

FLOOR

1965 S.F.

PLAN

14 × 1-34

SCALE 16"01-6"

materials. All finish materials and architectural details should be reviewed and approved by the owner before installation. The

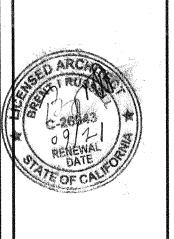
ALL FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER LESS THAN 5/8" THICK SHALL BE STAINLESS

STUDIO 202
SIDENTIAL ENERGY COMPLIANCE

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REVISIONS BY

SANTA ROSA, 09-252-022 8 PROPOSED SHED
29 WHEELER ST.



Date / 2/27/2 Drawn |多尺

Job to A WHEEL Sheet

or 3

## GENERAL NOTES

- All work shall be in conformance with the 2019 CRC & CBC Edition and any applicable local ordinances except where other notes are
- Drawings are not to be scaled. Building dimensions shown on the structural drawings are for general reference only. See architectural drawings for all actual building dimensons. The contractor shall notify the architect/engineer of any discrepancies on the drawings requiring clarification or revisions prior to commencing with work
- Details not shown, nor detailed on drawings, nor called for in these notes shall be constructed to same size and character as for similar conditions which are shown, detailed or specified.
- At all times the contractor shall be solely and completely responsible for conditions at the job site, including safety of persons and property; also design, adequacy and safety of temporary shoring, bracing, form work, scaffolding, erection methods, etc. Any job site visit by the engineer is
- The contractor shall warrant that all materials and workmanship are in compliance with th drawings and specifications. Any and all changes must have the architect's approval.

### DESIGN CRITERIA 2019 CRC & CBC

- Dead Load Soil / Foundation: MONO-POUE Soil Profile Type: S SEARS
- 110 MPH ULT

## FOUNDATION NOTES

- All site work, drainage systems, grading, and foundation excavations shall be done in accordance with Chapter 18 of the 2019 CBC and Chapters 3 & 4 in the 2019 CRC
- Foundation design is based upon the minimum footing dimensions set forth in 2019 CRC Table R 403.1(1). The design assumes class 5 soil with a bearing pressure of 1500 p.s.f. and constant expansion index of less than 20 unless otherwise note in the structural calculations
- Bottom and top of footings shall be level and stepped where slope exceeds 1:10. Provide  $\mathcal T$ minimum horizontal confinement from bottom of footing to face of slope.
- All foundations shall bear on firm, undisturbed, native soils or engineered fill at or exceeding the depths shown on the drawings. All footing excavations shall be neat. Over excavations in depth and width shall be filled with concrete, or shall be reported to the engineer or architect and backfilled as he directs. All loose soils shall be removed from excavations
- Garage slab on grade shall be 4 inches thick with #3 @ 18" o/c ea way at center line of slab over 1" of sand over 6 mil. vapor barrier over 1" sand over 4" minimum of clean, free-draining gravel or crushed rock
- Porch slab on grade shall be 4 inches thick with #3 @ 18" o/c ea way at center line over compacted backfill or crushed gravel placed early during construction so as to achieve maximum settlement prior to
- All slabs shall be completely separated from foundation stem walls with felt or mastic and slabs shall have 1/8" x 1" deep control joints at 12 feet on center maximum in each direction unless otherwise noted.
- Provide 20'-0" #4 AWG bare copper wire in bottom 2" of footing/grade
- Anchor bolt size and spacing shall be per plan. Bolts shall have 7" minimum embedment into concrete. Bolts shall be located 6" minimum and 12" maximum from end of sill plate. Anchor bolts and inserts shall be ridially held in place prior to placing concrete.
- Shear walls and interior braced wall panels are designated with See WALL FRAMING NOTES on this sheet for gneral requirements.
- Sheath all exterior walls and cripple walls per of "4/S1" unless otherwise noted (or shown as a shear wall on plan). All exterior wall considered braced wall panels meeting the requirements of 2019 CRC & CBC

Shear wall tie down anchors shall be "Holdown" or "Tension Tie" anchors as manufactured by Simpson Strong—Tie Company, Inc. and referenced per the current catalog specifications (ie: HD8A, HTT22). See detail "8/\$1" for installation requirements. Where tie down anchors are specified on the foundation plan, then the tie down anchor shall be located just above the first floor framing. If cripple walls occur below the first floor framing, then extend the threaded rad from the foundation up through the cripple wall to the tie down anchor, as shown in detail

#### REINFORCING STEEL

- All reinforcing steel shall conform with ASTM A-615, grade 40 for #5 bar and smaller and grade 60 for #6 bar and larger. Reinforcing steel shall be kept clean and free of rust.
- Welded wire mesh shall conform with ASTM A-185 and shall be lapped
- All reinforcing bars shall be as long as is practical and all bends shall be cold bent. Securely tie all reinforcing bars at each end or as near thereto as possible and at a maximum of 48° on center prior to placement of grout. At corners and intersections, bars shall return a minimum of 24". All reinforcing bar splices shall be lapped per detail "11/S1".

