DYNAMIC ANALYSIS

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SUITE 202
BILLINGS, MT 59102
(406) 201-3435
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RESIDENTIAL STRUCTURAL CONDITION ASSESSMENT

July 27, 2026

Single family dwelling located at 6315 Gray Hawk Trl, Billings, MT



Prepared for Current Homeowner

Samuel Bower, P.E.
MT License Number: MT49462 PE
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1501 14th Street West
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07/27/2026

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EXECUTIVE SUMMARY

The home is currently in good structural condition.

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REPORT INTENT AND LIMITATIONS

The intent of this report is to create a disclosure document that accurately and understandably conveys the structural condition of the building in question to the buyer and/or seller. This letter is not a forensic report, and it has not been prepared as an expert witness disclosure for pending or active litigation. The goal of this investigation is to determine if there is any damage, distress, deterioration, or degradation to the structure. Additionally, this report will disclose any apparent conditions that may lead to structural failure.

It is not possible to perform a complete analysis of the structure as much of the structure is obscured from view. Thus, this assessment is limited by the visible and observable characteristics and behaviors of the structure. No destructive testing was performed. The behavior of the structural elements has been observed to the best of our ability. Thus, these observations are dependent on incomplete information, and someone may discover issues not identified in this letter. Our determinations can often depend on the accuracy of information provided by the current, previous, or neighboring property owners. This letter contains our professional opinion based on our education and professional experience evaluating similar structures.

In some instances, we are asked to mention only a specific item or deficiency. If this is the case, it will be stated clearly. Otherwise, our analyses include the foundation, slabs-on-ground, floor support system, floor structure, wall framing, ceiling structure, and roof system. Our analyses do not include detached ancillary structures unless this report specifically states that it does. Our reports typically do not include non-structural observations or recommendations; however, non-structural deficiencies may be structurally relevant and will be identified as such.

Our reports do not include soils testing; however, if specific soil types are known to be present in a given area, or if we have observed the effects of specific soils conditions in nearby areas, this will be remarked in the Background section of this report.

Ongoing stability is mentioned with respect to the anticipated stability of any building in normal conditions. Meaning, a building without concern for ongoing stability may still shift if proper ownership maintenance practices are not observed – such as not maintaining positive drainage around the foundation. Concern for ongoing stability generally means the home may shift even if good ownership maintenance practices are observed.

The home is analyzed with respect to the International Property Maintenance Code (IPMC). All recommendations are in accordance with the IPMC. Repairs shall be completed in accordance with the International Existing Building (IEBC) code as applicable.

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REPORT BACKGROUND AND RESOURCES

At the request of the Client, Dynamic Analysis performed a site visit on July 23, 2026. This onsite investigation was performed by Samuel Bower, P.E. Our understanding regarding the purpose of the report is to evaluate the structural health of the home specifically in regard to foundation stability given the known presence of adverse soil conditions in the surrounding area.

According to information provided before I began my investigation, a previous engineer performed an consultation at the home in 2019. The information relayed to me indicated the previous engineer notated some differential elevation across the main floor of the home and across the front patio concrete slab. The recommendations made during that site visit were to maintain positive drainage and polymer injection beneath the front slab. According to the current homeowner's, this work was completed.

SITE OBSERVATIONS

A. General Construction

The home was originally constructed in 2015 using standard construction practices and materials of the time. No plans or other information regarding the home's history was provided for review.

- Foundation: Concrete foundation
- Floor Framing: Engineered floor joists
- Wall Framing: Repetitive dimensional lumber framing
- Roof Framing: Engineered truss system

B. Differential Level Survey

A high-precision hydrostatic altimeter and self-leveling three-beam laser were used to measure the differential elevation of the main floor of the home and the garage. These measurements revealed approximately 0.9" of differential elevation throughout the home and 3/4-inch across the garage. The field notes are attached to Appendix B of this letter. This quantity of differential elevation is not unexpected for a home of this age.

Given the known presence of adverse soil conditions in the area, it is important to keep the subgrade adjacent to the foundation free of excess moisture. This can be accomplished by maintaining positive drainage. Positive drainage can be achieved with a minimum 6" drop at 10' away from the foundation with a dense soil that promotes water flow away from the foundation or by installing a water collection and conveyance system such as a French drain or a trench drain in areas where the grade requires it. Additionally, irrigating within 5' of the home should be avoided and all gutter downspouts should have 6-foot extensions that positively discharge water away from the foundation.

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It is also important to ensure the window well sump pump remains operational and the pumped water is discharged away from the foundation.

C. Interior Cracking

Minor interior cracking was observed in the home. These cracks do not currently pose a threat to the structural stability of the home. However, the cracks should be monitored for indications of change that may suggest the home begins to experience unexpected movement.

D. Front Porch

The differential across the front porch was reportedly assessed during the 2019 site visit. While no documentation from this visit was provided, it is our understanding a contractor was hired to inject the subgrade beneath the slab to mitigate future differential movement. Details regarding this work are unknown; however, the work appears to be performing as intended thus far.

RECOMMENDATIONS

No recommendations at this time.

