

MEGAN BARRY
MAYOR



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

Metropolitan Historic Zoning Commission
Sunnyside in Sevier Park
3000 Granny White Pike
Nashville, Tennessee 37204
Telephone: (615) 862-7970
Fax: (615) 862-7974

STAFF RECOMMENDATION
3726 Richland Avenue
April 20, 2016

Application: Demolition; Reconstruction
District: Richland-West End Neighborhood Conservation Zoning Overlay
Council District: 24
Map and Parcel Number: 10409007300
Applicant: Gary and Lou Ann Brown
Project Lead: Paul Hoffman, paul.hoffman@nashville.gov

Description of Project: Demolition of a contributing building and reconstruction to the specifications and details of the existing building.

Recommendation Summary: Staff recommends approval of the demolition and reconstruction of the structure, with the conditions:

1. The finished floor height is consistent with the current finished floor height, to be verified by MHZC staff in the field;
2. Staff approve the windows and doors and trim materials;
3. Staff approve the color of roofing;
4. Staff verify that the masonry is reused for the reconstruction and approves new masonry, if needed;
5. HVAC and other utilities are located to minimize visibility, at the side of the home beyond the mid-point or at the rear.

With these conditions, the application meets section III.B.2.c. for appropriate demolition and section II.A.4 of the design guidelines for reconstruction in the Richland-West End Neighborhood Conservation Zoning Overlay.

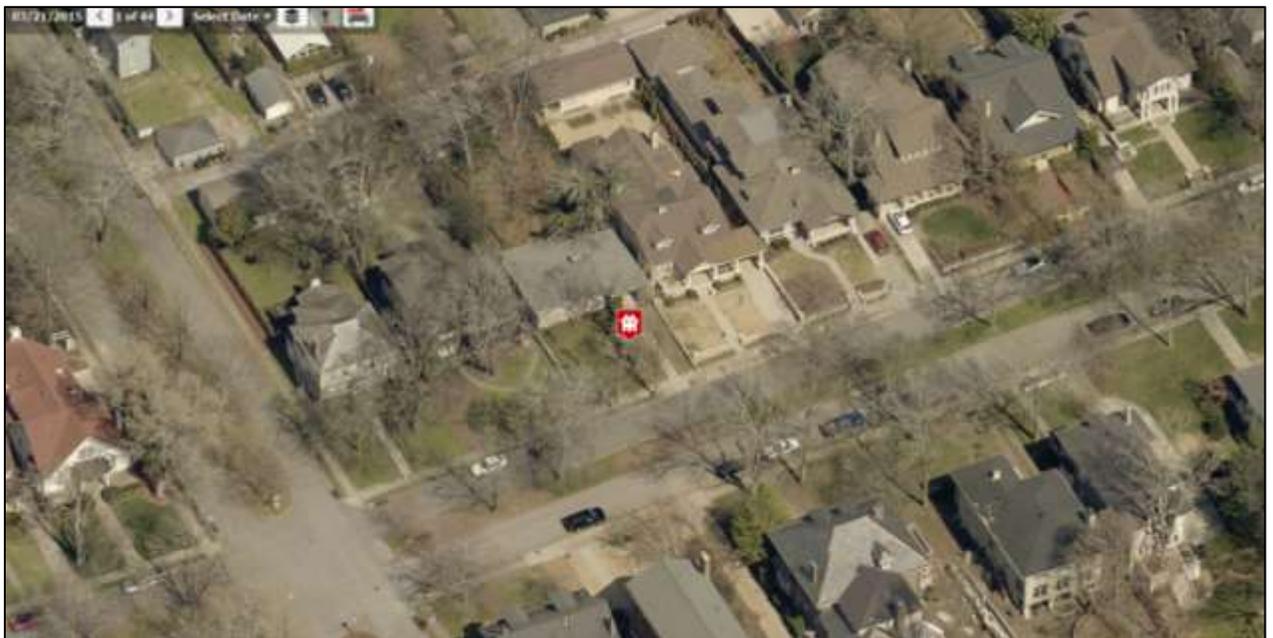
Attachments

- A:** Letters of Support
- B:** Engineer's Report
- C:** Photographs
- D:** Elevations for Reconstruction

Vicinity Map:



Aerial Map:



Applicable Design Guidelines:

II.A. New Construction-Principles

4. Reconstruction may be appropriate when it accurately reproduces a no-longer existing building on its original site, if the building (1) would have contributed to the historic and architectural character of the area; (2) will be compatible in terms of style, height, scale, massing, and materials with the buildings immediately surrounding it; and (3) is accurately based on documentary, physical, or pictorial evidence.

III.B.1 Demolition is Not Appropriate

- a. if a building, or major portion of a building, is of such architectural or historical interest and value that its removal would be detrimental to the public interest; or
- b. if a building, or major portion of a building, is of such old or unusual or uncommon design and materials that it could not be reproduced or be reproduced without great difficulty and expense.

III.B.2 Demolition is Appropriate

- a. if a building, or major portion of a building, has irretrievably lost its architectural and historical integrity and significance and its removal will result in a more historically appropriate visual effect on the district;
- b. if a building, or major portion of a building, does not contribute to the historical and architectural character and significance of the district and its removal will result in a more historically appropriate visual effect on the district; or
- c. if the denial of the demolition will result in an economic hardship on the applicant as determined by the MHZC in accordance with section 17.40.420 of the historic zoning ordinance.



Figure 1. 3726 Richland Avenue

Background: 3726 Richland Avenue is a contributing home built circa 1915.

An addition was approved in November 2015. The applicant discovered deterioration of the foundation walls that cannot be repaired with the structure remaining in place.

