

October 25, 2016  
Code Enforcement Officer  
389 Congress St  
Portland, ME 04101

16351

Re: 49 Wingate Dr, Portland, ME  
Bearing Wall Removal

Dear CEO,

I have visited the above referenced property and observed the existing conditions at the first floor area where a portion of the existing center bearing wall is planned to be removed. The new clear opening will be 13'-6" +/- and the required beam size is a triple 1.75"X9.5" LVL by Boise, with the following properties:

$E=2.0E$

$F_b=3100\text{psi}$

Multiple laminations to be connected with a minimum 2 rows of 16d box/sinker nails at 12" o.c.

Design Live Load = 30psf (sleeping areas above 1<sup>st</sup> floor)

Design Dead Load = 15 psf estimated.

Live Load deflection limit =  $\text{Span}/360$ .

Supporting end posts should be minimum 4-2x4's built-up post with Simpson ACE post caps. The new post at the exterior wall will be supported by the foundation wall. The new post adjacent to the stairwell will be supported by an existing concrete filled lally column at the basement. Refer to the attached sketch (by others) for additional information.

Sincerely,



Aaron S. Wilson, P.E.  
Structural Engineer  
Associated Design Partners, Inc.

