STRUCTURAL NOTES

(THESE NOTES ARE TYPICAL UNLESS NOTED OR DETAILED OTHERWISE ON DRAWINGS)

CODE

ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION. SPECIFICATIONS AND STANDARDS WHERE REFERENCED ON THE DRAWINGS ARE TO BE THE LATEST EDITION.

DESIGN LOADS

DEAD LOADS:

ROOF 15 PSF FLOOR 15 PSF

LIVE LOADS:

ROOF (SNOW LOAD) 25 PSF
RESIDENTIAL 40 PSF

(LIVE LOADS ARE REDUCED WHERE PERMISSIBLE PER IBC SECTION 1607.11).

EARTHQUAKE LOADS:

EQUIVALENT LATERAL FORCE PROCEDURE PER ASCE 7-16 SECTION 12.8.

SITE CLASS (ASSUMED) D
SHORT PERIOD SPECTRAL RESPONSE ACCEL (S_S) 1.419
ONE SECOND SPECTRAL RESPONSE ACCEL (S_I) 0.493
SHORT PERIOD DESIGN SPECTRAL RESPONSE ACCEL (S_D) 1.135
ONE SECOND DESIGN SPECTRAL RESPONSE ACCEL (S_D) 0.595
RISK CATEGORY II
SEISMIC IMPORTANCE FACTOR (I_E) 1.0

SEISMIC DESIGN CATEGORY

BASIC SEISMIC FORCE-RESISTING-SYSTEM

RESPONSE MODIFICATION FACTOR, (R)

REDUNDANCY FACTOR (p)

D

PLYWOOD SHEAR WALLS
6.5

REDUNDANCY FACTOR (p)

1.3

SEISMIC RESPONSE COEFFICIENT (C_s) 0.175 W = TOTAL SEISMIC DEAD LOAD AS DEFINED PER ASCE 7-16 SECTION 12.7.2.

BASE SHEAR (V), $V = C_S W = \frac{S_{DS}}{R/L} W$

WIND LOADS:

BASIC WIND SPEED (3 SECOND GUST)

EXPOSURE

K_{ZT}

98 MPH

B

1.0

SEE PLANS FOR ADDITIONAL DESIGN LOADS.

STATEMENT OF SPECIAL INSPECTIONS

SPECIAL INSPECTIONS ARE REQUIRED AS INDICATED IN THE FOLLOWING TABLE. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO COMMENCEMENT OF WORK IN ACCORDANCE WITH SECTION 1704.4 OF THE IBC.

STRUCTURAL OBSERVATION OF THE STRUCTURAL SYSTEM BY THE ENGINEER IS NOT REQUIRED.

FREQUENCY AND DISTRIBUTION OF REPORTS - INSPECTION REPORTS SHALL BE PROVIDED FOR EACH DAY ON SITE BY SPECIAL INSPECTOR. STRUCTURAL OBSERVATION REPORTS SHALL BE PROVIDED AFTER EACH OBSERVATION. REPORTS SHALL BE DISTRIBUTED TO THE CONTRACTOR, ARCHITECT, ENGINEER AND BUILDING OFFICIAL.

SPECIAL INSPECTION

OPERATION	CONT	PERIODIC	REMARKS
SOILS			
FOUNDATION BEARING CAPACITY VERIFICATION		Х	
CONCRETE			
ADHESIVE ANCHORS	Х		IF USED
NOTE:	COBDANC	E WITH IRC CI	HADTER 17 SDECIAL

ALL ITEMS MARKED WITH AN "X" SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17. SPECIAL INSPECTION SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING OFFICIAL SHALL BE FURNISHED WITH COPIES OF ALL RESULTS. ANY INSPECTION FAILING TO MEET THE PROJECT SPECIFICATIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGN TEAM.

FOUNDATIONS: SPREAD FOOTINGS

SOILS REPORT: NOT AVAILABLE AT TIME OF DESIGN

ALLOWABLE SOIL PRESSURE: 2000 PSF (ASSUMED; TO BE FIELD VERIFIED DURING CONSTRUCTION)

FOOTINGS SHALL BEAR ON FIRM UNDISTURBED EARTH OR 12" OF COMPACTED STRUCTURAL FILL AS REQUIRED AND AT LEAST 18" BELOW ADJACENT EXTERIOR GRADE. ANY FOOTING ELEVATIONS SHOWN IN THE DRAWINGS REPRESENT MINIMUM DEPTHS AND ARE FOR BIDDING ONLY. ACTUAL FOOTING ELEVATIONS ARE SUBJECT TO SITE CONDITIONS AND MUST THEREFORE BE ESTABLISHED BY THE CONTRACTOR. FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE. UNLESS NOTED OTHERWISE.

IMPORTED STRUCTURAL FILL AND BACKFILL MATERIAL SHOULD CONSIST OF CLEAN, WELL GRADED GRANULAR MATERIAL FREE OF DEBRIS OR ORGANICS WITH A MAXIMUM PARTICLE DIAMETER OF THREE INCHES AND NO MORE THAN 10% FINES (PASSING THE #200 SIEVE).

FILL AND BACKFILL MATERIAL SHOULD BE PLACED IN LEVEL LIFTS NOT EXCEEDING TWELVE (12") INCHES IN LOOSE THICKNESS AND COMPACTED TO A MINIMUM OF 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM TEST METHOD D1557.

EXCAVATIONS AND DRAINAGE INSTALLATION SHALL BE OBSERVED BY A SOILS ENGINEER RETAINED BY THE OWNER. IF EXCAVATION SHOWS SOIL CONDITIONS TO BE OTHER THAN THOSE ASSUMED ABOVE NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

CONCRETE

ALL CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED, AND PLACED IN ACCORDANCE WITH CHAPTER 26 OF ACI 318 AND THE AMERICAN CONCRETE INSTITUTE'S SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301).

ALL CONCRETE SHALL BE STONE-AGGREGATE CONCRETE HAVING A UNIT WEIGHT OF APPROXIMATELY 150 POUNDS PER CUBIC FOOT.

CONCRETE STRENGTHS AT 28 DAYS (f'c) AND MIX CRITERIA SHALL BE AS FOLLOWS:

TYPE OF CONSTRUCTION	f'c*	MAXIMUM WATER/CEMENT RATIO	MIN CEMENT CONTENT PER CUBIC YARD	MAXIMUM SHRINKAGE STRAIN
FOOTINGS	3000 PSI	0.55	5 1/2 SACK	N/A

THE MINIMUM AMOUNT OF CEMENT LISTED ABOVE MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER, AND ADMIXTURES AS WELL AS THE WATER-CEMENT RATIO, SLUMP, CONCRETE YIELD, AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH CHAPTER 26 OF ACI 318.

ALL CONCRETE EXPOSED TO WEATHER OR TO FREEZING TEMPERATURES SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318 TABLE 19.3.3.1 FOR MODERATE EXPOSURE CLASS F1.

*PROVIDE f'c SPECIFIED IN TABLE FOR DURABILITY REQUIREMENTS. 2500 PSI CONCRETE MEETS STRENGTH REQUIREMENTS, THEREFORE SPECIAL INSPECTION IS NOT REQUIRED.

REINFORCING STEEL

REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615, AND SHALL BE GRADE 60 (Fy = 60,000 PSI), UNLESS NOTED OTHERWISE. GRADE 60 REINFORCING BARS INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING COMPLYING WITH ASTM A615 MAY BE WELDED IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN AWS D1.4 ARE

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. PROVIDE WELDED WIRE FABRIC IN SHEETS NOT ROLLS. LAP WELDED WIRE FABRIC 12" AT SIDES AND ENDS.

REINFORCING STEEL SHALL BE DETAILED INCLUDING HOOKS AND BENDS IN ACCORDANCE WITH ACI SP-66 AND ACI 318, LATEST EDITIONS. UNLESS OTHERWISE NOTED, REINFORCING SPLICE LENGTHS AND DEVELOPMENT LENGTHS SHALL BE PER SCHEDULE.

MECHANICAL SPLICING OF REINFORCING BARS, WHERE INDICATED ON THE DRAWINGS, SHALL BE BY AN ICBO APPROVED SYSTEM, SHALL DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

REINFORCING SHALL BE PLACED AND ADEQUATELY SUPPORTED PRIOR TO PLACING CONCRETE. WET-SETTING EMBEDDED ITEMS IS NOT ALLOWED WITHOUT PRIOR ENGINEER APPROVAL. BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL NOT BE FIELD BENT UNLESS SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. REFER TO CHAPTER 25 OF ACI 318 FOR OTHER REINFORCING STEEL REQUIREMENTS.

MINIMUM LAPS AND EMBEDMENT

UNLESS OTHERWISE NOTED, REINFORCING SPLICE LENGTHS AND DEVELOPMENT LENGTHS SHALL BE AS TABULATED

	f'c = 3000 PSI								
		DEVELOPM	ENT LENGTH	LAP SPLICE					
BAR	TENSION		N COMPRESSION		SION	COMPRESSION			
SIZE	TOP BARS	OTHER BARS	ALL BARS	TOP BARS	OTHER BARS	ALL BARS			
#3	22	17	9	28	22	12			
#4	29	22	11	37	29	15			
#5	36	28	14	47	36	19			

1. ALL LENGTHS ARE IN INCHES.

2. ALL LAP SPLICES ARE CLASS B. 3. "TOP BARS" ARE HORIZONTAL REINFORCEMENT PLACED SUCH THAT MORE THAN 12 INCHES OF

CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

CONCRETE COVER ON REINFORCING

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:

CONCRETE EXPOSED TO EARTH AND WEATHER:

#6 BARS AND LARGER

#5 BARS AND SMALLER

CONCRETE NOT EXPOSED TO EARTH OR WEATHER:

SLABS, WALLS AND JOISTS

COLUMN TIES OR SPIRALS AND BEAM STIRRUPS

3"

2"

1 1/2"

CONCRETE GENERAL NOTE

APPROVED BY THE STRUCTURAL ENGINEER.

VERTICAL BARS SHALL START FROM TOP OF FOOTING. HORIZONTAL BARS SHALL START A DISTANCE OF 1/2 THE NORMAL BAR SPACING FROM TOP OF FOOTING AND TOP OF FRAMED SLABS. IN ADDITION, THERE SHALL BE A HORIZONTAL BAR AT A MAXIMUM OF 3" FROM TOP OF WALL AND BOTTOM OF FRAMED SLABS.

