

STRUCTURAL REQUIREMENTS

ENGINEERED WOOD TRUSSES

- ENGINEERED WOOD TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM LOADS:
ROOF TRUSS TOP CHORD: 20 PSF DL (INCLUDING TRUSS WT), LL PER STRUCTURAL CRITERIA.
ROOF TRUSS BOTTOM CHORD: 5 PSF DL, 10 PSF LL (NOT CONCURRENT W/ TOP CHORD LL)
WIND AND SEISMIC LOADS SHALL CONFORM TO ASCE 7-10.
- TRUSSES MARKED WITH "E.N." ARE DRAG TRUSSES AND SHALL BE DESIGNED FOR A MINIMUM DRAG FORCE OF 2000 LBS UNLESS NOTED OTHERWISE.
- TRUSS MAXIMUM DEFLECTION SHALL NOT EXCEED THE DEFLECTION RATIOS LISTED IN THE DESIGN CRITERIA SECTION FOR THE CORRESPONDING FRAMING LEVEL. IN ADDITION, DEAD LOAD DEFLECTION SHALL NOT EXCEED 1" AND TOTAL LOAD DEFLECTION SHALL NOT EXCEED 2" WITHOUT WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
- LUMBER GRADE FOR ENGINEERED WOOD TRUSSES SHALL BE DF #2 OR BETTER.
- TRUSS TOP CHORDS SHALL BE 2X4 MINIMUM. TRUSS WEBS SHALL BE 2X4 MINIMUM.
- MAXIMUM LOAD DURATION FACTOR SHALL NOT BE GREATER THAN 1.25 FOR ROOF TRUSSES AND 1.00 FOR FLOOR TRUSSES.
- MAXIMUM PLATE BEARING STRESS $F_c' = 625$ PSI. IF BEARING STRESS ON THE TOP PLATE EXCEEDS 625 PSI, THE TRUSS DESIGN SHALL INCLUDE ALL OF THE REQUIRED BEARING IMPROVEMENTS.
- DESIGN AND CONSTRUCTION OF ALL ENGINEERED WOOD TRUSSES SHALL CONFORM TO THE CURRENT EDITION OF THE IBC. THE DESIGN, MANUFACTURE AND QUALITY ASSURANCE SHALL CONFORM TO TPI 1.
- ALL TRUSSES SHALL BE DESIGNED FOR ALL LOADING FROM MECHANICAL, ELECTRICAL, FIRE SPRINKLER, HVAC AND OTHER SUPERIMPOSED LOADS. TRUSS DESIGNER SHALL CORRELATE LOAD LOCATIONS WITH MECHANICAL, PLUMBING AND ELECTRICAL PLANS.
- ALL TRUSS SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THIS PROJECT IS BEING CONSTRUCTED.
- TRUSS ERECTION SHALL BE ACCORDING TO TRUSS MANUFACTURERS RECOMMENDATIONS. TRUSS DESIGNER SHALL DESIGN TRUSS SYSTEM, INCLUDING ALL TEMPORARY BRACING, PERMANENT LATERAL BRACING, AND TRUSS TO TRUSS CONNECTIONS THAT ARE REQUIRED. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN CONCURRENCE AND APPROVAL OF THE TRUSS MANUFACTURER AND THE ENGINEER OF RECORD.
- FRAMED AND SHEATHED BLOCKING MAY BE REPLACED W/ ENGINEERING TRUSS BLOCKS. ENG. TRUSS BLOCKS AT ROOF DIAPHRAGM LEVEL SHALL BE DESIGNED FOR 230 PLF. ENGINEERING TRUSS BLOCKS AT FLOOR LEVEL SHALL BE DESIGNED FOR 285 PLF.

REINFORCED CONCRETE NOTES

- STRUCTURAL CONCRETE SHALL COMPLY WITH THE MOST RESTRICTIVE REQUIREMENTS ACCORDING TO ACI 318 TABLE 4.3.1 FOR THE EXPOSURE CATEGORIES AND CLASSES LISTED BELOW.

STRUCT. MEMBER	EXPOSURE CATEGORY AND CLASS	
FOOTINGS SLABS	F, FREEZING & THAWING:	F0 - NEGLIGIBLE
	S, SULFATE:	S2 - SEVERE
	W, IN CONTACT W/ WATER:	W0 - NOT APPLICABLE
	C, CORROSION PROT. OF REINF.:	C0 - NOT APPLICABLE
- MINIMUM CONCRETE MIX REQUIREMENTS:
CONCRETE COMPRESSIVE STRENGTH, f_c' : 4500 PSI.
MAXIMUM WATER TO CEMENT RATIO: 0.45
CEMENTITIOUS MATERIAL: TYPE V
- STRUCTURAL CONCRETE SHALL REACH A MINIMUM 3-DAY COMPRESSIVE STRENGTH OF 1500 PSI AND SHALL REACH THE SPECIFIED COMPRESSIVE STRENGTH IN 28 DAYS. CONCRETE COMPRESSIVE TESTS SHALL CONFORM TO ASTM C 140 TEST METHOD SAMPLING AND TESTING CONCRETE MASONRY UNITS AND RELATED UNITS. CEMENTITIOUS MATERIAL SHALL CONFORM TO ASTM C 150 "SPECIFICATION FOR PORTLAND CEMENT".
- THE CONCRETE SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP OF 4 INCHES OR LESS. A TOLERANCE OF 1 INCH ABOVE THIS AMOUNT SHALL BE PERMITTED FOR INDIVIDUAL BATCHES PROVIDED THE AVERAGE FOR ALL BATCHES DOES NOT EXCEED 4 INCHES. THE SLUMP SHALL BE DETERMINED BY STANDARD TESTING METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE (ASTM C 143), WHERE A SUPERPLASTICIZER ADMIXTURE IS USED, MAXIMUM SLUMP IS ALLOWED TO BE INCREASED 1-1/2" FOR EACH 1% OF SUPERPLASTICIZER UP TO A MAXIMUM INCREASE OF 3".
- WATER USED IN MIXING CONCRETE SHALL BE CLEAN FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, ORGANIC MATERIALS, OR OTHER SUBSTANCES DELETERIOUS TO CONCRETE OR REINFORCEMENT. NONPOTABLE WATER SHALL NOT BE USED.
- CONCRETE AGGREGATES SHALL CONFORM TO ASTM C 33 "STANDARD SPECIFICATIONS FOR CONCRETE AGGREGATES" OR ASTM C 330 "STANDARD SPECIFICATION FOR LIGHTWEIGHT AGGREGATES". THE NORMAL MAXIMUM SIZE OF COARSE AGGREGATES SHALL NOT BE LARGER THAN 1/5 THE DISTANCE BETWEEN THE SIDES OF FORMS, 1/3 THE SLAB DEPTH, OR 3/4 THE MINIMUM CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS OR WIRES, BUNDLES OF BARS, INDIVIDUAL TENDONS, OR DUCTS.
- DEFORMED CONCRETE REINFORCING SHALL BE GR 60 REINFORCING STEEL CONFORMING TO ASTM A 615 "STANDARD SPECIFICATION FOR DEFORMED AND PLAIN CARBON-STEEL BARS FOR CONCRETE REINFORCEMENT".
- BAR MATS FOR CONCRETE REINFORCING SHALL CONFORM TO ASTM A 184 "STANDARD SPECIFICATION FOR WELDED DEFORMED STEEL BAR MATS FOR CONCRETE REINFORCEMENT". REINFORCING BARS USED IN BAR MATS SHALL CONFORM TO ASTM A 615 OR ASTM A 706. WELDED PLAIN WIRE FOR CONCRETE REINFORCEMENT SHALL NOT BE SMALLER THAN D4 AND SHALL CONFORM TO ASTM A 496 "STANDARD SPECIFICATION FOR STEEL WIRE, DEFORMED, FOR CONCRETE REINFORCEMENT". WELDED DEFORMED WIRE FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A 497 "STANDARD SPECIFICATION FOR STEEL WELDED WIRE, DEFORMED, FOR CONCRETE REINFORCEMENT".
- WELDED WIRE FOR CONCRETE REINFORCEMENT SHALL NOT BE SMALLER THAN D4 AND SHALL CONFORM TO ASTM A 496 "STANDARD SPECIFICATION FOR STEEL WIRE, DEFORMED, FOR CONCRETE REINFORCEMENT".
- NO ADMIXTURES, OTHER THAN AIR-ENTRAINING ADMIXTURE CONFORMING ASTM C 260 OR SUPERPLASTICIZER ADMIXTURE CONFORMING TO ASTM C 494 MAY BE USED WITHOUT THE WRITTEN APPROVAL FROM THE ENGINEER. CALCIUM CHLORIDE AND CONCRETE ADMIXTURES CONTAINING CHLORIDE SALTS ARE NOT PERMITTED.
- ALL REINFORCING LAP SPLICES SHALL BE CLASS "B" SPLICES UNLESS NOTED OTHERWISE. LAP ALL REINFORCING BARS ACCORDING TO THE FOLLOWING LAP SPLICE SCHEDULE. WHERE BEAM REINFORCING IS REQUIRED TO BE SPLICED, SPLICING SHALL ONLY TAKE PLACE IN COMPRESSION REGIONS, I.E. BOTTOM REINFORCING SPLICES ALLOWED OVER SUPPORTS AND TOP REINFORCING SPLICES ALLOWED IN THE BEAM MIDSPANS. WHERE COLUMN VERTICAL REINFORCING IS REQUIRED TO BE SPLICED, SPLICING WILL BE PERMITTED ONLY AT FLOOR LEVELS OR AREAS OF LATERAL SUPPORT.

REINFORCED CONCRETE LAP SPLICE SCHEDULE								
F'c = 2500 PSI AT 28 DAYS			REINFORCEMENT LENGTH (INCHES)					
SPLICE CLASS	REINFORCEMENT LOCATION	#3 BARS	#4 BARS	#5 BARS	#6 BARS	#7 BARS	#8 BARS	
A	TOP*	24	32	39	47	69	78	
	BOTTOM	18	24	30	36	53	60	
B	TOP*	31	41	51	61	89	102	
	BOTTOM	24	32	39	47	69	78	

*TOP DENOTES HORIZONTAL REINFORCING W/ 12" OF FRESH CONCRETE BELOW THE LEVEL OF REINFORCING

WOOD FRAMING NOTES

- ALL DIMENSIONAL LUMBER SHALL BE DF#2 GRADE OR BETTER. SAWN LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF A LUMBER GRADING OR INSPECTION AGENCY THAT HAS BEEN APPROVED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS 20 OR EQUIVALENT.
- ALL SHEATHING TO BE APA RATED SHEATHING EXPOSURE 1 AND SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN DOC PS 1 OR PS 2. ALL EXTERIOR WALL ARE REQUIRED TO BE SHEATHED. ALL SHEATHING SHALL HAVE SPAN RATINGS ACCORDING TO THE FOLLOWING:
FLOOR W/ 16" JOIST/TRUSS SPACING.....24/12
FLOOR W/ 18" JOIST/TRUSS SPACING.....32/16
FLOOR W/ 24" JOIST/TRUSS SPACING.....48/24
ROOF W/ 12" JOIST/TRUSS SPACING.....12/0
ROOF W/ 24" JOIST/TRUSS SPACING.....24/0
ROOF W/ 48" JOIST/TRUSS SPACING.....48/24
WALL W/ 12" STUD SPACING.....16/0
WALL W/ 16" STUD SPACING.....24/0
- ALL LUMBER, TIMBER, PLYWOOD, REQUIRED TO BE TREATED SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE AWPA STANDARD U1 AND M4 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. PRESERVATIVE TREATED WOOD SHALL BEAR THE QUALITY MARK OF AN INSPECTION AGENCY THAT MAINTAINS CONTINUING SUPERVISION, TESTING, AND INSPECTION OVER THE QUALITY OF THE PRESERVATIVE TREATED WOOD.
- THE FOLLOWING SHALL BE PRESERVATIVE TREATED LUMBER OR REDWOOD:
A. ALL WALL SILL PLATES ON A CONCRETE SLAB THAT ARE IN DIRECT CONTACT WITH EARTH.
B. WOOD FRAMING MEMBERS THAT REST ON EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM EXPOSED EARTH.
C. WOOD FRAMING MEMBERS AND FURRING STRIPS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE.
D. WOOD JOISTS THAT ARE CLOSER THAN 18", OR WOOD GIRDERS THAT ARE CLOSER THAN 12" FROM EXPOSED EARTH IN CRAWL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIMETER OF THE BUILDING FOUNDATION.
- PREFABRICATED I-JOISTS SHALL CONFORM TO ASTM D 5055.
- LAMINATED VENEER LUMBER (LVL) SHALL BE 1-3/4" WIDE 1.8E WITH AN ALLOWABLE BENDING STRESS OF 2,800 PSI AND AN ALLOWABLE SHEAR STRESS OF 285 PSI. LAMINATED STRAND LUMBER (LSL) SHALL BE 1-3/4" WIDE 1.55E WITH AN ALLOWABLE BENDING STRESS OF 2,325 PSI AND AN ALLOWABLE SHEAR STRESS OF 310 PSI.
- STRUCTURAL GLUE LAMINATED TIMBER SHALL BE 24F-V4 DF UNLESS NOTED OTHERWISE AND MANUFACTURED AND IDENTIFIED AS REQUIRED IN AITC A190.1 AND ASTM D 3737.
- PROVIDE SOLID BLOCKING FOR ALL VERTICAL LOAD PATHS TO FOUNDATION.
- PROVIDE 1 TRIMMER ON EACH SIDE OF ALL OPENINGS LESS THAN 4'-0" WIDE. PROVIDE 2 TRIMMERS MIN. ON EACH SIDE OF ALL OPENINGS 4'-0" WIDE AND GREATER. A MINIMUM 2 STUDS SHALL BE PROVIDED AT ALL VERTICAL EDGES OF SHEAR WALLS, GIRDER TRUSSES, AND BEAMS UNLESS NOTED OTHERWISE.
- OPENINGS SHALL BE FRAMED WITH THE MINIMUM KING STUDS UNLESS NOTED OTHERWISE:
OPENINGS UP TO 2'-0": (1) 2X4 OR (1) 2X6 KING STUD AT EACH SIDE OF OPENING
OPENINGS UP TO 6'-0": (2) 2X4 OR (1) 2X6 KING STUDS AT EACH SIDE OF OPENING
OPENINGS UP TO 10'-0": (3) 2X4 OR (2) 2X6 KING STUDS AT EACH SIDE OF OPENING
OPENINGS UP TO 14'-0": (4) 2X4 OR (2) 2X6 KING STUDS AT EACH SIDE OF OPENING
OPENINGS UP TO 18'-0": (5) 2X4 OR (2) 2X6 KING STUDS AT EACH SIDE OF OPENING
- BUILT UP BEAMS SHALL BE FASTENED ACCORDING TO THE FOLLOWING:
(2) & (3) PLY MEMBERS WITH PLYS UP TO 1-3/4" THICK:
12" DEEP BEAMS: (2) ROWS OF 16d COMMON NAILS AT 12" O.C.
14" AND DEEPER: (3) ROWS OF 16d COMMON NAILS AT 12" O.C.
"NAILED CONNECTIONS REQUIRE AN ADDITIONAL ROW OF NAILS WHEN NAIL SIZE IS SMALLER THAN SPECIFIED ABOVE."
(4) PLY MEMBERS WITH PLYS UP TO 1-3/4" THICK AND (2) PLY MEMBERS WITH PLYS 3-1/2" THICK:
12" DEEP BEAMS: (2) STAGGERED ROWS OF 1/2" Ø A307 BOLTS W/ WASHERS @ 16" O.C.
14" AND DEEPER: (3) STAGGERED ROWS OF 1/2" Ø A307 BOLTS W/ WASHERS @ 16" O.C.
- STUDS OF BUILT UP COLUMNS SHALL BE NAILED TO ADJACENT STUDS W/ (2) ROWS OF 16d COMMON NAILS @ 12" O.C. UNLESS NOTED OTHERWISE.
- SIMPSON H1 IS REQUIRED AT EACH END EACH ROOF TRUSS UNLESS NOTED OTHERWISE. NAIL TJTS TO TOP PLATE W/ (1) 8d BOX NAIL EACH SIDE. DRIVE NAILS AT AN ANGLE AT LEAST 1-1/2" FROM END OF EACH FLOOR JOIST.
- PROVIDE 1 1/8" WIDE TIMBER STRAND OR EQUIVALENT FOR ALL RIM JOISTS.
- BEARING, SHEAR AND EXTERIOR WALL STUDS SHALL BE CAPPED WITH DOUBLE TOP PLATES INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND AT INTERSECTIONS WITH OTHER PARTITIONS. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET AT LEAST 48".
- NAIL TJTS TO TOP PLATE W/ (1) 8d BOX NAIL EACH SIDE. A MINIMUM OF 8-16d NAILS SHALL BE PLACED EACH SIDE OF TOP PLATE SPLICES UNLESS NOTED OTHERWISE.
- NON BEARING INTERIOR PARTITION WALLS SHALL BE FRAMED A MINIMUM OF 1/2" SHORTER THAN BEARING WALLS TO ACCOMMODATE TRUSS DEFLECTION AND PRESERVE THE INTENDED LOAD PATH.
- PROVIDE BLOCKING BETWEEN ENGINEERED TRUSSES AND JOISTS AS SPECIFIED BY THE MANUFACTURER.
- JOISTS WITH CANTILEVERS LARGER THAN 1'-6" AND WITHOUT A DIRECT APPLIED CEILING SHALL HAVE CONTINUOUS BLOCKING INSTALLED AT THE 1/3 PORTIONS OF THE BACK SPAN UNLESS NOTED OTHERWISE.
- FLOOR JOISTS SPANNING 16'-0" OR MORE WITHOUT A DIRECT APPLIED CEILING SHALL HAVE ROWS OF CONTINUOUS BLOCKING INSTALLED AT A MAXIMUM SPACING OF 8'-0" O.C.
- PARTITION WALLS THAT ARE PARALLEL WITH FLOOR JOISTS SHALL BE SUPPORTED WITH DOUBLE JOISTS OR CROSS BLOCKING BETWEEN THE TWO CLOSEST ADJACENT JOISTS UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
- ALL METAL HARDWARE TO BE SIMPSON STRONG TIE OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURERS REQUIREMENTS.
- HOLES FOR BOLTS SHALL BE DRILLED AT THE SAME NOMINAL DIAMETER OF THE BOLT +1/16". HOLES FOR LAG SCREWS AND WOOD SCREWS SHALL BE DRILLED THE SAME NOMINAL LENGTH AND DIAMETER AS THE SCREW AND PARALLEL TO THE SCREW. DRIVEN INTO PLACE.
- NAIL SHANK DIAMETER AND LENGTHS SHALL CONFORM TO THE FOLLOWING:
8d.....0.131"ØX2.50"
10d.....0.148"ØX3.00"
12d.....0.148"ØX3.25"
16d.....0.162"ØX3.50"
20d.....0.162"ØX4.50"
30d.....0.207"ØX4.50"
40d.....0.225"ØX5.00"
- STAPLES MAY BE SUBSTITUTED FOR NAILS TO FASTEN STRUCTURAL SHEATHING TO SUPPORTING MEMBERS PROVIDED THAT THE STAPLES HAVE A CROWN WIDTH OF 7/16" AND SHALL BE INSTALLED WITH THEIR CROWNS PARALLEL TO THE LONG DIMENSION OF THE FRAMING MEMBERS. SUBSTITUTE STAPLES FOR NAILS ACCORDING TO THE FOLLOWING:
8d COMMON NAILS.....14 GAUGE 1 1/2" STAPLES
10d COMMON NAILS.....13 GAUGE 1 1/2" STAPLES
8d COMMON NAILS AT 6" O.C.....16 GAUGE 16 GAUGE STAPLES AT 4" O.C.
8d COMMON NAILS AT 4" O.C.....16 GAUGE STAPLES AT 2 1/2" O.C.
8d COMMON NAILS AT 12" O.C.....16 GAUGE STAPLES AT 7 3/4" O.C.
- FASTENERS INSTALLED INTO PRESERVATIVE TREATED WOOD AND FIRE RETARDANT TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A153. CAST IN AND POST INSTALLED BOLTS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B685, CLASS 55 MINIMUM. WASHERS AND OTHER HARDWARE IN CONTACT WITH FASTENERS SHALL BE OF THE SAME ANTI-CORROSION TREATMENT AS THE FASTENERS THEY ARE IN CONTACT WITH. SHEATHING FASTENERS SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SHEATHING SURFACE.
- SILL PLATES OF EXTERIOR WALLS AND INTERIOR BEARING WALLS MUST BE ANCHORED TO THE FOUNDATION WITH A MINIMUM OF 1/2"x10" ANCHOR BOLTS @ 72" O.C. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 4" FROM EACH END OF EACH PIECE. A PROPERLY SIZED NUT AND STANDARD CUT WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE.
- SHEAR WALL SILL PLATE ANCHOR BOLTS SHALL INCLUDE 0.229"x3"x3" STEEL PLATE WASHERS BETWEEN THE SILL PLATE AND NUT. 0.229"x3"x3" STEEL PLATE WASHERS ARE PERMITTED TO HAVE A DIAGONALLY SLOTTED HOLE WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1-3/4" IF A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SHEATHED SIDE OF THE SHEAR WALL. SHEAR WALL SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH A MINIMUM OF 2 ANCHOR BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 4" FROM EACH END OF EACH PIECE.
- ANCHOR BOLTS FOR INTERIOR SHEAR WALLS SHALL BE SIMPSON STRONG-BOLTS, SIMPSON TITEN HD, OR HILTI KWIK BOLT TZ ANCHORS OF THE SAME DIAMETER AND SPACING AS SPECIFIED IN THE ANCHOR BOLT SCHEDULE W/ 4-1/2" MINIMUM EMBEDMENT. INTERIOR SHEAR WALL ANCHOR BOLTS MAY ALSO BE EMBEDDED INTO CONCRETE WITH SIMPSON SET-XP OR HILTI HIT-RE 500-SD EPOXY AND A MINIMUM 4-1/2" EMBEDMENT.

STATEMENT OF SPECIAL INSPECTIONS

- ALL SPECIAL INSPECTION REPORTS, TESTS, QUALIFICATIONS, AND CERTIFICATES OF COMPLIANCE SHALL BE APPROVED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE CITY BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTORS MUST SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY PER IBC 2012 SECTION 1704.4. CONTRACTOR IS REQUIRED TO FOLLOW QUALITY ASSURANCE PLAN PER IBC 2012 SECTION 1704.3.1.
- IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO SEE THAT THE TEST AND INSPECTIONS ARE PERFORMED. JOB SITE RECORD OF RECORD DO NOT CONSTITUTE AND ARE NOT A SUBSTITUTE FOR SPECIAL INSPECTIONS.
- CONTRACTOR SHALL PROVIDE NAME OF APPROVED SPECIAL INSPECTION AGENCY AND QUALIFICATION OF INDIVIDUAL TO BUILDING OFFICIAL FOR APPROVAL PRIOR TO CONSTRUCTION.
- THE FOLLOWING SPECIAL INSPECTIONS ARE REQUIRED BY THE CURRENT EDITION OF THE IBC:

EXPANSION, ADHESIVE, AND POST INSTALLED ANCHORS	PER ICC EVALUATION REPORT	
ANCHOR	APPROVED APPLICATION	ICC ES EVALUATION #
- SIMPSON STRONG-BOLT	CONCRETE	#ESR-1771
- SIMPSON TITEN HD (3/8", 1/2" & 3/4" DIA.)	CONCRETE	#ESR-2713
- SIMPSON SET-XP EPOXY	CONCRETE	#ESR-2508
- HILTI KWIK BOLT TZ	CONCRETE	#ESR-1917
- HILTI HIT-RE 500-SD EPOXY	CONCRETE	#ESR-2322
- HILTI KWIK BOLT 3	MASONRY	#ESR-1358
- SIMPSON TITEN HD	MASONRY	#ESR-1056
- SIMPSON WEDGE-ALL	MASONRY	#ESR-1396

SOILS IBC 1704.7 AND TABLE 1704.7

- SITE PREPARATION - PERIODIC
- SOIL COMPACTION - CONTINUOUS
- STRUCTURAL FILL SUIABILITY AND PLACEMENT - PERIODIC DURING PLACEMENT
- OBSERVATION OF SUB GRADES - PERIODIC
- ANY ADDITIONAL REQUIREMENTS STATED IN SOILS REPORT

SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE IBC 1707

- STRUCTURAL WOOD
PERIODIC SPECIAL INSPECTION:
REQUIRED FOR ALL NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, AND HOLD-DOWNS WHERE SHEATHING FASTENER SPACING IS 4" O.C. OR CLOSER (SW-3 AND GREATER, SD-2 AND SD-4).

