



Structural Evaluation Report

2609 San Pedro St.

Austin, Texas 78705

Report Issued: September 17th, 2020



Prepared For:

Cater Joseph

Joseph Companies

cater@josephcompanies.com

Prepared By:

FORT Structures TBPE#: 18034

2235 East 6th St. #105, Austin, Texas 78702

512-817-9264 www.fortstructures.com

September 17th, 2020

Client: Cater Joseph

Joseph Companies

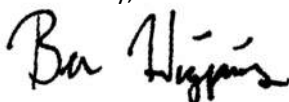
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Subject: Structural Evaluation Report – 2609 San Pedro St, Austin TX, 78705

Fort Structures PC is pleased to submit the results of the structural evaluation for the above-referenced project. This report briefly presents the findings of the visual study along with our conclusions and repair recommendations.

If you have any questions regarding the information in this report, please feel free to contact me at 512-565-7026, or ben@fortstructures.com, sam@fortstructures.com

Sincerely,



Benjamin Higgins, EIT

Project Manager



Samuel Covey, P.E.

Principal, TX Reg# 123,796



September 17, 2020

FORT Structures PC
TBPE Firm# 18034

Note:

I warrant that I visually inspected the components of this property as addressed in this report in a diligent manner and have honestly reported the findings existing conditions and have made recommendations based on my experience and opinion. Fort Structures does not express or imply any guarantee of specific future structural performance with the limited scope of this inspection; rather, this is my best effort to interpret my observations and develop an opinion as to structural significance. There may be other issues affecting the structure that are not visible without destructive investigation. The conditions of the various components of this property described in this report are true as of the date of inspection. Changes may occur in this property after the inspection date, which could make null and void the contents of this report. No other warranty, either expressed or implied, is hereby made.

On September 10th, 2020, Fort Structures performed an on-site visual, noninvasive evaluation of the subject property. The structure is a two-story, approximately 2400 SF duplex constructed circa 1928. The foundation of the house is a pier and beam construction with piers and dimensional 2x wood floor framing. The walls and roof are framed with dimensional lumber. For the age of construction, our limited investigation revealed that the building structure is in **fair to poor** condition.

The following deficiencies were observed:

- Moderate levels of floor foundation movement were recorded throughout the structure. Approximately 1.5" of differential floor movement was observed throughout the structure. The observed floor foundation movement can be like attributed to a variety of potential observed factors:
 - Poor site drainage was observed throughout the property. Portions of grade are relatively flat with very little positive drainage away from the foundation. There are areas of the roofs which lack gutters and downspouts. The discharged water cannot flow away from the foundation and will ultimately saturate the soils at the foundation and crawlspace which will result in foundation vertical movement. This will lead to long-term foundation movement unless remedied.
 - We were not able to locate a crawlspace to investigate the integrity of the existing piers, but based on the age of the structure and the foundation movement, it is anticipated that the piers will need to be replaced and the existing lumber reinforced.
 - Though not directly observed, other potential causes of floor movement may include:
 - Plumbing leaks
 - The proximity of mature trees with roots and other vegetation to the foundation
- There is widespread evidence of water infiltration at the building exterior walls. Evidence of water infiltration was observed at window sills at the building exterior throughout the structure. There are widespread areas of water staining, chipping/peeling paint, and bubbling finishes at the exterior walls. There is evidence of past façade repairs at the exterior walls which appear indicate an ongoing issue. Though not directly observed, there is likely widespread framing rot and deterioration at the exterior walls and foundation framing at areas prone to water intrusion. There is a likelihood of a presence of mold growth in the exterior wall cavities.
- Rot/deterioration of roof deck and fascia framing was observed likely due to improper flashing at roofs.
- Deck framing at the rear of the structure is structurally inadequate. The wood deck framing is extremely weathered and shows signs of deterioration and does not meet the requirements of the International Residential Code.
- The stairs and guardrails do not meet International Residential Code load requirements and may present as a safety hazard.
- The current roof and floor structural framing likely do not meet current building codes for load capacity. Restoring the structure to meet modern building codes or industry standard construction will require an extensive effort and will likely be cost prohibitive.

Conclusions

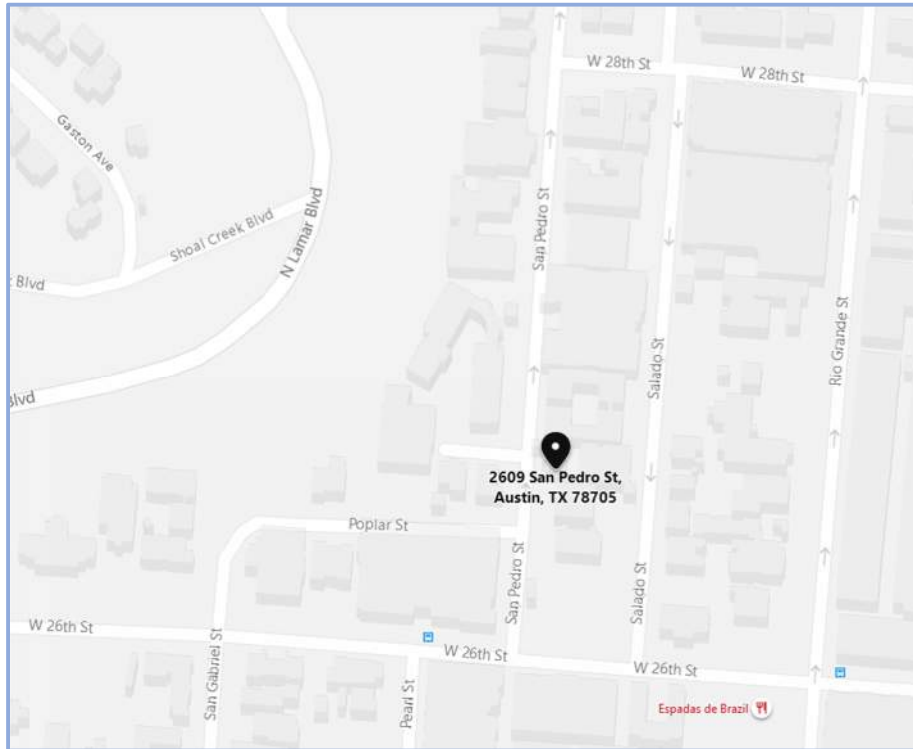
Based on the existing condition of the structure and the required amount of effort to restore the structure, it is Fort Structures' professional opinion that the house foundation is defective, compromised, and beyond repair.

