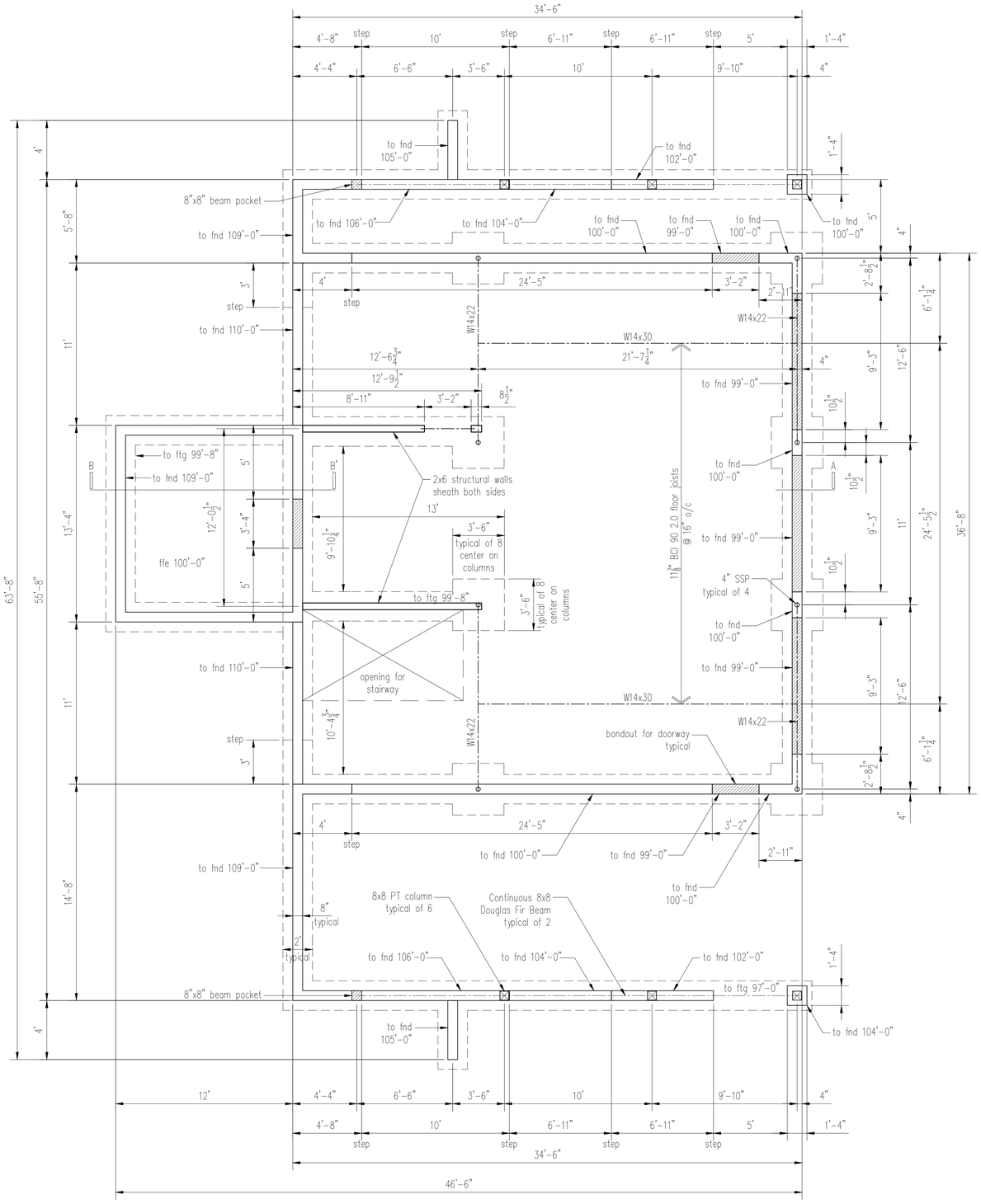


General Notes

1. Minimum requirements for all structural components shall be at the discretion of the designer.

2. Design is in accordance with the 2021 International Residential Code [IRC], as amended by _____.

3. Work shall be in accordance with all Federal, State, County and Municipal codes, rules, regulations and ordinances.

4. Install all materials in accordance with the manufacturer's recommendations.

5. Climate & Geographical Design Criteria
   - 5.1. Elevation of Site: 8000 feet
   - 5.2. Ground Snow Load: 70 psf
   - 5.3. Wind Speed: 169 mph
   - 5.4. Seismic Design: B
   - 5.5. Weathering: Severe
   - 5.6. Frost Line Depth: 30 inches
   - 5.7. Air Freezing Index: 900 °F-days

Foundation Notes

1. Abbreviations
   - 1.1. to fnd = top of foundation
   - 1.2. to ftg = top of footing

2. [note geotechnical engineering report, or] Allowable soil bearing pressure 1500 pounds per square foot maximum. Verify in field.

3. Structural Steel
   - 3.1. Structural Steel shall be detailed, fabricated and installed in accordance with the AISC Steel Construction Manual, latest edition.
   - 3.2. Structural Steel Connections shall be specified and detailed by steel fabricator and reviewed by a Structural Engineer.
   - 3.3. Field verify all structural steel dimensions.
   - 3.4. Welding shall be performed by an AWS certified welder.
   - 3.5. Structural Steel in contact with soil shall be coated with bituminous damp proofing.
   - 3.6. Structural Steel:
     - 3.6.1. Steel Beams [W sections]: A36
     - 3.6.2. Plate Steel: A36
     - 3.6.3. Steel Angles: A36
     - 3.6.4. Standard Steel Pipe Columns [SSP]: A36
       - 3.6.4.1. Install Pipe Columns using A36 Steel Plate Bearing Plates.