FOUNDATION & SLAB ON GRADE NOTES

- CONTRACTOR SHALL COMPLY WITH RECOMMENDATIONS IN THE PROJECT SOILS REPORT AND ALL ADDENDUMS, LETTERS, AND OTHER ASSOCIATED DOCUMENTS.
PROJECT SOILS REPORT: #14-0478 BY DUPONT ENGINEERING, INC DATED SEPTEMBER 3, 2014
- ALL FOOTINGS SHALL BEAR ON STRUCTURAL FILL WITH AN ALLOWABLE BEARING CAPACITY OF AT LEAST 1500 PSF. STRUCTURAL FILL UNDER FOOTINGS SHALL BE ACCORDING TO THE FOLLOWING:
CONTINUOUS FOOTINGS.....PER SOILS REPORT
SPOT FOOTINGS.....PER SOILS REPORT
SLABS ON GRADE.....PER SOILS REPORT
UNDER SLAB BASE COURSE.....PER SOILS REPORT
- STRUCTURAL FILL TO EXTEND BEYOND PERIMETER OF FOOTING A MINIMUM OF 6" PER 12" OF FILL DEPTH.
- ALL THE MATERIALS PLACED AT THE SITE FOR THE FOUNDATION AND BUILDING SHALL BE COMPACTED TO 95% OR AS RECOMMENDED IN THE GEOTECHNICAL REPORT.
- FOOTINGS SHALL BE LOCATED A MINIMUM OF 12" BELOW THE NEAREST ADJACENT FINAL GRADE.
- CONTRACTOR SHALL ASSURE THAT FOOTINGS ARE PROPERLY DRAINED AND THAT SOIL IS DRY AND THAT BUILDING HORIZONTAL CLEARANCE FROM FOOTINGS TO ASCENDING SLOPES SHALL BE A MINIMUM OF 25 FEET UNLESS APPROVED BY GEOTECHNICAL ENGINEER. FOOTING TRENCHES TO BE CLEARED OF ALL DELETERIOUS MATERIAL BEFORE CONCRETE IS POURED.
- PROVIDE CRACK CONTROL JOINTS @ 10'-0" O.C. MAX. JOINTS SHOULD BE INSTALLED WITHIN 4 HOURS OF CONCRETE PLACEMENT.
- CONTRACTOR TO FOLLOW ALL SITE PREPARATION RECOMMENDATIONS FROM SOILS REPORT. FOUNDATION STEPS SHALL NOT EXCEED 4 FEET OR 1/2 THE HORIZONTAL DISTANCE BETWEEN STEPS. HORIZONTAL REBAR SHALL BE 12" O.C. THROUGH STEP DOWNS AND EXTEND 48 INCHES EITHER SIDE OF STEP.
- ALLOW FOUNDATION 14 DAYS MINIMUM TO CURE PRIOR TO BACKFILL. PROVIDE BRACING AND/ OR FLOOR FRAMING BEFORE BACKFILLING FOUNDATION WALL.
- CONCRETE SLABS SHALL BE PROTECTED FROM LOSS OF SURFACE MOISTURE FOR NOT LESS THAN 7 DAYS BY USING A CURING COMPOUND CONFORMING TO ASTM C-309 OR BY WET BURLAP OR A PLASTIC MEMBRANE.
- LAP CONTINUOUS REINFORCING BARS WITH CLASS B LAP SPLICE ACCORDING TO CONCRETE LAP SCHEDULE UNDER REINFORCED CONCRETE NOTES. HOOK DISCONTINUOUS ENDS OF ALL TOP BARS WITH ACI STANDARD HOOKS. REINFORCING COVER SHALL BE AS FOLLOWS:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH (EXCEPT SLABS): 3"
CONCRETE EXPOSED TO EARTH OR WEATHER BUT PLACED IN FORMS.....2"
CONCRETE SLABS.....IN CENTER OF SLAB
- WATERPROOFING SHALL BE PLACED BETWEEN SOIL & CONCRETE WHEREVER SOIL IS USED AS A FORM FOR CONCRETE, EXCEPT FOR FOOTINGS.
- PLUMBING INSTALLED PARALLEL TO FOOTINGS SHALL BE INSTALLED ABOVE A 45 DEGREE LINE EXTENDING FROM THE NEAREST BOTTOM EDGE OF THE FOOTING. INSTALLING PLUMBING LINES UNDERNEATH AND PARALLEL TO FOOTINGS IS PROHIBITED.
- WHERE PLUMBING RUNS BELOW AND PERPENDICULAR TO CONTINUOUS FOOTINGS, A PIPE SLEEVE SHALL BE PROVIDED THAT IS TWO PIPE SIZES GREATER THAN THE PIPE PASSING BELOW THE FOOTING. THE MINIMUM PIPE SLEEVE LENGTH SHALL BE THE WIDTH OF THE FOOTING PLUS 2 TIMES THE DEPTH OF THE PLUMBING LINE BELOW THE BOTTOM OF THE FOOTING. SPRAYED ON FOAM MAY BE USED IN LIEU OF A PIPE SLEEVE AND SHALL BE AT LEAST AS LARGE AS THE REQUIRED PIPE SLEEVE SIZE AND LENGTH.
- INSTALLING PLUMBING UNDERNEATH SPOT FOOTINGS IS PROHIBITED. SPOT FOOTINGS ELEVATIONS SHALL BE LOWERED TO KEEP PLUMBING ABOVE TOP OF SPOT FOOTINGS.
- VERTICAL PLUMBING PENETRATIONS THROUGH CONTINUOUS FOOTINGS AND SLABS SHALL BE PROVIDED WITH A PIPE SLEEVE TWO PIPE SIZES GREATER THAN THE PIPE PASSING THROUGH THE FOOTING. SPRAYED ON FOAM MAY BE USED IN LIEU OF A PIPE SLEEVE AND SHALL BE AT LEAST AS LARGE AS THE REQUIRED PIPE SLEEVE SIZE.
- HORIZONTAL PLUMBING PENETRATIONS THROUGH SPOT FOOTINGS ARE PROHIBITED. SPOT FOOTING ELEVATIONS MUST BE LOWERED TO KEEP PLUMBING ABOVE FOOTINGS WHERE POSSIBLE. HORIZONTAL PLUMBING PENETRATIONS IN CONTINUOUS FOOTINGS MUST BE APPROVED BY THE ENGINEER OF RECORD.
- ANY PIPE THAT PASSES THROUGH A FOUNDATION WALL SHALL BE PROVIDED WITH A RELIEVING ARCH. OR A PIPE SLEEVE PIPE SHALL BE BUILT INTO THE FOUNDATION WALL. THE SLEEVE SHALL BE TWO PIPE SIZES GREATER THAN THE PIPE PASSING THROUGH THE WALL. SPRAYED ON FOAM MAY BE USED IN LIEU OF A PIPE SLEEVE SO LONG AS THE FOAM IS AT LEAST AS LARGE AS THE REQUIRED PIPE SLEEVE SIZE.
- ALL REINFORCING SHOWN TO BE HOOKED SHALL HAVE STANDARD ACI HOOKS.
- PLACE CRACK CONTROL JOINTS BY SAW CUTTING @ 14" WIDE x 1 1/4" DEEP WHERE SHOWN. CUTTING IS TO BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT. CONCRETE SLABS SHALL BE PLACED AND FINISHED WITHIN A TOLERANCE OF 1/8 INCH IN EVERY 10 FEET, AS DETERMINED BY PLACING A 10 FOOT STRAIGHT EDGE ON THE SLAB IN ANY DIRECTION. ANY DEVIATION FROM THIS WHICH REQUIRES ADDITIONAL CUTTING OF OTHER BUILDING COMPONENTS SHALL BE THE RESPONSIBILITY OF THE CONCRETE CONTRACTOR.
- CONTACT CLEAN INTERIOR SAND FILL HAVING LESS THAN 10% FINES TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY, ASTM D 1557 AT OPTIMUM MOISTURE CONTENT. SOIL COMPACTION SHALL BE FIELD CONTROLLED BY QUALIFIED LABORATORY OR SOILS ENGINEER, APPROVED BY STRUCTURAL ENGINEER.
- CAST IN ANCHOR BOLTS AND POST INSTALLED THREADED RODS EPOXIED INTO CONCRETE SHALL BE ASTM F1554 GR. 36.
- ALL LANDSCAPING AROUND THE HOME MUST BE GRADED AWAY FROM THE HOME AT A MINIMUM GRADE OF 5% FOR THE FIRST 10 FEET OR AS FAR AS POSSIBLE TO MINIMIZE WATER INFILTRATION INTO THE SUBGRADE.

STRUCTURAL SHEET INDEX

S0.10	PROJECT NOTES & SPECIFICATIONS
S1.10	TYPICAL STRUCTURAL DETAILS
S2.10	FOUNDATION PLAN
S3.10	FLOOR FRAMING PLAN
S4.10	ROOF FRAMING PLAN
S5.10	STRUCTURAL DETAILS
S6.30	STRUCTURAL DETAILS

STRUCTURAL CRITERIA

ANALYSIS ITEMS

GRAVITY LOADS (IBC 2012 TABLE 1607.1 & ASCE 7-10 TABLE C3-1)

ROOF LIVE:	20 PSF
ROOF DEAD:	25 PSF
FLOOR LIVE:	40 PSF (LIVING SPACE)
FLOOR DEAD:	15 PSF

DEFLECTION CRITERIA

ROOF MEMBERS	
Δ(LIVE)	L/360
Δ(TOTAL LOAD)	L/240
FLOOR MEMBERS	
Δ(LIVE)	L/360
Δ(TOTAL LOAD)	L/240
WALLS	
Δ(LIVE)	L/240

SEISMIC DESIGN PARAMETERS (ASCE 7-10 12.8)

SEISMIC DESIGN CATEGORY:	D
SITE CLASS:	II
RISK CATEGORY:	I
IMPORTANCE FACTOR, I_e :	1.00
RESPONSE MOD. FACTOR, R :	6.5
OVER STRENGTH FACTOR, O :	3.0
DEFLECTION AMPLIFICATION FACTOR, C_d :	4.0
BASIC SEISMIC-FORCE-RESISTING SYSTEM(S):	LIGHT FRAMED WALLS SHEATHED W/ WOOD STRUCTURAL PANELS
DESIGN BASE SHEAR, V :	0.0554
SEISMIC DESIGN COEFFICIENT, C_s :	0.450
ANALYSIS PROCEDURE USED:	0.156
Ss:	0.171
Si:	0.360
S0:	
S0s:	

WIND DESIGN PARAMETERS (ASCE 7-10 6.4)

ULTIMATE WIND SPEED:	115 MPH
EXPOSURE:	C
HT. AND EXPOSURE COEFF. λ :	1.32
RISK CATEGORY:	II
COMPONENTS & CLADDING DESIGN WIND LOADS TO BE PER ASCE 7-10	

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS, SPANS, AND CONDITIONS WITH ARCHITECTURAL DRAWINGS. IF ANY OMISSIONS, MISTAKES, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE CONSTRUCTION DRAWINGS, THE ENGINEER SHALL BE PROMPTLY NOTIFIED SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH A FAILURE.
- IF DISCREPANCIES ARE FOUND, THE MORE STRINGENT SPECIFICATION SHALL BE FOLLOWED. CONTRACTOR RESPONSIBLE FOR ADEQUATE BRACING OF STRUCTURAL MEMBERS, WALLS, AND NON-STRUCTURAL ITEMS DURING CONSTRUCTION.
- THE ENGINEER AND HIS CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE WORK HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY OMISSIONS, MISTAKES, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE WORK PRODUCT, THE ENGINEER SHALL BE PROMPTLY NOTIFIED SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH A FAILURE.
- MANY PORTIONS OF THESE DRAWINGS, NOTES AND SPECIFICATIONS ARE THE RESULT OF DEMANDS BY VARIOUS APPROVING AGENCIES THAT MUST BE PERFORMED AS PART OF THIS WORK. ANY ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE ENGINEER SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER, BUT OF THE PARTIES RESPONSIBLE FOR MAKING THE CHANGE AND TAKING ACTION TO DO SO. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE ENGINEER OR THE CONTRADICTION TO THE ENGINEER'S WORK PRODUCT, THE INTENT, AND/OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER, BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION. THE ENGINEER SHOULD BE CONTACTED IN MATTERS OF ANY AND ALL CHANGES TO THE DRAWINGS AND SPECIFICATIONS HEREIN WITHOUT EXCEPTION.
- NON STRUCTURAL FRAMING REQUIREMENTS ARE NOT SPECIFIED ON STRUCTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL FRAMING REQUIRED.
- CONTRACTOR SHALL ASSURE THAT ALL PRODUCTS AND HARDWARE ARE USED PER MANUFACTURER'S RECOMMENDATIONS.

DEFERRED SUBMITTALS

- FOR ALL DEFERRED SUBMITTAL ITEMS, CONTRACTOR SHALL SUBMIT CONSTRUCTION DETAILS AND DRAWINGS PRIOR TO CONSTRUCTION WITH CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS BEING CONSTRUCTED.
- ALL DEFERRED SUBMITTAL ITEMS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE CITY BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE FOLLOWING ITEMS SHALL BE CONSIDERED AS DEFERRED SUBMITTAL ITEMS:
A. ENGINEERED WOOD ROOF TRUSSES
B. ENGINEERED WOOD FLOOR TRUSSES

POST INSTALLED ANCHORS

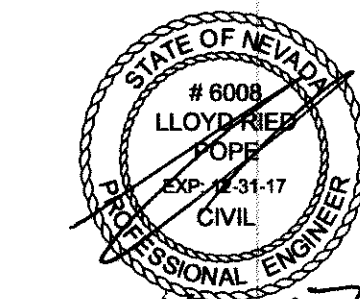
- POST INSTALLED ANCHORS REQUIRE SPECIAL INSPECTION AS STATED IN THE STATEMENT OF SPECIAL INSPECTIONS SECTION. COPIES OF SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL.
- POST INSTALLED ANCHORS SHALL BE AS FOLLOWS:
A. INSTALLED IN CONCRETE
- SIMPSON TITEN HD (3/8", 1/2", AND 3/4" DIAMETERS)
- SIMPSON STRONG-BOLT
- HILTI KWIK BOLT TZ
- SIMPSON SET-XP EPOXY
- HILTI HIT-RE 500-SD EPOXY
B. INSTALLED IN MASONRY
- HILTI KWIK BOLT 3
- SIMPSON TITEN HD
- SIMPSON WEDGE-ALL
- INSTALLATION AND MIN. EMBEDMENT SHALL BE IN ACCORDANCE WITH SPECS. OR AS SPECIFIED ON DRAWINGS, WHICH EVER IS GREATER.
- CONTRACTOR TO FOLLOW MANUFACTURERS REQUIREMENTS FOR INSTALLATION OF EXPANSION ANCHORS INCLUDING DRILL BIT DIAMETER, DRILLED HOLE DEPTH, MINIMUM EDGE DISTANCE AND MINIMUM SPACING REQUIREMENTS.
- WHERE ANCHOR BOLTS ARE SET IN MASONRY WALLS, FILL BLOCK CELLS WITH CONCRETE FOR BOLTED COURSE AND ONE COURSE BELOW ANCHOR ELEVATION.

220 DESERT ROSE DR.

221 W DELAMAR LLC

HENDERSON, NV

PROJECT NOTES & SPECIFICATIONS



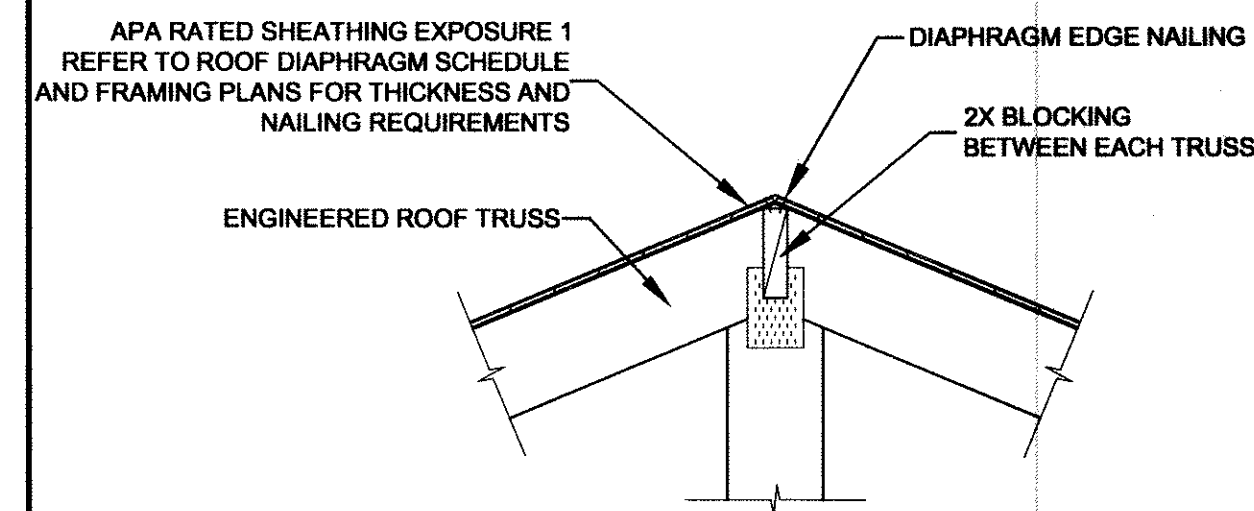
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4/5/17

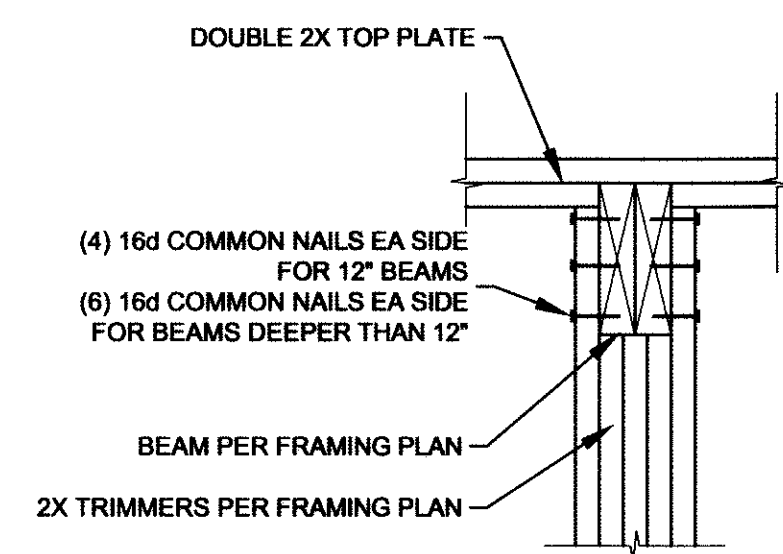
DRAWN BY: PROJECT NO:
RDB 1170087

SHEET

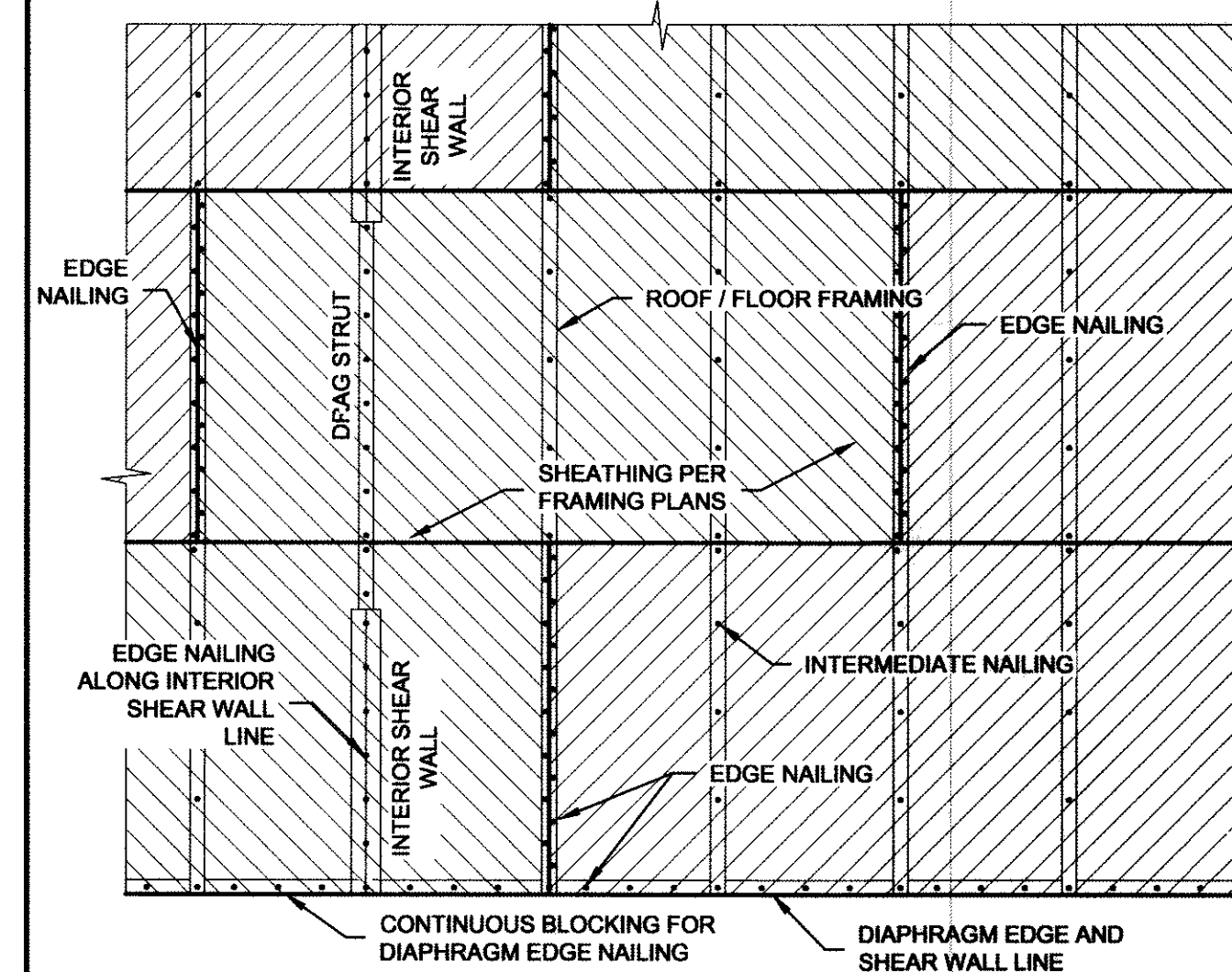
S0.10



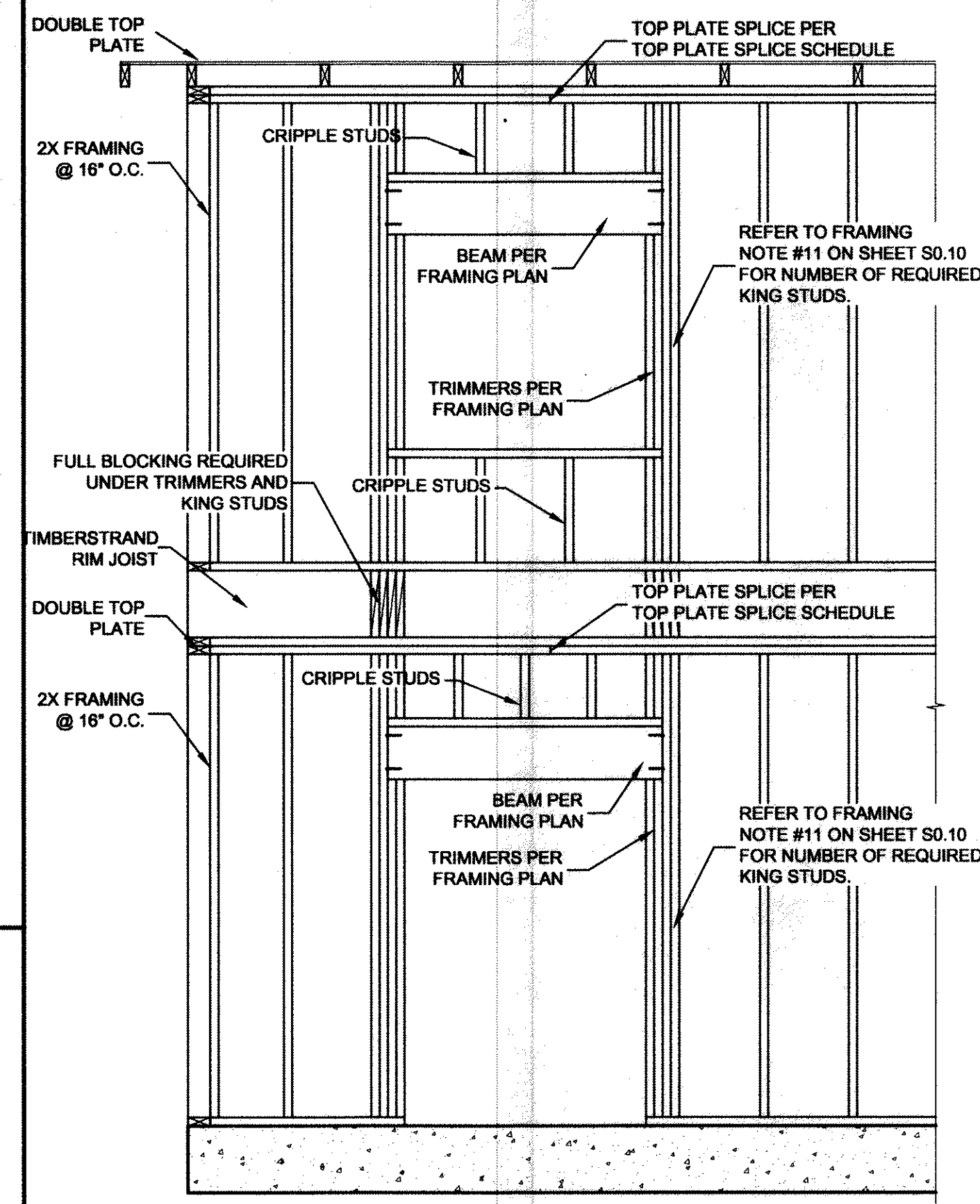
12 RIDGE BLOCKING W/O VENTING
S1.10 SCALE:NTS



