



OBSERVATION REPORT

TO:	Valla Djafari
CC:	Ian Ellis, MF Architecture
DATE:	October 26, 2017
PROJECT:	2009 Lakeshore Drive, Austin, TX
PRESENT:	Whit Smith and Paula Hilbrich Lee, Smith Structural Engineers

Our office conducted a site visit at the address noted above on October 24, 2017 for the purpose of observing existing structural conditions of the main house and guest house. The following report is based solely upon visual observations of the foundation and framing systems (to the extent possible), elevation measurements of existing floors, and visual observations of the building finishes. This level of investigation can most closely be classified as Level A by the *Guidelines for the Evaluation and Repair of Residential Foundations* by the Texas Section-American Society of Civil Engineers and is commonly considered to be a report of first impressions and is not an exhaustive, detailed investigation.

It should be noted that an in-depth structural survey and analysis of the existing structures would involve exposing the existing structure, documenting the existing structure, performing a structural analysis of each of the existing structural components, obtaining site specific geotechnical information regarding the type(s) of soil conditions at the sites, exposing some of the existing foundation elements and performing a structural analysis of the existing foundation.

MAIN HOUSE

Through communication with MF Architecture, it is our understanding the main house was originally built in the 1960s as a single-story residence and a multi-story addition was constructed in the 1980s. A tour of the house also indicates several first-floor areas that appear to have been added to the original house structure.

In general, our impression of the construction of the existing house and various additions appears to be sub-par without attention to detail. Additionally, a mildew-type odor is noticeable upon entering the house. Top of floor elevations were measured using a ziplevel that is accurate to within 1/8-in. Elevation measurements of the floors indicate a differential of less than 1-in. which is considered an industry-accepted tolerance. We were able to access 2 crawl spaces at the time of the site visit, but attic access was not available.

In observing the roof at the rear of the carport/house (poolside), one location of the roofline and rafters appears to bow upward (Fig. 1). The roofline is also uneven at the front of the carport. An exposed ceiling beam at the carport appears to be a three-ply stacked 2x6 beam with at least one splice in the beam span away from supports (Fig 2.). This configuration does not meet current





SMITH STRUCTURAL ENGINEERS

building codes. The exterior door from the entry hall to the pool binds at the floor before it is fully open. Evidence of repaired cracks is present at the west end of the living room stone fireplace. Multiple locations of vertical and horizontal drywall cracks are present. Water damaged drywall is present at the framing at the bottom of the interior stairs. At the room adjacent to the door at the bottom of the stairs the wood flooring is cupping, indicating the presence of moisture. This area is at the west, below grade side of the house.

A below grade masonry wall is present at the south end of the west house wall. The masonry is exposed at the utility room and appears to experience water infiltration. The masonry is discolored and has evidence of patching (Fig. 3).

Review of the exterior masonry at the house reveals stair-step cracking. Some of these cracks have been repaired with new cracks reappearing. This is typically indicative of ongoing movement.

The southeast, first floor room appears to be an addition to the original house. Inspection of the crawl space reveals a pier and beam foundation. The posts bear on rocks and dirt. Footings are not present. This bearing strata is insufficient. The concrete footing supporting the perimeter masonry skirt is undermined by erosion (Fig. 4).

The south pool deck wall appears to be concrete. The wall bears on masonry at one location and is undermined at another (Fig. 5). The steel posts at the pool rail are severely rusted at the base.



Fig. 1. Bowing of roofline at rear of house.

9701 Brodie Lane Suite A-204 • Austin, Texas 78748 Phone (512) 478-5281 • TBPE Firm Registration No. F-3907

004/38





Fig. 2. Spliced, stacked beam at carport.



Fig. 3. Below grade masonry at utility room.







Fig. 4. Undermining of foundation at masonry skirt.



Fig. 5. Pool deck wall bearing on masonry.

O04/40



SMITH STRUCTURAL ENGINEERS

GUEST HOUSE

The guest house is built into a hill with the north, west, and south side walls extending below grade, providing the opportunity for water intrusion. Upon entering the house, an overpowering mildew odor is present.

