

JOHN COOPER
MAYOR



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

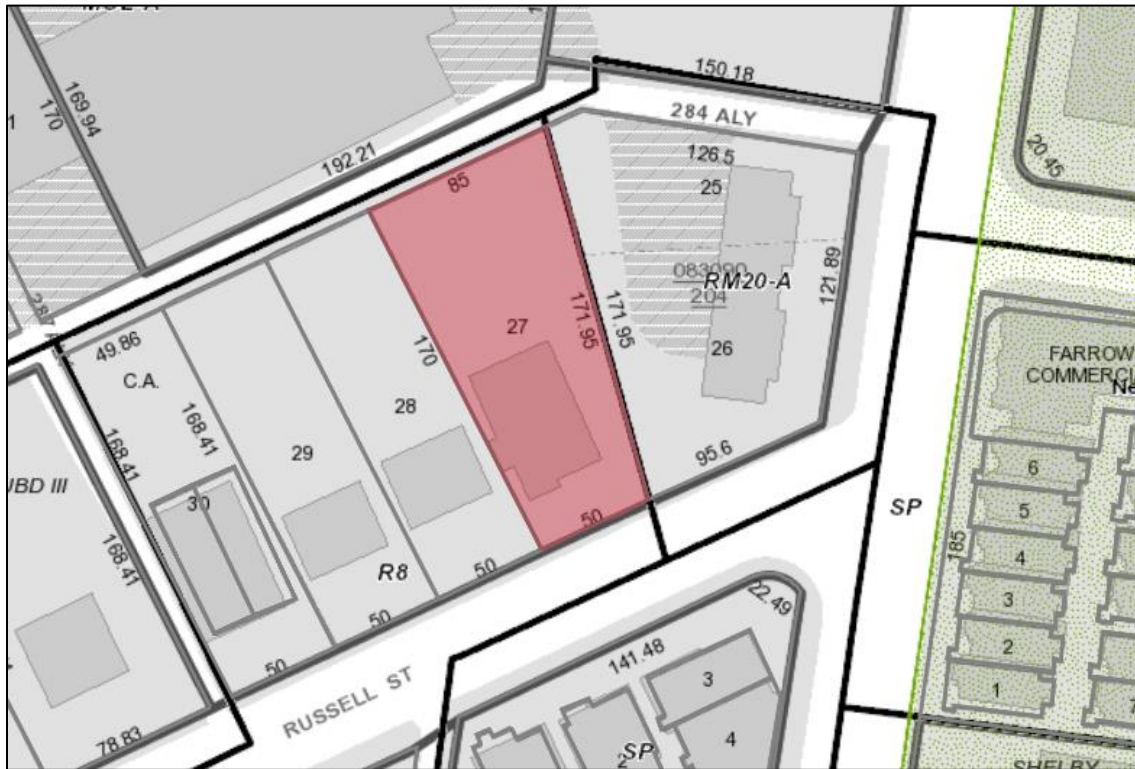
Metropolitan Historic Zoning Commission
Sunnyside in Sevier Park
3000 Granny White Pike
Nashville, Tennessee 37204
Telephone: (615) 862-7970
Fax: (615) 862-7974

STAFF RECOMMENDATION
949 Russell Street
March 17, 2021

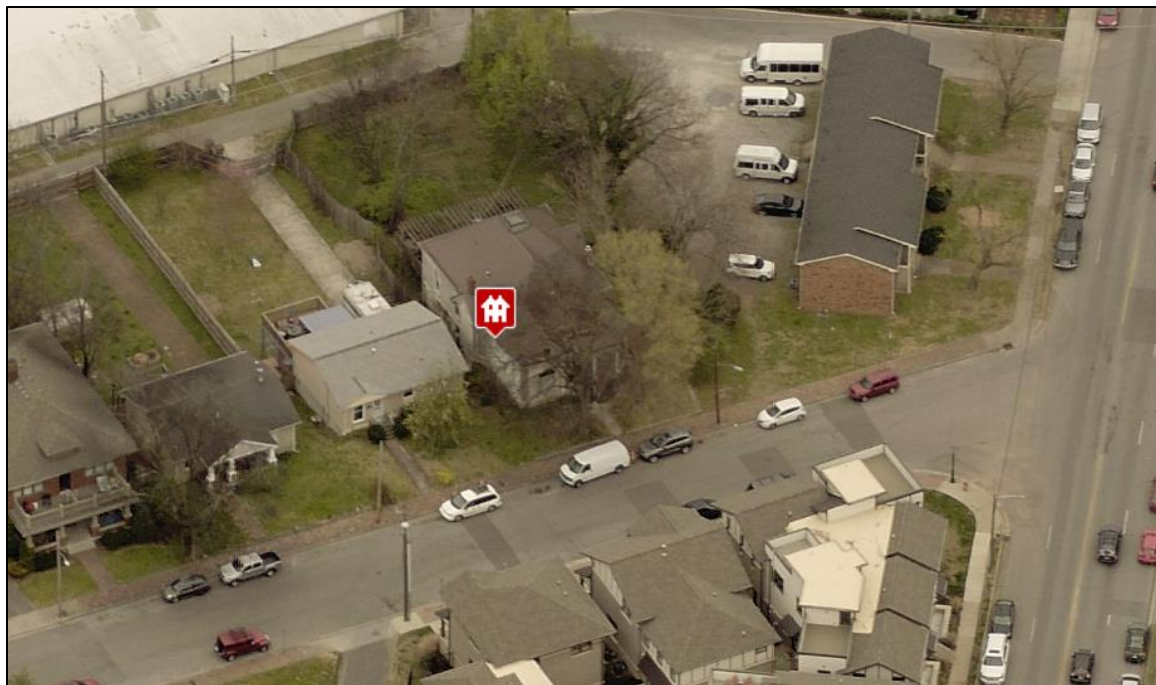
Application: Demolition
District: Edgefield Historic preservation Zoning Overlay
Council District: 06
Base Zoning: R8
Map and Parcel Number: 082120038300
Applicant: Troy Harper
Project Lead: Paul Hoffman; paul.hoffman@nashville.gov

<p>Description of Project: The applicant requests demolition of a contributing building, damaged by the 2020 tornado, arguing for economic hardship.</p> <p>Recommendation Summary: Staff recommends disapproval of the application for full demolition, finding that the applicant has not met the burden of proof for sections 1, 2, 3, 4, 5, 6, and 8 of section 17.40.420 D of the ordinance and Section III.B.2 for appropriate demolition.</p>	<p>Attachments</p> <ul style="list-style-type: none">A: PhotographsB: Engineer Report-DailyC: Engineer Report-RimkusD: Estimate-ApexE: Estimate-M &MF: Comps 1G: Comps 2H: Additional submittals
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Vicinity Map:



Aerial Map:



Applicable Design Guidelines:

V.B DEMOLITION GUIDELINES

- 1 . Demolition is not appropriate
 - a. if a building, or major portion of a building, contributes to the architectural or historical significance or character of the district.
- 2 . Demolition is appropriate
 - a. if a building, or major portion of a building, does not contribute to the architectural or historical character or significance of the district; or
 - b. if a building, or major portion of a building, has irretrievably lost its physical integrity to the extent that it no longer contributes to the district's architectural or historical character or significance; 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, as amended, of the historic zoning ordinance.

Ordinance 17.40.420 D. Determination of Economic Hardship. In reviewing an application to remove an historic structure, the historic zoning commission may consider economic hardship based on the following information:

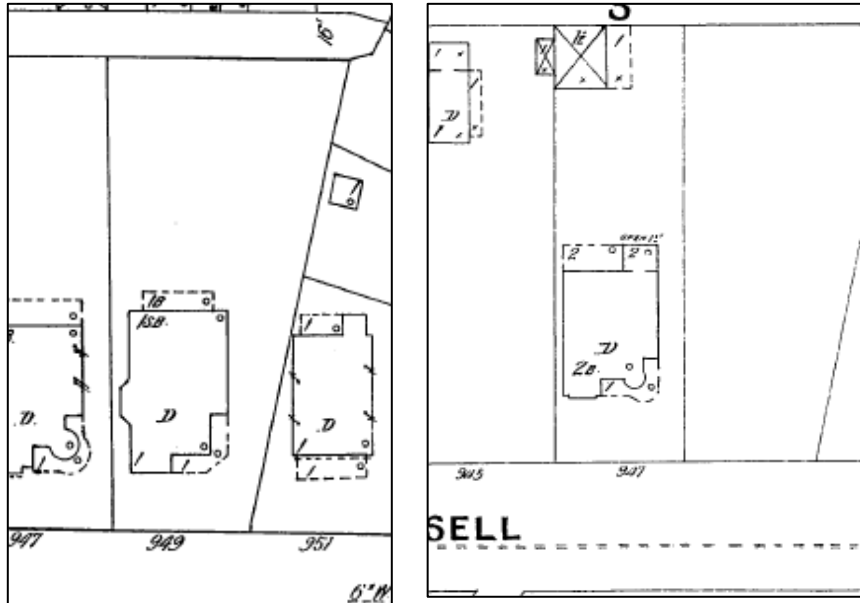
1. An estimated cost of demolition and any other proposed redevelopment as compared to the estimated cost of compliance with the determinations of the historic zoning commission;
2. A report from a licensed engineer or architect with experience in rehabilitation as to the structural soundness of the subject structure or improvement and its suitability for rehabilitation;
3. The estimated market value of the property in its current condition; its estimated market value after the proposed undertaking; and its estimated value after compliance with the determinations of the historic zoning commission.
4. An estimate from an architect, developer, real estate consultant, appraiser, or other real estate professional experienced in rehabilitation as to the economic feasibility of rehabilitation or reuse of the existing structure.
5. Amount paid for the property, the date of purchase, and the party from whom purchased, including a description of the relationship, if any, between the owner of record or applicant and the person from whom the property was purchased, and any terms of financing between the seller and buyer.
6. If the property is income-producing, the annual gross income from the property for the previous two years; itemized operating and maintenance expenses for the previous two years; and depreciation deduction and annual cash flow before and after debt service, if any, during the same period.
7. Any other information considered necessary by the commission to a determination as to whether the property does yield or may yield a reasonable return to the owners.
8. Hardship Not Self-Imposed. The alleged difficulty or hardship has not been created by the previous actions or inactions of any person having an interest in the property after the effective date of the ordinance codified in this title.

