

DESIGNED BY: Larry A. Wichroski, P.E.  
DRAWN BY: LAW  
JOB #: 03917  
DATE: 08-08-2017

REVISIONS

**STRUCTURAL NOTES:**  
CODE: Comply with the 2012 International Residential Building Code.  
**DESIGN LOADS:**  
Dead Loads: Roof = 15.0 psf, Floor = 10.0 psf.  
Live Loads: Roof = 45.0 psf (Plus Drift)  
Wind Load: Building = 31.0 psf

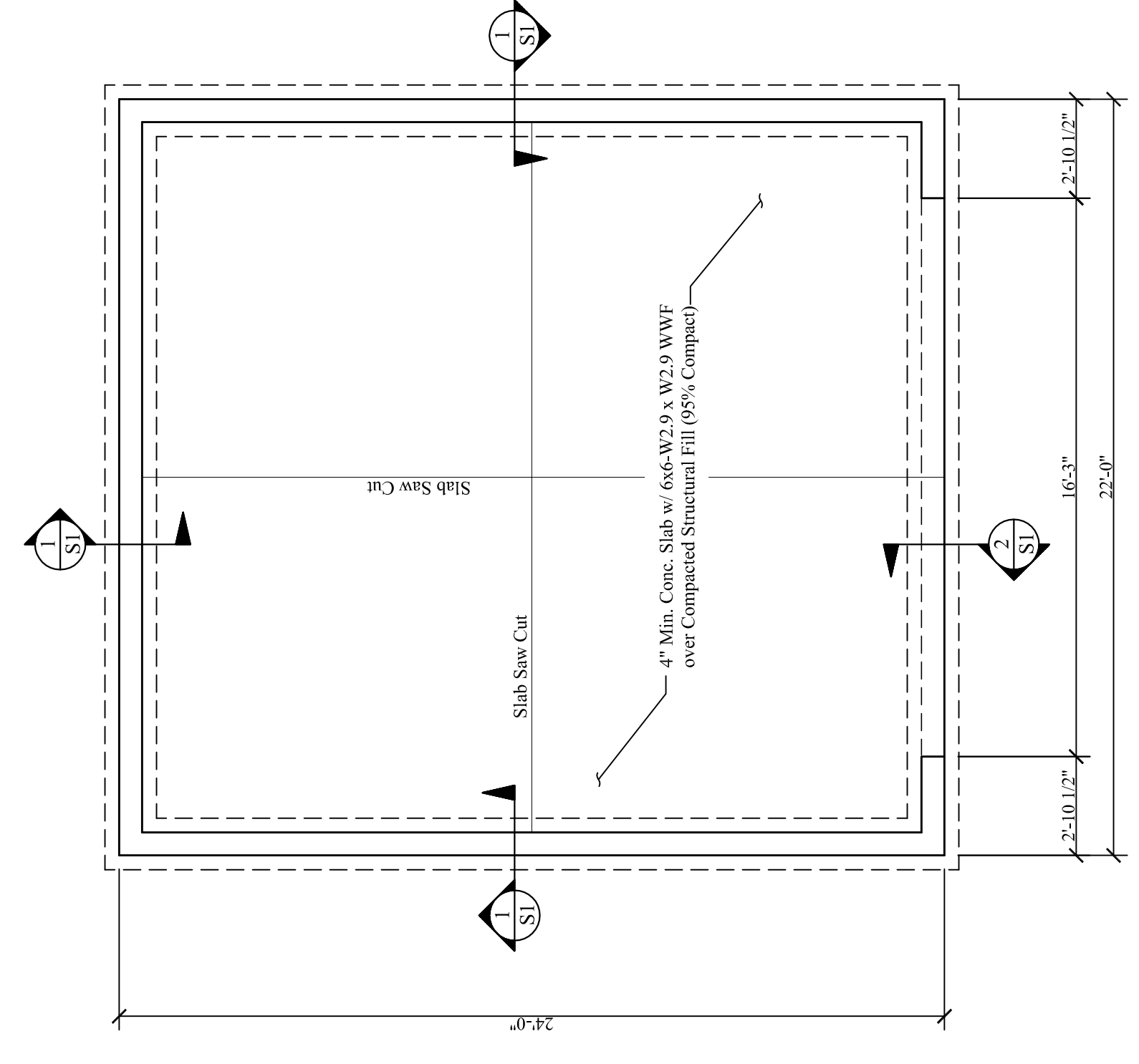
**FOUNDATIONS:**  
1. Bear footings on firm, undisturbed dense native soil at 4" minimum below lowest adjacent finish or natural grade, which ever is lower. Step footings to achieve these depths as required. If stone ledge is encountered place footing directly on ledge where exists.  
2. Assumed soil bearing pressure = 2,000 psf.  
3. Place foundation concrete only on clean, firm, dry bearing material. Dowel to stone ledge as detailed.  
4. Engineer shall be notified if stone ledge or native clay is found during excavation.  
5. See architectural drawings for additional information not shown.

