

Engineer's Report

SUBJECT:

Foundation performance and suitability for reuse 2507 Park View Drive, Austin, Texas 78757

Job Number:	DATE OF SITE VISIT:
20167	October 23, 2020

At his request, I met with owner and builder Dominique Levesque on site to review the current performance of the foundation and to offer an opinion about its suitability for reuse in a renovation. This report is a summary of our discussion and my observations.

Built in the 1950's, the house is a one-story ranch style with a slab-on-ground foundation and wood-framed superstructure clad with siding and stone veneer wainscotting.

The owner provided a structural inspection report from 2009 that documented three inches of elevation difference between the center and corners of the house. That report concluded that the foundation deflections and damage were beyond allowable tolerances and recommended piers to correct some of the deflection. Other paperwork showed that piers were installed and the leveling was attempted.

During my site visit, I observed signs of ongoing foundation movement such as cracks in interior gyp walls and a large gap in the exterior wall at the rear living room, which aligns with a significant crack in the foundation slab visible under the west exterior wall. The owner reported several rounds of patching gyp cracks and adjusting stuck doors throughout the house. Current floor deflection appeared similar to those shown in the 2009 report.

The cracks in the exterior wall have been filled with foam in an attempt to reduce infiltration of air, water and insects, and the doors have been adjusted to insure egress. These are examples of the effects of this foundation deflection that will require more and more maintenance each year to meet minimum standards for livability and safety.

Additionally, perimeter drainage is poor, and water reportedly enters the garage during heavy downpours. The poor drainage is likely contributing to the observed foundation movement. The top of slab is too low relative to surrounding grade to correct surface drainage without extensive excavation to lower grade, which may jeopardize the surrounding trees.

The foundation deflection and cyclical movement that requires repeated patching of cracks and adjustment of doors indicates that the foundation repairs in 2009 were not effective. Given its poor performance and inadequate drainage with no good options for improving either, I believe this foundation has reached the end of its useful life. The foundation should be replaced with one that meets modern design and construction standards.

SIGNED:

Dennis Duffy, PE

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DISTRIBUTION:

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