

Initial Application Date: 12.3.18

Application # ERES1812.0002 BRES1812.0003

COUNTY OF HARNETT RESIDENTIAL LAND USE APPLICATION

Central Permitting 108 E. Front Street, Lillington, NC 27546 Phone: (910) 893-7525 ext:2 Fax: (910) 893-2793 www.harnett.org/permits

A RECORDED SURVEY MAP, RECORDED DEED (OR OFFER TO PURCHASE) & SITE PLAN ARE REQUIRED WHEN SUBMITTING A LAND USE APPLICATION

LANDOWNER: Kathy + Randall Griffin Mailing Address: 505 EAST H ST
City: ERWIN State: NC Zip: 28379 Contact No: 910-658-2410 Email: kateclawges@charter.net

APPLICANT*: Kathy Griffin Mailing Address: 505 EAST H ST
City: ERWIN State: NC Zip: 28379 Contact No: 910-658-2410 Email: kateclawges@charter.net
*Please fill out applicant information if different than landowner

CONTACT NAME APPLYING IN OFFICE: Kathy Griffin Phone # 910-230-0645

PROPERTY LOCATION: Subdivision: ERWIN MILLS, ±NC, SECT 2 Lot #: 11 Lot Size: .25
State Road # _____ State Road Name: H Street Map Book & Page: 1422 10157-0158
Parcel: 06-0597-15-04-0004 PIN: _____

Zoning: _____ Flood Zone: _____ Watershed: _____ Deed Book & Page: 1 Power Company*: _____

*New structures with Progress Energy as service provider need to supply premise number _____ from Progress Energy.

- PROPOSED USE: JOINT of ERWIN Info Only
- SFD: (Size _____ x _____) # Bedrooms: _____ # Baths: _____ Basement (w/w/o bath): _____ Garage: _____ Deck: _____ Crawl Space: _____ Slab: _____ Slab: _____
(Is the bonus room finished? () yes () no w/ a closet? () yes () no (if yes add in with # bedrooms)
 - Mod: (Size _____ x _____) # Bedrooms _____ # Baths _____ Basement (w/w/o bath) _____ Garage: _____ Site Built Deck: _____ On Frame _____ Off Frame _____
(Is the second floor finished? () yes () no Any other site built additions? () yes () no
 - Manufactured Home: _____ SW _____ DW _____ TW (Size _____ x _____) # Bedrooms: _____ Garage: _____ (site built? _____) Deck: _____ (site built? _____)
 - Duplex: (Size _____ x _____) No. Buildings: _____ No. Bedrooms Per Unit: _____
 - Home Occupation: # Rooms: _____ Use: _____ Hours of Operation: _____ #Employees: _____
 - Addition/Accessory/Other: (Size _____ x _____) Use: _____ Closets in addition? () yes () no

Water Supply: _____ County _____ Existing Well _____ New Well (# of dwellings using well _____) *Must have operable water before final

Sewage Supply: _____ New Septic Tank (Complete Checklist) _____ Existing Septic Tank (Complete Checklist) _____ County Sewer

Does owner of this tract of land, own land that contains a manufactured home within five hundred feet (500') of tract listed above? () yes () no

Does the property contain any easements whether underground or overhead () yes () no

Structures (existing or proposed): Single family dwellings: 1 Manufactured Homes: _____ Other (specify): 1 1/4 Sheds #5 on deed

Required Residential Property Line Setbacks:

	Minimum	Actual
Front	<u>7</u>	<u>7</u>
Rear	<u>7</u>	<u>7</u>
Closest Side	<u>7</u>	<u>7</u>
Sidestreet/corner lot	<u>7</u>	<u>7</u>
Nearest Building on same lot	<u>7</u>	<u>7</u>

Comments: We are not changing the footprint of the house. Doing work to repair damage from Florence. Doing work to make it livable inside and up to 2017 NC Existing Building Code. Section 404, Repairs and Chapter 6, Repairs to Code.

