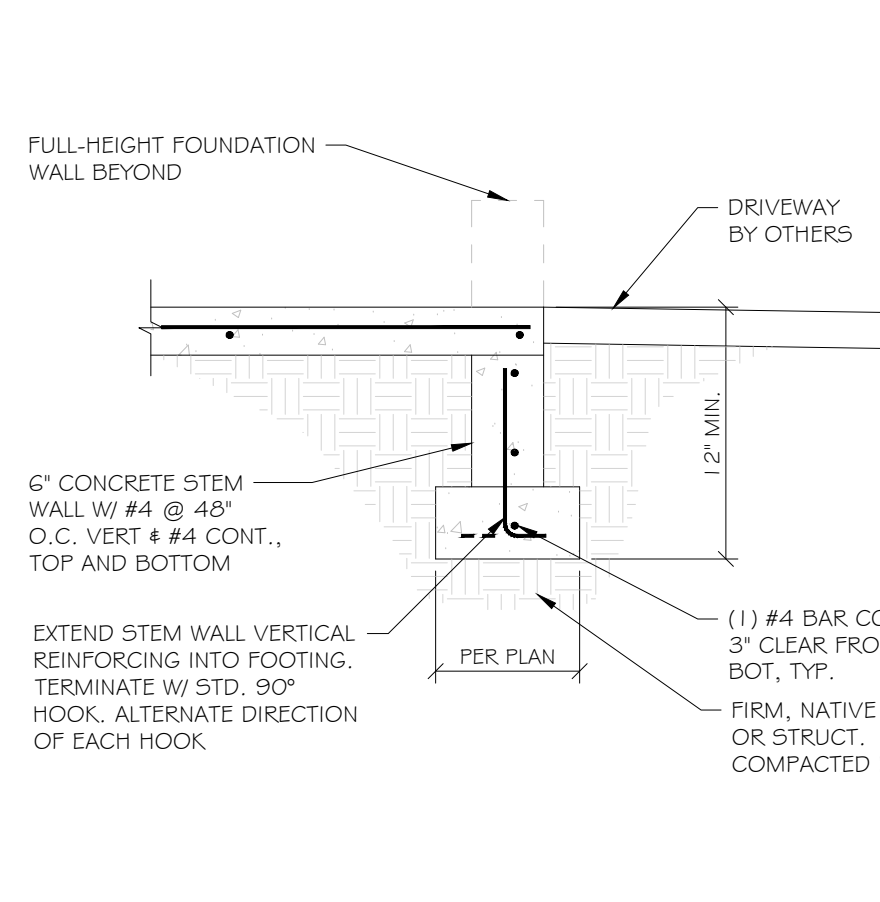
JOISTS PARA. @ FND

1/3 S3 3/4" = 1'-0"



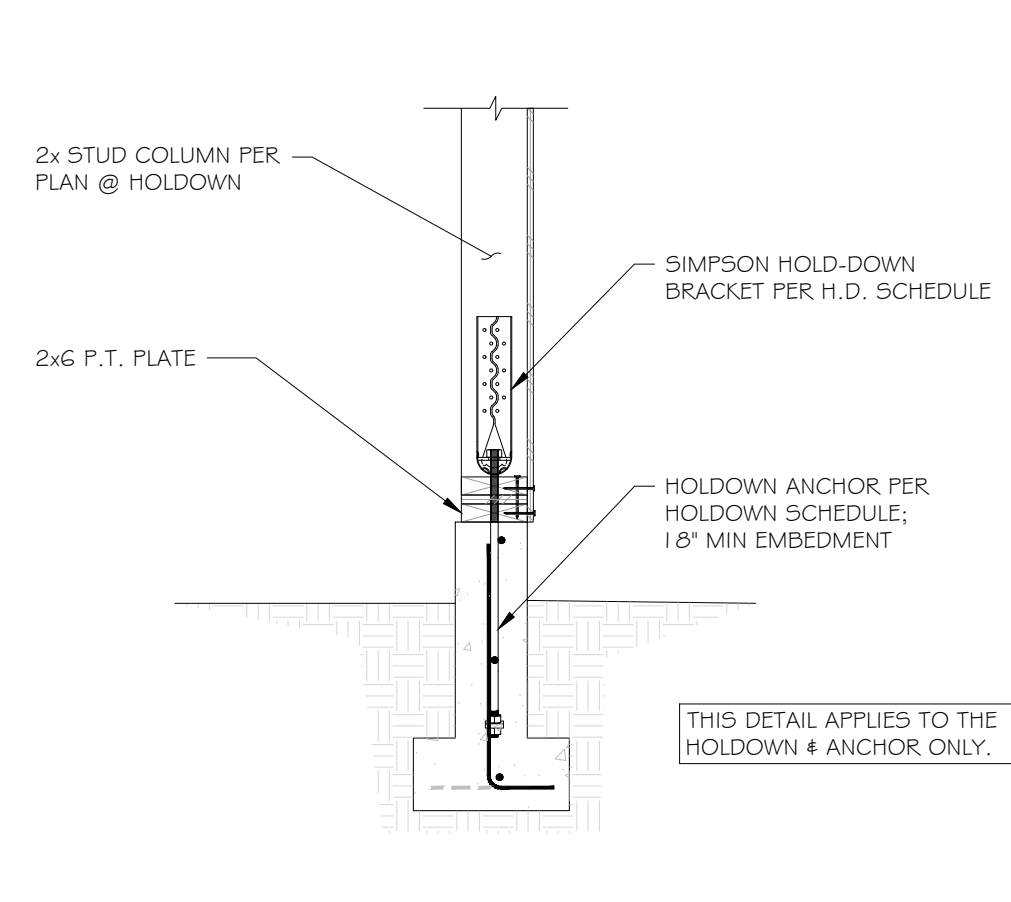
FOUNDATION @ S.O.G.

1/3 S3 3/4" = 1'-0"