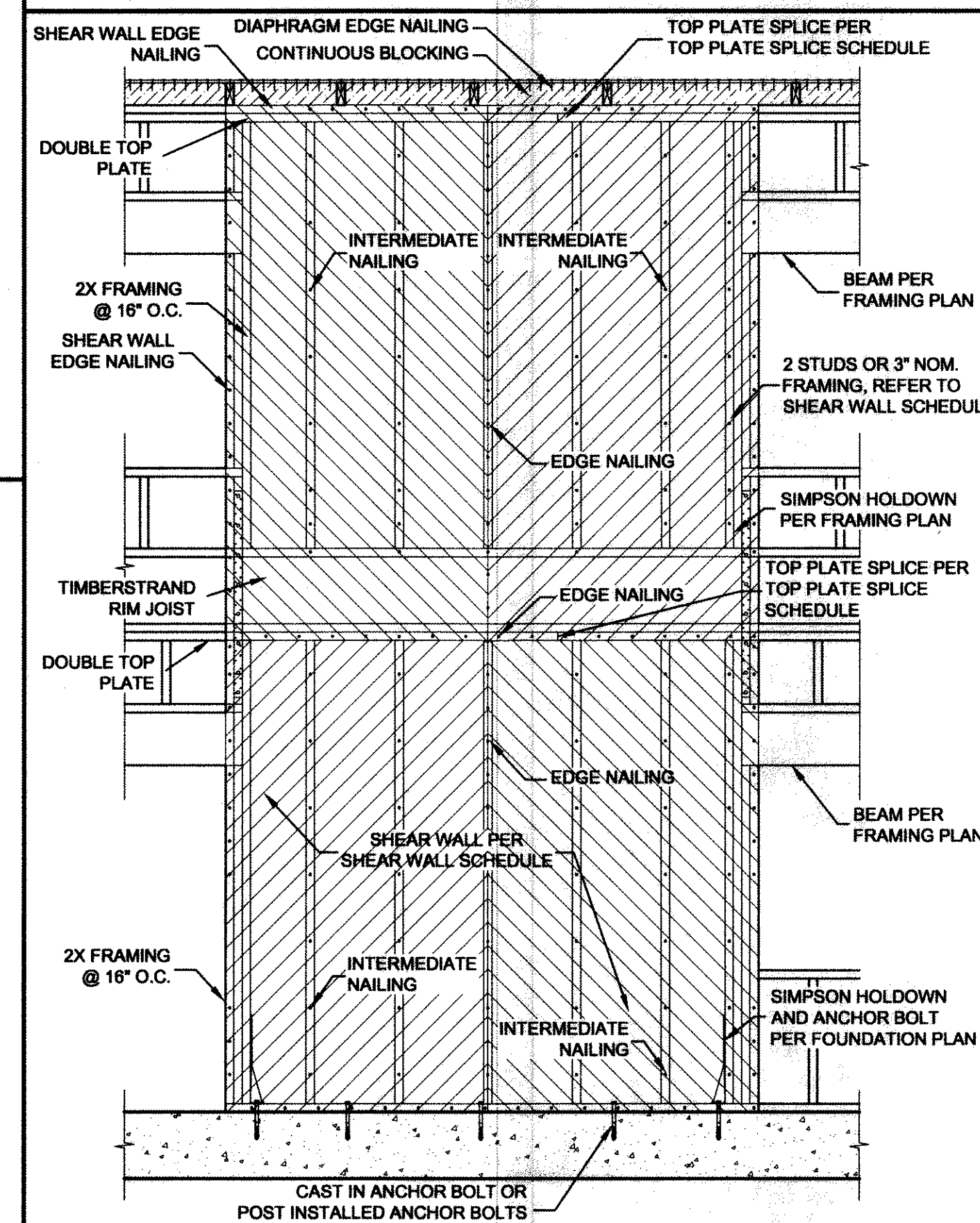
11 BEAM POCKET
S1.10 SCALE:NTS



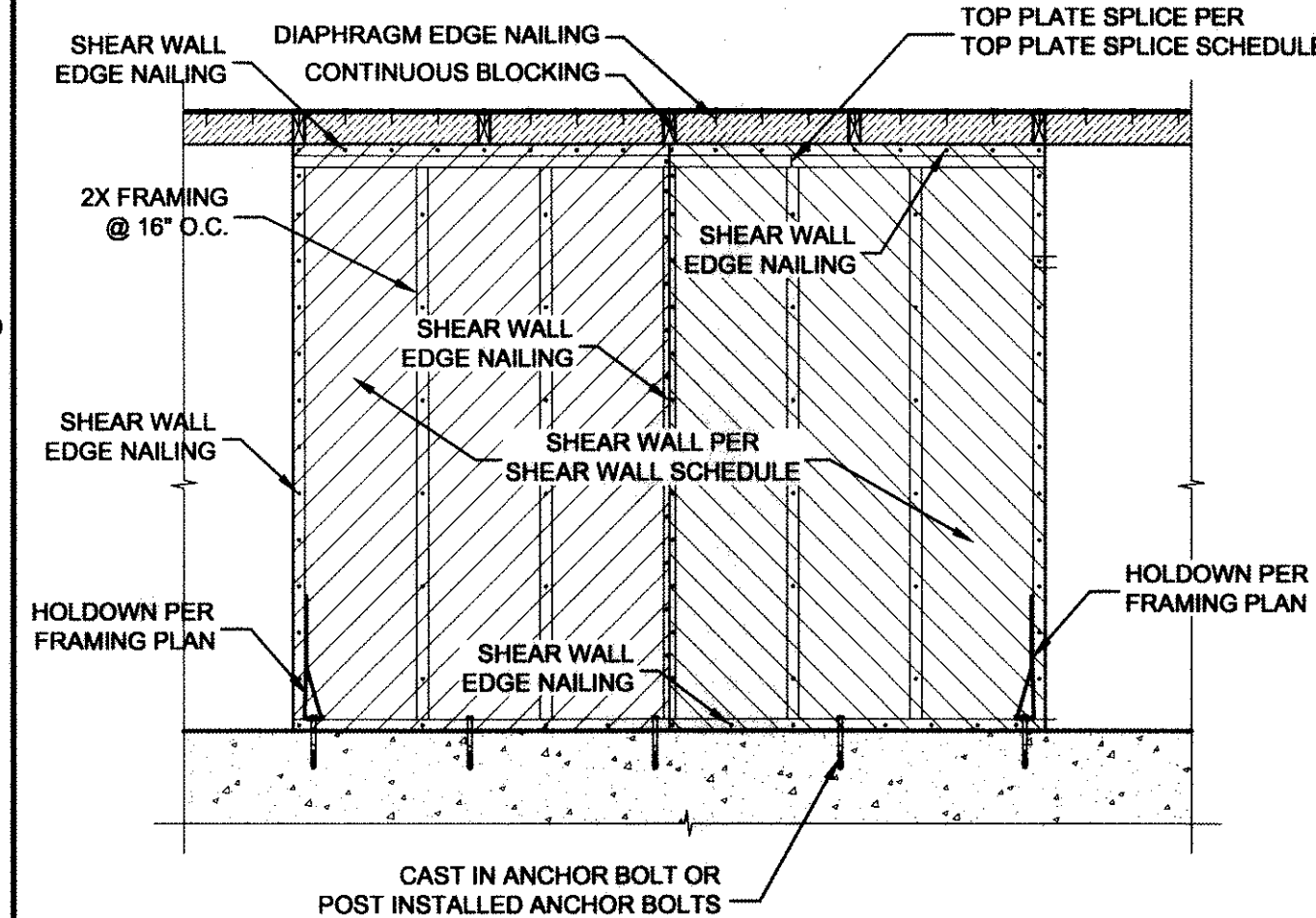
10 UNBLOCKED WOOD DIAPHRAGM
S1.10 SCALE:NTS



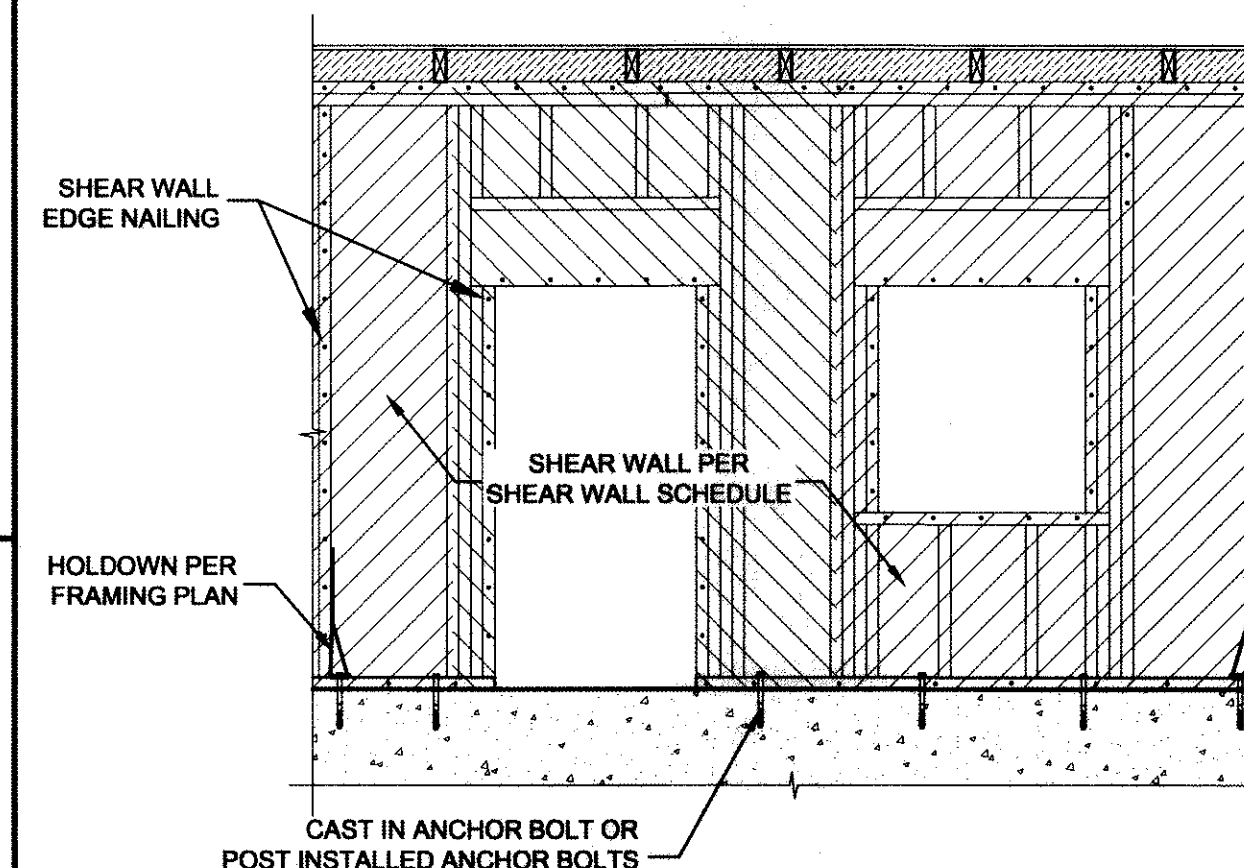
9 OPENING IN MULTIPLE STORY WOOD STUD FRAMED WALL
S1.10 SCALE:NTS



7 2 STORY SHEAR WALL
S1.10 SCALE: NTS



6 SHEAR WALL ON SLAB OR STEM WALL
S1.10 SCALE: NTS



5 PERFORATED SHEAR WALL
S1.10 SCALE:NTS

CONNECTION OF TOP LOADED AND SIDE LOADED MULTIPLE PLY BEAMS

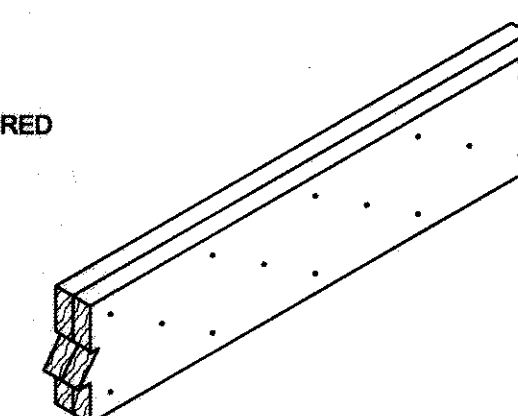
1 1/4\"/>

- (2) PLIES:
UP TO 12\"/>

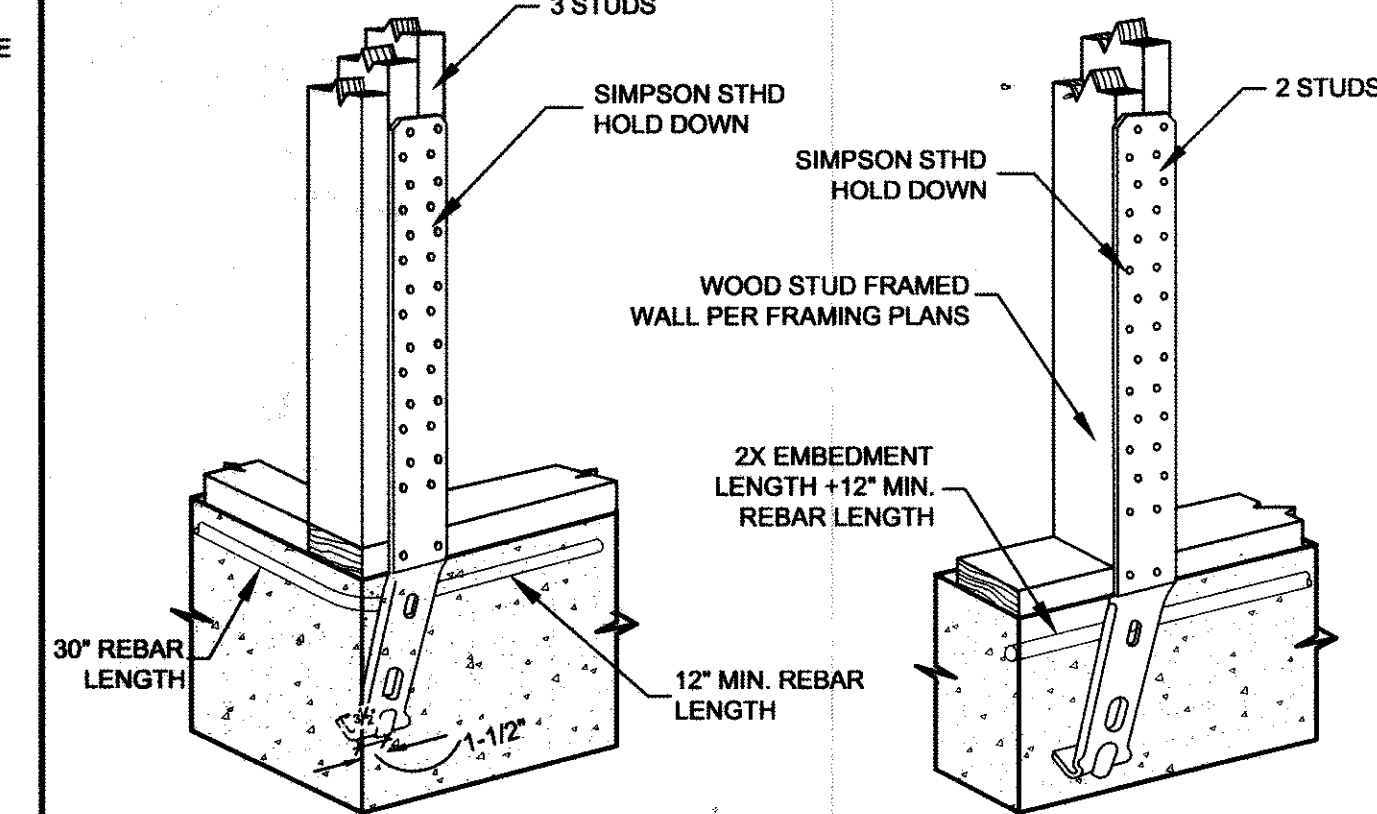
NOTE: NAILED CONNECTIONS REQUIRE AN ADDITIONAL ROW OF NAILS WHEN NAIL SIZE IS SMALLER THAN SPECIFIED ABOVE

3 1/2\"/>

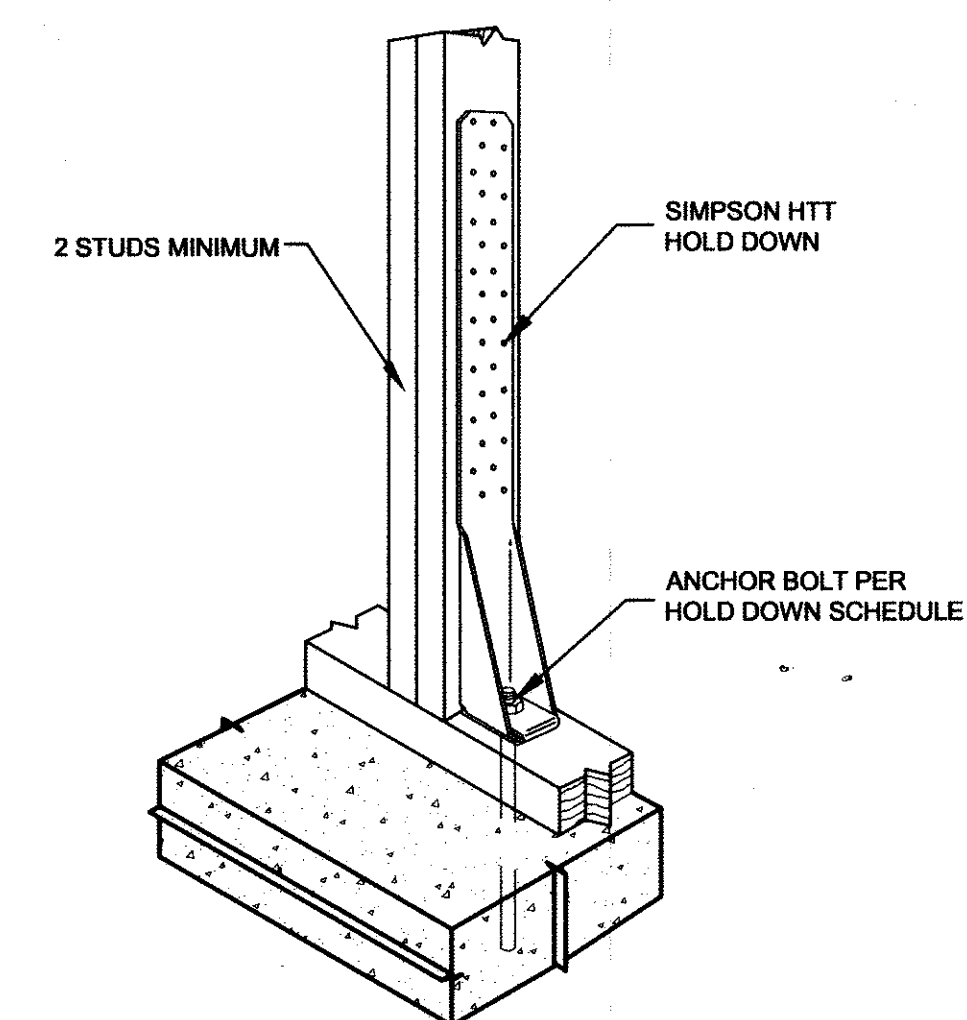
MINIMUM OF 2 ROWS 1/2\"/>



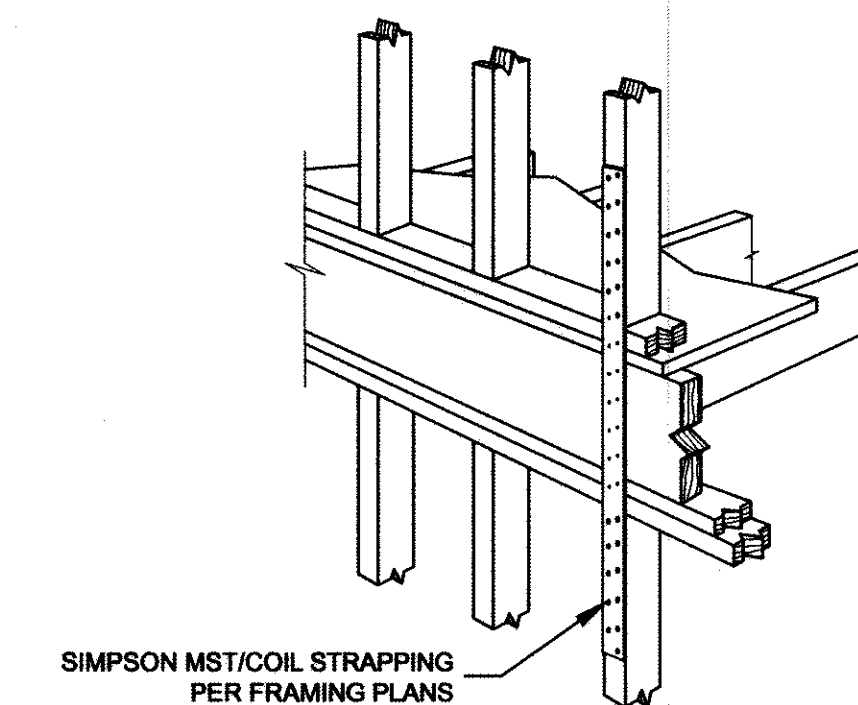
4 MULTIPLE PLY BEAM FASTENING
S1.10 SCALE:NTS



