

PAIGE ENGINEERING
STRUCTURAL & FORENSIC

December 2, 2020

Emily Wilson
542 Schmeltzer Lane
San Antonio, Texas 78213

Re: 542 Schmeltzer Lane
San Antonio, Texas 78213

Level "A" Structural Evaluation of Foundation

Dear Ms. Wilson:

In response to your request I conducted a Level "A" structural evaluation of the foundation at the above referenced address on December 1, 2020 in the presence of both realtors.

The residence is single story, wood framed, clad with $\frac{3}{4}$ masonry, roofed with composition shingles, and is supported by a conventionally reinforced concrete slab-on-grade foundation. There are numerous non-foundation concrete slabs on the property including a patio slab at the rear.

It is my understanding that the residence was constructed circa 1954 which makes it approximately 66 years old.

A review on the exterior revealed several flat slabs, non-foundation, that have major cracks and crack repairs. The area is known to have highly expansive clay soil and this movement is the result of ground movement and possibly poor lawn maintenance. In addition, some of these slabs may not contain steel reinforcement. Maintaining a lawn is one way to minimize the effects of soil with high clay content on the foundation and non-foundation slabs.

A review of the exterior of the residence revealed a very small tight (hairline) crack in the front porch and several minor cracks in the masonry on the front and sides of the residence. All were located at window openings. One on the left side, at the last window near the left rear corner, was horizontal but it is likely due to the installation of Central A/C where a Freon pipe was installed through the masonry.

None of these minor masonry cracks are a surprise for a foundation that has experienced numerous deep droughts. The cracking I observed would not be considered a problem unless the home was less than a couple of years in age. This foundation settled decades ago. It will still move with weather cycles but it is not likely to cause additional masonry cracking.

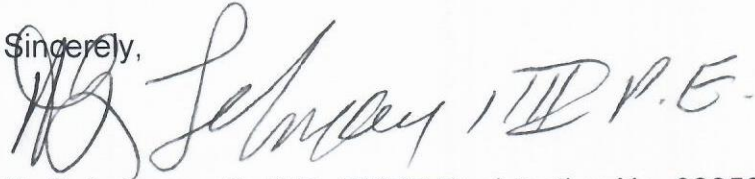
Inside the residence, the interior was observed to be recently renovated and there were no signs of excessive foundation movement. In addition, I observed the floor and was unable to detect noticeable floor slope. This correlates well with the minor magnitude of the exterior masonry cracking I observed.

Considering all the above information, it is my professional opinion and conclusion that the foundation is structurally sound and is performing well for the soil conditions in this area.

One thing I know is that these early concrete foundations were constructed with a considerable percentage of steel and another plus for this foundation is its small footprint. The smaller the footprint, the less foundation stiffness is required to reduce foundation deflection and observable cosmetic property damage.

If you have any questions, call me at 210-687-7298.

Sincerely,



H. G. Lehman, III, P.E. TBPE Registration No. 32859
Paige Engineering TBPE Registration No. F-1212

