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August 15, 2019

Robert Uhler
Community Development Director
City of Fort Scott
123 S Main Street
Fort Scott, KS 66701

Dear Mr. Robert Uhler,

On August 8, 2019, Agriculture Engineering Associates was engaged by City of Fort Scott to perform a walk through and visual structural inspection of a three-story historic building located at 10 North National Ave in Fort Scott, Kansas. Along with the owner Mr. Scott Johnson, I was accompanied by the Fort Scott Fire Chief Mr. Paul Ballou and two other firefighters. The Fire Chief remained on the main floor while Mr. Johnson accompanied me throughout the three floors and onto the exterior of the roof. I investigated the basement area alone.

The purpose of the structural observation was to assess the existing conditions and identify potential inadequacy of the load bearing walls as well as the general condition of the exterior walls. A visual review of the exterior and an interior inspection of all three existing floors, basement area and the roof itself. Access was allowable to the roof area through a narrow service opening. Complete access to the entire structure was limited due to the condition of the building and safety concerns of the owner. The foremost concern is whether installing a new roof and sealing the building from further water damage would enable the structure to remain for a significant amount of time.

Based on the plaque near the top of the structure the building was erected in 1888. The building is a three-story load bearing brick and wood structure located in downtown Fort Scott with a full basement and concrete floor. The basement contained four large stone and mason columns located along the centerline of the floor. These columns along with the members above are used to support the load along the center of the structure. No information was provided but the first floor appeared to be primarily used as a business or showroom with the second and third floors divided into rental apartments. The building has apparently not been inhabited in quite some time based on the condition of the interior structure. The visual inspection conducted for this report was for structural purposes only with no intent for future occupancy. Several of the windows and exterior doors were damaged or missing. Any wood structural members located in the interior of the building are so badly damaged they should be considered a complete loss and demolished.

Findings are as follows:

Typically, if there is settlement in a brick and mortar structure, you would observe a stair step or zig zag cracking along the mortar joints. The exterior of the building appeared to be in sound structural condition with no noticeable settlement cracking or deficiencies. All walls appeared to be true and plumb. No signs of settlement appeared in the chimney located in the northwest corner of the building. No other settlement conditions were present, and all mortar joints appeared complete and secure except for minor locations where tuckpointing would be required to prevent further water damage. Though mostly viewed from street level, all brick lintels and stone sills appeared to be sound with no noticeable structural deviations. Additionally, it should be noted the building is adjoined to the buildings to the north and south via a common wall and no access was made into these structures.

Looking at the front of the building (east side) from street level it appears three threaded rods and backing plates were installed as a possible lateral support just below the third-floor elevation. When viewed from the alley (west side) only one plate and rod is visible near the center of the building just below the third-floor elevation. With the condition of the interior and lack of access to all points it was never determined if the rod was continuous from the east wall to the west wall.

Access to the roof was available and the parapet walls were inspected from the roof top along with some of the lintels and sills. Damage to the roof itself is very extensive and non-repairable. At some point skylights were added to the original roof structure and most likely contributed to the water damage throughout the building and the downfall of the roof and interior structures.

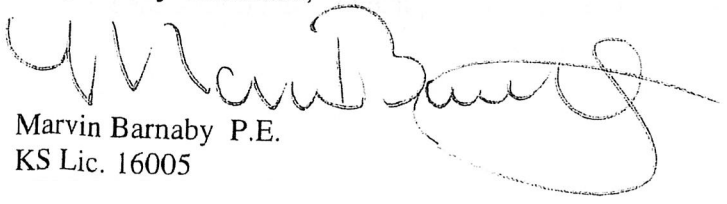
Inspection of the basement found the stone support columns to be in good condition. As the roof has started to collapse inward upon itself the steel columns that run through the first floor support the second floor have began to lean to the south as the beams/joists they support have begun to twist as the roof and interior walls collapse. The floor joists first-floor are supported by main wood beam running down the centerline on the stone columns. Though visual hard to completely see do to standing water, the concrete floor appears to be in good condition. The basement walls appeared to be in good condition as well with no visual structural deviations noticed.

The first, second and third floors have deteriorated to a point that they should be considered unsafe to traverse.

As originally designed the wood structures, floors and roof are falling inward from the with no current damage visible to the masonry walls. Though no damage was found doing the visual inspection, a selective demolition of the wood supports should be undertaken help to ensure the walls and the threaded tie rods are not damaged.

In summary, although the load bearing exterior walls appear to be stable and sufficient, if a roof is to be added, a more complete, with possible destructive investigation is needed to determine the condition of all bearing walls and their foundations once greater accessibility is available. This would ensure the bearing capacity is adequate to support the required design loads.

Respectfully Submitted,



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