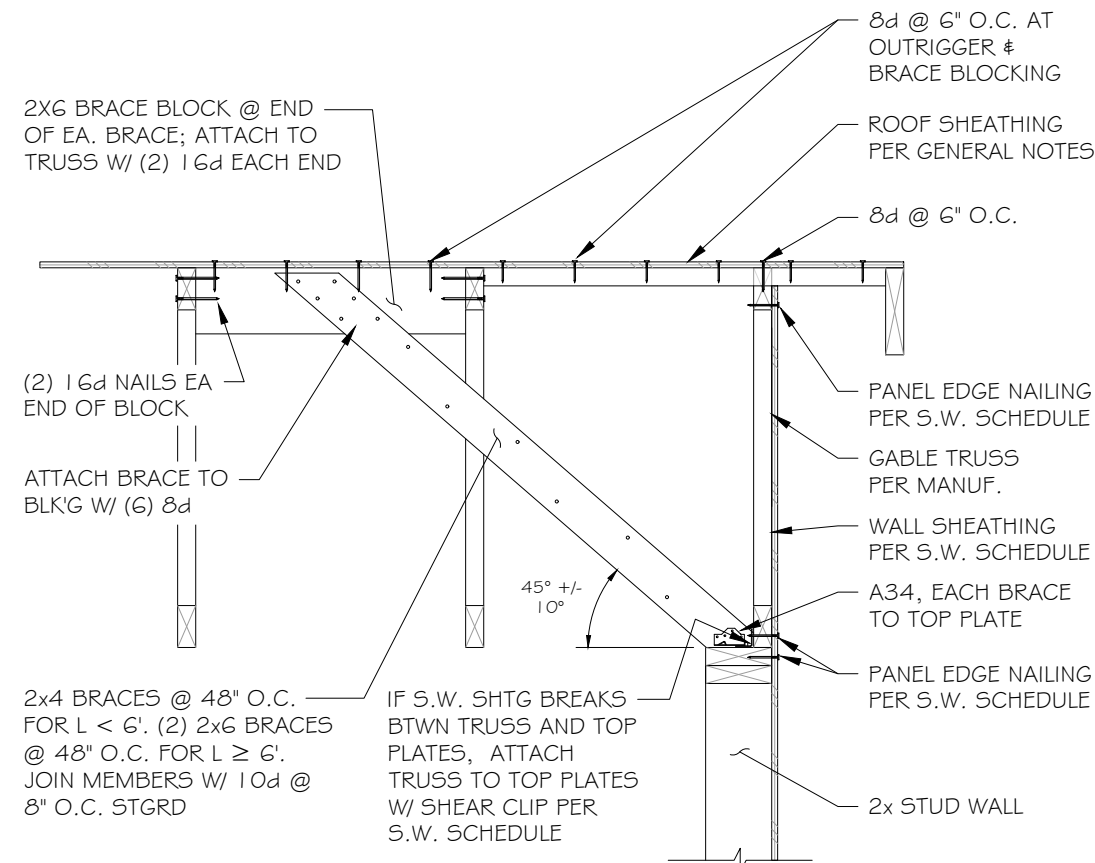
GARAGE APRON DETAIL

1/3 S3 3/4" = 1'-0"



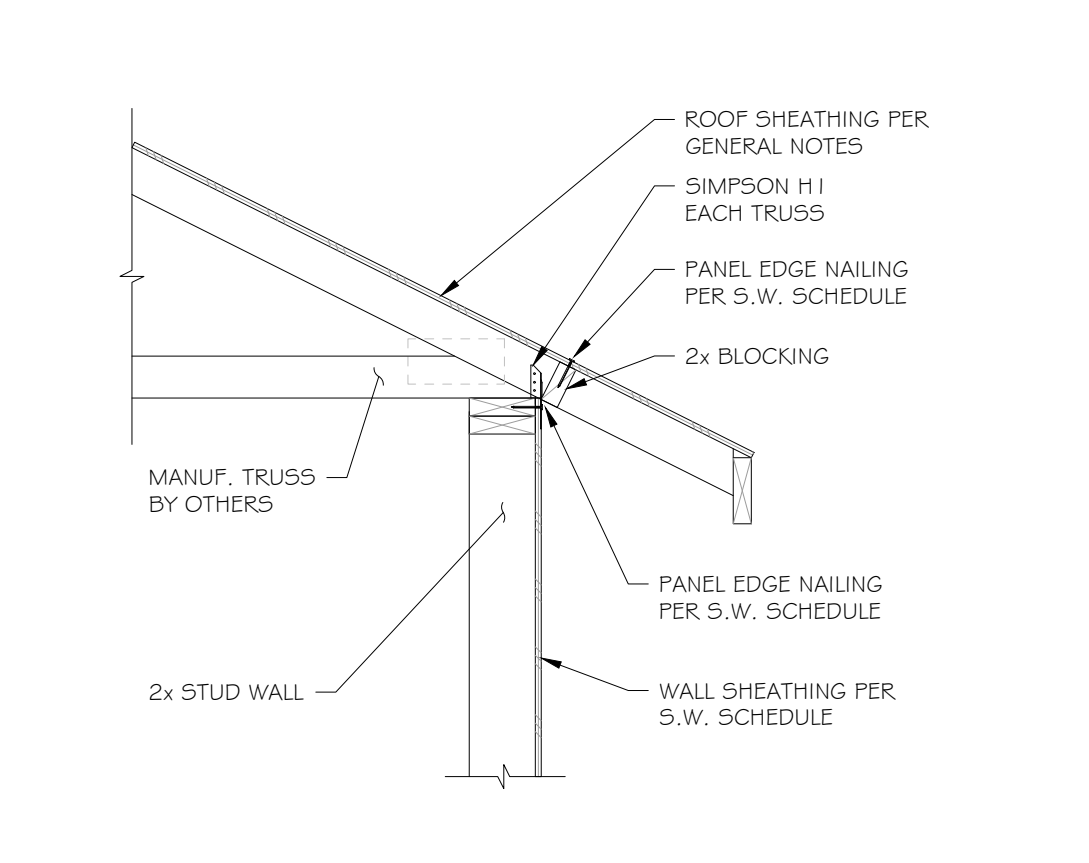
TYPICAL HOLDOWN DETAIL

1/3 S3 3/4" = 1'-0"



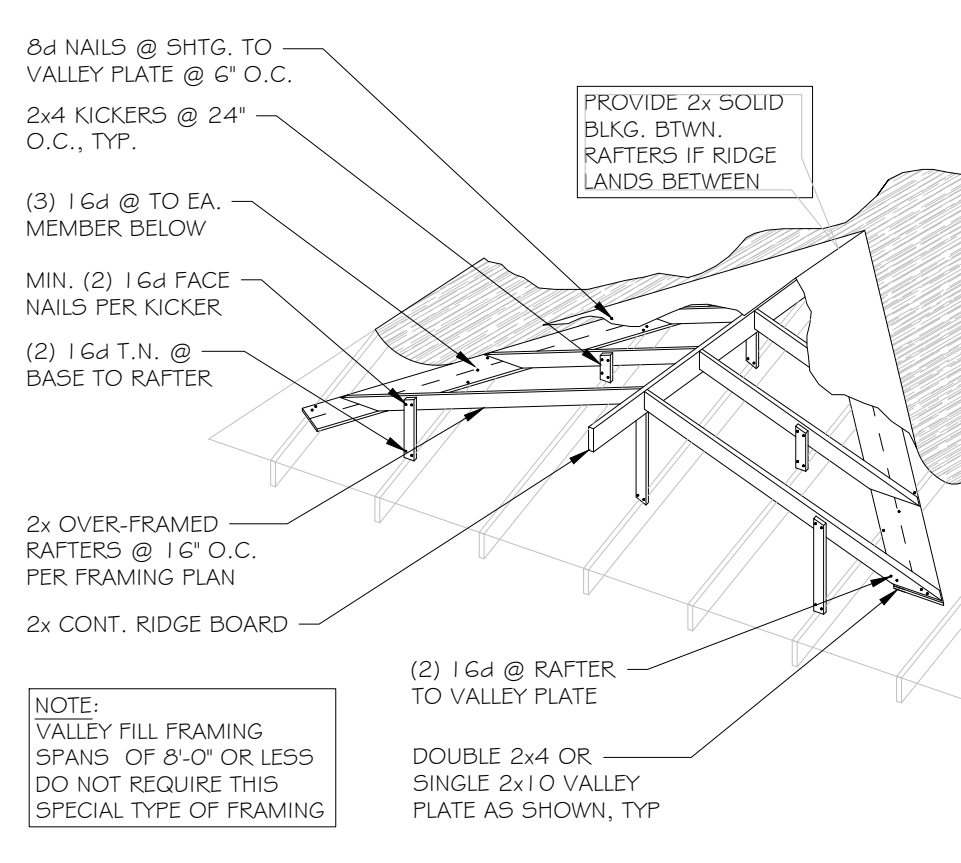
GABLE TRUSS DETAIL

1/3 S3 3/4" = 1'-0"