(Ord. BL2012-88, § 1, 2012; Ord. 96-555 § 10.9(C), 1997)

Background: 949 Russell Street is a c. 1899 contributing home in the Edgefield Historic Preservation Zoning Overlay and the National Register of Historic Place’s Edgefield Historic District nomination from 1977. The nomination describes the house as a one-story, clapboard cottage from the late 19th century with Eastlake influence. The nomination states that Edgefield contains excellent examples of the modest clapboard cottages of the middle class, displaying varying stylistic influences. It is this collection that “makes Edgefield a unique neighborhood in Nashville.”



Figures 1 and 2: 949 Russell St in 2020 and in 1979



Figures 3-4: 1914 and 1897 Sanborn map, subject property not on 1897 map.

It is the Commission's primary goal to ensure the preservation of historic buildings. Demolition requests are reviewed by staff in detail providing not only an analysis of the information given but an analysis of what questions remain. It is the responsibility of the applicant to prove hardship rather than for staff to disprove hardship.

Economic Hardship is not based on the personal hardship of the owner, whether or not new construction would be cheaper, or the ability of the property owner to realize the highest and best use of the property.

The house was damaged in the 2020 tornado. The rear wall, roofing material, and some windows were removed by the storm.



Figures 5 and 6: The house as seen after the storm on March 6, 2020.

On first inspections on July 29, 2020, Staff found that many repairs were warranted, but in general the integrity of the home was sound.

Three MHZC Commissioners met on site to inspect the building on August 11, 13 and 14, 2020. Questions were asked but the Commission did not discuss the case.

Analysis and Findings:

Ordinance 17.40.420 D. provides 8 sections listing items that the commission may consider in determining an economic hardship.

1. An estimated cost of demolition and any other proposed redevelopment as compared to the estimated cost of compliance with the determinations of the historic zoning commission.

An estimate for demolition and cost of other proposed redevelopment was not provided. Additional development could include a detached accessory dwelling unit that could provide rental income to assist with cost of repairs and ongoing maintenance. No addition has been proposed.

Staff defined “cost of compliance with the determination of the historic zoning commission” as those actions that are within their purview to review. In a historic preservation zoning overlay, the commission does not review interior repairs or changes but does review all other exterior repairs and alterations.

Not enough information has been provided to meet section 1. The cost of exterior repairs of the historic portion of the building alone is not clear. (Please also see section 4 for a review of the “cost of compliance.”)

2.A report from a licensed engineer or architect with experience in rehabilitation as to the structural soundness of the subject structure or improvement and its suitability for rehabilitation.

The applicant has provided two reports: Daily Engineering and Rimkus Consulting Group, Inc. Neither report provides information about their experience in rehabilitation.

The Rimkus report does not provide recommendations for repair but instead states that repair is not reasonable. The Daily Engineering report provides 16 actions that could be taken to repair the building; however it also states that “without fully reconstructing the home, it is not possible to address the underlying cause of every drywall crack found in the upstairs finished spaces or the out-of-square condition of the front portion of the first floor.” The upstairs was not originally finished space. The Commission does not review interiors and usable space in the attic is not necessary for rehabilitation of the building. In addition, historic buildings are not square and current building codes do not require that an existing building be square.

An amendment to these reports, dated Dec 16, 2020 states “to provide conceptual repair recommendations and comment on the classification of the extent of damage to the property per the applicable code.” The amendment to the engineer’s report adds their recommendation for demolition of the structure, citing that the damage meets the criteria for “Substantial Structural Damage” as defined by the International Building Code, and is not reparable in its current state. Again, historic buildings are not required to, or expected to, meet building codes for new construction.

Staff’s observations of the structure agree with some of the individual notes made in the engineers’ reports. The north (rear) wall of the structure requires replacement. Removal of the wall would be in compliance with the design guidelines. The west wall was caused to separate from the foundation by as much as an inch (1”); it is reasonable to estimate that the west wall requires reframing of 66%-100% of it. Reconstruction of one wall would be also be in compliance with the design guidelines.

The engineer’s photos indicate that the foundation and support system need repair or replacement in areas. Individual beams and joists have been damaged by time, water intrusion and insects, and merit repair/replacement. The siding and trim have

deteriorated over time and have not been maintained. These conditions are not unusual for a home of this age. Issues such as these have been routinely addressed on rehabilitation and addition projects.

Access underneath the building was restricted for most site visits, but staff and Chairman Bell were able to view the cellar on the March 5 site visit. Previous visits only permitted what is visible from the exterior, and the photographs provided by the engineer during his inspection. The perimeter foundation is a load-bearing stone wall which overall is in good condition. There are cracks visible through the mortar joints, and bulging is evident on the west side. The engineer notes that the foundation walls are within 0.5 degree of plumb, except for the west side. There are mortar joints that have crumbled, which is to be expected for a building of this age. The northwest corner of the foundation wall was damaged during the tornado and requires replacement of the mortar joints and possibly relaying of the stones. A central beam has twisted at the north end of the house. Repairs have been made at unknown times, including mortar pointing and concrete patches. There are individual structural components that might require replacement, such as the termite-eaten beam in the engineer's photos, but there is not sufficient evidence that it is not reparable.



Figure 7: Foundation wall on the east side shows mortar joints that have deteriorated but is overall in good condition.

The roofing structure is visible in areas toward the rear of the second story. While the visible rafters are 2x4 construction, this is typical of the time period, and the roofing support structure is in good condition overall, with the exception of the north plane which was removed by the storm. The roof is less than five years old. Residential Building Permit 2016-16588 was issued in April 2016 for replacement of the metal roofing. The areas that were not damaged in the storm remain in good condition. Staff estimates that repairs can be made to the existing roof framing and materials, not requiring its full replacement.

Staff finds that section 2 has not been met as the reports do not include information about the engineer's experience with the historic buildings, some of the required actions such as removal of the rear wall and replacement of the left-side wall would comply with the design guidelines, and the reports do not provide sufficient evidence that other areas of the exterior of the building, which is the area the commission has purview over, cannot be repaired.

3.The estimated market value of the property in its current condition; its estimated market value after the proposed undertaking; and its estimated value after compliance with the determinations of the historic zoning commission.

The applicant provided the current value as 172.42 per square foot but did not provide an estimated value after repairs that follow the design guidelines. Staff posits that relevant comps that might express the building’s estimated post-repair value after compliance would be historic buildings located in the same overlay with the same zoning, of a similar size, and with recent rehabilitation.

The applicant provided two different sets of comps. One set includes 1527 Douglas and 1413 Lillian St, which are in a different overlay with different level of restrictions and design guidelines. 935 Silverdome Pl does not appear to be a valid address and 718 Setliff is not located in a historic overlay. With only one property being in the same district, Staff does finds that one of the reports is not relevant.

The second set includes all historic buildings located in this same district, are of the same general size, and have the same zoning. (See attachment G.)

Summary of Comps:

Address	Construction Date	Square Footage	# of Stories	Notes
949 RUSSELL ST (subject)	c.1890	1917	1	
900 Russell St	c.1930	1639	1	1993 for general repairs due to fire
920 Boscobel St	c. 1915	1970	1	2021 rear porch added/ 2007 outbuilding added/ 1995 general repairs including a dormer addition
821 Boscobel St	c. 1920	1894	1	2001 general repairs
709 Shelby	c. 1920	1631	1	1996 general repairs

These buildings do not appear to have had recent rehabilitation that would express a potential post-rehab value.

Staff finds that section 3 has not been met as not all information has been provided and an analysis of what provided was not given.

4. An estimate from an architect, developer, real estate consultant, appraiser, or other real estate professional experienced in rehabilitation as to the economic feasibility of rehabilitation or reuse of the existing structure.

The applicant provided two estimates for work from M&M Building Co, LLC and Apex Builders. Neither estimate provides information regarding their experience with historic rehab.

The estimate from Apex Builders appears to be for full replacement of foundation, roofing, windows, doors, interior finishes, all electrical, HVAC toilets and plumbing fixtures, and cabinets and countertops. Staff's review and the engineer reports do not conclude that full replacement is necessary for these features. Chimney correction is also listed as an expense; however, the engineer reports do not list the chimney as an issue. The estimate also includes a new deck and stain, retaining wall, and landscaping which are not part of the historic building.



Figures 8 and 9: The house as seen after the storm on March 6, 2020.

Staff finds that section 4 has not been met as the estimates include costs that are not relevant to rehab of the historic building and, in some cases, appear to include full replacement of features that may not be necessary based on the engineer reports.

5. Amount paid for the property, the date of purchase, and the party from whom purchased, including a description of the relationship, if any, between the owner of record or applicant and the person from whom the property was purchased, and any terms of financing between the seller and buyer.

This information was not provided by the applicant; therefore, section 5 has not been met.

6.If the property is income-producing, the annual gross income from the property for the previous two years; itemized operating and maintenance expenses for the previous two years; and depreciation deduction and annual cash flow before and after debt service, if any, during the same period.

This information was not provided by the applicant; therefore section 6 has not been met.

7.Any other information considered necessary by the commission to a determination as to whether the property does yield or may yield a reasonable return to the owners.

8.Hardship Not Self-Imposed. The alleged difficulty or hardship has not been created by the previous actions or inactions of any person having an interest in the property after the effective date of the ordinance codified in this title.

