RULES RESIDENCE, WEBER COUNTY,

PROJECT DATA

1, GOVERNING BUILDING CODE: IRC 2015

2. OCCUPANCY AND GROUP: R-3

3. TYPE OF CONSTRUCTION: TYPE Y-B

4. LOCATION ON PROPERTY:

EXTERIOR WALLS: NON-RATED

EXTERIOR OPENINGS: NON-RATED

5, OCCUPANCY SEPARATION: NOT REQUIRED

SPRINKLED: NO

CONTRACTOR'S RESPONSIBILITY

NUMBER OF STORIES: 2.0

6. FIRE RESISTIVE REQUIREMENTS:

SEE ARCHITECTURAL DWGS

PROJECT INFORMATION

OWNER ADDRESS :

UTAH

BILL RULES 1700 WEST 2700 NORTH PLEASANTYIEW, UT 84414

BUILDING DEPARTMENT:

WEBER COUNTY, UT

DRAWING INDEX

AO COYER SHEET SO GENERAL NOTES SI.O CONNECTION DETAILS SI,I CONNECTION DETAILS \$1,2 CONNECTION DETAILS S2 FOUNDATION PLAN S3 MAIN FLOOR FRAMING 54 SECOND FLOOR FRAMING S5 ROOF FRAMING

S6 SHEAR WALLS

BUILDING SQ. FT.

LIVING SPACE :

MAIN FLOOR = 1204 SQ, FT, SECOND FLOOR = 626 SQ, FT,

TOTAL = 1830 SQ, FT,

NON LIVING SPACE :

BASEMENT/GARAGE = 1232 SQ, FT, DECK OR PORCH = 1189 SQ. FT.

DESIGN NOTES

GROUND SNOW LOAD - 62 PSF FLAT ROOF SNOW LOAD - 43 PSF SNOW LOAD IMPORTANCE FACTOR - 1.0 SNOW EXPOSURE FACTOR - LO THERMAL FACTOR - 1.0

OCCUPANCY CATEGORY - II BEARING PRESSURE - 2000 PSF

ULTIMATE WIND SPEED - 115 MPH, EXP B WIND IMPORTANCE FACTOR - 1.0

SEISMIC DESIGN CATEGORY - D SEISMIC SITE CLASS - D RISK CATEGORY - II SEISMIC COEFFICIENTS -Sds: 0.723g Sd1: 0.387g Cs: 0.18 R: 4.0 SEISMIC ANALYSIS PROCEDURE -EQUIVALANT LATERAL FORCE METHOD

FLOOR LIVE LOAD - 40 PSF FLOOR DEAD LOAD - 15 PSF ROOF DEAD LOAD - 15 PSF

STRUCTURAL DRAWINGS ONLY

GENERAL STRUCTURAL NOTES

- 1. The Structural drawing shall be used in conjuction with the drawings of all other disciplines and the project specifications. The contractor shall verifig the requirements of the other trades as to sleeves, chases, hangers, inserts, anchors, holes and other items to be placed or set in the structural work.
- 2. The contactor shall be responsible for complying with all safety precautions and regulations during the work. The engineer will not advise on nor issue direction as to safety precautions and programs.
- 3. The structural drawings herein represent the finished structure. The contractor shall provide all temporary guying and bracing required to erect and hold the structure in proper alignment until all structural work and connections have been completed. The investigation, design, safety, adequacy and inspection of erection bracing, shoring, temporary supports, etc. is the sole responsibility of the contractor.
- 4. The engineer shall not be responsible for the methods, techniques and sequences of precedures to perform the work. The supervision of the work is the sole responsibility of the contractor.
- 5. Drawings indicate general and typical details of construction. Where conditions are not specifically shown, similar details of construction shall be used, subject to approval by the engineer.
- 6. All structural systems which are to be composed of components to be field erected shall be supervised by the supplier during manufacturing, delivery, handling, storage and erection in accordance with the supplier's instructions and requirements.
- 7. Loading applied to the structure during the process of construction shall not exceed the safe load-carrying capacity of the structural members. The live loadings used in the design of the structure are indicated in the "Design Criteria Notes". Do not apply any construction loads until structural framing is properly connected together and until all temporary bracing is in place.
- 8. All ASTM and other references are per the latest editions of these standards, unless otherwise noted.
- 9. Shop drawings and other items shall be submitted to the engineer for review prior to fabrication . All shop drawings shall be reviewed by the general contractor before submittal. The engineer's review is to be for conformance with the design concept and general compliance with the relevant contract documents. The engineer's review does not relieve the contractor of the sole resposibility to review, check and coordinate the shop drawings prior to submission. The contractor remains soley responsible for errors and ommissions associated with the preparation of the shop drawings as they pertain to member sizes, details, dimensions, etc.
- 10. Submit shop drawings in the form of two blueline prints. In no case shall reproduction of the contract drawings be used as shop drawings. Submit the following items for
- A. Concrete mix design(s) NOT REQUIRED. B. Reinforcing steel shop drawings - NOT REQUIRED
- C. Structural steel shop drawings NOT REQUIRED D. Steel Joist / Girder shop drawings - NOT REQUIRED E. Metal decking shop drawings - NOT REQUIRED
- F. Pre-manuf, wood sysem / truss shop drawings NOT REQUIRED G. Pre-engineered metal building system - NOT REQUIRED

Other submittals may be rquired per the "Schedule of Special inspections" or the separate notes contained herein.

11. Special Inspections will be required for this project as noted below:

- A. Concrete NOT REQUIRED
- B. Bolts installed in Concrete NOT REQUIRED C. Structural Welding - Field Welds - NOT REQUIRED
- D. High Strength Bolting NOT REQUIRED E. Structural Masonry - NOT REQUIRED
- 12. Unless otherwise indicated, all items noted to be demolished shall become the contractor's property and be removed from the site.

CONTRACTOR IF HE FEELS THE CHANGE IS IN THE BEST INTEREST OF THE OWNER. CHANGES

SHALL BE FORWARDED TO THE ENGINEER IN WRITING FOR APPROVAL PRIOR TO CONSTRUCTION.

- 13. Contractors shall visit the site prior to bid to ascertain conditions which may adversely affect the work or cost thereof.
- 14. Ducts, plumbing and openings through engineered shear walls shall not exceed 6" in diameter except as noted on drawings. No perforations exceeding 3/4" in diameter shall be made in structural members except as noted on drawings. Peforations with 3/4" diameter and smaller shall be made in the center 1/3rd of the beam height and length. A maximum of (2) perforations per beam are allowed. Contact the engineer if additional perforations are required.

DESIGN CRITERIA

Design Gravity Loads:

ROOF DL - SEE COVER SHEET Floor DL - SEE COVER SHEET

Design Live Loads:

Roof LL - 20 psf min Snow - SEE COVER SHEET Commerical Floor LL - 50 psf + 20 psf Partition Residential LL - 40 psf

Lateral Live Loads:

Wind - SEE COYER SHEET Seismic - SEE COVER SHEET Equivalent Fluid Pressure - 35 pcf

FOUNDATION NOTES

- 1. All footings shall bear on undisturbed, firm natural soil or compacted fill capable of supporting a minimum design bearing pressure as noted on the cover sheet. All foundation excavations shall be evaluated by a qualified geotechical engineer/testing agency prior to pouring foundation concrete if required by the Structural Engineeer.
- 2. Top of footing elevations shall be as shown on the foundation plan. These elevations are a maximum and shall be lowered as required to obtain the required design bearing pressure.
- Unless noted otherwise, the bottom of all exterior footings shall be placed 6" below local frost depth: the bottom of all interior footings shall be placed 12" minimum below interior finished grade.
- 3. All foundation concrete shall obtain a 28 day compressive strength of 2500 psi. All concrete to be permanentally exposed to the weather shall be air-entrained to 5% (+/- 1%) with an admixture that conforms to ASTM C-260.
- 4. All concrete work shall conform to the requirements of ACI 301, "Specification for Structural Concrete Buildings". Hot weather concreting shall be in accordance with ACI 305. Cold weather concreting shall be in accordance with ACI
- 5. All reinforcing steel shall conform to ASTM A-615, Grade 60 for #5 and larger and Grade 40 for #4 and smaller.
- 6. Unless noted otherwise, the following concrete cover shall be provided for reinforcemen A. Concrete cast against & permanently exposed to earth - 3" B. Concrete exposed to earth or weather. #6 through #18 bars - 2" #5 bar, W31 or D31 wire \$ smaller - 1 1/2"
- 7. All reinforcing marked continuous (Cont.) on the plans and details shall be lapped $36 \times bar$ diameters at splices unless noted otherwise.
- 8. No unbalanced backfilling shall be done against foundation walls unless walls are securely braced against overtruning, either by temporary bracing or by permanent construction.
- 9. Prior to commencing any foundation work, coordinate work with any existing utilities. Foundations shall be lowered where required to avoid utilities.
- 11. Unless noted otherwise, the centerlines of column foundations shall be located on column centerlines.
- 10. All retaining walls shall have at least 12" of free draining granular backfill, full height of wall. Provide control joints in retaining walls at approximately equal intervals not to exceed 25 feet nor 3 times the wall height. Provide expansion joints at every fourth control joint, unless otherwise indicated.