PIN - 0597-84-8325



Town of Erwin
Zoning Application & Permit
Planning & Inspections Department

Permit #
[]

Rev Jan2013

Each application should be submitted with an attached plot/site plan with the proposed use/structure showing lot shape, existing and proposed buildings, parking and loading areas, access drives and front, rear, and side yard dimensions.

Name of Applicant	Kathy Griffin	Property Owner	Kathy + Randall Griffin
Home Address	505 EAST H ST	Home Address	505 EAST H ST
City, State, Zip	ERWIN, NC 28339	City, State, Zip	ERWIN, NC 28339
Telephone	910-230-0645 landline	Telephone	910-658-2410 cell
Email	katchlawges@charter.net	Email	katchlawges@Charter.net

PID

Address of Proposed Property	505 EAST H ST		
Parcel Identification Number(s) (PIN)	06059715040004	Estimated Project Cost	
What is the applicant requesting to build / what is the proposed use of the subject property? Be specific.	Home - Residence to be livable		
Description of any proposed improvements to the building or property	Floor and wall surfaces in affected area need to be stripped to the studs and floor and ceiling framing for repair access to determine hidden internal damage.		
What was the Previous Use of the subject property?	Home - residence		
Does the Property Access DOT road?	City streets		
Number of dwelling / structures on the property already	3		
Property / Parcel Size	.25		
MUST circle one that applies to property	Existing/Proposed Septic System	Or	Existing/Proposed County/City Sewer

PAID

NOV 30 2018

Owner/Applicant Must Read and Sign

The undersigned property owner, or duly authorized agent/representative thereof certifies that this application and the forgoing answers, statements, and other information herewith submitted are in all respects true and correct to the best of their knowledge and belief. The undersigning party understands that any incorrect information submitted may result in the revocation of this application. Upon issuance of this permit, the undersigning party agrees to conform to all applicable town ordinances, zoning regulations, and the laws of the State of North Carolina regulating such work and to the specifications of plans herein submitted. The undersigning party authorizes the Town of Erwin to review this request and conduct a site inspection to ensure compliance to this application as approved.

<u>Kathy Griffin</u> Print Name	<u>[Signature]</u> Signature of Owner or Representative	<u>11/29/18</u> Date
------------------------------------	--	-------------------------

For Office Use

Zoning District	DMV	Existing Nonconforming Uses or Features	
Front Yard Setback	18'	Other Permits Required	Conditional Use <input type="checkbox"/> Building <input type="checkbox"/> Fire Marshal <input checked="" type="checkbox"/> Other <input type="checkbox"/>
Side Yard Setback	5'	Zoning Permit Status	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied
Rear Yard Setback	15'	Fee Paid:	10
Comments		Date Paid:	11/30/18
		Staff Initials:	[Signature]

Comments

Signature of Town Representative: <u>[Signature]</u>	Date Approved/Denied: <u>11/30/18</u>
--	---------------------------------------

Not Changing the footprint of the house.
Doing work inside the home to make it be livable on UP to building code
Not in flood plain zone, wetland

TOWN OF ERWIN
pd
clerk
471



3. Two brick piers that previously supported the rear wall at the left corner area have been damaged and require replacement or reconstruction. The brick foundation face wall on the left side and along the rear of the main portion of the home require replacement. The face wall is not a structural wall.
4. The floor and wall surfaces in the affected area of the hallway and leading into the kitchen will be required to be striped to the studs and floor/ceiling framing for repair access and to determine if there is hidden internal damage. Once the structure is stable and reasonably level with replaced piers in place, the framing damage is easily repaired by an NC-licensed general contractor familiar with and highly experienced in repair of aged homes.
5. Some electrical and plumbing damage is present and will require assessment and repair by an NC-licensed electrician and NC-licensed plumber, respectively.
6. A specialty foundation contractor should be contacted to determine the best method or stabilizing the home in its elevated position and returning it to its normal position after the tree stump is removed.