Walls consist of a combination of masonry and wood framing. Insulation does not appear to be present at the masonry walls. The south gable wall encompasses two rows of windows with placement indicating the absence of shear walls (Fig. 6). Additionally, the header above the long stretch of low windows is suspected to be a flatwise, double 2 x 4 plate. If this is the case, it would be structurally deficient.

The foundation was found to be uneven throughout the guest house. Changes in floor elevation were documented to be 2.7-in. across a 6-ft. distance at the north side of the structure, and 4-in. across the 40-ft. structure width (running north/south). Elevation measurements of the floors indicate a differential greater than the standard 1-in. industry-accepted tolerance.

The front porch deck and roof of the guest house is a timber framed structure. Porch columns bear on the front porch 2x floor decking, unsupported by joists or beams. The deck is supported by a pier and beam foundation. The deck piers are supported by shallow concrete footings that are undermined by erosion (Fig. 7). One deck pier and footing is shifting downhill, away from the structure. The deck rail height is 30" tall and does not meet current building code requirements.

Severe cracking is present in the exterior masonry retaining wall at the north side of the guest house and it is rotating out-of-plane away from the retained earth. It appears the wall has been previously repaired but cracks have reappeared.



Fig. 6. South gable wall of guest house.





SMITH STRUCTURAL ENGINEERS



Fig. 7. Shallow, undermined footings at guest house deck.

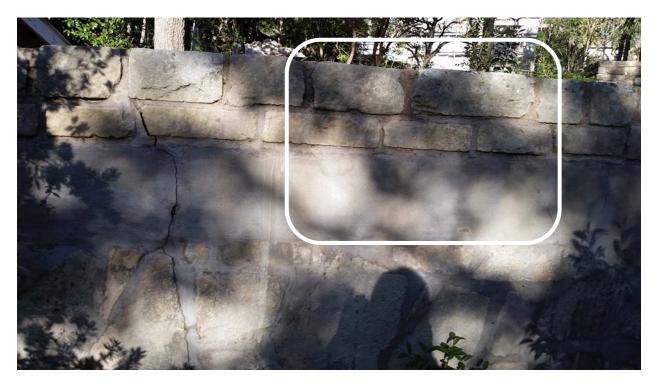


Fig. 8. Cracked retaining wall at north end of guest house.

9701 Brodie Lane Suite A-204 • Austin, Texas 78748 Phone (512) 478-5281 • TBPE Firm Registration No. F-3907





Our overall impression of the structural condition of the main house is fair while the condition of the guest house is poor. Neither the main house nor the guest house is in danger of immediate structural failure but both have serviceability issues which are likely due to failure of the building envelope. The structural integrity of the guest house porch deck and roof is poor making the guest house unsafe for use. The structural integrity of the guest house retaining wall is poor and steps should be taken to prevent parking at the retained earth side as well as preventing people from being present at the low side of the wall. Additionally, a new beam should be sized to replace or support the stacked, spliced beam at the carport. Failure to address problems with the building envelope at the main house, as well as the guest house, will be detrimental the structural integrity of the buildings and will likely lead to future structural problems.

Respectfully submitted,

CONCLUSION

h D. All Lee

Paula D. Hilbrich Lee, P.E.

Attachments: Limitations of Report (1 page)