**CONCRETE:**  
1. Concrete regular weight (144 pcf) with Type II cement per ASTM C150, aggregate per ASTM C33, and potable water. No fly-ash permitted in floor slab. Aggregate size = 1" maximum for footings and slab. Minimum compressive strength = 3000 psi for foundations and slab on grade and 4,000 psi for exterior walls.  
2. Saw cuts for floor slab control joints (CJ) shall be made as soon as the slab can support the weight of the saw, but no more than 12 hours after placing concrete.  
3. Pitch garage floor slabs 1/4"ft. toward over head door.

**REINFORCING:**  
1. Grade 60 except #2 and #3 bars. ASTM A615-S1, Grade 40.  
2. Lap splices in concrete 42 bar diameters.  
3. Provide bent corner reinforcing to match and lap with horizontal reinforcing at corners and intersections of walls, and footings.  
4. Reinforcing shall be placed with 3" clearance at all surfaces.

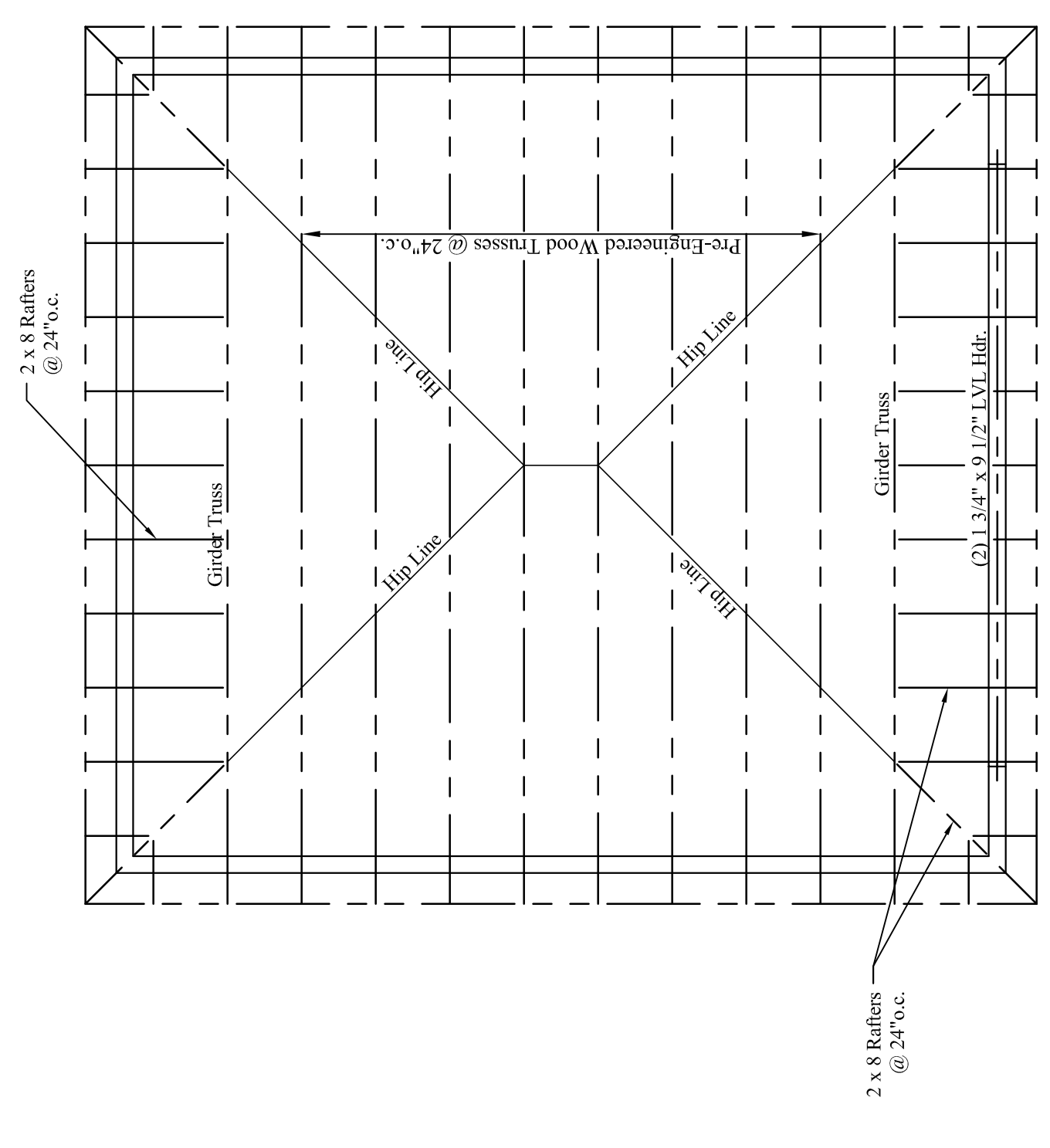
**WOOD:**  
1. General:  
a. Each piece of lumber shall be "S-DRY" and bear the grade stamp of a grading rules agency approved by the American Lumber Standards Committee.  
b. Double up studs at jambs and under beams.  
c. Do not notch or drill joists, beams or load bearing studs without approval.  
2. Connections:  
a. Connections of plywood with 8d common nails at 6" o.c. at all edges and boundary members and 10" o.c. at intermediate supports.  