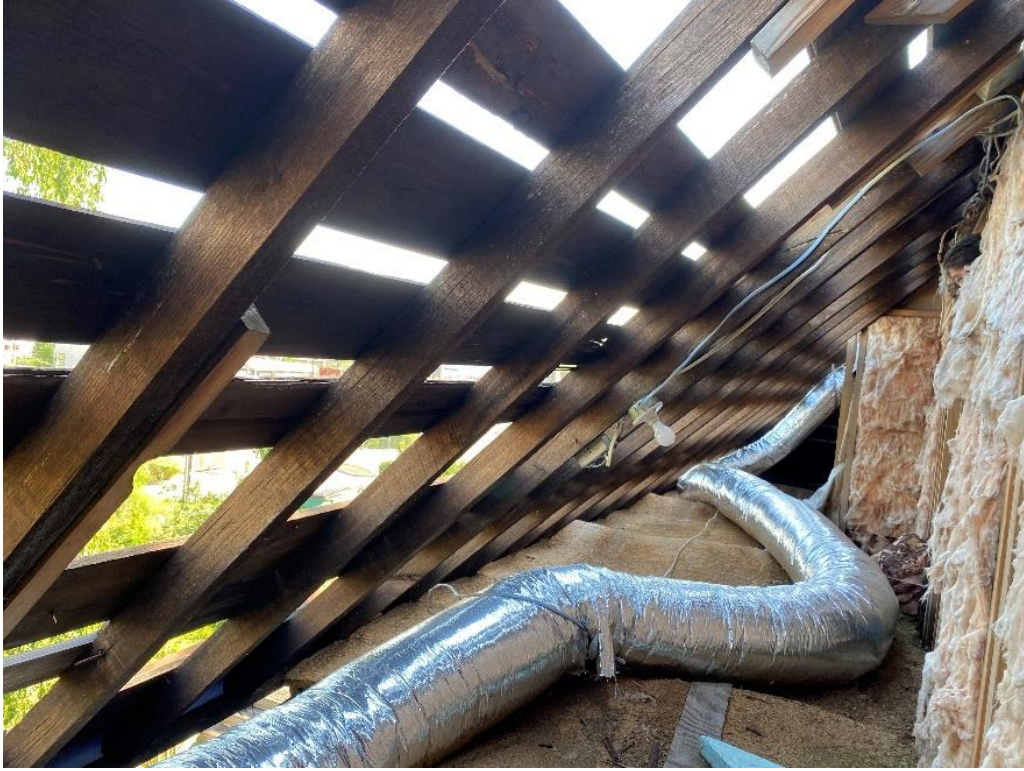
The current owner has only owned the property since August of last year and so is not responsible for the deferred maintenance and repairs. In addition, not all concerns were likely to have been visible at the time of purchase; however, the exterior condition, which is what the Commission has purview over, should have been evident. The applicant is not responsible for the damage caused by the tornado; however on staff's first visits the building was unsecured from the weather. It has since been tarped, with plywood fixed to the previously open windows and door openings.

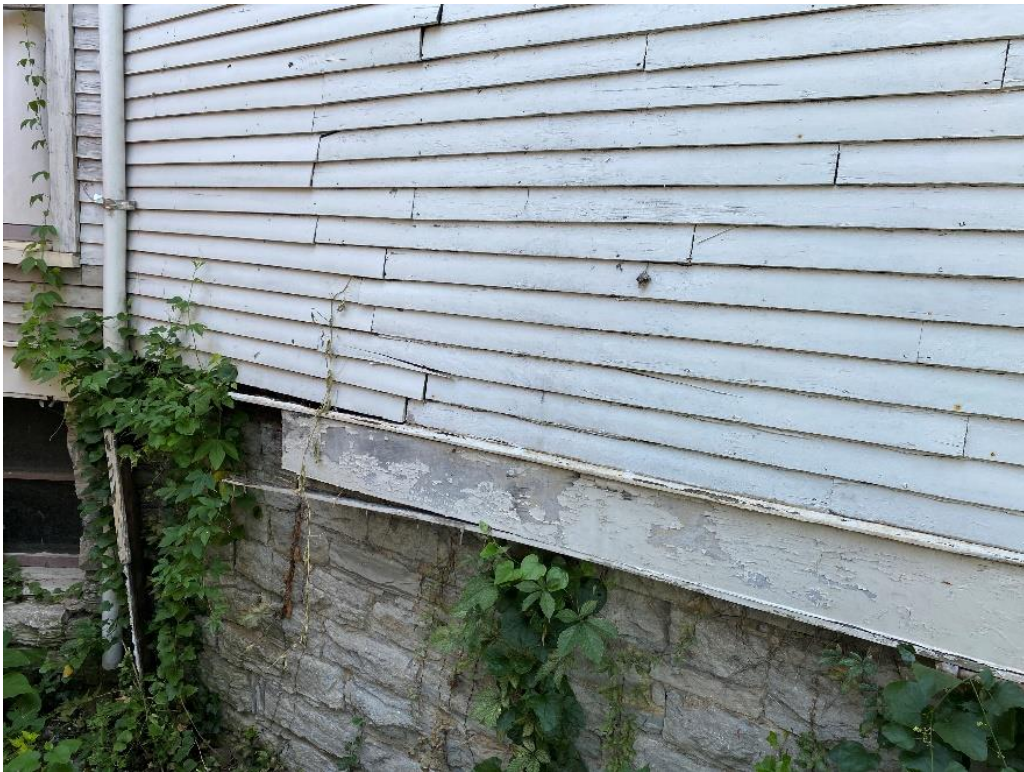
Recommendation:

Staff recommends disapproval of the application for full demolition, finding that the applicant has not met the burden of proof for sections 1, 2, 3, 4, 5, 6, and 8 of section 17.40.420 D of the ordinance and Section III.B.2 for appropriate demolition.

ATTACHMENT B: PHOTOGRAPHS













November 3, 2020

Robert Huggins and JTRE1 LLC

Anthony Hirsch
Artisan Build Construct

Subject: Structural Evaluation of Home
949 Russell Street, Nashville, TN

On November 2, 2020 I visited the subject home to evaluate its structural condition. It was damaged by the March 2, 2020 tornado and has been uninhabitable ever since. The home is a two-story residence with a painted wood siding exterior and full daylight basement. It was originally constructed in the late 1890's.

Note, any references to "left", "right", "front", or "back" are as viewed from the front of the home.



Front Elevation

Rear Elevation



Right Hand Side

Left Hand Side

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The tornado's winds appear to have entered the home through the left side windows, pressurized the interior sufficiently to blow the entire rear wall off of the home, strip the metal roofing from the rear side, damage the left front exterior wall, rack the entire structure, and blow out several other windows. The rear of the home has been covered with tarpaulins in an effort to secure the property, but in the amount of time that has passed since the event, many of the tarps have torn away, exposing the interior to the elements and causing additional damage.

My examination of the structure included the exterior, the roof framing where visible, both interior floor levels, and the basement. The following structural issues were noted with the home. This list does not include general maintenance items. The condition of the home prior to the tornado event is not known, so it is not possible to differentiate between tornado damage and damage from age, water infiltration, wood destroying insects, etc. in every case.

1. The entire rear wall of the first floor from the top of the stone foundation wall to the roof rafter tails was stripped from the home and blown outwards onto the wood framed deck across the rear, causing it to collapse. Examination of the wood components of the affected wall identified several structural components that were severely compromised prior to the tornado event. This includes the double 2x10 rim joist on top of the rear foundation wall. Portions of this joist had previously been replaced to secure the deck to the home, but the new wood was attached to the old, rotten, insect damaged wood, so it was not structurally stable. Historical water damage was also observed in the framing members around the door to the deck from the kitchen, the rear doors from the right rear bedroom, and in the floor decking and wall framing.



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2. The wall from the left front corner of the home to the corner of the bay window in the dining room has broken free at the base and rolled outwards. Examination of the rim joists at this location determined that they have been damaged by water infiltration of the wall causing the wood to rot. The bases of the vertical 2x4 studs were also rotten.

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949 RUSSELL ST.

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When the home was pressurized by the storm, the weakened wall ripped free at the base, blowing outwards roughly 4". This resulted in extensive damage to the interior finishes of this wall and the ones that intersect it. For example, light can be seen coming through the joint in the exterior wall beside the dining room window.

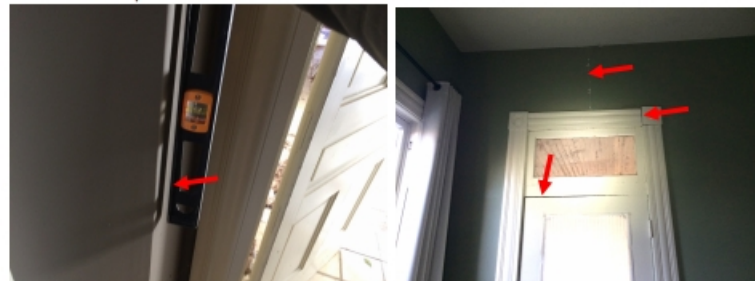


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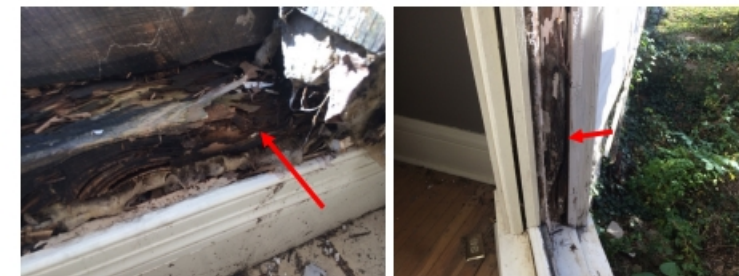
3. The walls of the front rooms of the home are leaning to the right, indicating that the wall framing has racked. The front to back walls along the hallway are 1/2" out of plumb in a 4' vertical level near the front wall tapering back to plumb at the stairwell. The racking has caused cracks to appear in the drywall around the doors and tapered gaps to open in the door trim. As the rear half of the home is plumb, the racking in the front half is apparently a function of structural weakness developing over time or the effect of the tornado's initial impact on the left front corner of the home.



4. Where exterior window in the kitchen was blown in by the storm, the underlying wood framing could be observed. Evidence of wood rot in the framing could be observed due to years of water leaking in around the window. Less severe damage was also noted in the side jamb of the window in the dining room to the left of the fireplace. No other window frames were removed in their entirety, so the full extent of this type of damage is unknown.

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5. Damaged original hardwood floors were noted throughout the first floor. Gaps have developed between most of the tongue and groove planks, some approaching 1/4" wide. Soft spots in the flooring were also noted in the front rooms where water, wood destroying insects, or furniture weight have affected the wood's structural integrity.