3 SIMPSON STHD
S1.10 SCALE:NTS



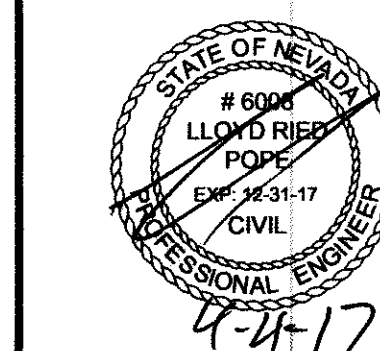
2 SIMPSON HTT
S1.10 SCALE:NTS



1 SIMPSON MST/COIL STRAP
S1.10 SCALE:NTS

220 DESERT ROSE DR.
221 W DELAMAR LLC
HENDERSON, NV

TYPICAL STRUCTURAL DETAILS



DATE: 4/5/17
DRAWN BY: RDB PROJECT NO: 1170087

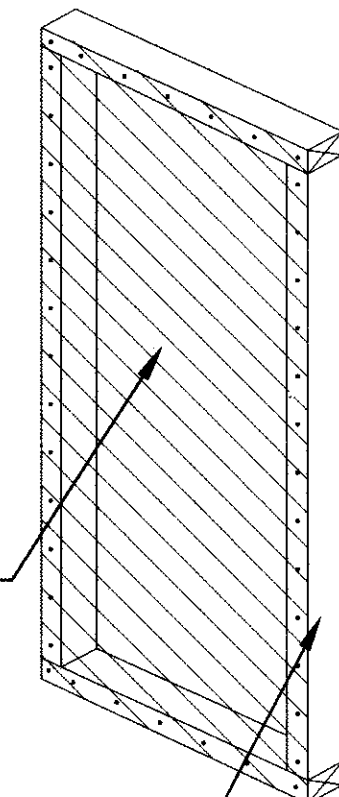
SHEET
S1.10

120 EAST 100 SOUTH SUITE 15-B
ST. GEORGE, UTAH
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(FAX) 435-425-1788
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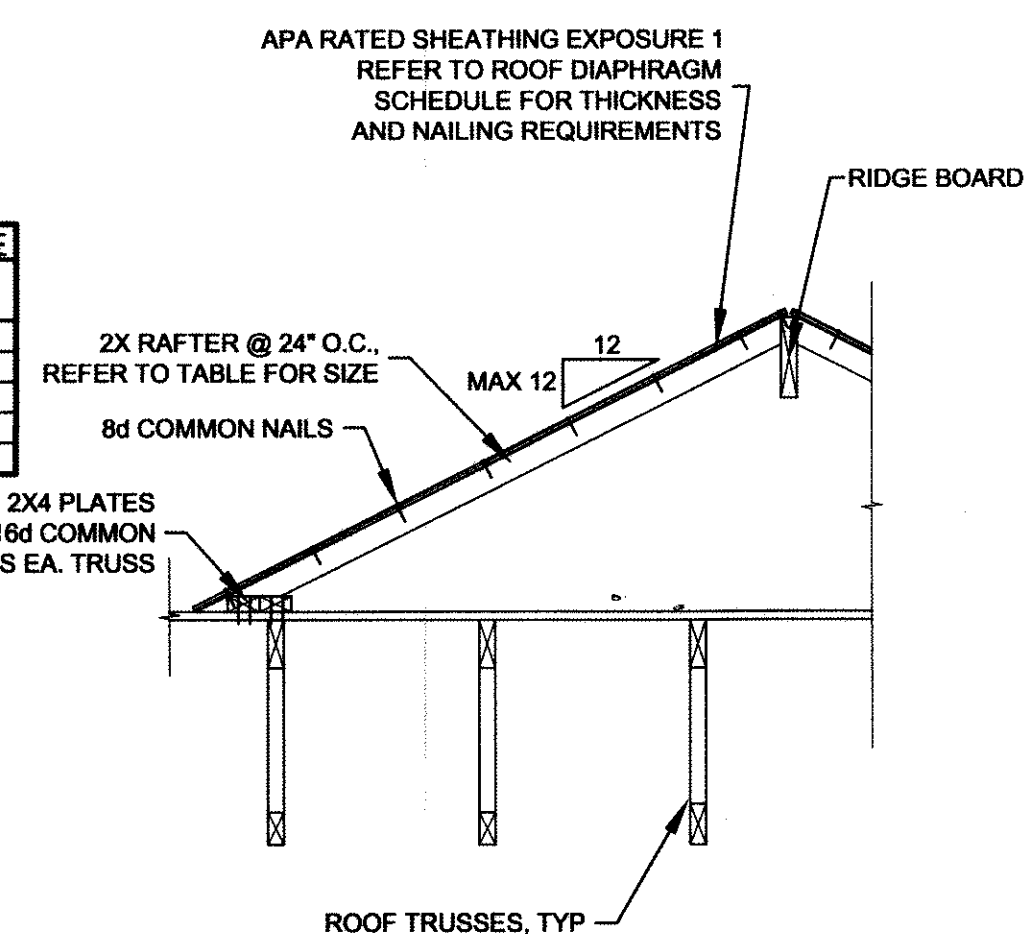
NO. DATE BY REVISION



- 2X4 FRAMING ALL AROUND -

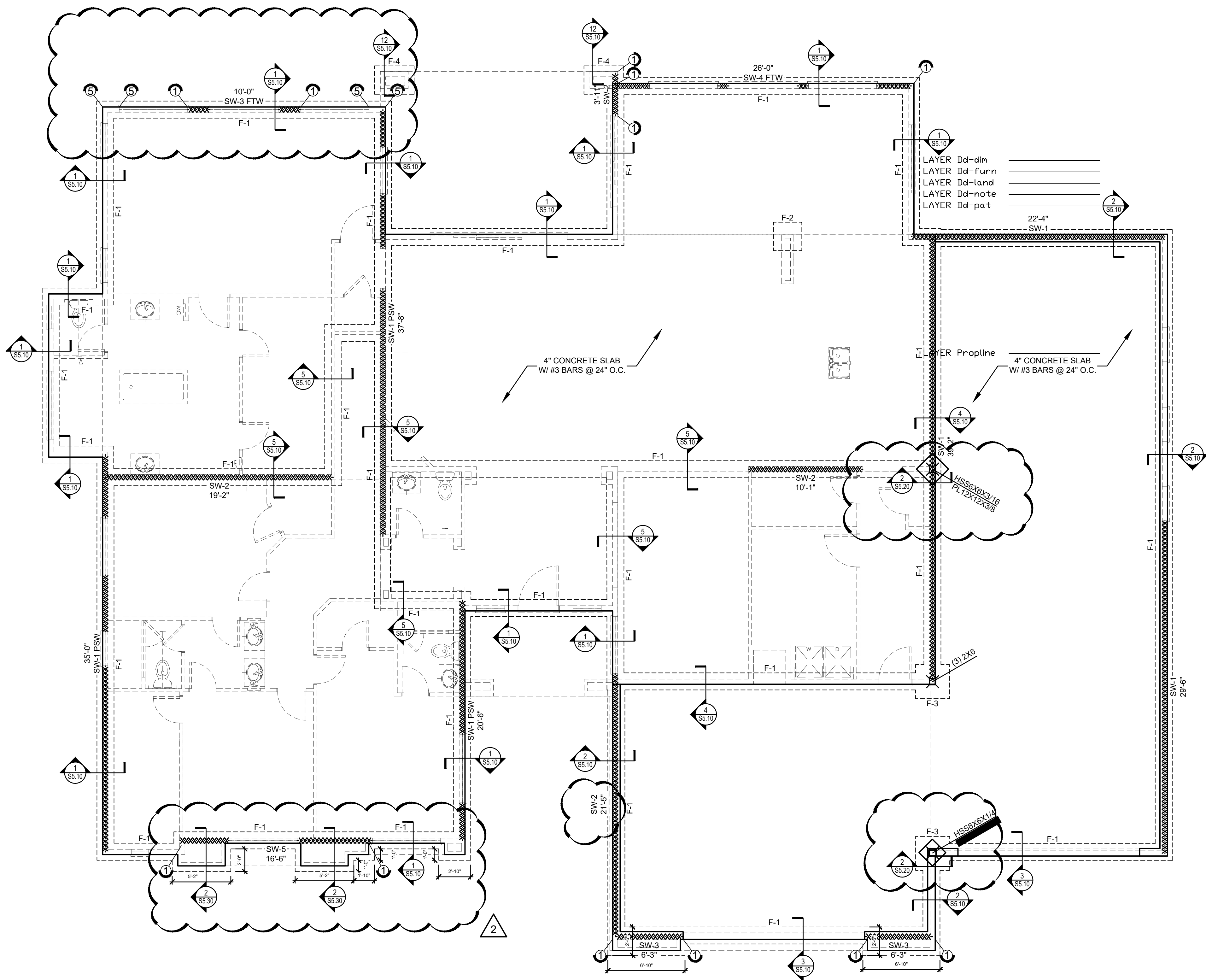


RAFTER TABLE	
HORZ. SPAN	RAFTER SIZE
5'-0"	2X4
8'-0"	2X6
10'-0"	2X8
13'-0"	2X10
15'-0"	2X12



CONCRETE CORNERS & INTERSECTIONS





1 FOUNDATION PLAN
S2.10 SCALE: 1/4"=1'-0"

SYMBOL LEGEND	
1'-0" SW-1	WOOD FRAMED BEARING/SHEAR WALL
FOOTING	
COLUMN SIZE	WOOD COLUMN
COLUMN BASE	

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES, OMISSIONS, OR ERRORS BEFORE COMMENCING CONSTRUCTION.
- REFER TO SHEET S0.10 FOR ALL CONCRETE, FOUNDATION, AND SUBGRADE SPECIFICATIONS
- CONTRACTOR TO FOLLOW ALL SITE PREPARATIONS FROM SOILS REPORT
- ALL LANDSCAPING AROUND THE HOME MUST BE GRADED AWAY FROM THE HOME AT A MINIMUM GRADE OF 5% FOR THE FIRST 10 FEET OR AS FAR AS POSSIBLE TO MINIMIZE WATER INFILTRATION INTO THE SUBGRADE

WOOD WALL ANCHOR BOLT SCHEDULE		
MARK	SILL PLATE	ANCHOR BOLTS AND SPACING
SW-1	2" NOMINAL	1/2" Ø X 10" ANCHOR BOLTS @ 48" O.C.
SW-2	2" NOMINAL	1/2" Ø X 10" ANCHOR BOLTS @ 32" O.C.
SW-3	2" NOMINAL	1/2" Ø X 10" ANCHOR BOLTS @ 23" O.C.
SW-4	2" NOMINAL	1/2" Ø X 10" ANCHOR BOLTS @ 17" O.C.
SW-5	2" NOMINAL	5/8" Ø X 10" ANCHOR BOLTS @ 24" O.C.
SW-6	2" NOMINAL	5/8" Ø X 10" ANCHOR BOLTS @ 20" O.C.
SW-7	2" NOMINAL	3/4" Ø X 10" ANCHOR BOLTS @ 19" O.C.
SW-PF	(3) 2" NOMINAL	5/8"ØX14" BOLT @ CENTER OF SILL PLATE

NOTES:

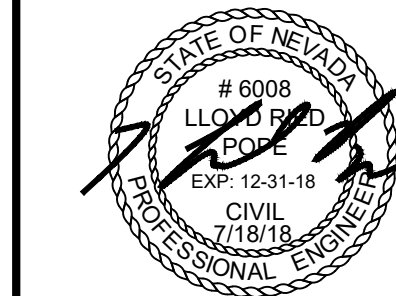
- ANCHOR BOLTS FOR INTERIOR SHEAR WALLS SHALL BE SIMPSON STRONG-BOLTS, SIMPSON TITEN HD, OR HILTI KWIK BOLT 1Z ANCHORS OF THE SAME DIAMETER AND SPACING W/ 4-1/2" MINIMUM EMBEDMENT. INTERIOR SHEAR WALL ANCHOR BOLTS MAY ALSO BE EPOXIED INTO CONCRETE WITH SIMPSON SET-XP OR HILTI HIT-RE 500-SD EPOXY AND A MINIMUM 4-1/2" EMBEDMENT.
- *PSW INDICATES A PERFORATED SHEAR WALL REQUIRING ANCHOR BOLTS THE FULL LENGTH OF THE SILL PLATE

SIMPSON HOLDOWN SCHEDULE			
MARK	TYPE	ANCHORAGE AND NOTES	FASTENERS
1	LSTHD8*	NO ANCHOR BOLT REQUIRED	(20) 16d
2	CS14	CUT LENGTH = JOIST DEPTH + 30"	(26) 10d
3	CS16	CUT LENGTH = JOIST DEPTH + 22"	(20) 10d
4	MSTC48B3	NO ANCHOR BOLT REQUIRED	(38) 10d
5	STHD10*	NO ANCHOR BOLT REQUIRED	(28) 16d

*USE RJ HOLDDOWNS FOR RIM JOIST APPLICATIONS
**USE SIMPSON SET-XP EPOXY

FOOTING SCHEDULE			
MARK	FOOTING SIZE	REINFORCEMENT	FOOTING TYPE
F-1	18" X 10" X CONT.	(2) #4 BARS CONT.	CONTINUOUS
F-2	30" SQ. X 10"	(3) #4 BARS EA. WAY	SPOT
F-3	36" SQ. X 10"	(4) #4 BARS EA. WAY	SPOT
F-4	30" X 42" X 10"	(4) #4 BARS EA. WAY	SPOT

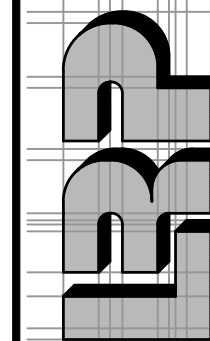
220 DESERT ROSE DR.
221 W DELAMAR LLC
HENDERSON, NV
FOUNDATION PLAN



DATE:
7/18/18
DRAWN BY: PROJECT NO:
RDB 1170087

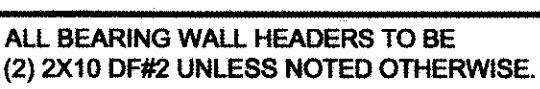
SHEET
S2.10

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(EMAIL) lrpope@lrwest.com



L. R. POPE ENGINEERING INC.
STRUCTURAL ENGINEERS, CIVIL ENGINEERS & SURVEYORS

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SIMPSON HOLDDOWN SCHEDULE			
MARK	TYPE	ANCHORAGE AND NOTES	FASTENERS
①	LSTDH*	NO ANCHOR BOLT REQUIRED	(20) 16d
②	CS14	CUT LENGTH = JOIST DEPTH + 30"	(26) 10d
③	CS16	CUT LENGTH = JOIST DEPTH + 22"	(20) 10d
④	MSTC4B3	NO ANCHOR BOLT REQUIRED	(38) 10d

*USE RJ HOLDDOWS FOR RIM JOIST APPLICATIONS
 **USE SIMPSON SET-XP EPOXY

GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS AND NOTIFY ENGINEERS OF DISCREPANCIES, OMISSIONS, OR ERRORS BEFORE CONSTRUCTION.
2. REFER TO SHEET S0.10 FOR ALL GENERAL FRAMING AND MATERIAL SPECIFICATIONS.
3. SEE ARCHITECTURAL PLANS FOR ANY ADDITIONAL DIMENSIONS
4. CONTRACTOR TO FOLLOW ALL SITE PREPARATIONS FROM SOILS REPORT.
5. ENGINEERED TRUSS MANUFACTURER TO COORDINATE MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DRAWINGS
6. ALL SHOP DRAWINGS TO BE REVIEWED AND APPROVED BY I.R. HOPE ENGINEERING INC.
7. CONTRACTOR TO FOLLOW ALL SIMPSON INSTALLATION REQUIREMENTS.
8. REFER TO FRAMING NOTES FOR ADDITIONAL REQUIREMENTS

1. ALL BEARING AND SHEAR WALLS TO BE FRAMED ACCORDING TO THE FOLLOWING MINIMUM REQUIREMENTS:
UP TO 10'-0" WALL - 2X4 DF #2 STUDS @ 16" O.C.
UP TO 15'-0" WALL - 2X6 DF #2 STUDS @ 16" O.C.

2. ALL INTERIOR PARTITION WALLS TO BE FRAMED WITH 2X4 NOM. DF#2 STUDS @ 16" O.C.

MARK	WOOD FLOOR DIAPHRAGM	
FD-1	<p>23/32" (48/24 SPAN RATING) TONGUE AND GROOVE APA RATED SHEATHING EXPOSURE 1 UNBLOCKED WITH 10d COMMON NAILS @ 6" O.C. ALONG DIAPHRAGM PERIMETER, SHEAR WALL LINES, AND SUPPORTED PANEL EDGES AND 10d COMMON NAILS @ 12" O.C. IN THE FIELD. FLOOR SHEATHING SHALL BE GLUED TO ALL SUPPORTS IN ADDITION TO REQUIRED DIAPHRAGM NAILING.</p> <p>ALI OWABLE SHEAR = 285 PLF (CASE 1), 215 PLF (OTHER CASES)</p>	

TC-1: 8-16d NAILS= 8 X 93 X 1.6 = 1,190 LBS (MINIMUM)
TC-2: 10-16d NAILS= 1,488 LBS
TC-3: 15-16d NAILS= 2,230 LBS
TC-4: 20-16d NAILS= 2,976 LBS
TC-5: 24-16d NAILS= 3,570 LBS
TC-6: SIMPSON MST 48 STRAP= 4,845 LBS
TC-7: SIMPSON MST 60 STRAP= 6,400 LBS

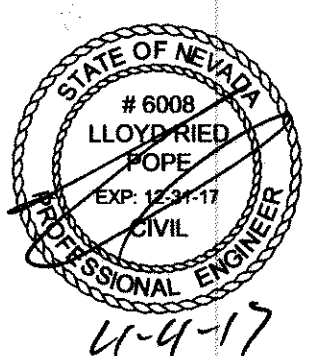
WOOD FRAMED SHEAR WALL CONNECTION

SHEARWALL REQUIREMENTS	
SW-1	71/8" APA RATED SHEATHING EXPOSURE 1 W/ 8d COMMON NAILS @ 6" O.C. ALONG PANEL EDGES & 12" O.C. @ INTERMEDIATE SUPPORTS. BOLT 2X SILL PLATE TO FOUNDATION WITH 1/2"x3" ANCHOR BOLTS @ 22"x3"x3" PLATE WASHERS @ 48" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 12" O.C. ALLOWABLE SHEAR = 140 PLF
SW-2	71/8" APA RATED SHEATHING EXPOSURE 1 W/ 8d COMMON NAILS @ 6" O.C. ALONG PANEL EDGES & 12" O.C. @ INTERMEDIATE SUPPORTS. BOLT 2X SILL PLATE TO FOUNDATION WITH 1/2"x3"x3" ANCHOR BOLTS & 0.229"x3"x3" PLATE WASHERS @ 32" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 6" O.C. ALLOWABLE SHEAR = 280 PLF
SW-3	71/8" APA RATED SHEATHING EXPOSURE 1 W/ 8d COMMON NAILS @ 4" O.C. ALONG PANEL EDGES & 12" O.C. @ INTERMEDIATE SUPPORTS. BOLT 2X SILL PLATE TO FOUNDATION WITH 1/2"x3"x3" ANCHOR BOLTS & 0.229"x3"x3" PLATE WASHERS @ 23" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 4-3/4" O.C. ALLOWABLE SHEAR = 350 PLF
SW-4	71/8" APA RATED SHEATHING EXPOSURE 1 WITH 8d COMMON NAILS @ 3" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ALL PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 1/2"x3"x3" ANCHOR BOLTS & 0.229"x3"x3" STEEL PLATE WASHERS @ 17" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 3-1/2" O.C. ALLOWABLE SHEAR = 490 PLF
SW-5	71/8" APA RATED SHEATHING EXPOSURE 1 WITH 8d COMMON NAILS AT 2" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ALL PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 5/8"x3"x3" ANCHOR BOLTS & 0.229"x3"x3" STEEL PLATE WASHERS AT 24" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 20d COMMON NAILS AT 4-1/2" O.C. ALLOWABLE SHEAR = 440 PLF
SW-6	15/32" APA RATED SHEATHING EXPOSURE 1 WITH 10d COMMON NAILS AT 2" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ALL PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 5/8"x3"x3" ANCHOR BOLTS & 0.229"x3"x3" STEEL PLATE WASHERS AT 24" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 20d COMMON NAILS AT 3-1/2" O.C. ALLOWABLE SHEAR = 770 PLF
SW-7	19/32" APA RATED SHEATHING EXPOSURE 1 WITH 10d COMMON NAILS AT 2" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ALL PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 3/4"x3"x3" ANCHOR BOLTS & 0.229"x3"x3" STEEL PLATE WASHERS AT 19" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 20d COMMON NAILS AT 3" O.C. ALLOWABLE SHEAR = 870 PLF

SW-PF	<p>7/16" APA RATED SHEATHING EXPOSURE 1 WITH 8 COMMON NAILS @ 3" O.C. INTO ALL FRAMING MEMBERS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ADJOINING PANEL EDGES. BOLT TRIPLE 2X SILL PLATE TO FOUNDATION W/ (1) 5/8"x14" ANCHOR BOLT & 0.229"x3"x3" STEEL PLATE WASHER IN THE CENTER OF THE SILL PLATE.</p>
<p>NOTE: 'PSW' INDICATES A PERFORATED SHEAR WALL. SEE DETAIL 5/S1.1 'FTW' INDICATES A SHEAR WALL WITH REINFORCED OPENING. SEE DETAIL 2/S1.20</p>	

STRUCTURAL ENGINEERS, CIVIL ENGINEERS & SURVEYORS

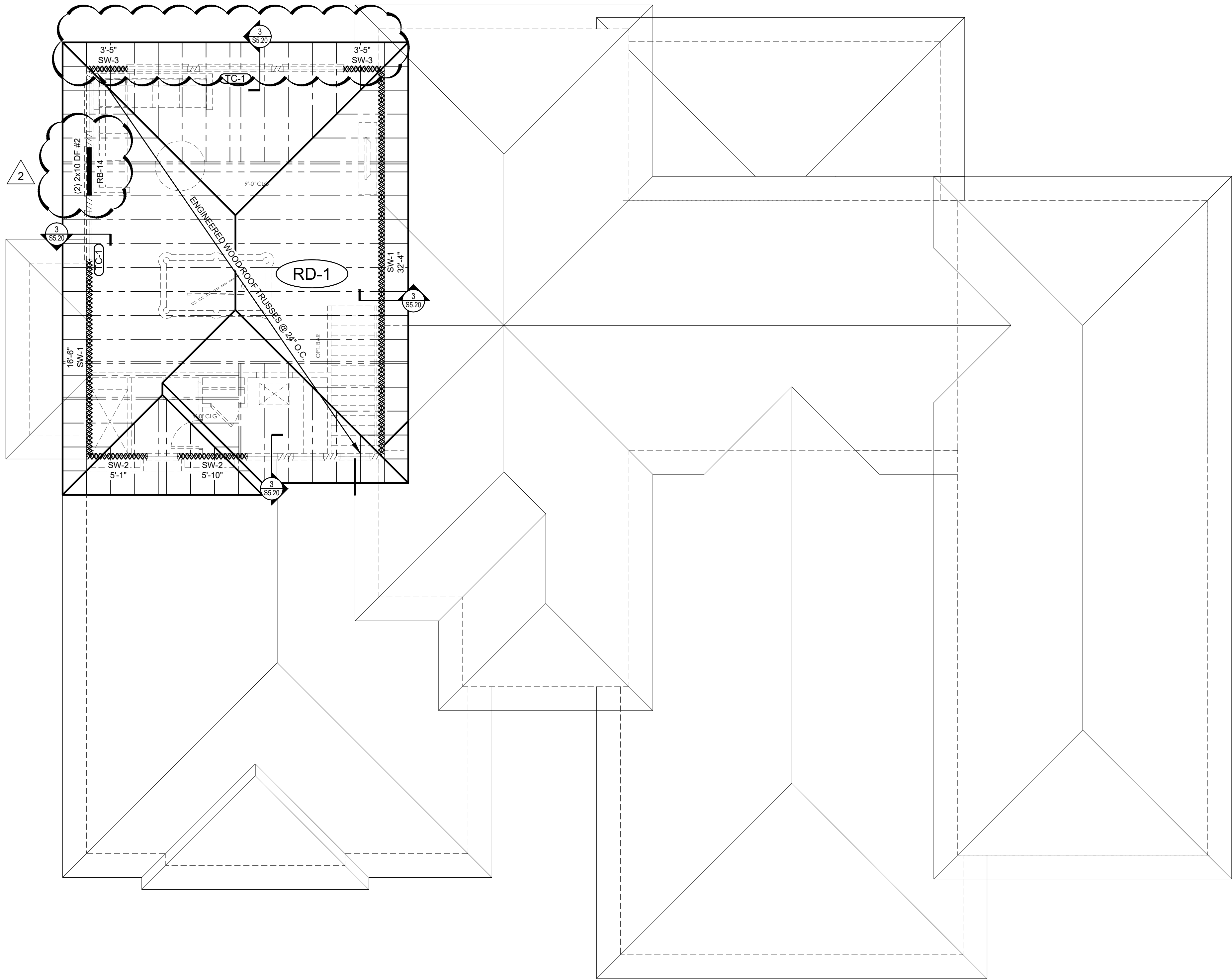
IL COORDINAMENTO DI ANI



DATE:
4/5/17

DRAWN BY: PROJECT NO
RDB 1170087

SHEET
S3.10



ALL BEARING WALL HEADERS TO BE
(2) 2X10 DF#2 UNLESS NOTED OTHERWISE.

