

Field Observation Report

Project Name:	1204 & 1206 West Ave. Assessment	Project #:	19024	Field Report #:	001
Date of Site Visit:	06/10/2019	Time:	9:30am	Weather:	Overcast - 78 F
Date of Report:	06/10/2019				
Attendees:					
Firm/Company	Contact Person	Email			
Austin Community College	Robert Ryland	rryland@austincc.edu			
Leap!Structures	Tak S. Chu	tchu@leapstructures.com			
Leap!Structures	Tanner Parker	tparker@leapstructures.com			

GENERAL REMARKS:

Tak Chu and Tanner Parker (Leap!Structures) met with Mr. Ryland (ACC) to visually observe the structural condition of 1204 and 1206 West Avenue residential houses built around 1904. The purpose of our visit was to perform a visual assessment of the structural condition of the houses. Our review was limited to visual observation of the accessible areas and did not include destructive nor non-destructive testing.

1204 West Ave. Structure

Visual Observations

The one-story wood-framed construction residential house built on an elevated pier/cinder block and beam system.

Based on our observations, the elevated first level has experienced significant differential movement. The differential movement across the slab generally follows a high center dome at the interior of the house with lower elevation along the perimeter with the exception of relative high points at the Southwest corner. The Northeast living room measured a downward slope to the perimeter of 6 inch drop over a distance of 17 feet.

We also observed limited areas of rotten wood on the ceiling frame and front porch deck and post.

Conclusion and Recommendation

We believe foundation movement has been ongoing for a long time. A geotechnical report was not available at the time of our visit but based on the geotechnical study from the Main Rio Grande Campus across the street to the East, the potential vertical rise (PVR) ranges between 1 ¼" - 1 ¾". Given the significant differential movement observed, we believe it is likely that some of the wood frame may be damaged and/or rotted in addition to experiencing foundation movement and settlement. It is also likely that plumbing problems and drainage are exacerbating the movement. Further investigation can be performed by providing access to the crawlspace.

In general, the wood frame superstructure appears to be in reasonable shape given the age of the building, no signs of structural stress were observed beyond the rotting in some localized areas. Given the age of the building, it is likely the walls are shiplap which are a more tolerant to movement but can also cover signs of distress.

At this time, we believe it would be more feasible to replace the structure; however, if the building should remain, we recommend exposing the wood floor to retrofit and/or replaced the framing as needed. We believe new and deeper footings will be needed as well as improvements to the crawlspace ventilation. Given the amount of movement, the floors will not be leveled by jacking the structure as it would result in additional damage to the walls.

The new floor will need to be leveled within the existing wall conditions by retrofitting the floor joists. Walls and ceiling will need remain unlevel. All areas with rotting will need to be exposed and replaced as needed.

1206 West Ave. Structure

Visual Observations

The two-story wood-framed construction residential house built on an elevated pier/cinder block and beam system with limited crawlspace.

Based on our observations, the elevated first level has experienced significant differential movement. The differential movement across the slab generally follows a high center dome at the interior of the house with lower elevation along the perimeter. The amount of differential movement appeared to range in 3" to 4".

Most of the observed distress was in the second floor frame. The floor, flooring, and roof was visibly rotted at the Southwest creating a safety concern. In addition, it appears portions or all of the second floor level was added at a later date. Of special concern are the areas over the front porch and carport framing which appear to be undersized for the additional load of the second floor and roof. One of the footings supporting a post carrying the carport roof/ second floor addition has tilted such that the wood post is now shifted to the edge of the pilaster.

Conclusion and Recommendation

As noted previously, the floor will need to be leveled by adding new and deeper footings and reinforcing the floor joists. Some leveling can be performed however, it will be limited given the stiffness of the walls and the weight of the 2-story structure.

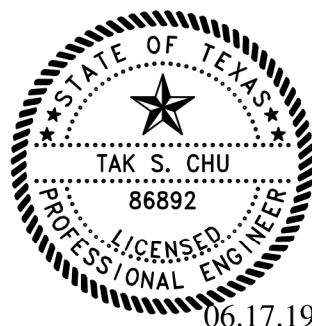
The area of most concern for this residence is on the second floor. Most of the exposed framing supporting the second floor appears to be undersized and will need to be retrofitted or replaced. In addition, all the damaged and rotted areas will need to be demolished and replaced. We believe this was added without proper supervision based on the existing built-up condition so it is likely the first floor girders and foundation are also undersized.