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6. The foundation walls of the home are 24" thick and consist of several layers of mortared stone. The floor joists are connected to rim joists that sit on the outside edge of the foundation wall, so the bulk of the stone is of little structural value. In numerous locations along the right hand foundation wall and in the left hand foundation wall near the back corner, the mortar has eroded away between the stones of the outer layer of the walls. Several mortar joints up to 3/4" wide are now completely free from their original mortar. The structural load on this outer layer of stone and the deteriorated mortar has caused this layer of the right hand foundation wall to lean outwards up to 1". This can also be seen in the drywall around the fireplace in the right center bedroom where cracks have appeared that are wider at the base, indicating that the exterior wall is pulling away from the fireplace at the base.



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7. The weakened mortar has most likely contributed to movement in the foundation wall at the left rear corner of the home as well. A vertical crack is present in the rear face of the foundation wall at this corner indicating that the load bearing outer layer is leaning towards the left at this corner.

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8. Sections of the rear foundation wall in the right corner are missing at the top, leaving the rim joist to support the exterior walls above across three gaps of up to three feet each.



9. The interior side of the foundation wall beneath one of these gaps has 1/2" wide vertical crack running the full height of the wall.



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10. The door that accessed the basement level from the exterior on the left side of the home was blown in by the storm. When it fell in, it damaged the interior side of the foundation walls on either side of the opening.



11. Damaged foundation walls were also noted under a window on the right hand side of the basement, in the wall adjacent to that window, and where the HVAC condensate lines were run through the wall.



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12. The first floor framing of the home is 2x10 joists on 16" centers spanning from the left and right hand foundation walls to two intermediate pier and beam systems running from front to back under the two walls of the central hallway. The original beams are triple 2x10's with 6x6 columns on approximately 9' centers. The columns are supported by single large stones as footings. It appears that the majority of the original left hand beam was heavily damaged by wood destroying insect activity and had to be replaced from the first original 6x6 column in the front to the rear foundation wall. The replacement beam is constructed out of three 2x12's with light-duty adjustable steel support piers on between 4'-8" and 8'-0" centers. When further tightening of the screw top of the pier only served to bend the top plate, wooden wedges were driven between the top of the beam and the bottom of the floor joists it supports. The wedges were only driven in from one side which imparts a rotating force onto the top of the beam. Over time, this has caused the beam to twist along approximately 25' of its length at the rear of the home, pushing the support piers severely out of plumb and further bending their top and bottom plates. The light gauge material from which these piers are made are why they are not recommended for use under primary load bearing members of a structure.



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13. The right hand main beam is still all original. The three laminated plies of the beam have periodic butt joints along its length which are weak points in the beam. Most of these joints do not fall directly over a support column, so one side of the joint is sagging compared to the other side which can affect the levelness of the floor above.



14. The wood destroying insect damage was not limited to the left hand beam only. Thirty one of the floor joists under the left half and central hallway of the home were also damaged. Some attempts were made to supplement the damaged members through the installation of short sections of 2x10's and 2x12's beside the damaged ends of the joists. These supplements were not attached to the original joists, so the damaged members are still supporting the majority of their original structural load. In one location, the flooring beneath the wall cavity was also damaged, greatly reducing the support available for the wall framing.

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Undermined wall framing due to insect damaged floor

15. Six joists under the center section of the home near the rear wall have significant mold growth occurring due to exposure to the weather. Mold is also growing in the interior

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DOCUMENT - A25 - 2



walls on the first floor between the kitchen, hallway, and back bedroom and in the ceiling joist spaces.



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16. Historic evidence of water damage was also noted in the floor framing of the first floor bathroom. The end of one floor joist has completely rotted away and been re-supported by a 2x6 extension nailed to its end. This is not structurally sound.



17. One floor joist under the front left living room of the home was cut to provide clearance for a HVAC duct. It was "headered-off" with a smaller 1x that is insufficient to transfer the cut joist's structural load to the adjacent members.



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18. One floor joist under the kitchen near the rear wall was cut almost in half to allow for the passage of a duct.



19. When the home's original attic space was converted into the master suite, the original 2x4 roof rafters were not supplemented structurally. Drywall was added and the ridge modified to include a skylight at the peak. The rafters are undersized, so they are relying on the additional interior vertical walls of the master suite for intermediate support. When the home was damaged by the tornado, the stress placed on the overall structure caused the roof framing to flex, damaging the drywall at virtually all angled seams and at the corners of the doors.



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20. The second floor subfloor is particle board. The roof was removed from the rear of the home by the storm, exposing the subfloor in this area to the weather. The material has swollen due to water saturation, causing humps in the floor of the closet and attic areas at the rear of the home.



21. The front porch of the home is a concrete slab with a mortared stone foundation wall on the outside perimeter. The porch deck supports the framing for the shed roof above it through wooden columns. The foundation wall apparently does not have a sufficient footing because several of the blocks have broken free from the wall and the slab has cracked into large sections at the expansion joints. The cracks are up to 1" wide. The slab sections have dropped and pulled away from the house by more than 1". The movement is significant enough to tilt the columns out of plumb.



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DOCUMENT - A26 - 3

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22. The porch section at the front door is cracked in the center and sloping towards the left, directing any water that blows onto the porch surface towards the right side wall of the front living room.

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23. The home has gutters integrated into the eave framing at the edges of the roof. The eave framing and gutter on the front side of the left hand bay area is sagging away from the roof.



24. The steps to the front porch are stacked monolithic concrete blocks. Their footing is insufficient, so they are moving and sinking, sloping back towards the front porch up to 1/8".



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949 RUSSELL ST.

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Recommended Structural Repairs

The following repairs are recommended to restore the home's structural integrity and address issues that have resulted from the tornado, weather exposure since the tornado, and issues that existed prior to the storm.

1. Remove the damaged sections of the foundation wall across the rear of the home at the left and right hand corners, addressing the cracks in the outer layer at the left corner and the gaps and crack in the right hand corner. Install new concrete spread footings as required, then reconstruct the wall.
2. Rebuild the entire rear wall of the home from the top of the repaired foundation wall to the eave.
3. Reconstruct the wall from the left front corner of the home to the fireplace in the dining room. New framing should extend from the top of the foundation wall to the eave.
4. Remove the interior and exterior finishes as necessary to reconstruct the damaged framing around the window in the left hand wall of the kitchen.
5. Temporarily support the floor framing and exterior walls on the left and right hand sides so the exterior layer of the foundation stone can be reconstructed in all areas where the walls are leaning and/or the mortar has deteriorated.
6. Reinstall the basement access door. Repair the damaged foundation walls as needed.
7. Reconstruct the damaged portions of foundation wall at the HVAC condensate line penetration and around the window in the right hand foundation wall.
8. Replace the new left hand main floor framing beam with a properly sized beam and permanent heavy duty support columns with cast reinforced concrete footings.
9. Install additional support columns or modify the existing to provide support to all butt splices in the right hand main floor framing beam.
10. Replace or properly repair the 31 insect-damaged floor joists, the 6 water damaged joists at the rear of the home, the improperly "headered off" joist under the living room, the rotted joist under the bathroom, and the cut joist for the ductwork under the kitchen.
11. Remove the water damaged drywall walls and ceilings from the kitchen, back end of the central hallway, back bedroom, and upstairs closet. Remediate any mold found. Replace water or mold damaged framing where found.
12. Replace the water damaged particle board subfloor on the second floor. This will require the removal of some of the interior second floor walls across the rear of the structure.
13. While the roof framing does not appear to be appreciably damaged, it will not support the structural load dictated by modern codes. If the building department requires the exposed structure to be brought in compliance with current building standards, it will be necessary to reframe part of the roof. The wood available today is not as structurally strong as the wood used to build the home originally, so the replacement materials will have to be larger, which will complicate the framing where the old wood meets the new.
14. Remove and reconstruct the front porch and stairs as the current one cannot be repaired.
15. Patch the damaged hardwood floors.
16. Rebuild the eave gutter on the left hand side of the home on the front side of the bay.

DailyEngineering@yahoo.com - (615) 450-8364 - P.O. Box 331865 - Murfreesboro, TN 37133

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Without fully reconstructing the home, it is not possible to address the underlying cause of every drywall crack found in the upstairs finished spaces or the out-of-square condition of the front portion of the first floor. These issues may have appeared over time due to a fundamental structural inadequacy or been the result of the trauma inflicted on the structure during the storm event. Once repaired cosmetically, if the underlying issue remains, the cracks will return.

The damage done by the tornado exploited weaknesses in the home's framing that had developed over time. The water and insect-damaged rim joists and window framing created failure points that gave way when the wind loading on the home exceeded their diminished thresholds. As the issues were present in both the rear and left side walls, it is possible that they exist in the other walls as well. These could not be identified without the removing trim, siding, or drywall, which is beyond the scope of this report. My investigation was based on visual inspection only and did not include destructive testing, soil capacity checks, removal of interior or exterior finishes, or excavation to determine the condition of structural components not readily visible. It assesses the condition of the home as it existed on the day of the inspection.

Sincerely,

S. Craig Daily, P.E.
President
Daily Engineering LLC



DailyEngineering@yahoo.com - (615) 450-8364 - P.O. Box 331865 - Murfreesboro, TN 37133

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Rimkus Consulting Group, Inc.
 2630 Elm Hill Pike, Suite 130
 Nashville, TN 37214
 Telephone: (615) 883-4115

Report of Findings

Gough Structural Evaluation

Rimkus File No: 100030156

Prepared For:

Blair & Company
 3111 Springbank Lane, Ste. C
 Charlotte, NC 28226

Attention:

MS. Kristin Shocklee



Brendan Edward Ryan, P.E.
 TN Engineering Number 119633
 Consultant

April 27, 2020

DOCUMENT - A05 - 1

Section I INTRODUCTION

Mr. Steven Gough reported that on March 3, 2020, a tornado caused damage to his residence located at 949 Russell Street in Nashville, Tennessee.

Rimkus Consulting Group, Inc. was retained to determine the extent of structural damage and provide recommendations for repair. This report was reviewed by Mr. Andrew Sharer, Regional Property Division Manager.

This report was prepared for the exclusive use of Blair & Company and was not intended for any other purpose. Our report was based on the information available to us at this time, as described in the **Basis of Report**. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions and to revise our opinions and conclusions if necessary and warranted.