LIMITATIONS OF REPORT

- 1. The observations in the report do not intend to provide an exhaustive analysis of the structural conditions and do not intend to convey the impression that detailed measurements or examinations of the entire superstructure or the hidden elements of the structure were performed. Hidden elements would include framing or floors covered by sheetrock, masonry veneer, carpeting, tile, etc.
- 2. Unless otherwise indicated, this report was prepared expressly for the client involved and expressly for the purposes indicated by the client. Permission for use by any other persons for any purpose, or by the client for a different purpose is denied unless otherwise stated in writing by Smith Structural Engineers.
- 3. The observations, discussions, and conclusions in this report are based solely on the field observations or other data in the report. The observed conditions are subject to change with the passage of time. The field observations and this report are not to be construed in any way as a guarantee or warranty as to the future life, performance, need of repair or suitability of purpose of the subject property.
- 4. Detailed structural calculations were not performed other than specifically reported, and the report does not imply that the building meets all current Building Code provisions.
- 5. Soil borings and materials testing are not included in the investigation, unless specifically reported.
- 6. These observations do not include an examination or opinion regarding electrical, mechanical, plumbing systems or appliances, or roof or wall water proof condition, unless specifically discussed.
- 7. Water damage or rotted wood will be noted if obvious, but the limited scope of the examination precludes observations of all structural members, and hidden defects may be present. Surface drainage may be noted in general as being adequate or inadequate to prevent casual water from entering the structure or ponding adjacent to the foundation, but no evaluation of regional drainage was done to ensure that flood waters do not rise above the levels of the foundation and enter the building.
- 8. Termite damage was specifically not examined for and is not a part of this scope of work.



Matt Fajkus, MALEED AP Principal Architect

Tenured Assoc. Professor UT School of Architecture

512.432.5137

Mail Feikus Architecture 900 East 6th Street Suite 100 Austin, TX 78702



Jenny Sandman Executive Assistant

512.432.5137

Matt Fajkus Architecture 900 East 6th Street Suite 100 Austin, TX 78702



We live at 3801 Island Way and are happy to support the project that Valla is conducting on his property on Lakeshore Dr. The

construction of this house and the additions to the surrounding area will add a great look to our uping neighborhood. The revival of this neighborhood has always been important to us and were thankful he is taking the initiative to do great things here.

We are available for any questions or comments if needed.

Thanks Brian Patek

Please excuse the brevity as this was sent from my iPhone

O04/46



From: Jim Wimberly <	
Subject: Case # C15-2017-0048	

Dear Leane,

Thank you for the explanation of the requested variance cited in the above referenced case.

My personal residence is 2015 Westlake Drive, Austin Tx 78746, and I am the closest owner to the proposed residential development.

I support the variances for the following reasons:

- 1. The existing structure(s) defy description due to their age, ugliness, and lack of architectural conformance with other homes in the immediate vicinity.
- 2. Mr. Djafari has shown a refreshing desire to keep his neighbors educated and informed about his new home. He has arranged meetings between interested homeowners and his design/engineering team to answer questions, and in my particular situation, has worked diligently to minimize any impact on our views of Lake Austin and downtown.
- 3. The 6 requested variances address two primary concerns; impervious cover on slopes and setbacks, and no doubt there are legitimate reasons for these Land Development codes. My request of the Board of Adjustment is to not only consider the technical aspects of drainage and environmental impact, but also please give equal thought to the totality of Dr. Djafari's investment in our City. He has designed the home around our legacy tree



ordinance, proposes to improve the look and feel of our neighborhood with a multi-million dollar personal home visible to thousands of residents on the east side of Lake Austin, and pledges to simultaneously maintain the area character of our street and surrounding homes.

4. Please contact me if necessary, and please approve this modest variance request for the overall betterment of Austin.

Sincerely,

Jim Wimberly Partner



Physical: 4400 Airport Highway 21 | Mailing: 1807 Airport Drive Suite 200 | San Marcos, Texas 78666 Office: 512.216.6042 | Fax: 512.216.6043

JOHN C. HORTON III 903 NUECES STREET AUSTIN, TEXAS 78701 512-477-9966

February 28, 2017

Mr. Matt Fajkus MF Architecture 900 East Sixth Street Suite 100 Austin, TX 78702

RE: Dr. Valla Djafari home - 2009 Lakeshore Drive, Austin, TX

Dear Mr. Fajkus:

I am the owner/trustee for the direct neighboring property of Dr. Djafari on Lakeshore Drive. Recently, Dr. Djafari along with his architects and contractor met with us to show the plan and model for the home that Dr. Djafari plans to build on his property. I was impressed with the thought that went into the design of the house and the respect of the site and the neighborhood. I fully support the plan that MF Architecture presented to me for Dr. Djafari's home.

Feel free to contact me if you have any questions.

