



# OBSERVATION REPORT

**Client:** Bill McKean  
**Address:** 2802 Pearce Road, Austin, TX

February 1, 2024

TBPE FIRM REG. #2487  
TBPLS FIRM REG. #10126000

4910 West Hwy 290  
Suite 300  
Austin, Texas 78735  
512.328.6995  
512.328.6996. Fax

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On 26 January 2024, George Breehl, Inspection Supervisor, observed the home at the above address to identify health or safety concerns and/or deviation from adopted codes and standards governing existing buildings which have resulted in reported leaks and structural damage in the home.

## A. Report Limitations

Please note, this report is based on the visual examination of the structural, mechanical, electrical and plumbing. No intrusive examinations have been performed, and no samples of materials have been taken for laboratory testing. No mold or air quality testing was conducted. No water quality testing was conducted. The observations, opinions, and recommendations are based entirely upon our visual examination, compiled data, and interviews with the tenants/owners as applicable. No detailed structural analysis of existing members has been performed, and no rehabilitation designs are provided in this report. ATS Engineers makes no warranties or guarantees, either expressed or implied, that all items of a deficient nature and/or improper construction techniques, etc. have been discovered and commented upon in this report. This report has been prepared to identify current deficiencies observed on the date of inspection and should not be considered an exhaustive description of every item that may require remedial attention. In some cases, additional examinations may be warranted to fully evaluate the deficiencies noted. Portions of the items inspected were covered, inaccessible or unavailable, therefore, unable to be thoroughly inspected.

## B. General Description of the Home and Accessory Building

The home is a one-story, wood-framed structure, which measures approximately 28 feet across the front and 54 feet along the sides. The exterior consists of natural stone bearing walls with some wood siding. The roof is covered with composition shingles (not original roofing material). Per Travis CAD records, the home was constructed ca. 1910. An accessory building measuring approximately 15 feet by 12 feet was noted at the rear left corner of the property. Like the main home, the building is covered with stacked natural stone, wood siding and composition roof shingles. Based on discussions with the Owner, we understand this property has not been occupied in 53 years.

## C. General Observations

### C01. Exterior:

The front gable of the house is warped. There is a downward and inward curve of the gable framing. The wood columns at the front porch are leaning inward following the curvature of the gable. The columns appear to be undersized. It was noted that the beam supporting the left side of the porch canopy is rotting with portions missing. The roofing at the front left side of the porch is rotted and falling. Many cracks were noted in the floor of the front porch. The cracks vary in size

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from hairline to 1/4" with chipping along the edges of some. It appears that sections of the concrete flooring were replaced at various times in the history of the house. Large cracks were noted in the wall along the perimeter of the front porch. It was noted that some cracks were more than 1" wide; for reference cracks greater than 1/8" typically require structural repair. It appears that these wider cracks are partial recurrences of larger cracks (up to 3") that were previously repaired. A 1/4" crack was noted in the stone at the front right corner of the living room.

The right side of the house appears to be a clear path for rain runoff. It was noted that the soil along the right side of the house was eroded. Part of the foundation along the right side and at the front of the entry porch has been undermined by the erosion. It appears that some mortar has been washed away from between the stone along the right side. Cracking was noted in the mortar joints of the stone at the right side of the living room. It was noted that the backyard drains towards the back of the house which includes the kitchen and bathroom. It was also noted that portions of the floors of the kitchen and bathroom are below the exterior grade. It appears that the result of this is water migration into these areas of the house.

### C02. Interior

In general, the house is open to the elements. It was noted that several small animals are living in the house. The house has an extraordinarily strong smell of mildew (note we did not test for mold). The house is not insulated. Several holes were noted in the roof. This resulted in several wet areas in the house and the rotting of some site-built roof trusses, window headers and other lumber in the house. It appears that several trusses have been repaired previously. It was noted that the construction and configuration do not adhere to common engineering practices. One such example is the scabbing of top or bottom chords using short 2X sections. Through a hole in the subfloor at the front right corner of the living room, it was noted that the subfloor framing is less than 6 inches above grade. No ventilation of the subfloor was evident. The electrical wiring consists of modern materials (Romex) but were installed without conduits. It was also noted that some electrical splices were unprotected. It was noted that the subfloor of the kitchen and the bathroom, including floor joists and beams, has almost completely rotted away. It was noted that the floor of the bathroom is filled with mildew. It was also noted that the walls were partially covered in mildew. It should be noted that our representative did not enter the bathroom because of the strong, unpleasant odor coming from the room. The exterior door to the kitchen is rotted and not operable.

### C03. Accessory Building

It was noted that the accessory building was built on flatwork (not a structural slab). Some holes were noted below the edge of the concrete. Like the main house, the roof is constructed of site-built trusses. The roof has substantial damage including a hole at the rear left corner. It was noted that the walls at the rear left corner have separated. Like at the main building, exterior grade at the back of the accessory building is above the finish floor. This has caused the siding along the rear wall to rot.

## **D. Conclusions**

The building construction is substandard in terms of the framing, the improper electrical wiring and the lack of insulation. The construction of the roof trusses and the subsequent repairs appear to fall significantly short of acceptable engineering practices. It appears that the roofs of both buildings have begun to collapse. The

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electrical conductors in the house were installed without adherence to local practice or the minimum requirements of the NEC. The exposed electrical conductors will become a fire hazard or life-safety issue if the system becomes energized. These buildings will fail minimum code requirements for the city's building codes, plumbing code, fire prevention code or electrical code. These buildings are dilapidated and unfit for habitation.

Several window headers are undersized. As noted above, some window headers have deteriorated and no longer support the structure as intended. The left and rear walls at the rear left corner of the accessory building no longer support loads as intended because of the hole in the roof and subsequent water damage. The visible portions of the foundation framing of the house have completely deteriorated. The moisture and smell of the house poses a risk to the health and safety to persons on the property. This is especially true of the kitchen and bathroom. The bathroom is unsanitary. Please be reminded that the entire floor of the bathroom is covered in what we perceive to be mildew.

Based on the number of structural deficiencies noted in the roofs of the main house and accessory building, the prolonged presence of moisture at the interior, the unpleasant smell and the multiple building code deficiencies, these buildings are hazardous for habitation.

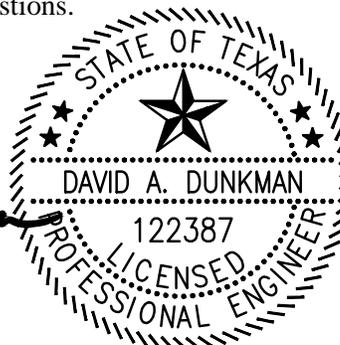
Please contact me if you have any questions.



Julian Morton, EIT



Dave Dunkman, P.E.  
Structural Department Manager



I certify that I have produced this certification as an independent registered professional engineer and have no interest, present or prospective, in this property or anyone involved with this property. I warrant that ATS has looked at the structural components of this property in a diligent manner and has made recommendations based on my experience and opinion. Changes may occur during construction that could make null and void the contents of this report. No other warranty, either expressed or implied, is hereby made. Please note that this certification shall expire with any change in referenced code or any changes from the referenced plan date and architecture. Professional Engineering Firm Registration Number 2487