Analysis and Findings: The initial plans for interior rehabilitation included replacing or strengthening the foundation walls. Contractors discovered that the degree of deterioration of the foundation was more than expected, and had in fact crumbled to a point beyond repair in situ. As a result, the applicant requests demolition of the building, for the purpose of reconstruction.



Figure 2. The window lintel and sill at the front porch reveal considerable settling

Demolition: There is settling apparent on first view of the building's front facade. The front porch shows a fall of two to three inches (2-3") over its twelve feet (12') from right to left. At an unknown date, the deterioration of the foundation wall was observed and remediation attempted with a new concrete block wall. This was laid adjacent to the front stone wall to a height of approximately seven feet (7') to support the stone wall. The new wall may have kept the stone behind it from fully collapsing. The engineer for the project observes that it also hid the problem, preventing the necessary repair:

In order to assess the condition of the front basement wall hidden by the newer block wall, The Maintenance Company excavated a portion of the backfill against the front wall. What we discovered is that the wall hidden by the block wall was crumbling. The portion of the front wall not hidden by the block bowed inward during excavation and cracked considerably. The excavator noticed that the wall moved during his work.

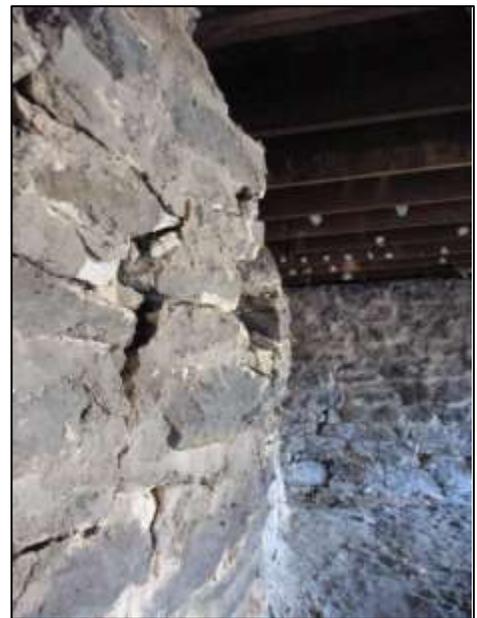


Figure 3. The front foundation wall is crumbling into the basement



Figure 4. The concrete block wall built in front of the original stone wall. The deterioration of the stone is evident.

Consequently the stone wall requires rebuilding, while isolating the structure above. MHZC staff discussed with the applicants the possibility of phasing the repair work and rebuilding one section of the wall at a time. The engineer argues that is not feasible:

The sequencing of construction is where the problem lies. The front stone wall could collapse at any time, especially if any of the structure is disturbed. This is a dangerous situation for anyone working on the house. In order to gunite the interior side of the front wall, the newer block wall will have to be removed. If this block wall is removed, I am concerned that the crumbling stone wall would collapse.

Essentially, the wall has collapsed to the point that it is unsafe and cannot be repaired or rebuilt without the risk of fully collapsing. There is danger inherent both to the building itself and to members of the construction crew.

Complicating a potential repair effort is the unusual construction method for the exterior walls. These were built with wood studs supported by the stone wall beneath, and the stone cladding was laid in between the studs, rather than as a veneer as typically seen. The stones were mortared in place. It will be at least difficult and possibly infeasible to stabilize the stud/stone walls without losing some percentage of the stone veneer or to remove the stone and lift the house, replacing the stone after it is placed back onto a new



foundation. This adds another hazard to repairing or rebuilding the foundation walls.

Figure 5. The atypical construction method of laying the stone veneer inside the stud walls

There is no indication that the applicant has created his/her own hardship because the issued does not appear to be based on deferred maintenance and the current owners did not construct the block wall that resulted in masking and deferring the issues rather than correcting them.

Typically, an economic hardship application includes information such as the current value of the property, the rehabbed value of the property and the cost of repair in order to determine if repair is feasible. Staff did not require this information since repair is not feasible at any cost due to the danger to workers that would be involved and any solutions result in the removal of the majority of materials. This case is similar to the economic hardship granted for 1818 Wildwood Avenue in 2013, which also had a foundation that was too dangerous to be repaired.

Because of the unsafe conditions, method of construction and the pervasiveness of foundation issues, staff finds that the project meets section III.B.2.c. for appropriate demolition based on economic hardship.

Reconstruction: The building will be rebuilt to the same specifications as the historic structure, with the exception of the rear wall which had already been planned to be primarily removed to accommodate an addition approved on November 9, 2015. The guidelines allow for reconstruction of a historic building on its original site when there is evidence of its original design. In this case, the building is extant and the applicant is able to create measured drawings that exactly replicate the exterior of the building.

The applicant proposes to remove much of the stone's veneer and reuse; however, because of the unusual installation it is unlikely that a majority of the stone will be salvageable. Staff recommends that at least the front facade incorporate original stone and as much as the side facades as possible and that any additional stone necessary is approved by staff.

Reconstruction includes new asphalt shingle roofing, windows, doors, trim and concrete porch. Staff recommends having final approval of the roofing color, windows and doors, and trim. With this condition and the assumption that demolition is approved, reconstruction meets section II.A.4 of the design guidelines for reconstruction.

Recommendation:

Staff recommends approval of the demolition and reconstruction of the structure, with the conditions:

1. The finished floor height is consistent with the current finished floor height, to be verified by MHZC staff in the field;
2. Staff approve the windows and doors and trim materials;
3. Staff approve the color of roofing;

4. Staff verify that the masonry is reused for the reconstruction and approves new masonry, if needed;
5. HVAC and other utilities should be placed in a minimally-visible location, at the side of the home beyond the mid-point or at the rear.