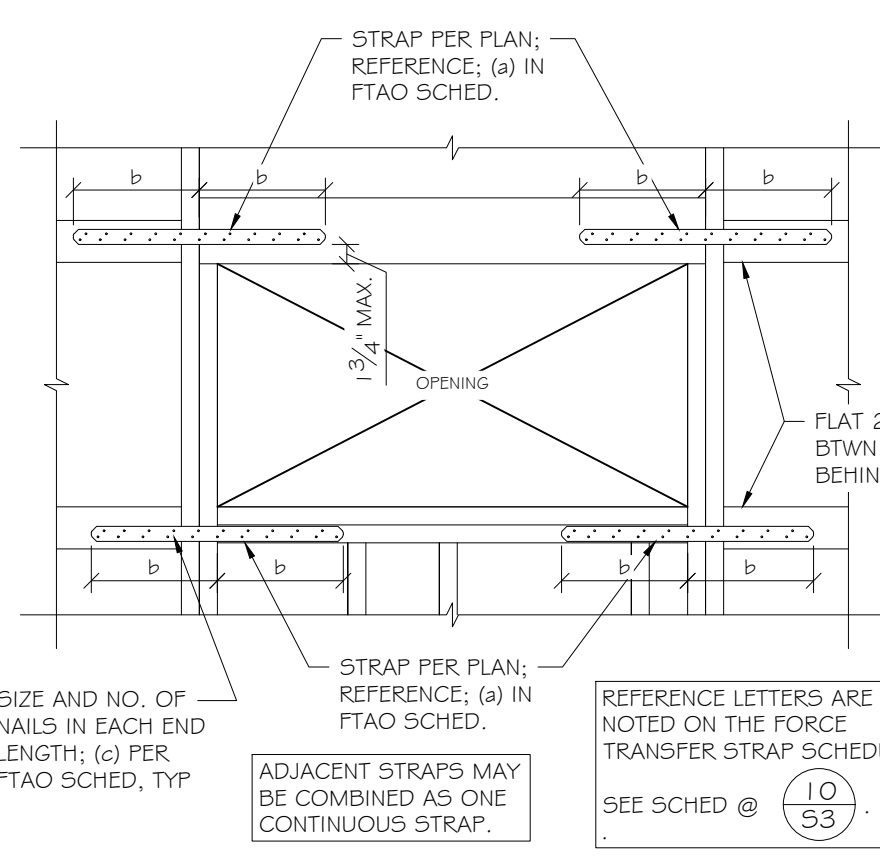
TRUSSES @ EXT. WALL

1/3 S3 3/4" = 1'-0"



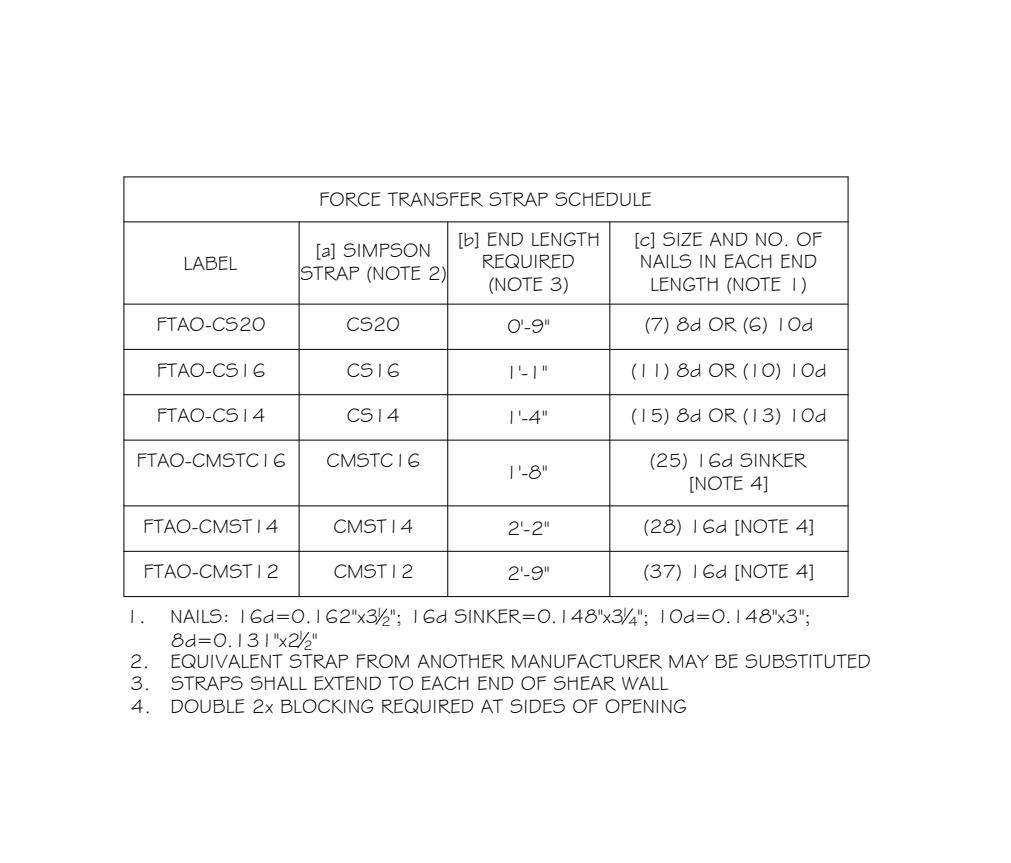
ROOF OVERFRAMING DTL

1/3 S3 3/4" = 1'-0"



