

**DESIGN LOADS:**  
 Dead Loads: Roof = 160 psf, Floors = 100 psf  
 Live Loads: Roof = 450 psf (Plus DTH), 1st Floor = 100.0 psf, 2nd Floor = 100.0 psf  
 Wind Load: Building = 520 psf

**FOUNDATIONS:**  
 1. Bear footings on firm undisturbed dense native soil at 4'-0" minimum below lowest adjacent finish or natural grade, whichever ever is lower.  
 2. Assumed soil bearing pressure = 2,000 psf.  
 3. Place foundation concrete only on clean, firm, dry bearing material.  
 4. Engineer shall be notified if some ledge or marine clay is found during excavation.

**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 slabs. Aggregate size = 1" maximum for footings and slabs. Maximum Slump = 4". Minimum compressive strength = 3000 psi for foundations and slabs on grade and 4000 psi for exterior slabs and sidewalks. No additives containing calcium chloride will be permitted.  
 2. Saw cuts for floor slab control joints shall be made as soon as the slab can support the weight of the saw, but no more than 12 hours after placing concrete. Place at 12'-0" o.c. max.  
 3. Contractor shall be responsible with coordination with all other trades for bond-ions, locations, size and sleeves.  
 4. Exposed concrete shall be neatly rubbed finished.