PROVIDE CORNER BARS TO MATCH THE HORIZONTAL REINFORCING WITH TENSION LAP SPLICE AT EACH SIDE PER TABLE, OR BEND ONE SIDE OVER TO PROVIDE TENSION LAP.

ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED AND PROPERLY PREPARED IMMEDIATELY PRIOR TO

POURING OF CONCRETE. DOWEL STEEL SHALL BE THE SAME SIZE AND SPACING AS MAIN REINFORCING DETAILED

SEE ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF OPENINGS IN CONCRETE WALLS, FLOORS AND ROOF. UNLESS INDICATED OTHERWISE, REINFORCE AROUND

OPENINGS GREATER THAN 12" IN EITHER DIRECTION WITH (2) #5 EACH SIDE AND (1) #5 x 4'-0" DIAGONAL AT EACH

CORNER. EXTEND BARS 2'-0" BEYOND EDGE OF OPENING. IF 2'-0" IS UNAVAILABLE, EXTEND AS FAR AS POSSIBLE

AND HOOK. HOOK ALL REINFORCING INTERRUPTED BY OPENINGS.

BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL NOT BE FIELD BENT UNLESS SO DETAILED OR

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

LUMBER

ALL GRADES SPECIFIED ARE MINIMUM GRADES REQUIRED. ALL LUMBER SHALL BE IN ACCORDANCE WITH WWPA GRADING RULES, KILN-DRIED TO MC 19 AND OF THE FOLLOWING MINIMUM STANDARDS:

SIZE CLASSIFICATION	SPECIES	GRADE	Fb (PSI)	Fc (PSI)
SLEEPERS	DOUG-FIR	STUD	700	-
LIGHT FRAMING (STUDS)	HEM-FIR	STUD	675	800
2x JOISTS AND PLANKS	HEM-FIR	#2	850	-
PLATES AND BLOCKING	HEM-FIR	#2	850	-
6x AND LARGER BEAMS AND STRINGERS	DOUG-FIR	#2	875	-
4x AND SMALLER BEAMS AND STRINGERS	HEM-FIR	#2	850	-
ALL POSTS AND TIMBERS	DOUG-FIR	#1	1200	1000

REFER TO PLAN NOTES, SCHEDULES, AND DETAILS FOR MORE SPECIFIC LUMBER SIZE AND GRADE REQUIREMENTS.

UNLESS NOTED OTHERWISE IN THE PLANS, ALL WOOD AND WOOD-BASED MEMBERS EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE, MASONRY, OR WITHIN 8" OF SOIL SHALL BE PRESERVATIVE-TREATED BY VACUUM-PRESSURE IMPREGNATION IN ACCORDANCE WITH AWPA STANDARD U1.

NAILS, BOLTS, AND METAL CONNECTORS FOR WOOD

ALL NAILS SHALL CONFORM TO THE STANDARDS SET FORTH BY THE NATIONAL DESIGN STANDARDS (NDS) FOR WOOD CONSTRUCTION, LATEST EDITION. NAILING NOT SPECIFIED SHALL BE PER IBC TABLE 2304.10.1 NAILING SCHEDULE. ALL NAILS CALLED OUT ON PLANS SHALL BE COMMON NAILS UNLESS NOTED OTHERWISE AND SHALL MEET OR EXCEED THE FOLLOWING MINIMUM GUIDELINES:

NAIL	SHANK Ø	MIN LENGTH
8d COMMON	0.131Ø	2 1/2" SHANK
10d COMMON	0.148Ø	3" SHANK
12d COMMON	0.148Ø	3 1/4" SHANK
16d COMMON	0.162Ø	3 1/2" SHANK

10d BOX NAILS MAY BE SUBSTITUTED FOR 8d COMMON NAILS WITH NO CHANGE IN NAIL SPACING. FRAMING MEMBERS MAY BE NAILED WITH 16d SINKERS (0.148"Ø x 3 1/4"), BUT ONLY 16d COMMON NAILS SHALL BE USED WHERE 16d NAILS ARE INDICATED IN THIS DRAWING SET. ENGINEER MAY APPROVE OTHER NAILS IF NAIL LABELS ARE SUBMITTED TO ENGINEER PRIOR TO START OF CONSTRUCTION.

ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. LEAD HOLES FOR LAG BOLTS SHALL BE BORED FOR THE SHANK AND THREADED PORTIONS PER NDS 12.1.4.2.

CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, CATALOG TO BE THE LATEST EDITION, OR ENGINEER APPROVED EQUAL. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND WITH THE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY THE MANUFACTURER. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS, SCREWS, OR BOLTS IN EACH MEMBER.

INSTALL SOLID BLOCKING AT ALL BEARING POINTS. ALL SHIMS SHALL BE SEASONED, DRIED, AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

GALVANIZATION

UNLESS NOTED OTHERWISE, STEEL CONNECTORS IN CONTACT WITH TREATED WOOD SHALL BE GALVANIZED ACCORDING TO THE FOLLOWING TABLE:

GALVANIZATION	UNTREATED WOOD	CCA-C	SBX	ACQ-C ACQ-D	CBA-A CA-B	OTHER BORATE	ACZA	OTHER PT WOOD
G90	Х	Х	Х					
G185	Х	Х	Х	Х	Х	Х		
HDG	Х	Х	Х	Х	Х	Х		
STT300	Х	Х	Х	Х	Х	Х	Х	Х

G90 = 0.90 OZ. OF ZINC PER SQUARE FOOT OF AREA G185 = 1.85 OZ. OF ZINC PER SQUARE FOOT OF AREA

HDG = HOT DIP GALVANIZED SST300 = TYPE 316L STAINLESS STEEL

RATED SHEATHING

RATED SHEATHING SHALL BE GRADE C-D INT-APA WITH EXTERIOR GLUE OR OSB SHEATHING WITH EXTERIOR GLUE IN CONFORMANCE WITH IBC STANDARD 2303.1.5.

TIMBERSTRAND, MICROLLAM, AND PARALLAM MEMBERS

FABRICATED IN CONFORMANCE WITH THE INTERNATIONAL CODE COUNCIL EVALUATION SERVICE (ICC-ES) REPORT NO. ESR-1387 OR CCMC REPORT NO. 12627-R, 08675-R, AND 11161-R. EACH MEMBER SHALL BE IDENTIFIED BY A STAMP INDICATING THE PRODUCT TYPE AND GRADE, ICC-ES OR CCMC REPORT NUMBER, MANUFACTURER'S NAME PLANT NUMBER AND INDEPENDENT INSPECTION AGENCY'S LOGO. FABRICATOR SHALL BE CERTIFIED. MEMBERS SHALL MEET THE FOLLOWING MINIMUM STANDARDS:

SIZE CLASSIFICATION	SPECIES	GRADE	Fb (PSI)	Fv (PSI	Fc (PSI)
BEAMS & POSTS (d < 9 1/2")	LSL	1.3E	1,700	425	1,835
RIMS & BEAMS (d ≥ 9 1/2")	LSL	1.55E	2,325	310	-
BEAMS & POSTS	LVL	2.0E	2,600	285	2,510
POSTS (d < 9 1/2")	PSL	1.8E	2,400	190	2,500
BEAMS (d ≥ 9 1/2")	PSI	2.0F	2.900	290	_

TIMBERSTRAND, MICROLLAM, AND UNTREATED PARALLAM MEMBERS ARE INTENDED FOR DRY-USE APPLICATIONS. UNLESS NOTED OTHERWISE, ENGINEERED WOOD BEAMS EXPOSED TO WEATHER SHALL BE TREATED PER MANUFACTURES RECOMMENDATIONS.

GLUE-LAMINATED TIMBER

GLUE-LAMINATED TIMBER SHALL BE DOUGLAS FIR, FABRICATED IN CONFORMANCE WITH ANSI/AITC STANDARD A190.1, LATEST EDITION. EACH MEMBER SHALL BEAR AN AITC IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC CERTIFICATE OF CONFORMANCE. FABRICATOR SHALL BE CERTIFIED. MEMBERS SHALL BE OF THE FOLLOWING MINIMUM STANDARDS:

SPAN	COMBINATION	Fb
SIMPLE SPAN BEAMS	24F-V4	2400 PSI
CANTILEVER OR MULTI-SPAN BEAMS	24F-V8	2400 PSI

WOOD I-JOISTS

WOOD I-JOISTS, MANUFACTURED BY WEYERHAEUSER CORPORATION SHALL BE SIZED AND DETAILED TO FIT THE DIMENSIONS AND LOADS INDICATED ON THE PLANS. ALL DESIGN SHALL BE IN ACCORDANCE WITH THE ALLOWABLE VALUES AND SECTION PROPERTIES ASSIGNED BY THE BUILDING CODE.

SHALL PROVIDE ALL SPECIALTY ITEMS REQUIRED FOR A COMPLETE INSTALLATION OF JOISTS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE TEMPORARY BRACING UNTIL SHEATHING AND PERMANENT BRACING IS INSTALLED. MANUFACTURER

ALL I-JOISTS ARE TO BE CONNECTED TO FLUSH BEAMS OR WOOD LEDGERS WITH SIMPSON IUS, ITS, OR MIT HANGERS. PROVIDE WEB STIFFENERS AS REQUIRED.

PRE-MANUFACTURED WOOD TRUSSES

WOOD TRUSSES SHALL BE SIZED AND DETAILED TO FIT DIMENSIONS AND LOADS INDICATED ON THE PLANS. ALL DESIGN SHALL BE IN ACCORDANCE WITH THE ALLOWABLE VALUES AND SECTION PROPERTIES ASSIGNED BY THE BUILDING CODE. SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW PRIOR TO FABRICATION. CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE SAME STATE AS THE PROJECT. TRUSS DESIGN AND SHOP DRAWINGS SHALL BE IN CONFORMANCE WITH IBC 2303.4

PROVIDE TEMPORARY BRACING UNTIL SHEATHING AND PERMANENT BRACING IS INSTALLED. MANUFACTURER SHALL PROVIDE ALL SPECIALTY ITEMS REQUIRED FOR A COMPLETE INSTALLATION OF JOISTS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

FOR TOP CHORD DESIGN LIVE LOADS, REFER TO THE DESIGN LOAD SECTION. IN ADDITION TO ROOF LOADING LISTED IN THE DESIGN LOAD SECTION, ROOF TRUSSES SHALL BE DESIGNED FOR A BOTTOM CHORD LIVE LOAD OF 10 PSF. TOP AND BOTTOM CHORD LIVE LOAD DO NOT NEED TO BE DESIGNED FOR SIMULTANEOUSLY.