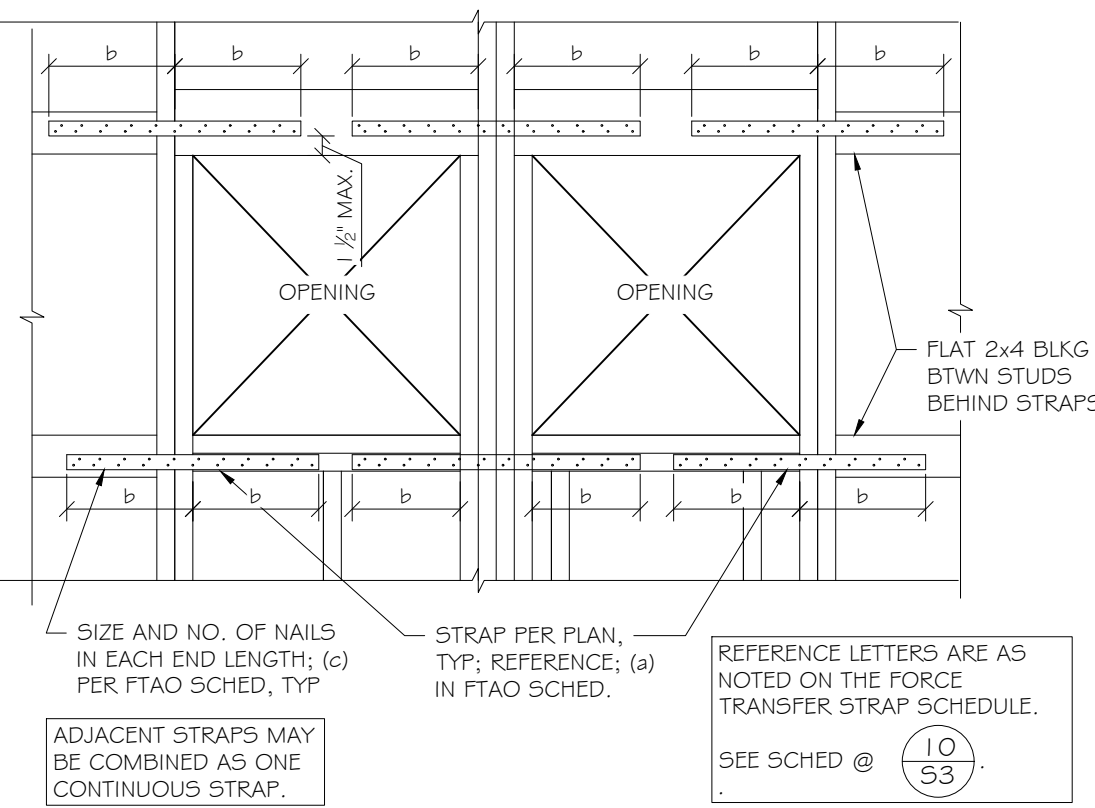
FTAO DETAIL

1/3 S3 3/4" = 1'-0"



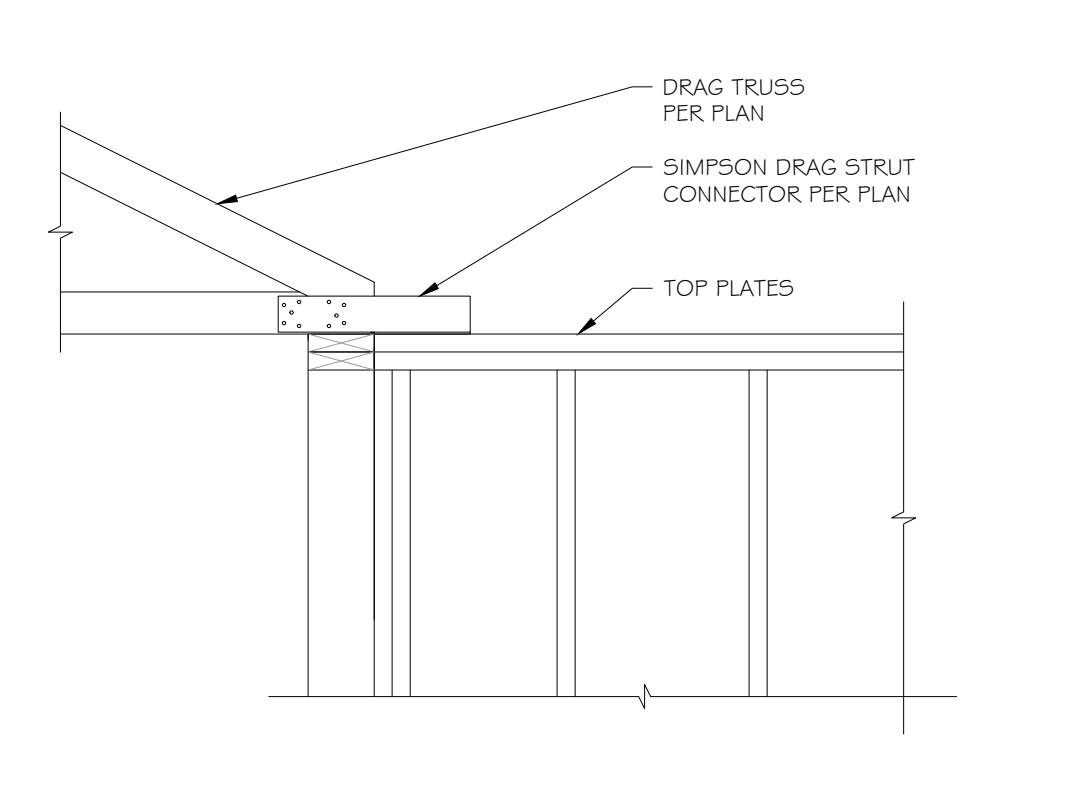
FTAO SCHEDULE

1/3 S3 3/4" = 1'-0"



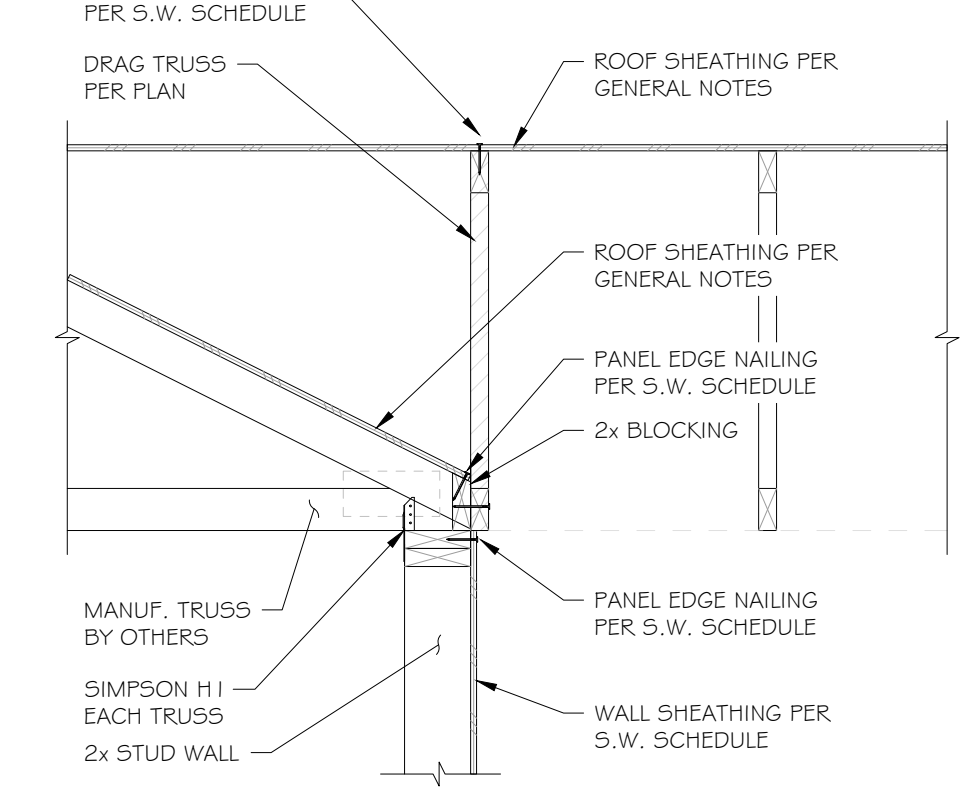
FTAO DETAIL

1/3 S3 3/4" = 1'-0"



DRAG CONNECTION DETAIL

1/3 S3 3/4" = 1'-0"



SHEAR TRANSFER DETAIL

1/3 S3 3/4" = 1'-0"



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DATE: 1/23/2024
SCALE: AS NOTED
DRAWN BY: LB

