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# SHERIDAN HEIGHTS FRAMING REVISIONS Portland, Maine

### ISSUED FOR PERMITTING & CLIENT REVIEW ONLY NOT FOR CONSTRUCTION

## STRUCTURAL NOTES & DETAILS PSE Project No. 112-07

### **Detail Pages SK-1 thru SK-9**

Prepared for:

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# GENERAL STRUCTURAL NOTES

## SHERIDAN HEIGHTS FRAMING REVISIONS PORTLAND, MAINE November 6, 2009

#### **GENERAL REQUIREMENTS**

- 1. Work and materials shall conform to the 2003 International Building Code, State of Maine Building Codes, and other applicable codes and standards and shall meet the requirements of local authorities having jurisdiction.
- 2. See project drawings, specifications and other construction documents prepared by TFH Architects for additional requirements.
- 3. Reference to "Engineer" within these specifications refers to Price Structural Engineers, Inc.
- 4. Not all existing "As-Built" structural components within the existing building have been reviewed by the engineer. The improvements contained within the attached notes and details define the extent to which the structure has been reviewed.
- 5. See attached page labeled "Abbreviations" for description of abbreviations used on sketches.
- 6. Structural drawings and specifications do not include provisions for site-work, building set-back requirements, ventilation, plumbing, water-tightness of building, NFPA fire code requirements, Americans with Disabilities Act (ADA) requirements, handrails, guardrails, lighting, egress requirements, flashing, finishes, hazardous waste, or other architectural and environmental features. Coordinate these requirements with others as necessary.
- 7. The following list of drawings and sketches form a part of this specification: SK-1 through SK-9
- 8. The structural design is based on the full interaction of all its connected parts. No provisions have been made for any temporary conditions that may arise during construction prior to the completion of the structure. The Contractor shall be responsible for adequate design and construction of all forms, shoring and temporary bracing during the progress of the project. NOT FOR CONSTRUCTION

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- 9. All work, including demolition, shall be performed by experienced workman and coordinated with adequate supervision by the contractor's project supervisor.
- 10. Alternate details may be used only if such details are submitted in writing to the Structural Engineer for review and written acceptance is granted prior to construction. However, the Structural Engineer shall be the sole judge of acceptability and the Contractor's Bid shall anticipate the use of those specific details shown on the Drawings.
- 11. The Contractor shall be completely responsible for the safety of adjacent structures, property, and the public. The Contractor shall comply with all federal, state and local safety requirements.
- 12. Do not scale from Drawings. Remove and legally dispose of demolished materials.
- 13. All materials shall be new except those labeled "EXIST." (existing).
- 14. Work not indicated on a part of the Drawings but reasonably implied to be similar to that shown at corresponding places shall be included.
- 15. Details indicating existing conditions are based on assumptions, some of which have not yet been field verified. It is critical that the contractor verify actual existing conditions prior to purchasing or fabricating new materials and notify the engineer immediately if actual conditions differ from those indicated on the structural details.
- 16. Stored materials shall be kept under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack materials in such a manner that prevents warping or crushing.
- 17. Pre-manufactured materials shall be installed in accordance with manufacturer's requirements and recommendations. Substitutions for specified premanufactured materials may be made but only after specific written approval has been provided by the owner's engineer prior to installation.
- 18. Except where slope is specified, new materials shall be installed plumb, level, and square.
- 19. Contractor shall not fabricate materials until interferences have been identified and resolved.
- 20. At areas where existing structural components are uncovered and found to be inadequate, the contractor shall either properly reinforce the components or contact the Engineer (PSE) for the structural design of the modifications.

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#### **WOOD & STEEL**

- 1. Lumber shall bear the grade and trademark of the association under whose rules it is produced and a mark of mill identification. Except for heavy timbers and pressure treated wood, lumber shall be kiln-dried to a moisture content not exceeding 19%.
- 2. Except as noted below or designated otherwise, lumber used for beams, rafters, joists, plates, columns or posts shall be No. 2 grade or better Spruce. Pine, Fir (SPF) and surfaced four sides. Wall studs shall be "stud" grade SPF.
- 3. Holes for bolts shall be drilled to a diameter that is 1/16" larger than the nominal diameter of the bolt.
- 4. Holes for the unthreaded portion of lag screws shall be drilled to a diameter that is the same as the nominal diameter of the lag screw shank. A pilot hole for the threaded portion of the lag screw shall be drilled and shall have a diameter that is <u>half</u> the nominal diameter of the lag screw shank.
- 5. Reference to "Simpson" on Drawings indicates metal connectors manufactured by Simpson Strong-Tie.
- 6. All sheathing shall conform to APA "Plywood Specification Grade Guide" and Product Standard PS-1. Plywood construction shall conform to APA Design/Construction Guide - Residential and Commercial, Form E30B for required applications.
- 7. Stair width shall not exceed 4'-0" wide and shall be supported by (3) 2x12 stringers, equally spaced. Center stringer shall be reinforced with a continuous 2x4 nailed to both sides, and outside stringers shall have continuous 2x4 nailed to one side. Spacing between supports for stringers shall not exceed 6'-4" on center. Upper ends of stringers shall be supported by either suitable steel joist hangers or continuous wood ledger.
- 8. Reference to "Parallam" and "Microllam" on Drawings indicates materials manufactured by Trus-Joist-Macmillan Company.
- 9. Dimensions shall be verified in field by the contractor prior to fabricating new components. Any discrepancies shall be brought immediately to the attention of the owner's engineer.
- 10. Holes through framing members shall be drilled through middle third of lumber and shall not exceed 1 1/2" diameter. Contact structural engineer if larger holes are required. NOT FOR CONSTRUCTION

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- 11. Pre-manufactured materials, including expansion bolts and Simpson hangers, shall be installed in strict accordance with the manufacturer's requirements and recommendations.
- 12. Substitution for the specified pre-manufactured materials may be made only after specific written approval has been provided by the engineer prior to the installation.
- 13. Lumber 2x12 stair stringers and 2x6 "sisters" shall be Spruce/Pine/Fir of Select Structural or Number 1 Grade. Check stringers in field to verify that the portion of the stringer which is un-notched for the stair treads is sound and contains only small, tight knots with minimal checking.
- 14. Contractor shall take all necessary precautions when cutting notches in stair stringers to prevent cutting more deeply into stringers than necessary. Overcutting of stringers will be cause for rejection.
- 15. All structural steel work shall conform to the recommendations and requirements contained in the "Manual of Steel Construction, Allowable Stress Design," AISC Ninth Edition (including AISC Code of Standard Practice for Steel Buildings and Bridges), and "Structural Steel Welding Code Steel," (AWS D1.1, latest edition).
- 16. Structural steel rolled shapes, plates, bars and tubes shall conform to ASTM A-36, Fy = 36 ksi

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