SITE PREPARATION NOTES

- 1. Within an area a minimum of 5 feet beyond the building limits, excavate a minimum of 4" of existing soil. Remove all organics, pavement, roots, debris and otherwise unsuitable
- 2. The surface of the exposed subgrade shall be inspected by probing or testing to check for pockets of soft or unsuitable maerial. Excavate unsuitable soil as directed by the engineer.
- 3. Proof roll the surface of the exposed subgade with a loaded tandem axle dump truck. Remove all soils which pump or does not compact properly as directed by the
- 4. Fill all excavated areas with approved controlled fill. Place in 8" loose lifts and compact to a minimum of 95% of the maximum dry density in accordance with ASTM D-698.
- 5. All controlled fill material shall be a select granular material free from all organics or otherwise deleterious material with not more than 20% by weight passing a no. 200 sieve and with a placticity index not to exceed
- 6. Provide field density tests for each 3,000 SF of building area for each lift of controlled fill.

PRE-ENGINEERED TRUSS NOTES

- 1. Wood trusses shall be designed by the manufacturer to support the loads dictated by the governing jurisdiction.
- 2. Wood trusses shall be designed by the maufacturer in accordance with the applicable provisions of the latest edition of the National Design Specification of the National Forest Products Association and the design specification for metal plate connected wood trusses of the Truss Plate institute.
- 3. Wood materials shall be Douglas Fir and shall be kiln dried and used at 19% maximum moisture content. Provide grade required to meet stress requirements.
- 4. Connector plates shall be not less than 0.036 inches (20 gage) in coated thickness, shall meet or exceed ASTM Grade A or higher and shall be hot dipped galvanized according to ASTM A-525 (coating G60). Minimum steel yield stress shall be 33,000 psi.
- 5. Trusses shall be fabricated in a properly equipped manufacturing facility of a permanent nature. Trusses shall be manufactured by experienced workmen, using precision cutting, jigging and pressing equipment under the requirements in quality control standard QST-88 of the Truss Plate Institute.
- 6. Secondary bending stresses in truss top and bottom chords due to dead, live and wind laods shall be considered in the design. Load duration factors shall be per the "National Design Specification for Wood Construction" latest edition.
- 7. Wood trusses shall be erected in accordance with the truss manufacturer's requirements. This work shall be done by a qualified and experienced contractor.
- 8. The Contractor shall provide all temporary and permanent bracing as required for safe erection and performance of the trusses. The guidelines set forth by the Truss Plate Institute publication "HIB-91, Commentary and Recommendations for Handling, Installing and Bracing Metal Plate Connected Wood Trusses" shall be a minimum requirement.
- 9. Truss member and components shall not be cut, notched drilled nor otherwise altered in any way without the written approval of the Engineer.
- 10. Submit complete shop drawings for all wood trusses showing member sizes, species, grade, moisture content, span, camber, dimensions, chord pitch, bracing requirements and loadings. Shop drawing shall be submitted to the Engineer and shall bear the seal of a Professional Engineer registered in Idaho.

WOOD FRAMING NOTES

- 1. All wood framing material shall be surfaced dry and used at 19% maximumu moisture content.
- 2. All stud and wall framing shall be No. 2 grade Doug Fir.
- 3. All joist, rafter & misc. framing shall be Select Str. grade Doug Fir. Provide full depth or metal bridging at midspan and at a maxmimum spacing of 8 ft o.c. between.
- 4. All framing exposed to the weather or in contact with masonry or concrete shall be pressure treated in accordance with the American Wood Preservers Assocication Specifications where possible. All cuts and holes should be completed before treatment. Cuts and holes due to on-site fabrication shall be brushed with 2 coats of copper naphthenate solution containing a minimum of 2% metallic copper in solution (per AWPA STD, M4).
- 7. Provide double joists under all partitions which run parallel with joists and under all concentrated loads from framing
- 8. Provide header beams of the same size as joists or rafters to frame around openings in the plywood deck unless otherwise indicated.
- 9. Structural steel plate connectors shall conform to ASTM A-36 specifications and be 1/4" thick unless noted otherwise. Bolts connecting wood members shall be ASTM A-307 and be 3/4" diameter unless otherwise indicated. Provide washers for all bolt heads and nuts in contact with wood surfaces.
- 10. Bolt holes shall be carefully centered and drilled not more than 1/16" larger than the bolt diameter. Bolted connections shall be snugged tight but not to the extent of crushing wood under washers.
- 11. Prefabricated metal joist hangers, hurricane clips, hold-down anchors and other accessories shall be as manufactured by "Simpson Strong-Tie Company", or approved equal. Install all accessories per the manufacturer's requirements. All steel shall have a minimum thickness of 0.04 inches (per ASTM A446, Grade A) and be galvanized (coating G60).
- 12. Holes and notches drilled or cut into wood framing shall not exceed the requirements of the International Building Code or the manufacturers specifications.
- 13. All plates, anchors, nails, bolts, washers and other miscellaneous hardware permanentally exposed to weather or in treated wood shall be hot dip galvanized.
- 14. All 8d nails shall have a minimum shank diameter of 0.113". All 10d & 12d nails shall have a minimum shank diameter of 0.120". All 16d nails shall have a minimum shank diameter of 0.131".

SLAB ON GRADE NOTES

- 1. Provide concrete slabs over a 6 mil polyethylene vapor barrier and 4" of porous fill. Maximum slump for concrete slabs shall be 5", using Type II cement.
- 2. All porus fill material shall be a clean granular material with 100% passing a 1-1/2" sieve and no more than 5% passing a No. 4 sieve. Porous fill shall be compacted to 95% max. dry density per ASTM D-698.
- 3. Slab joints shall be filled with approved material. This should take place as late as possible preferably 4 to 6 weeks after the slab has been cast. Prior to filling, remove all debris from the joints, then fill in accordance with the manufacturer's recommendations as follows:
- 6" slabs fill with Epoxy resin Other slabs - fill with field molded of elastomeric sealant.
- 5. Unless approved otherwise, all reinforcing shall be blocked into the center of the slab with precast concrete blocks having a compressive strength equal to that of the slab.
- 6. Walk ways and other exterior slabs are not shown on the structrual drawings. See the site plan and architectural drawings for location, dimensions, elevations, jointing details and finish details. Provide 4" walks reinforced with 6x6 - WI.4WI.4 WWF unless otherwise noted.
- 7. Slabs to be permanently exposed to weather shall be air entrained to 5% (+/- 1%) with an admixture that conforms to ASTM C-260.
- 8. All concrete work shall conform to the requirements ACI 301, "Specification for Structural Concrete Buildings". Hot weather concreting shall be in accordance with ACI 305. Cold weather concreting shall be in accordance with ACI
- 9. In order to avoid concrete shrinkage cracking, place concrete slabs in an alternating lane (or checker board) pattern. The maximum length of slab cast in in any one continuous pour is recommended to be less than 100 feet. The maximum spacing of joints shall be 25 feet.
- 10. See architectural drawings for exact locations of depressed slab areas and drains. Slope slab to drains where shown.
- 11. The finish tolerance of all slabs shall be in accordance with ACI 301, Type A.
- 12. Slabs shall be constructed in accordance with the following flatness/levelness requirements:

Slab Category	Specified	Local Minimum
Bull-Floated	Ff = 15 , FI = 13	Ff = 13 , FI = 10
Straight Edged	Ff = 15 , Fl = 13	Ff = 13 , Fl = 10
Flat	Ff = 15 , F1 = 13	Ff = 13 , FI = 10
Very Flat	Ff = 15 , FI = 13	Ff = 13 , FI = 10
Super Flat	Ff = 15 , Fl = 13	Ff = 13 , FI = 10

Floor flatness and levelness tests shall be conducted if deemed necessary by the owner in accordance with ASTM E 1155. Results, including acceptance or rejection of the work will be provided to the contractor within 48 hours after data collection. Remedies for out of tolerance work may include removal and reconstruction at the contractors expense. Any other remediation requires the approval of

PLYWOOD/GYPBOARD SHEATHING NOTES

- 1. All plywood construction shall be in accordance with the American Plywood Association (APA) specifications.
- 2. All roof panel sheathing shall be 5/8" (nom.) OSB 1 APA rated sheathing. Suitable edge support shall be provided by use of panel clips or blocking between framing. Unless otherwise noted connect roof sheathing with 8d common nails at 6" o.c. at supported panel edges and 6" o.c. at intermediate supports.
- 3. All floor sheathing shall be 3/4" (nom.) APa rated STURD-I-FLOOR Exp. 1, with tongue and groove edge. Unless noted otherwise connect floor sheathing with 10d common nails spaced 6" o.c. supported edges and 12" o.c. at intermediate supports. Field glue using adhesives meeting APA specification AFG-OI, applied in accordance with the manufacturer's recommendations.
- 4. All wall sheathing shall be 1/2" (nom.) OSB APA rated sheathing. Unless noted otherwise, connect wall sheathing with 8d common nails spaced at 6" o.c. at supported panel edges and 12" o.c at intermediate supports.
- 5. Install wall sheathing either vertically or horizontally with panel continuous over two or more spans. All other sheathing shall have long edges spanning over supports. Stagger panel end joints.
- 6. All nailing shall be carefully driven and not over-driven.
- 7. Provide 2x blocking at all unsupported panel edges.

