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August 13, 2015

Mr. Michael Jezierski
Nationwide Insurance Co.
PO Box 4578
Midlothian, VA. 23112
email: JEZIERM@nationwide.com

Re: Damage Investigation
 411 Union Street, Jonesboro, AR
 Nationwide case no. 6303005142PE

Mr. Jezierski:

At your request, I visited the referenced property to obtain a general overview of the fire damage, the stability of the building with regard to public safety, determine feasibility of restoring the building, and the feasibility of demolishing the building without damaging the adjoining buildings. I was met at the site by Tim Renshaw, Chief Building Official, Addy Burgi McNamee, Nationwide Insurance, and Steve Gibson. I was able to access the ground floor, the 'loft' or 2nd floor, but not the basement. The referenced building is approximately 60'-9" along Union Street and 81'-9" normal to Union Street. (see Exhibit A). My inspection of the building was non-destructive visual only, no testing or samples were taken. There was standing water in the basement and I could see this area. It was my understanding that a fire and following rain storms occurred on June 30th of this year. Photographs of my findings are included in this report.

The basement is approximately six (6) feet below grade and has a story height of approximately 10' to the ground floor. The wood framed (post and beam) is approximately 4 feet above sidewalk grade and approximately 12 feet to the second floor. The building generally conforms to ATC designation of 'URM', (unreinforced masonry) and is similar in configuration to that shown in the Exhibit B

I was told by Mr. Renshaw and Mr. Gibson that the building was originally constructed in 1926 as Jonesboro's water works building. I was lead to believe the building has no historical value. The construction is unreinforced load bearing masonry exterior walls. The upper most floor, the loft, was constructed of 3 wythe load bearing brick. The ground floor may have had 4 wythes of brick. The original window openings had wood lintels while newer openings appeared to have steel angle lintels. Partitions were wood framed with gypsum board coverings; the basement appeared to have a suspended ceiling. The basement exterior walls were not seen, but it has been my experience that one should expect to see brick walls here as well. The interior is wood post and beam wood framing, likely of hardwood species. The ground floor and second floor framing levels were sound and unyielding even though the finishes were badly damaged. The roof was wood framed supported on wood framed walls. The building appeared to have been renovated at least once. The use of metal framing clips observed throughout the structure, an indication of a major structural retrofit had been completed in the past.

The damage observed was as follows:

- Roofing, roof framing, ceiling on the second floor was at least 50% consumed by fire with the remaining 50% in a state of collapse.
- Wood framed walls in the 'loft' showed signs of fire and were damaged by the collapsing roof.
- A pile of water soaked rubble was supported on the loft floor.
- Portions of the brick supporting walls in the loft were smoke stained.
- The brick on the east wall appeared delaminated. the interior wythe moved inward, portions of brick were in a pile on the floor.
- Bricks above the loft windows on the west side of the building's front were damaged, either from fighting the fire or the fire itself. A section of the brick parapet appeared sustained fire damage, on both faces.
- The finished wood flooring and the walls on the second floor were water soaked and basement. In places there seemed to be new growth of mold and mildew on the walls.
- The basement is flooded with approximately 1 foot of water. The limited number of walls observed appeared to be water soaked.
- Generally the electrical systems and mechanical duct work on the upper floors appeared damaged beyond repair. Similarly, the electrical and mechanical on the lower floors were water soaked with some exposed wiring hanging loosely.

Unrelated to the fire, the original brick work observed to have weak, soft mortar. There is little bonding between the mortar and the brick. Without the benefit of testing, I concluded that the binder in the mortar was likely non-hydraulic lime (hydrated lime). The aggregate appeared was brown in color and likely coming from natural sources. Hydrated lime tends to revert to calcium carbonate which might explain the observed lack of bonding and "sanding" of the mortar. If the owner of the building decides to retrofit or restore the building to a habitable state I recommend that testing be conducted to confirm these conclusions and to evaluate the extent of soft mortar. Normally it is possible to restore such brick structures however it has been my experience that the expense far outweighs the expense to rebuild. The outcome of these tests would bear directly on whether or not it would be economically feasible to restore the building.

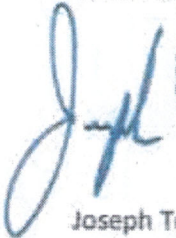
In summary, it is my opinion that the basement and ground floor structural wood framing system is generally sound. The roof and partition walls in the loft area are totally lost. All the gypsum board finishes, walls and ceilings, are damaged beyond repair throughout the structure. The finished hardwood floor throughout the structure is beyond repair. Without the benefit of an in-depth study of repair costs and considering the issues with the soft mortar it is my opinion that demolishing the building and erecting a new structure would be more economically viable as opposed to refurbishing the building.

As the building stands now, the parapets could potentially fall given sufficient sustained winds. Keeping pedestrians off the adjoining sidewalk and away from the building is advisable. The current temporary fence on Union Street, apparently erected for that purpose, should have a tarpaulin cover to prevent fragments of brick bouncing off the ground into the street. Whether or not the building is demolished, in the short term some provisions for safety should be maintained until the brick walls of loft area can be stabilized. Because of the condition of the mortar in the existing brick if the building is allowed to weather any appreciable time it is like the brick will deteriorate rapidly. I would suggest that some action be taken to either repair or demolish the building within month. Also, along the Union Street front there are loose bricks on the parapet should be removed by hand - obviously utilizing a lift from the exterior. When damaged roof is removed the loft brick walls will become laterally un-braced and susceptible to collapse likely falling outward a distance of 8' to 10' from the building. These walls should be braced or removed at least down to height of approximately 3' above the loft floor removing or stabilizing loose bricks.

If the building is to be demolished, the walls adjoining the building to the south should remain - it's been reported that the adjoining building utilizes these walls for support. Before demolish begins the contractor should assess the building and the effects his work will have on remaining any remaining element; bracing and shoring as may be necessary.

Feel free to call or write if you have any questions.

Sincerely,



Joseph Tomasello,
Senior Engineer