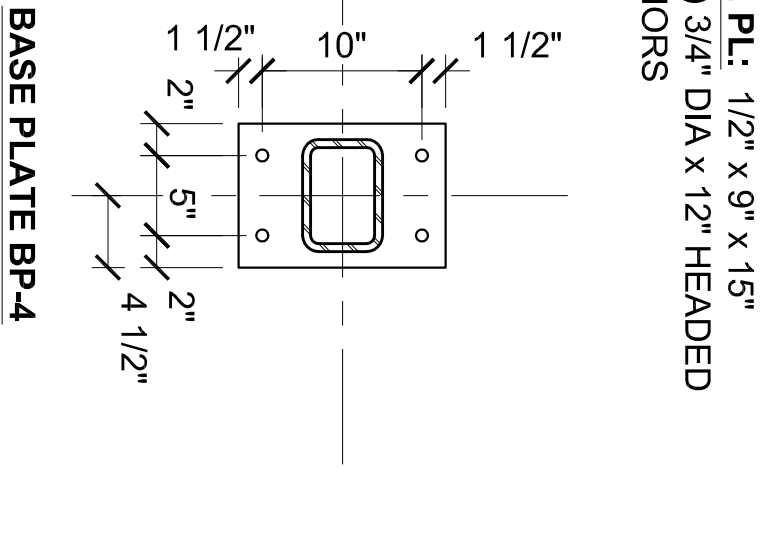
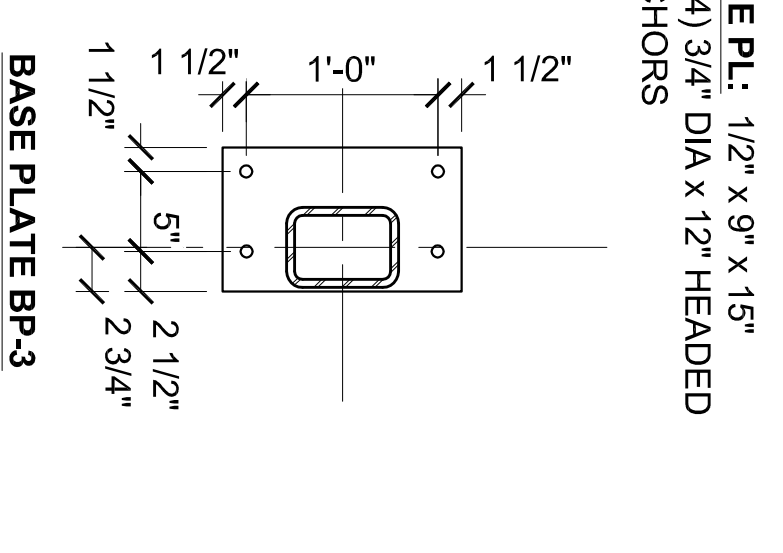
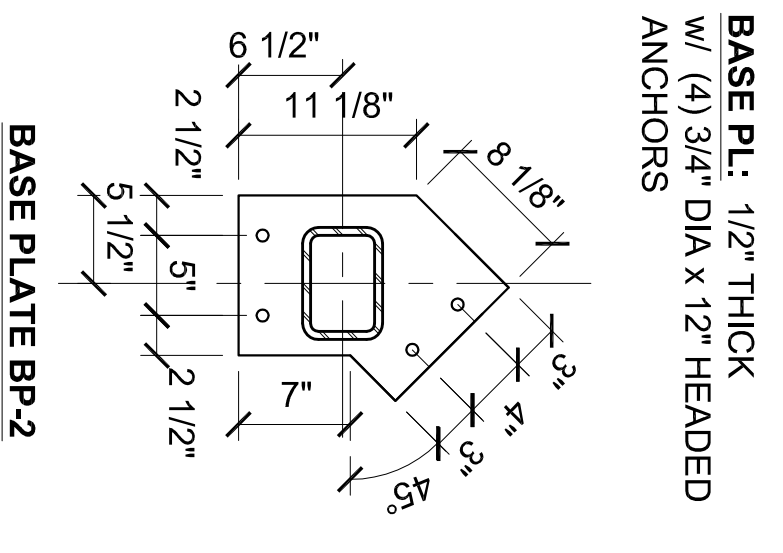
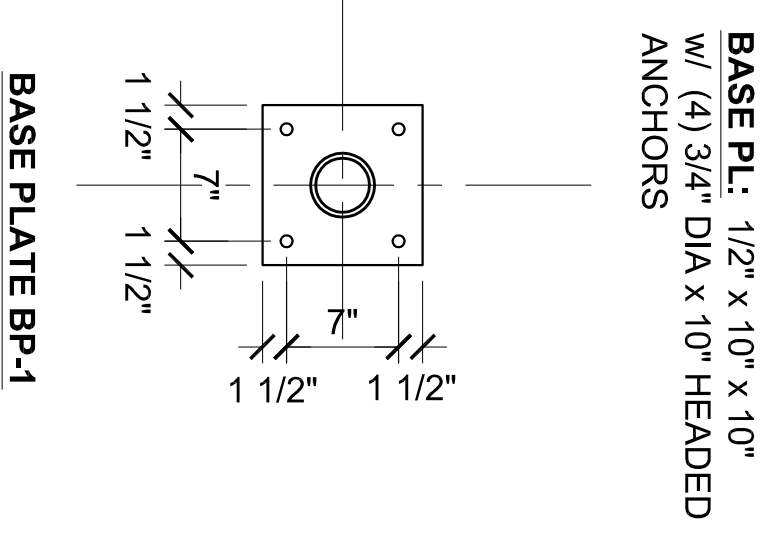
**REINFORCING:**  
 1. ASTM A 615 S1, Grade 60 except #2 and #3 bars ASTM A615-S1: Grade 40  
 2. Lap splices in concrete: 46 bar diameters.  
 3. Provide bent corner reinforcing to match and lap with horizontal reinforcing at corners and intersections of walls, and footings.

**STEEL:**  
 1. Rolled sections and plates: ASTM A-992, Fy = 50.0 ksi.  
 2. Steel Plates & Angles: ASTM A-36, Fy = 36 ksi.  
 3. Steel Lally Columns: ASTM A513, Fy = 32 ksi, 16 gage steel filled w/ 1,000 psi concrete.  
 4. Steel Pipe Column: (not lally columns) ASTM A-36, Fy = 36 ksi.  
 5. Bolts and plate anchors: ASTM A 307.  
 6. All steel located below grade shall be finished with 2 coats of bituminous mastic.  
 7. Submit shop drawings. Fabricate after Engineer's review.