CAST-IN-PLACE CONCRETE NOTES

4000 psi 2" - 4" 0.50

- 1. Concrete mixes shall be designed per ACI 301, using Portland Cement conforming to ASTM C-150 or C-595, aggregate conforming to ASTM C-33, and admixtures conforming to ASTM C-494, C-1017, C-618, C-989 and C-260. Concrete shall be ready-mixed in accordance with ASTM
- 2. Concrete shall conform to the following compressive strength, slump and water/cement ratio requirements unless specifically approved by the Engineer in writing:

Concrete	Min f'c (28 days)	Slump II	I/C Ratio
Columns	4000 psi	2" - 4"	0.46
Elevated Slabs	3000 pei	2" - 4"	0.46
Concrete not No	ted 3000 psi	2" - 4"	0.50
Foundations	2500 psi	2" - 4"	0.50

Slabs on Grade

- 3. All concrete work shall conform to the requirements of ACI 301, "Specification for Structural Concrete Buildings". Hot weather concreting shall be in accordance with ACI 305. Cold weather concreting shall be in accordance with ACI 306. 4. All reinforcing steel shall conform to ASTM A-615, Grade 60 for #5 and larger bars and Grade 40 for #4 and smaller. All welding of reinforcing steel shall be in accordance with AWS DI.4. Epoxy coated reinforcing shall conform to ASTM A-115. 5. All welded wire fabric (WWF) shall conform to ASTM A-185. 6. All reinforcing steel shall be set and tied in place prior to pouring of concrete, except that vertical dowels for masonry wall reinforcing may be "floated" in place. Do not
- field bend bars partially embedded in hardened concrete unless specifically indicated or approved by the Engineer. 7. Reinforcing steel, including hooks and bends, shall be detailed in accordance with ACI 315. All reinforcing steel indicated as being continuous (Cont.) shall be lapped with
- a Type 2 splice unless noted otherwise. 8. Unless noted otherwise, the following minimum concrete cover shall be provided for reinforcement:
- A. Concrete exposed to earth or weather: #6 through #18 bars - 2" #5 bar, W31, D31 wire \$ smaller - 1 1/2" B. Concrete not exposed to earth or weather:
- Walls, elevated slabs [\$ joists] 3/4" Beams and columns - 1 1/2" C. Foundation concrete - See Foundation Notes.
- 9. Bar supports and holding bars shall be provided for all reinforcing steel to insure minimum concrete cover. Bar supports shall be plastic tipped or stainless steel. 10. Unless noted otherwise, all one way slabs shall be reinforced as follows:
- Bottom reinforcing #4 @ 16" o.c. (Between Supports) Top Reinforcing #4 @ 12" o.c. (Centered on Supports) Temp. Reinforcing #4 @ 18" o.c. (Transverse Bottom)
- 11. Unless noted otherwise, all concrete walls (other than

retaining walls) shall be reinforced as follows:

Wall Thickness	Horizontal	Vertical	Location
4" - 6"	#4 @ 16" O.C.	#4 @ 18" o.c.	Centered
8"	#4 @ 12" o.c.	#4 @ 18" o.c.	Centered
10"	#4 @ 18" o.c.	#4 @ 18" o.c	Each Face
12"	#4 @ 16" o.c.	#4 @ 18" O.C.	Each Face

- 12. All edges of permanently exposed concrete surfaces shall be chamfered 3/4" unless otherwise noted. 13. In order to avoid concrete shrinkage cracking, place concrete slabs in an alternating lane pattern. The maximum length of slab cast in any one continuous pour shall be limited to 80 feet.
- 14. Formwork shall remain in place until concrete has obtained at least 90% of its 28 day compressive strength. The Contractor shall provide all shoring and reshoring.

NOTE TO CONTRACTOR

- TRUSS DRAWINGS SHALL BE ON SITE AT THE TIME OF FRAMING INSPECTION.
- 2. JOIST/RAFTER MANUFACTURER'S INSTALLATION MANUAL OF INSTRUCTIONS TO BE ON SITE AT THE TIME OF FRAMING INSPECTION.

MASONRY VENEER

1. Wood Stud Backing - a 2 inch by 2 inch 0.0625" zinc-coated or not-metalic coated wire mech with two layers of water-resistant barrier in accordance with Section 1404.2 shall be applied directly to wood studs spaced a maximum of 16" o.c. On studs, the mesh shall be attached with 2" long corrosion-resistant steel wire furring nails at 4" o.c. providing a minimum 1.125" penetration into each stud and with 8d annular threaded nails at 8" o.c. into top and bottom plates or with equivalent wire ties. There shall be not less than a 0.1055" zinc-coated or nonmetallic coated wire, or approve equal, attached to the stud with a minimum of an 8d (0.120" diameter) annular threaded nail for every 2 square feet of stone veneer. This tie shall be a loop having legs not less than 15" in length, so bent that it will lie in the stone veneer mortar joint. The last 2" of each wire leg shall have a right-angle bend. One-inch minimum thickness of cement grout shall be placed between the backing and the stone veneer.

STRUCTURAL STEEL NOTES

1. All structrual steel shall conform to the latest edition of the "Manual of Steel Construction" of the AISC

2. Unless noted otherwise, all materials shall be in conformance

with the following ASTM specifications:

	Tropositioalistics	
MEMBER	ASTM	MIN, STRENGT
Structural Tubing	A500 Grade B	46 ksi
Steel Pipe	A53 (Type E or Grade B)	35 ksi
Other Rolled Shapes	Ç,	
and Plates	A36	36 ksi
Connection Bolts	A325	92 ksi
Anchor Bolts	A307	
Threaded Rods	A36	36 ksi
Non-Shrink Grout	C1107	8000 psi

- 3. Minimum bolt diameter shall be 3/4" unless noted otherwise. All bolts shall be shear/bearing type bolts and be snug-tight. 4. All welding shall be in accordance with AWS DI.1 using ETOXX electrodes. Unless noted otherwise, provide cont. min. sized fillet welds per AISC requirements. All filler material
- shall have a minimum yield strength of 58 ksi. 5. Where "Continuous Chord" angles are indicated, provide a continuous butt weld or full penetration weld at the splice
- connection detail for approval. 6. Moment connections are denoted thus () on the
- plan. See typical details. 7. Where steel beams bare across building expansion joints or at wall control joints, provide a "slip" connection as shown
- in the tupical details. 8. Holes in steel shall be drilled or punched. All slotted holes shall be provided with smooth edges. Burning of
- holes and torch cutting at the site is not permitted. 9. Unless otherwise noted, all structural steel permanently exposed to view shall be shop painted with one coat of

SSPC 15-68, Type 1 (Red Oxide) paint.

- 10. The structural steel erector shall provide all temporary guying and bracing. 11. Columns, anchor bolts, base plates, etc. have been designed
- construction. Any investigation of the columns, anchor bolts, base plates, etc. is the sole responsibility of the contractor. 12. Steel fabricators shall be an AISC certified shop for Category 1 steel structures and maintain detailed quality control procedures as required to satisfy the special

for the loading encountered during steel erection and

13. Provide girts with a slight downward "bow" at midspan. 14. Unless otherwise noted, all structural steel permanently exposed to the weather, including all brick shelf angles

inspection requirements of the International Building

- shall be hot-dipped galvanized in accordance with ASTM A153. 15. Protective coatings damaged during the transporting, erecting and field welding processes shall be repaired in the field to match the shop applied coating.
- other items in accordance with the International Building 17. Provide angle frames at all roof openings and mechanical

16. The contractor shall hire an independent testing agency

to provide special inspections of bolting, welding and

RADON CONTROL

roof top units per typical details.