         - 3.6.4.1.1. Top: ½"x6"x8"
         - 3.6.4.1.2. Bottom: ½"x8"x8"

4. Concrete Steel Reinforcing [Rebar] – ASTM 615, Grade 60, deformed bars shall be detailed, fabricated, and placed in accordance with ACI-315 "ACI Manual of Standard Practice". Laps in broken runs shall be 23" min for #4 and 34" min for #5 and larger.
   - 4.1. Continuous Wall Footings
     - 4.1.1. 2-#4 continuous installed 3" above subgrade and 2" from the edge of the footing.
     - 4.1.2. Dowels w/10" hooks
       - 4.1.2.1. Match size & spacing of vertical wall reinforcement.
       - 4.1.2.2. Minimum height above top of ftg as per required lap length.
   - 4.2. Concrete Foundation Walls
     - 4.2.1. Place rebar in the center of the wall.
     - 4.2.1. Vertical
       - 4.2.1.1. #6 @ 35" o/c w/12" [alternates: #5 @ 25" o/c or #4 @ 16" o/c; adjust dowel spacing as req'd].
       - 4.2.1.2. Tie to dowels.
     - 4.2.2. Horizontal: #4 bars – 6" from top & btm of wall & 18" max o/c in between.

5. Piers
   - 5.1. Vertical: 4-#4 in corners of square piers with 3" cover at sides & bottom and 2" cover at top.
     - 5.1.1. At overhead doors, vertical steel to bend and tie into garage slab S&T steel.
     - 5.1.2. Horizontal: #4 bars 6" from top & btm of wall & 18" max o/c in between with 3" cover.

6. Vault
   - 6.1. Walls & Floor: #6 @ 12" each way with minimum 2" cover.
   - 6.2. Ceiling: 2 layers #6 each way with minimum 2" cover.
   - 6.3. Reinforcing continuous in walls, floor and ceiling.

7. Concrete Slab-on-Grade
   - 7.2. Slope concrete floors in garage as required by the IRC.
   - 7.3. Shrinkage & Temperature [S&T] steel in slab-on-grade shall be #4 rebar @ 18" o/c each way 2" from the bottom of the slab, installed on chairs.