With these conditions, the application meets section III.B.2.c. for appropriate demolition and section II.A.4 of the design guidelines for reconstruction in the Richland-West End Neighborhood Conservation Zoning Overlay.

Gary and Lou Ann Brown

Tennessee address:
6105 Hickory Valley Road
Nashville, TN 37205

Florida address:
324 Pirates Bight
Naples, FL 34103

Metropolitan Nashville Historical Comm'n
Sunnyside in Sevier Park
3000 Granny White Pike
Nashville, Tennessee 37204
Attn: Robin Zeigler, Historic Zoning Administrator

Re: 3726 Richland Avenue, Nashville, TN

Ladies and Gentlemen:

We are the owners of the above-referenced property, having purchased it in May 2015. Both of us are long-time Nashville residents – we have owned our current Nashville home for more than 25 years. Our long term desire is to spend the majority of our time in Nashville. That is why we acquired the Richland Avenue house – with plans to renovate it and thereafter sell our current Nashville home.

We acquired the Richland Avenue home with an understanding of the presumably valid historic overlay that purports to limit how we can change the structure. We proceeded in good faith within those limits, engaging a structural engineer (Ruth Alwes), architect (Wells Design Associates) and following approval of plans by your agency, a contractor (WAC Contractors). The intent was to preserve the façade of the home without completely demolishing it.

It has now come to our attention through our engineer and our contractor that the condition of the home makes it inadvisable, if not impossible to proceed with the renovation as planned – at least not without what could only be an enormous and unreasonable burden and expense. The conditions that have been discovered and brought to our (and your) attention render it dangerous for workers to be in the structure. Given the current state of the property (gutted and freely accessible), that also presents a potentially dangerous condition for persons that might enter the premises (*e.g.*, children) and a liability concern for us as owners.

While we were willing to incur the expense of renovating the property under the set of assumptions that we made at purchase (no dangerous condition such as has arisen would exist), we are not and will not be willing to proceed under the current plans. We and our professionals are unsure whether that is possible – even if it were, the costs would be enormous and disproportionate to what is being protected – the front façade of the home.

Therefore, we respectfully request that the Commission allow us to demolish the home with the understanding that it will be rebuilt to mirror, as closely as possible, the current façade. That will eliminate the safety issues that currently confront the contractor as well as allow us to construct a more sound home – all while keeping with the historic “look and feel” of the

neighborhood. Without such permission, we will have no choice but to simply fence off the location for safety reasons and review any other alternatives that we might have for the property.

We also request that the decision be made as promptly as possible – the delay is affecting not only us but our neighbors. For example – one of the neighbors needs to come onto our property in order to repair a retaining wall on their property. Until the safety issues are resolved, we are hesitant to allow others onto our property.

We look forward to a prompt and favorable decision from the Commission.

Thank you for your attention. We would be pleased to answer any questions that you might have.

Gary Brown

Gmbrown0955@gmail.com

(615) 390-7230

Lou Ann Brown

louannbbrown@gmail.com

(615) 948-2014

3 April 2016

Metropolitan Historic Zoning Commission

3000 Granny White Pike

Nashville, Tennessee 37204

Dear Staff and Commissioners,

I am writing this letter regarding 3726 Richland Avenue as independent observer. Though I am not a member of the design or construction team, I have worked on numerous historic houses, one of which included some very similar characteristics to this existing construction.

I first toured the site on March 8th, 2016 at the request of Bill Moore, the contractor on the project and with whom I have worked on many other projects. Pursuant to the original historic permit application, the structure had been stripped down to framing to prepare for the proposed addition and renovation. I became immediately aware of various structural issues, as documented in Ruth Alwes report dated April 1st, 2016. I fully agree with her findings and conclusions, and to avoid redundancy I will refer you to her letter and merely elaborate on some key elements from my experience and perspective.

In 2013, my firm was enlisted to design the renovation and addition to an historic home in close proximity to the Whitland Neighborhood Conservation Zoning Overlay. The original house was constructed in the 1930's and a major addition was added in the 1970's. Because much of the original house from the 1930's was still intact, my clients' desire was to remove the later addition and pursue a renovation and addition of the original period house. Though the home was not located within the historic district, the original design concept incorporated the principals of the overlay guidelines into the design solution.

After completing a full design, permitting, and pricing process, the general contractor began careful hand demolition of the elements added over time to the original house. While much of the addition came down without incident, we began to observe some alarming issues as the demolition continued into modified areas of the original house.

Much like the construction at 3726 Richland Avenue, we observed that my project contained a stacked stone veneer set inside of the stud pocket. This unorthodox method of construction prohibits the application of traditional sheathing or a vapor barrier. The stone veneer, which serves as a rain screen and not water barrier, allows water to wick or otherwise seep through and into the structure.

As we performed exploratory analysis of various exterior walls around the house, we found that some of the walls were performing and contained a moisture content within an acceptable range, but the majority were not acceptable, which meant they were susceptible to mold, mildew, rot, and other deterioration. Some of the conditions were dangerously deteriorated, but the water intrusion had been long masked by cabinets or other built-in elements, which visually obscured their needed discovery. After six months of analysis with

pta Pfeffer Torode Architecture

opinions from multiple contractors, subcontractors, and specialists, the decision was reluctantly made to demolish the house, redesign, resubmit, reprice, and rebuild.

Through this period of analysis, various professionals brainstormed ways to reframe, sheath, waterproof, and weep out water out of the exterior wall. We could not find an acceptable solution. There is no reason for this type of wall construction to perform with regard to water and moisture, and there is no reason to believe that if performing now, the wall will continue to perform in the future. This risk of non-performance is further heightened at 3726 Richland Avenue as its framing, especially the headers, and areas of differential settlement are notably worse than the conditions we encountered on my project.