1. A minimum 6-mil (or 3-mil cross laminated) polyethylene or equivalent flexible sheeting material shall be placed on top of the gas permeable layer prior to pouring the slab. The sheeting should cover the entire floor area, and separate sections of sheeting should be overlapped at least 12 inches. 2. To retard soil gas entry, large openings through concrete slabs, wood, and other floor assemblies in contact with the soil, such as spaces around bathtub, shower, or toilet drains, shall be filled or closed with materials that provide a

permanent airtight seal such as non-shrink mortar, grouts,

expanding foam, or similar materials designed for such application. 3. A minimum 3-inch diameter pvc or other gas-tight pipe shall be embedded vertically into the sub slab aggregate or other permeable material before the slab is poured. A "T" fitting or other support on the bottom of the pipe shall be used to ensure that the pipe opening remains within the sub-slab permeable material. This gas tight pipe shall be extended vertically through the building floors, terminate at least 12 inches above the surface of the roof, in a location at least 10 feet away from any window or other opening into the conditioned spaces of the building that is less than 2 feet below the exhaust point, and 10 feet from any adjoining or adjacent buildings.

FIRE BLOCKING

of combustion.

Fire blocking shall be provided in wood-frame construction in the following locations:

- I. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of stude or staggered studs, as follows: 1.1 Vertically at the ceiling and floor levels.
- 1.2 Horizontally in intervals not exceeding 10 feet 2. At all intersections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
- 3. In concealed spaces between stair stringers at the top and bottom of the run. 4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products