1 ROOF FRAMING PLAN
S4.10 SCALE: 3/16"=1'-0"

SYMBOL LEGEND	
	WOOD FRAMED BEARING WALL
	WOOD FRAMED BEARING/SHEAR WALL
	ROOF TRUSS / JOIST
	BEAM
	COLUMN SYMBOL
	EDGE NAILING FULL LENGTH OF TRUSS
GENERAL NOTES	
1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES, OMISSIONS, OR ERRORS BEFORE CONSTRUCTION.	
2. REFER TO SHEET S0.10 FOR ALL GENERAL FRAMING AND MATERIAL SPECIFICATIONS.	
3. SEE ARCHITECTURAL PLANS FOR ANY ADDITIONAL DIMENSIONS	
4. CONTRACTOR TO FOLLOW ALL SITE PREPARATIONS FROM SOILS REPORT.	
5. ENGINEERED TRUSS MANUFACTURER TO COORDINATE MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DRAWINGS	
6. ALL SHOP DRAWINGS TO BE REVIEWED AND APPROVED BY L.R. POPE ENGINEERING INC.	
7. CONTRACTOR TO FOLLOW ALL SIMPSON INSTALLATION REQUIREMENTS.	
8. REFER TO FRAMING NOTES FOR ADDITIONAL REQUIREMENTS	
WOOD FRAMED WALLS	
1. ALL EXTERIOR WALLS TO BE FRAMED ACCORDING TO THE FOLLOWING MINIMUM REQUIREMENTS: UP TO 10'-0" WALL - 2X4 DF #2 STUDS @ 16" O.C. UP TO 15'-0" WALL - 2X6 DF #2 STUDS @ 16" O.C.	
2. ALL INTERIOR WALLS TO BE FRAMED WITH 2X4 NOM. DF#2 STUDS @ 16" O.C.	
WOOD ROOF DIAPHRAGM	
MARK	RD-1
7/16" (24/16 SPAN RATING) APA RATED SHEATHING EXPOSURE 1 UNBLOCKED WITH 8d COMMON NAILS @ 6" O.C. ALONG DIAPHRAGM PERIMETER, SHEAR WALL LINES, AND SUPPORTED PANEL EDGES AND 8d COMMON NAILS @ 12" O.C. IN THE FIELD. ALLOWABLE SHEAR = 230 PLF (CASE 1), 170 PLF (OTHER CASES)	
TOP PLATE SPLICE SCHEDULE	
TC-1: 8-16d NAILS= 8 X 93 X 1.6 = 1,190 LBS (MINIMUM) TC-2: 10-16d NAILS= 1,488 LBS TC-3: 15-16d NAILS= 2,230 LBS TC-4: 20-16d NAILS= 2,976 LBS TC-5: 24-16d NAILS= 3,570 LBS TC-6: SIMPSON MST 48 STRAP= 4,845 LBS TC-7: SIMPSON MST 60 STRAP= 6,400 LBS	

WOOD FRAMED SHEAR WALL SCHEDULE	
MARK	SHEARWALL REQUIREMENTS
SW-1	7/16" APA RATED SHEATHING EXPOSURE 1 W/ 8d COMMON NAILS @ 6" O.C. ALONG PANEL EDGES & 12" O.C. @ INTERMEDIATE SUPPORTS. BOLT 2X SILL PLATE TO FOUNDATION WITH 1/2"Ø X10" ANCHOR BOLTS & 0.229"X3"X3" PLATE WASHERS @ 48" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 12" O.C. ALLOWABLE SHEAR = 140 PLF
SW-2	7/16" APA RATED SHEATHING EXPOSURE 1 W/ 8d COMMON NAILS @ 6" O.C. ALONG PANEL EDGES & 12" O.C. @ INTERMEDIATE SUPPORTS. BOLT 2X SILL PLATE TO FOUNDATION WITH 1/2"ØX10" ANCHOR BOLTS & 0.229"X3"X3" PLATE WASHERS @ 32" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 6" O.C. ALLOWABLE SHEAR = 260 PLF
SW-3	7/16" APA RATED SHEATHING EXPOSURE 1 W/ 8d COMMON NAILS @ 4" O.C. ALONG PANEL EDGES & 12" O.C. @ INTERMEDIATE SUPPORTS. BOLT 2X SILL PLATE TO FOUNDATION WITH 1/2"ØX10" ANCHOR BOLTS & 0.229"X3"X3" PLATE WASHERS @ 23" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 4-3/4" O.C. ALLOWABLE SHEAR = 350 PLF
SW-4	7/16" APA RATED SHEATHING EXPOSURE 1 WITH 8d COMMON NAILS @ 3" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ADJOINING PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 1/2"ØX10" ANCHOR BOLTS & 0.229"X3"X3" STEEL PLATE WASHERS @ 17" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 16d COMMON NAILS @ 3-1/2" O.C. ALLOWABLE SHEAR = 490 PLF
SW-5	7/16" APA RATED SHEATHING EXPOSURE 1 WITH 8d COMMON NAILS AT 2" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ALL PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 5/8"ØX10" ANCHOR BOLTS & 0.229"X3"X3" STEEL PLATE WASHERS AT 24" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 20d COMMON NAILS AT 4-1/2" O.C. ALLOWABLE SHEAR = 640 PLF
SW-6	15/32" APA RATED SHEATHING EXPOSURE 1 WITH 10d COMMON NAILS AT 2" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ALL PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 5/8"ØX10" ANCHOR BOLTS & 0.229"X3"X3" STEEL PLATE WASHERS AT 20" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 20d COMMON NAILS AT 3-1/2" O.C. ALLOWABLE SHEAR = 770 PLF
SW-7	19/32" APA RATED SHEATHING EXPOSURE 1 WITH 10d COMMON NAILS AT 2" O.C. ALONG PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ALL PANEL EDGES. BOLT 2X SILL PLATE TO FOUNDATION W/ 3/4"ØX10" ANCHOR BOLTS & 0.229"X3"X3" STEEL PLATE WASHERS AT 19" O.C. NAIL 2X SILL PLATE TO WOOD FLOOR WITH 20d COMMON NAILS AT 3" O.C. ALLOWABLE SHEAR = 870 PLF
SW-PF	7/16" APA RATED SHEATHING EXPOSURE 1 WITH 8d COMMON NAILS @ 3" O.C. INTO ALL FRAMING MEMBERS. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR DOUBLE 2X. NAILS SHALL BE STAGGERED AT ADJOINING PANEL EDGES. BOLT TRIPLE 2X SILL PLATE TO FOUNDATION W/ (1) 5/8"ØX14" ANCHOR BOLT & 0.229"X3"X3" STEEL PLATE WASHER IN THE CENTER OF THE SILL PLATE.
NOTE: 'PSW' INDICATES A PERFORATED SHEAR WALL. SEE DETAIL 5/S1.10 'FTW' INDICATES A SHEAR WALL WITH REINFORCED OPENING. SEE DETAIL 3/S1.20	

220 DESERT ROSE DR.
221 W DELAMAR LLC
HENDERSON, NV
ROOF FRAMING PLAN



DATE:
6/27/18
DRAWN BY: PROJECT NO:
RDB 1170087

SHEET
S4.10

1240 EAST 100 SOUTH SUITE 15-B
ST. GEORGE, UTAH

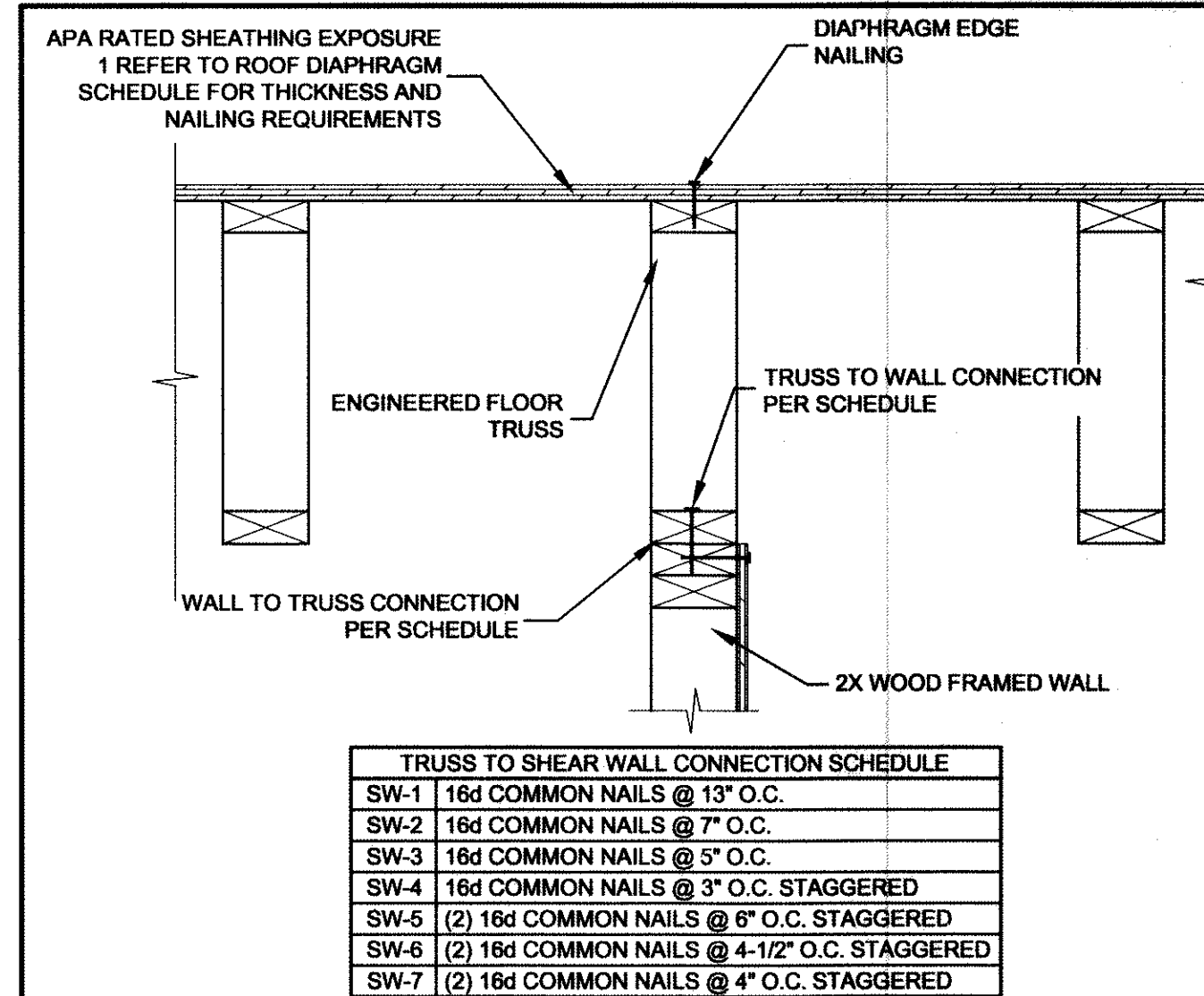
(PHONE) 435-628-1476
(FAX) 435-628-1788

(EMAIL) lrpope@lrwest.com

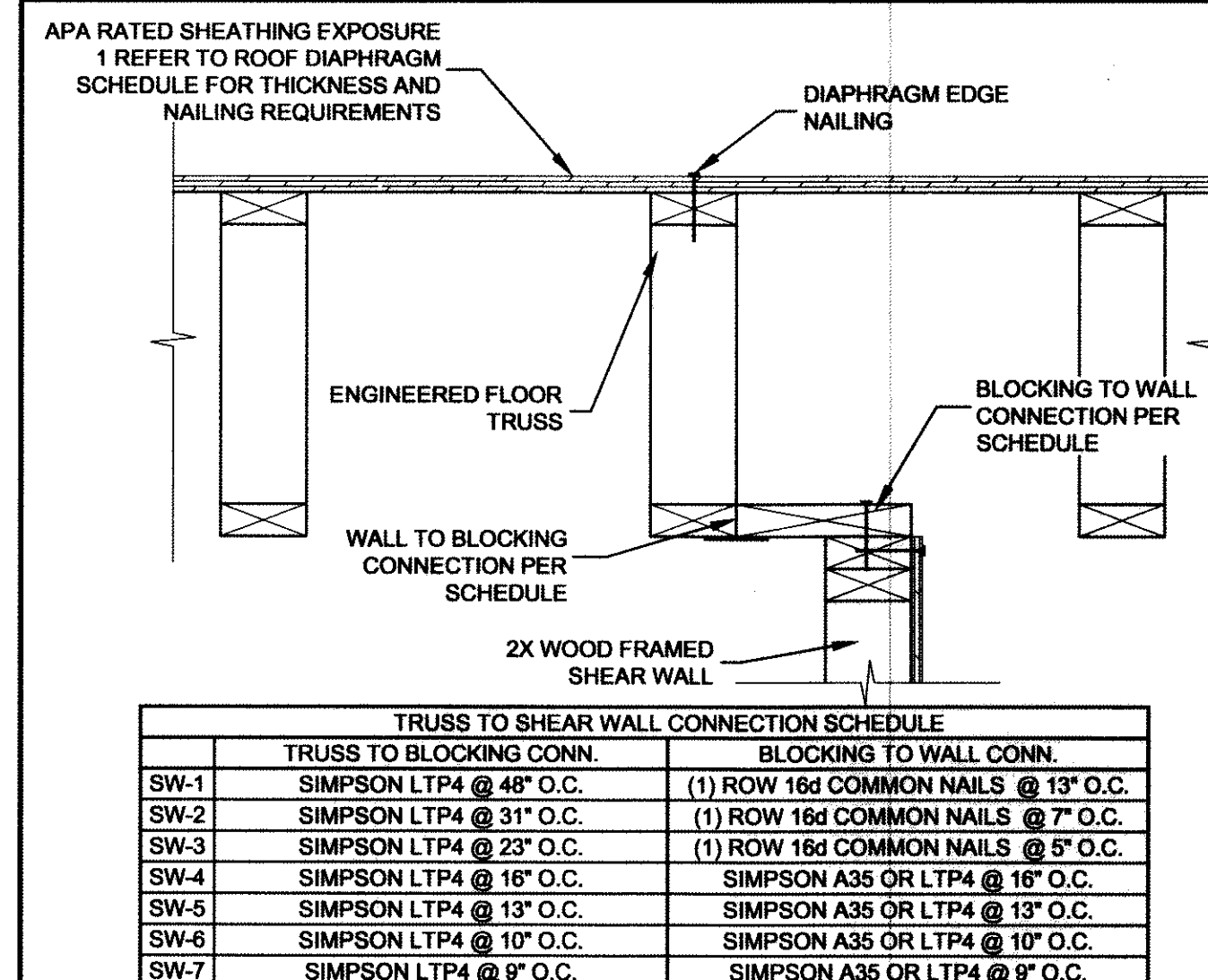
L. R. POPE ENGINEERING INC.

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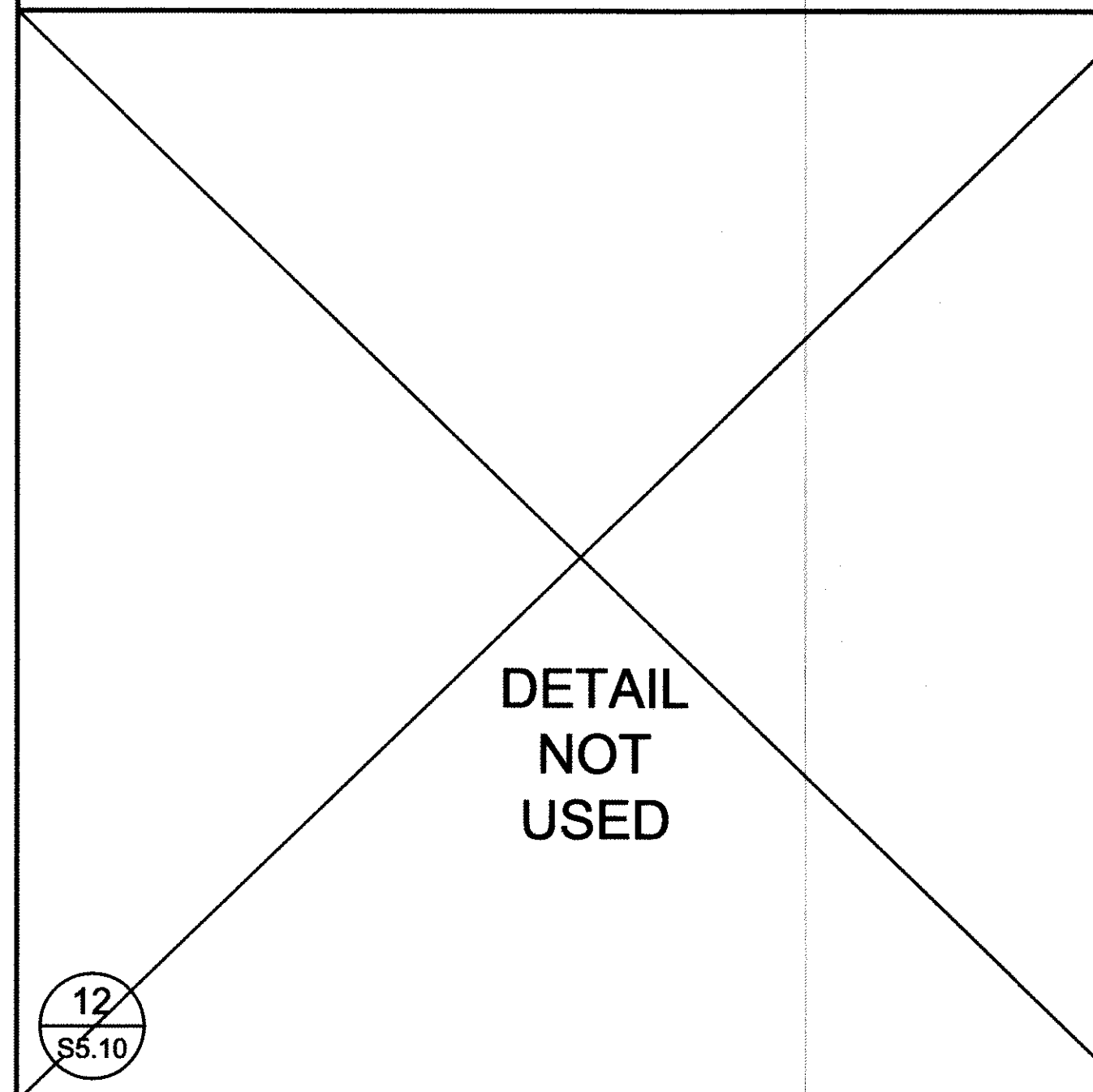
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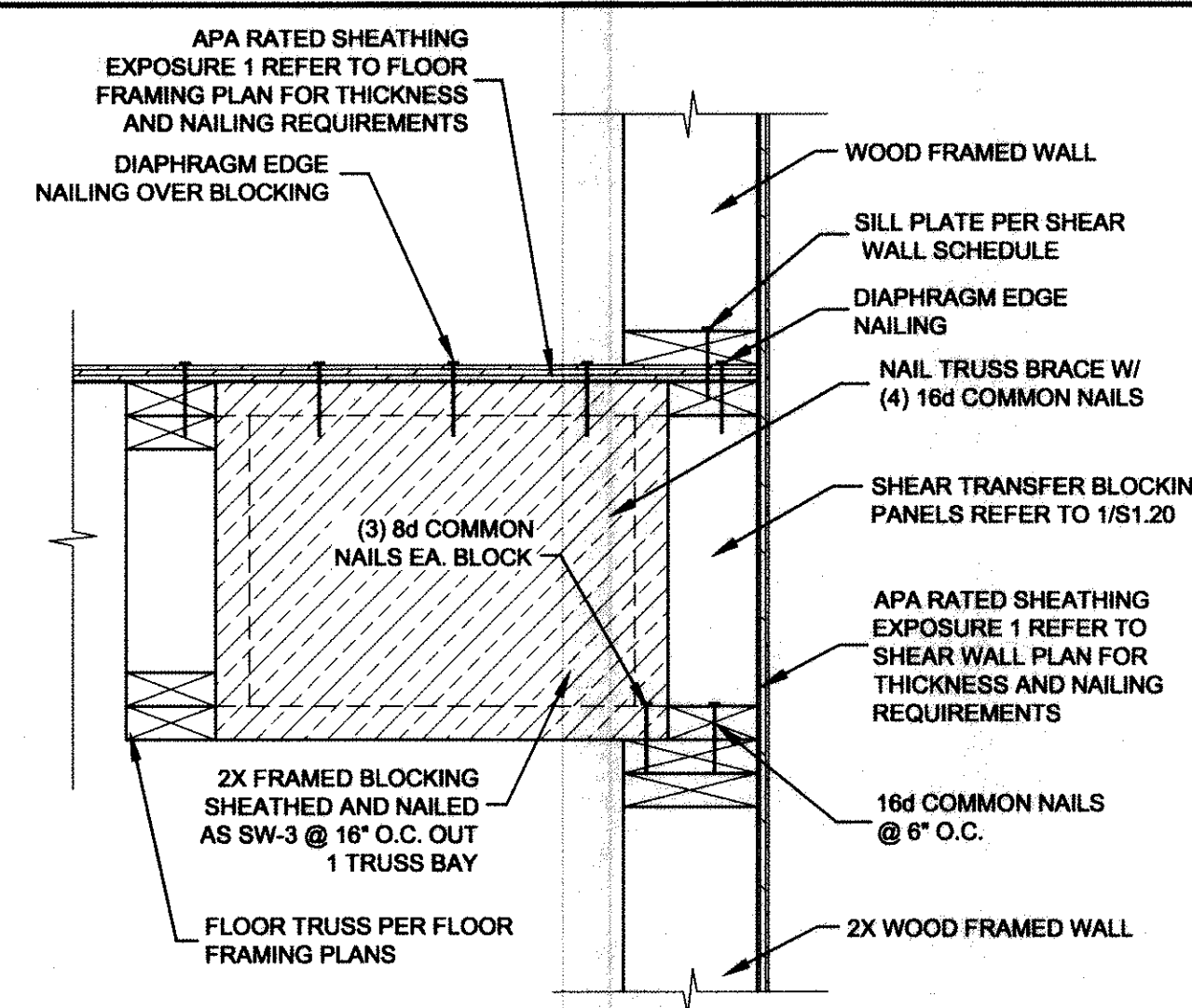
10 FLOOR TRUSSES PARALLEL TO SHEAR WALL
S5.10 SCALE:NTS



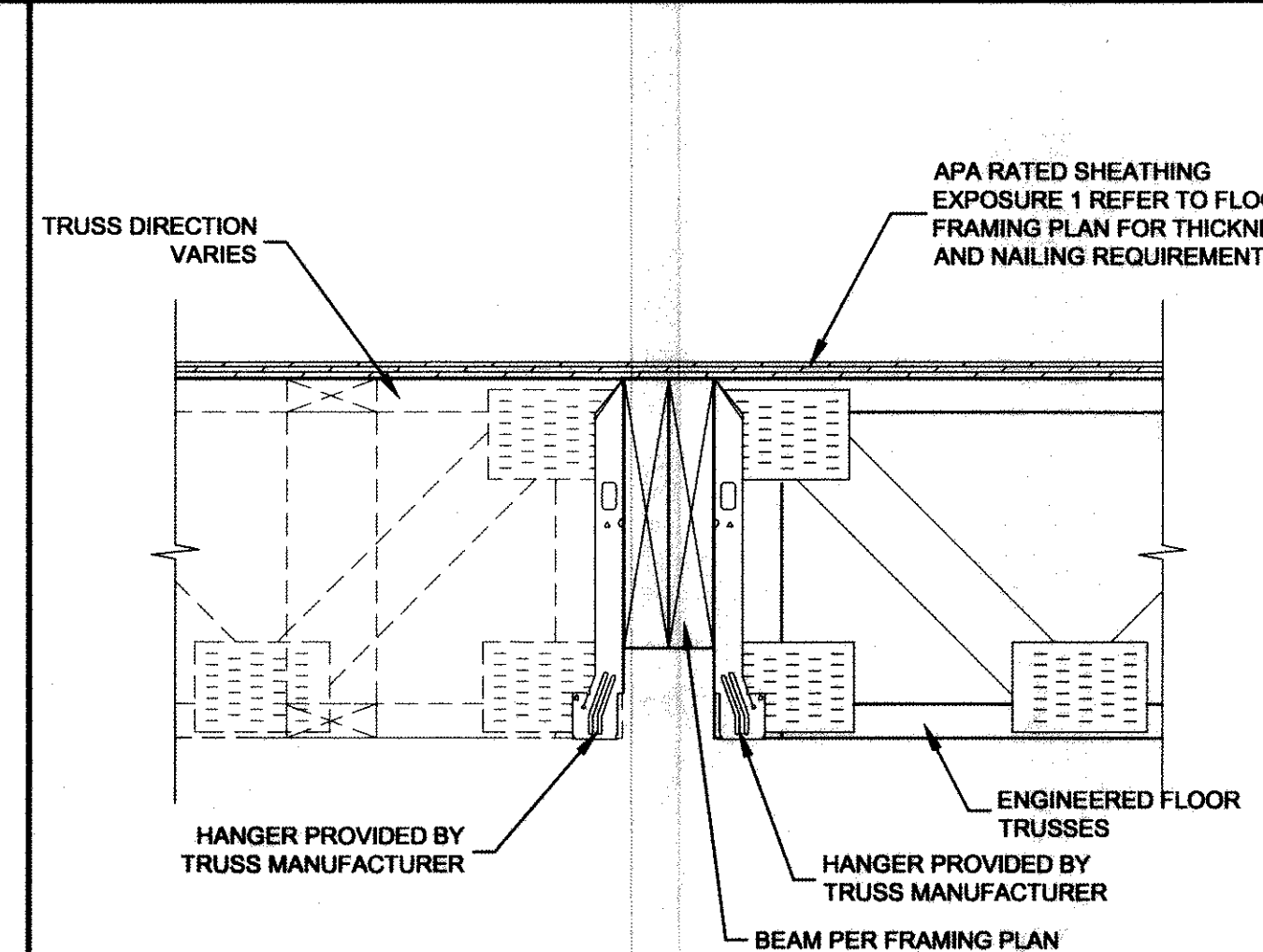
11 FLOOR TRUSSES PARALLEL TO SHEAR WALL
S5.10 SCALE:NTS