IN ADDITION TO THEIR SELF WEIGHT, ROOF TRUSSES SHALL BE DESIGNED FOR A TOP CHORD DEAD LOAD OF 5 PSF AND A BOTTOM CHORD DEAD LOAD OF 10 PSF ACTING SIMULTANEOUSLY. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOADS AND OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS. DEFLECTIONS SHALL NOT EXCEED L/360 FOR LIVE LOADS, OR L/240 FOR TOTAL LOADS.

TYPICAL FRAMING NOTES

1. BEARING WALL FRAMING

2x STUDS @ 16" OC FOR ALL SHEAR AND/OR BEARING WALLS UNO.

REFER TO FRAMING PLAN NOTES FOR TYPICAL DOOR & WINDOW HEADERS NOT CALLED OUT ON THE PLANS. HEADERS SHALL BE SUPPORTED BY A MINIMUM OF (1) CRIPPLE AND (1) FULL HEIGHT STUD UNO.

COLUMNS BELOW FLUSH MULTIPLE JOIST BEAMS SHALL BE EQUAL IN WIDTH TO THE BEAM. ALL COLUMNS NOT CALLED OUT OTHERWISE SHALL BE TWO STUDS.

2. WALL BASE PLATE ON CONCRETE

WALL PLATES BEARING ON CONCRETE SHALL BE PRESSURE-TREATED. FOR ALL EXTERIOR AND INTERIOR WALLS, BOLT PLATES OR SILLS TO CONCRETE STEM WALLS OR THICKENED SLAB FOOTINGS WITH 5/8 INCH DIAMETER ANCHOR BOLTS WITH 7 INCH MINIMUM EMBEDMENT. PLACE AT 5'-0" OC MAXIMUM FOR SHEAR WALLS, AND AT 6'-0" OC FOR BEARING WALLS AND OTHER PARTITIONS. USE MINIMUM OF TWO ANCHOR BOLTS PER SILL AND PLACE ONE WITHIN 12 INCHES OF END OF PLATES, TYPICAL UNLESS NOTED OR DETAILED OTHERWISE. REFER TO SHEAR WALL SCHEDULE. AT ALL SILL PLATE ANCHOR BOLTS, CONTRACTOR SHALL INSTALL 1/4" x 3" x 3" FLAT PLATE WASHERS. INTERIOR NON-STRUCTURAL WALLS MAY BE ANCHORED TO CONCRETE SLAB-ON-GRADE WITH 1/4" x 3" POWDER ACTUATED FASTENERS WITH 3/4" WASHERS AT 16" OC AND WITHIN 6" OF END OF PLATES.

3. ROOF AND FLOOR FRAMING

PROVIDE 1 1/2" FULL DEPTH BLOCKING FOR JOISTS AND RAFTERS AT ALL SUPPORTS AND AT 8'-0" OC MAXIMUM UNO. INTERMEDIATE 8'-0" OC BLOCKING NOT REQ'D IF GWB CEILING IS INSTALLED DIRECTLY TO UNDERSIDE OF FRAMING. INSTALL DOUBLE JOISTS UNDER PARTITIONS EXTENDING ONE HALF OR MORE OF THE JOIST SPAN. PROVIDE TRUSS BLOCKING PANELS FOR ROOF TRUSSES AT SUPPORTS AND SHEAR WALLS, AND WHERE INDICATED ON PLANS AND DETAILS.

4. DIAPHRAGM NAILING

ALL SHEAR WALLS, FLOOR AND ROOF DIAPHRAGM NAILINGS SHALL BE AS CALLED OUT ON SCHEDULES OR ON THE PLANS. EXTERIOR WALLS NOT INDICATED AS SHEAR WALLS SHALL BE SHEATHED AND NAILED TO SUPPORTING FRAMING WITH 8d NAILS AT 6" OC AT ALL PANEL EDGES AND 12" OC AT ALL INTERMEDIATE SUPPORTS.

THE USE OF NAIL GUNS WILL BE APPROVED IF NAILING INTO THE DIAPHRAGMS CAN BE INSTALLED FLUSH WITH FACE OF SHEATHING. NAIL PENETRATIONS GREATER THAN 1/16" ARE NOT ACCEPTABLE.

5. ALLOWABLE STUD AND PLATE PENETRATIONS

CUTTING AND/OR NOTCHING OF WOOD STUDS OR PLATES SHALL NOT EXCEED 25% OF THE STUD/PLATE WIDTH IN EXTERIOR AND BEARING WALLS AND SHALL NOT EXCEED 40% OF THE STUD/PLATE WIDTH IN ANY NON-BEARING PARTITIONS. BORED HOLE DIAMETER IS LIMITED TO 40% OF STUD/PLATE WIDTH IN ANY STUD AND MAY BE 60% IN NONBEARING PARTITIONS OR IF STUD IS DOUBLED. MAINTAIN 5/8" MINIMUM EDGE DISTANCE FROM HOLE EDGE.

6. GYPSUM WALLBOARD NAILING

ALL GYPSUM WALLBOARD SHALL BE NAILED TO ALL STUDS AND TOP AND BOTTOM PLATES WITH 6d COOLER NAILS OR NO. 13 GAUGE x 1 5/8" @ 7" OC (5d COOLER NAILS FOR 1/2 INCH GYPSUM SHEATHING). TYPICAL UNLESS NOTED OTHERWISE. INSTALLATION OF GWB SHALL BE SUCH THAT JOINTS ARE STAGGERED ON EACH SIDE OF A SINGLE WALL.

EXISTING BUILDING

CONTRACTOR SHALL VERIFY ALL DIMENSIONS, MEMBER SIZES AND CONDITIONS OF THE EXISTING BUILDING DEPICTED IN THE DRAWINGS, AND NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES FOR POSSIBLE REDESIGN

CONTRACTOR RESPONSIBLE FOR COMPLETELY SEALING ALL AREAS WHERE EXISTING ROOF MATERIAL IS PENETRATED OR REMOVED. PROVIDE WATER PROOFING AS REQUIRED BY THE ARCH.

GENERAL

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS FOR COMPATIBILITY BEFORE PROCEEDING. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING.

CONTRACTOR TO SEE ARCHITECTURAL, CIVIL, ELECTRICAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPE, VENT, DUCT AND OTHER OPENINGS AND DETAILS NOT SHOWN ON THESE DRAWINGS.

CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTION STABILITY AND TEMPORARY SHORING AS NECESSARY UNTIL PERMANENT SUPPORT AND STIFFENING ARE INSTALLED.

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

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

SE WASHING STATE OF WAS

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09/19/22

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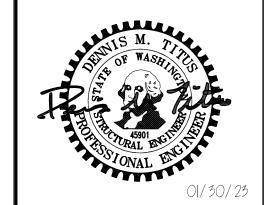
STRUCTURAL NOTES

(THESE NOTES ARE TYPICAL UNLESS NOTED OR DETAILED OTHERWISE ON DRAWINGS)

	LEC	GEND	
DEFINITION	SYMBOL	DEFINITION	SYMBOL
DIRECTION OF FRAMING	4	NATIVE SOIL	
EXTENT OF FRAMING	\longleftrightarrow	GRANULAR FILL	
COLUMNS		STRUCTURAL STEEL	91111111
COLUMN BEARING ON BEAM		RATED SHEATHING	
BEAM CONTINUOUS OVER SUPPORT	CAR CAR	SHEAR WALL (SEE SCHEDULE)	SWX
CONCRETE WALL	5	COLUMN MARK (SEE SCHEDULE)	, cit
BEARING STUD WALL		FOOTING MARK (SEE SCHEDULE)	⟨FX⟩
NON-BEARING STUD WALL	5	HOLDOWN MARK (SEE SCHEDULE)	♦
BEARING STUD SHEAR WALL	SMMMS	HANGER MARK (SEE SCHEDULE)	×
NON-BEARING STUD SHEAR WALL	5/////	FLAG NOTE (SEE PLAN NOTES)	X
CMU WALL		STEEL MOMENT FRAME CONN.	-

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



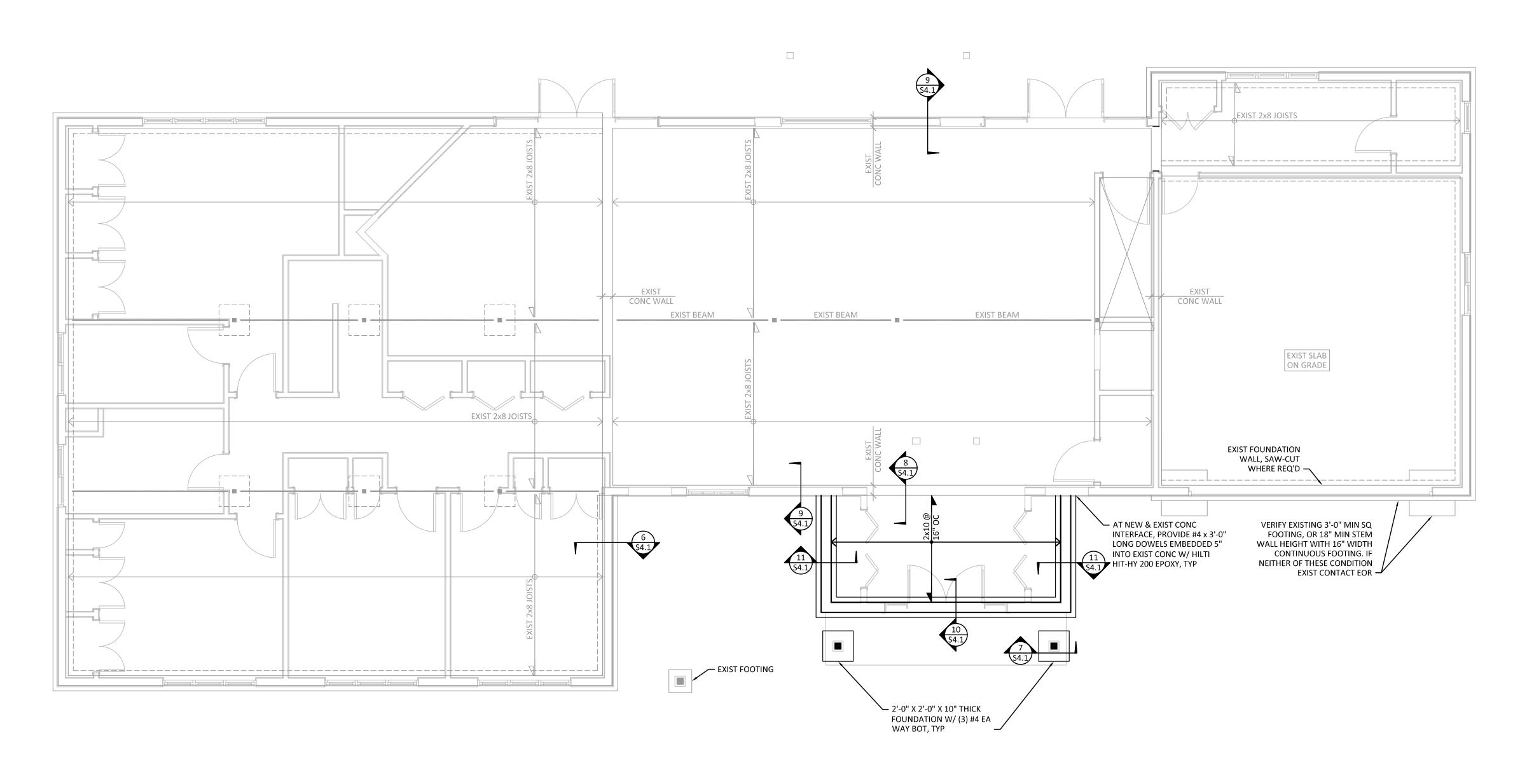


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FOUNDATION & CRAWLSPACE FRAMING PLAN