If required to maintain the existing exterior conditions, I would not advise Stephen Wells, the designer, or Bill Moore, the contactor, to continue on this project. I do not know how to bring these conditions up to a reasonable standard of care or how to subrogate the assumed risk.

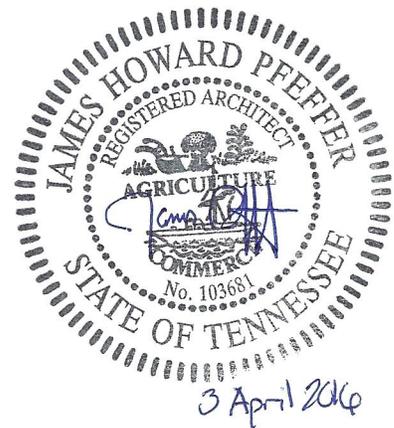
The Browns acquired this house, because they loved the house. They were drawn to its charm, its character, and its presence on this great historic street. Their intent was to maintain this essence, while allowing the house to hold its place in this historic context for another hundred years with the planned improvements.

After these devastating discoveries were made, the Browns further enlisted Mr. Wells and Ms. Alwes to document the existing conditions. If it is not possible to make the original construction sufficiently sound, then it is their express intent to rebuild the house as an exact recreation of the original house from the street. As a part of the new application, the designer is submitting the original permit drawings, as well as new documents depicting how to recreate the original facades. The goal is that an approval of this concept will approve a project with the exact same characteristics of the project original approved several months ago. The project team has taken numerous photographs to use as a guide when reconstructing the house, and Mr. Moore has engaged top stone masons and related craftsman to expertly execute the recreation of the original product. The Browns' aspirations remain exactly the same, but it is just a matter of the means needed to achieve this end result.

I would like to thank you for your review and consideration of this matter. I would be glad to discuss any questions or comments at any time.

Sincerely,

Jamie Pfeffer, AIA





April 3, 2016

Mr. & Mrs. Gary M. Brown
3726 Richland Ave.
Nashville, TN 37205

Subject: **3726 Richland Ave.**
RAE Project No. 15941

Dear Mr. & Mrs. Brown:

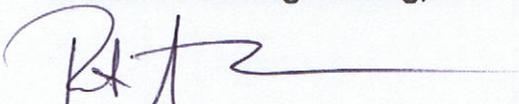
The attached report is a condition assessment of the existing house located at 3726 Richland Ave.

I provided an initial walk-through on April 17, 2015 and then more thorough evaluations during design of the renovation and addition to the building.

If you have any further questions concerning this information, please feel free to contact me at your convenience.

Sincerely,

Ruth Alwes Engineering, P.C.



Ruth G. Alwes, P.E.
President



RUTH ALWES ENGINEERING, P.C.

3726 Richland Ave

Property Condition Report

Ruth G. Alwes, P.E.

4/3/2016

Structural Condition Assessment of 3726 Richland Ave., Nashville, Tennessee

Structural Description:

The house is a one-level structure with a full basement that opens out to the back yard. For references purposes the front faces south and the back faces north.

The house is constructed of stacked stone foundations and basement walls, stacked stone cladding and wood framing for the first floor and roof.

It is approximately 100 years old.

Initial observations

During my initial site visit on April 17, 2015, I was able to observe the building exterior, some portions of the basement walls, and first floor framing from the basement.

I was unable to observe the west side wall because it was covered with partitions.

I could not observe a significant part of the front basement wall because a block wall had been constructed inside of the original wall.

There were cracks in the stone where I could observe the front basement wall.

The east wall of the house is very close to the adjacent house. A large boulder was located along the back of the east basement wall. It appears that the boulder was too big to remove, so the stone wall was built on top of it.

The main floor had plaster walls and ceiling. The roof framing was not easily accessible.

The roof framing for the front porch sagged.

The stone cladding above the windows along the front had shifted over time and had been tuck-pointed, but the tops of the windows were not level.

There were cracks in the stone cladding at various locations around the house.

There was evidence of attempts to repair the stone cladding at several areas.

The slab at the covered entry to the front door was uneven and appears to have settled towards the inside corner. The concrete slab appears newer than original, but the settlement continued after the repair.

The property was vacant and uncared for. The yard was overgrown.

Initial conclusions

My conclusion at the time was that the front basement wall would have to be removed and replaced or strengthened with gunite and reinforcing, the east wall would have to be strengthened with gunite and reinforcing or build a new wall inside the existing. The west wall could possibly be strengthened with gunite and left in place.

The interior would need to be demolished down to the studs so that we could re-frame and strengthen the existing structure as needed.

The exterior basement walls on the front and west sides would need to be waterproofed and have appropriate drain systems installed. Since the adjacent house on the east side is so close, no excavation on that side should be attempted

The slab at the front porch would have to be removed and replaced.

Design Phase

A new addition and renovation of the house has been developed by Stephen Wells.

The plans call for a new addition on the back and a new raised roof area on the back side of the existing house. The front hips and ridge would remain in order to preserve the original look of the house from the street.

I provided structural foundation and framing plans for the addition and re-configuring of the existing roof in the back.

The original roof framing is 2x4's spaced at 24" on-center. The roof will have to be re-framed in order to support code required live loads and the dead load of the new roof.

My intent was to reinforce and gunite the insides of the front and side stone basement walls and reinforce and gunite the exterior of the front wall and what may be necessary on the west side.

Demolition Discoveries

The initial demolition consisted of stripping everything inside the house down to the studs.

