



**L & L STRUCTURAL**  
**ENGINEERING SERVICES, INC.**  
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South Portland, ME 04106  
Telephone: 207 767-4830

March 14, 2015

Steve Osborne & Scott Bailey  
Blue Horizon Real Estate Group, LLC  
636 US RT 1, Suite HA2  
Scarborough, Maine 04074

Subject: Residential Building located at 44 Riverview Street, Portland, Maine  
Second Floor Joist Reinforcing

Dear Steve & Scott,

As per your request we visited the residential building located at 44 Riverview Street in Portland, Maine to review the second floor joists beneath the bathroom and above the dining room. The existing joists were severely compromised with plumbing penetrations. We analyzed the existing 2x10@16" on center second floor joists and designed the required reinforcing for the joists to be capable of supporting the code stipulated floor load. Our review was limited to the analysis and design of the reinforcing for this area of the second floor and the header within the first interior wall that supports the second floor system in this area only. Our analysis utilized the 2009 IRC International Residential Building Code adopted by the City of Portland, Maine. In addition, our analysis considered the latest edition of the NDS National Design Specification for Wood Construction published by the National Forest Products Association and the latest edition of the AISC Manual of Steel Construction. The proposed structural design of the second floor joists reinforcement and the re-support of the interior header that we directed the contractor to implement meets or exceeds the code stipulated design requirements and is acceptable to support the anticipated second floor loading.

We re-visited the building to review the completed reinforcement of the second floor joists and re-support of the existing header in the interior wall. The construction of the second floor joists reinforcing and the re-support of the header in the interior wall is complete and in general compliance with our structural design directive.

If you have any questions, please do not hesitate to call.

Sincerely,

**L&L Structural Engineering Services, Inc.**

Joseph H. Leasure, P.E  
File.