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APPENDIX A
Photographs

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Photo 1:

Rear exterior profile



Photo 2:

Ensure positive drainage is maintained

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Photo 3:

Ensure the sump pump remains operational

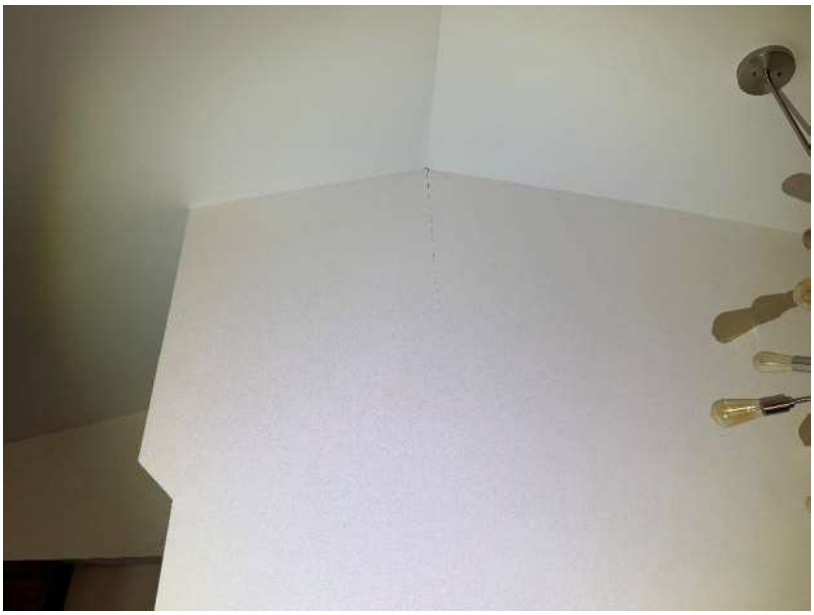


Photo 4:

Overview of interior cracking

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Photo 5:

Photo showing the separate house and front porch foundations

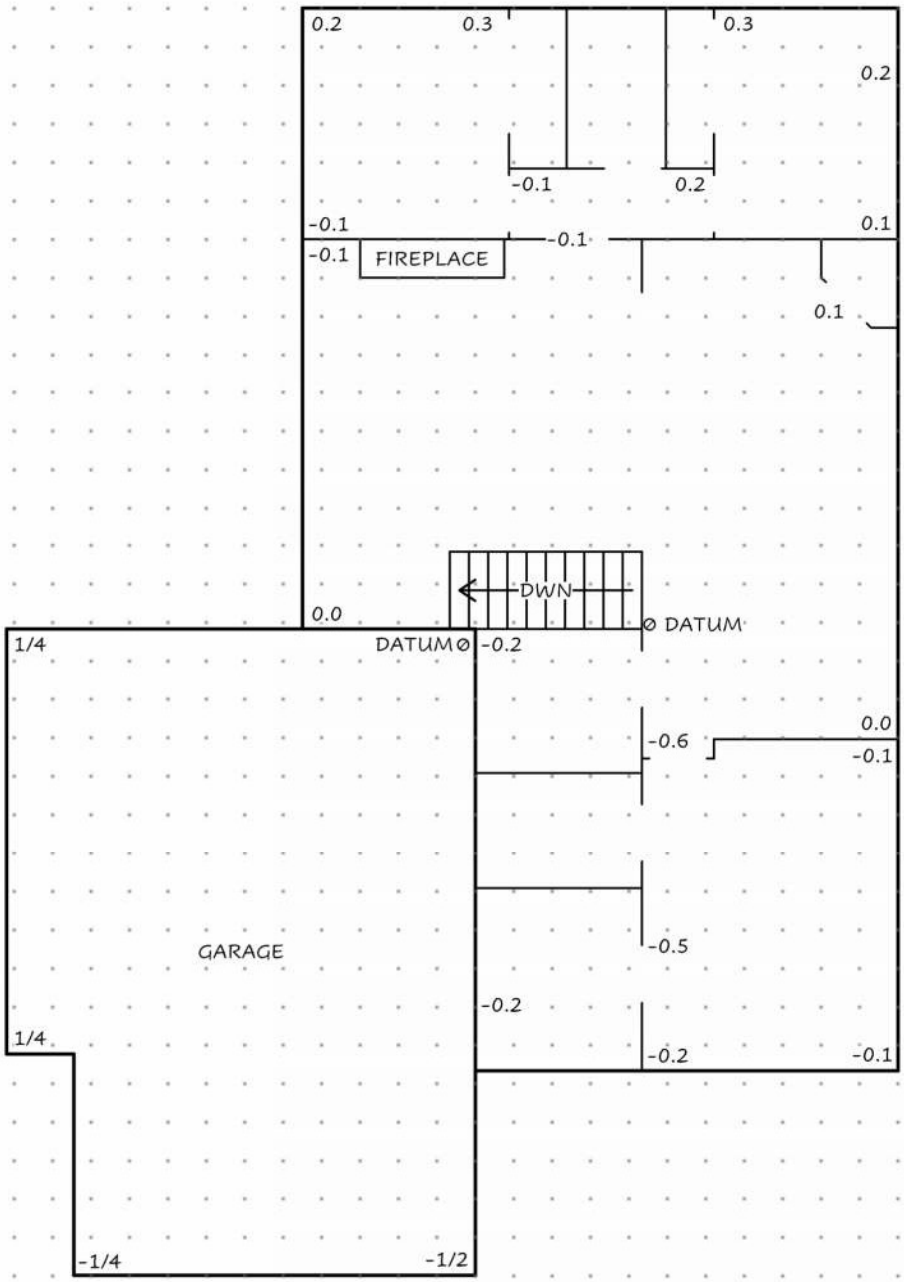
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APPENDIX B
Drawings

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6315 GRAY HAWK TRAIL
07/23/26

NOTES:
- DRAWING NOT TO SCALE
- MEASUREMENTS ADJUSTED TO ACCOUNT FOR DIFFERENCES IN FLOOR THICKNESS