FOUNDATION PLAN NOTES:

1. REFERENCE TO SLAB ELEVATION SHOWN ON PLAN AND VERIFY W/ ARCH DRAWINGS. EXTERIOR FOOTINGS SHALL BEAR A MIN OF 1'-6" BELOW ADJACENT GRADE.

2. FOOTINGS SHALL BEAR ON FIRM NATIVE SOIL OR COMPACTED STRUCTURAL FILL AS SPECIFIED IN THE SOILS

3. REFER TO SHEET S4.1 FOR FOUNDATION DETAILS.

4. PLACE ALL REINFORCEMENT PER THE STRUCTURAL NOTES AND FOUNDATION DETAILS. REFER TO SHEET \$1.1 FOR ADDITIONAL CONCRETE DETAILING REQUIREMENTS.

5. FOUNDATION LEVEL HOLDOWNS ARE SHOWN ON THE FRAMING PLANS AT THE BASE OF WALL SHOWN. REFER TO HOLDOWN SCHEDULE ON SHEET S3.1 FOR HOLDOWN TYPES AND FRAMING PLANS FOR HOLDOWN ANCHOR

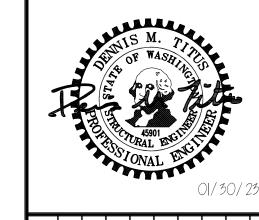
6. REFER TO FRAMING PLANS AND SHEAR WALL SCHEDULE ON SHEET S3.1 FOR LOCATION OF SHEAR WALL ANCHOR BOLTS. ANCHORAGE AT NON-SHEAR WALLS SHALL BE PER STRUCTURAL NOTES.

7. CONTRACTOR SHALL VERIFY ALL DIMENSIONS & WALL LOCATIONS, AND NOTIFY ALL PARTIES OF ANY

8. REFER TO DETAIL 3/S4.1 FOR PIPE PENETRATIONS THROUGH CONCRETE WALL OR FOOTINGS.

9. WHERE SLAB ON GRADE IS INDICATED, SLAB SHALL BE 4" THICK WITH #4 REBAR AT 18" OC. SLAB SHALL BE POURED OVER A 10 MIL VAPOR BARRIER OVER 4" OF 5/8" CRUSHED ROCK.





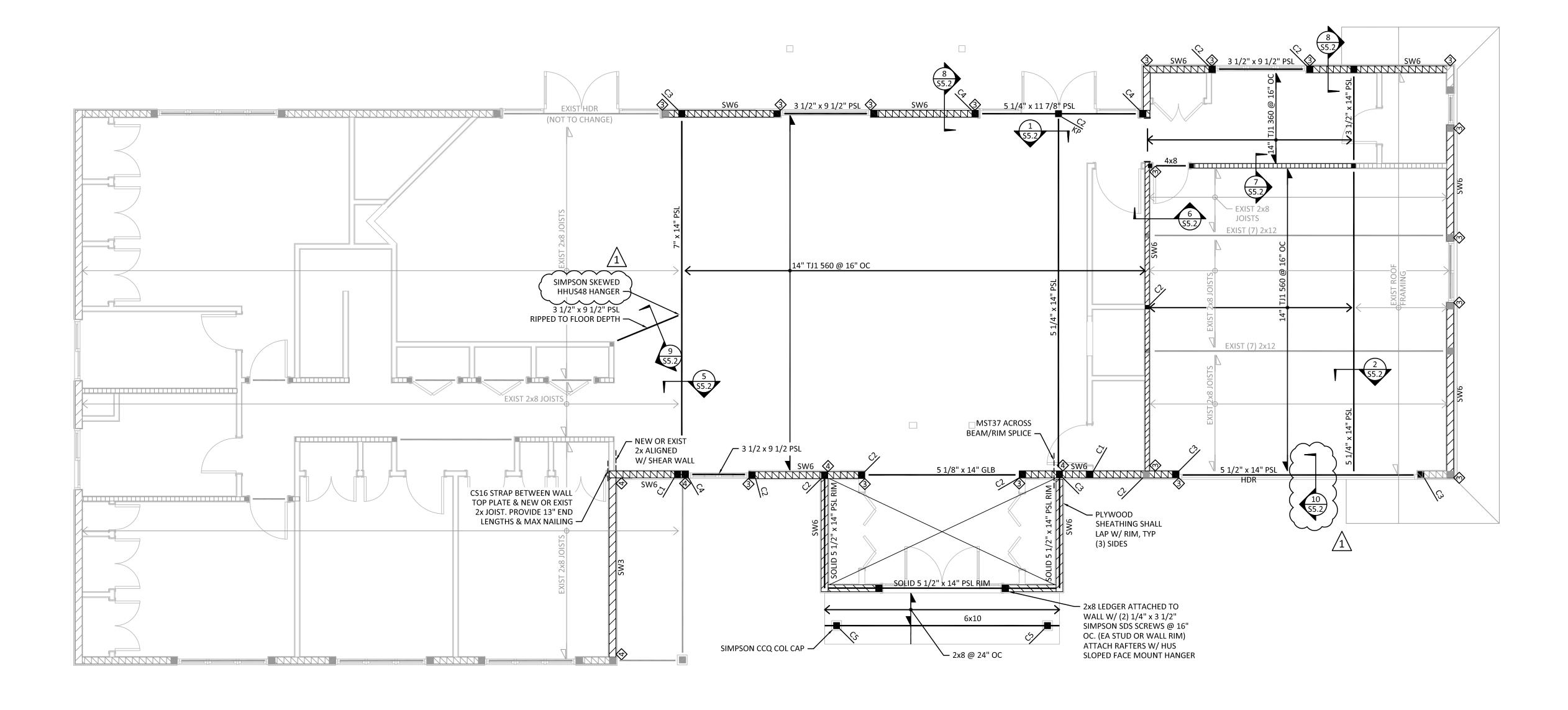
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UPPER FLOOR FRAMING PLAN

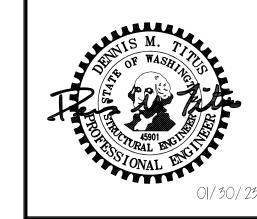
SCALE: 1/4" = 1

TYPICAL FLOOR FRAMING PLAN NOTES:

- FLOOR SHEATHING SHALL BE 3/4" PI 48/24 WITH 10d COMMON NAILS SPACED AT 6" OC AT ALL DIAPHRAGM BOUNDARIES, PANEL EDGES AND SHEAR WALLS AND 10" OC AT INTERMEDIATE FRAMING. FOR SHEATHING LAYOUT AND NAILING REFER TO DETAIL 2/S5.1
- 2. COLUMNS AND BEARING WALLS SHOWN ON PLANS SHALL BE CONTINUED DOWN TO THE FOUNDATION UNLESS CARRIED BY A BEAM BELOW.
- 3. ALL DIAPHRAGMS UNBLOCKED.
- 4. REFER TO SHEET S5.1 THRU S5.2 FOR TYPICAL FLOOR FRAMING DETAILS.
- 5. CONTRACTOR SHALL HAVE THE OPTION TO DRILL A 1 1/2" HOLE CENTERED IN THE DEPTH AND AT THE THIRD POINT OF THE SPAN FOR ALL WOOD FLUSH BEAMS SHOWN ON THE PLAN.
- 6. WALLS SHOWN ON THE FRAMING PLANS ARE WALLS BELOW THE FRAMING LEVELS INDICATED. HOLDOWNS SHALL BE PLACED AT THE BASE OF THE WALLS SHOWN.
- 7. TYPICAL HEADERS AT BEARING LOCATION SHALL BE 4x8 DF#2 UNO SUPPORTED BY A MINIMUM OF (1) CRIPPLE STUD AND (1) FULL HEIGHT STUD.
- 8. COLUMNS NOT OTHERWISE SHOWN OR CALLED OUT ON PLAN SHALL BE (2) 2x STUDS.
- 9. UNLESS NOTED OTHERWISE ALL STUDS SHALL BE HF STUD GRADE AND SPACED AT 16" OC.
- 10. UNLESS NOTED OTHERWISE, ALL BEAM-TO-BEAM CONNECTIONS SHALL BE SIMPSON HU SERIES FACE MOUNT HANGERS W/ MAX NAILING.
- 11. UNLESS NOTED OTHERWISE, ALL BEAM-TO-COLUMN CONNECTIONS SHALL BE SIMPSON ECCQ OR CCQ SERIES
- 12. UNLESS NOTED OTHERWISE, ALL JOIST-TO-BEAM CONNECTIONS SHALL BE SIMPSON LUS OR HUC FACE MOUNT HANGERS.