#### CONCRETE NOTES

- All concrete shall be normal weight (150 pcf) hard rock concrete and shall develop a minimum ultimate compressive strength of 2500 psi at 28 days and be 5 sack mix unless otherwise noted. Design is based on compressive strength of 2500 psi. Concrete quality mixing and placing shall conform with UBC Section 1905.
- Minimum concrete cover requirements for reinforcing steel shall be 3" when cast against and exposed to earth " when formed and exposed to earth or weather 3/4" when not exposed to weather or in contact with ground
- 3. 20 % of cement mix to be made up of fly ash

# MANUFACTURED WOOD PRODUCTS

- Glu—Lam beams shall conform to ANSI/AITC 190.1 and ASTM D3737. Glu—Lams shall be combination 24F—V4 for simple span conditions and 24F—V8 for continuous and cantilever conditions unless otherwise noted. Beams shall have standard camber (1600'  $\pm$ ) unless otherwise noted. Glu—Lam beams shall meet the following design properties: E = 1,800,000. psi; Fb = 2400. psi; Fv = 165. psi. GLB's shall be industrial appearance u.o.n.
- All Glu-Lam beam inspection certificates shall be submitted to the field inspector prior to completion of frame inspection.

## CARPENTRY NOTES

- Lumber shall be grade marked in accordance with "standard grading and dressing rules" of the West Coast Lumber Inspection Bureau
- All lumber framing members shall be Douglas Fir (D.F.) of the following
- 6x Beams & Posts ...... No. 1
- All framing lumber shall have a maximum moisture content of 19%.
- Lumber in contact with concrete shall be pressure treated Dauglas Fir (P.T.D.F.) conforming to AWPB LP-2 standard. Lumber embedded in concrete or earth shall be pressure treated Douglas Fir (P.T.D.F.) conforming to AWPB LP-22 standard. Use Chromated Copper Arsenate (CCA) treatment compounds or similar chemicals that are non-corrosive to zinc-coated
- Structural plywood sheathing shall be CD grade, exposure 1, conforming to PS-1-95 of the American Plywood Association unless attentive noted. Supported edges of plywood shall butt along the
- Nails used in exterior applications or in pressure preservative treated wood shal be hot-dipped zinc coated galvanized box nails, unless otherwise noted Where nailing causes wood to split, replace member and predrill holes. All nailing not specifically called out on plans shall be per table 2019 CRC & CBC
  - a. Roof and Floor Sheathing

(also applies to gun nails):

- Common Nails Common or Hot Dipped Galvanized Box (electroplated box nails are not acceptable) Common, Box or Coated Sinker Nails u.o.n.
- .131 .113 3 1/4" 3 1/2"
- All metal framing connectors, clips, joist hangers, straps, etc. shall be manufactured by Simpson Strong Tie Company. Fill all nail or bolt holes in connectors per manufacturer's specifications and per note 6
- Bolts shall be standard machine bots (M.B.) conforming to ASTM 307 with sizes as shown on the plans and details. Use malleable iron or plate washers under head and nut where bearing is against wood. Bol holes in wood shall be 1/16"larger than the bolt diameter. Holes for bolts shall not be located in or near lumber with knots or checks. Bolt
- Structural members shall not be notched, cut or otherwise altered for ducts, pipes, etc. u.o.n. or approved by the engineer. She detail "2/S1".
- To minimize lumber shrinkage effects, install and tighten straps and tie down anchors (Holdowns) just prior to covering, whenever possible.
- Lag screws require prebaring as follows:

SHANK	LEAD	SHANK	
DIAMETER	HOLE (1)	HOLE (2)	<ol> <li>tead hole depth equals lag length.</li> <li>shank hole depth equals shank length Do not drive lag screws with hammer.</li> <li>Soop or lubricate threads to ease installati</li> </ol>
1/4"	5/32"	1/4°	
3/8"	7/32"	3/8°	
1/2"	5/18"	1/2"	
5/8"	3/8"	5/8"	

