

24 Joy Street – VIO.BH.71: Before June 2011











24 Joy Street – VIO.BH.71: After December 2016







Kenneth Alley P.E.  
Structural Engineering

May 30, 2017

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Regional Property Manager  
The Copley Group  
896 Beacon Street  
Boston, MA 02215

Subject: 24 Joy Street, Boston, MA  
Cracked Door Lintel  
Steel Beam Additions

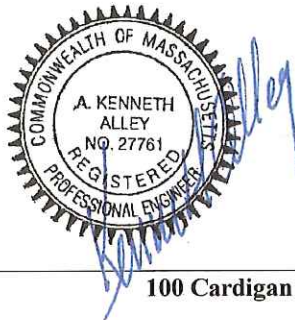
As a result of my field observation of the existing conditions surrounding the cracked lintel, it was clear to me that the section of exterior wall, around and above the cracked door lintel, was in questionable condition. The brick above, which supports a significant portion of wall, floors and roof structures, is of poor quality, with numerous cracked joints and weather deterioration, and has undergone significant distortion due to the sagging of the cracked lintel. Additionally, that section of wall is isolated from the adjacent building wall construction which could have helped redistribute loads from above.



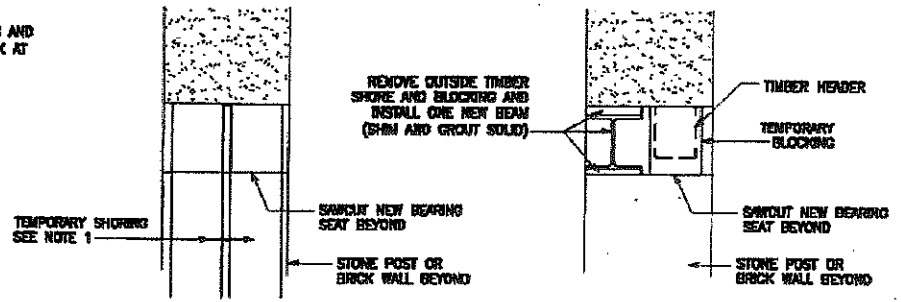
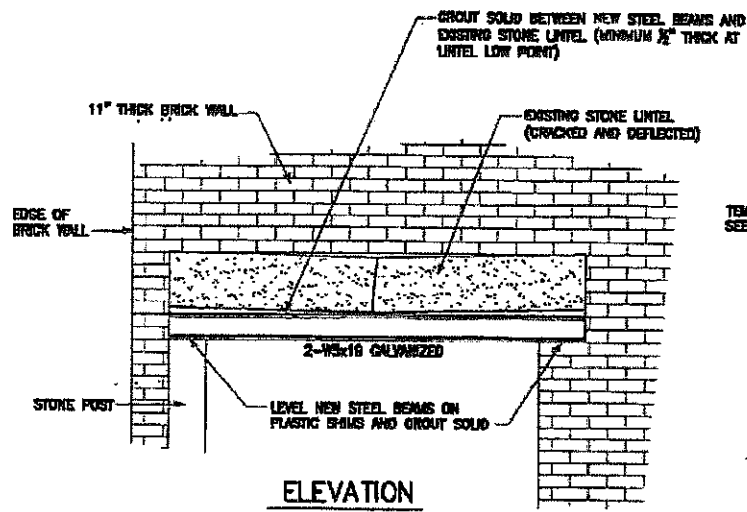
Because the existing conditions do not present a clear and defined load path for directing loads from above to the buildings foundations, attempting to adequately shore the existing brickwork would be somewhat guesswork and could very well result in unforeseen unsafe and unstable conditions. Additionally, the holes necessary to install proper shoring would further compromise the existing wall construction. I do not believe that the building should be occupied while this work was ongoing.

Accordingly, in the interest of building stability and public safety, the decision was made, based upon sound engineering judgment, to stabilize the existing lintel in place, rather than attempting to replace it. This was accomplished by installing the steel beams now in place. The decision was made without the knowledge of any BHAC requirements, but would not have been otherwise had I been aware of such requirements.

Kenneth Alley P.E.

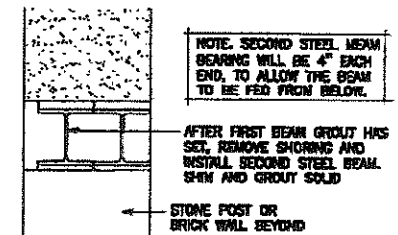


100 Cardigan Road Tewksbury, MA 01876  
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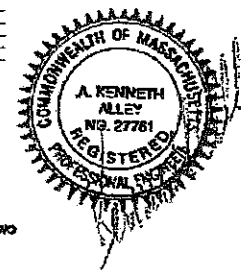
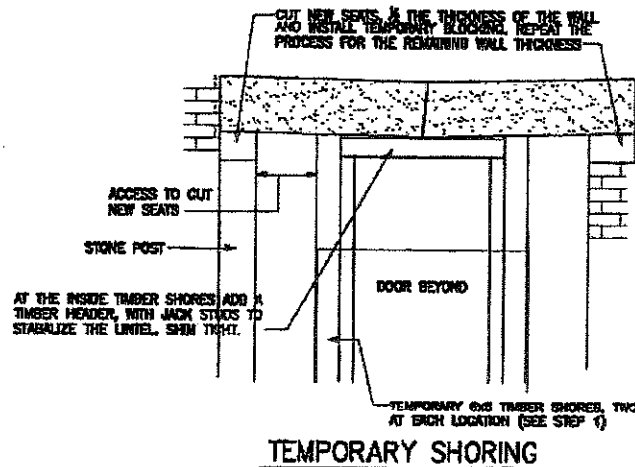


**NOTE 1**  
 TEMPORARY TIMBER SHORING AS REQUIRED TO SUPPORT EXISTING STONE LINTEL BEFORE SAW CUTTING NEW SEAT AND INSTALLING NEW STEEL BEAMS.

**STAGED CONSTRUCTION STEP 1**



**STAGED CONSTRUCTION STEP 3**



24 JOY STREET  
 BOSTON, MA  
 LINTEL REPAIRS

**ELEVATION AND DETAILS**

**KENNETH ALLEY P.E.**

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Date NOVEMBER 7, 2016

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