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FAX (425) 778-5536



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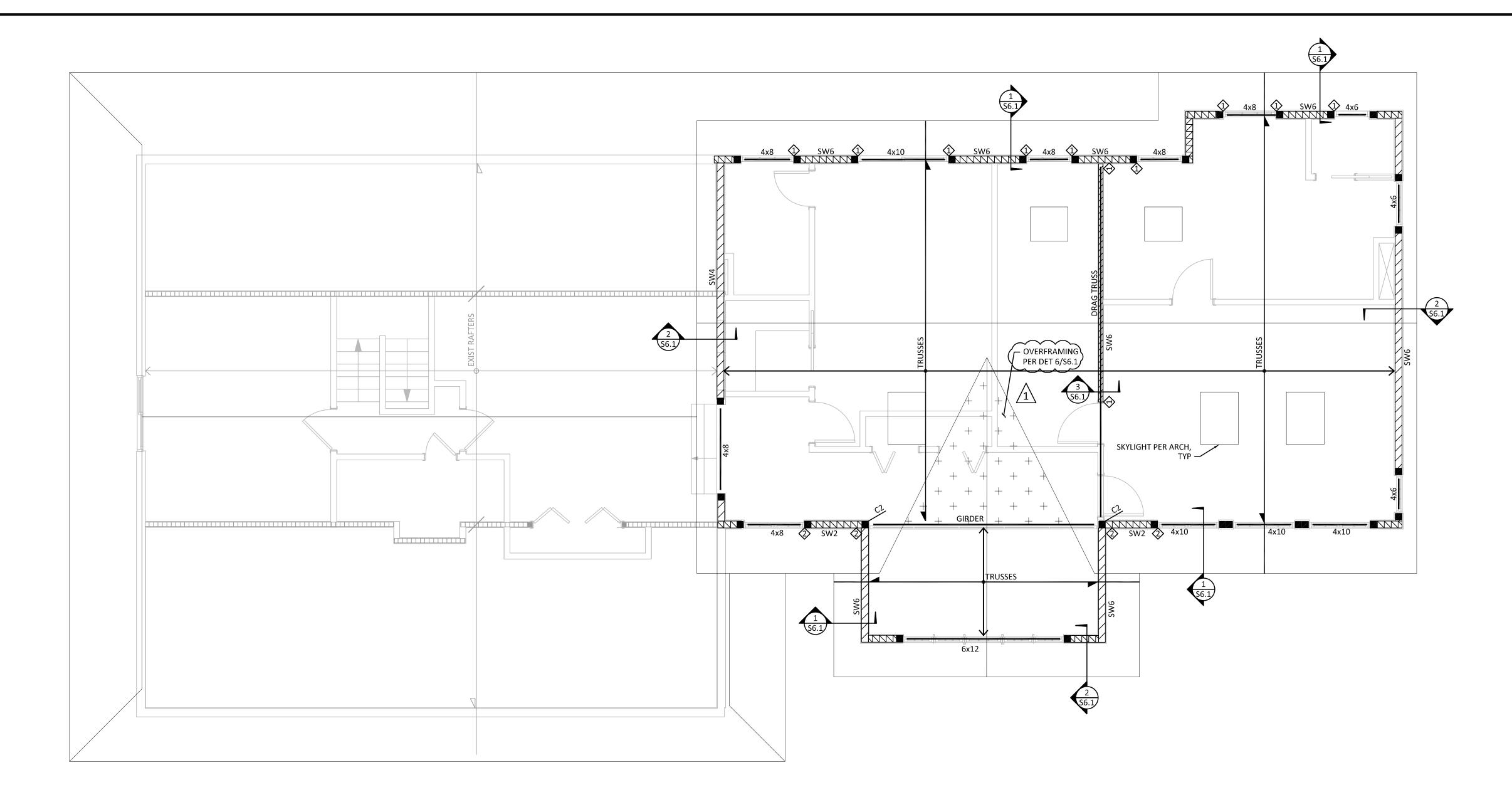
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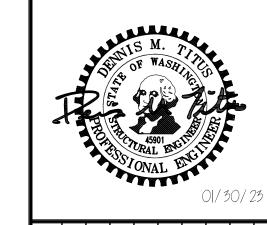
ROOF FRAMING PLAN

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

TYPICAL ROOF FRAMING PLAN NOTES:

- 1. WALLS SHOWN ON ROOF FRAMING PLAN ARE WALLS BELOW ROOF FRAMING.
- 2. BEAMS SHOWN ON ROOF FRAMING PLAN SHALL BE ABOVE DOUBLE TOP PLATE UNLESS USED AS A DOOR OR WINDOW HEADER.
- 3. ROOF SHEATHING SHALL BE 1/2" PI 40/20 WITH 8d COMMON NAILS SPACED AT 6" OC AT ALL DIAPHRAGM BOUNDARIES, PANEL EDGES, SHEAR WALLS, COLLECTOR TRUSSES, AND BLOCKING OR TRUSS BLOCKING PANELS INDICATED ON PLANS. NAILING AT INTERMEDIATE FRAMING SHALL BE 8d COMMON NAILS @ 12" OC. REFER TO DETAIL 2/S5.1 FOR SHEATHING LAYOUT AND NAILING.
- 4. UNLESS NOTED OTHERWISE, HEADERS AT ALL EXTERIOR WALLS SHALL BE 4x8 HF#2 WHERE MAXIMUM SPAN = 5'-5".
- 5. STUD WALL FRAMING SHALL BE 2x HF STUDS @ 16" OC FOR ALL STUD WALLS SHOWN ON THE PLAN.
- 6. REFER TO SHEET S6.1 FOR TYPICAL ROOF FRAMING DETAILS.
- 7. REFER TO DETAIL 3/S5.1 FOR CONSTRUCTION OF MULTIPLE STUD COLUMNS.
- 8. REFER TO THE STRUCTURAL NOTES SHEET FOR COLUMNS SUPPORTING TYPICAL BEARING WALL HEADER BEAMS.
- 9. ALL DIAPHRAGMS UNBLOCKED.
- 10. COLUMNS AND BEARING WALLS SHOWN ON PLAN SHALL BE CONTINUED DOWN TO THE FOUNDATION UNLESS CARRIED BY A BEAM BELOW.
- 11. HOLDOWNS SHOWN ON ROOF FRAMING PLAN SHALL BE PLACED AT BASE OF WALLS SHOWN.
- 12. ATTACH ALL ROOF TRUSSES TO WALLS BELOW WITH SIMPSON H2.5A HURRICANE TIES.
- 13. TRUSSES MARKED "DRAG TRUSS" SHALL BE DESIGNED FOR THE SERVICE LEVEL IN-PLAN AXIAL LOAD OF 310 PLF





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SHEAR WALL SCHEDULE									
TYPE	APA-RATED SHEATHING	MIN FRAMING AT ADJOINING PANEL EDGES (SEE NOTE 5)	SHEAR WALL NAILING AT PANEL EDGES	RIM JOIST OR BLOCK CONN TO TOP PLATE	SILL PLATE NAILING TO RIM/BLKG BELOW	SILL PLATE ANCHOR BOLT TO SLAB OR FOUNDATION	FOUNDATION SILL PLATE SIZE	SHEAR CAPACITY (PLF)	
SW6	15/32" ONE SIDE	2x STUD AND BLKG	0.131"Ø x 2 1/2" @ 6" OC	LTP4 OR A35 @ 24" OC	0.131"Ø x 3" @ 6" OC	5/8"Ø AB @ 5'-0" OC	2x	242	
SW4	15/32" ONE SIDE	2x STUD AND BLKG	0.131"Ø x 2 1/2" @ 4" OC	LTP4 OR A35 @ 20" OC	0.131"Ø x 3" @ 4" OC	5/8"Ø AB @ 4'-0" OC	2x	350	
SW3	15/32" ONE SIDE	(2) 2x STUD AND 2x FLAT BLKG	0.131"Ø x 2 1/2" @ 3" OC	LTP4 OR A35 @ 15" OC	0.131"Ø x 3" @ 3" OC	5/8"Ø AB @ 3'-0" OC	2x	455	
SW2	15/32" ONE SIDE	3x STUD AND 2x FLAT BLKG	0.131"Ø x 2 1/2" @ 2" OC	LTP4 OR A35 @ 12" OC	0.131"Ø x 3" @ 2.5" OC	5/8"Ø AB @ 2'-6" OC	2x	595	
2SW4	15/32" BOTH SIDES	(2) 2x STUD AND BLKG	0.131"Ø x 2 1/2" @ 4" OC	LTP4 OR A35 @ 10" OC	0.131"Ø x 3" @ 2" OC	5/8"Ø AB @ 2'-0" OC	2x	706	
2SW3	15/32" BOTH SIDES	(2) 2x STUD AND BLKG	0.131"Ø x 2 1/2" @ 3" OC	LTP4 OR A35 @ 7.5" OC	0.131 x 3" @ 1.5" OC	5/8"Ø AB @ 1'-6" OC	2x	910	
2SW2	15/32" BOTH SIDES	3x STUD AND BLKG	0.131"Ø x 2 1/2" @ 2" OC	LTP4 OR A35 @ 6" OC	0.131 x 3" @ 1.5" OC	5/8"Ø AB @ 1'-0" OC	2x	1190	

- NOTES:

 1. REFER TO THE TYPICAL SHEAR WALL DETAIL.
- THE VALUES IN THIS TABLE ARE APPROPRIATE FOR HF GRADE STUDS AND HF GRADE PLATES & RIM/BLOCKING. NAILS AT ADJOINING PANEL EDGES SHALL BE STAGGERED EACH SIDE OF THE COMMON JOINT.
- WHERE PANELS ARE APPLIED ON BOTH FACES OF A WALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING
- SHALL BE 3x AT ADJOINING PANEL EDGES AND NAILS SHALL BE STAGGERED.
- WHERE TABLE SPECIFIES (2) 2x FRAMING, CONNECT (2) 2x STUDS AND BLOCKING AS FOLLOWS: SW3 = (2) 0.131 Ø @ 3.5 OC, 2SW3 = (2) 0.131 Ø @ 1.5
- NOTE THAT 3x FRAMING MAY BE USED IN LIEU OF (2) 2x FRAMING SPECIFIED IN TABLE. INTERMEDIATE FRAMING TO BE WITH 2x MINIMUM MEMBERS. FIELD NAILING 12" OC MAXIMUM.
- AT ALL 5/8"Ø SILL PLATE ANCHOR BOLTS, INSTALL 1/4" x 3" x 3" PLATE WASHERS. EDGE OF PLATE WASHER SHALL BE WITHIN 1/2" OF SHEATHED EDGE.
- FOR DOUBLE SIDED SHEAR WALLS, USE WIDER PLATE WASHERS AS REQUIRED TO MEET THIS REQUIREMENT. PROVIDE A MINIMUM OF 7" EMBEDMENT FOR AB INTO FOUNDATION OR STEM WALL.
- 10. 7/16" SHEATHING MAY BE USED IN PLACE OF 15/32" SHEATHING PROVIDED ALL STUDS ARE SPACED 16" OC OR PANELS ARE APPLIED WITH LONG
- DIMENSION ACROSS STUDS.
- 11. AT EXIST FOUNDATION WALLS PROVIDE TITEN HD TO MATCH ANCHOR ABOVE WITH 7" EMBED.