8. Cast-in-Place Concrete
   - 8.1. Concrete shall be mixed, placed, finished and cured in accordance ACI 301, "Specifications for Structural Concrete for Buildings" and ACI 306, "Cold Weather Concreting".
   - 8.2. Concrete shall have a 28-day compressive strength of 3000 psi. Use 3/4" max aggregate with a max Water/Cement Ratio of 0.50 with a 4" max slump. Add 6% air entrainment where exposed to freezing weather.

9. Concrete Control Joints:
   - 9.1. 4 slab thickness deep, 12 feet on center each way maximum. Pattern shall form squares or rectangles with a maximum width to length ratio of 1.5.
     - 9.0.1. 4.2. If control joints are saw cut, all cuts crossing radiant tubing [if applicable] shall be protected by steel and the depth of cut reduced to 3/8" for 6" on either side of tube.

10. Anchor bolts [anchor PT wood sill plate to top of concrete wall].
    - 10.1. Shall meet the requirements of ASTM F1554.
    - 10.2. Shall be ½" minimum diameter, galvanized bolts, embedded not less than 7" into concrete, located within the middle ⅓ of the plate.
    - 10.3. Shall be spaced not less than 6 feet on center with bolts between 7 and 12 inches from the end of each plate.
    - 10.4. Walls shall have a minimum of 2 bolts per per plate section.

Framing Notes

1. These drawings take precedence. See A sheets for additional framing instructions.

2. Field verify all dimensions.

3. All wood fasteners shall be in accordance with the applicable IRC.
   - 3.1. Structural Wall Panels, including Braced Wall Panels, shall be installed in accordance with Table 602.3(1), Fastening Schedule, Table Table 602.3(2), Alternate Attachments to Table Table 602.3(1), and Table 602.3(3), Requirements for Wood Structural Panel Wall Sheathing used to resist Wind Pressures.

4. Exterior wood-framed walls are generally framed with 2x6's and interior walls, unless noted otherwise, are framed with 2x4's or 25ga metal studs. If metal studs are used, install wood bucks at door and window openings.

5. Beams/Headers in gable walls [non-load-bearing] are not required.

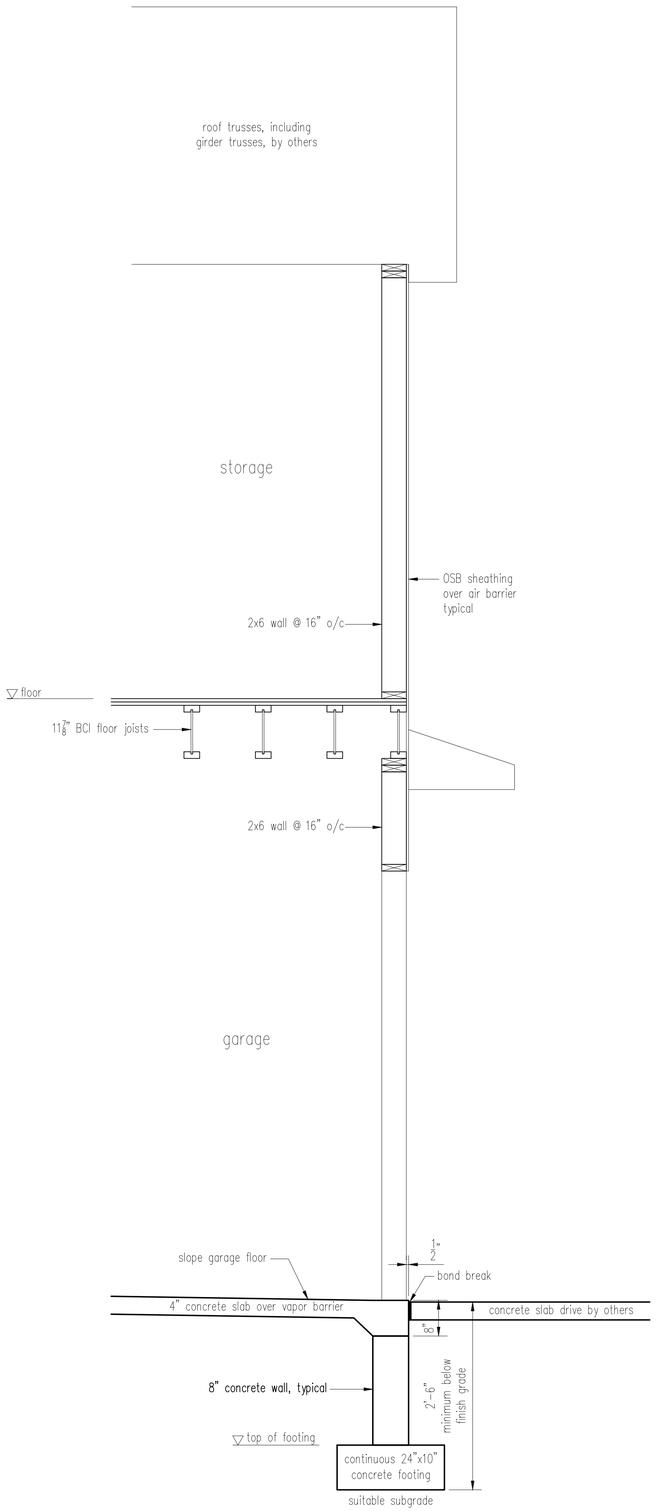
6. Engineered Wood
   - 6.1. Use Boise Cascade products as shown.
     - 6.1.1. BCI Floor Joists shall span between the W14 webs.

