## Earles Engineering & Inspection, Inc

Civil & Structural Engineers – Construction Inspectors – Surveyors

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WOMAN OWNED MINORITY FIRM - email: earlesinc@earleseng.com web: earlesengineering.com

July 9, 2021

City of Fort Scott 123 S. Main St Fort Scott, KS 66701

Attn: Mayor & Council

EEI File 21-221

RE: Main Street Building Collapse Report

Mayor & Council;

On Friday, July 16<sup>th</sup>, 2021, I Peter W Earles, a civil and structural engineer and CEO for Earles Engineering & Inspection, Inc., went to the site and reviewed the buildings condition. I meet city staff on site and we did a site review of the structures.



There are 4 separate yet combined buildings. It appears that all the walls are party or shared walls. The roof and partial wall collapse happened on the 3 story middle building. This roof collapse caused both sidewalls to move and partially collapse. Additionally it caused the front of the structure to move creating a bowed front of the building and numerous cracks in the bricks. Additionally I was informed that what

appears as white stone in the picture above was covering for previous wire strands stretched through the building and anchored in the front and rear walls to stabilize the building. These are now broken or under the piles of debris, causing additional destabilization of the structure.



The north wall partially collapsed onto and through the roof of the CDL building to the north collapsing its roof. The next north building is a bar. It suffered no damage. We were able to get onto the bar roof and look south over the CDL building and the collapsed structure further south.

The portion of the roof of the 3 story structure is unstable and could finish the collapse at any time. The upper story from the bottom of the top windows to the roof is all leaning in and could collapse at any time. The building appears to be a total loss as well as the CDL building.

There is a basement under all three buildings. The hope of the City is to save as much of the structures as possible.

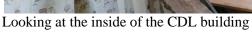
On Saturday July 17, 2021, I and City staff meet with Carl Britz with American Wrecking Services, LLC and went through the structures with him. We were able to go into the basement of the CDL building and the bar. The CDL basement showed stone and brick that had lost most of its mortar and was in very poor condition both north and south walls. The bar basement showed the mortar had mostly all been repaired and the wall looked in good condition.



After review, it was concluded that the bar could be saved by supporting its south wall and removing the upper parapet. The CDL building would need to be removed. The saved wall would need to be repaired, tuck pointed, sealed and a cap put over it as part of the reworked roof of the bar.

The south wall of the structure could to be saved below the upper windows. The building on the south is built between the failed structure and the current radio station. Its roof needs attention, but can be saved if the adjoining wall to its north can be salvaged. This wall will need to be supported as repairs are made to it, including brick repair, tuck pointing and sealing.









Looking east on the roof of the bar looking toward the CDL building

If you have any questions, feel free to call me.

## EARLES ENGINEERING & INSPECTION, INC.

## Peter W Earles

Peter W. Earles, P.E **CEO**