HOLDOWN SCHEDULE							
MARK	TYPE	MIN CHORD SIZE	STUD NAILS OR BOLTS	ANCHOR BOLT (SEE NOTE 4)	CAPACITY (LB)		
<u>(1)</u>	MST48	(2) 2x	(17) 16d EA END	-	3,640		
2	MST60	(2) 2x	(23) 16d EA END	-	5,405		
3	HDU2	(2) 2x	(6) SDS 1/4" x 2 1/2" SCREWS	5/8"Ø	2,215		
4	HDU5	(2) 2x	(14) SDS 1/4" x 2 1/2" SCREWS	5/8"Ø	4,340		

- REFER TO THE LATEST SIMPSON STRONG-TIE CATALOG FOR ADDITIONAL INSTALLATION REQUIREMENTS. REFER TO DETAIL 4/S5.2 FOR INSTALLATION OF MST FLOOR TO FLOOR STRAPS. REFER TO DETAILS 3/S5.2
- FOR CONNECTION OF STRAP TO BEAM BELOW.
- INSTALL HD HOLDOWNS AT FOUNDATION WALLS PER DETAIL 4 & 5/S4.1. AT ALL HOLDOWN CHORDS, PROVIDE PANEL EDGE NAILING PER SHEAR WALL SCHED.

COLUMN SCHEDULE							
MARK	COLUMN SIZE 2x4 WALL	COLUMN SIZE 2x6 WALL	REMARKS				
C1	(2) 2x4	(2) 2x6	SEE NOTE 2				
C2	(3) 2x4	(3) 2x6	SEE NOTE 2				
C3	(4) 2x4	(4) 2x6	SEE NOTE 2				
C4	4x6 HF#1	4x6 HF#1	-				
C5	4x8 HF#1	6x6 DF#1	-				
C6	4x10 HF#1	6x8 DF#1	-				
C7	6x10 DF#1	6x10 DF#1	-				
C8	TS4x4x1/4	TS4x4x1/4	PL 3/4 x 5 x 0'-10"				

- NOTES:

 1. REFER TO THE LATEST SIMPSON STRONG-TIE CATALOG FOR PRE-FABRICATED CONNECTION INSTALLATION REQUIREMENTS.
- 2. MULTIPLE STUD COLUMNS SHALL USE GRADE OF STUD INDICATED ON WALL FRAMING SCHEDULE. REFER TO DETAIL 3/S5.1 FOR FABRICATION OF
- MULTIPLE STUD COLUMNS.
- 3. CONTRACTOR TO PROVIDE BLOCKING EQUAL TO COLUMN DIMENSIONS AT JOIST SPACE FOR COLUMNS CONTINUING TO FOUNDATION.





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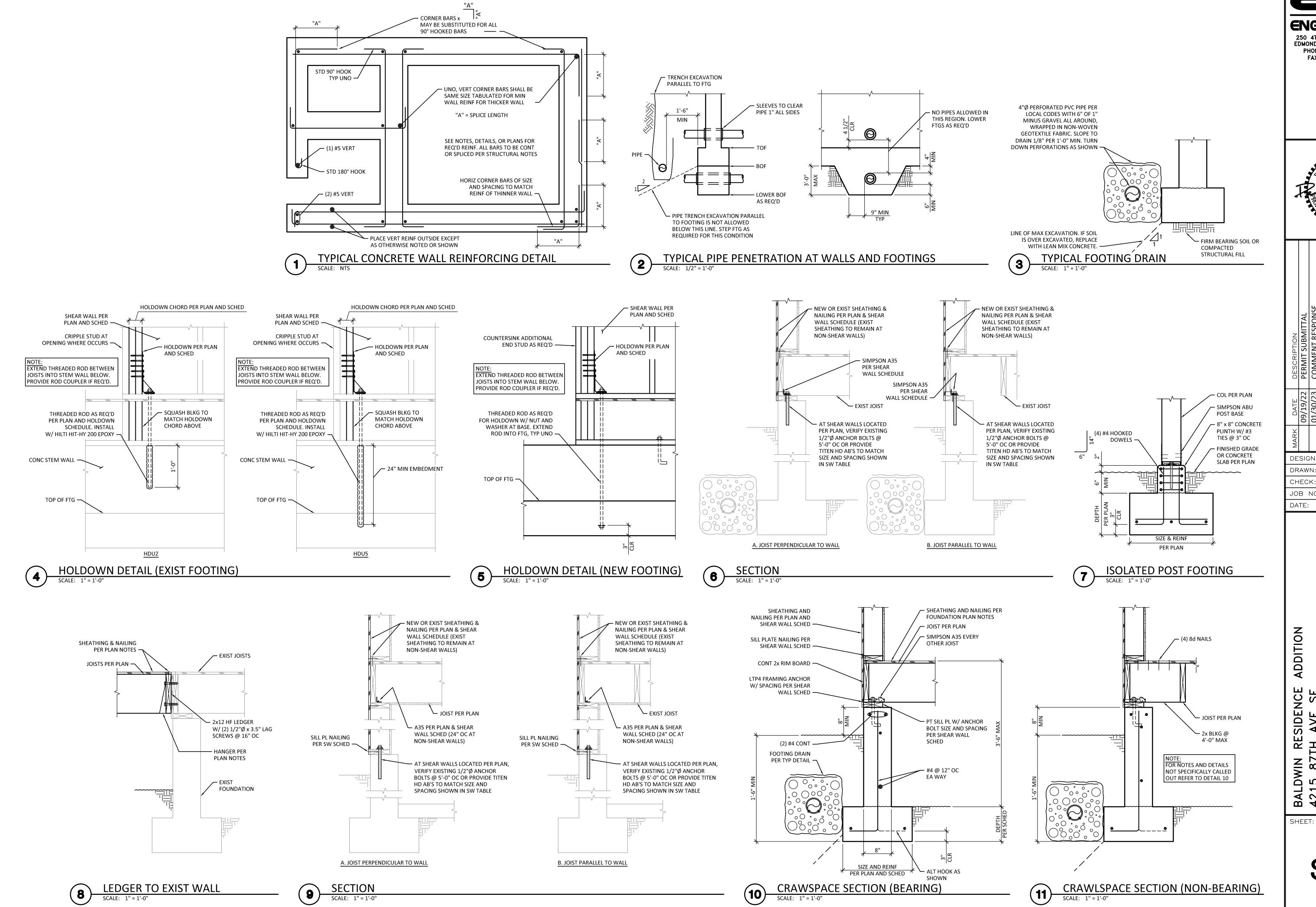
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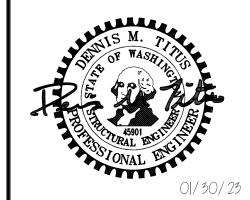
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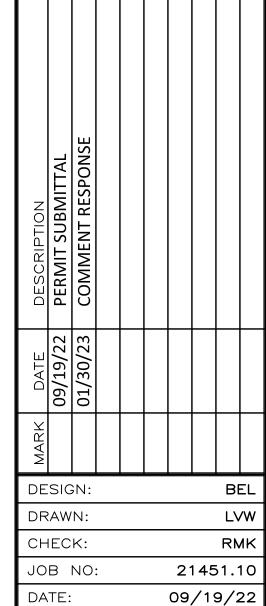
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250 4TH AVE. S., SUITE 200 EDMONDS, WASHINGTON 98020 PHONE (425) 778-8500 FAX (425) 778-5536