April 27, 2020
 Rimkus File No. 100030156

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Section II CONCLUSIONS

1. Wind from the tornado resulted in pressurization of the residence, causing separation along the bottom edge of the west perimeter wall and complete detachment of the north perimeter wall.
2. Long-term structural deficiencies in the Gough residence that occurred prior to the tornado combined with separation of the wall connections caused by the tornado resulted in damage to the residence which was not reasonably repairable.

April 27, 2020
 Rimkus File No. 100030156

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**Section III
DISCUSSION**

Background Information

The Gough residence was a two-story, single-family residence (Photographs 1 through 4 and Attachment B). It was built over a basement with a foundation constructed of stone masonry. The exterior walls were wood framed and clad with wood siding. The windows were of wood construction. The interior wall finishes were gypsum and interior floor finishes included wood, carpet, and ceramic tile. The roof had wood-framed rafter construction with wood plank sheathing and was covered with exposed-fastener metal panel roofing. The front of the residence was referenced to face south toward Russell Street, for the purposes of this report.

Weather Data

Weather data, as reported by the National Oceanic and Atmospheric Administration (NOAA) Nashville Weather Forecast office, showed an outbreak of tornadoes that began late on March 2, 2020, and continued into the early hours of March 3, 2020. Tornadoes touched down in southeastern Missouri, southern Kentucky, Tennessee, and central Alabama. Seven tornadoes were reported in middle Tennessee, moving at speeds estimated between 60 and 65 miles per hour (mph). The Enhanced Fujita (EF) scale for the tornadoes ranged from EF-0 to EF-4.

A tornado occurred in the Nashville area and crossed Davidson, Wilson, and Smith Counties. This had been classified as an EF-3 tornado that touched down at 12:32 a.m. CST at coordinates 36.1735 degrees north, 86.9580 degrees west, and traveled east to terminate at 1:32 a.m. CST at coordinates 36.1536 degrees north, 85.8905 degrees west. Peak winds were estimated at 165 mph, the tornado path was a maximum of 800 yards (2,400 feet) wide, and the path length was 60.13 miles. The Gough residence was located approximately 180 feet to the south of the estimated path centerline (Attachment C).

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Observations

Exterior

- Portions of the wood siding and trim had been partially displaced, and in some instances completely separated from the residence. The siding had a generally wavy appearance. The lower portion of the east wall was visibly bulged outward near the middle portion of the wall (Photograph 5).
- The entirety of the north exterior wall had fallen away from the residence. Debris from the wall, along with that of the back deck, were resting on the north lawn. The exterior stairs of the deck remained intact but were deflected out of plane (Photographs 6 and 7).
- Glass panes of the wood-framed windows that had fallen away from the north wall remained intact (Photograph 8).
- The exposed wood framing around the perimeter of the fallen north wall exhibited widespread deterioration with dark discoloration and soft, friable wood. Isolated sections of relatively newer, undeteriorated dimensional lumber remained attached to the underlying wood framing along portions of the north wall (Photographs 9 and 10).
- Exposed wood framing along the lower perimeter of the exterior walls exhibited extensive deterioration and dark discoloration. The wood had widespread regions that were soft to the touch (Photograph 11).
- The metal roof panels and a portion of the wood plank sheathing were missing on the north roof slope (Photographs 12 and 13).
- The foundation walls consisted of limestone masonry. The mortar in the joints was very soft to the touch and crumbled in response to light manipulation. Multiple joints around the perimeter of the foundation were cracked and deteriorated. The

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cracks had rounded, weathered edges and vegetation was present in and around many of the cracks and gaps (Photographs 14 through 16).

Interior

- The north wall of the kitchen, north hallway, and north lower bedroom had fallen away from the residence. The exterior was visible through the opening (Photograph 17).
- A portion of the gypsum wall covering had fallen away from the west wall of the southwest living room on the first story of the residence. The wall framing was exposed and had been displaced approximately 3 1/2 inches outward along the bottom of the wall (Photograph 18).
- The lower portion of the west wall of the dining room was displaced outward by approximately 1 inch with additional separation between adjacent wall sections surrounding the fireplace. The region of separation along the bottom of the wall extended the entire length of the dining room (Photographs 19 and 20).
- Multiple floor tiles were separated from the floor of the pantry. The door frame had been deformed such that the door between the pantry and the dining room was bound and did not operate freely (Photographs 21 and 22).
- Cracks and separation in the upper portion of the walls and crown molding were present in the living room, dining room, foyer, and north bedroom on the first story (Photograph 23).
- With the exception of the displaced portion of wall along the west side of the residence, walls measured with a digital level were found to be within 0.5 degrees of plumb.
- Multiple regions of the ceiling and upper edges of the walls were cracked. The cracks had sharp, clean edges and were generally between 1/32 and 1/8 inch in

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width. In isolated areas, the cracks were accompanied by flaking of the surface of the wall covering (Photographs 24 and 25).

Basement

- The basement was unfinished with the interior faces of the stone masonry foundation walls and the underside of the floor framing visible. Multiple windows had been broken and were open to the exterior, as well as the west door which had fallen inward and was resting on the floor of the basement (Photographs 26 and 27).
- Portions of the stone walls had multiple displaced and broken stones, particularly concentrated around windows (Photograph 28).
- Multiple stones had fallen from the upper portion of the north wall near the northeast corner of the basement (Photograph 29).
- A structural beam spanning north-south along the center of the basement exhibited a severe westward deflection near the north end. The beam consisted of 2x10 dimensional lumber spliced together with nails. The beam was also rotated out of vertical alignment by as much as 12 degrees near the north end (Photograph 30).
- The deflected beam was spliced into a timber beam near the south end of the basement. The beam was supported by steel posts which were not fastened to the beam at the upper plates (Photograph 31).
- Insect tunnel galleries were present in multiple regions of the wood framing in the basement. The galleries were accompanied by areas of soft, friable wood (Photographs 32 through 34).

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Analysis

The separation of the north wall of the residence from the adjoining walls, roof, and foundation was consistent with the type of damage that can result from severe wind pressures associated with tornados. When the pressures on opposite sides of a wall differ, the wall will receive forces away from the high-pressure side and toward the low-pressure side. If a building enclosure were perfectly sealed, high wind pressures would be exerted on the windward side of the structure and comparatively low pressures would exist on the leeward side or sides. The constant pressure on the interior of the structure would allow those forces to be distributed through the structure. Residential buildings rarely if ever have this degree of perfect seal. This means that air can travel between the interior and exterior spaces of the residence and can serve to increase or decrease the interior pressure. In the instance of the Gough residence, windows on the south, west, and east sides of the residence were older, single-pane units and many of them were broken during the tornado event. The windows on the north wall, however, were newer and despite falling to the ground, most were undamaged by the tornado. As a result, the high-pressure conditions on the exterior of the north, east, and west sides of the residence passed to the interior through the large openings created by the broken windows. Because wind directions during a tornado can vary depending on the position of the tornado at any given moment, a high-pressure condition on one of those three sides was at least momentarily paired with a low-pressure condition on the north side of the residence. Under those conditions and given the generally intact state of window openings on the north wall, extreme wind pressures accumulated on the interior of the wall, forcing it north, away from the building. Separation of the lower portion of the west wall outward, away from the building, was further evidence of relatively high interior pressures. We therefore concluded that wind from the tornado resulted in pressurization of the residence causing separation along the bottom edge of the west perimeter wall and complete detachment of the north perimeter wall.

Inspection of exposed structural framing in the Gough residence revealed extensive deterioration of the wood frame components, particularly around the perimeter of the

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fallen portion of the north wall. Portions of the floor beams and joists visible from the basement exhibited widespread decay as well as isolated regions of wood-boring insect damage. The decayed condition of the wood caused it to be more prone to separation and failure. While the wind pressures from the tornado may have been sufficient to cause damage to non-deteriorated wood, the relative weakness of the framing and connections facilitated the complete separation of an entire wall and roof facet under wind conditions that otherwise left large portions of the structure and its exterior claddings intact. The mechanism of damage and observed condition of remaining wood framing components indicate that the residence had suffered a significant loss of structural capacity due to long-term deterioration which existed prior to and was not associated with the tornado damage. This deterioration likely included portions of the framing which were not visible at the time of inspection as they were concealed behind wall, floor, and ceiling finishes. The apparent widespread deterioration would require substantial repairs or complete replacement to facilitate proper repair of the damage caused by the tornado.

The foundation of the residence likewise exhibited conditions consistent with long-term deterioration. The mortar in the joints of the stone foundation walls was very soft, readily crumbling under light pressure. Widespread cracking and deterioration of the mortar was accompanied by large gaps between stone units and extensive vegetative growth in and through the masonry joints. Portions of the stone foundation walls had failed, particularly near window openings. The deterioration of the foundation walls was sufficient to indicate a reduction of capacity of the foundation from its original design. Based on the age of the residence, the foundation would not meet current building code requirements for new construction and would require substantial modification or replacement prior to reconstruction of the residence over it. We therefore concluded that long-term structural deficiencies in the Gough residence that occurred prior to the tornado combined with separation of the wall connections caused by the tornado resulted in damage to the residence which was not reasonably repairable.