APPLICABLE BUILDING CODES

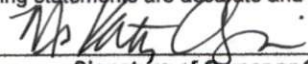
The applicable building code for the repairs to this structure is the 2017 North Carolina Existing Building Code. This Code generally allows repairs to be made with like materials without compliance with current building codes. The basic criteria for the repairs are found in *Section 404, Repairs* and *Chapter 6, Repairs* of this Code.

In accord with the requirements of Section 404, this structure has not sustained "substantial structural damage" to the vertical elements of the lateral force-resisting system of the roof structure, or to the gravity load-carrying components. Thus, the damaged structure can be repaired in such a way that restores the building to its pre-damaged state, based on material properties and design strengths applicable at the time of original construction.

The NC Existing Building Code also has additional provisions that relate to the installation of interconnected battery backup smoke detectors and to the installation of carbon monoxide detectors. These particular code upgrades are specifically required by law in NC and will be enforced by the local inspection authority.

SPECIFIC DIRECTIONS TO THE PROPERTY FROM LILLINGTON: From Lillington take 421 towards
. ERWIN , RIGHT ON HWY 55 (13th ST) At the intersection of
H ST make a left , 2 blocks after you pass the back
Side of Good Hope Hospital (previously) house is the
3rd on left.

If permits are granted I agree to conform to all ordinances and laws of the State of North Carolina regulating such work and the specifications of plans submitted. I hereby state that foregoing statements are accurate and correct to the best of my knowledge. Permit subject to revocation if false information is provided.


Signature of Owner or Owner's Agent

12-3-18
Date

It is the owner/applicants responsibility to provide the county with any applicable information about the subject property, including but not limited to: boundary information, house location, underground or overhead easements, etc. The county or its employees are not responsible for any incorrect or missing information that is contained within these applications.

This application expires 6 months from the initial date if permits have not been issued

200008437

HARNETT COUNTY NC 06/12/2000
\$159.00



Real Estate
Excise Tax

HARNETT COUNTY NC
Book 1422
Pages 0157-0158

FILED 2 PAGE(S)
06/12/2000 11:23 AM
KIMBERLY S. HARGROVE
Register of Deeds

Excise Tax \$159.00

Recording Time, Book and Page

Tax Lot No. Parcel Identifier No. 06-0597-15-04-0004
Verified by County on the day of
by

Mail after recording to William M. Pope, Attorney at Law, PO Box 790, Angier, NC 27501

This instrument was prepared by William M. Pope, Attorney at Law

Brief description for the Index Lot 11, Erwin Mills, Sect 2

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 9th day of June, 2000, by and between

GRANTOR

GRANTEE

Linda IR Danskin and husband,
Glen W. Danskin

12 Galaxy Street
Pope Air Force Base, NC 28307

Randall J. Griffin and wife,
Kathy C. Griffin

505 East H Street
Erwin, NC 28339

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Erwin, Duke Township, Harnett County, North Carolina and more particularly described as follows:

BEING all of Lot No. 11 as shown on a plat entitled "Section 2 of a subdivision for Erwin Mills, Inc., Erwin, N.C., by Pickell & Pickell, Engineers, dated January 1951", and recorded in the office of the Register of Deeds for Harnett County, North Carolina in Plat Book 6 at pages 87, 88, 89 and 90, to which reference is hereby made for a more particular description, and being the identical lot or parcel of land conveyed by deed from Erwin Mills, Inc. to John F. Lynch, dated April 2, 1951, and of record in Book 309, Page 598, Harnett County Registry.

HARNETT COUNTY TAX 157
06-0597-15-04
0004
6-12-00 (167)

HARNETT COUNTY, NORTH CAROLINA
FILED DATE 6/12/2000 TIME 11:23 Am
BOOK 1422 PAGE 157-158
REGISTER OF DEEDS
KIMBERLY S. HARGROVE

The property hereinabove described was acquired by Grantor by instrument recorded in
Deed Book 1157, Page 634-635, Harnett County Registry.

A map showing the above described property is recorded in Plat Book6..... page 87-90.....