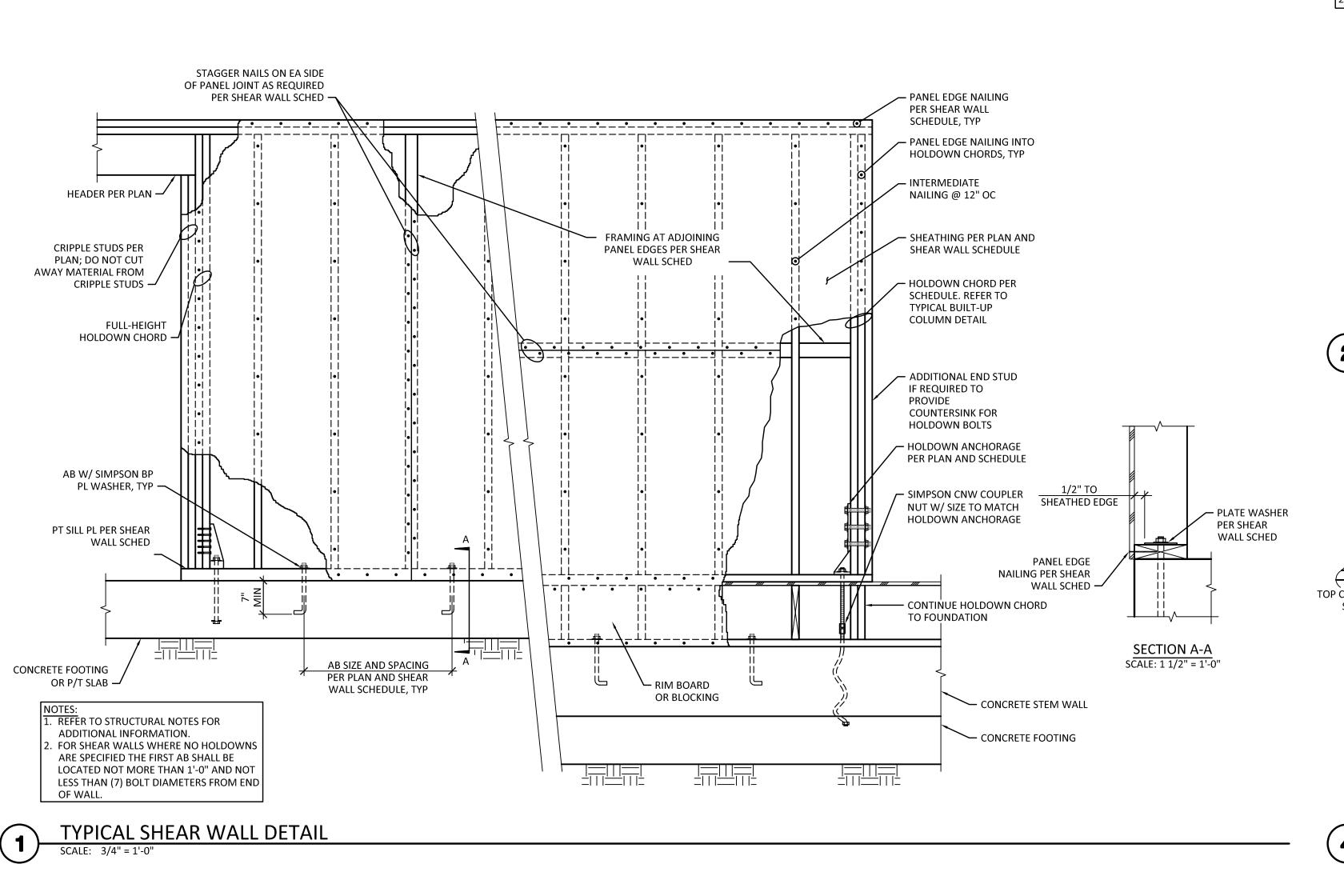


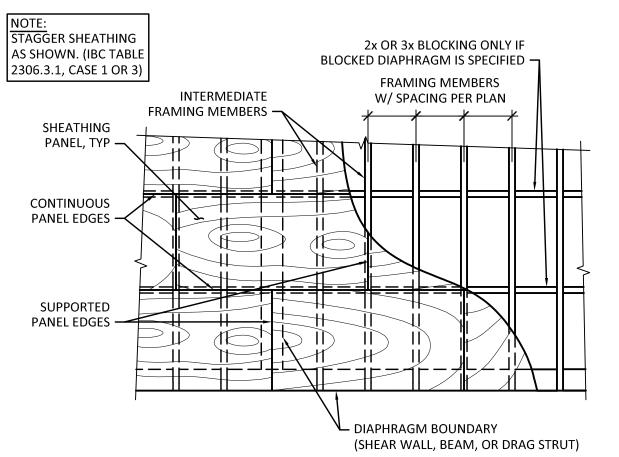
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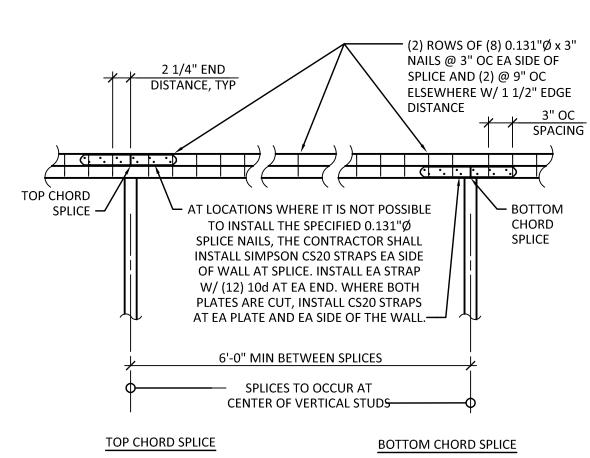


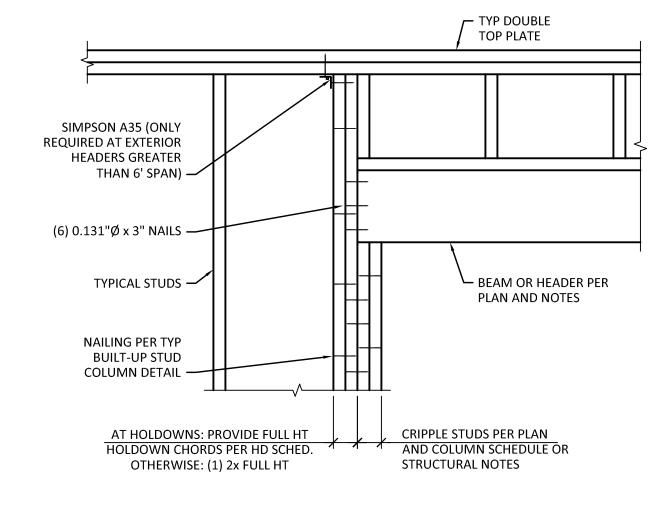
FOR 2x4 STUDS, PROVIDE SINGLE ROW OF NAILS STAGGERED EA SIDE WITH 1 1/2" EDGE DISTANCE. FOR 2x6 STUDS, PROVIDE (2) ROWS OF NAILS SPACED AT 2 1/2" W/ 1 1/2" EDGE DISTANCE 9" OC MAX SPACING BETWEEN ADJACENT NAILS IN A ROW ADJACENT NAILS IN A ROW ARE TO BE DRIVEN FROM OPPOSITE SIDES, TYP ─ 0.131"Ø x 3" NAILS, TYP (5) STUDS MAX TO BE USED FOR **BUILT-UP COLUMNS**