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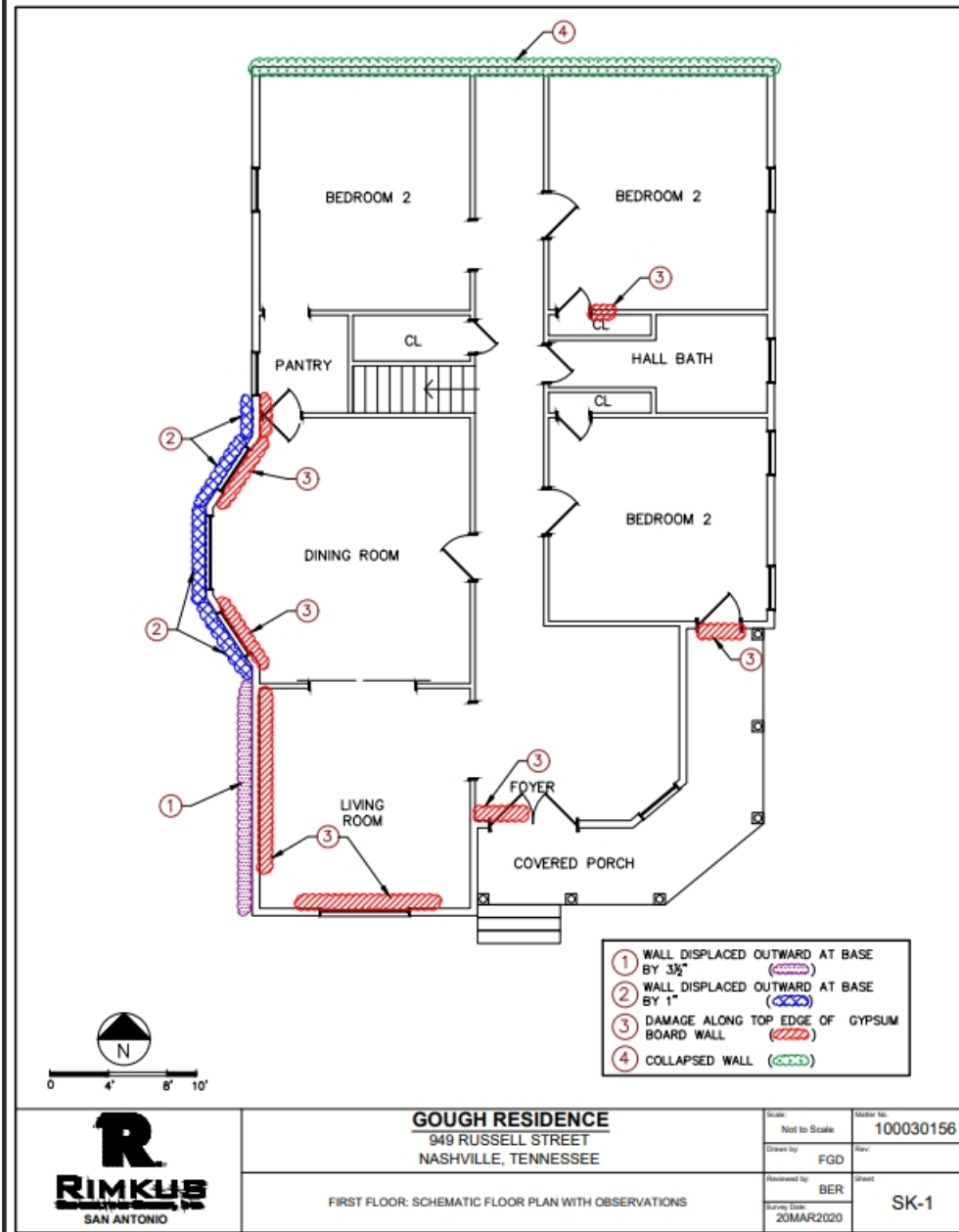
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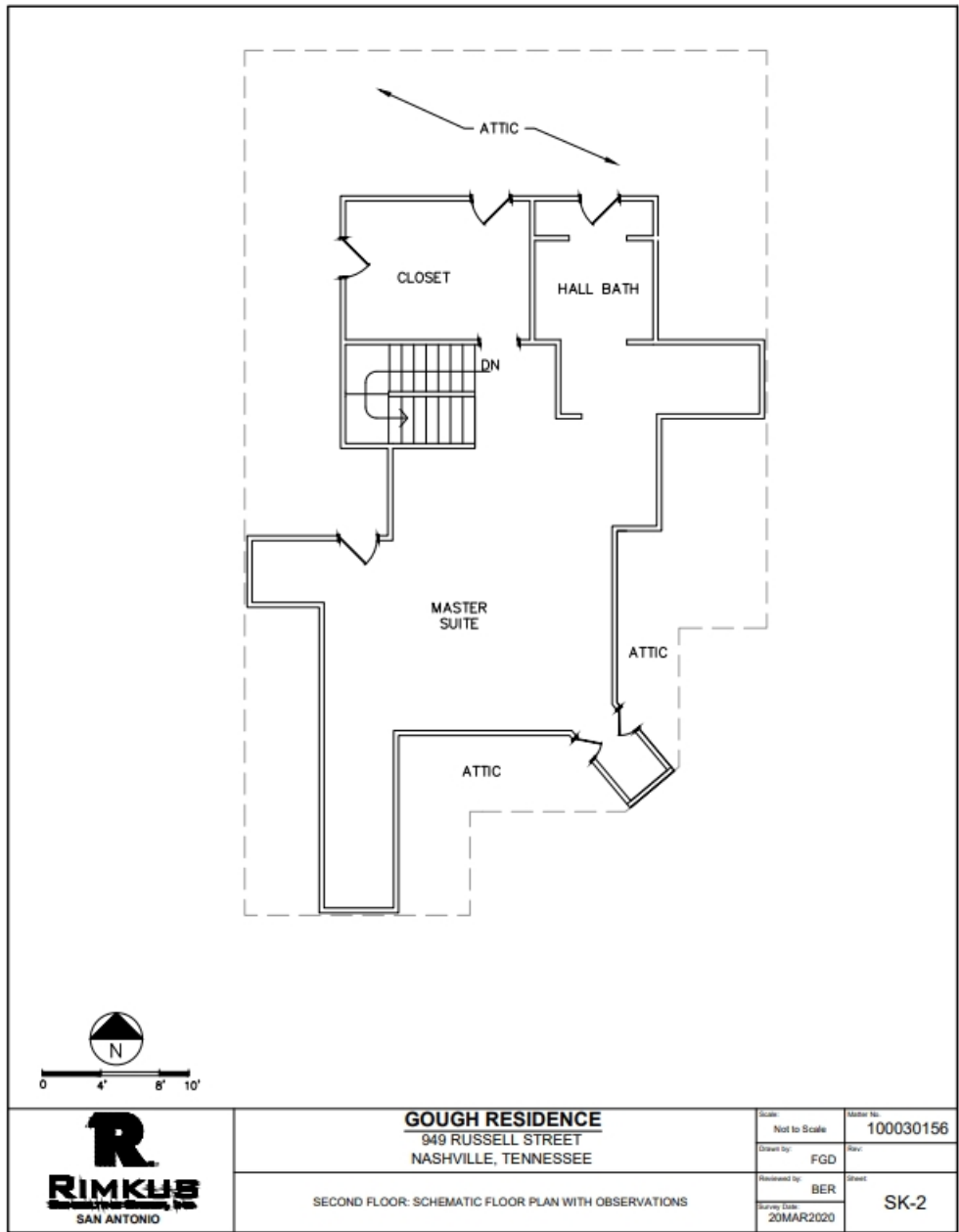
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Photograph 1
South (front) elevation of the residence.



Photograph 3
North (rear) elevation of the residence.



Photograph 5
Outward deflection of the wood siding on the east elevation.



Photograph 7
Debris from the north wall resting on the failed deck.



Photograph 2
East elevation of the residence.



Photograph 4
West elevation of the residence.



Photograph 6
The north wall had fallen away from the residence.



Photograph 8
Typical intact windows in the north wall debris.



April 27, 2020
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April 27, 2020
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April 27, 2020
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April 27, 2020
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Photograph 9
Deterioration of the wood framing in an exposed portion of the wall.



Photograph 11
Typical deterioration of the floor framing near the perimeter.



Photograph 13
Close-up view of the exposed wood planks on the north slope of the roof.



Photograph 15
Close-up view of the open mortar joints in the stone foundation wall.



Photograph 10
Deterioration and a former repair along the bottom of the north elevation.



Photograph 12
Roof covering and a portion of the wood planks were missing on the north slope.



Photograph 14
Cracks and deterioration in the mortar joints and organic growth on the foundation wall.



Photograph 16
Cracks in the stone foundation wall near the northwest corner of the residence (red arrow).



April 27, 2020
Rimkus File No. 100030156

April 27, 2020
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April 27, 2020
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April 27, 2020
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Photograph 17
View of the fallen north wall from the kitchen.



Photograph 18
Separated gypsum wall covering on the west wall of the living room.



April 27, 2020
Rimkus File No. 100030156

Photograph 19
Displaced west wall of the dining room.



Photograph 20
Gap between adjacent wall sections near the fireplace in the dining room.



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Photograph 21
Dislodged floor tiles and the bound door in the pantry.



Photograph 22
View of the bound door at the doorway between the dining room and the pantry.



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Photograph 23
Cracking and separation at the crown molding and upper wall joints.



Photograph 24
Typical cracks in the ceiling and upper wall areas on the second story.



April 27, 2020
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Photograph 25
Typical cracks in the ceiling and upper-wall areas on the second story.



Photograph 26
Overview of the basement.



April 27, 2020
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Photograph 27
Detached and fallen door at the west side of the basement.



Photograph 28
Crumbling and fallen stone near a window on the east side of the basement.



April 27, 2020
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Photograph 29
Daylight visible through fallen stones near the top of the north wall of the basement



Photograph 30
View along the previously spliced and repaired beam in the basement, facing north. Note deflection at the north end, indicated by the red line.



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Photograph 31
Splice near the south end of the previously repaired beam.



Photograph 32
Damage from wood-boring insects.



April 27, 2020
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Photograph 33
Insect galleries in a structural beam.



Photograph 34
Extensive wood boring insect activity and deteriorated wood.



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Rimkus Consulting Group, Inc.
2630 Elm Hill Pike, Suite 130
Nashville, TN 37214
Telephone: (615) 883-4115

December 16, 2020

Mr. Robert Huggins
Robert Huggins & JTRE1, LLC
949 Russell Street
Nashville, TN 37206

Re: Rimkus File No: 100053230
Subject: Report of Findings

Dear Mr. Huggins:

On March 3, 2020, a tornado reportedly caused damage to the residence located at 949 Russell Street in Nashville, Tennessee.

Rimkus Consulting Group, Inc. (Rimkus) was retained by Blair & Company to determine the extent of structural damage and provide recommendations for repair. Rimkus published a **Report of Findings** pursuant that investigation on April 27, 2020 (Rimkus File No. 100030156).

Subsequently, we were informed that the property had been sold, and were asked by Mr. Robert Huggins to provide conceptual repair recommendations and comment on the classification of the extent of damage to the property per the applicable code.