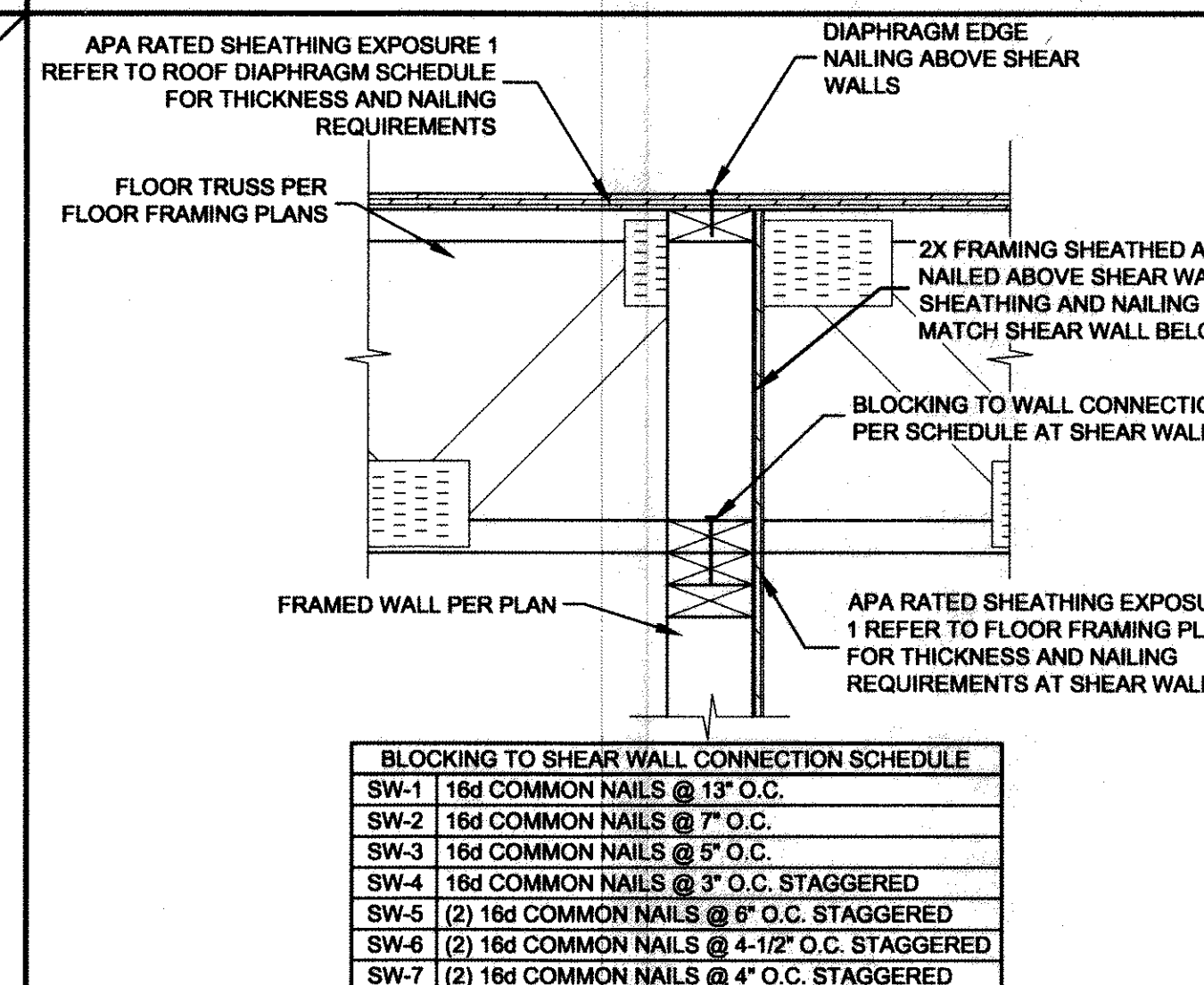
12
S5.10



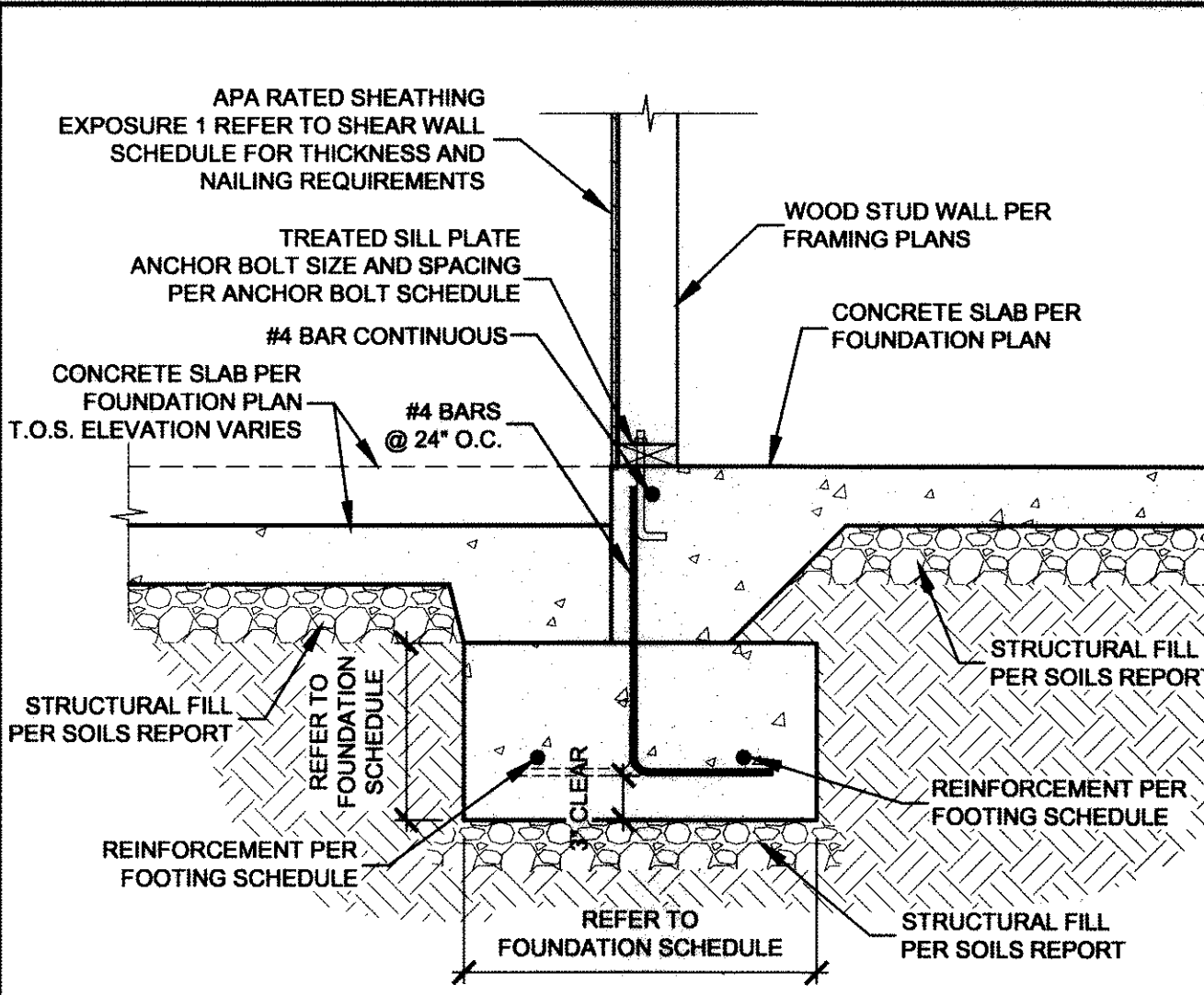
7 FLOOR TRUSSES ON BEARING/SHEAR WALL
S5.10 SCALE:NTS



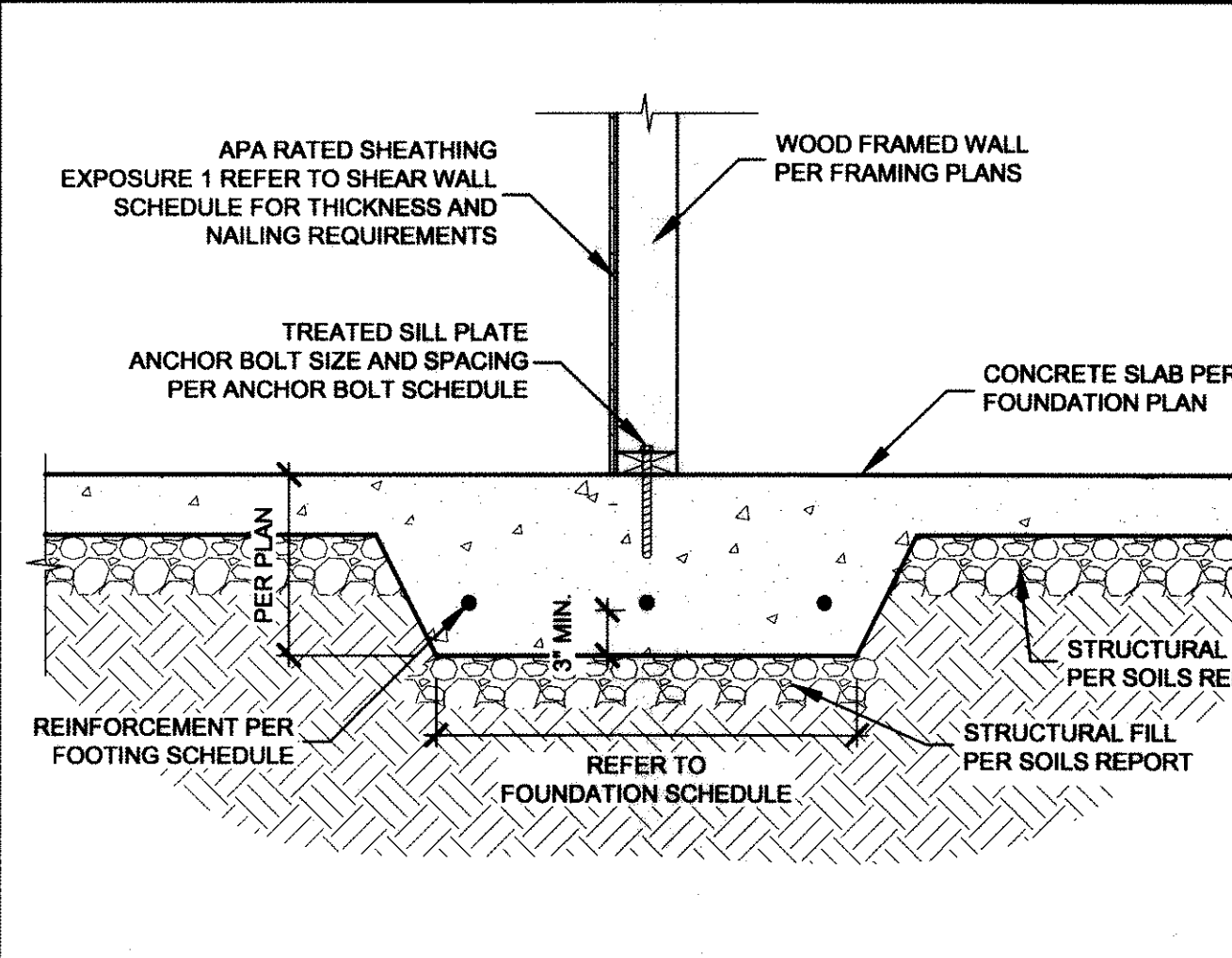
8 FLUSH BEAM
S5.10 SCALE: NTS



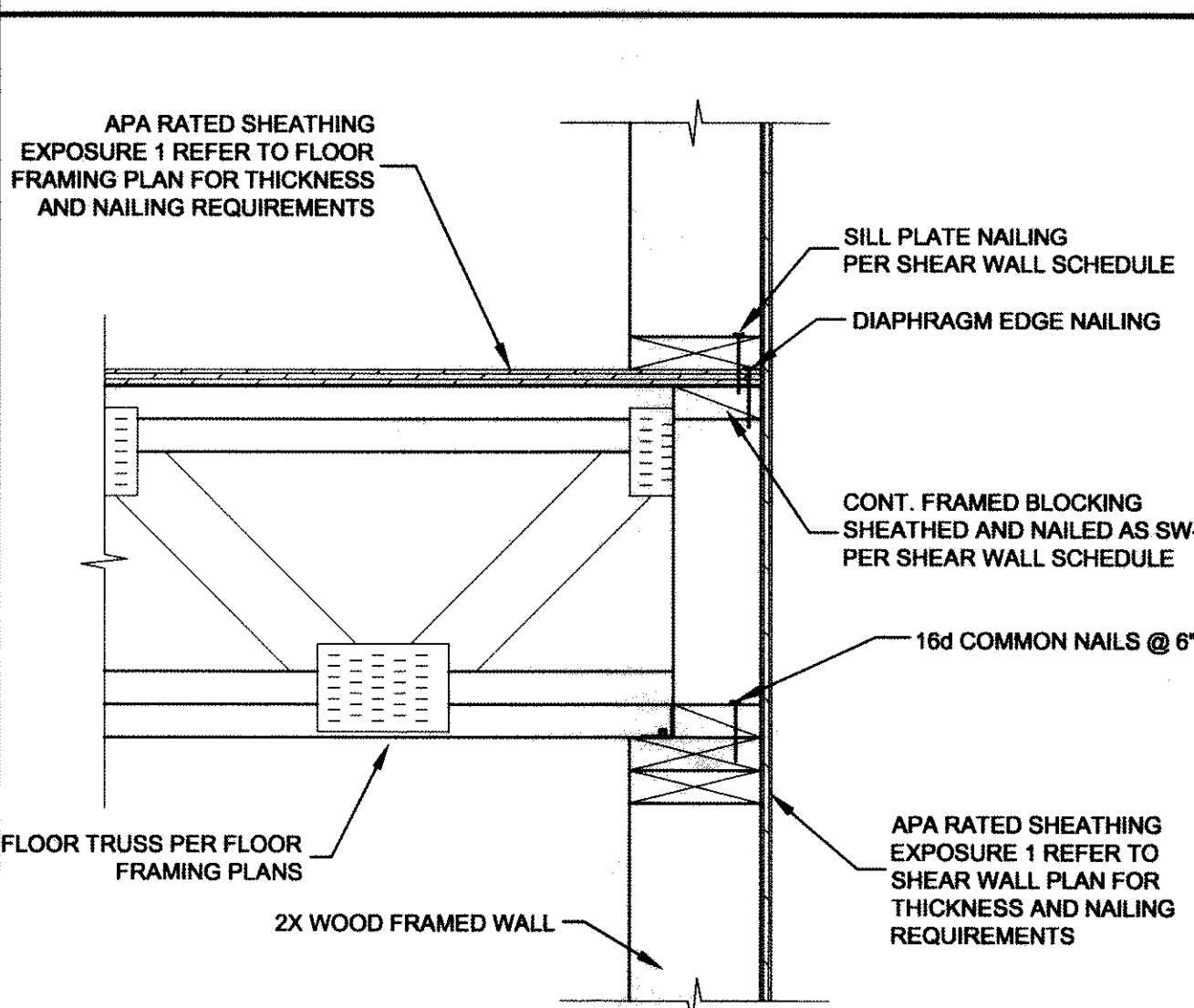
9 FLOOR TRUSSES BEARING ON SHEAR WALL
S5.10 SCALE:NTS



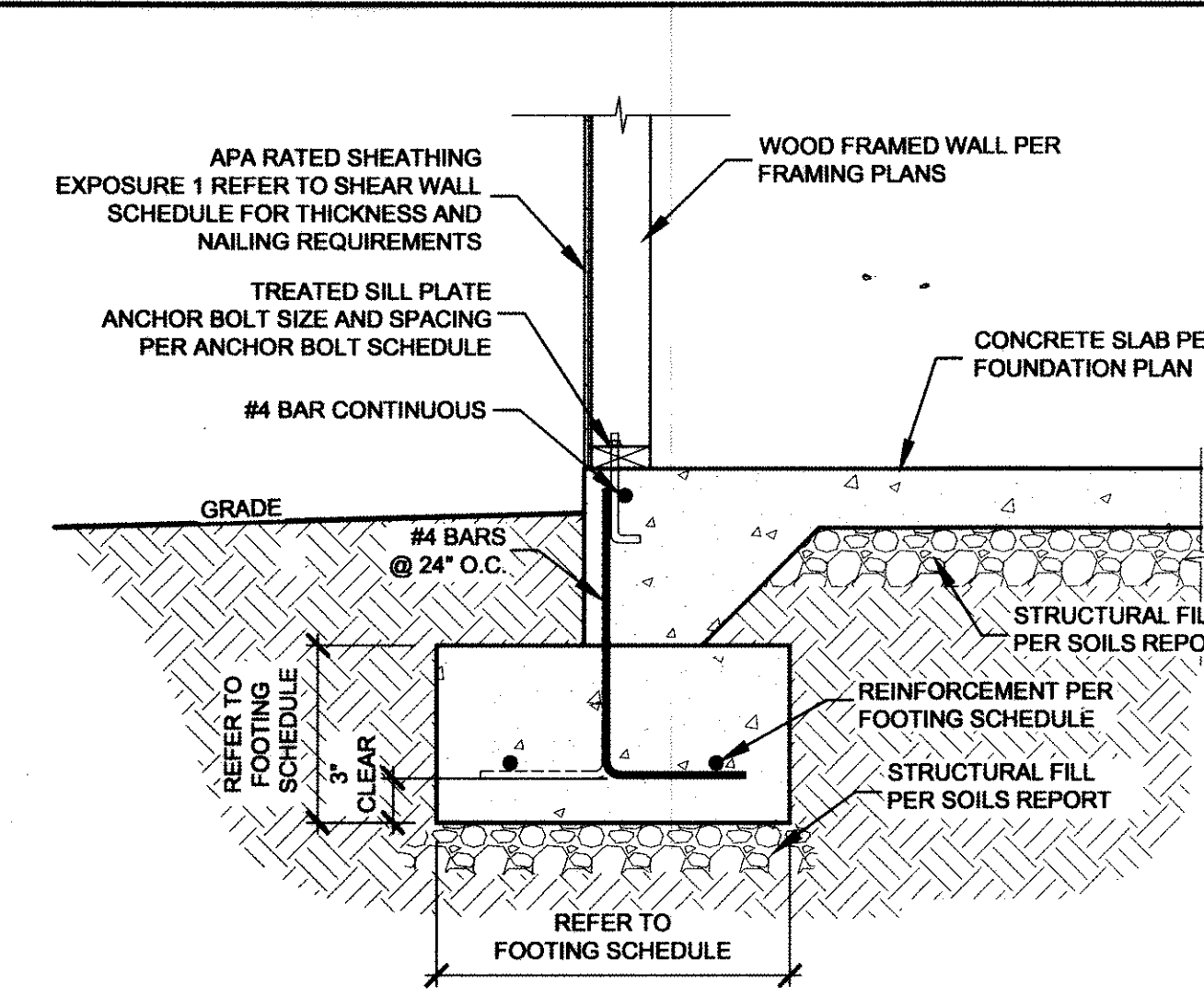
4 CONTINUOUS INTERIOR FOOTING IN GARAGE
S5.10 SCALE:NTS



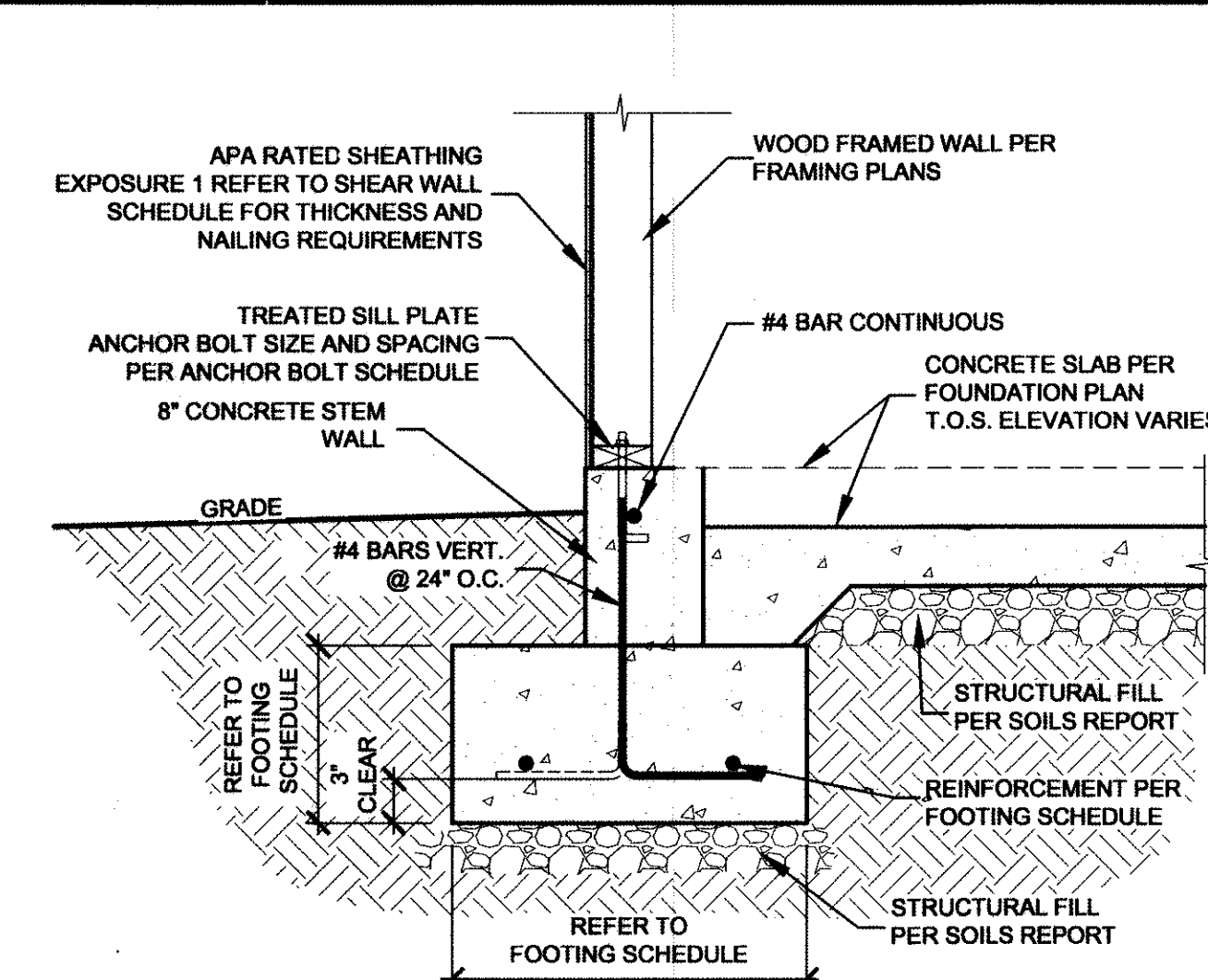
5 INTERIOR CONTINUOUS FOOTING
S5.10 SCALE:NTS