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated. Title to the property hereinabove described is subject to the following exceptions:

1. 2000 Town of Erwin and Harnett County ad valorem taxes.
2. General utility easements for power and phone purposes.
3. Roadways and rights of way of record and those visible by inspection of the premises.
4. Such facts as an environmental study of the subject property by an environmental engineer would reveal.
5. Subject to the common areas, including roof and walls of the old maid house located at the southwest corner of this lot, which is common to Lot Nos. 11, 12, 10 & 13.
6. Subject to those matters as would be disclosed by a current survey of the subject property.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors; the day and year first above written.

.....
(Corporate Name)

By:

.....
President

ATTEST:

.....
Secretary (Corporate Seal)

USE BLACK INK ONLY

Linda J.R. Danskin (SEAL)
Linda IR Danskin
[Signature] (SEAL)
..... (SEAL)
..... (SEAL)



NORTH CAROLINA, HARNETT County.

I, a Notary Public of the County and State aforesaid, certify that Linda IR Danskin Grantor,

personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this 9th day of June, 2000.

My commission expires: 6/8/2004 *Katherine Pardue* Notary Public

NORTH CAROLINA, _____ County.

I, a Notary Public of the County and State aforesaid, certify that _____

personally came before me this day and acknowledged that _____ he is _____ Secretary of _____

a North Carolina corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its _____

President, sealed with its corporate seal and attested by _____ as its _____ Secretary.

Witness my hand and official stamp or seal, this _____ day of _____, _____

My commission expires: _____ Notary Public

The foregoing Certificate(s) of Katherine Pardue, a notary public for Harnett County, North Carolina

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof.

By Kimberly S. Hargrove REGISTER OF DEEDS FOR Harnett COUNTY
[Signature] Deputy/Assistant - Register of Deeds 158



Application # _____

Harnett County Central Permitting

PO Box 65 Lillington, NC 27546

910-893-7525 Fax 910-893-2793 www.harnett.org/permits

* Each section below to be filled out by whomever performing work. Must be owner or licensed contractor. Address, company name & phone must match information on license.

Application for Residential Building and Trades Permit

Owner's Name: _____ Date: _____

Site Address: _____ Phone: _____

Subdivision: _____ Lot: _____

Description of Proposed Work: _____

General Contractor Information

* M. Katz
Building Contractor's Company Name _____ Telephone _____
Address _____ Email Address _____
License # _____

Electrical Contractor Information

Description of Work _____ Service Size: _____ Amps T-Pole: Yes No
* M. Katz
Electrical Contractor's Company Name _____ Telephone _____
Address _____ Email Address _____
License # _____

Mechanical/HVAC Contractor Information

Description of Work _____
Mechanical Contractor's Company Name _____ Telephone _____
Address _____ Email Address _____
License # _____

Plumbing Contractor Information

Description of Work _____ # Baths _____
* M. Katz
Plumbing Contractor's Company Name _____ Telephone _____
Address _____ Email Address _____
License # _____

Insulation Contractor Information

Insulation Contractor's Company Name & Address _____ Telephone _____

***NOTE: General Contractor / owner must fill out and sign the second page of this application.**



I hereby certify that I have the authority to make necessary application, that the application is correct and that the construction will conform to the regulations in the Building, Electrical, Plumbing and Mechanical codes, and the Harnett County Zoning Ordinance. I state the information on the above contractors is correct as known to me and that **by signing below I have obtained all subcontractors permission to obtain these permits** and if **any** changes occur including listed contractors, site plan, number of bedrooms, building and trade plans, Environmental Health permit changes or proposed use changes, I certify it is my responsibility to notify the Harnett County Central Permitting Department of any and all changes.

EXPIRED PERMIT FEES - 6 Months to 2 years permit re-issue fee is \$150.00. After 2 years re-issue fee is as per current fee schedule.

Mr. Katz, Officer
Signature of Owner/Contractor/Officer(s) of Corporation

Dec 3, 2018
Date

Affidavit for Worker's Compensation N.C.G.S. 87-14

The undersigned applicant being the:

General Contractor Owner Officer/Agent of the Contractor or Owner

Do hereby confirm under penalties of perjury that the person(s), firm(s) or corporation(s) performing the work set forth in the permit:

Has three (3) or more employees and has obtained workers' compensation insurance to cover them.