REVISIONS
1 - 7.8.25 - FLOOR JOIST
CHANGES

CLIENT:
KEVIN SUTTERLICHT

360.349.9306

JURISDICTION:
THURSTON COUNTY, WA

PROJECT: NISQUALLY TRIBE - SPEC PLAN G
ADDRESS: 12338 SQUALL-ABSCH ROAD, OLYMPIA, WA 98513



SHEET NO.
S3

APPROVED PER: NOTES
ONPLAN

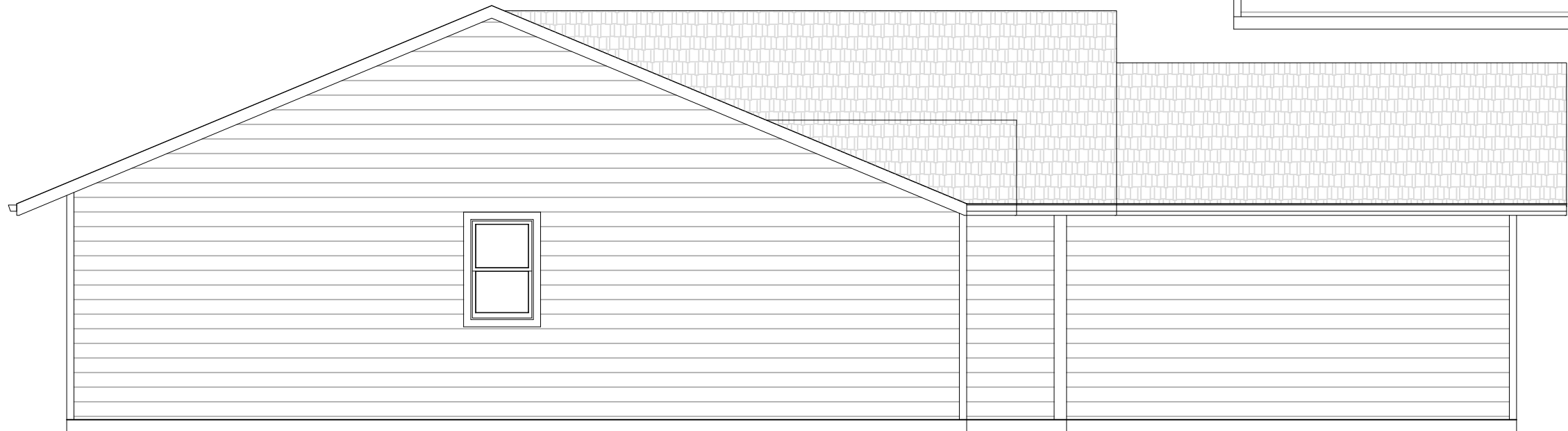
NISQUALLY INDIAN TRIBE
BUILDING DEPARTMENT



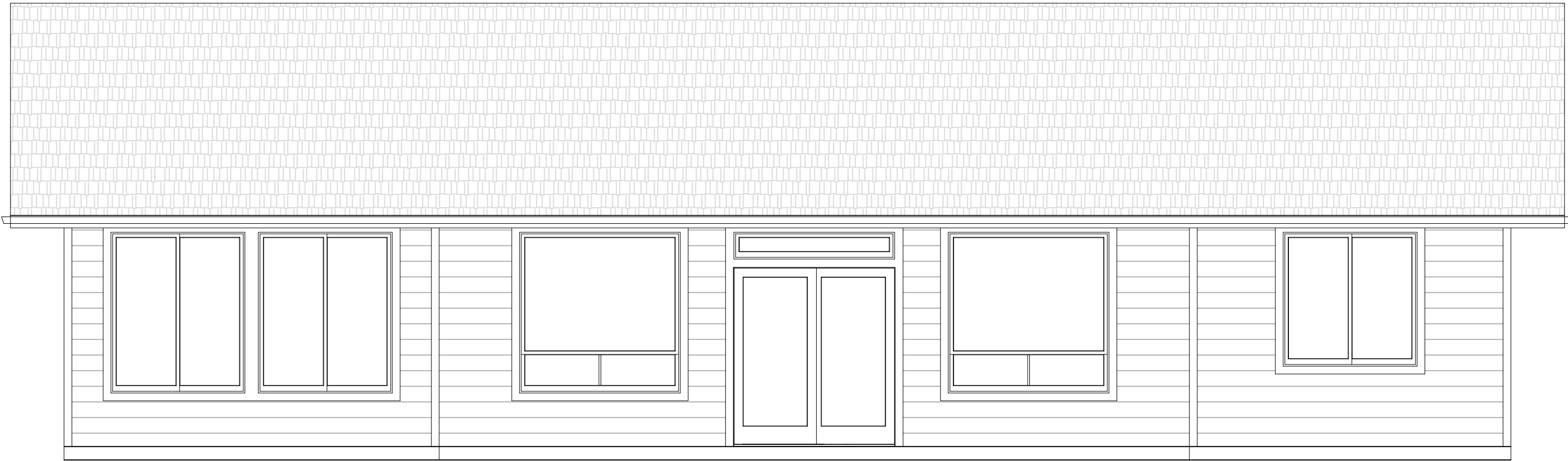
FRONT ELEVATION
SCALE: 1/4" = 1'-0"



RIGHT ELEVATION
SCALE: 3/16" = 1'-0"



LEFT ELEVATION
SCALE: 3/16" = 1'-0"



REAR ELEVATION
SCALE: 1/4" = 1'-0"

APPROVED PER: NOTES
ON PLAN

NISQUALLY INDIAN TRIBE
BUILDING DEPARTMENT



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MAIN OFFICE:
205 ALLEN STREET
KELSO, WA 98626

DATE: 1/23/2024
SCALE: 1/4" = 1'
DRAWN BY: EKM

REVISIONS
7/7/2025 EKM

CLIENT:
KEVIN
SUTTERLICHT
360-349-9306

JURISDICTION:
NISQUALLY TRIBE, WA

PROJECT: NISQUALLY TRIBE- SPEC PLAN G
ADDRESS: 12338 SQUALLI-ABSCH ROAD, OLYMPIA, WA 98513

SHEET NO.