This **Report of Findings** was prepared by Brendan Ryan, P.E., and relied on the full **Basis of Report** contained in our **Report of Findings** for Rimkus File No. 100030156 and telephone conversations with Mr. Huggins. This report was reviewed by Mr. Andrew Sharer, Property Division Manager.

Conclusions

1. Damage to the residence met the criteria to be considered "Substantial Structural Damage" as defined by the 2012 International Building Code.
2. The structure was effectively not reparable in its state as observed during our inspection on March 20, 2020, and should be demolished.

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Discussion

Rimkus Investigation

The Rimkus inspection on March 20, 2020, documented that the entirety of the north wall of the house had fallen to the ground and the west wall had separated at its base as a result of pressurization by the tornado. Additional structural deficiencies to portions of the wood framing systems and stone masonry foundation were the result of long-term deterioration of the building materials.

Code Review

Review of Title 16 "Building Codes and Construction" in "The Code of the Metropolitan Government of Nashville and Davidson County, Tennessee" identified the model building design codes adopted. The adopted model codes include the 2012 International Building Code with Local Amendments.

Section 16.08.012 of the referenced code provided the local amendments to the model code.

Definitions taken from Chapter 2 of the 2012 international Building Code:

Substantial Structural Damage. A Condition where:

1. In any story, the vertical elements of the lateral force resisting system have suffered damage such that the lateral load-carrying capacity of the structure in any horizontal direction has been reduced by more than 33 percent from its predamaged condition; or
2. The capacity of any vertical gravity load-carrying component, or any group of such components, that supports more than 30 percent of the total area of the structure's floors and roofs has been reduced more than 20 percent from its predamaged condition and the remaining capacity of such affected elements with respect to all dead and live loads, is less than 75 percent of that required by this code for new buildings of similar structure, purpose and location.

From Chapter 34 of the 2012 International Building Code:

3405.1 General.

Buildings and structures, and parts thereof, shall be repaired in compliance with Section 3405 and Section 3401.2. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the requirements for alterations in this chapter. Routine maintenance required by Section 3401.2, ordinary repairs exempt from permit in accordance with Section 105.2, and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.

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3405.2 Substantial structural damage to vertical elements of the lateral force-resisting system.

A building that has sustained substantial structural damage to the vertical elements of its lateral force-resisting system shall be evaluated and repaired in accordance with the applicable provisions of Sections 3405.2.1 through 3405.2.3.

Exceptions:

1. Buildings assigned to Seismic Design Category A, B or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.
2. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.

3505.2.1 Evaluation.

The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the building official. The evaluation shall establish whether the damaged building, if repaired to its predamage state, would comply with the provisions of the International Building Code for wind and earthquake loads.

Wind loads for this evaluation shall be those prescribed in Section 1609 of the International Building Code. Earthquake loads for this evaluation, if required, shall be permitted to be 75 percent of those prescribed in Section 1613.

3405.2.2 Extent of repair for compliant buildings.

If the evaluation establishes compliance of the predamage building in accordance with Section 404.2.1, then repairs shall be permitted that restore the building to its predamage state, based on material properties and design strengths applicable at the time of original construction.

3405.2.3 Extent of repair for noncompliant buildings.

If the evaluation does not establish compliance of the predamage building in accordance with Section 404.2.1, then the building shall be rehabilitated to comply with applicable provisions of the International Building Code for load combinations that include wind or seismic loads. The wind loads for the repair shall be as required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be as required by the International Building Code. Earthquake loads for this rehabilitation design shall be those required for the design of the predamage building, but not less than 75 percent of those prescribed in Section 1613. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the International Building Code for new buildings of similar structure, purpose and location.

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3405.3 Substantial structural damage to gravity load-carrying components.

Gravity load-carrying components that have sustained substantial structural damage shall be rehabilitated to comply with the applicable provisions of the International Building Code for dead and live loads. Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects. Existing gravity load-carrying structural elements shall be permitted to be designed for live loads approved prior to the damage. Non-damaged gravity load-carrying components that receive dead, live or snow loads from rehabilitated components shall also be rehabilitated or shown to have the capacity to carry the design loads of the rehabilitation design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of this code for new buildings of similar structure, purpose and location.

3405.3.1 Lateral force-resisting elements.

Regardless of the level of damage to vertical elements of the lateral force-resisting system, if substantial structural damage to gravity load-carrying components was caused primarily by wind or earthquake effects, then the building shall be evaluated in accordance with Section 3405.2.1 and, if noncompliant, rehabilitated in accordance with Section 3405.2.3.

Exceptions:

1. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.
2. Buildings assigned to Seismic Design Category A, B or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.

3405.4 Less than substantial structural damage

For damage less than Substantial Structural Damage, repairs shall be allowed that restore the building to its predamage state, based on materials and properties and design strengths applicable at the time of original construction. New structural members and connections for this repair shall comply with the detailing provisions of this code for new buildings of similar structure purpose and location.

Review of Title 16 "Building Codes and Construction" in "The Code of the Metropolitan Government of Nashville and Davidson County, Tennessee" also identified section 16.24.590 to repair or demolish a structure based on the value of the structure.

16.24.590 - Order to repair, vacate or demolish required when:

If, after such notice and hearing, as provided in Section 16.24.580, the director or the director's authorized agent determines that the dwelling or structure under consideration is unfit for human habitation, occupation, or use, the individual making the determination shall state in writing the findings of fact in support of such determination and shall issue and cause to be served upon the owner thereof an order:

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1. If the repair, alteration, or improvement of such dwelling, structure or accessory dwelling or structure can be made at a cost not to exceed fifty percent of the value of the dwelling or structure, requiring the owner, within the time specified in the order, to repair, alter or improve such building or structure to render it fit for human habitation, occupation or use, or to vacate and close the building or structure as a place of human habitation, occupation or use. The order shall allow a reasonable time for the performance of any act it requires. For the purposes of this article, the value of the dwelling or structure shall be assumed to be that established by the tax assessor's office.

a. If the owner fails to comply with the order to repair, alter, improve, or vacate and close the dwelling or structure, the director may cause such dwelling or structure to be repaired, altered, improved, or vacated and closed, and may cause to be posted on the main entrance of any dwelling or structure so vacated and closed, a placard with the following words, "This Building Is Unfit for Human Habitation, Occupation or Use. The Use or Occupancy of This Building is Unlawful and Prohibited by Order of the Director of the Department of Codes Administration." Such placard shall remain posted until the required repairs, alterations, or improvements are made. It is unlawful for any person to remove such notice without written permission of the director or for any person to enter such dwelling or structure except for the purpose of making the required repairs, alterations, or improvements.

b. A dwelling or structure closed pursuant to this section shall be securely closed by boarding-up all exterior openings such that a person could not gain entry without the use of a key, special tool, or significant physical effort. It shall be the duty of the owner to ensure that dwelling or structure remains closed.

c. It shall be unlawful to occupy or use a dwelling or structure ordered vacated pursuant to this section until a valid certificate of occupancy has been issued.

2. If the repair, alteration, or improvement of such dwelling, structure, or accessory dwelling or structure cannot be made at a cost not to exceed fifty percent of the value of the dwelling or structure, requiring the owner within the time specified in the order to remove or demolish such dwelling or structure. For the purposes of this article, the value of the dwelling or structure shall be assumed to be that established by the tax assessor's office.

a. The director, upon issuing an order to the owner to remove or demolish, shall forward a copy of said order to the vacant property review commission ("the commission"), and, for the purposes of assisting the commission in its review, supply the commission with a copy of the related structural and dwelling unit inspection record, complaint, and title research report. The department of codes administration may supplement these documents with pertinent information acquired during its investigation and hearing.

b. If the owner fails to comply with an order to remove or demolish the dwelling or structure, the director may cause such dwelling or structure to be removed or demolished, except that when the director has been notified by the commission of its intent to gain control of such dwelling or structure prior to the letting of bids for demolition, in which case the department shall suspend its effort to remove or demolish the dwelling or structure pending notice to proceed from the commission.

DOCUMENT - A15 - 2

Analysis

Given the failure of the entirety of the north wall of the residence in comparison with criteria provided in the 2012 IBC for Substantial Structural Damage, which only requires 33 percent of the horizontal load-carrying capacity of the structure to be lost, damage to the residence met the criteria to be considered substantial structural damage.

Because the building has suffered substantial structural damage, the code subsequently requires repairs be made to restore it to its pre-damaged condition, provided that such repairs would result in the structure meeting current code requirements for wind and seismic loading.

Large portions of the wood framing of the floors, walls, and roof structure of the residence exhibited evidence of rot and extensive deterioration. For example, a large proportion of the floor joists had been repaired prior to the tornado damage in an attempt to remediate full section failure resulting from wood-boring insect damage and fungal rot. The repairs had resulted in out-of-plane conditions at the main beam and steel supporting posts such that they could reasonably be expected to have a reduction from their intended capacity.

Portions of the wall framing that were exposed by the tornado damage also showed evidence of past deterioration. The stone masonry foundations were also deteriorated, with reduced capacity with respect to their original construction. These observations were evidence of a widespread reduction in structural capacity throughout the wood framing of the residence, which would require removal and replacement of the majority of the walls and floors at a minimum. As such, the structure was effectively not repairable in its state as observed during our inspection on March 20, 2020, and should be demolished.

Photographs taken during our inspection, including photographs that were not included in this report, were retained in our files and are available to you upon request.

This report was prepared for the exclusive use of Robert Huggins & JTRE1, LLC and was not intended for any other purpose. Our report was based on the information available to us at this time. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions and to revise our opinions and conclusions if necessary and warranted.

DOCUMENT - A15 - 3

A	949 RUSSELL ST. - RIMKUS REPORT
001	scale: N/A

949 RUSSELL ST.

scale: N/A

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15

Thank you for allowing us to provide this service. If you have any questions or need additional assistance, please call.

Sincerely,
RIMKUS CONSULTING GROUP, INC.
Digitally signed by: Brendan E Ryan
Date: 2020.12.16 17:58:10 -05'00'
Brendan E. Ryan, P.E.
Engineering Number 119633
Consultant



Attachments: Curriculum Vitae

DOCUMENT - A16 - 1

A	949 RUSSELL ST. - RIMKUS REPORT
001	scale: N/A



Brendan E. Ryan, P.E.