Has one (1) or more subcontractors(s) and has obtained workers' compensation insurance to cover them.

Has one (1) or more subcontractors(s) who has their own policy of workers' compensation insurance covering themselves.

Has no more than two (2) employees and no subcontractors.

While working on the project for which this permit is sought it is understood that the Central Permitting Department issuing the permit may require certificates of coverage of worker's compensation insurance prior to issuance of the permit and at any time during the permitted work from any person, firm or corporation carrying out the work.

Sign w/Title: Mr. Katz, Officer Date: 12-3-18



FORENSIC™

ANALYSIS & ENGINEERING

November 12, 2018

Mr. Ken Strand
State Farm Insurance
PO Box 106169
Atlanta, GA 30348-6169

Re: Damage from Falling Tree
State Farm Claim: #33-5770-G43
Insured: Randall & Kathy Griffen
D.O.L.: 9/14/2018
FAEC File No.: 500-248-NC-18

Dear Mr. Strand:

FORENSIC ANALYSIS & ENGINEERING CORPORATION (FAEC) is pleased to provide the following report that summarizes our investigational activities in this assigned loss. We trust that it will be found to be informative and suitable for its intended purposes.

BACKGROUND INFORMATION

FAEC was contacted on October 22, 2018 and requested to travel to the insured residence in Erwin, NC to perform an engineering investigation and evaluation into the claimed loss. Specifically, we were asked to examine the structure of the insured property located at 505 East H Street and to provide an objective expert opinion, including supporting rationale, that fulfills the following provided request:

- Inspect the structure, focusing on the left rear quadrant where a falling tree uplifted the home.
- Determine the extent of structural damage to the home and provide recommendations for repair, addressing the applicable building codes as well.

Accident Reconstruction • Electrical • Evidence Management • Expert Witness • Fire Cause & Origin • Geo-Technical • Marine • Mechanical • Product Defects • System Failures

"Establishing Why"™
Since 1966



Northeastern Regional Office
P.O. Box 898 | Portsmouth, NH 03802
603.427.0111

USA Eastern Operations Center
2503 58th Street, Suite A | Hampton, VA 23661
757.265.9333

Southeastern Regional Office
700 Celebration Ave, Suite 203 | Celebration, FL 34747
407.351.6789

PHONE: 800.224.3595

FAX: 757.265.9334

WEB: Forensic-Analysis.com

EMAIL: COM@Forensic-Analysis.com



Upon arrival at the subject property on November 1, 2018 we were met by the insured, Mr. Griffen and yourself. We completed our physical examination and photographic documentation of the property and provided a preliminary verbal summary of our technical findings to you on that day.

Access was granted the structure by the insured. The inspection involved visual observations with no invasive measures and was limited to readily visible elements. Selected photographs from the inspection are attached.

The insured risk is a 2,610-sf, two-story residential structure built in 1903. The home has wood siding, an asphalt shingle roof, and a brick pier crawlspace foundation. The insured purchased the home in June of 2000. The structure faces south.

On the date of loss, Hurricane Florence struck the North Carolina coast and inland areas. WeatherUnderground reports winds of 10-mph gusting to 33-mph from the north and northeast during the day. Precipitation was recorded at 1.96-in for the date of loss.

OBSERVATIONS & FINDINGS

FAEC was asked to perform an engineering investigation and evaluation concerning the structural damage caused by a falling tree at the home of Randall & Kathy Griffen in Erwin, NC. All directional references in this report are from the point of view of an observer standing in front of the structure on East H Street and facing the building, unless otherwise stated.