There is widespread evidence of water intrusion and possible water damage at the building's exterior envelope. There is a high likelihood of damage to the building's superstructure as a result. The decks, stairs, and guardrails at the structure appear to be inadequately constructed and require immediate remediation to meet current codes and standards. The foundation is substandard and shows signs of movement.

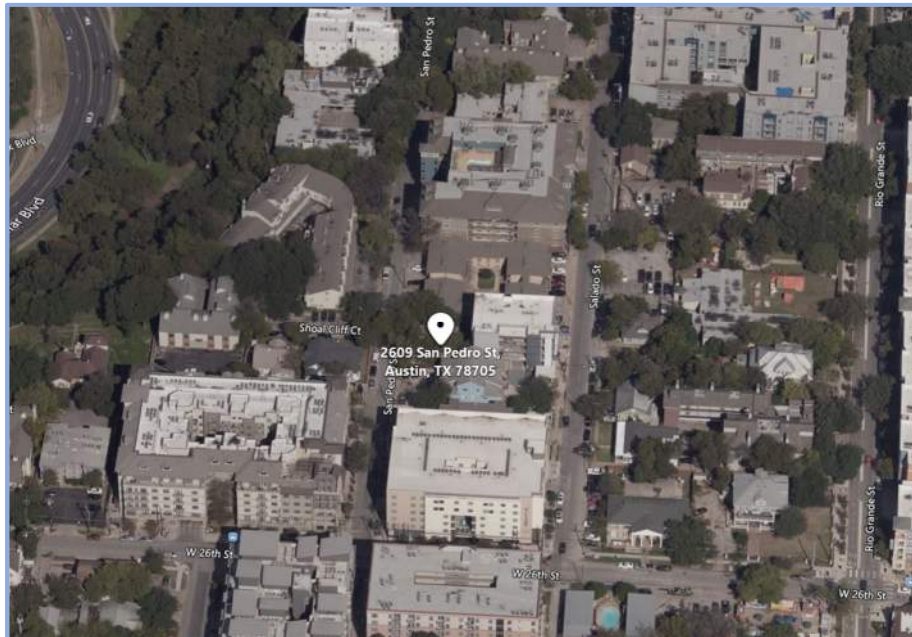
The existing structure needs extensive structural work including a new foundation elements, reinforcement of existing framing, repair and replacement of rotting lumber and siding, and replacement of deck, stairs, and railings. Based on the age of the structure and future use, the structural repairs may be cost prohibitive.

Appendix A – Site Location

Map View



Aerial Photo



Appendix B – Photos



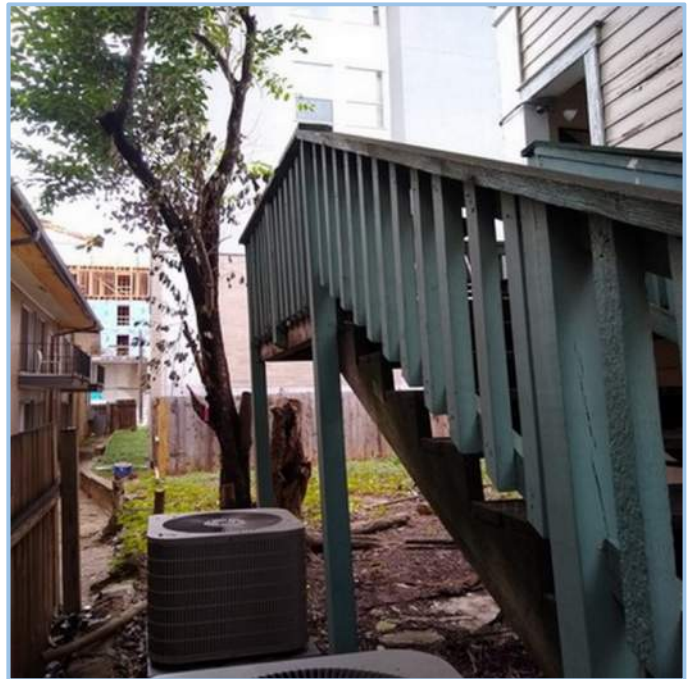
Front Façade



Rear Façade



Inadequate Deck Construction



Inadequate Deck Construction

Appendix B – Photos



Trip Hazard at Door Threshold



Evidence of Prior Exterior Façade Repairs



Water-damaged Exterior Siding



Interior Hallway