



23 Thornbury Way  
Windham, ME 04062  
(207) 892-0983

## MEMORANDUM

Date: November 20, 2017

To: Marc Poulin  
Poulin Financial Services, LLC  
171 Warren Ave.  
Portland, ME 041003

From: Matthew J. Miller, P.E.

Re: 171 Warren Avenue, Portland, Maine

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On Sunday, November 19, 2017, M<sup>2</sup> Structural Engineering, P.C. visited the property at 171 Warren Avenue in Portland, Maine to review damage to the foundation. It is our understanding that early on Sunday morning a vehicle crashed into a pad mounted air conditioner, which in turn pushed through the existing foundation wall.

The existing foundation wall consist hollow masonry blocks over a stone foundation.

Damage to the foundation wall included a partial collapse of the foundation near the pad supporting the air conditioner. The collapse included both the masonry and stone portions of the wall. Additionally, the masonry was cracked and displaced over an area of approximately 10 feet.

The existing structure consist of a hip style roof and two wood framed floors. With the damage occurring near the front corner of the building, the roof loads on the exterior wall is minimal at the corner, and gradually increases as the distance from the corner increased.

Floor loads on the exterior wall consist of approximately 1'-4" of tributary load from each of the two floors. Based on this width, the loads imposed on the exterior wall is again minimal.

As constructed, the first-floor sill extends continuously from the corner to approximately 12 feet from the corner, spanning over the damaged foundation wall, and bears solidly at each end.

Based on our review of the existing structure and damage to the foundation wall, it is our opinion that the structure remains temporarily structurally stable, however the damage should be repaired as soon as feasibly possible. If it is not possible to complete the repairs prior to a significant snow event, the first floor should be temporarily stabilized with several 6x6 wood posts under the existing still founded on intact foundations.


We also recommend that, until permanent repairs can be completed, that the condition of the damaged foundation wall be monitored. If additional movement or damage to the foundation wall is noted, installation of temporary shoring to support the existing sill should be immediately installed.

If you need any assistance in preparing a temporary shoring plan or the design of a permanent foundation repair, please let me know.

If you have any questions regarding this memo, please do not hesitate to contact me.

Regards,

M<sup>2</sup> Structural Engineering, P.C.



Matthew J. Miller, P.E.