Based upon the information identified during the course of our onsite investigation, FAEC was able to determine the following:

- This home is in an urban neighborhood of similar homes. The tree that fell was located immediately adjacent to the rear exterior wall of the home on the left side with a root structure that extended well under the home. The tree fell to the northeast. The uplifted root ball lifted the left rear corner of the home at least 1-ft vertically.
- Two brick support piers, one on each side of the tree, failed as a result of the tree movement. The leftmost pier that was damaged was the pier at the left rear corner of the home.
- On the interior, there is a hallway over the immediate area of the tree root. The kitchen is along the rear wall to the right of this hallway. The sill beam of the rear



wall under this hallway has been uplifted at least 12-in at the rear wall, with the hall floor following. The common interior wall within the kitchen shows a significant diagonal crack to the front of the door leading from the hallway into the kitchen. The kitchen floor is uplifted and that uplift decreases as one moves to the right away from the tree location.

- The finish walls in the hallway are T&G wood plank. These show distress, and the rear wall is pushed out to the rear a few inches at its bottom. The window on the left wall near the left rear corner is wracked significantly. The hallway also contains a stairway that leads to the second floor. The floors on the second floor are also uplifted, following the first-floor lead.
- A screened porch is located on the left side of the house, with the rear wall set forward approximately 5-ft from the rear wall of the main structure. This porch shows distress along its rear wall.
- On the exterior, the sill beam along the rear wall is not completely visible but is uplifted at its left end. The rear wall of the home in the area of the hallway projects out several inches at the bottom from the remaining portions of that wall to the left.
- The body of the stump is supporting the left rear corner of the house in its elevated position.
- The crawlspace under was accessed with difficulty. The floor framing under the hallway runs front-to-back and are ledgered to a left-to-right girder placed an estimated 12-ft- from the rear wall of the home and supported by brick piers at each end. At least one of the floor joists, the one immediately above the tree root ball, is broken.
- The girder pier on the left side is intact, although the brick face wall between that pier and left rear corner is leaning inward.
- A significant tree root, at least 4-in in diameter extends up the floor joists bay towards the front of the home. This root has pushed the subfloor up locally.
- The floor framing under the wall between the kitchen and the hallway is also a girder, and the joists under the kitchen run left-to-right. These joists appear to be in good condition, but the joists along the rear wall are not fully visible. The right corner pier does not show damage, although the rear face wall is damaged.



ANALYSIS AND DISCUSSION

Basically, this house is being supported by the right corner pier and the right center pier under the kitchen area and by the tree root, which is supporting the left rear quadrant in its elevated position.

The damage to the framing is more due to displacement caused by the uplift movement of the root ball than by structural failure of the framing members. Only one failed floor joist was observed, although there may be more, including a sill beam that may turn out to be damaged. The two piers to the left side of the rear wall of the home have failed as well.

Once the tree is removed from under the rear wall and the rear wall is re-supported, then the framing misalignments both vertically and laterally can be made through normal carpentry techniques. This will involve stripping the wall surfaces in the affected rooms.

The issue is how to support the rear wall while the tree stump is removed. I have suggested to the insured that a specialty foundation contractor inspect the site. It is possible that helical piers can be installed to support the left rear v-corner while the stump is removed, then readjusted to support the home at a normal level or removed in the event that new footings and piers are constructed after the tree is out of the way.

OPINIONS

The conclusions and opinions presented in this report are based on the results of FAEC's investigation and analysis of this incident based upon the facts, as we know them to be at this time. If additional information or facts become available which materially affect the analysis performed, the conclusions and opinions presented herein are subject to revision accordingly. Based upon our onsite evaluation, examination of the physical evidence and information that was provided to FAEC, we have been able to conclude the following:

1. This home is repairable with normal carpentry procedures once it is stabilized with the tree stump and root ball removed. The issue is how to support the home in its elevated position while the tree is removed.
2. The wood framed structure under the hallway and partially under the kitchen has been uplifted by the root ball of a large tree that was located immediately adjacent to the rear wall of the home behind an interior hallway on the left side of the home. Structural damage to the framing is minimal with only one (but possible other) floor members damaged. The damage to the home is primarily from displacement and misalignment of the structure in both the vertical and lateral directions.