When the framing was exposed we discovered that the exterior walls were constructed of wood studs supported by the stone wall and that the stone cladding was actually laid in between the studs, creating a stone/stud bearing wall.

There was no insulation or moisture barrier between the cladding and the plaster.

There were no ties, or other mechanical fasteners attaching the stone to the studs. The stone cladding was loose in several areas.

There were no headers over the window or door openings. The typical construction for this era was to install diagonal 2x4's over the windows to create a 'truss' between the top plate and the plate at the top of the windows.

There was extensive termite damage in the studs along the east wall.

Since the existing walls are incorporated into the exterior cladding, a new stud wall would need to be installed inside the existing wall. This wall would support the new roof framing and must be supported down to the new gunite interior concrete.

More investigation

In order to assess the condition of the front basement wall hidden by the newer block wall, The Maintenance Company excavated a portion of the backfill against the front wall.

What we discovered is that the wall hidden by the block wall was crumbling.

The portion of the front wall not hidden by the block bowed inward during excavation and cracked considerably. The excavator noticed that the wall moved during his work.

The bulge in the wall was more pronounced at a later site visit, indicating that it is moving and is unstable.

This leads us to where we are today

Based on what we have discovered, the condition of the front stone wall, and the construction of the walls, it is my recommendation to demolish the house and re-build it.

The sequencing of construction is where the problem lies.

The front stone wall could collapse at any time, especially if any of the structure is disturbed. This is a dangerous situation for anyone working on the house.

In order to gunite the interior side of the front wall, the newer block wall will have to be removed. If the block wall is removed, I am concerned that the crumbling stone wall will collapse.

If we were to gunite the exterior side of the front wall, I am concerned that it will collapse where the wall bulges during operations

The stone/stud wall above cannot be supported without the wall below. The wall cannot be shored up without removing the stone.

It is my opinion that working around the front wall is unsafe

Recommendations

I recommend the house be demolished along the front and west side and that any loose portions of the east wall be removed.

A new basement wall will be constructed along the front and west side. The east side basement wall will be left in place so as not to disturb the adjacent house. The stone left in place will be reinforced and gunited so that it will stay in place. A new basement wall will be constructed inside this area in order to support the floor and roof framing.

The new house will be constructed to look exactly as the old house, except it will be up to current code loading requirements.

