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13 July 2022

Kristi Kuhn 740-339-3930 kristikuhn@ymail.com ***Disclosing this report is for the sole purpose of disclosing previous work that was done to the basement. This is not to be used for any other purpose. If a current buyer wishes to have another structural inspection they may do so, at the buyer's cost.



SUBJECT: Structural Inspection and Report – 1190 Starcher Road, Gallipolis, OH 45631

Dear Ms. Kuhn,

At your request, I performed a visual inspection of the Subject home on Wednesday, 13 July 2022. My inspection and this report are limited to the structural aspects of the home shown on the attached photographs and discussed within this document. This report makes no attempt to address the general, overall condition of the home other than the structural aspects discussed within this report. As an engineer, I am not necessarily qualified to provide comments on general home items such as (but not limited to): electrical, plumbing, HVAC, roofing, mold, water intrusion, etc...

My inspection of the structure was visual **only**. The home's components were viewed in areas that were readily accessible on the date of my visit. No destructive or non-destructive testing was conducted, and none of the home's components were removed for inspection purposes. No representation or warranty is made or implied that all deficiencies have been discovered or that deficiencies will not later appear. I cannot make guarantees on the future condition of the structure, or its foundation based simply on a visual inspection. More extensive excavation / drilling and laboratory / destructive testing would be necessary to provide detailed condition information. No subsurface geotechnical exploration or laboratory soil testing was conducted. This report is intended to provide a professional opinion only based on the visible conditions at the time of my single visit. Also, I made no attempt to compare the construction materials or installation techniques to the requirements of past or current local building codes.

In addition, this report and opinion / statements contained within are intended for the use of Ms. Kuhn. This report is non-transferable to future owners of the Subject property, and no warranty is expressed or implied as to the future condition of the home even if no changes are made that alter the structural system in any way.

It is my understanding that questions have been raised concerning the structural condition of the home due to past foundation repair work. My inspection and this report are intended to document the current structural condition of the home and provide recommendations if necessary. It should be noted that this was my first and only visit to the home. I have no direct knowledge of the conditions prior to my visit on the date described above and my inspection concentrated on the foundation walls and other visible structural features of the home. Since this

a one-time inspection, I have no way of knowing if conditions are changing or progressing over time. Also, it is impossible for me to know the condition of – or comment on – structural items that are underground, concealed, or otherwise not visible for inspection purposes.

Current Condition / Findings

The structure is an approximately 38-year-old, 1 ½ story home with a part basement (front) and part crawl space (rear). The home is constructed on a generally level lot such that there is soil backfill pressure on the basement foundation walls of the home. For my documentation purposes the front of the home is considered to face Starcher Road. The foundation walls are masonry block construction; while the upper level walls appear to be wood framed. The basement floor is a concrete slab-on-grade. The left / front corner garage is at the upper-level and is also a concrete slab-on-grade.

In my professional opinion, this home is safe and structurally sound in its current (corrected) condition. There are no structural issues with the home that require additional remedial measures or correction. The home appears typical for the age and initial construction techniques. Any items / issues noted within this report would be considered normal maintenance / improvement for a home of this age, topography, and initial construction techniques.

The attached photographs are provided to document the current conditions at the time of my single visit to the property. The general items of note found at the time of my inspection are described below:

- 1. The attached photographs show views of the steel angles installed on the front foundation wall of the home. Based on the current conditions of the home and foundation walls, it is my best engineering judgment that the home and foundation walls are safe, stable, and structurally sound. The past work to the home was proper for the application and should prevent further movement or cracking in the basement foundation walls.
 - a. The front masonry wall has been stabilized with seven (7) steel angles (also called tension beams or force brackets). This is a common and effective wall strengthening technique for masonry walls with lateral (horizontal) soil pressure.
 - b. The front basement foundation wall also has seven (7) carbon fiber straps applied to the interior face of the block. This is also a common wall strengthening method.
- 2. Although the movement and cracking is not a severe, the right wall also has been stabilized from additional lateral movement with five (5) carbon fiber straps.
- 3. The exterior masonry walls are not fully visible. However, there does not appear to be any signs of significant vertical settlement of the home or foundation walls.

- 4. The basement area was dry at the time of my visit with no major water intrusion noted. However, there are signs of old water intrusion issues. It appears that work has been done along the front exterior of the home with gutters and french drains to help with the past basement water issues. There is no evidence that any current water intrusion is causing structural damage.
- 5. The visible portions of the main-level floor system appear typical for the age and capable of supporting normal residential loads.
- 6. The interior of the home is in good condition with no issues related to ongoing foundation movement. Minor wall / ceiling cracking would be considered normal for a home of this age.
- 7. Minor cracking is present in the garage floor slab, but this is not considered to be structurally significant.
- 8. Overall, the home appears to have been constructed using typical residential construction techniques and materials for the era of initial installation. In my professional opinion, there are simply no structural issues with the visible foundation walls or wood framing that require additional corrective measures. As with any home with this type of topography, exterior drainage is important to the long-term service life of the foundation walls and structural components. Keep both surface and underground water away from the foundation walls of the home.

Conclusions / Recommendations

As an engineer – my primary duty is to the safety of the home and the occupants. In my professional opinion, this home is safe for occupancy and structurally sound in its current (corrected) condition. There is no reason to perform additional structural corrective measures to the foundation walls.

- There is no indication of ongoing vertical movement of the home's foundation walls. The visible foundation walls of this home appear to be safe, stable, and structurally sound.
- There is no visible indication of ongoing lateral (horizontal) movement of the foundation walls. The past work was proper for the application. No additional repairs are required. The left-side and rear walls did not experience the same type of movement in the past and no work was performed to these walls.
- In general, it is my best engineering judgment that this home is safe, stable, and structurally sound. For the age and topography, the conditions of this home are somewhat common.

- The floor system is in good condition and safe.
- The basement area was dry at the time of my visit.
- The interior of the home shows no signs of ongoing foundation movement.
- As with any masonry home with foundation walls below grade, drainage is critical to the longevity of the structure. Ensure that all foundation drains and gutter downspout drains are kept clear and functioning. Where possible, slope ground surfaces adjacent to the home to provide positive drainage for surface water away from the foundation walls. As much water as possible should be directed away from the home and the foundation walls to ensure the long-term service life of the structure.
- With typical maintenance for a residential structure and control of water around the exterior of the home / property, this structure should have the same general service life as others of similar age, location, topography, and initial construction techniques.

I appreciate the opportunity to provide this service to you. Please feel free to contact me with questions or comments at any time. I can be reached at (304) 544-5034.

JASON C MERRITT

E-65935

Respectfully,

Jason C. Merritt, P.E.

13 July 2022

Enclosures: Invoice for Services – Paid in Full (PayPal)

Photographs – 13 July 2022 (11 total)

CC: shelly@wisemanrealestate.com

Jason C. World











