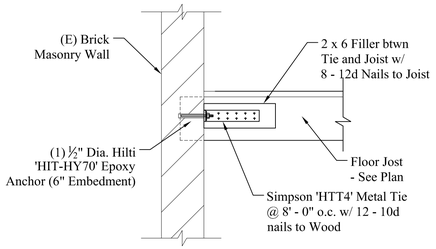
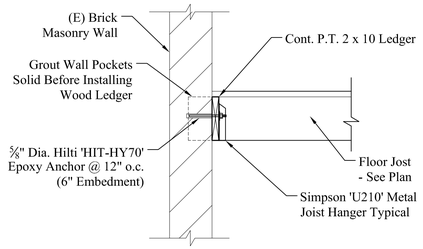


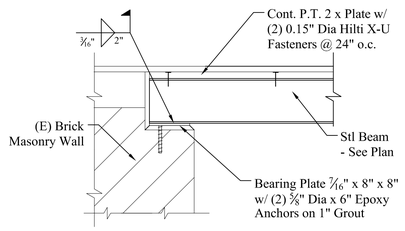
1 S6 FLOOR TIES @ EXIST. BRICK WALL

Scale: ¾" = 1'-0"



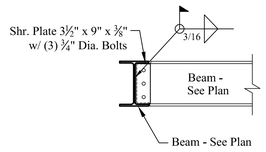
2 S6 FLOOR JOISTS @ (E) BRICK WALL

Scale: ¾" = 1'-0"



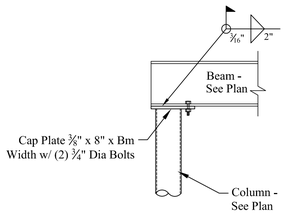
3 S6 STEEL BEAM @ (E) BRICK WALL

Scale: ¾" = 1'-0"



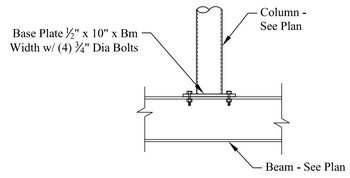
4 S4 BEAM TO BEAM CONN.

Scale: ¾" = 1'-0"



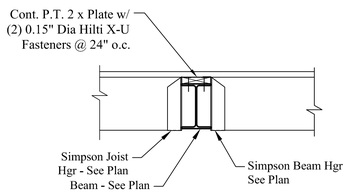
5 S4 BEAM to COLUMN CONN

Scale: ¾" = 1'-0"



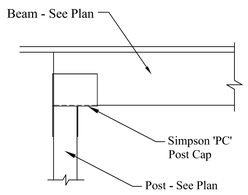
6 S4 STEEL COLUMN ON BEAM

Scale: ¾" = 1'-0"



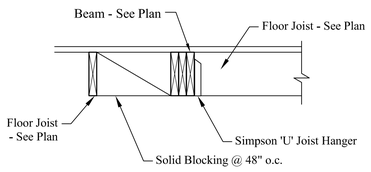
7 S4 WOOD BM. to STL BEAM CONN.

Scale: ¾" = 1'-0"



8 S4 WOOD BM. to WOOD POST CONN.

Scale: ¾" = 1'-0"



9 S4 WOOD JOISTS to WOOD BM. CONN.

Scale: ¾" = 1'-0"

STRUCTURAL NOTES: 1

CODE: Comply with the 2009 International Building Code (IBC) & the 2009 International Existing Building Code (IEBC).

DESIGN LOADS:
Dead Loads: Roof = 15.0 psf., Floors = 12.0 psf.
Live Loads: Roof = 45.0 psf (Plus Drift), 1st Floor = 100.0 psf (Retail), 2nd & 3rd Floor = 40.0 psf.
Wind Load: Building = 31.0 psf

FOUNDATIONS:
1. Bear footings on firm, undisturbed dense native soil at depth shown.
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 stone 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 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 slabs and sidewalks.

REINFORCING:
1. ASTM A 615-S1, Grade 60 except #2 and #3 bars ASTM A615-S1: Grade 40.
2. Lap splices in concrete: 42 bar diameters.

STEEL:
1. Wide - Flange Beams Sections: ASTM A992, Fy = 50 ksi (min).
2. Rolled sections and plates: ASTM A-36, Fy = 36 ksi.
3. Steel Pipe Column: (not lally columns) ASTM A-35, Fy = 35 ksi.
4. Bolts and plain anchors: ASTM A 307.
5. Submit shop drawings. Fabricate after Engineers review.

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. 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. 2 x 6 thru 2 x 14 joists: Spruce Pine Fir No. 2 with Fb (repetitive) = 1200 p.s.i.
   b. Studs: Spruce Pine Fir No. 2 with Fb (repetitive) = 1200 p.s.i.
4. Laminated Veneer Lumber (LVL): Fb = 2800 psi, Fv = 285 psi, E = 2,000 ksi
5. Parallam Veneer Beams (PL): Fb = 2900 psi, Fv = 290 psi, E = 2,000 ksi
6. Parallam Veneer Posts (PL): Fb = 2900 psi, Fv = 290 psi, E = 2,000 ksi
7. Plywood:
   a. Roof Sheathing: C-D INT-APA (PSI-94) with exterior glue; 1/2" 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.
   b. Sub-flooring: C-D INT-APA (PSI-94) with exterior glue: 3/4" 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" with Identification Index 24/0. All panel edges backed with 2" nominal or wider framing.

SCHEDULE OF SPECIAL INSPECTION SERVICES:

The following comprise the required schedule of special inspections for this project. All special inspections shall be performed by the Engineer of Record (EOR). The construction divisions which require special inspections for this project are as follow:
- Cast-In-Place Concrete
- Structural Steel
- Wood Framing

1

Cast-In-Place Concrete:
- Mix Designs; Provice a concrete footing mix design for engineers review.
- Reinforcement Installation; Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters.
- Concrete Placement; Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.

Structural Steel:
- Review shop fabrication drawings for steel members and connections.
- Bolting; Inspect installation and tightening of high-strength bolts.
- Welding; Visually inspect all welds. Vrify size and length of fillet welds. Review welder qualification statements by fabricator and erector.
- Structural Details; Verify that the general geometry of the erected steel frame conforms to the construction documents and approved shop drawings.

Wood Framing:
- Inspect installation of framing members and connections for comformance with contract documents.
- Field verify member sizes and materials.

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

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EDP

BUILDING REMODEL & REPAIRS
660 Congress Street * Portland * Maine

DETAILS & NOTES

STATE OF MAINE LARRY A. WICHROSKI No. 5994 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: Larry Wichroski, P.E.
DRAWN BY: LAW
JOB NO.: 02412
DATE: 04-20-2013
REVISIONS: 1 07-02-13

SHEET: S1