b. Nail CDX wall plywood with 10d common nails at 6" o.c. at all edges and boundary members and 12" o.c. at intermediate supports.  
3. Structural Sawn Lumber:  
a. 2 x 6 lintel 2 x 12 joists. Spaced Pine Fir No. 2 with Fb (repetitive) = 1200 p.s.i.  
b. Studs. Spaced Pine Fir No. 2 with Fb (repetitive) = 1200 p.s.i. with Fb (repetitive) = 1200 p.s.i.  
c. Laminated Veneer Lumber (LVL). Posts: Fb = 2,800 psf; Fv = 285 psf; E = 2,000 ksi  
d. Laminated Veneer Lumber (LVL). Posts: Fb = 2,400 psf; Fv = 190 psf; E = 1,800 ksi  
4. Plywood:  
a. Roof Sheathing: C-D INT-APA (PSI-94) with exterior glue, 5/8" with Identification Index 48/24. Lay up with three grain perpendicular to supports. Stagger joints. Each plywood piece to be continuous over a minimum of two spans with a minimum width of 1'-0" unless blocking is provided.  
b. Wall Sheathing: C-D INT-APA (PSI-74) with exterior glue, 1/2" CDX with Identification Index 24/0. All panel edges backed with 2" nominal or wider framing.  
6. Light Metal Plate Connected Wood Trusses:  
a. Design, fabricate, transport and erect per Truss Plate Institute Standards TPI-18 and BW176.  
b. Design for loads, in addition to member weights, as given under "DESIGN LOADS" above.  
c. Mount design calculations. Fabricate after the Engineer's review. Include wood grades to be used.  
d. All connections shall be made in accordance with the bearing by truss manufacturer.  
e. Comply with "SUPPLEMENTARY NOTES" below.