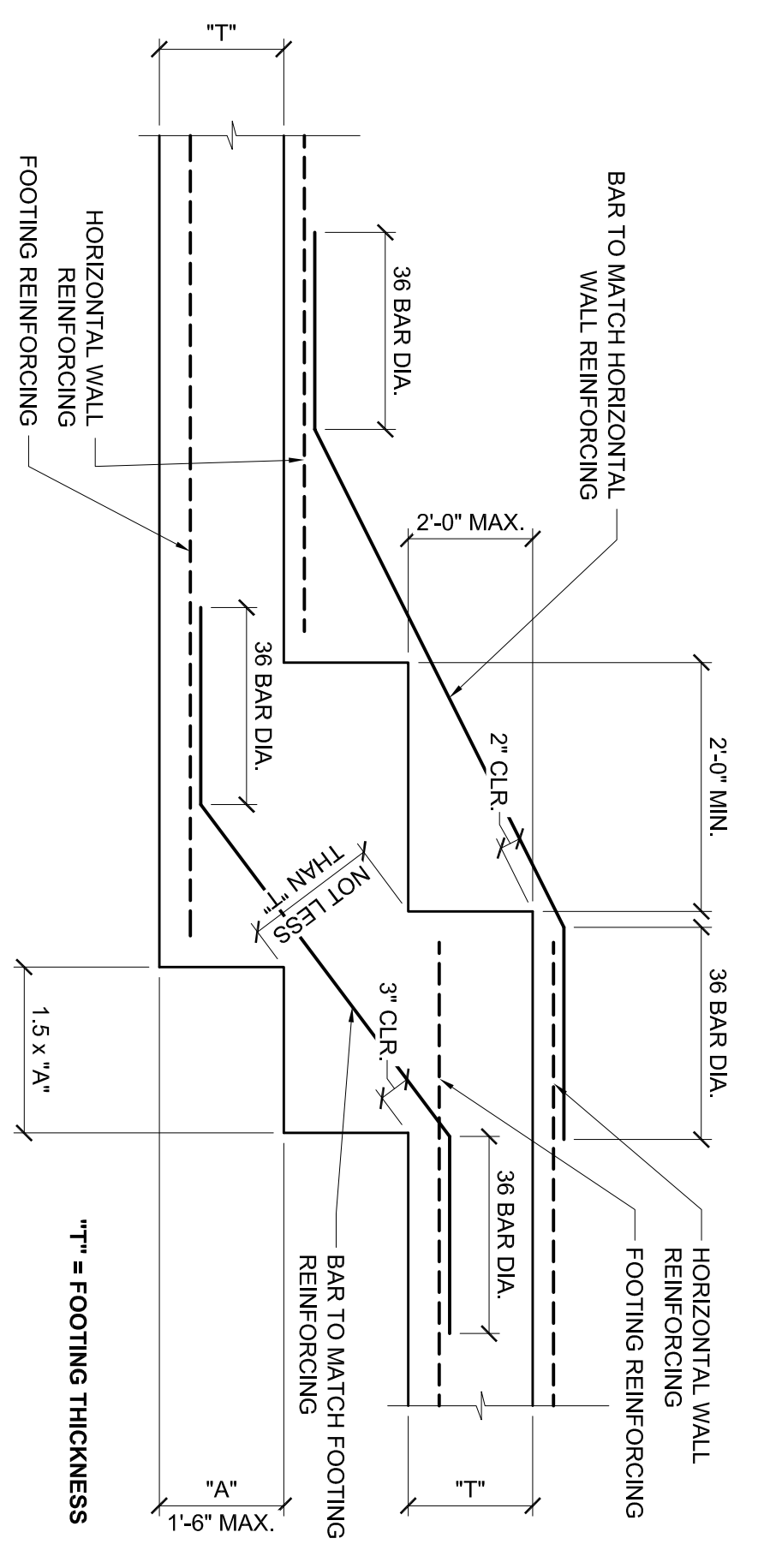
**WOOD:**  
 1. General:  
 a. Each piece of lumber shall be "S-DKRY" and bear the grade stamp of a grading rules agency approved by the American Lumber Standards Committee.  
 b. Double up studs at joints and under beams.  
 c. Double up floor joists below all upper parallel walls and at locations shown on framing plans.  
 d. Do not notch or drill joists, beams or load bearing studs without approval.  
 2. Connections:  
 a. Nail roof plywood with 8d common at 6" o.c. at all edges and boundary members and 10" o.c. at intermediate supports.  
 b. Glue floor plywood to all framing members and nail with 8d common at 6" o.c. at all plywood edges and boundary members and 10" o.c. at intermediate supports.  
 c. Nail 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. Stud: 2 x 4 dim 2 x 14 girts: Sorce Pine Fir No. 2 with Fb (parallel) = 1200 p.s.i.  
 b. Studs: Sorce Pine Fir No. 2 with Fb (perpendicular) = 1200 p.s.i.  
 4. Laminated Veneer Lumber (LVL): Fb = 2800 psi, Fv = 285 psi, E = 2,000 ksi  
 5. Parallel Posts (PSL): Fb = 2,900 psi, Fv = 290 psi, E = 2,000 ksi  
 6. Plywood:  
 a. Roof Sheathing: C-D INT-APA (PSI-94) with exterior glue, 3/8" CDX with Identification Index 48/24. Lay up with face grain perpendicular to supports. Each plywood piece to be continuous over a minimum of two spans with a minimum width of 1'-0" unless blocking is provided at all joints.  
 b. Sub-flooring: C-D INT-APA (PSI-94) with exterior glue, 3/4" T & G with Identification Index 48/24. Lay up with face 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 at all joints.  
 c. Wall Sheathing: C-D INT-APA (PSI-74) with exterior glue, 1/2" wall Identification Index 24/0. All panel edges backed with 2" nominal or wider framing.