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CONTRACTOR'S RESPONSIBILITY

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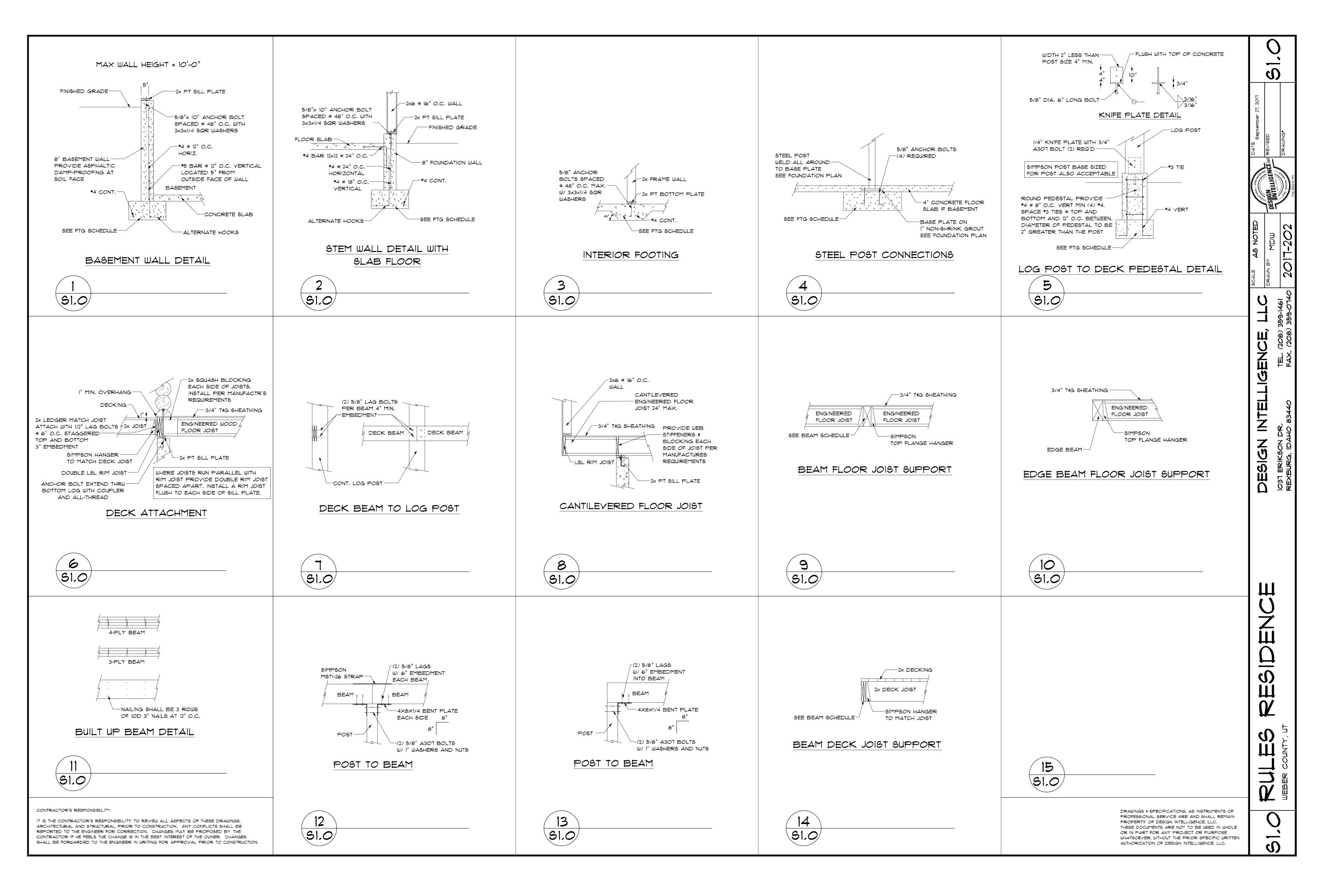
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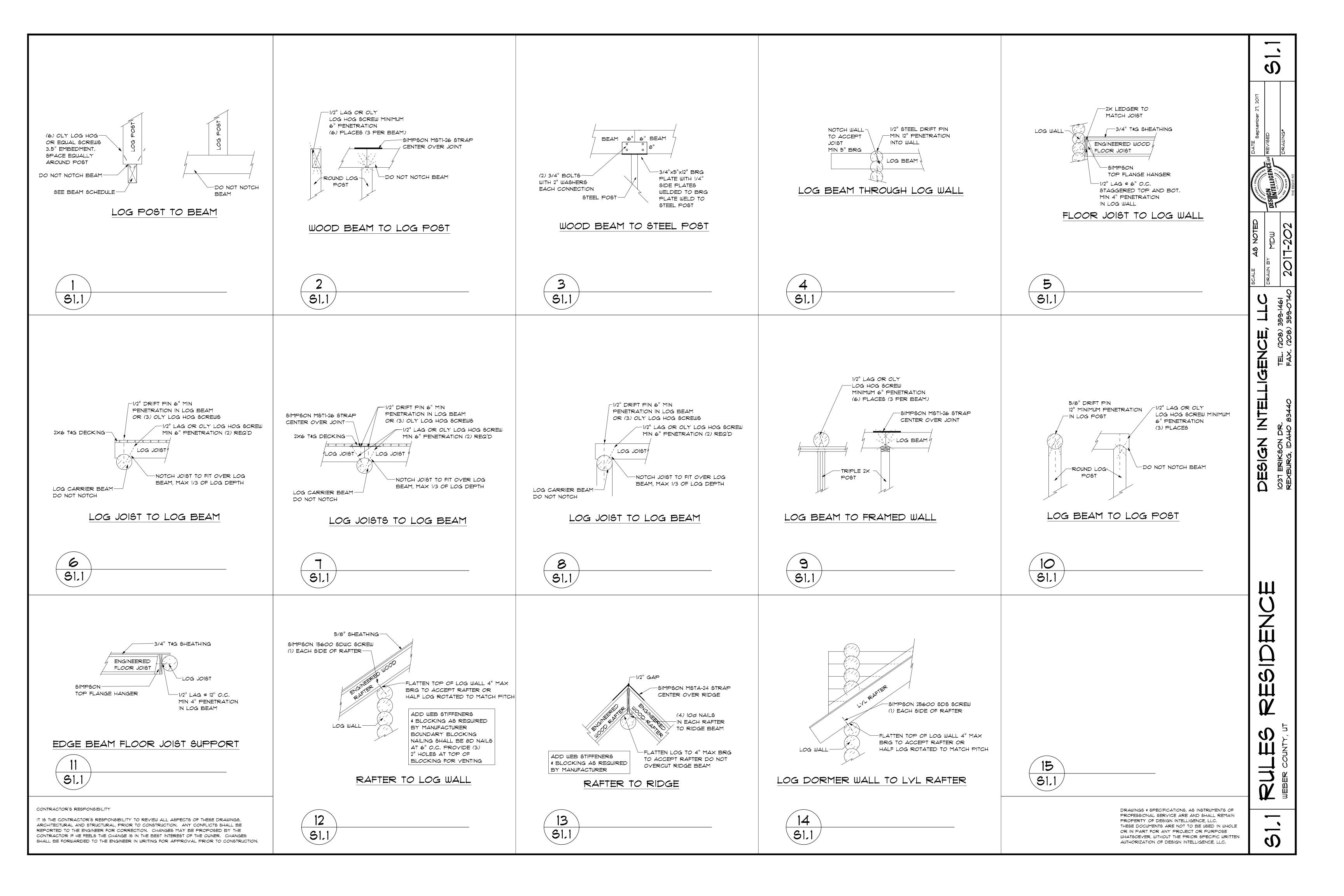
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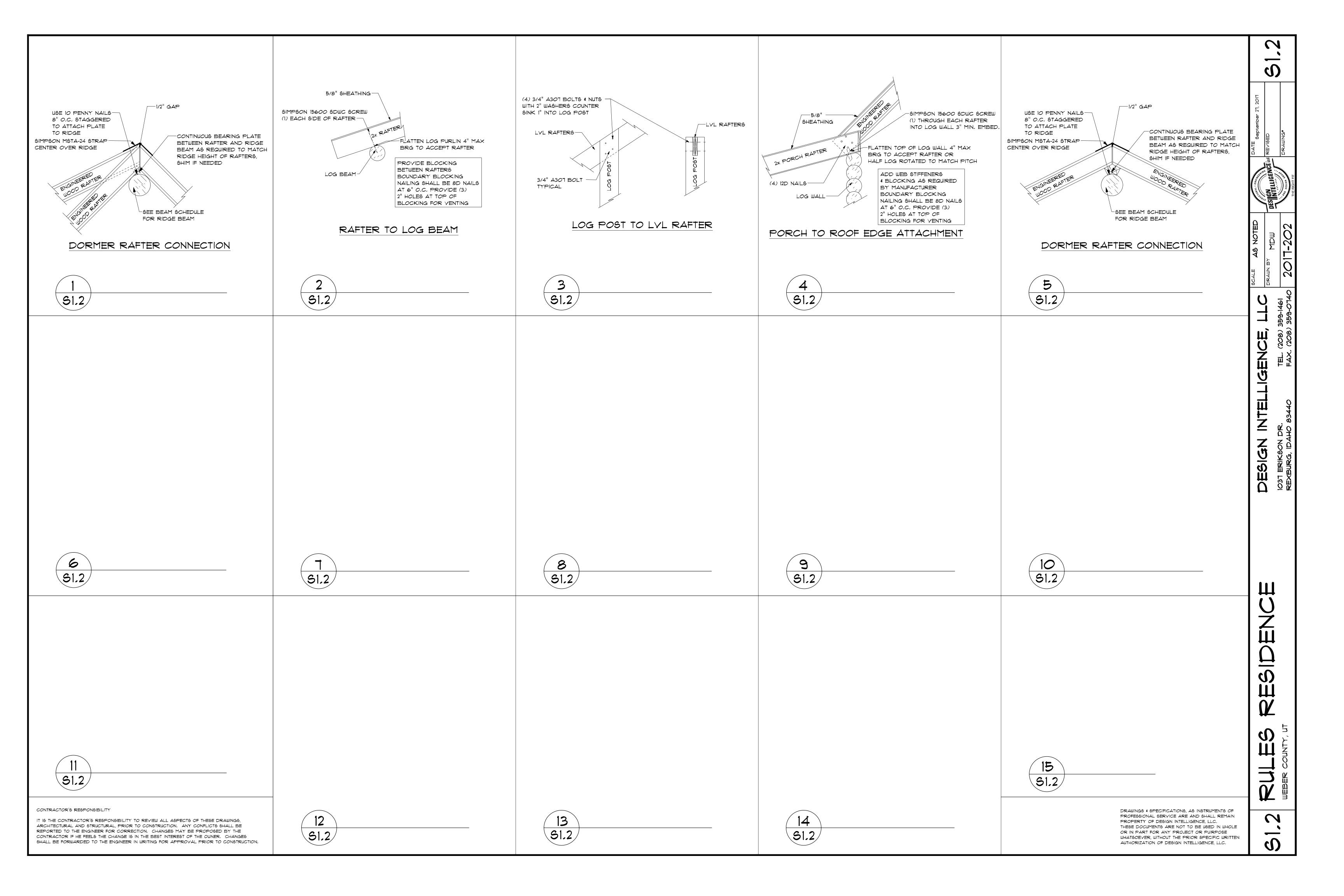
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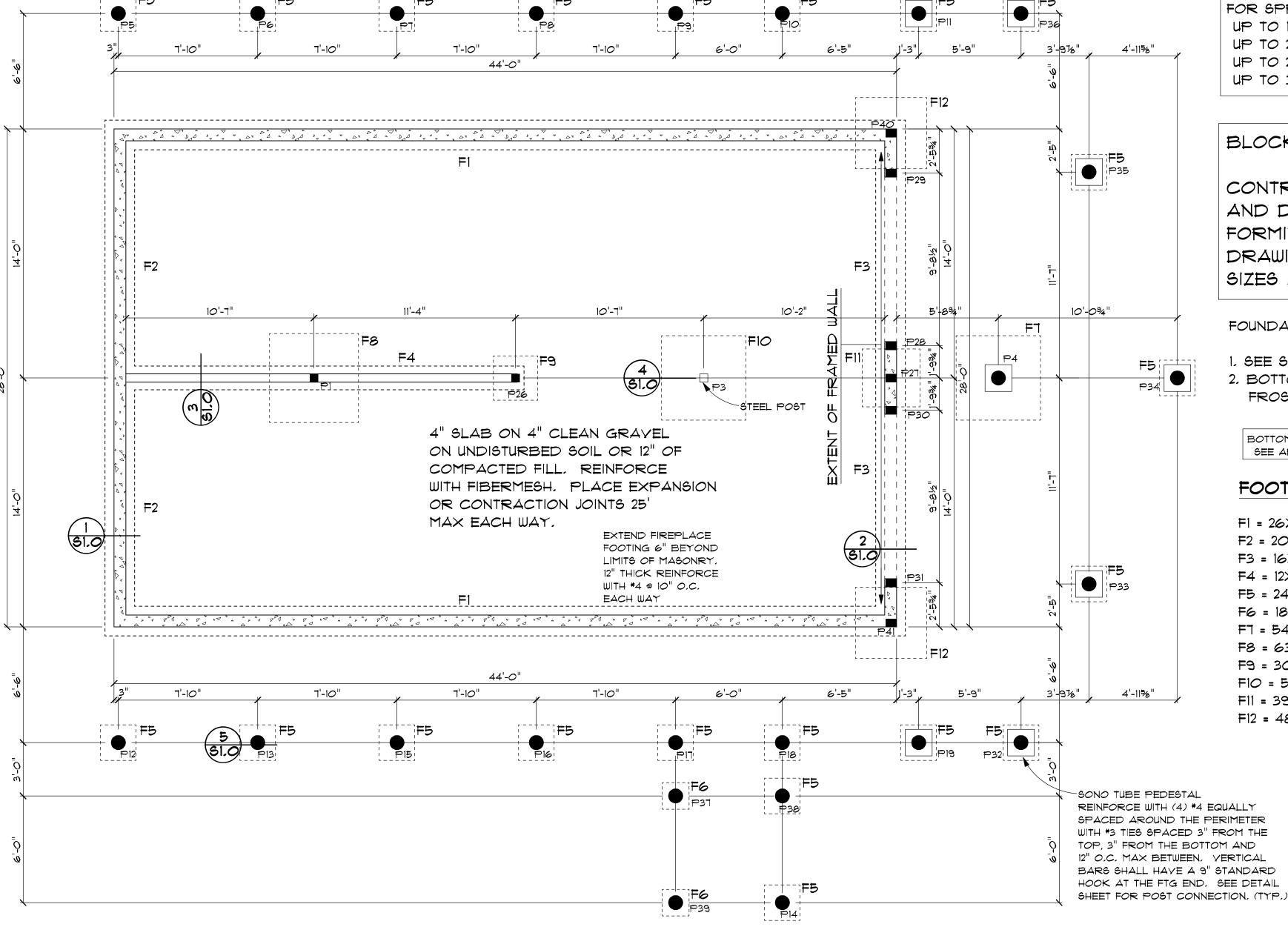
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL ASPECTS OF THESE DRAWINGS, ARCHITECTURAL AND STRUCTURAL, PRIOR TO CONSTRUCTION, ANY CONFLICTS SHALL BE REPORTED TO THE ENGINEER FOR CORRECTION, CHANGES MAY BE PROPOSED BY THE











ALTERNATE BIG FOOT FOOTING SCHEDULE:

FOR SPREAD FOOTINGS: UP TO 18"X18" USE BF20 UP TO 21"X21" USE BF24 UP TO 24"×24" USE BF28 UP TO 30"X30" USE BF36

BLOCKOUTS

CONTRACTOR SHALL YERIFY ALL WINDOW AND DOOR ROUGH OPENING SIZES BEFORE FORMING BLOCKOUTS, SEE ARCHITECTURAL DRAWINGS FOR ALL WINDOW AND DOOR SIZES AND LOCATIONS.