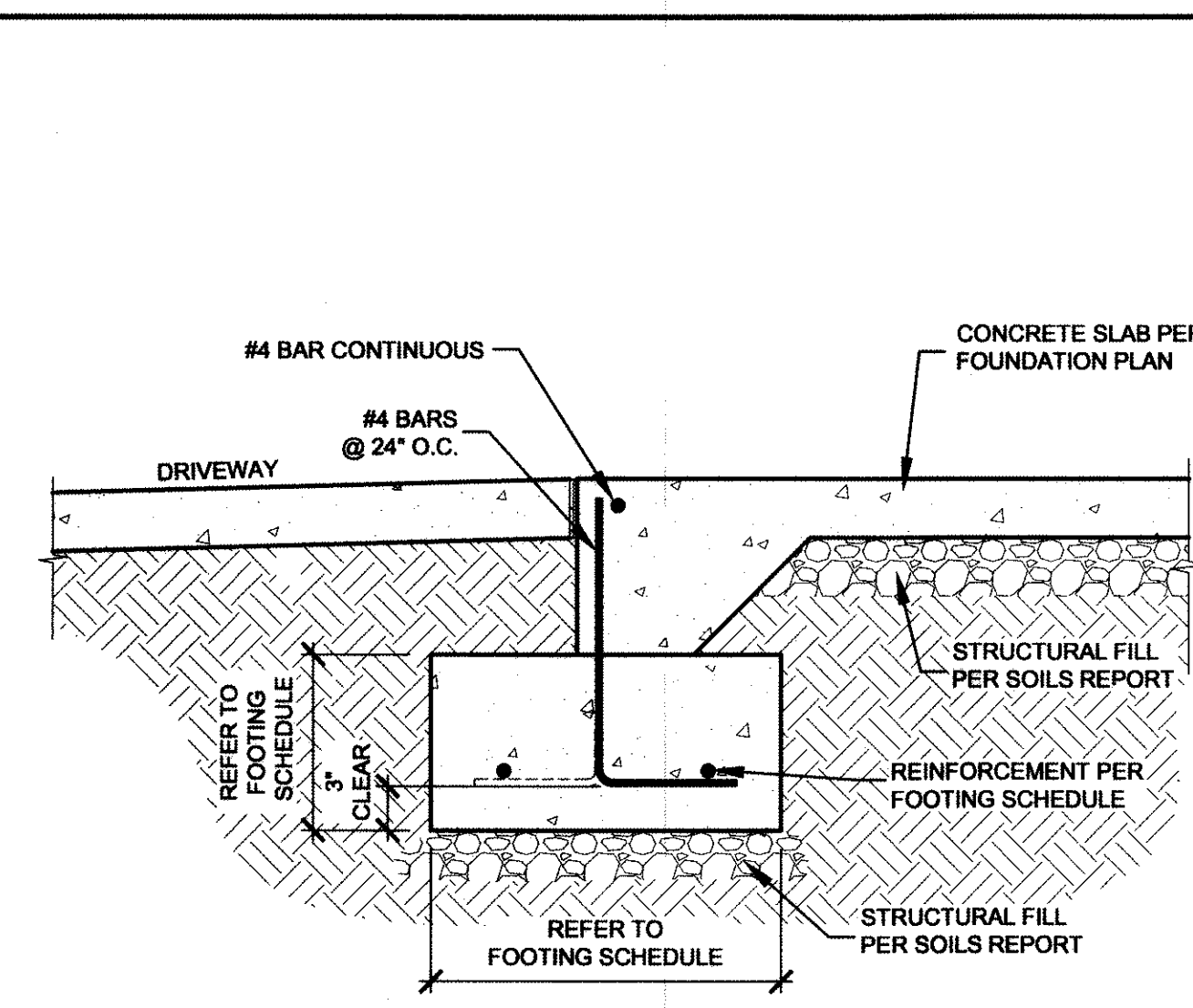
6 FLOOR TRUSSES ON EXTERIOR BEARING/SHEAR WALL
S5.10 SCALE:NTS



1 CONTINUOUS EXTERIOR FOOTING
S5.10 SCALE:NTS

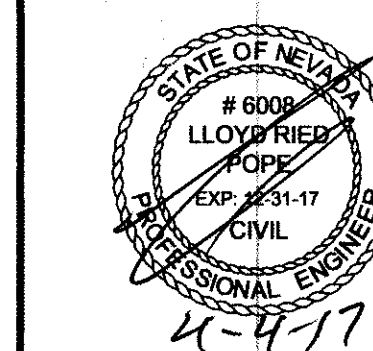


2 CONTINUOUS EXTERIOR FOOTING IN GARAGE
S5.10 SCALE:NTS



3 CONTINUOUS EXTERIOR FOOTING
S5.10 SCALE:NTS

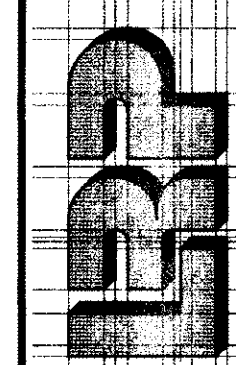
220 DESERT ROSE DR.
221 W DELAMAR LLC
HENDERSON, NV



DATE: 4/5/17
DRAWN BY: RDB PROJECT NO: 1170087
SHEET S5.10

REVISION NO. DATE BY

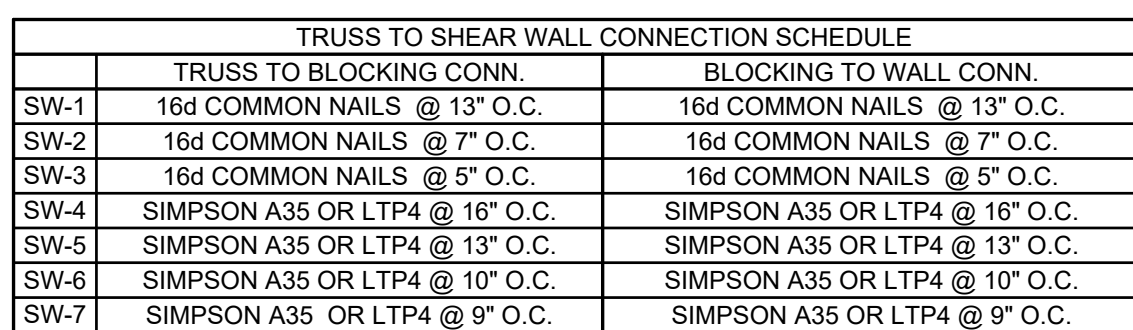
1200 EAST 100 SOUTH SUITE 15-B
ST. GEORGE, UTAH
(PHONE) 435-628-1676
(FAX) 435-628-1788
(EMAIL) lrpope@infowest.com

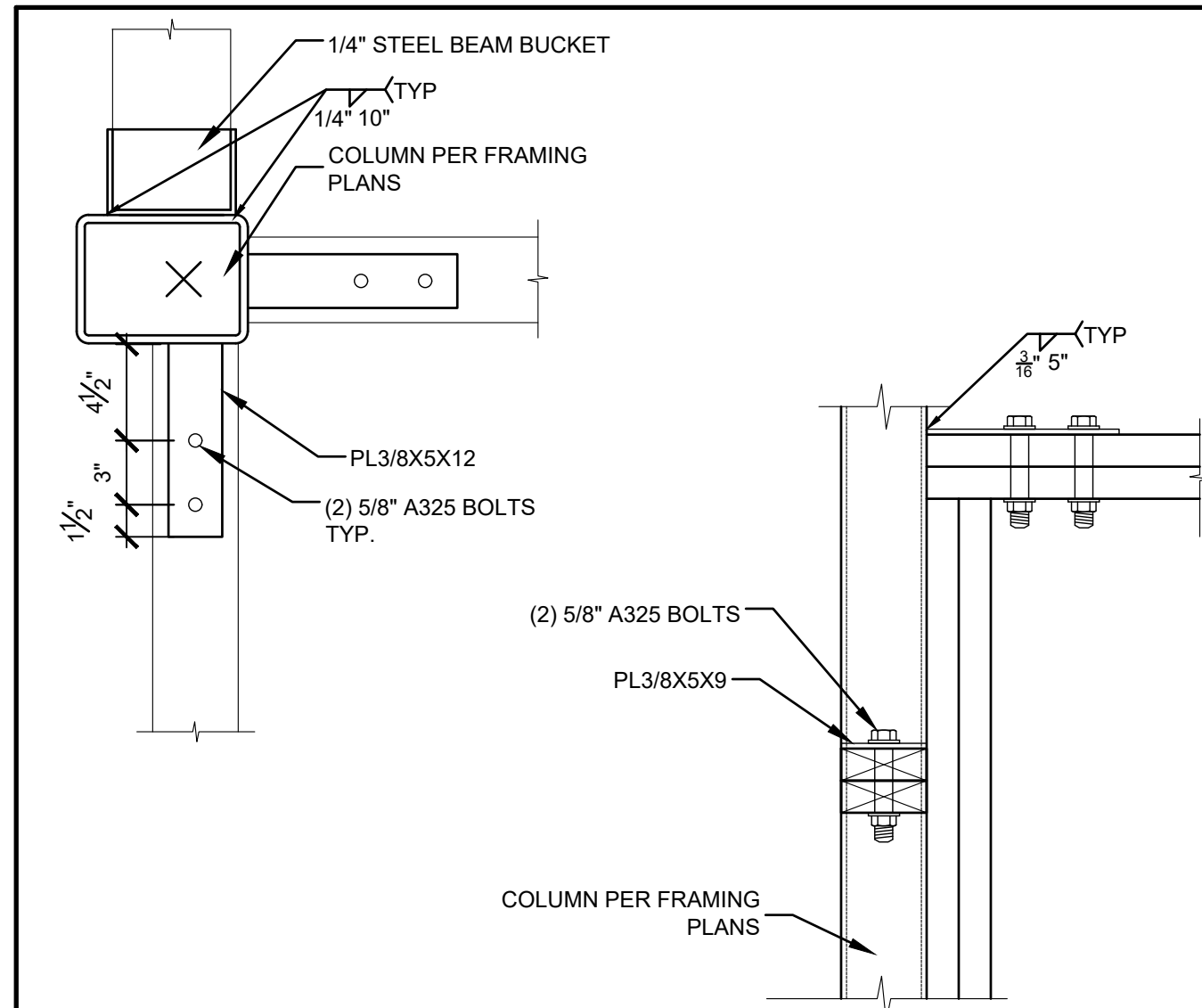


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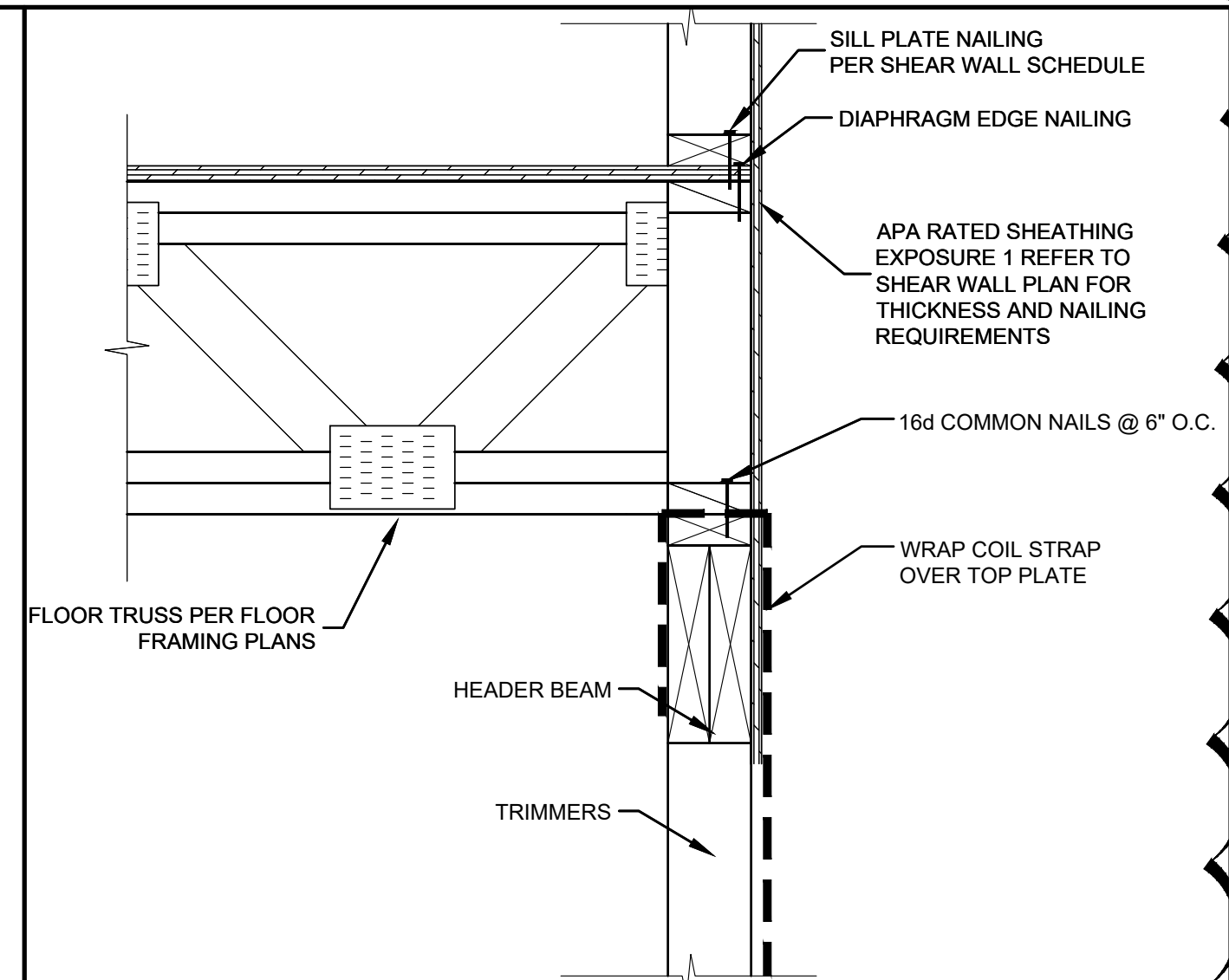
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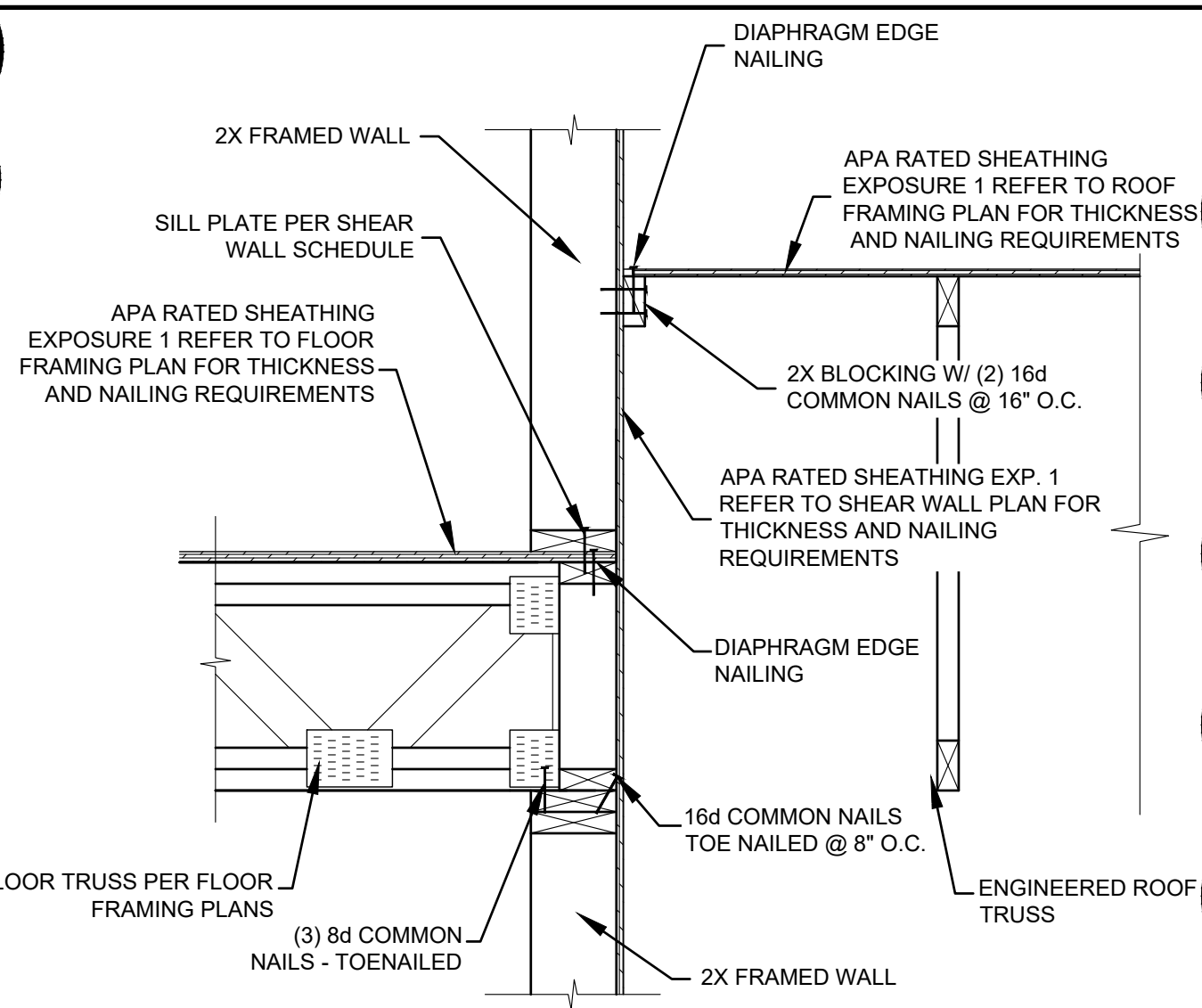




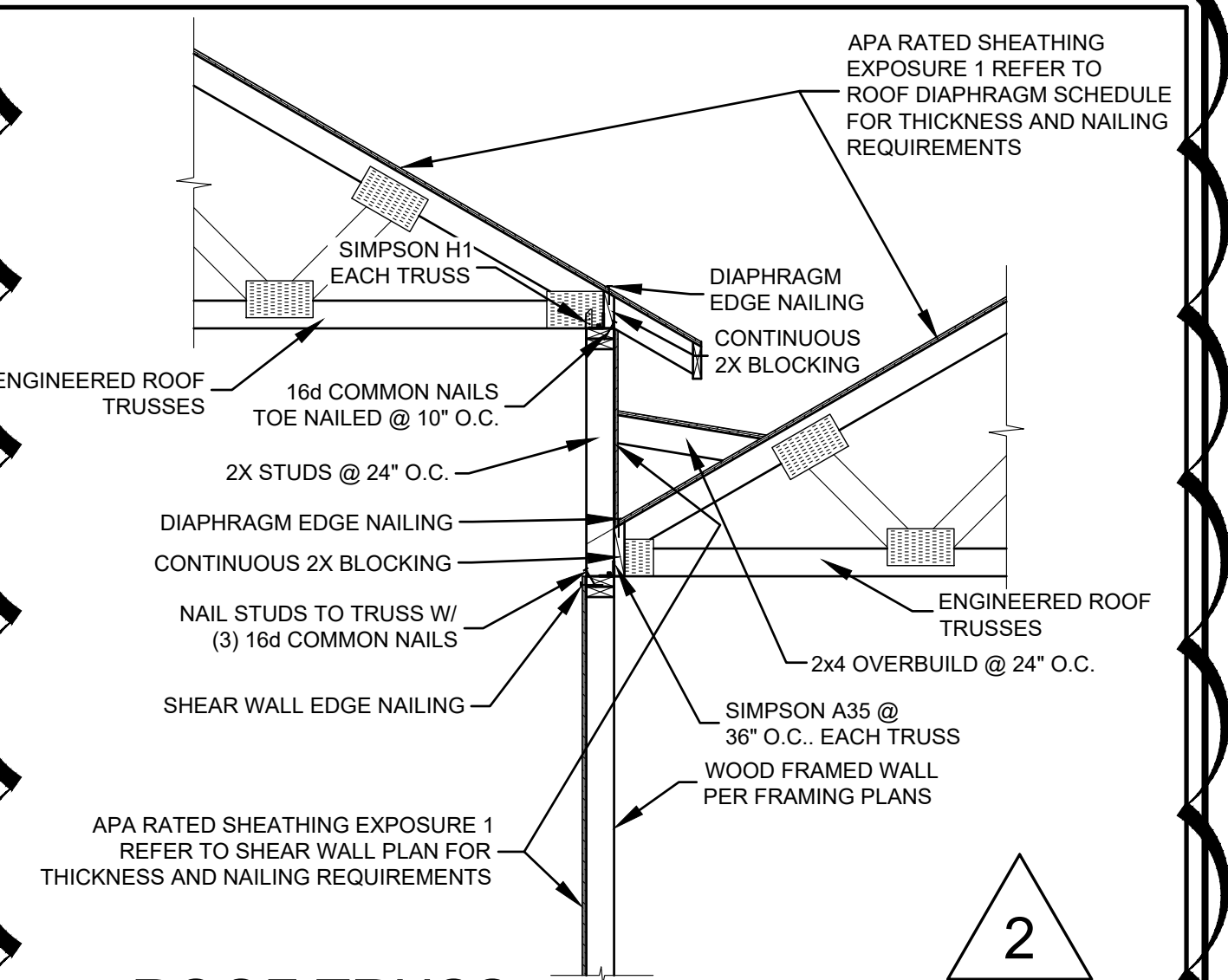
10 SHEAR TRANSFER STEEL COLUMN
\$5.30 SCALE: NTS



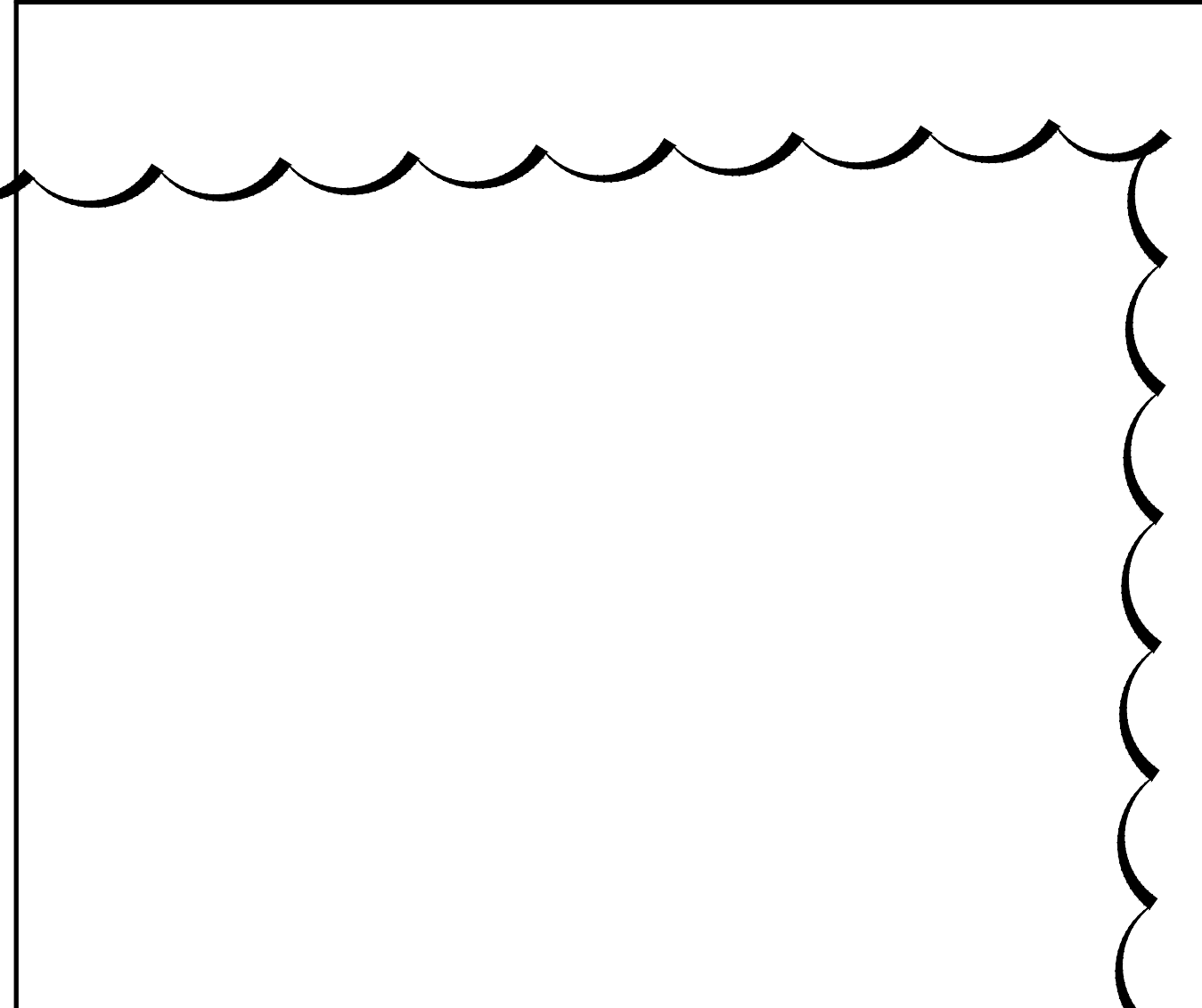
7 STRAP HOLDOWN DETAIL
\$5.30 SCALE: NTS



