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Main Stream Capital Investments, LLC
Attn: Ryan Woodlief
2495 S Chavis Rd
Kittrell, NC 27544

October 2, 2026

Re: Limited Structural Inspection
12835 NC-39
Henderson, NC 27537

To Whom it may concern:

At the request of the seller of the property listed above, I reviewed the structural portion of an inspection report titled "Request List for 12835 NC-39 Henderson NC 27537".

Description

The single-family home in question is traditional stick built construction circa approximately 1961. The home construction is conventional in nature and consisted of a wood-frame super-structure over a masonry wall basement, with a slab floor. Renovations of the home have been performed. The following issues were provided on the inspection report:

1. Inspection Report Observations

- a. **Foundations, Basement and Crawl space - 1.0** *"The foundation wall at the exterior and in the basement of the home has cracks and bulging noted that may have structural implications with through brick cracks and / or long cracks and needs to be reviewed and repaired under the guidance of a licensed structural engineer or a licensed general contractor specializing in foundation structural repairs. A clear structural letter and warranty should be received from the company performing the work."*
- b. **Columns or Piers - 1.1** *"The metal column in the basement have heavy rust noted to the lower areas and up approximately 10" to 12" up the post and indicates high water at times. This has cause damage that can allow these posts to fail. These posts need to be evaluated and repaired or replaced and the water stoped from entering the basement and causing this damage by a licensed general contractor with all areas made functional."*

- c. **Floors (Structural) 1.2 (1)** *“The main girders in the basement that support the center of the floor structure is covered by wood making these areas not visible for inspection. The only gaps in this wood coverings has been probed and the wood is deteriorated. These girders need to be opened up for evaluation by a licensed general contractor and all areas repaired or replaced and made functional.”*
- d. **Floors (Structural) 1.2 (3)** *“The floor joists and other framing members at the center of the basement have deterioration noted from water or moisture and a lack of ventilation. The cause of the moisture and or lack of ventilation needs to be located and repaired and made functional. These areas can get worse with time and needs repaired or replaced and all areas probed for concealed damage. All repairs are to be performed by a licensed general contractor with all areas made functional.”*
- e. **Floors (Structural) 1.2 (4)** *“The floor framing in the crawlspace has deterioration and fungus growth from radiant moisture and this can be a health concern and this crawlspace and floor framing needs to be evaluated and probed for concealed damage with proper repairs performed by a licensed general contractor and all areas made functional and safe.”*

2. Discussion

- a. **Foundations, Basement and Crawl space - 1.0**
 - i. *Front Porch Cracking* - The cracking noted on the front porch has been determined to be not an issue of structural concern and it appears to be cosmetic in nature due to the minor nature of the cracking.
 - ii. *Rear Basement foundation wall with straight mortar joint inward displacement* - Along the bottom course of CMU in the back right wall of the basement, the wall has an inward displacement of up to approximately 1”. This inward displacement is due to the build up of pore-water pressure on the rear wall of the home. This is likely due to insufficient grading away from the home as well as the lack of gutters moving water away from the rear of the home. Over a number of visits to the property, water can be seen entering the basement, which is helping to relieve pressure against the foundation wall. In my professional opinion, the basement foundation wall is not in imminent danger of failure, but to prevent further worsening of the bulging, which could lead to failure in the future, it is advised to ensure proper grading is achieved away from the house (Ref. R401.3 Drainage - NC Residential Code) as well as installing a gutter system to divert water away from the home. Additional steps may be made to further relieve the water pressure against the home, such as the installation of a foundation drain.

- iii. *Stair-stepping in the foundation wall* - The stair-step cracking noted has been determined to be not an issue of structural concern and it appears to be cosmetic in nature due to the minor nature of the cracking.
- b. **Columns or Piers - 1.1**
 - i. The metal columns in the crawlspace have been inspected and have sufficient capacity to remain in service in their current condition and will meet the loading requirements per the NC Residential Code, 2018 Edition.
- c. **Floors (Structural) 1.2 (1) - Main Girder**
 - i. The girders running the length of the first floor were covered in plywood and 2x4's making inspection difficult. The owner has since removed the sheathing and the portions of the main beam which were determined to be in poor material condition have been repaired or replaced. From my follow up inspection following the completion of the work, as installed, the beams meet the requirements per the NC Residential Code, 2018 Edition. (NCRC 2018 Edt)
- d. **Floors (Structural) 1.2 (2) - Cut Floor Joist**
 - i. There is a floor joist which was cut short and did not bear on the exterior wall. Per my instruction, the cut joist was sistered with a new floor joist. The sistered joist has sufficient capacity to meet the required loading conditions per the NC Residential Code, 2018 Edition.
- e. **Floors (Structural) 1.2 (3) & 1.2 (4) - Deteriorated Floor Joist**
 - i. Floor joists in the basement were noted as having deteriorated on the ends where they bore on the ledger strip. Joists which were determined to be of poor condition have either been replaced or sistered at my instruction. The existing joists were attached using a ledger and notch connection. This practice, although legal when installed, is not commonly used due to the potential for splitting of the joists, particularly when notches exceed 1/4th the depth of the joist. At my request, the seller has reinforced the notched joists with plywood. The repaired joists have sufficient capacity to meet the required loading conditions per the NC Residential Code, 2018 Edition.
- 3. **Additional Items Found Outside of the Provided Report (See Disclaimer Below)**
 - a. Some Joist Hangers were not attached with the proper fasteners. The correct fasteners have now been installed.
 - b. The middle stair stringer was broken at the top 2 steps going into the basement. The stringer has been replaced/repaired.
 - c. One of the new floor joists installed in the was not properly fastened to the outside band above one of the rear basement windows. A joist hanger is now installed, correcting this issue.

- d. An existing floor joist was split at the notch where it was resting on the 2x4 ledger strip. The damaged joist has been sistered and is adequately supported on the main beam.

4. **Disclaimer**

This structural inspection was limited in scope to the specific structural items identified in the home inspection report provided to the Engineer, together with certain additional conditions observed by the Engineer while evaluating those identified items.

The identification of any additional conditions in this report should not be interpreted to mean that a comprehensive structural inspection of the residence was performed. Areas, components, and conditions outside the specific items addressed herein were not systematically inspected or evaluated.

Accordingly, this report should not be construed as an opinion regarding the overall structural condition of the residence, nor as confirmation that other structural deficiencies, concealed conditions, construction defects, code deficiencies, or maintenance-related conditions do not exist. The Engineer assumes responsibility only for the specific conditions evaluated and opinions or recommendations expressly stated in this report.

Sincerely,
John R. Frazier, PE
919-482-0593