**SUPPLEMENTARY NOTES:**  
1. Verify all dimensions and conditions with architectural drawings prior to starting work. Notify the Engineer of any discrepancies or inconsistencies.  
2. All connections shall be made in accordance with the bearing by truss manufacturer, or other means to avoid excessive stresses and to hold structural elements in place during construction.



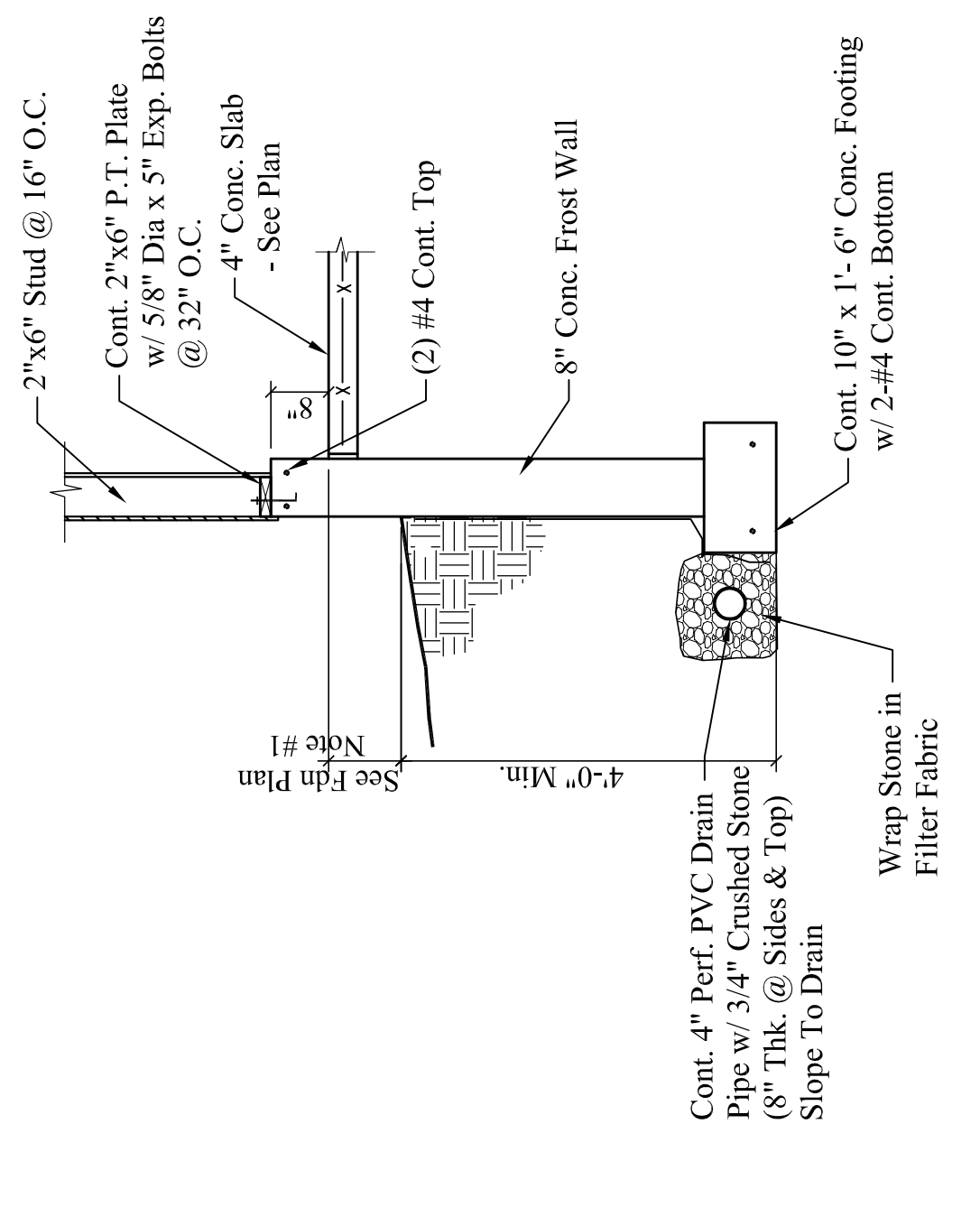
**FOUNDATION NOTES:**  
1. When exterior finish grade is located 18" or more below interior floor slab surface, vertical reinforcement is needed in wall and reinforcement shall be provided from engineer or condition.  
2. See General Structural Notes on Sheet S-1.  
3. Verify all wall heights and dimensions with architectural drawings prior to commencing work. Notify engineer of any discrepancies.  
4. Step footing in field to obtain minimum foot depth. See detail 3.S1.  
5. Saw cut concrete floor slab at 12'-0" maximum on center. See plan for layout and detail 4.S1 for size.