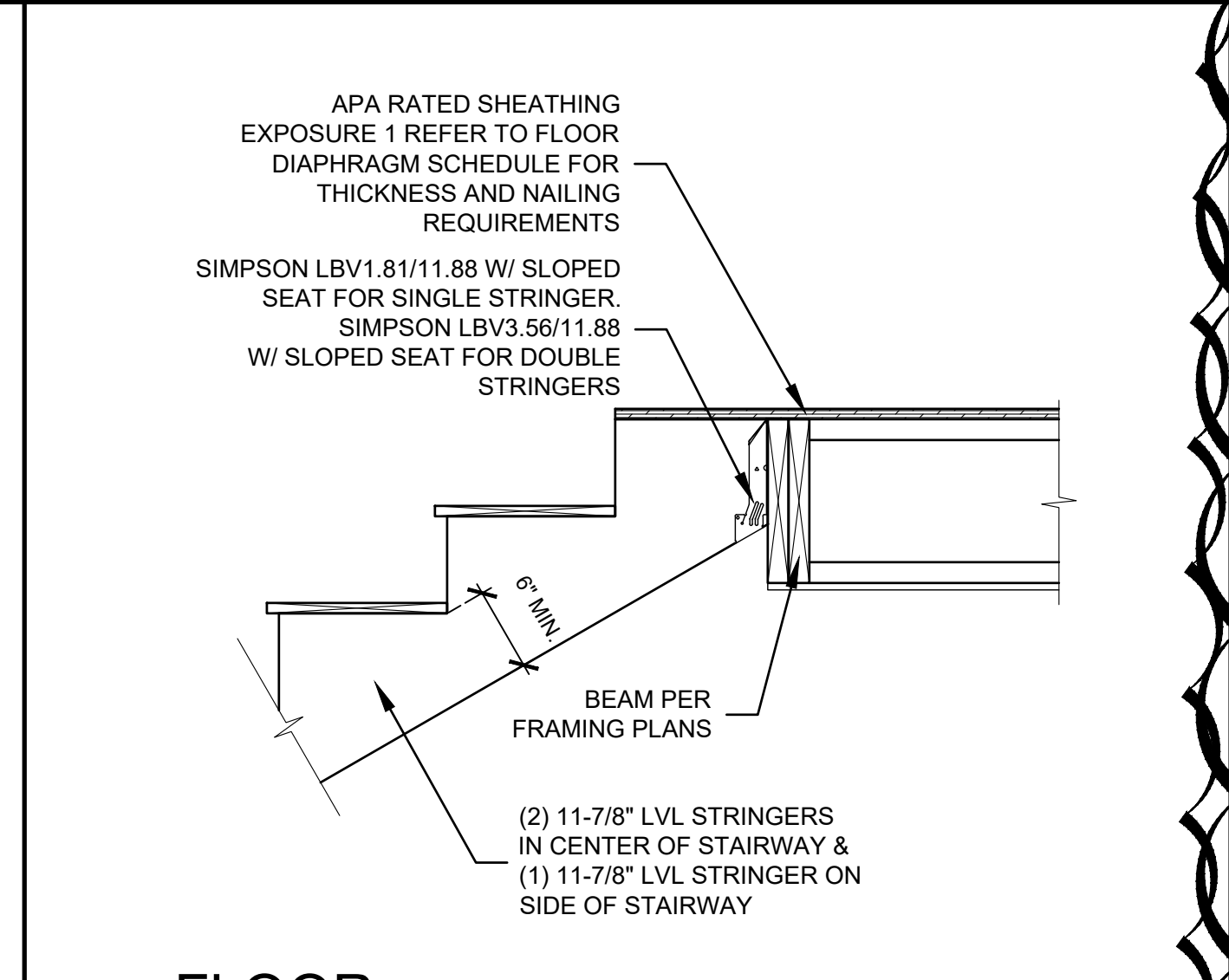
4 ROOF TRUSSES ON FLOOR BEAM
\$5.30 SCALE: NTS



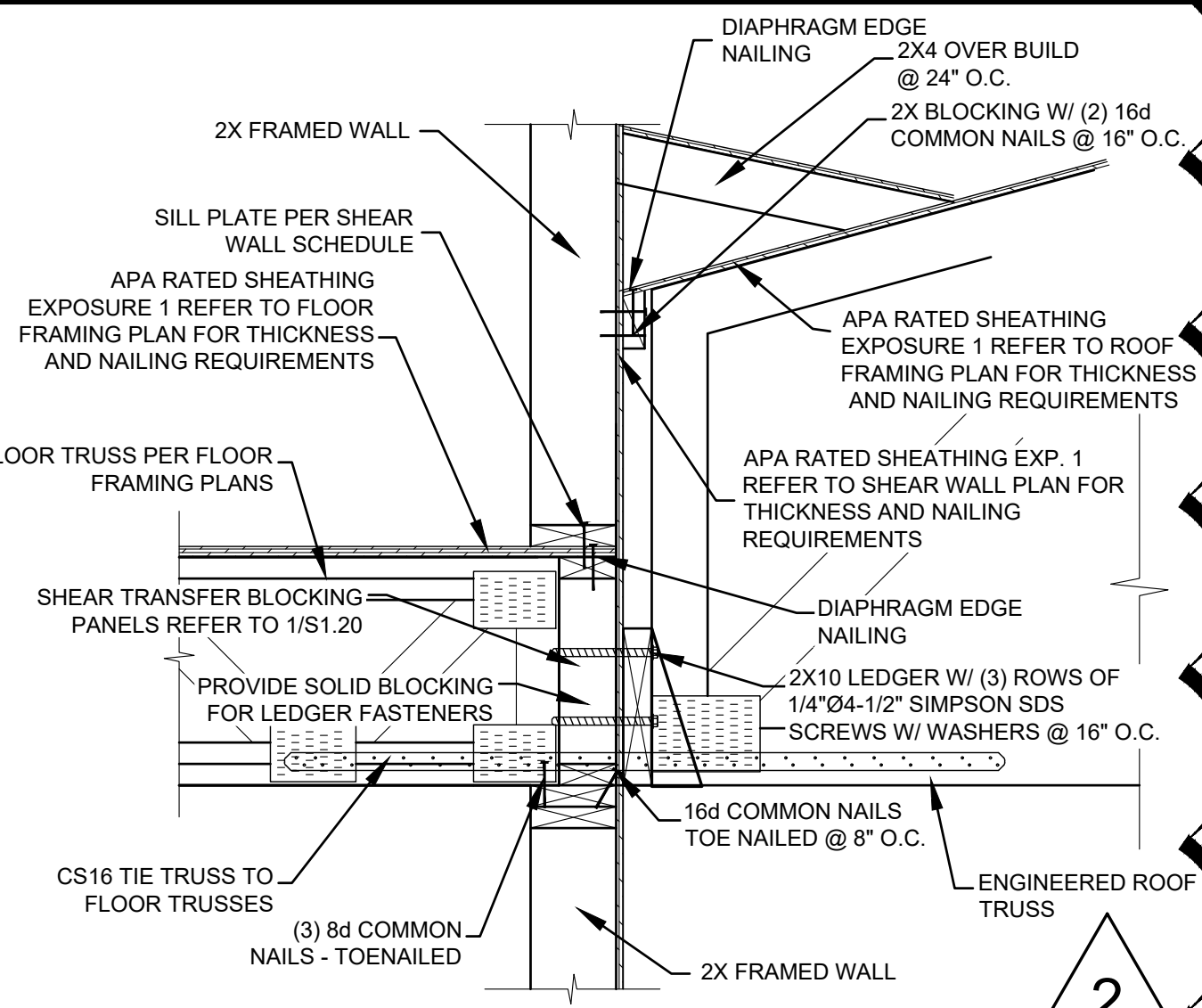
1 ROOF TRUSS ON EXTERIOR BEARING WALL
\$5.30 SCALE: NTS



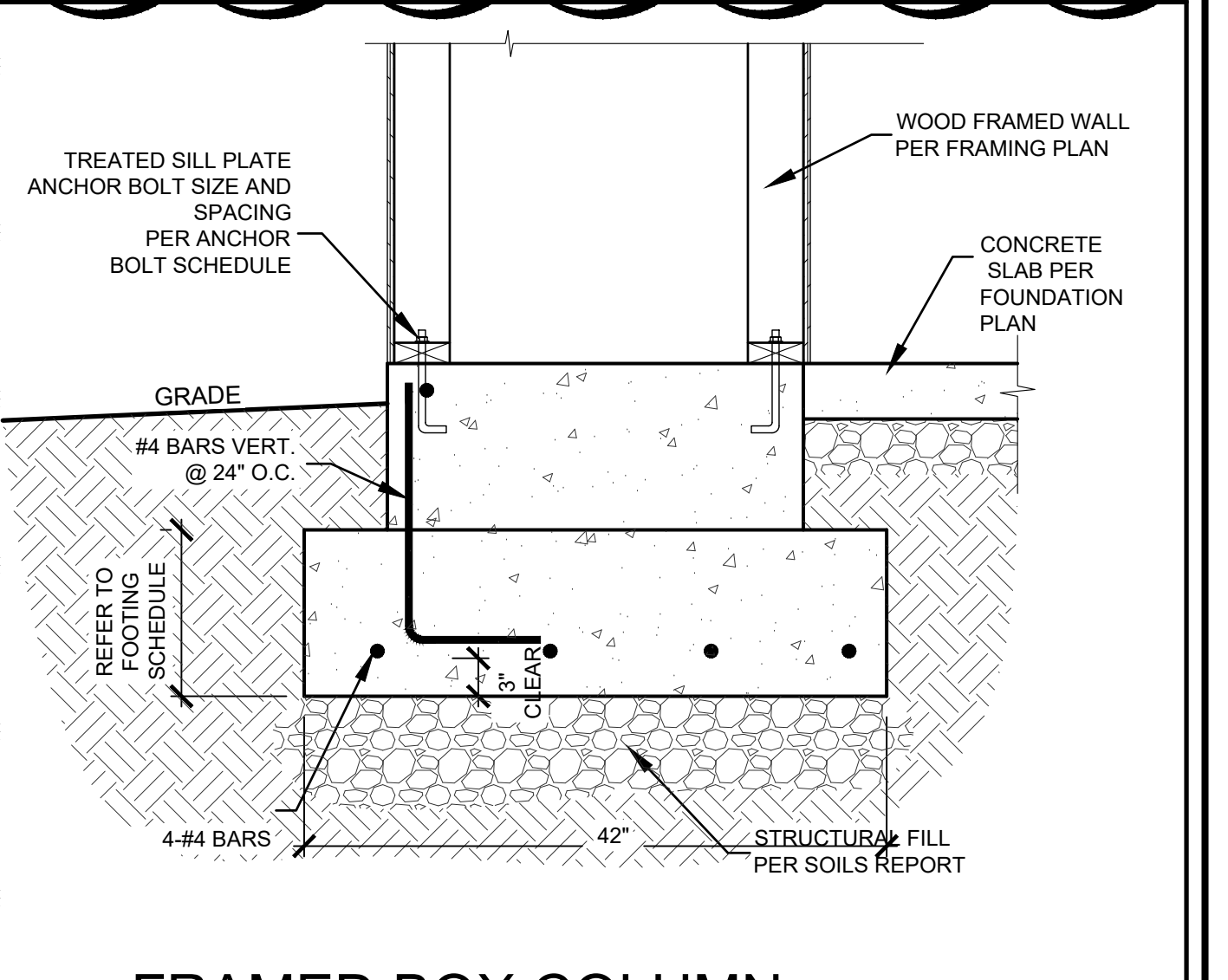
11 FLOOR JOISTS BEARING ON FLUSH BEAM
\$5.30 SCALE: NTS



8 FLOOR JOISTS BEARING ON FLUSH BEAM
\$5.30 SCALE: NTS



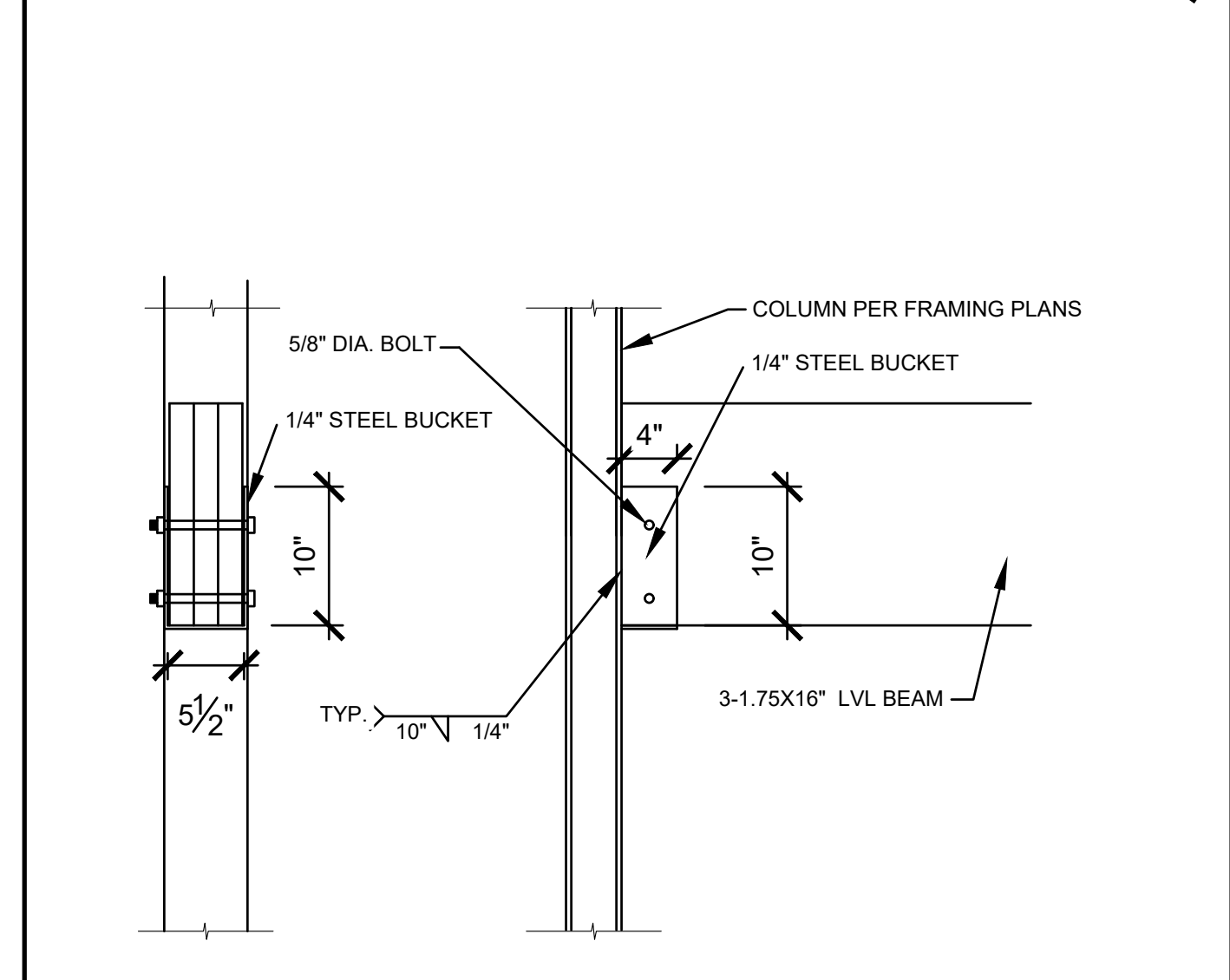
5 ROOF TRUSSES ON SHEAR WALL
\$5.30 SCALE: NTS



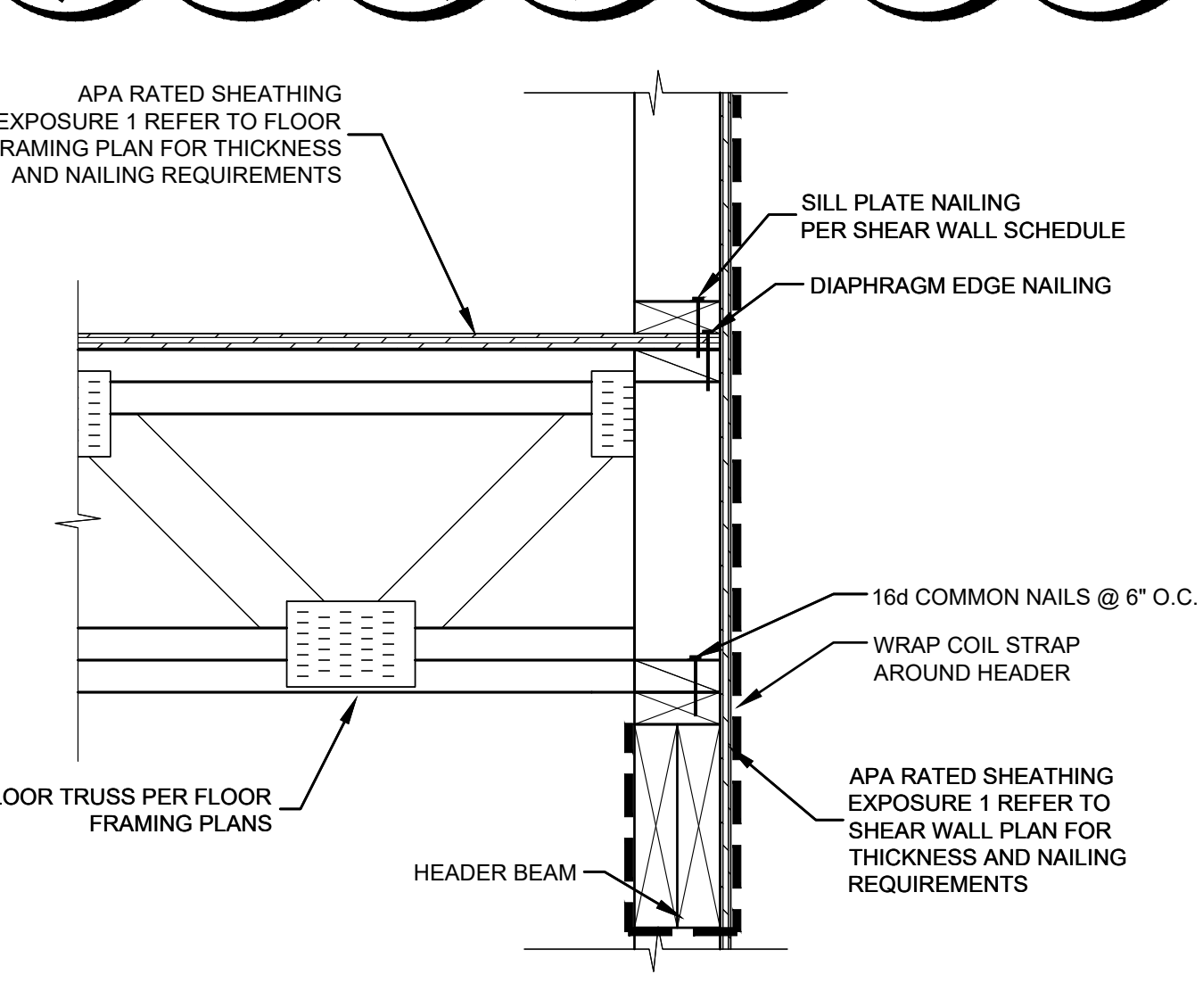
2 FRAMED BOX COLUMN SPOT FOOTING @ EDGE OF SLAB
\$5.30 SCALE: NTS



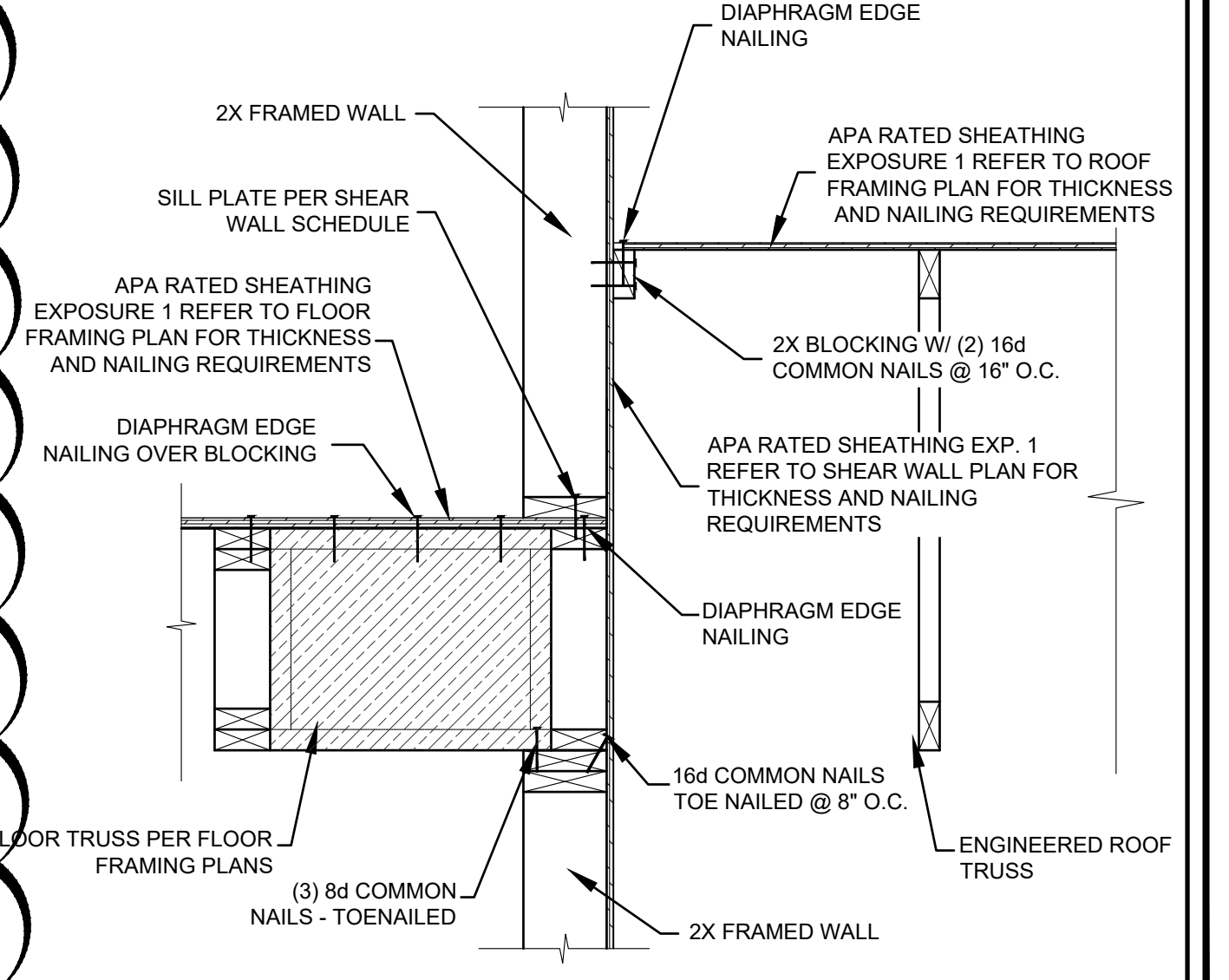
12 STEEL COLUMN BEAM CONNECTION
\$5.30 SCALE: NTS



9 STEEL COLUMN BEAM CONNECTION
\$5.30 SCALE: NTS



6 STRAP HOLDOWN DETAIL
\$5.30 SCALE: NTS



3 ROOF TRUSSES ON FLOOR BEAM
\$5.30 SCALE: NTS

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NO.	DATE	BY	REVISION

220 DESERT ROSE DR.
221 W DELAMAR LLC
HENDERSON, NV

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