**SUPPLEMENTARY NOTES:**  
 1. Verify all dimensions and conditions with architectural drawings prior to starting work. Notify the Engineer of any discrepancies.  
 2. Provide all necessary temporary bracing, shoring, tying or other means to avoid excessive stresses and to hold structural elements in place during construction.

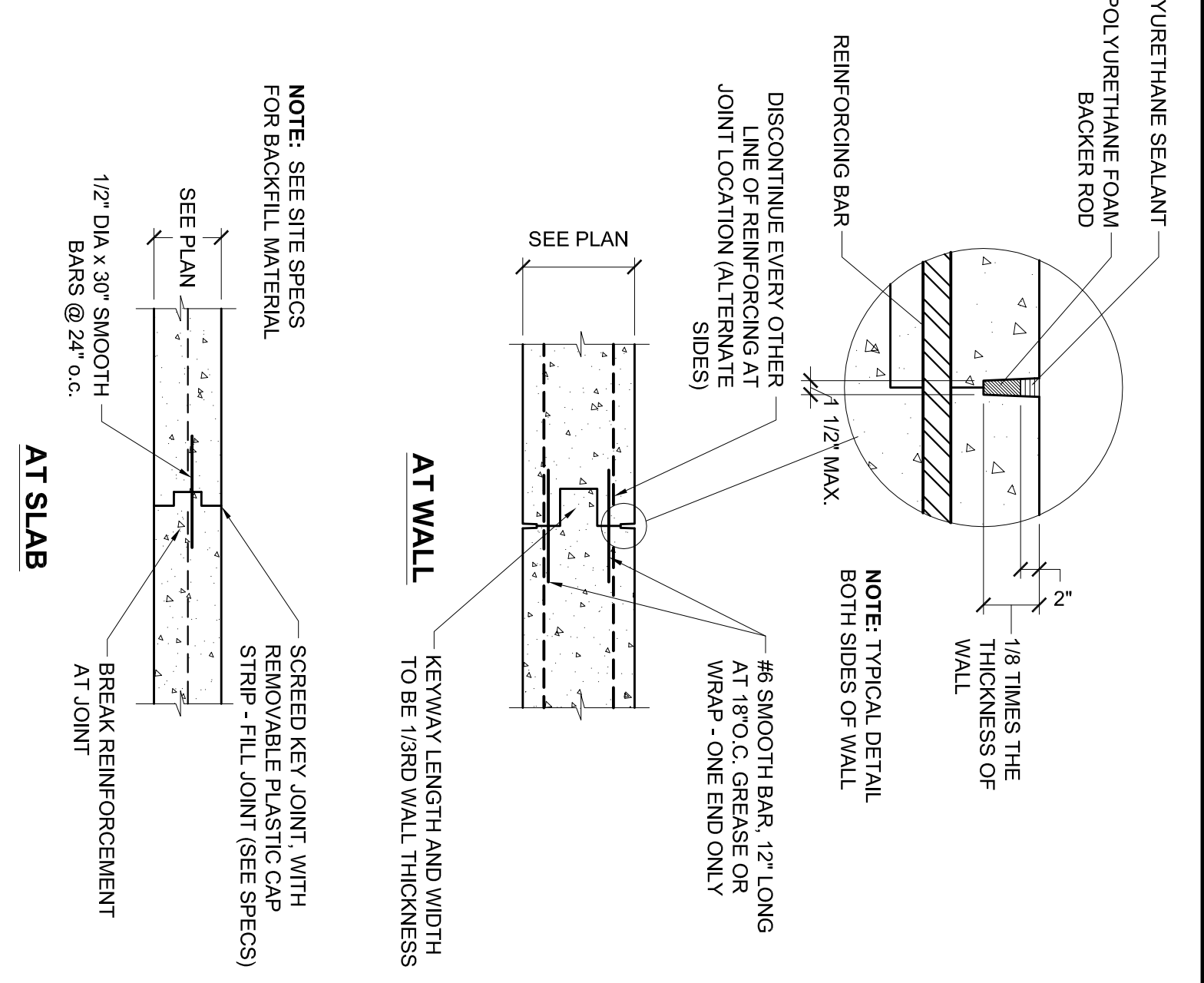