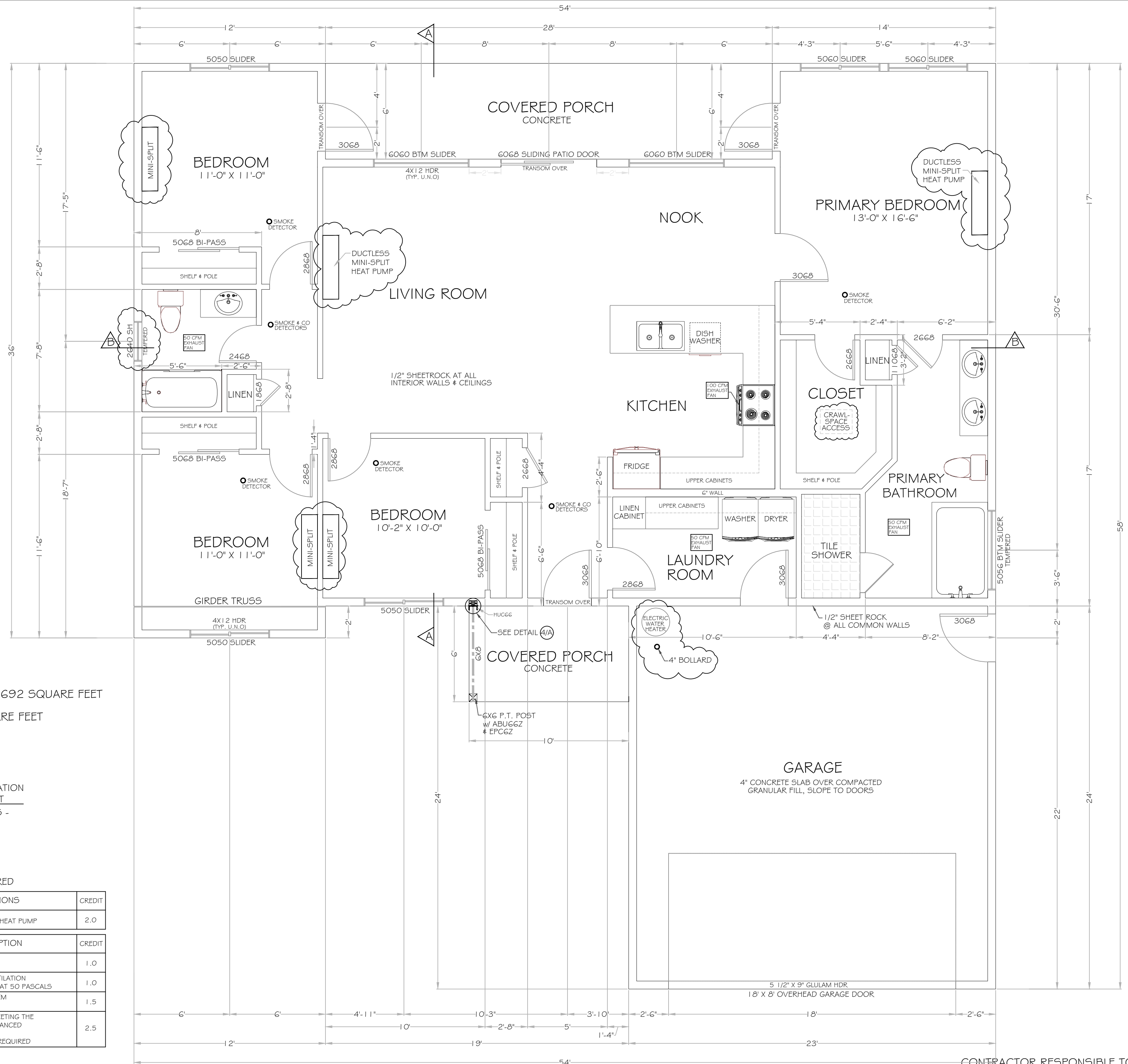
1

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PLANS FOR ERRORS AND OMISSIONS

R308.4.5 GLAZING AND WET SURFACES. GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR ADJACENT TO HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF GLAZING IS LESS THAN 60" (1524 MM) MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED A HAZARDOUS LOCATION. THIS SHALL APPLY TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

NISQUALLY INDIAN
TRIBE BUILDING
DEPARTMENT.

ENERGY OPTIONS	ENERGY CREDIT OPTION DESCRIPTION	CREDIT
1.2	EFFICIENT BUILDING ENVELOPE U-25 GLAZING, R38 FLOOR	1.0
2.1	AIR LEAKAGE CONTROL & EFFICIENT VENTILATION 2.0 AIR CHANGES PER HOUR MAXIMUM AT 50 PASCALS	1.0
3.5	DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM WITH MINIMUM HSPF OF 10	1.5
5.7	ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION 700 CUBIC FEET OF TRANSFERRED AIR REQUIRED	2.5



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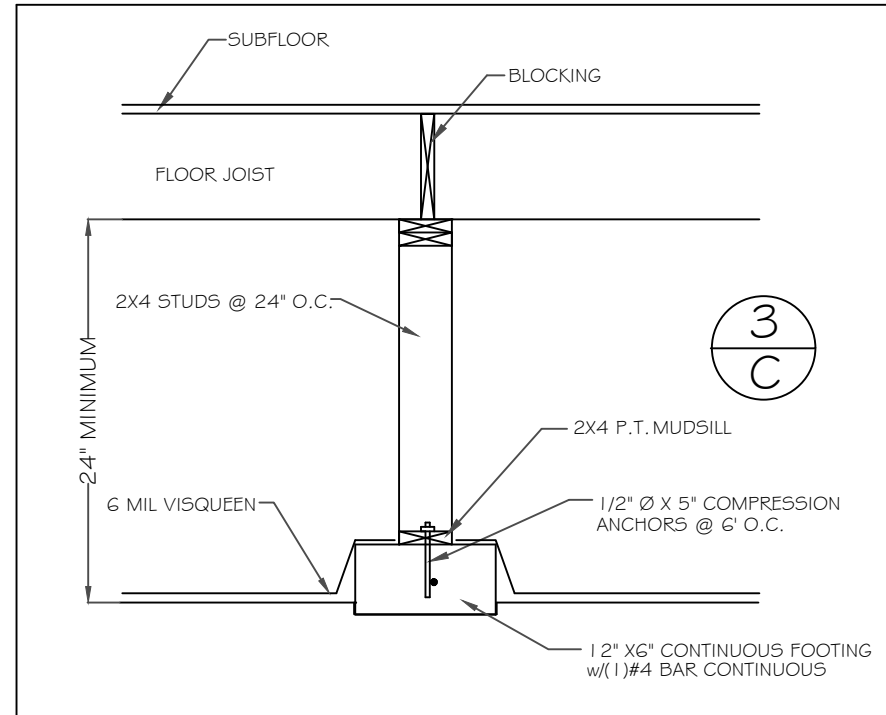


NISQUALLY TRIBE- SPEC PLAN G
12338 SQUALL-ABSCH ROAD, OLYMPIA, WA 98513

CCN2, C/EBP β , and NF- κ B. The expression of these transcription factors was determined by Western blotting. The results showed that the expression of C/EBP β and NF- κ B was significantly increased in the treated group compared with the control group, while the expression of CCN2 was significantly decreased. These results suggest that the treatment of the cells with the inhibitor of the NF- κ B signaling pathway can significantly reduce the expression of CCN2 and increase the expression of C/EBP β and NF- κ B.

SHEET NO.

2



WHERE A CLASS 1 VAPOR RETARDER MATERIAL IS USED, THE MINIMUM NET AREA OF VENTILATION OPENINGS SHALL BE NOT LESS THAN 1 SQUARE FOOT FOR EACH 1,500 SQUARE FEET OF UNDER FLOOR SPACE AREA. ONE SUCH VENTILATION OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING.