7. Wood/Timber framing & sheathing
   - 7.1. All framing not exposed to weather shall be #2 Western Hem-Fir @ 19% Moisture Content maximum or equal and approved.
   - 7.2. Wood framing exposed to weather, soil or in contact with concrete shall be pressure-treated, suitable for use, or equal.
   - 7.3. Sill Plates shall be placed on a sill sealer appropriate for use.
   - 7.4. First Floor sheathing: 2 layers ¾" T&G OSB.
   - 7.5. Exterior wall sheathing: 7/16" OSB.
   - 7.6. Roof Sheathing
     - 7.6.1. 19/32 T&G OSB.
     - 7.6.2. Install H-clips at mid-span between trusses as required.

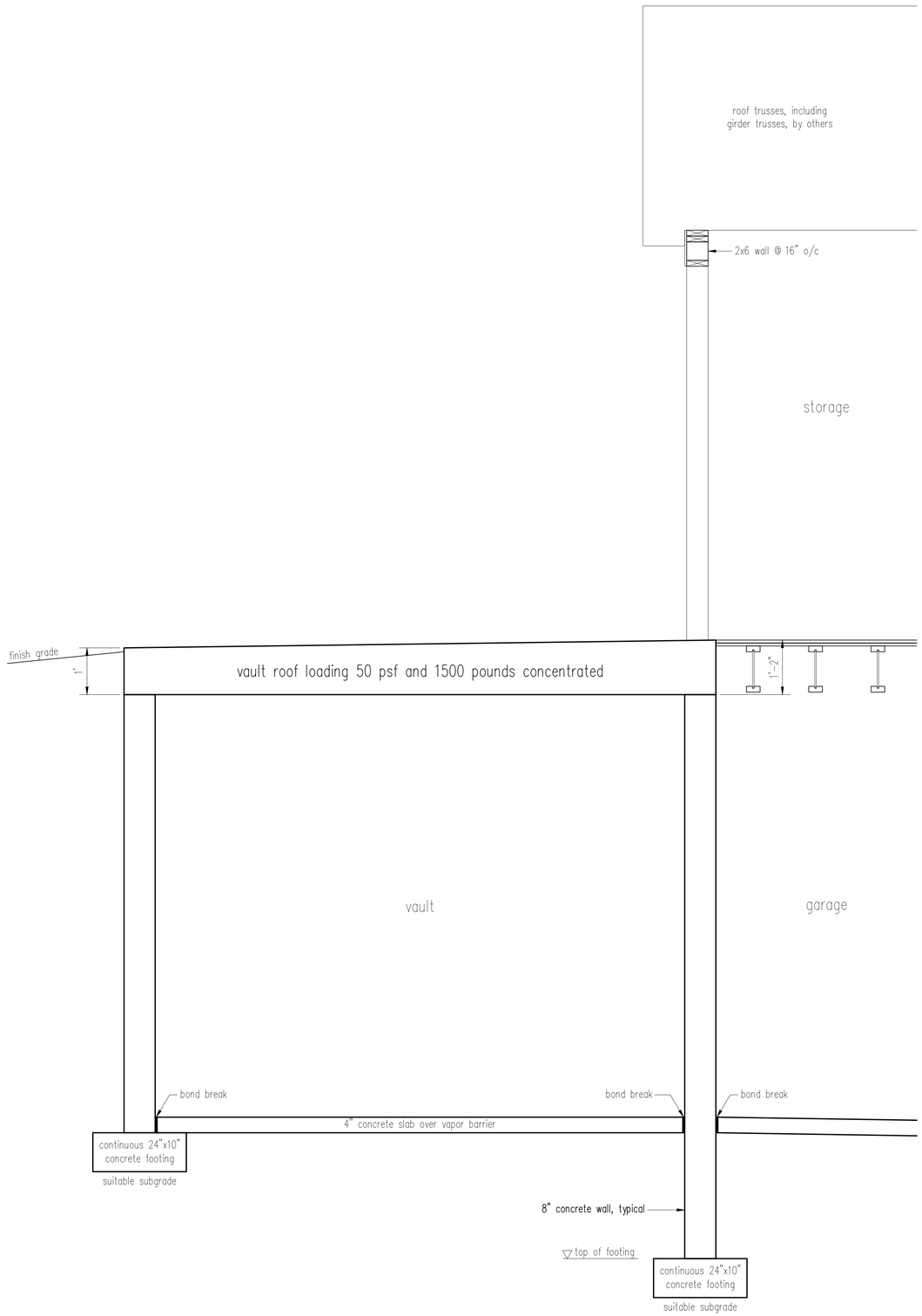
8. Beams & Headers
   - 8.1. Timber Beams shall have 3" minimum bearing at ends.
   - 8.2. Door/Window Headers up to 40": 3-2x6 or 2-2x8.
     - 8.2.1. Use 1-2x jack stud column under each end.
     - 8.2.2. Support columns shall be braced along their entire length.
     - 8.2.3. Top and bottom connectors for support columns shall be by Simpson Strong-Tie, appropriate for use. Fasteners shall be in accordance with the manufacturer's recommendations.

9. Joist Hangers shall be Simpson Strong-Tie appropriate for use or equal.
   - 9.0.1. Use manufacturer's recommended fasteners.

10. Roof Trusses, including Girder Trusses, by others.
    - 10.1. Hold-down ties between trusses and top wall double plate shall be by Simpson Strong-Tie, appropriate for use. Fasteners shall be in accordance with the manufacturer's recommendations.