**C1 STRUCTURAL NOTES**



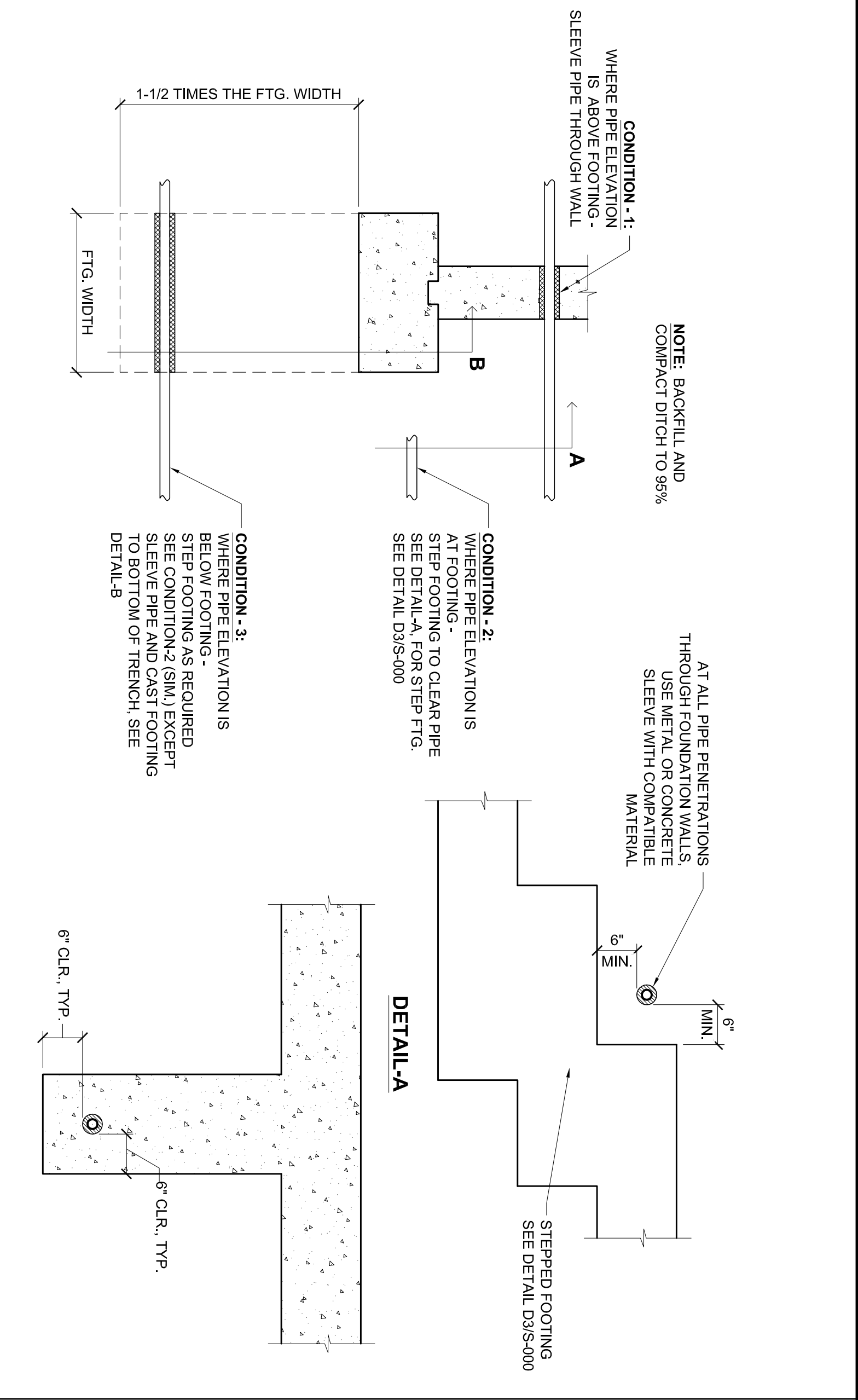
**C4 TYPICAL STEPPED FOOTING DETAIL**



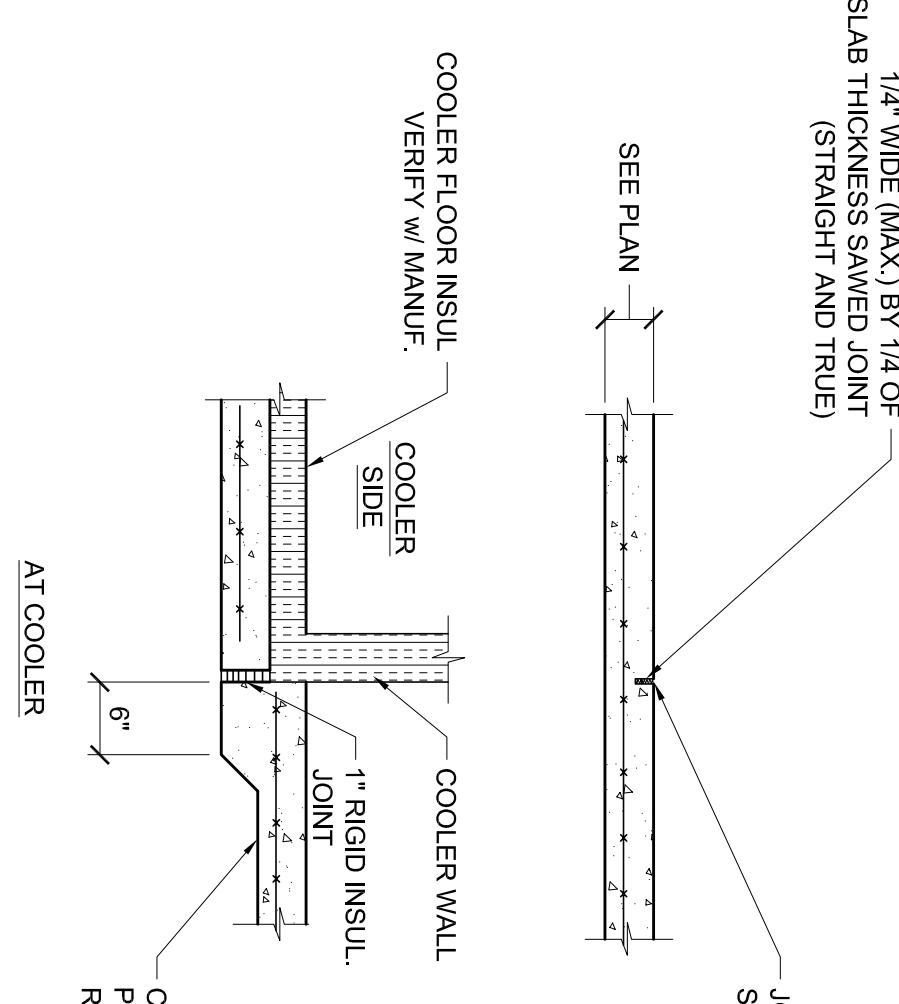
**E4 WALL AND SLAB CONSTRUCTION JOINT DETAIL**