**FOUNDATION PLAN**  
Scale: 1/4" = 1'-0"

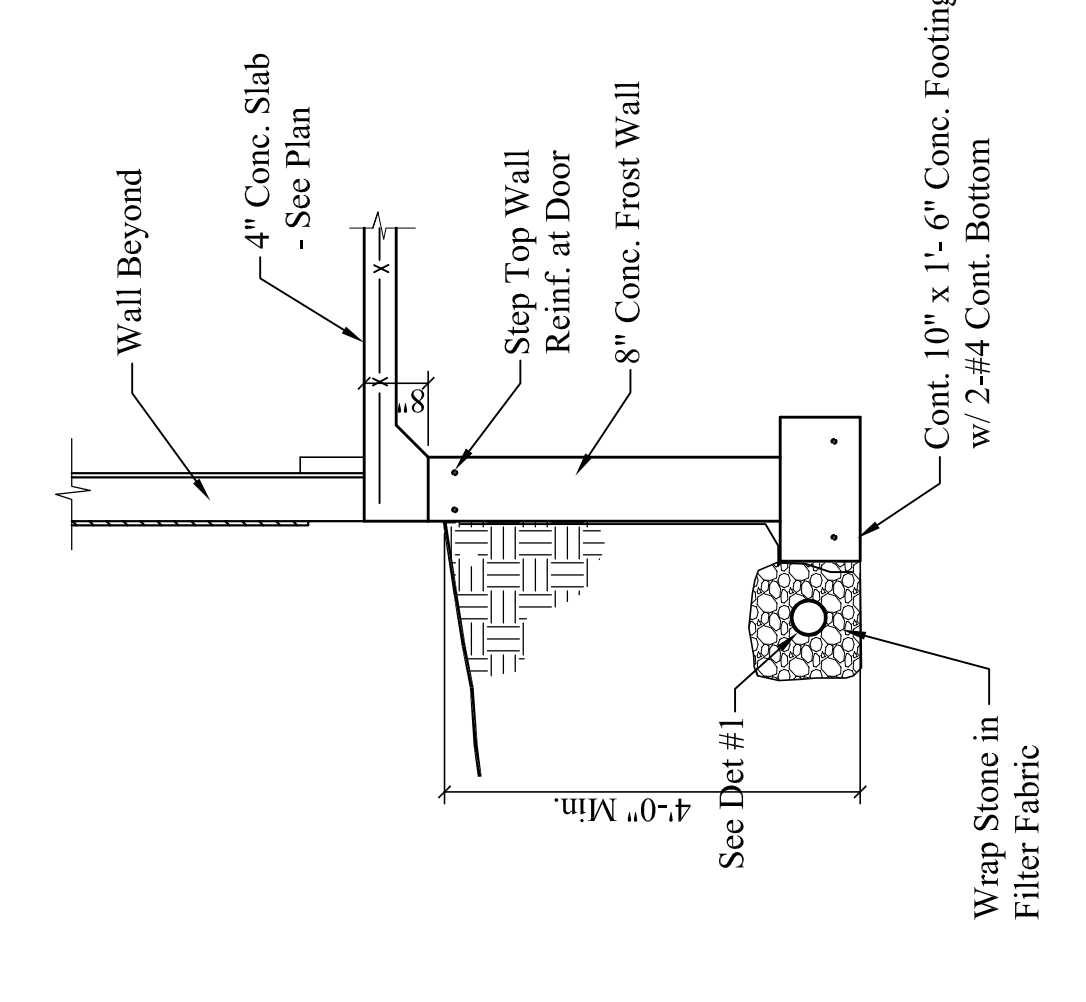


**ROOF FRAMING NOTES:**  
1. See Structural Notes, Sheet S-1.  
2. Built-up headers and beams shall be spiked w/ 3 rows of 16d nails @ 12" o.c.  
3. Provide (2) 2" x 10" header w/ 2" rigid insulation between over all exterior door and window openings.  
