



www.cascobayengineering.com

424 Fore St., Portland, ME 04101 Phone 207.842.2800 Fax 207.842.2828

January 22, 2014

Brewster Buttfield 58 Fore St Portland, ME 04101

Re: Engineering Services for 29 Atlantic St

Project No: 13-098

Dear Brewster:

Thank you for the opportunity to provide you with structural engineering services.

Casco Bay Engineering's scope of services was limited to providing design calculations for a new roof structure over the 3<sup>rd</sup> floor portion of the above mentioned residence. The roof structure consists of a new 3½ x 14 LVL ridge beam with new 2x10 roof joists. In addition, we designed new 2x10 floor joist for the 3<sup>rd</sup> floor that bear on an existing bearing wall. It is our understanding that this bearing wall will be removed between the 1<sup>st</sup> floor and 2<sup>nd</sup> floor. We have designed (3) LVL beams to support this wall. The beams are located at the new front entry (3½ x 9¼ LVL), another at over the new kitchen, and a header to support the kitchen beam over the refrigerator. In addition, new floor joists were added at the third floor attic space to support a spiral stair case. These joists should be 1¾ x 7¼ LVL at 12" on-center. A single 3½ x 7¼ LVL beam should be placed directly under the spiral stair case post.

Casco Bay Engineering did not analyze any other portion of the building including any portions of the existing building including existing beams, joists or attachments, as well as lateral load paths.

Thank you.

Sincerely,

Scott Markowski, P.E. Casco Bay Engineering