FOUNDATION NOTES:

1. SEE SHEET SO FOR ADDITIONAL GENERAL NOTES. 2. BOTTOM OF FOOTING SHALL BE BELOW LOCAL FROST LINE,

BOTTOM OF FOOTINGS MAY VARY SEE ARCHITECTURAL DRAWINGS

FOOTING SCHEDULE

FI = 26×10 CONT, FTG WITH (3) #4 CONT. $F2 = 20 \times 10$ CONT, FTG WITH (2) *4 CONT. F3 = 16×10 CONT. FTG WITH (2) #4 CONT. F4 = 12×8 CONT. FTG WITH (2) #4 CONT. F5 = 24×24×12 FTG WITH (3) #4 EACH WAY F6 = 18×18×12 FTG WITH (3) #4 EACH WAY $F7 = 54 \times 54 \times 12$ FTG WITH (7) *4 EACH WAY F8 = 63×63×12 FTG WITH (8) #4 EACH WAY $F9 = 30 \times 30 \times 12$ FTG WITH (4) #4 EACH WAY FIO = 57×57×12 FTG WITH (7) #4 EACH WAY FII = 39×39×12 FTG WITH (5) #4 EACH WAY F12 = 48×48×12 FTG WITH (6) #4 EACH WAY

POST SCHEDULE

P1 = (1) DF #1 6×8 P2 = (1) 10" R LOG POST P3 = (1) H66 4x4x1/4 W/ 12X12X1 BPP4-P25 = (1) 10" R LOG POST P26 = (2) DF #1 2x6P27-P31 = (2) DF #1 2x8P32-P39 = (1) 10" R LOG POST P40-P41 = (1) DF #1 6X8

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

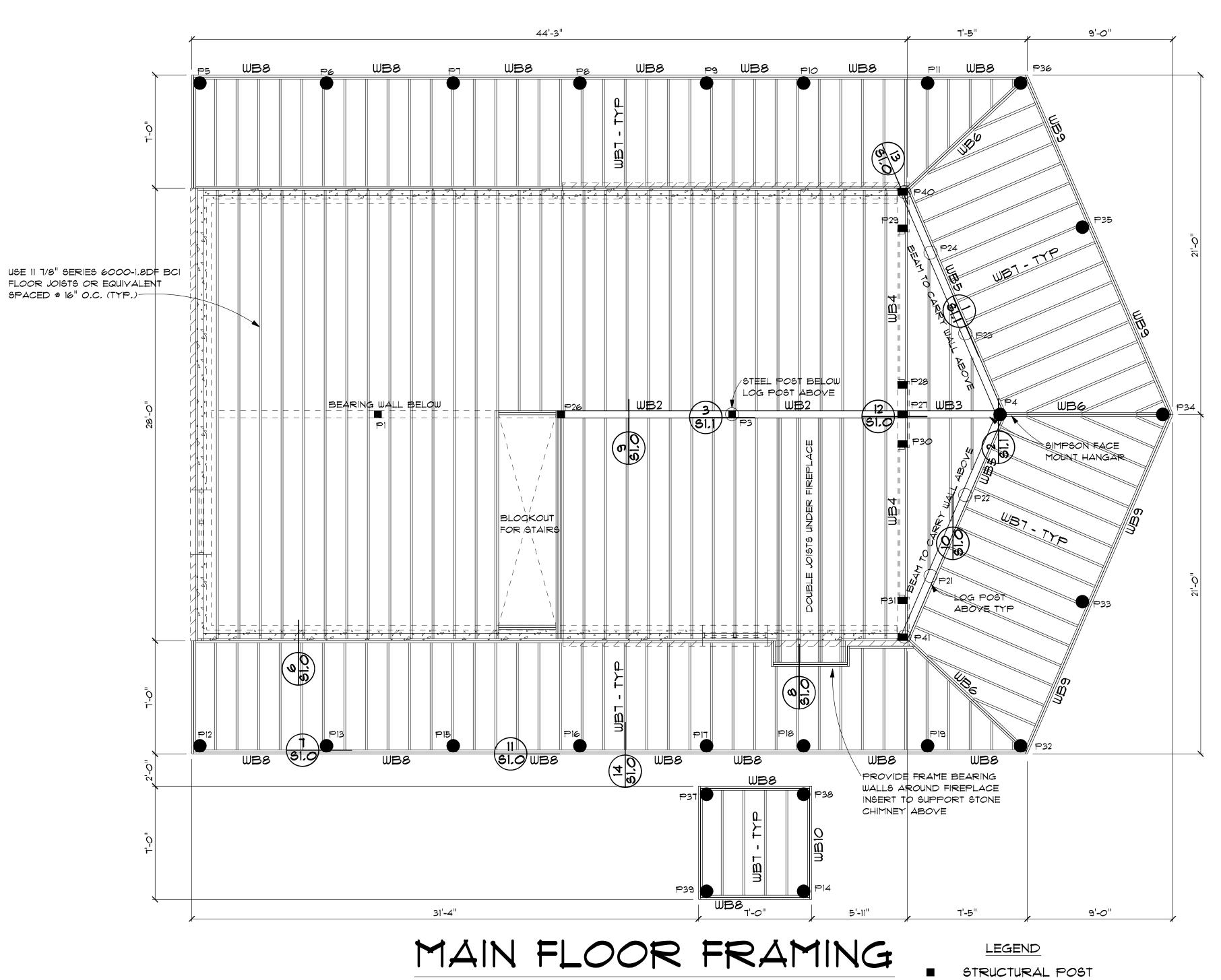
LEGEND

STRUCTURAL POST

SONO TUBE UNO

CONTRACTOR'S RESPONSIBILITY

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL ASPECTS OF THESE DRAWINGS, ARCHITECTURAL AND STRUCTURAL, PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE REPORTED TO THE ENGINEER FOR CORRECTION, CHANGES MAY BE PROPOSED BY THE CONTRACTOR IF HE FEELS THE CHANGE IS IN THE BEST INTEREST OF THE OWNER, CHANGES SHALL BE FORWARDED TO THE ENGINEER IN WRITING FOR APPROVAL PRIOR TO CONSTRUCTION.



1/4" = 1'-0"

FLOOR FRAMING NOTES:

STRUCTURAL LOG POST

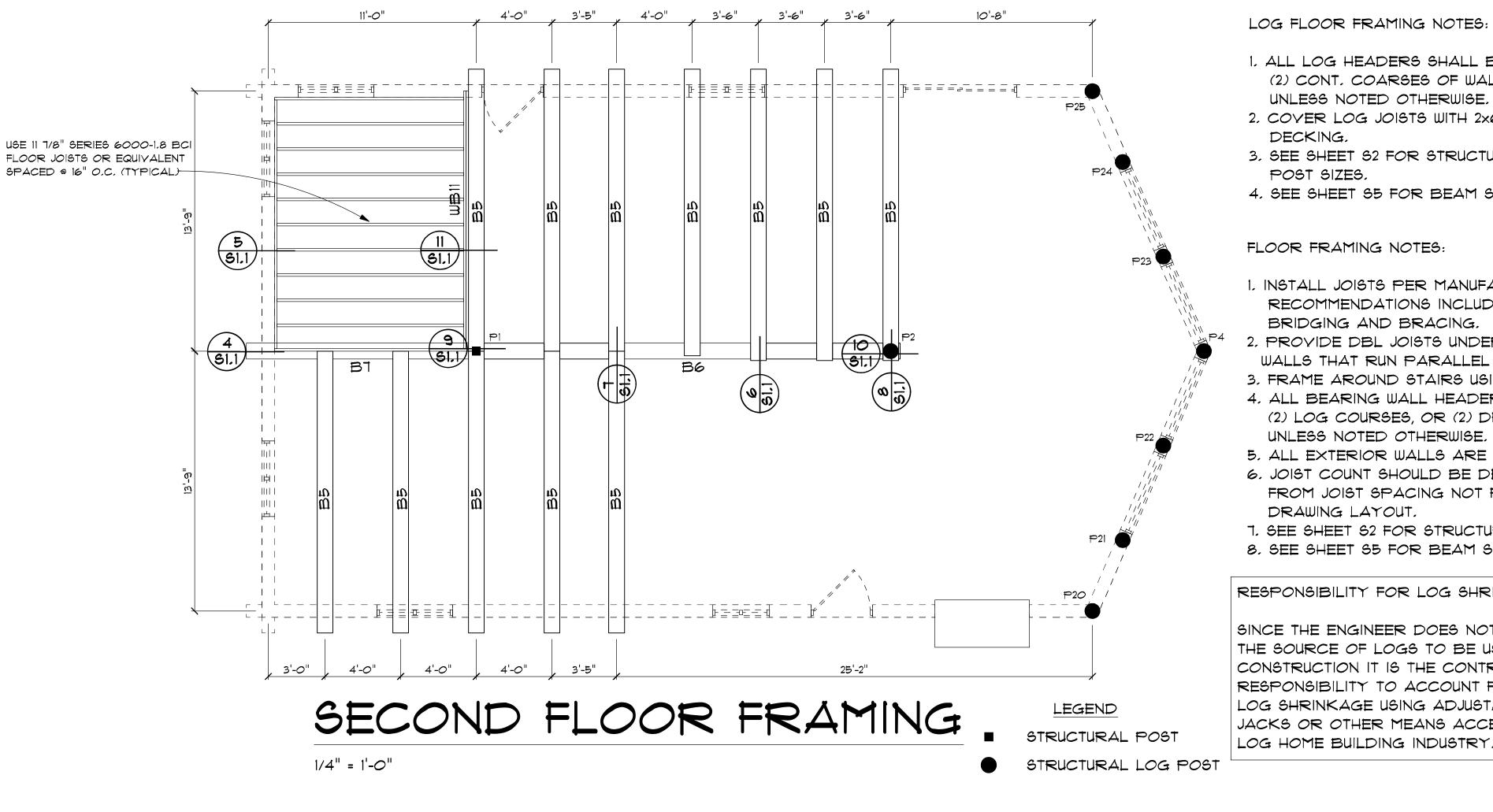
- 1. INSTALL JOISTS PER MANUFACTURER'S RECOMMENDATIONS INCLUDING ALL BRIDGING AND BRACING.
- 2. PROVIDE DBL JOISTS UNDER ALL BEARING WALLS THAT RUN PARALLEL TO FLOOR JOISTS.
- 3. FRAME AROUND STAIRS USING (2) 1.75x11.875 LYL. 4, ALL BEARING WALL HEADERS SHALL BE
- (2) CONTINUOUS LOG COURSES, OR (2) DF 2x10 UNLESS NOTED OTHERWISE. 5, ALL EXTERIOR WALLS ARE BEARING WALLS
- 6. JOIST COUNT SHOULD BE DETERMINED
- FROM JOIST SPACING NOT FROM DRAWING LAYOUT.
- 1. SEE SHEET S2 FOR STRUCTURAL POST SIZES.
- 8. SEE SHEET S5 FOR BEAM SCHEDULE.

RESPONSIBILITY FOR LOG SHRINKAGE

SINCE THE ENGINEER DOES NOT KNOW THE SOURCE OF LOGS TO BE USED IN CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOUNT FOR LOG SHRINKAGE USING ADJUSTABLE SCREW JACKS OR OTHER MEANS ACCEPTED IN THE LOG HOME BUILDING INDUSTRY.

CONTRACTOR'S RESPONSIBILITY

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LOG FLOOR FRAMING NOTES:

- 1. ALL LOG HEADERS SHALL BE (2) CONT. COARSES OF WALL LOG UNLESS NOTED OTHERWISE.
- 2. COYER LOG JOISTS WITH 2x6 T&G DECKING.
- 3. SEE SHEET S2 FOR STRUCTURAL POST SIZES.
- 4. SEE SHEET S5 FOR BEAM SCHEDULE.

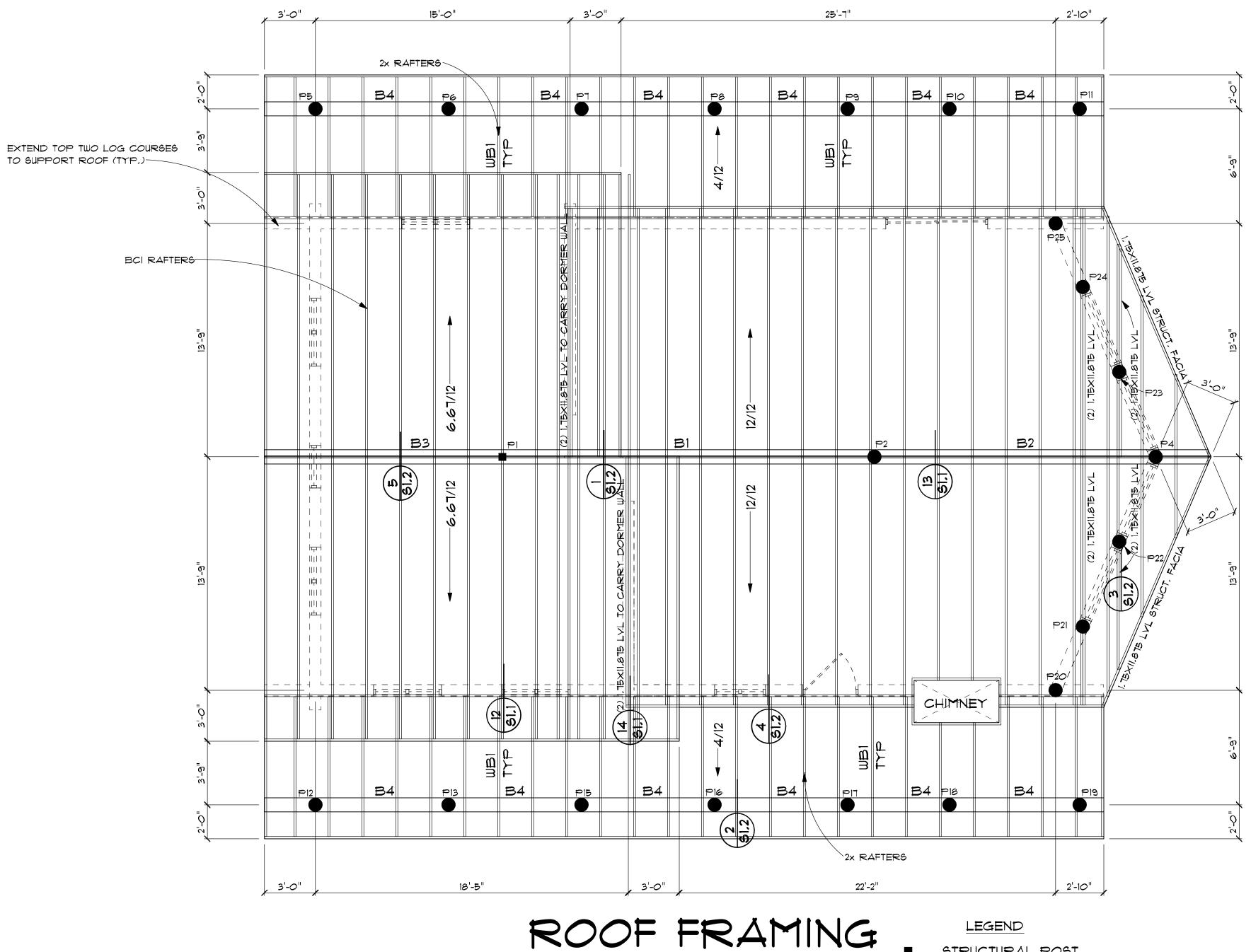
FLOOR FRAMING NOTES:

- 1. INSTALL JOISTS PER MANUFACTURER'S RECOMMENDATIONS INCLUDING ALL BRIDGING AND BRACING.
- 2. PROVIDE DBL JOISTS UNDER ALL BEARING WALLS THAT RUN PARALLEL TO FLOOR JOISTS.
- 3. FRAME AROUND STAIRS USING (2) 1.75x11.875 LVL. 4, ALL BEARING WALL HEADERS SHALL BE (2) LOG COURSES, OR (2) DF 2×10
- 5. ALL EXTERIOR WALLS ARE BEARING WALLS
- FROM JOIST SPACING NOT FROM DRAWING LAYOUT.
- 7. SEE SHEET S2 FOR STRUCTURAL POST SIZES. 8. SEE SHEET S5 FOR BEAM SCHEDULE.

RESPONSIBILITY FOR LOG SHRINKAGE

SINCE THE ENGINEER DOES NOT KNOW THE SOURCE OF LOGS TO BE USED IN CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOUNT FOR LOG SHRINKAGE USING ADJUSTABLE SCREW JACKS OR OTHER MEANS ACCEPTED IN THE LOG HOME BUILDING INDUSTRY.