Consultant
Construction and Property Divisions

Background

Mr. Ryan holds a B.S. degree in Civil Engineering and is a registered professional engineer in Colorado, Iowa, Michigan, Minnesota, South Carolina, Tennessee, and Wyoming.

His experience includes design and analysis in commercial, municipal, and residential structures as well as marine structures.

Mr. Ryan's areas of expertise include civil engineering, structural engineering, construction management, building envelope systems, foundation design, mechanical dredging, and marine construction.

His experience and knowledge cover areas including design, analysis, procurement, competitive bidding, estimating, project scheduling, and project management.

Mr. Ryan's areas of experience also include thermoplastic, EPDM, bitumen, steel, and shingled roof systems, brick and concrete masonry wall systems, glazing systems, polycarbonate panel systems, concrete and asphalt pavements, site drainage, steel fabrication, powder coating processes, bolted steel connections, HDPE pipe assemblies, hazardous material disposal, U.S. Army Corps of Engineers construction management processes, and OSHA policies and regulations.

Contact Information

(616) 333-8820
bryan@rimkus.com

250 Monroe Ave NW
Suite 400
Grand Rapids, MI 49503

949 RUSSELL ST.

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A 16

Renovation Initial Estimate = \$688,000

Summary of proposed renovations

- Demolition of existing items to be installed as new listed below.
- Asphalt shingle roof (includes new sheathing).
- Fascia and soffit
- Gutters
- Hardie board siding
- 2 new fireplaces

- New foundation walls as needed
- Paint exterior
- New windows
- Full landscaping
- Concrete sidewalk
- Deck (stained or painted)
- Roof decking
- Wood fence
- Paint interior
- Hardwood flooring
- Decorative tile (flooring and shower)
- High end kitchen (cabinets, countertop, and appliances) [main floor]
- Median kitchen (cabinets, countertop, and appliances) [basement]
- 2 large master bathrooms
- 1 full bathroom
- Assumed 50% of framing replaced (includes some floor beams, and basement stairs)
- Wall insulation
- Attic insulation
- Drywall – finished
- Interior doors, hardware and trim
- Exterior doors and hardware
- Raised panel wood wainscotting
- Concrete based slab
- French drains installed around perimeter of the house
- New footing (where needed)

- 3 HVAC split units (main floor, second floor, and basement)
- Plumbing (includes fixtures)
- Electrical (includes fixtures)
- Permit
- Dumpster rentals
- Full clean
- Contractor management fee

*Listed items and quote are based on provided renovation plans and in person conversation of desired proposed work.

Let me know if you have any questions.

Thank you,

Marvin

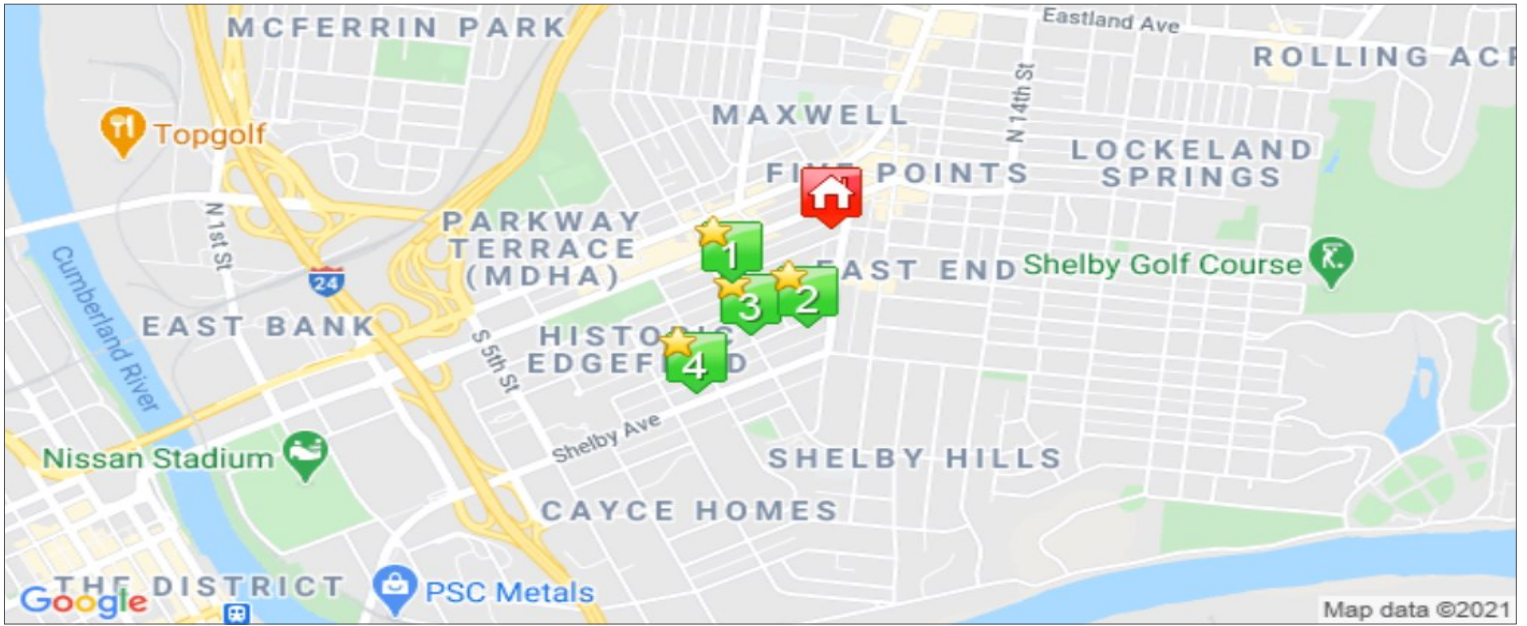
Marvin Martinez, PE | Owner

& General Contractor

M&M Building Company, LLC

P 615.579.7215 | E mmartinez@mmbuildingcompany.com

08212038300 - 949 RUSSELL ST



Subject



Comp #1



Comp #2



Comp #3



	08212038300	08216014700	08216035400	08216029100
Map & Parcel No	08212038300	08216014700	08216035400	08216029100
Address	949 RUSSELL ST	900 RUSSELL ST	920 BOSCOBEL ST	821 BOSCOBEL ST
Distance	-	1,281 ft	1,293 ft	1,627 ft
Sale Date	N/A	29 Aug 2019	3 Dec 2019	3 May 2019
SalePrice/SqFt	N/A	\$277.3	\$330.86	\$290.39
Living Area	1,842	1,639	1,970	1,894
Property Type	SINGLE FAMILY	SINGLE FAMILY	SINGLE FAMILY	SINGLE FAMILY
Neighborhood	EAST NASH RIVER TO...	EAST NASH RIVER TO SHELBY...	EAST NASH RIVER TO SHELBY...	EAST NASH RIVER TO SHELBY...
Bedrooms	4	4	4	3
Baths	2	2	2	2
Half Baths	0	0	0	0
Year Built	1899	1930	1915	1920
Sale Price	N/A	\$454,500	\$651,625	\$550,000
App.Value/SqFt	\$172.42			

Subject



Comp #4



Map & Parcel No	08212038300	08216039000
Address	949 RUSSELL ST	709 SHELBY AVE
Distance	-	2,577 ft
Sale Date	N/A	16 Dec 2019
SalePrice/SqFt	N/A	\$251.46
Living Area	1,842	1,631
Property Type	SINGLE FAMILY	SINGLE FAMILY
Neighborhood	EAST NASH RIVER TO...	EAST NASH RIVER TO SHELBY...
Bedrooms	4	3
Baths	2	2
Half Baths	0	1
Year Built	1899	1920
Sale Price	N/A	\$410,000
App.Value/SqFt	\$172.42	

949 RUSSELL ST - PARCEL DETAILS

PARCEL ID: 08212038300

LEGAL DESCRIPTION:
LOT 27 PAYNE ADDN TO
EDGEFIELD

ACREAGE: 0.26

FRONT DIMENSION: 50'

SIDE DIMENSION: 171.95'

REAR DIMENSION: 85'

CENSUS TRACT: 37019200

COUCIL DISTRICT: 06

LAND USE: SINGLE FAMILY

ZONING: R8

ZONING CODE: OV-HPR

ZONE DESCRIPTION:
MEDIUM DENSITY
RESIDENTIAL, REQUIRING A
MINIMUM 8,000 SQUARE
FOOT LOT AND INTENDED
FOR SINGLE AND TWO-
FAMILY DWELLINGS AT A
DENSITY OF 5.79 DWELLING
UNITS PER ACRE.

Class	RESIDENTIAL
Effective Date	1/1/2020
Land Appraised Value	\$ 220,000.00
Improvement Appraised Value	\$ 244,500.00
Total Appraised Value	\$ 464,500.00
Status	Historical

Enter Address or click button to use your current location

949 RUSSELL ST, 37206

1 Record(s) found.

Parcel ID	Owner	Address
08212038300	HUGGINS, ROBERT & JTRE1, LLC	949 RUSSELL ST NASHVILLE, TN 37206

- 949 RUSSELL VALUE - \$464,500

COMPS - PROPERTY ADDRESS	SALE DATE	SALE PRICE PER SQ FT.	LIVING SQ FT.	TOTAL
1527 DOUGLAS AVE.	7.29.20	\$267.67	1924	\$515,000
1413 LILLIAN ST.	9.24.20	\$252.06	1920	\$580,000
718 SETLIFF PL.	1.6.20	\$212.50	1923	\$585,000
303 N 16TH ST.	2.25.20	\$193.16	1920	\$589,900
935 SILVERDOME PL.	1.11.20	\$235.94	1925	\$604,000

A	949 RUSSELL ST. - PROPERTY DETAILS + METRO EVALUATION
001	scale: N/A

949 RUSSELL ST

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949 RUSSELL ST.
NASHVILLE, TN 37206



PHOTO - A03 - 1

PHOTO - A03 - 2

A	949 RUSSELL ST. - DOCUMENTS
001	scale: N/A

949 RUSSELL ST.

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