Regards,

John C. Horton III

MF Architecture c/o Matt Fajkus 900 East Sixth Street Suite 100 Austin, TX 78702

To whom it may concern,

I understand the nature of my neighbor Dr. Valla Djafari's request. We fully support him and think it will improve our neighborhood.

4/49

Regards,

Lipp Jamie Lipp

Adam and Jamie Lipp Owners, 3906 Laguna Vista Cove

PUBLIC HEARING INFORMATION

Although applicants and/or their agent(s) are expected to attend a public hearing, <u>you are not required to attend</u>. However, if you do attend, you have the opportunity to speak FOR or AGAINST the proposed application. You may also contact a neighborhood or environmental organization that has expressed an interest in an application affecting your neighborhood.

During a public hearing, the board or commission may postpone or continue an application's hearing to a later date, or recommend approval or denial of the application. If the board or commission announces a specific date and time for a postponement or continuation that is not later than 60 days from the announcement, no further notice will be sent.

A board or commission's decision may be appealed by a person with standing to appeal, or an interested party that is identified as a person who can appeal the decision. The body holding a public hearing on an appeal will determine whether a person has standing to appeal the decision.

An interested party is defined as a person who is the applicant or record owner of the subject property, or who communicates an interest to a board or commission by:

• delivering a written statement to the board or commission before or during the public hearing that generally identifies the issues of concern (*it may be delivered to the contact person listed on a notice*); or

• appearing and speaking for the record at the public hearing; and:

- occupies a primary residence that is within 500 feet of the subject property or proposed development;
- is the record owner of property within 500 feet of the subject property or proposed development; or
- is an officer of an environmental or neighborhood organization that has an interest in or whose declared boundaries are within 500 feet of the subject property or proposed development.

A notice of appeal must be filed with the director of the responsible department no later than 10 days after the decision. An appeal form may be available from the responsible department.

For additional information on the City of Austin's land development process, visit our web site: www.austintexas.gov/department/development-services Written comments must be submitted to the contact person listed on the notice before or at a public hearing. Your comments should include the name of the board or commission, or Council; the scheduled date of the public hearing; the Case Number; and the contact person listed on the notice. All comments received will become part of the public record of this case.

Case Number: C15-2017-0048, 2009 Lakeshore Drive Contact: Leane Heldenfels, 512-974-2202, leane.heldenfels@austintexas.gov Public Hearing: Board of Adjustment, October 9, 2017

John + Mary McGovern I am in favor Your Name (please print) I object Austin, TX 78746 1907 Lakeshore DR. Your address(es) affected by this application Mary Signature Daytime Telephone: 5124131101

Comments:__

The proposed Impervious Coverage of 12,383 SF against allowed of 4,100 SF is more than a three times expansion beyond the intent of the LA zoning requirements. Granting three times the allowable SF is a troubling precedent for other development along the street that includes vacant lots and redevelopment candidates in the LA zone.

This is a difficult lot and these variances perpetuate the challenge. Our desire is a less intensive development

Comments must be returned by 10am the day of the hearing to be seen by the Board at this hearing. They may be sent via:

 Mail: City of Austin-Development Services Department/ 1st Floor Leane Heldenfels
P. O. Box 1088
Austin, TX 78767-1088
(Note: mailed comments must be postmarked by the Wed prior to the hearing to be received timely)
Fax: (512) 974-6305
Email: leane.heldenfels@austintexas.gov