INTELLIG



HAND FRAMED ROOF NOTES:

- I. INSTALL RAFTERS PER MANUFACTURER'S RECOMMENDATIONS INCLUDING ALL BRIDGING AND BRACING.
- 2. PROVIDE SIMPSON H2.5 OR EQUAL AT BRG ENDS OF EACH RAFTER.
- 3. RAFTER COUNT SHOULD BE DETERMINED FROM RAFTER SPACING NOT FROM DRAWING LAYOUT.
- 4. BEARING WALL HEADERS SHALL BE (2) CONTINUOUS LOG COURSES, OR (2) DF 2x10 UNLESS NOTED OTHERWISE.
- 5, ALL ROOF OVERHANGS SHALL BE AS NOTED.

RESPONSIBILITY FOR LOG SHRINKAGE

SINCE THE ENGINEER DOES NOT KNOW THE SOURCE OF LOGS TO BE USED IN CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOUNT FOR LOG SHRINKAGE USING ADJUSTABLE SCREW JACKS OR OTHER MEANS ACCEPTED IN THE LOG HOME BUILDING INDUSTRY.

DORMER WALLS TO BE BUILT ON TOP OF LYL RAFTERS.

ALL DOUG FIR SHALL BE

SELECT STRUCTURAL U.N.O.

BCI RAFTER SHALL BE

11 7/8" BCI 6000-1.8 DF

SPACED AT 24" O.C. TYP.

BEAM SCHEDULE

WB1 = DF 2×6 @ 24 IN. O.C. WB2 = (2) 1.75×11.875 LYL

WB3 = (2) 1.75×11.875 LVL WB4 = (2) 1.75×11.875 LYL WB5 = 6.75×12 GLB (24F- $\sqrt{4}$)

WB6 = (2) DF 2X8 WB7 = DF 2X8 @ 16 IN. O.C.

WB8 = (2) DF 2×8 $WB9 = (2) DF 2 \times 12$ $WB10 = (2) DF 2 \times 12$

WB11 = (2) 1.75×11.875 LYL

BI = 18"R LODGE POLE SELECT B2 = 18"R WEST WOOD SELECT

B3 = 16"R WEST WOOD SELECT B4 = 8"R WEST WOOD SELECT

B5 = 10"R WEST WOOD SELECT B6 = 16"R DOUG FIR SELECT

BT = 16"R WEST WOOD SELECT

1/4" = 1'-0"

STRUCTURAL POST STRUCTURAL LOG POST

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IOD NAILS THRU SHEATHING TO BEAM -SEE BEAM SCHEDULE: ADDITION TO POST -(2) DF 2X8 SEE POST SCHEDULE 2X8 STUDS — AT 16" O.C. SEE SHEAR WALL DRAWINGS FOR ON SHEET S2 SHEAR WALL NOTES AND HOLD DOWNS. DASHED LINES INDICATE MAX, - TYP SECOND OPENING IF APPLICABLE NAILING AT BEAM SHALL BE (20) 10D NAILS AT 2" O.C., ONE ROW TOP AND ONE ROW BOTTOM AND ONE ROW CENTERED. WALL FRAMING AT GARAGE DOORS

NOTE: 1 1/2" 16 GAGE STAPLES MAY BE USED INSTEAD OF 8D NAILS AS FOLLOWS:

8D NAILS @ 6" O.C. = 1 1/2" 16 GA. STAPLES AT 4" O.C. 8D NAILS @ 4" O.C. = 1 1/2" 16 GA, STAPLES AT 3" O.C. 8D NAILS @ 3" O.C. = 1 1/2" 16 GA, STAPLES AT 2" O.C

ALL HOLD DOWNS ARE SIMPSON BRAND AND SHALL BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS.

ALL EXTERIOR WALLS SHALL BE NAILED PER UNLESS NOTED OTHERWISE.

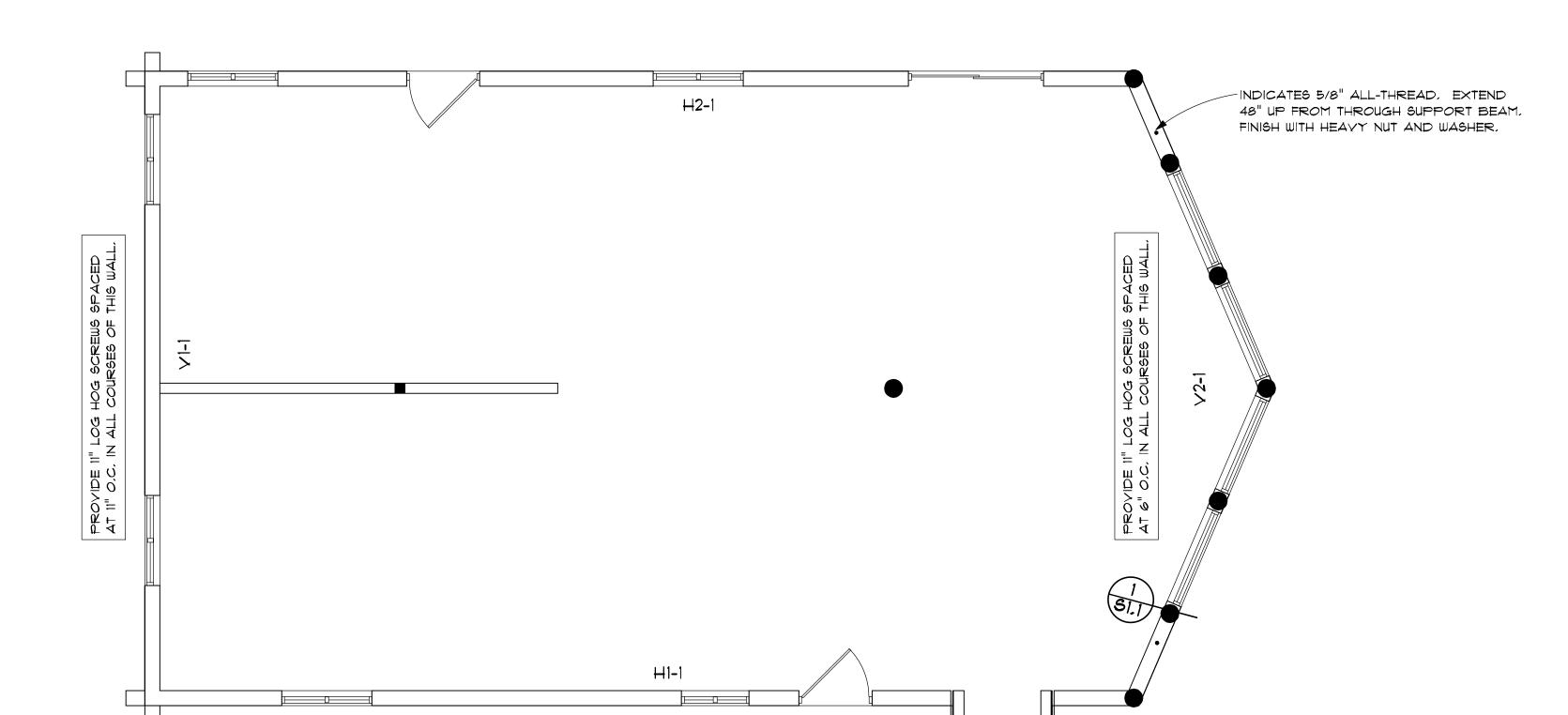
SHALL BE STAGGERED. (2044 PLF)

SHEAR WALL NOTES

1. ALL EXTERIOR WALLS ARE DESIGNATED SHEAR WALLS. 2. ALL FRAMED SHEAR WALLS SHALL BE 2×8 @ 16" O.C. OF THE WALL WITH 8D NAILS @ 2" O.C. AT PANEL EDGES AND 12" O.C. IN THE FIELD. 3" NOMINAL BLOCKING IS REQUIRED AT ALL PANEL EDGES INCLUDING THE SILL PLATE, NAILS ON EACH SIDE

BASEMENT SHEAR WALLS

1/4" = 1'-0"



APPLY SASHOO LOG JAM OR SASHOO LOG BUILDER AS A CAULK TO THE INSIDE AND OUTSIDE FACES OF ALL LOG WALL JOINTS, THICKNESS SHALL BE 1/2 THE WIDTH OF THE BEAD UP TO A MAXIMUM OF 1/2" THICK.

ADHESIVE PROPERTIES ARE PART OF THE LATERAL FORCE RESISTING SYSTEM.

PROVIDE II" LOG HOG SCREWS SPACED AT 36" O.C. IN ALL COURSES OF WALL LOG UNLESS NOTED OTHERWISE.

MAIN FLOOR SHEAR WALLS

1/4" = 1'-0"

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