

Memorandum

April 1, 2025

To: Julie Pereira, Homeowner
5055 Adagio Ln. Lakeland TN 38002

From: Rita Anderson, Building Official

CC: John Zeanah, Director of Planning and Development; Kevin Dulin, Chief Building Inspector; John Bowman, Chief Plumbing Inspector

Background:

I was contacted by Director Zeanah to investigate a homeowner's concerns regarding the construction of their home at 5055 Adagio Ln, Lakeland, TN 38002.

- Permit number B1116613 was applied for in 2020 for a new home construction project that includes a two-story single-family residence with a three-car garage located at 5055 Adagio Ln. TN. The permit specifies a residential conditioned area of 3,794 square feet, an attached garage of 775 square feet, and an outdoor patio/porch of approximately 239 square feet. The contractor of record is Regency Home Builders, holding Tennessee Contractor's License No. 61473. This building permit was approved based on the provided information and is publicly accessible at [Develop901.com](https://develop901.com).
- Since this permit was issued before our system went digital, the building plans are unavailable. Shelby County discarded all paper plans six months after a structure was completed. With our new digital system, the plans are retained indefinitely. I selected a similar home under construction in the same subdivision—built by the same contractor, Regency Home Builders LLC (State of Tennessee License #61473)—for comparative construction details. The chosen home at 5054 Adagio is a two-story structure with a 2-car garage and a similar floor plan, issued on March 2, 2022.

- Typically, the building department does not conduct a foundation inspection unless specifically requested by the contractor. If no request is made, an engineer's letter approving the foundation is required. For this property, an engineer's letter was provided, confirming that the foundation inspection was completed on 10/12/2020 by State of Tennessee Registered Engineer, Linda Gail Prather.

Site Inspection Summary

On March 5th, I conducted a site inspection and met with the homeowner, Julie Pereira. Upon entering the home, I observed that the floor covering had been removed in the entry, dining room, kitchen, living room, and breakfast nook. Julie explained that a water leak from the second-story restroom sink faucet had traveled down the wall below, necessitating the floor removal. The concrete slab has since been exposed to ambient temperatures. According to the flooring company, the slab moisture was too high to install new flooring even after one month. As of this report, two months have passed.

Additionally, I observed a slab repair in the hallway. Julie explained that the plumbing waste line had lost its required slope for proper drainage, causing a backup. The repair involved jackhammering the slab to restore the correct slope. Plumbing permit Res-Plm-22-000448 was obtained for this repair.

Julie provided photos taken during the open trench plumbing repair that verified the installation of the required vapor barrier and welded reinforcing wire mesh according to the plan specifications. However, the photos also showed that the wire mesh was installed directly on the vapor barrier.

Note: For effective crack control and reinforcement, the wire mesh **should not** be laid directly on the ground or on the vapor barrier. Instead, it should be elevated into the concrete. This practice helps limit crack propagation and contributes to the slab's overall structural performance, and it is considered industry standard practice.

Julie also gave me a tour of the first floor, pointing out settlement cracks in the exposed slab in the living areas and on the exterior walls. No destructive investigation or testing was conducted beyond visual inspection. Based on the slope of the land and adjacent properties, it was noted that fill had been added at the back of the house.

Recommendations

It is recommended that a structural engineer be consulted to inspect the existing foundation, evaluate settlement cracks in the exterior walls, and assess soil compaction for structural stability. Additionally, further investigation is required to determine why the slab continues to retain excessive moisture, which is preventing the installation of floor covering despite being exposed to ambient temperatures for over two months.