**E6 TYPICAL PIPE AT FOOTING DETAIL**



**C8 TYPICAL SLAB CONTROL JOINT DETAIL**



**BEAM HANGER SCHEDULE**

BEAM	HANGER @ WOOD *	HANGER @ STEEL/WOOD ***
(2) 1 3/4 x 11 7/8" LVL	SIMPSON EQG3.02-SDS3	SIMPSON GL1V3.511 **
(3) 1 3/4 x 11 7/8" LVL	SIMPSON EQG5.50-SDS3	SIMPSON GL1V5.511 **
(4) 1 3/4 x 11 7/8" LVL	SIMPSON EQG7.25-SDS3	SIMPSON GL1V41.88-2 **

**JOIST HANGER SCHEDULE**

JOIST / RAFTER	HANGER @ WOOD	HANGER @ STEEL/WOOD ***
11 7/8" JI/J210	SIMPSON LBV2.1111.88	SIMPSON BA2.1111.88 **
11 7/8" JI/J260	SIMPSON LBV2.3711.88	SIMPSON BA2.3711.88 **
2 x 12	SIMPSON LBV1.5011.25	

\* HANGERS REQUIRE THE USE OF SIMPSON SDS SCREWS TO ACHIEVE LOADING VALUES.  
 \*\* PROVIDE 16d x 1 1/2" LONG NAILS AT TOP OF WOOD PLATE.  
 \*\*\* PROVIDE CONT. 3 x WOOD PLATE ON STEEL BEAM w/ 2 - 1/2" DIA FLAT HEAD BOLTS @ 32" o.c.  
 NOTE: PROVIDE HANGERS NOTED IN ABOVE SCHEDULES UNLESS NOTED OTHERWISE ON DRAWINGS.

**A1 BASE PLATE / ANCHOR BOLT DETAIL**

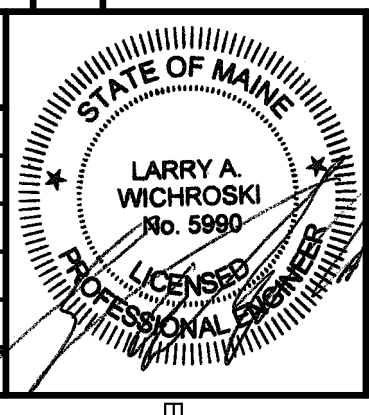
**A6 ENTRY STAIR DETAIL**

**A8 HANGER SCHEDULE**

Date: 01/27/2010  
 Drawn By: PED  
 Checked By: LAW  
 Project Mgr: LAW  
 Project No: 09003  
 Cad File: 09003S.dwg

**REVISIONS**

NUMBER	DATE	BY	DESCRIPTION



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**DETAILS & NOTES**  
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**S-000**