3726 Richland Ave.
April 3, 2016



front view of 3726 Richland Ave. 1



Repair work to window sill



Large boulder in East basement wall 1



Cracks in basement wall at front porch. Note the crushed slab

3726 Richland Ave.
April 3, 2016



View of front basement wall 1



Bulge in front basement wall 1

3726 Richland Ave.
April 3, 2016



Bulge in front basement wall 2. Tape hung from framing as a plumb line



view of wall construction 1



crumbled front basemen wall behind block

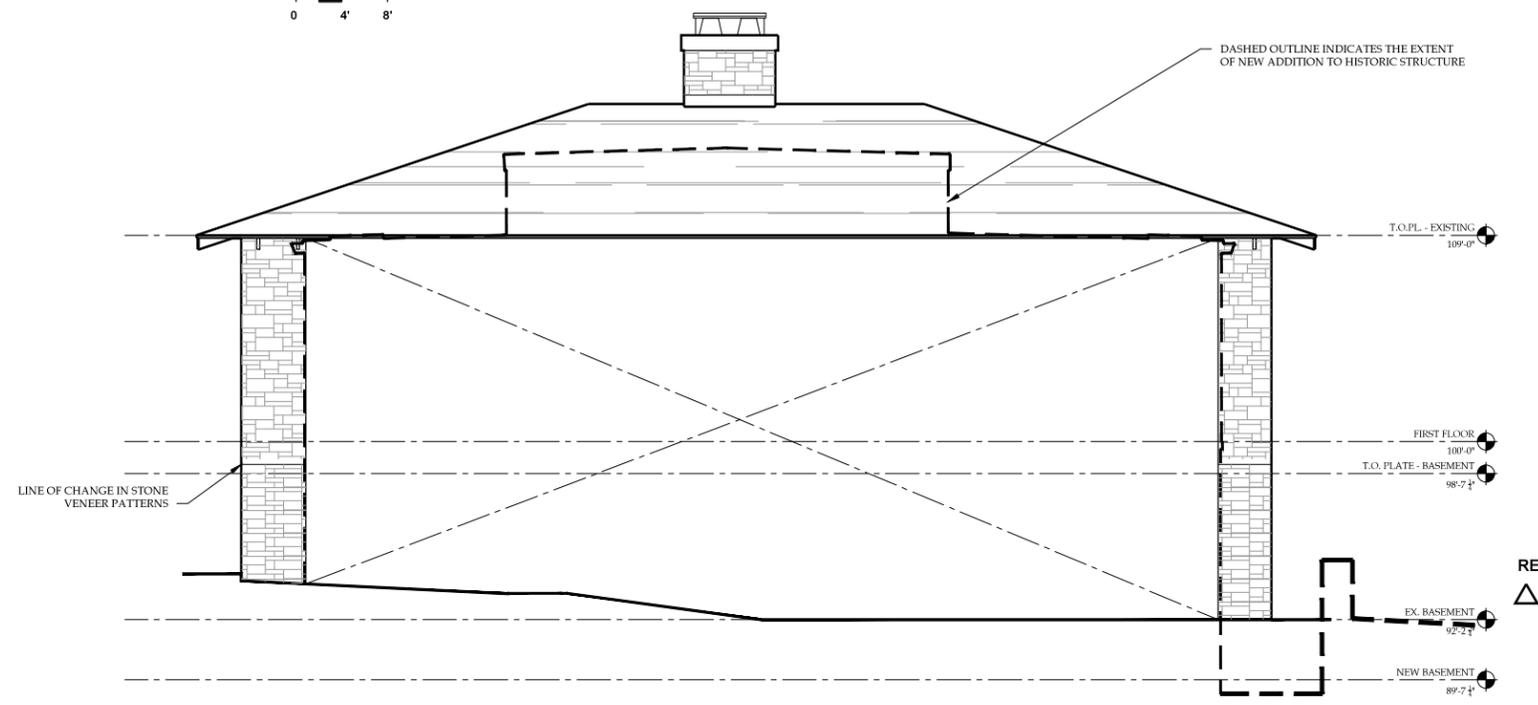
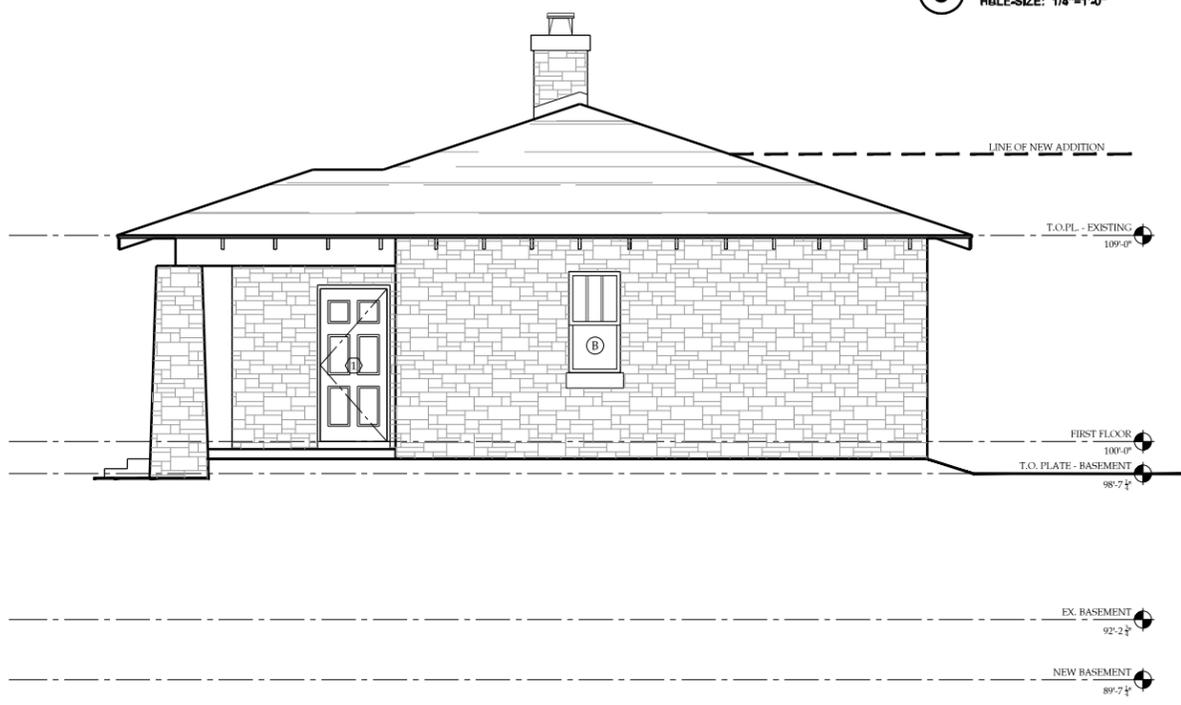
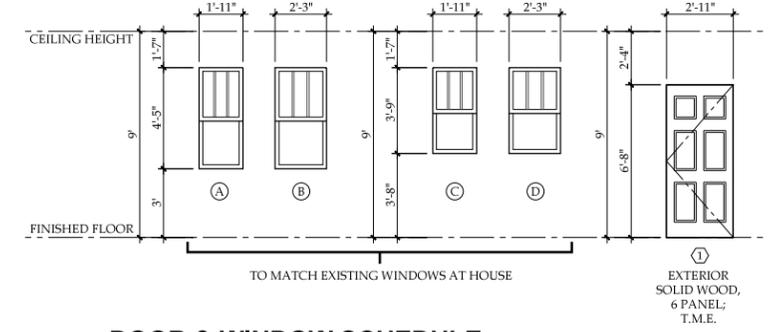
3726 Richland Ave.
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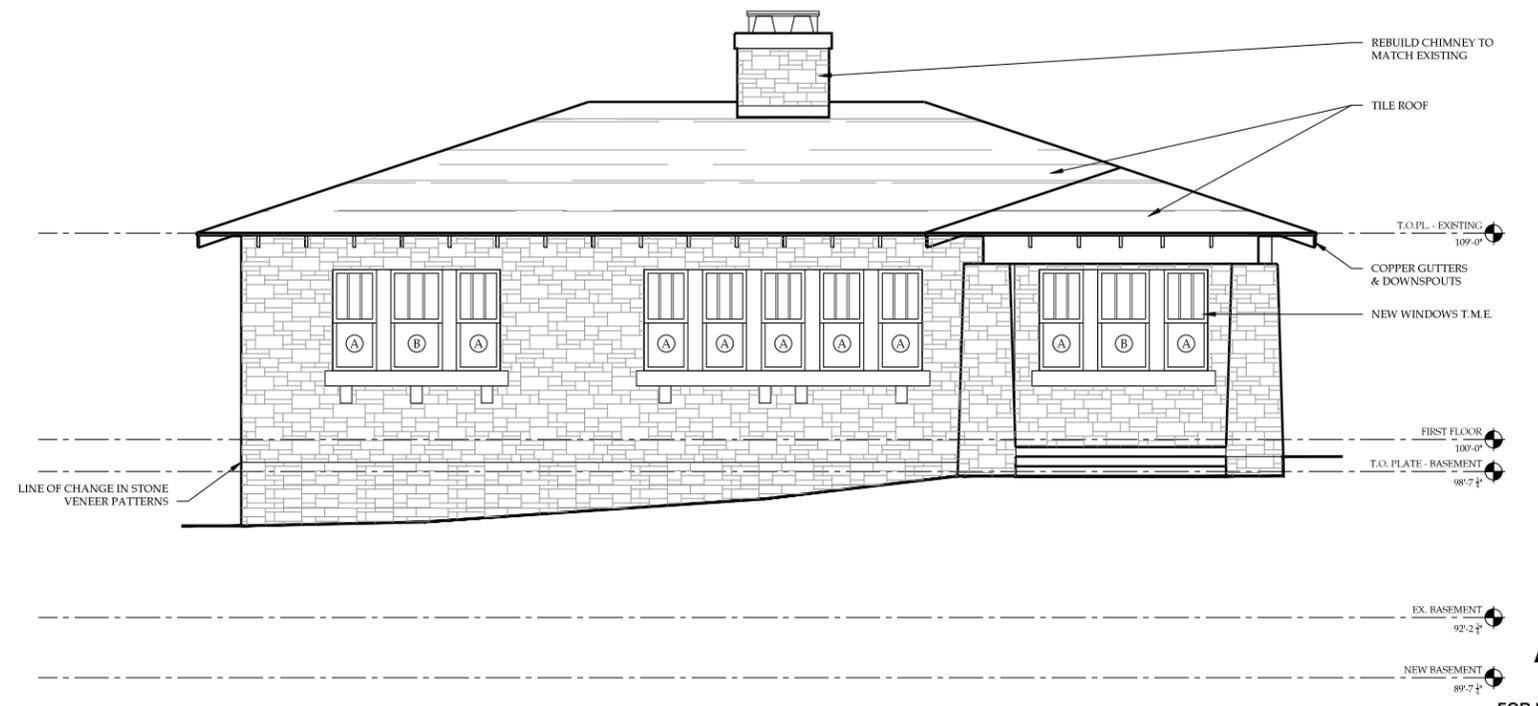
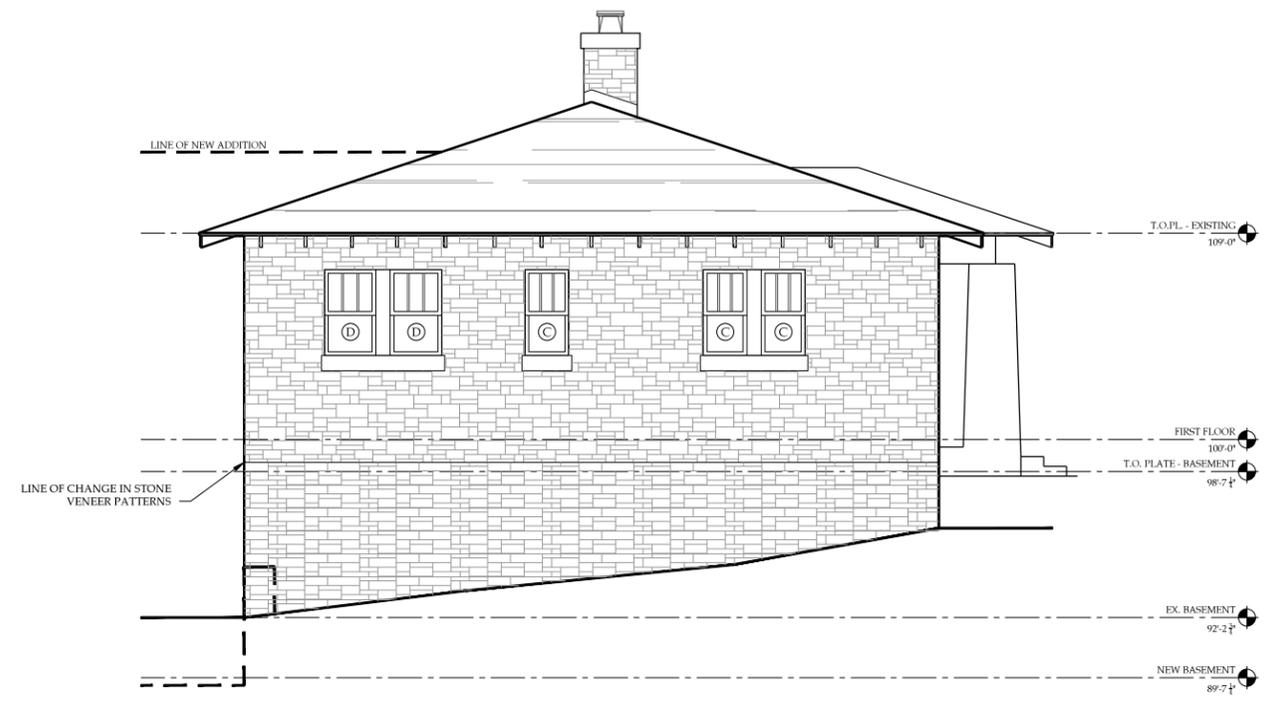
Termite damage to wood



