

Engineers Design Group inc.

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June 14, 2012

Via email only to jprondak@townofmilton.org

Mr. Joseph Prondak Town of Milton Building Department 525 Canton Avenue Milton, MA 02186

Re:

131 Eliot Street - Structural Inspection

Milton, MA

EDG Project Number: 2012-036

Dear Joe:

We visited the site of the above on May 29, 2012 to observe the condition of the existing structure. This was carried out with a walk through, both inside and outside the building. We had no access to the roof structures, did not remove any finishes and our report is based solely on these observations. Our report references only the condition of the structural elements, particularly those we feel are a safety concern.

Much of the exterior of the building consists of brick masonry with built out wood and clapboard on the upper portion. There is localized cracking and distress to the brick on all elevations and severe corrosion to the wood at projecting windows. The high bay above the loading dock has 2 inch wood studs with exterior plywood sheathing; the vertical span of which could be subject to failure under excessive wind loading.

The built-up wood façade, viewed from Central Street, has severe water damage, as has the wall facing the railroad tracks where the wood at the bay windows is in extremely poor condition. Also, as was noted in a recent report, the load bearing masonry behind is in an unstable condition.

On the interior of the building at the rear, there are wood joists supported on steel beams with evidence of severe moisture ingress and subsequent rot. The structure over the parking area has steel framed construction exhibiting extensive rust to columns, beams, bolted connections and metal deck. There is evidence that rust has compromised the integrity of the framing. There is a significant portion of an upper wood floor which as collapsed resulting in an extremely unstable condition at the surrounding supports walls and floors below.

The basement at the rear of the building exhibits corrosion due to, what is likely extensive, long term water ingress. Steel exhibits major rusting and corrosion. There is a wood structure above which has been severely compromised by water. The high bay at the rear has steel framing with steel joists and deck at roof. There is severe corrosion to both elements.

The roof structures in certain areas exhibit localized failure and instability. The large sign supported on the roof is in a dangerous condition due to both the corrosion exhibited at the underside of the structure and the potentially poor condition of connections. The sign is unlikely to be stable under high wind loads.

It is apparent from our brief walk through that there are numerous concerns regarding the structure. These include partial roof collapse and the subsequent long term condition exposing other elements to the weather. The wood floor collapse has resulted in the potential instability of a number of load bearing walls in this area. The potential of corroded wood elements falling off the building, while not structural, could present safety concerns. The high wood framed exterior walls would be unlikely to have the ability to resist loads from high winds.

It is our opinion that the portions of the building which have collapsed have rendered the attendant load bearing elements to be in an unstable condition. The long term affect of exposure to the elements has and will continue to corrode the structure. The sign on the roof is a major safety concern and needs to be removed, as do other loose elements on the exterior of the building. Portions of the interior are in an extremely unstable condition and extreme care needs to be taken for anyone accessing the building.

In conclusion, the building must either be completely demolished or repaired within a brief time-span. Due to the extent of work required to repair this structure, it is likely that demolition is the most practical approach.

We trust this is sufficient for your needs. Please do not hesitate to contact our office should you have any questions.

Very truly yours,

ENGINEERS DESIGN GROUP, INC.

Clement F. McCarey, P. E.

Principal

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