

October 2, 2008  
WP Project No. OHTB08

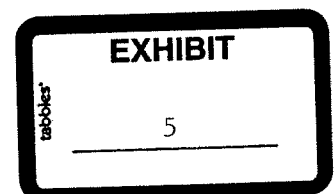
Mr. David P. Cichowski  
Code Enforcement Officer  
City of Gardiner, Maine  
6 Church Street  
Gardiner, Maine 04345

Subject: Visual Observations of House at 173 Highland Avenue, Gardiner, Maine

The purpose of this letter is to offer my observations and structural related concerns with the ongoing construction at the residential home at 173 Highland Avenue in Gardiner, Maine. You had requested that we provide a visual inspection of the house and offer our professional opinions concerning the present state of the repairs to the house. I observed the house on September 23, 2008 and was accompanied by you. Please note that my observations and concerns are based on a very limited visual inspection of the building exterior from Clinton Street, the gravel driveway behind the property and the abutting neighbor's property to the north of the house. We did not access the property nor inspect the interior of the house. Please note that I am assuming that the house is oriented such that the front of the house facing Clinton Street is the east side.

The house in question is a two story colonial located at the intersection of Highland and Clinton streets. The house consists of north and south segments - each with its own separate roof and framing system. It is my understanding that the homeowner has received a building permit for various remodeling projects around the house and has subsequently received a time extension on one of the permits. There are various areas around the house that currently are in the state of construction. It is my understanding that the homeowner is performing the construction himself. Following are the areas of construction that pose structural concerns. Please note that although each issue is discussed as a separate concern, they all are interacted and will affect one another. I have enclosed photos on page 3 that were taken at various stages of construction for your reference.

- There is a large excavated hole in the front of the house extending north from the southeast corner of the building to the edge of the driveway and east to Clinton Street. Several vehicles and pieces of construction equipment are parked in the driveway adjacent to the hole. The hole is about 8 feet deep. The excavated hole has very steep edges adjacent to the driveway and below the damaged foundation (see discussion of this issue below). Please refer to Photo 3 for a view of this area.  
*This excavation should be shored or cut back to a more appropriate sideslope based on the type of soils. There is potential danger that the walls of the excavation could collapse, especially if a heavy rain or seismic event occurs. If the excavation collapses, this could trigger either movement or settlement of the house.*





- The plywood siding has been removed from a large portion of the front of the house. The exposed wood studs are covered by either plastic sheeting or "Tyvek" home wrap. Please refer to Photos 1 and 2 for a view of this area.  
*This wall may be unstable without the plywood and not offer the proper required lateral strength if the house is subjected to either wind or seismic loads.*
- The southeast portion of the house is unsupported as follows:
  - The ends of the first floor framing joists at the southeast end of the house are not supported. Please note that the east side wood stud bearing walls are directly supported by the joists at this location so the walls are also unsupported. There appears to be several steel lally columns under the floor, about 3 feet from the joist ends. However, it is questionable whether pipe columns are providing adequate support for the floor joists and whether the columns are properly supported from the ground below (it appeared that one of the columns was only partially bearing on an outcrop of ledge). Please refer to Photo 2 for a view of this area.  
*This portion of the building appears to be unstable and is in danger of movement that could be easily triggered from the normal use of the house, a heavy wind or seismic event or buildup of snow on the roof.*
  - Most of the foundation wall on the east side of the house has been exposed and it appears that several portions of the foundation have been removed. In addition, a portion of the exposed foundation at the garage has been undermined by the excavated hole in front of the house. It appears that a portion of the wood bearing wall in this area is unsupported. Please refer to Photo 3 for a view of this area.  
*This portion of the building appears to be unstable and is in danger of movement that could be easily triggered from the normal use of the house, a heavy wind or seismic event, a buildup of snow on the roof or movement of the remaining soil below.*
- There are various working platforms installed at the roof level. I was not able to determine if these were properly supported from the roof or house structure. The platform on the west side is of special concern given the size of the platform and the fact that several of the edges are unsupported.

It is my opinion that the construction activities discussed above have created unsafe conditions for the current occupants and potentially adjacent properties, especially given the close proximity of this house to the neighboring house at the north end of the property.

If you have any questions or comments concerning the content of this letter, please contact me at 523-1406. We look forward to continue working with the City on any future projects you may have.

Sincerely,

WRIGHT-PIERCE

David Skidgel, PE

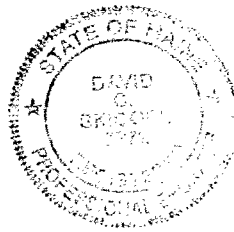




Photo 1 - View of house from Clinton Street

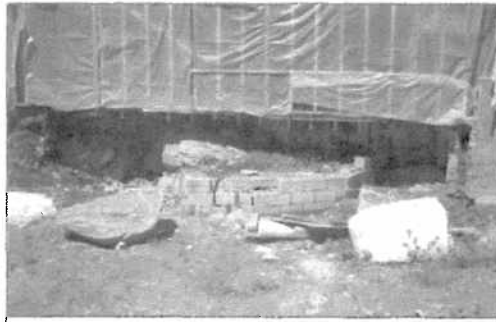


Photo 2 - Unsupported first floor framing



Photo 3 - Excavated hole and exposed foundation