Given the extent of repairs, we believe the residence will need to be gutted to expose the primary structure so the existing conditions can be evaluated and retrofitted as needed to meet current Building Code.

Sincerely yours,



A handwritten signature in black ink, appearing to read "Tak S. Chu".

Tak S. Chu, PE, LEED AP.
Principal
Leap Structures, PLLC.
Firm Registration F-14438



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Item #	Location/Reference	Description /Required Action	Documentation/Photo
01	1204 Front Porch	Slope of slab visible at the front of the house due to foundation movement.	
02	1204 Front Porch	Rotted wood at base of porch columns.	



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Item #	Location/Reference	Description /Required Action	Documentation/Photo
03	1204 Front Porch	Separation between the porch deck and wall probably due to rotting.	A close-up photograph showing the corner of a porch. The wooden deck boards are weathered and show signs of rot. There is a visible gap between the deck and the white-painted wooden wall, indicating structural separation.
04	1204 Front Porch	Post/roof framing has shifted due to column movement as a result of foundation movement combined with rotting	A photograph of a porch column. The column appears to be made of concrete or stone and is supporting the roof. The roof framing above the column looks like it might be sagging or shifted. In the background, a white car is parked on the street, and there are trees and other houses visible.



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Item #	Location/Reference	Description /Required Action	Documentation/Photo
05	1204 Interior space	6 inches of movement was measured between corners of the room with a noticeable center dome contour.	 A photograph of the interior of room 1204. The room has white walls and a ceiling with a central dome contour. A colorful, patterned rug is on the floor. A window with a metal grate is visible on the right wall. There is some clutter on the floor, including a small table and some boxes.
06	1206 Front (East Facade)	General overview of building. The front porch and carport framing on the South side will need to be reviewed and retrofitted as needed to support the conditioned spaces.	 A photograph of the exterior of building 1206. The building is a two-story structure with a white facade. It has a prominent front porch with white columns and a balcony above it. The porch and balcony are enclosed with white railings. The building is surrounded by greenery, including trees and bushes. A yellow caution tape is visible in the foreground.



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Item #	Location/Reference	Description /Required Action	Documentation/Photo
07	1206 Front Porch	View of front porch framing. Note the undersized girders.	
08	1206 Southeast corner	Rotted wood at front porch and cracking in the plaster or stucco covering the masonry wall footing behind.	



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Item #	Location/Reference	Description /Required Action	Documentation/Photo
09	1206 West Facade Backyard, view from the West	The Southwest corner was completely rotted.	 A photograph showing the exterior of a two-story house. The house has a light-colored facade and a dark roof. A set of stairs leads up to a porch on the right side. The house appears to be in a backyard with some greenery and a dirt path in the foreground.
10	1206 West Exterior Wall Under Stairs	Crack in exterior foundation wall.	 A close-up photograph of a crack in the exterior foundation wall. The wall is light-colored and shows signs of weathering. A vertical crack is visible, and there is some peeling paint or plaster. A white electrical box is mounted on the wall to the right of the crack.



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Item #	Location/Reference	Description /Required Action	Documentation/Photo
11	1206 Southwest Corner Exterior	Rotted wood from the second floor up to the roof system	
12	1206 Southwest Corner Interior	Rotted wood in ceiling and floor, exposed roof system.	



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Item #	Location/Reference	Description /Required Action	Documentation/Photo
13	1206 South Second Floor Extension Overview	Note the second floor addition was built over the carport roof frame.	
14	1206 South Second Floor Extension Exterior	Underside of carport roof supporting the second floor.	

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15	1206 South Second Floor Extension Exterior	Middle foundation pilaster has shifted leaving wood post at edge of pilaster.	 A photograph showing the exterior of a building's second-floor extension. A white foundation pilaster is visible, and a wooden post is positioned at its edge. Two people are standing nearby for scale.
16	1206 South Second Floor Extension Exterior	Rotted wood at the base of the columns supporting the second-floor extension.	 A close-up photograph of the base of a white column where it meets a concrete foundation. The wood at the base is severely rotted and crumbling.