	before or at a public hearing. Your comments should include the name of the board or commission, or Council; the scheduled date of the public hearing; the
are expected to attend a public . However, if you do attend, you or AGAINST the monosed	Case Number; and the contact person listed on the notice. All comments received will become part of the public record of this case.
	Case Number: C15-2017-0048, 2009 Lakeshore Drive Contact: Leane Heldenfels, 512-974-2202, leane heldenfels@austintexas.gov Public Hearing: Board of Adjustment, October 9, 2017
r commission may postpone or ter date, or recommend approval	Sanie & Earl Fields Your Name (please print)
ard or commission announces a it or continuation that is not later further notice will be sent.	3800 B Island Way
e appealed by a person with that is identified as a nerson who	Tour address(es) affected of this apprication
g a public hearing on an appeal ding to appeal the decision.	Signature Signature Date Date Davime Telephone: 512.327.3117
who is the applicant or record mmunicates an interest to a	comments: We live at the Island Way Condos.
board or commission before or ally identifies the issues of contact person listed on a	Our property is immediately adjacent to 2009 Lakeshore Dr. Our HOA has not been contacted by the Owner or his
rd at the public hearing;	representative. Considering the magni-
vithin 500 feet of the subject	postponement at this time to further
a 500 feet of the subject property	inderstand all of his requests.
eighborhood organization that oundaries are within 500 feet of lonment	Comments must be returned by 10am the day of the hearing to be seen by the Board at this hearing. They may be sent via:
t the director of the responsible be decision. An appeal form may nent.	Mail: City of Austin-Development Services Department/ 1st Floor Leane Heldenfels P. O. Box 1088
of Austin's land development	(Note: mailed comments must be postmarked by the Wed prior
velopment-services	Email: leane.heldenfels@austintexas.gov

Children's Environmental

PUBLIC HEARING INFORMAT

Oct.08.2017

22:59

Although applicants and/or their agent(s) are expected to attend a pub hearing, <u>you are not required to attend</u>. However, if you do attend, y have the opportunity to speak FOR or AGAINST the propos application. You may also contact a neighborhood or environment organization that has expressed an interest in an application affectin your neighborhood. During a public hearing, the board or commission may postpone of continue an application's hearing to a later date, or recommend approva or denial of the application. If the board or commission announces specific date and time for a postponement or continuation that is not late than 60 days from the announcement, no further notice will be sent. A board or commission's decision may be appealed by a person with standing to appeal, or an interested party that is identified as a person wh can appeal the decision. The body holding a public hearing on an appeal will determine whether a person has standing to appeal the decision.

An interested party is defined as a person who is the applicant or record owner of the subject property, or who communicates an interest to a board or commission by:

- delivering a written statement to the board or commission before during the public hearing that generally identifies the issues of concern (it may be delivered to the contact person listed on a notice); or
- appearing and speaking for the record at the public hearing; and:
- occupies a primary residence that is within 500 feet of the subject property or proposed development;
- is the record owner of property within 500 feet of the subject propert or proposed development; or
 - is an officer of an environmental or neighborhood organization that has an interest in or whose declared boundaries are within 500 feet of the subject property or proposed development.

A notice of appeal must be filed with the director of the responsibl department no later than 10 days after the decision. An appeal form ma be available from the responsible department.

1/

1

512327311

For additional information on the City of Austin's land developmen process, visit our web site: www.austintexas.gov/department/deve<u>lopment-services</u>



Dear Leane,

Thank you for the explanation of the requested variance cited in the above referenced case. My personal residence is 2015 Westlake Drive, Austin Tx 78746, and I am the closest owner to the proposed residential development.

I support the variances for the following reasons:

- 1. The existing structure(s) defy description due to their age, ugliness, and lack of architectural conformance with other homes in the immediate vicinity.
- 2. Mr. Djafari has shown a refreshing desire to keep his neighbors educated and informed about his new home. He has arranged meetings between interested homeowners and his design/engineering team to answer questions, and in my particular situation, has worked diligently to minimize any impact on our views of Lake Austin and downtown.
- 3. The 6 requested variances address two primary concerns; impervious cover on slopes and setbacks, and no doubt there are legitimate reasons for these Land Development codes. My request of the Board of Adjustment is to not only consider the technical aspects of drainage and environmental impact, but also please give equal thought to the totality of Dr. Djafari's investment in our City. He has designed the home around our legacy tree ordinance, proposes to improve the look and feel of our neighborhood with a multi-million dollar personal home visible to thousands of residents on the east side of Lake Austin, and pledges to simultaneously maintain the area character of our street and surrounding homes.
- 4. Please contact me if necessary, and please approve this modest variance request for the overall betterment of Austin.

Sincerely,

Jim Wimberly