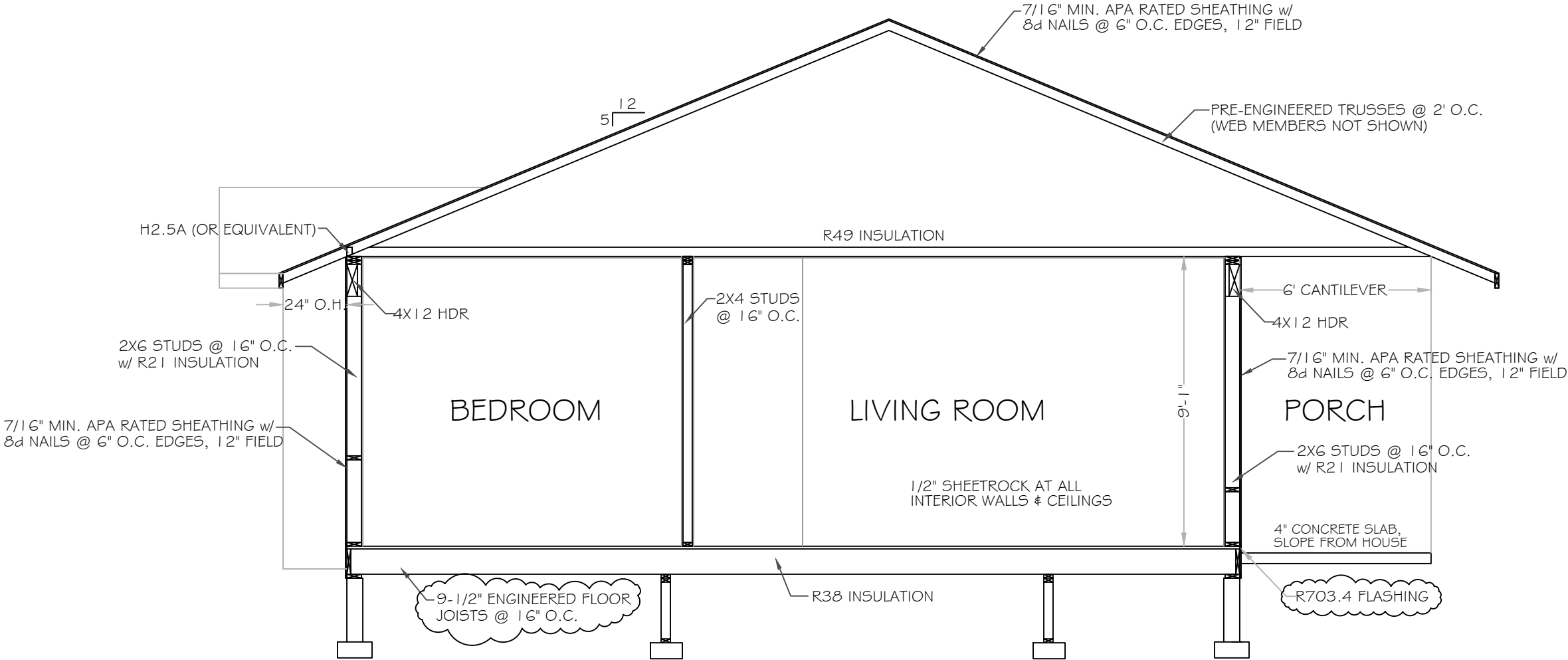
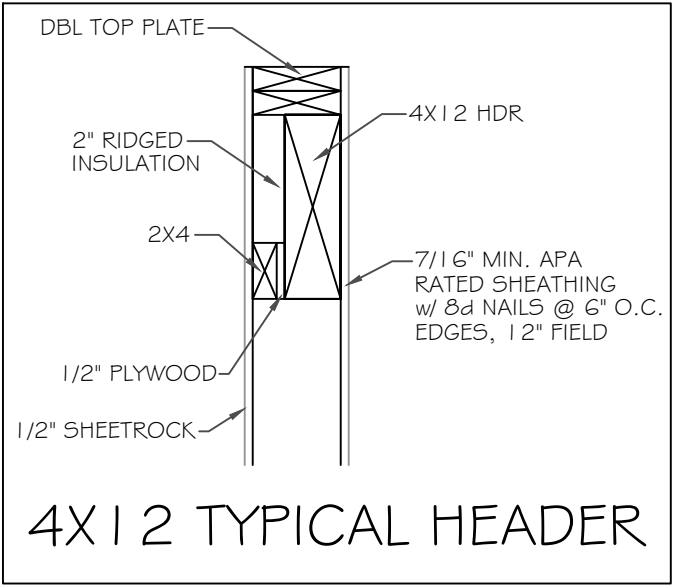
FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

Annotations and Dimensions:

- CRAWLSPACE:**
 - 9'-1/2" ENGINEERED FLOOR JOISTS @ 16" O.C.
 - 24" X 24" X 12" MINIMUM BELOW GRADE w/ (2) #4 BAR EACH WAY, 3" CLEAR FROM BOTTOM
 - 18" X 18" X 12" MINIMUM BELOW GRADE w/ (2) #4 BAR EACH WAY, 3" CLEAR FROM BOTTOM
 - CRAWLSPACE ACCESS (2'-6" wide)
 - follow detail 3C for continuous footer.
- GARAGE SLAB:**
 - 2% SLOPE TO SIDEWALK
- Dimensions:**
 - Overall width: 54'
 - Overall depth: 56'
 - Top section width: 12', 28', 14'
 - Top section depth: 6', 6'
 - Left section depth: 36'
 - Right section depth: 34'
 - Bottom section width: 12', 19'
 - Bottom section depth: 24', 20'-3 1/2", 24'
 - Internal dimensions: 12', 10', 10', 18'-3", 2'-4 1/2", 2'-4 1/2", 23'
- Grid Lines:**
 - Horizontal: 3/A, 3/B
 - Vertical: 3/A, 3/B, 3/C, 3/D

3

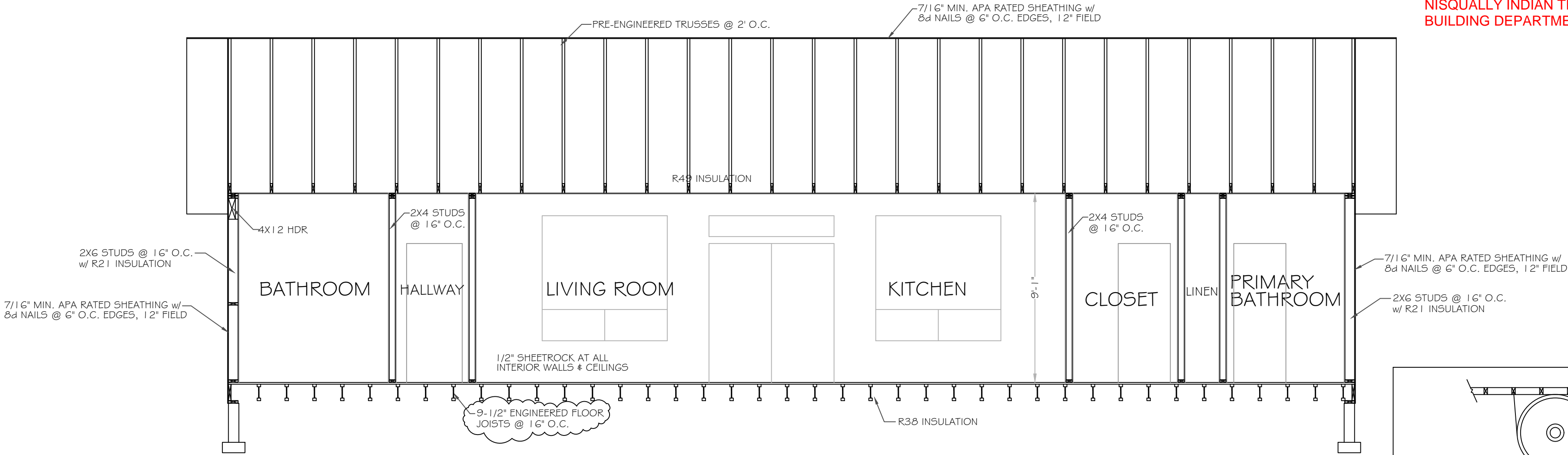
GLULAMS TO BE 2400F/V4 DF/DF (U.N.O.)
DIMENSIONAL LUMBER TO BE DOUG FIR #2 OR BETTER (U.N.O.)
HEADERS TO BE 4X12 (U.N.O)
CONCRETE TO BE MINIMUM 2500 PSI
REBAR TO BE GRADE 60
SIMPSON CONNECTORS NOTED



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

APPROVED PER NOTES
ON PLN

NISQUALLY INDIAN TRIBE
BUILDING DEPARTMENT.