repaired stone around window and uneven lintel

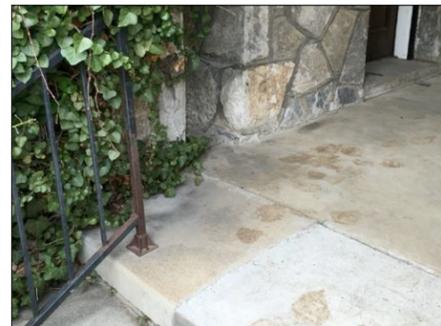
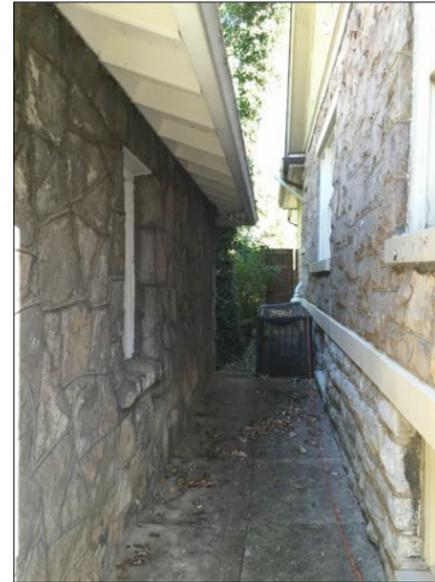


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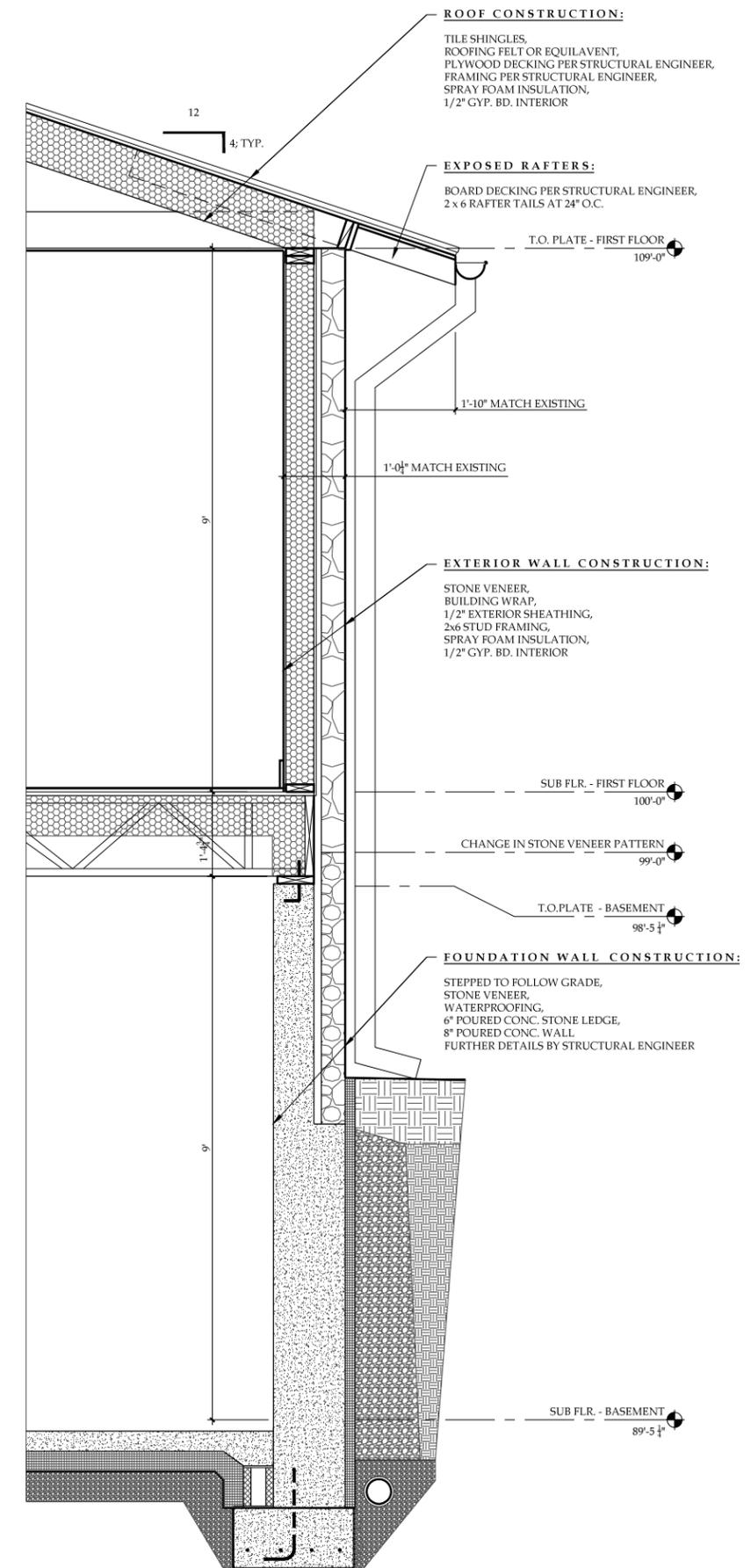


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FOR REVIEW ONLY
 NOT FOR CONSTRUCTION
 DATE: 04.01.16



2 PHOTOS OF EXISTING STRUCTURE



1 WALL SECTION
 FULL-SIZE: 3/4"=1'-0"
 HALF-SIZE: 3/8"=1'-0"



BROWN RESIDENCE
3726 RICHLAND AVENUE
NASHVILLE, TN 37205

HISTORIC HOUSE - DETAILS

REVISIONS
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WELLS DESIGN ASSOCIATES
 1440 15TH AVENUE SOUTH + NASHVILLE, TN + 37212 + 615.300.6766

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FOR REVIEW ONLY
 NOT FOR CONSTRUCTION
 DATE: 04.01.16