4. See architectural drawings for wall layout and dimensions.  
5. Connect all rafters and trusses to wall plate with Simpson H2.5 Seismic & Hurricane Ties per Manufacturer's instructions..

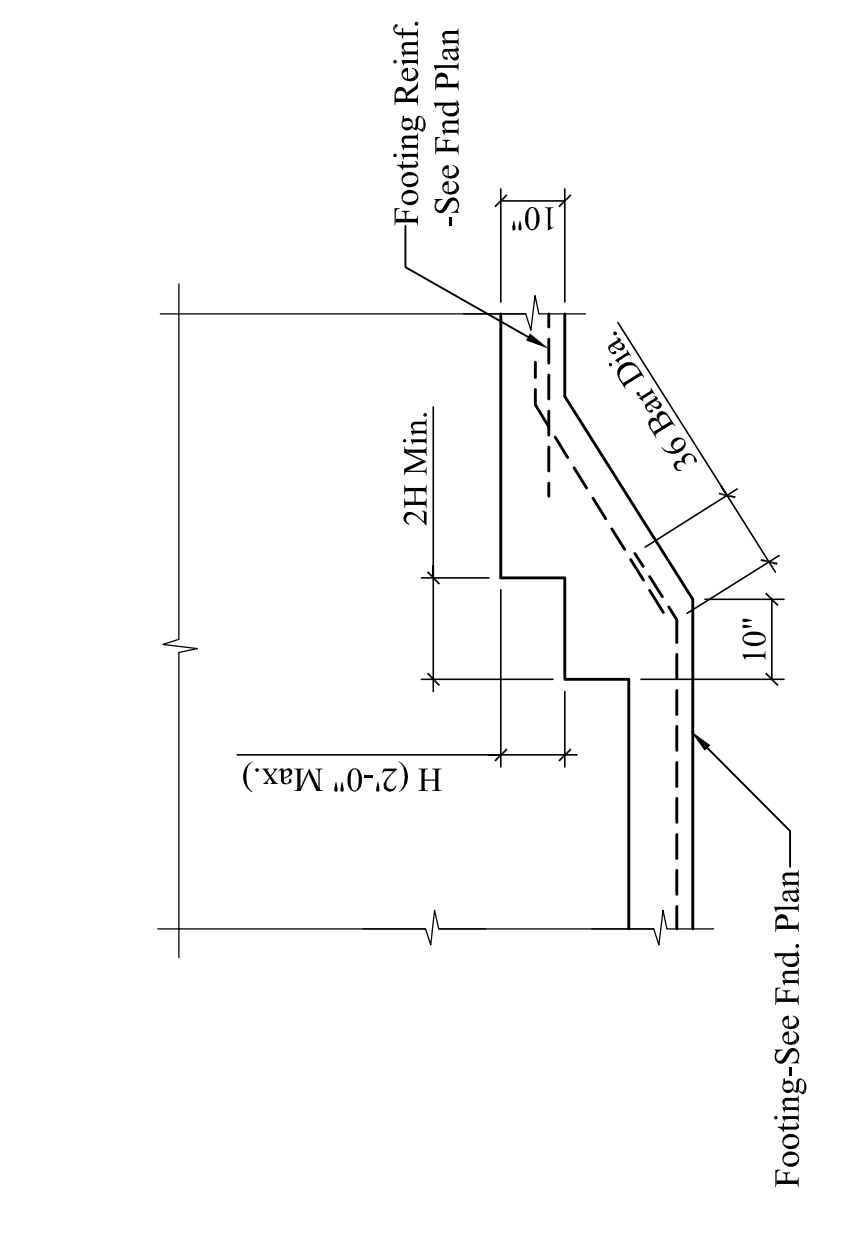
**ROOF FRAMING PLAN**  
Scale: 1/4" = 1'-0"