3. Two brick piers that previously supported the rear wall at the left corner area have been damaged and require replacement or reconstruction. The brick foundation face wall on the left side and along the rear of the main portion of the home require replacement. The face wall is not a structural wall.
4. The floor and wall surfaces in the affected area of the hallway and leading into the kitchen will be required to be striped to the studs and floor/ceiling framing for repair access and to determine if there is hidden internal damage. Once the structure is stable and reasonably level with replaced piers in place, the framing damage is easily repaired by an NC-licensed general contractor familiar with and highly experienced in repair of aged homes.
5. Some electrical and plumbing damage is present and will require assessment and repair by an NC-licensed electrician and NC-licensed plumber, respectively.
6. A specialty foundation contractor should be contacted to determine the best method or stabilizing the home in its elevated position and returning it to its normal position after the tree stump is removed.

APPLICABLE BUILDING CODES

The applicable building code for the repairs to this structure is the 2017 North Carolina Existing Building Code. This Code generally allows repairs to be made with like materials without compliance with current building codes. The basic criteria for the repairs are found in *Section 404, Repairs* and *Chapter 6, Repairs* of this Code.

In accord with the requirements of Section 404, this structure has not sustained "substantial structural damage" to the vertical elements of the lateral force-resisting system of the roof structure, or to the gravity load-carrying components. Thus, the damaged structure can be repaired in such a way that restores the building to its pre-damaged state, based on material properties and design strengths applicable at the time of original construction.

The NC Existing Building Code also has additional provisions that relate to the installation of interconnected battery backup smoke detectors and to the installation of carbon monoxide detectors. These particular code upgrades are specifically required by law in NC and will be enforced by the local inspection authority.



FORENSIC™
ANALYSIS & ENGINEERING

Policyholder: Randall & Kathy Griffen
Claim Number: 33-5770-G43
FAEC File Number: 500-248-NC-18
Date of Loss: 9/14/2018

PHOTOGRAPHS

Taken by
Dana F. Shave, P.E.
on November 1, 2018



Policyholder: Randall & Kathy Griffen
Claim Number: 33-5770-G43
FAEC File Number: 500-248-NC-18
Date of Loss: 9/14/2018

We have appreciated the opportunity to be of support to State Farm Insurance and your insured in this matter. We trust that you will find our report to be suitable for its intended purposes. We look forward to earning an opportunity to prove our technical competence once again in the near future.

Respectfully submitted,
FORENSIC ANALYSIS & ENGINEERING CORPORATION

E-SIGNED by Dana Shave
on 2018-11-12 19:36:00 UTC

Dana F. Shave, P. E.
Vice President, Engineering
North Carolina PE License 031625