TYPICAL FLOOR/ ROOF SHEATHING DETAIL

SCALE: NTS

TYPICAL BUILT-UP STUD COLUMN DETAIL

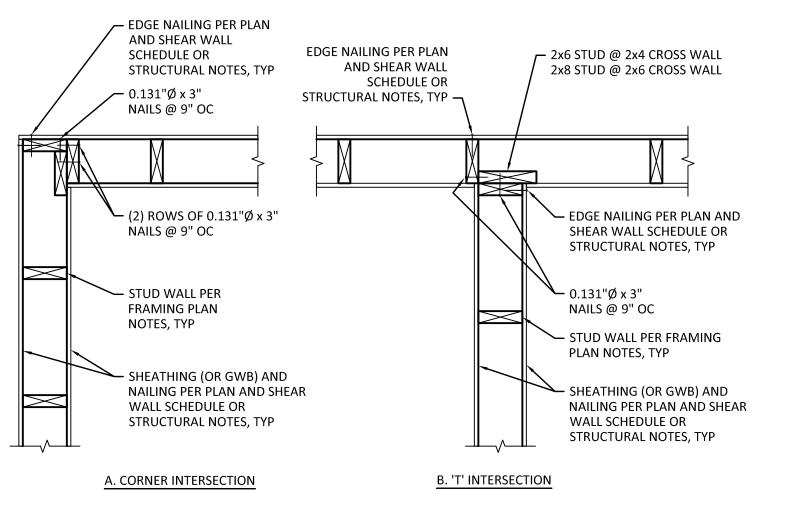




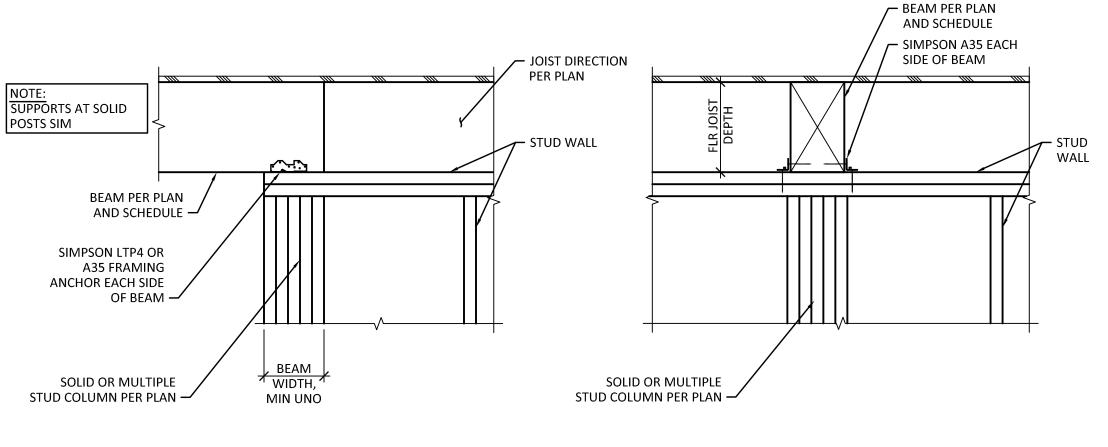
PERPENDICULAR TO STUD WALL

TYPICAL TOP PLATE SPLICE DETAIL

TYPICAL HEADER DETAIL



TYPICAL WALL INTERSECTION DETAIL

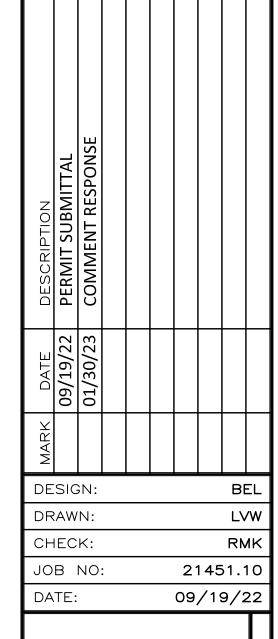


TYPICAL FLUSH BEAM SUPPORT DETAILS

PARALLEL TO STUD WALL

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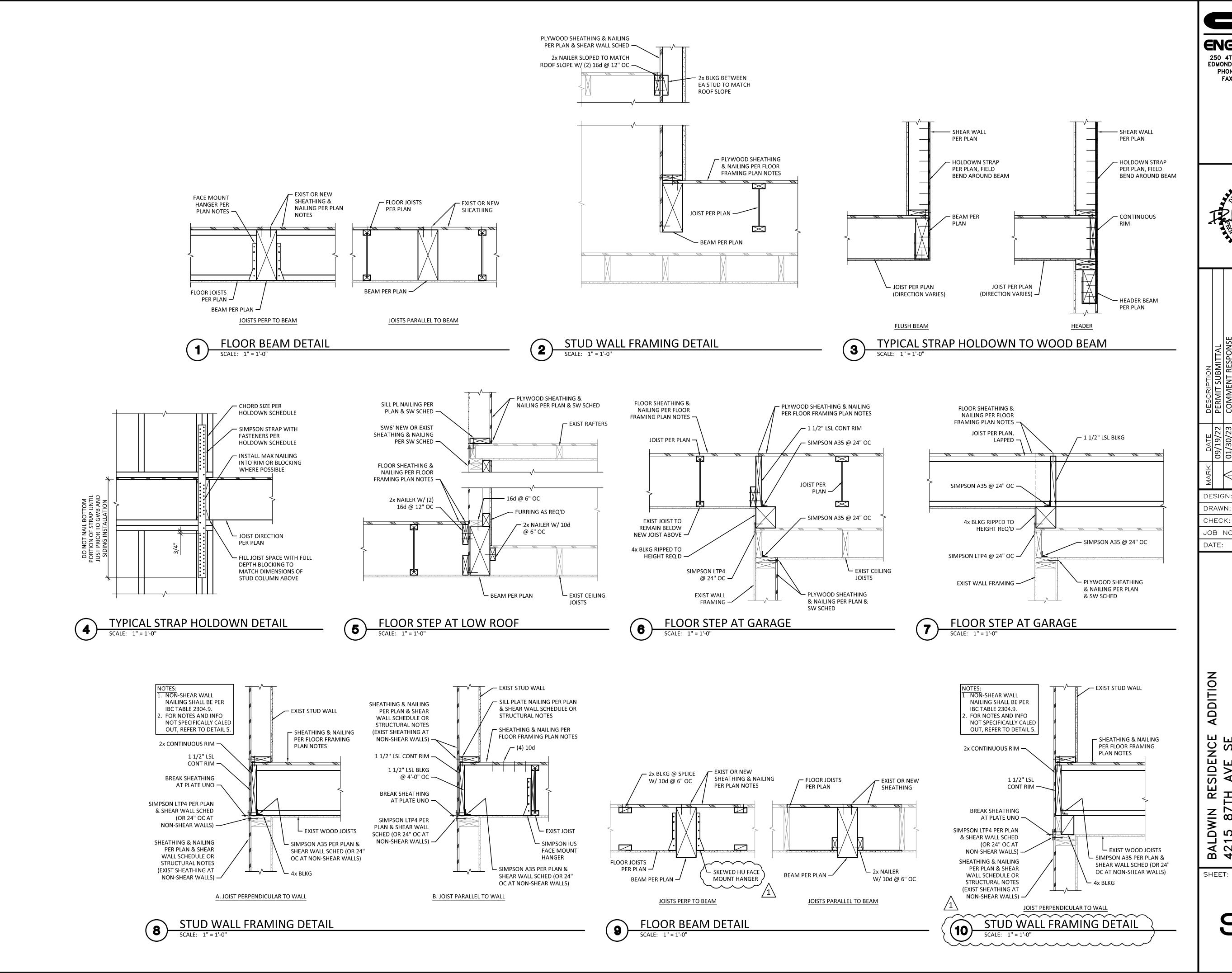
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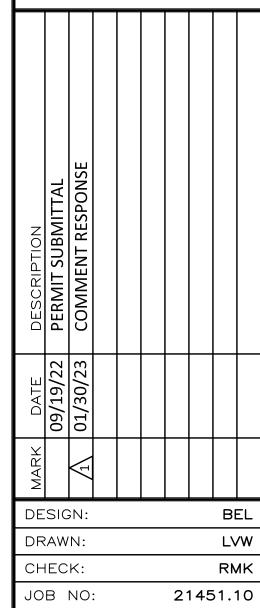
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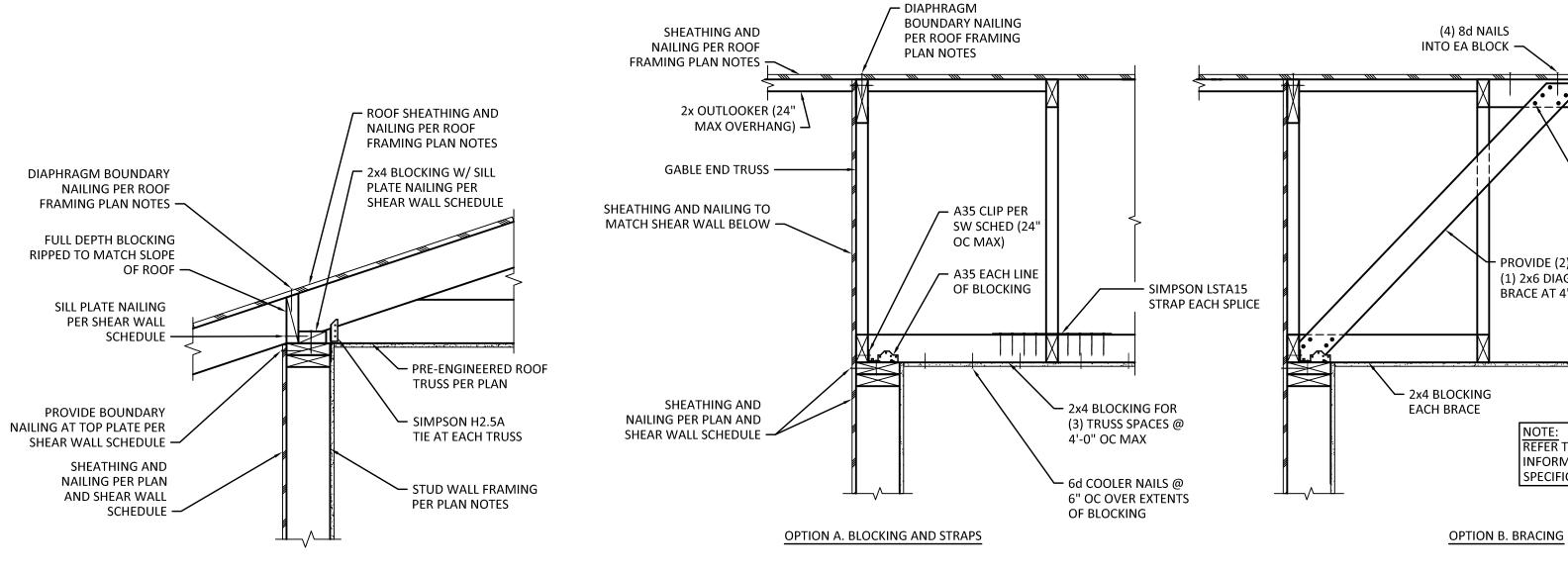
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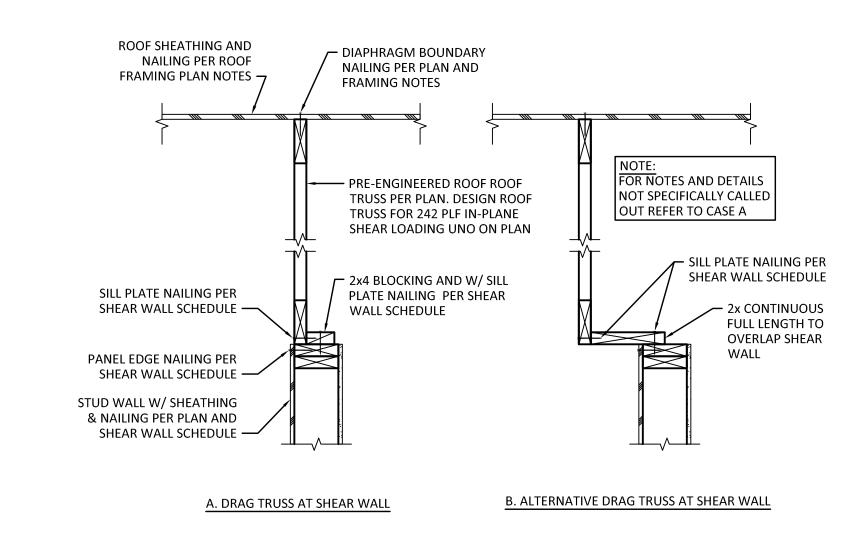
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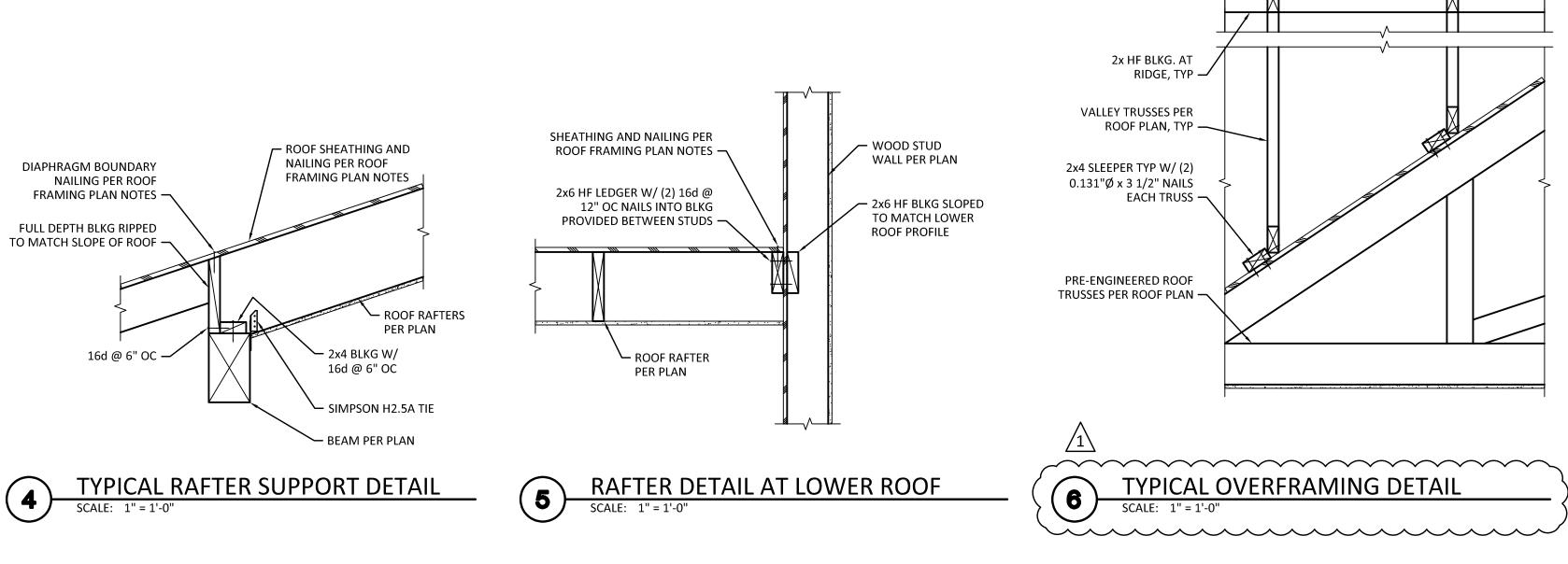




TYPICAL GABLE END SECTION

TYPICAL DRAG TRUSS SECTION

SCALE: 1" = 1'-0"



- 2x4 BLOCKING

EACH BRACE

└ (6) 10d

PROVIDE (2) 2x4 OR

(1) 2x6 DIAGONAL

BRACE AT 4'-0" OC

NOTE: REFER TO CASE A FOR

SPECIFICALLY CALLED OUT

INFORMATION NOT





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ROOF