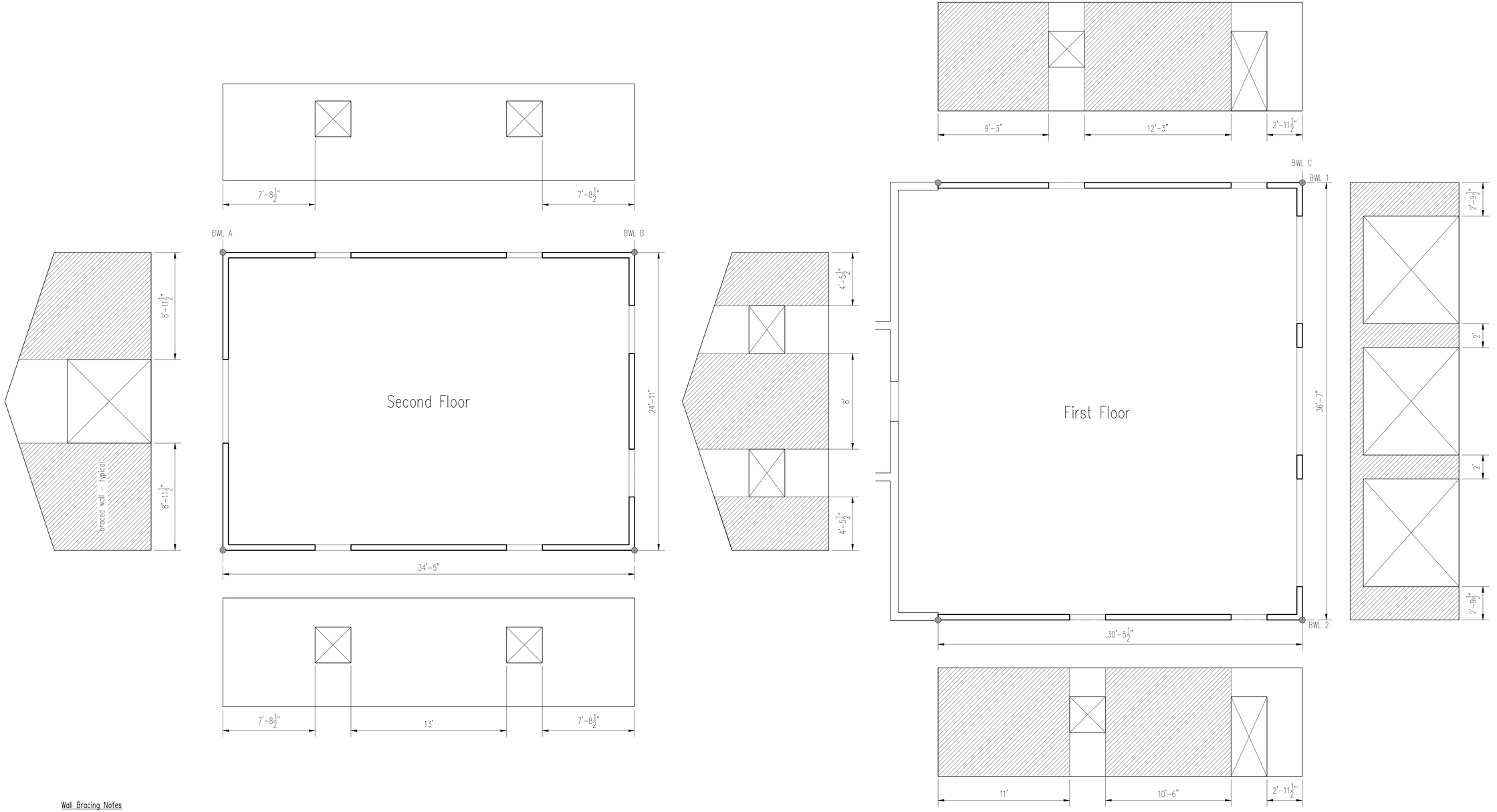


wall section A @ garage door



wall section B-B' thru vault

sheet 2 of 3
foundation and framing details



Wall Bracing Notes

1. All 2x6 exterior wall framing 2x6@16" o/c = 1.33 feet/bay.
   1.1. Install 3-2x6 King studs adjacent to all overhead door openings.
2. Wall Bracing Method: Wall Structural Panel [WSP]
3. Braced Wall Panels shall be $\frac{7}{16}$" OSB.
4. All Braced Wall Panels shall use uplift framing connectors, appropriate for use, to provide a continuous load path from the top of the wall to the foundation.

wall bracing plan