#### WALL FRAMING NOTES

- See sheet S1 for standard construction details.
- Shear walls and interior braced wall panels are designated with and are above the level of framing shown unless otherwise noted. S SHEAR WALL / BRACED WALL SCHEDULE "4/S1" for specific and general requirements.
- Sheath all exterior walls and cripple walls per 68P of "4/S1" unless otherwise noted (or shown as a shear wall on plan). All exterior wall panels four (4) feet or greater in length without openings shall be considered braced wall panels meeting the requirements of 2019 CRC & CBC unless otherwise noted.
- Stud sizes shall be as specified on plan and where not noted shall be per the table shown in detail "17/S1" unless otherwise noted.
- All studs shall be framed full height (continuous pieces) between supporting floors, ceilings, and roofs unless atherwise noted. End joints in wall double top plates shall be offset a minimum of 48 inches. See detail "1/S1" for typical lap splice conection.
- Foundation cripple walls shall be framed of study not smaller in size than the stude in the level above. Cripple walls greater than four feet
- high shall be 2x6 at 16" o/c minimum when supporting two floor levels. Cripple wall stud lengths less than 6 inches shall be framed of solid
- Header sizes shall be as specified on plan and where not noted shall
- be per the schedule shown in detail "15/S1" unless otherwise noted. Interior bearing walls below framing arer shown shaded. All exterior walls are bearing walls unless otherwise noted.
- Posts indicated on framing plans are below unless otherwise noted. Post sizes are indicated on the highest level framing plan on which they occur. Provide post at each level below uppermost post to foundation or beam/header support.
- Posts indicat4d but not called out are a minimum of (2) 2x studs. When supporting 4x members provide 1/2" plywood filler between studs. See detail "3/S1" for headers framed into walls. Provide multiple studs under all multiple joists and roof girder trusses to match bearing width.
- At floor levels, solid block in the joist space under all posts to the full
- Natches and holes cut in studs shall be per detail "2/S1" unless holes. Do not notch study for "Let In" bracing.
- Wall framing at chimneys and fireplaces shall be full height. Chimneys shall be 24 inches minimum in each direction. Where splicing of stude is required, studs shall be double. The splice length shall be a minimum of one-third the length of the individual piece nailed with (2) 16d at 8" o/c. Top plates interrupted by full height framing shall be strapped with a continuous CS16 strap. Extend the strap 30 inches beyond each end of the full height framing and nail with (2) 8d at 4" o/c to the top plates and 2x blocking unless otherwise noted. Chimneys and fireplaces requiring splicing shall be sheathed with plywood or panel siding.
- At wall heights greater than 10'-0", provide 2x blocking at 10'-0" o/c maximum. At vertical board siding provide 2x blocking at 24" a/c maximum unless otherwise noted.
- Provide a minimum of 3 stude at each corner.

## FLOOR FRAMING NOTES

- See sheet S1 for standard construction details.
- Shear walls and interior traced wall panels are designated with and are above the level of framing shown unless otherwise noted. See WALL FRAMING NOTES on this sheet for general requirements.
- T & G, 3/4" minimum thickness. Install sheets with face grain perpendicular to supports. Stagger sheets and glue and nail with 8d @ 6" o/c edges and 12" o/c field typical unless otherwise noted.
- When braced panels run perpendicular to joist add blocking under wall and double joist at ends.  $\label{eq:continuous}$
- When braced panels run parallel to joist add double joist under wall. All floor openings shall be between joists unless otherwise noted.
- Provide additional joist under all parallel partitions of length greater than one—half the joist span or walls greater than four (4) feet in length unless otherwise noted.

## FRAMING HANGERS

- 1-Joist hangers shall be us follows un less otherwise noted on plans: Single LPI 16" CTR 350 ...... MIT3516-2 Double LPI 16" CTR 350 ...... WP3516-2 \* Sloped or skewed members ..... LSSU Hanger Sawn lumber hangers shall be as follows unless otherwise noted on plans:
- US28 Hanger
  US28-2 Hanger
  US210 Hanger
  US210-2 Hanger
  US212 Hanger
  US212 Hanger
  US212-2 Hanger
- \* Requires web stiffeners