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

ROOF NOTES PER 2021 IRC R806

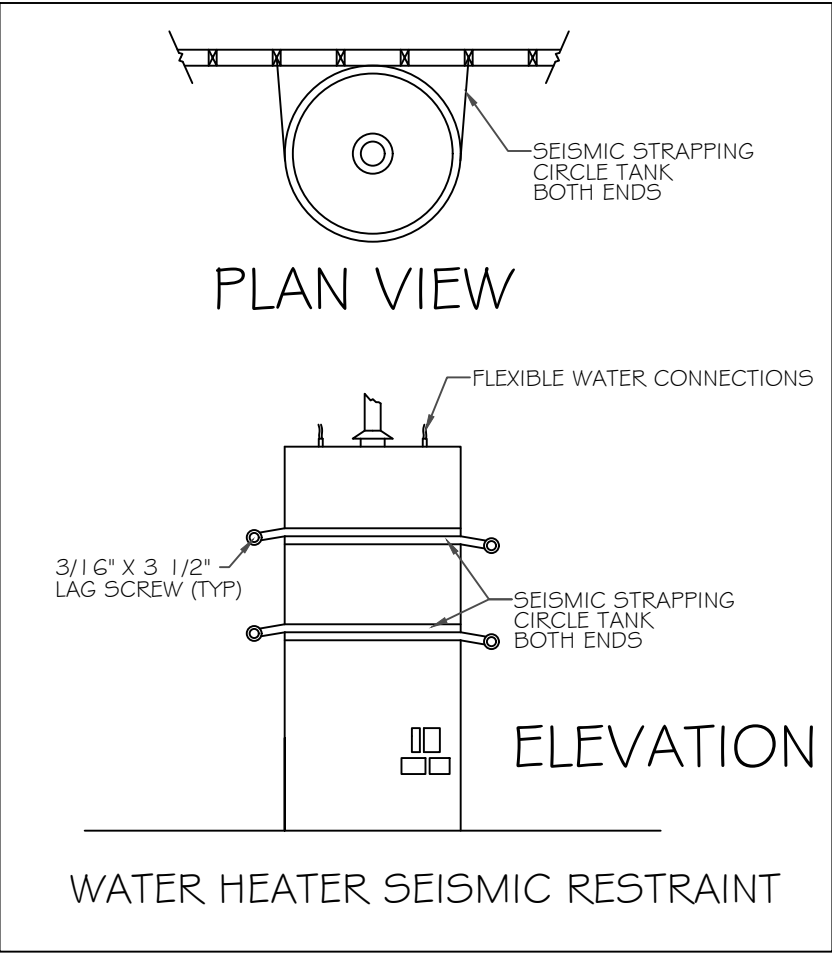
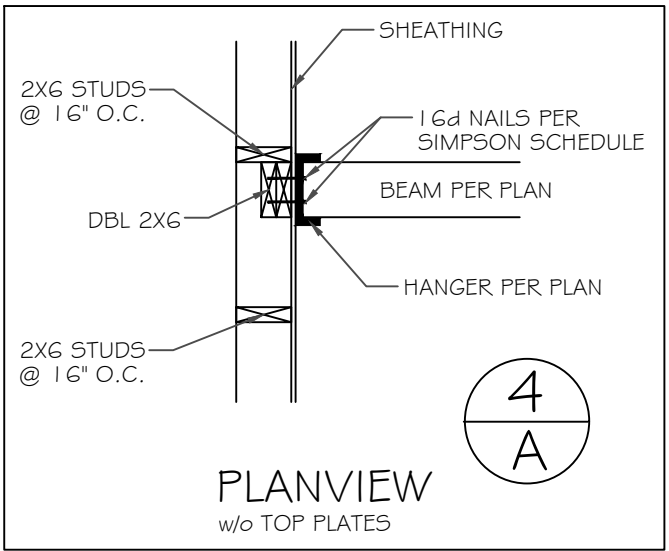
R806.1 VENTILATION REQUIRED.
ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/8 INCH MINIMUM AND 1/4 INCH MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN 1/4 INCH SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, PERFORATED VINYL OR SIMILAR MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF 1/8 INCH MINIMUM 1/4 INCH MAXIMUM. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.7. REQUIRED VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND SHALL BE PROTECTED TO PREVENT THE ENTRY OF BIRDS, RODENTS, SNAKES AND OTHER SIMILAR CREATURES.

R806.2 MINIMUM VENT AREA.
THE MINIMUM NET FREE VENTILATION AREA SHALL BE 1/50 OF THE AREA OF THE VENTED SPACE.

R806.3 VENT AND INSULATION CLEARANCE.
WHERE EAVE OR CORNICE VENTS ARE INSTALLED, BLOCKING, BRIDGING AND INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. NOT LESS THAN 1-INCH SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT.

R806.4 INSTALLATION AND WEATHER PROTECTION.
VENTILATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION. INSTALLATION OF VENTILATORS IN ROOF SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R903. INSTALLATION OF VENTILATORS IN WALL SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R703.1.

R807.1 ATTIC ACCESS.
BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT HAVE A VERTICAL HEIGHT OF 30 INCHES OR GREATER OVER AN AREA NOT LESS THAN 30 SQUARE FEET. THE VERTICAL HEIGHT SHALL BE MEASURED FROM THE TOP OF THE CEILING FRAMING MEMBERS TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS. THE ROUGH-FRAMING OPENING SHALL BE NOT LESS THAN 22 INCHES BY 30 INCHES AND SHALL BE LOCATED IN A HALLWAY OR OTHER LOCATION WITH READY ACCESS. WHERE LOCATED IN A WALL, THE OPENING SHALL BE NOT LESS THAN 22 INCHES WIDE BY 30 INCHES HIGH. WHERE THE ACCESS IS LOCATED IN A CEILING, MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE 30 INCHES AT SOME POINT ABOVE THE ACCESS MEASURED VERTICALLY FROM THE BOTTOM OF THE CEILING FRAMING MEMBERS. SEE SECTION M1305.1.3 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED IN ATTICS.



CONTRACTOR RESPONSIBLE TO INSPECT
PLANS FOR ERRORS AND OMISSIONS



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DATE: 1/23/2024
SCALE: 1/4" = 1'
DRAWN BY: EKM

REVISIONS
7/7/2025 EKM

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