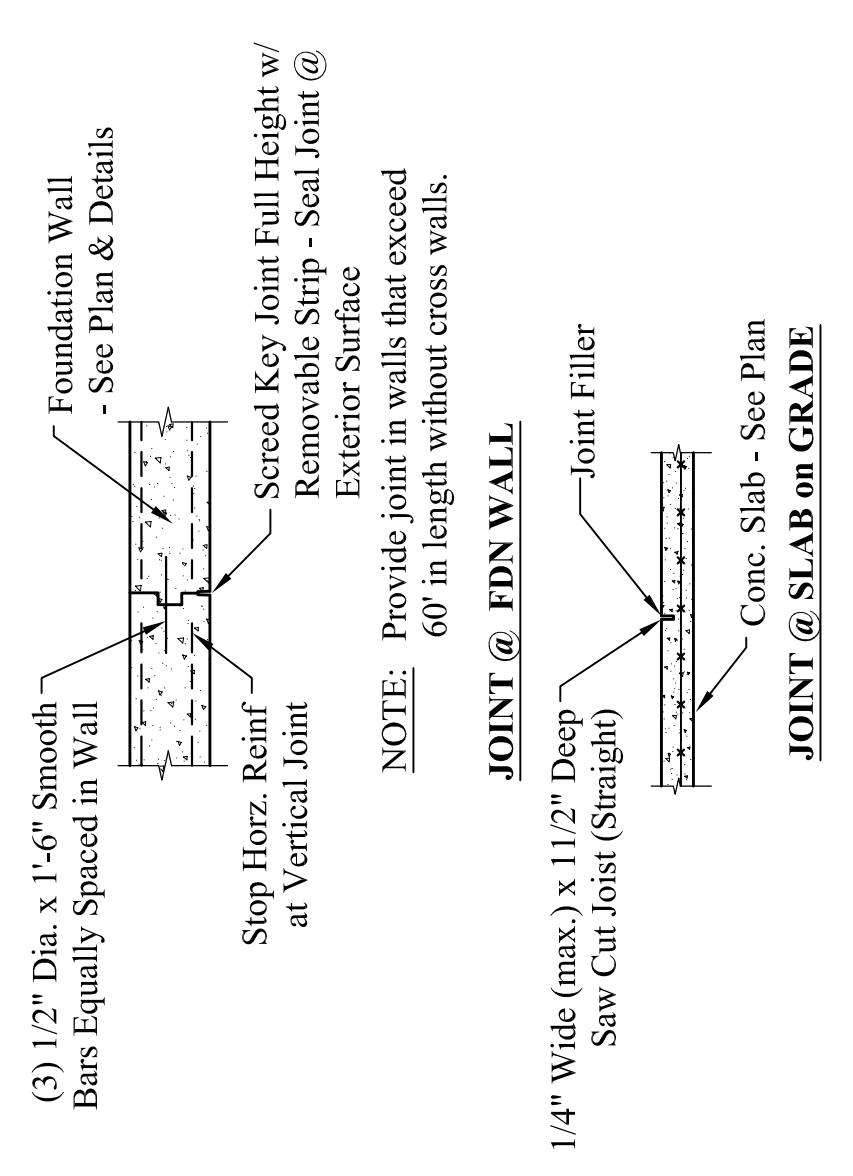
**1 FROST WALL FOUNDATION**  
Scale: 1/2" = 1'-0"



**2 FROST WALL @ DOOR**  
Scale: 1/2" = 1'-0"



**3 TYP STEP FOOTING DETAIL**  
Scale: 1/2" = 1'-0"



**4 TYP. FLOOR & WALL JOINTS**  
Scale: 1/2" = 1'-0"