#### (Stick framing) ROOF FRAMING NOTES

- See WALL FRAMING NOTES on this sheet for shear wall and braced panel general requirements.
- Roof shall be sheathed with APA rated sheathing, 24/0, exposure 1, 15/32" minimum thickness. Install sheets with face grain perpendicular to supports. Stagger sheets and noil with 8d @ 6" o/c edges and 12" o/c field typical unless otherwise noted.
- Building has been designed for a maximum roofing dead load of 4 psf.
- All roof openings shall be between rafters unless otherwise noted on the drawings.
- Interior bearing walls are shown shaded. All exterior walls are bearing walls unless otherwise noted. Brace purlins, rafters, hips, valleys, and ridge boards to bearing walls or beams only.
- California framing shall be 2x6 rafters and 2x8 ridges and hips unless otherwise noted. Brace California framing to typical framing below at 48° o/c maximum. Typical roof framing and plywood sheathing shall be continuous below California framed areas. Use 2x plate under all California framed rafters.
- Rafters shall be nailed to adjacent ceiling joists to form a continuous tie between exterior walls when such joists are parallel to the rafters. Where not parallel, raftere shall be tied to 1x4 (nominal size) minimum cross ties. Rafter ties shall be spaced not more than four (4) feet on center. Nail cross ties or ceiling joists per "9/51" unless otherwise
- Ceiling joists shall be sized and spaced per "16/S1" unless otherwise noted on plans.

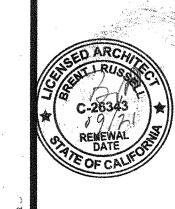
#### TRUSS NOTES

NOTE: PROVIDE TRUSS CALCULATIONS AND LAYOUT TO BUILDING OFFICIAL PRIOR TO INSTALLATION OF TRUSSES. TRUSS DOCUMENTATION SHALL INCLUDE:

- 1. SLOPE OR DEPTH, SPAN AND SPACING
- LOCATION OF ALL JOINTS REQUIRED BEARING WIDTHS
- DESIGN LOADS FOR TOP & BOTTOM CHORD LIVE & DEAD LOADS AND CONCENTRATED LOADS AND THEIR POINTS OF APPLICATION
- 5. ADJUSTMENTS TO LUMBER AND JOINT CONNECTOR DESIGN VALUES FOR CONDITIONS
- EACH REACTION FORCE AND DIRECTION
- 7. JOINT CONNECTOR TYPE AND DESCRIPTION (SUCH AS SIZE, THICKNESS OR GAGE) AND THE DIMENSIONAL LOCATION OF EACH JOINT CONNECTOR EXCEPT WHERE SYMMETRICALLY LOCATED RELATIVE TO THE JOINT INTERFACE
- LUMBER SIZE, SPECIES, AND GRADE FOR EACH MEMBER
- CONNECTION REQUIREMENTS FOR:
- A. TRUSS TO GIRDER TRUSS
  B. TRUSS PLY TO PLY C. FIELD SPLICES
- 10. CALCULATED DEFLECTION RATIO AND/OR MAXIMUM DESCRIPTION FOR LIVE AND
- 11. MAXIMUM AXIAL COMPRESSION FORCES IN THE TRUSS MEMBERS TO ENABLE THE BUILDING DESIGNER TO DESIGN THE SIZE, CONNECTIONS AND ANCHORAGE OF THE PERMANENT CONTINUOUS LATERAL BRACING. FORCES SHALL BE SHOWN ON THE TRUSS DESIGN DRAWING OR SUPPLEMENTAL DOCUMENTS
- 12. REQUIRED PERMANENT TRUSS MEMBER BRACING LOCATION.

TRUSS AND BEAM TO BEAM CONNECTIONS.

- 13. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED TRUSS SPANS AND REQUIRED
- 14. MFD ROOF TRUSS DESIGN LOADS:A. TOP CHORD: 9 PSF DEAD LOAD FOR COMPOSITION ROOFING AND 15 PSF DEAD FOR TILE ROOFS, LIVE LOAD OF 20 PSF B. BOTTOM CHORD: 5 PSF DEAD LOAD, 10 PSF LIVE LOAD
- 15. THE POSITIONS, WEIGHTS, & METHODS OF ATTACHMENT OF ALL MECHANICAL UNITS, ELECTRICAL FIXTURES, PLUMBING, ETC. SHALL BE INCLUDED IN THE DESIGN OF THE TRUSSES BY THE TRUSS MANUFACTUREER AND SHALL BE VERIFIED WITH THE DESIGNER. ADDITIONAL TRUSSES OR SPECIAL DESIGNED TRUSSES MAY BE REQUIRED.
- 16. SUPERIMPOSED LOADS FROM ARCHITECTURAL FINISHES OR OTHER SECONDARY FRAMING (SUCH AS CALIFORNIA FRAMING, FURRED CEILINGS, SOFFITS, ETC.) SHALL BE INCLUDED IN THE DESIGN OF SUPPORTING TRUSSES.
- 17. TRUSS MANUFACTURER SHALL INCLUDE DEFLECTION CALCULATIONS WITH THE SHOP DRAWING SUBMITTALS. 18: TRUSS MANUFACTUER IS RESPONSIBLE FOR DESIGN AND DETAILING OF ALL TRUSS TO
- 19. MANUFACTURED TRUSS DOCUMENTS SHALL BE SUBMITTED AND APPROVED BY THE BUILDING OFFICIAL (AND ENGINEER OR ARCHITECT) PRIOR TO THE FABRICATION AND



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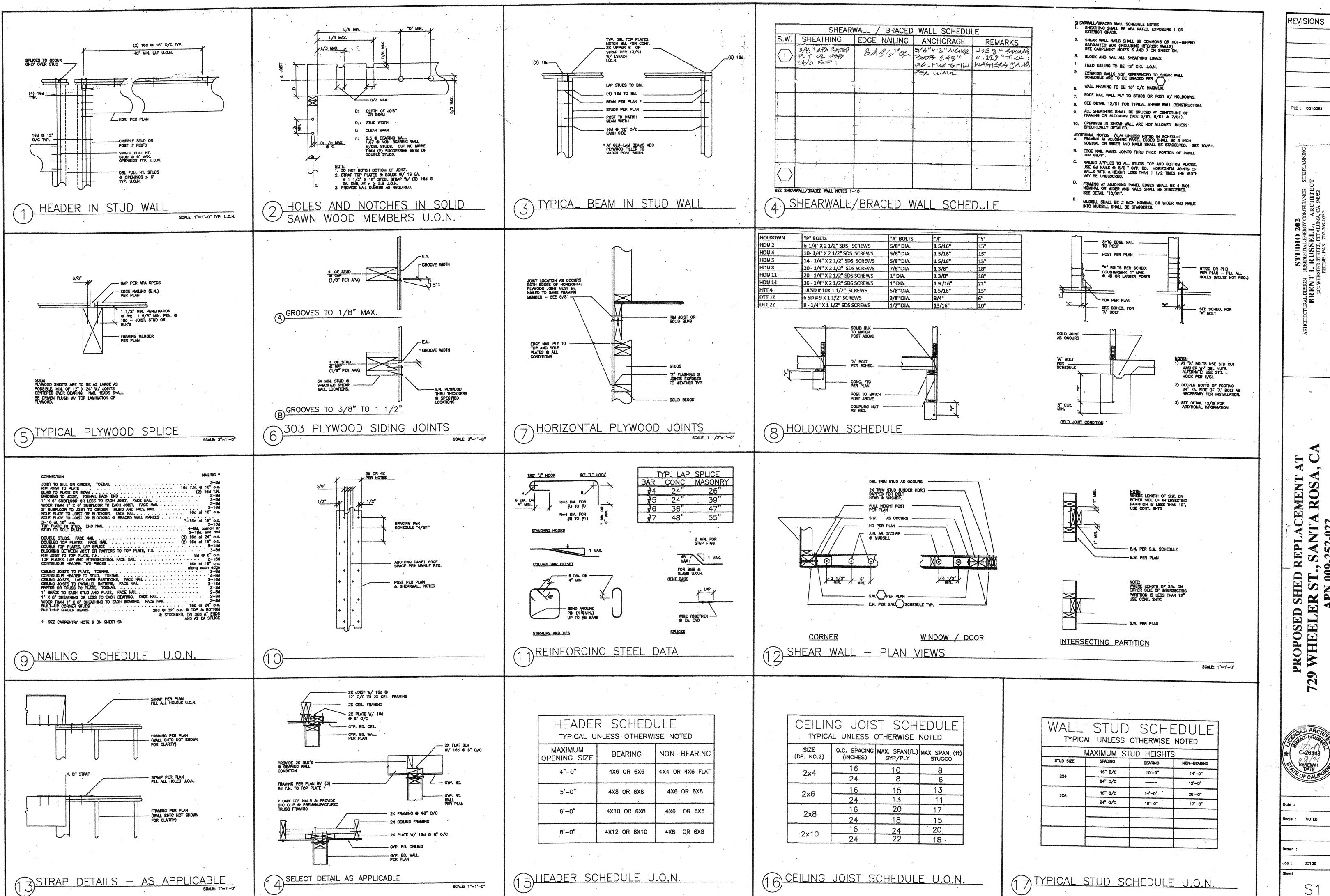
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