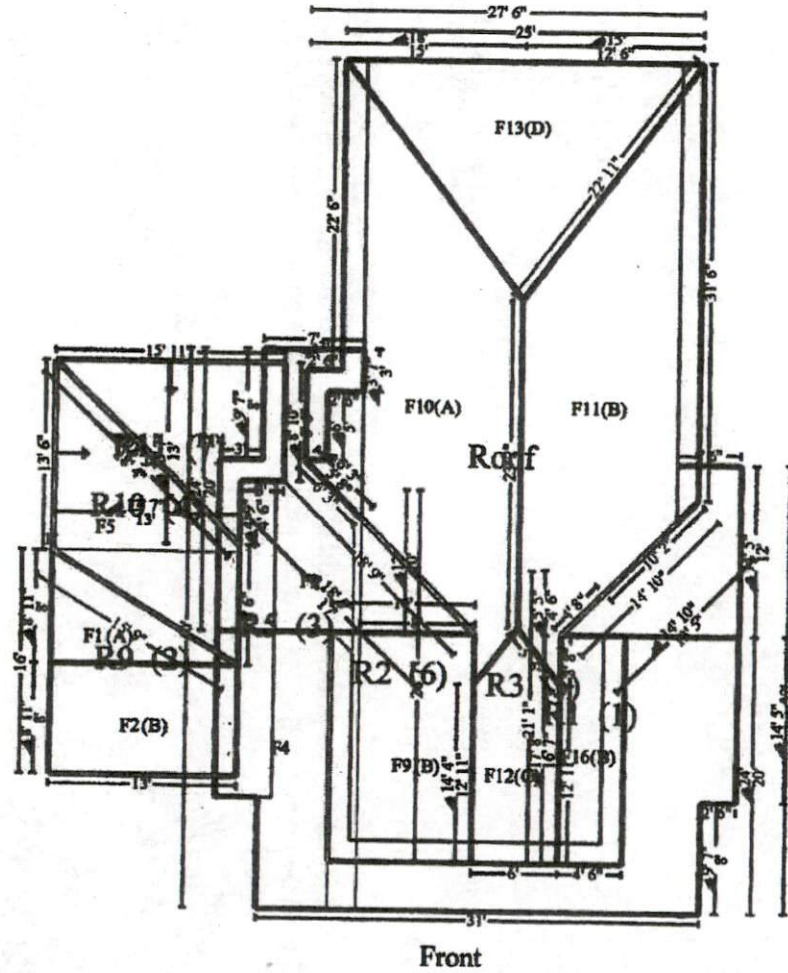


This firm follows a practice of having all technical reports read and reviewed by a peer for understanding and technical accuracy. This report has been reviewed by the undersigned for the firm.

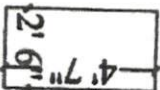
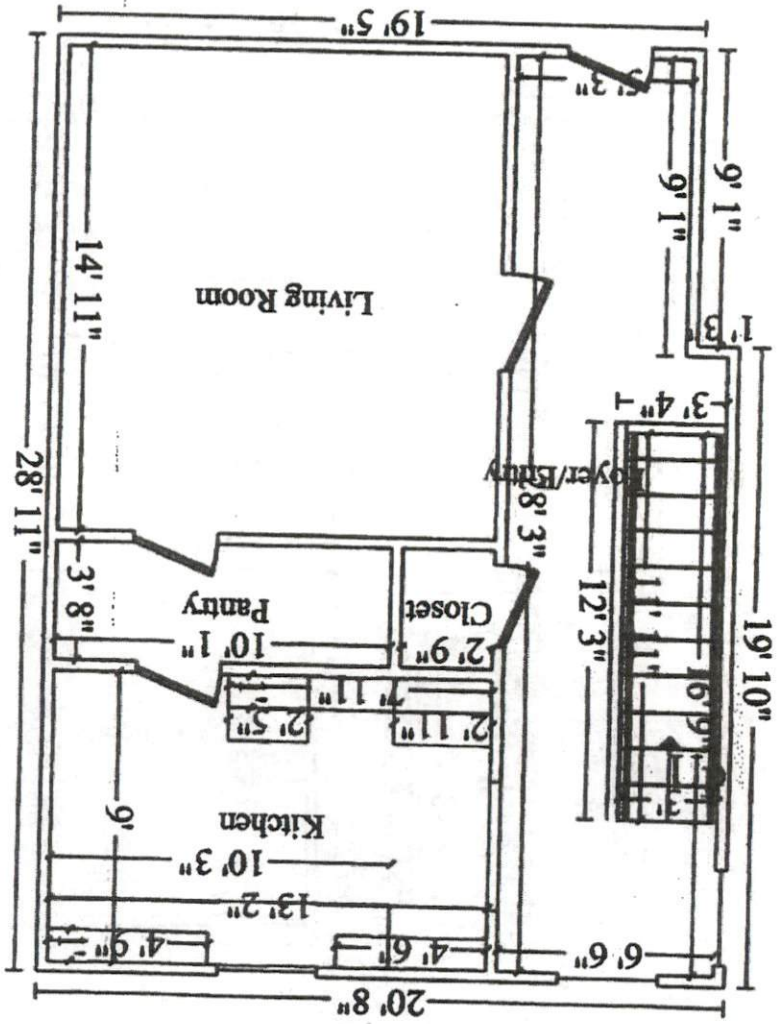
E-SIGNED by Kevin Pruemer
on 2018-11-12 17:35:38 UTC

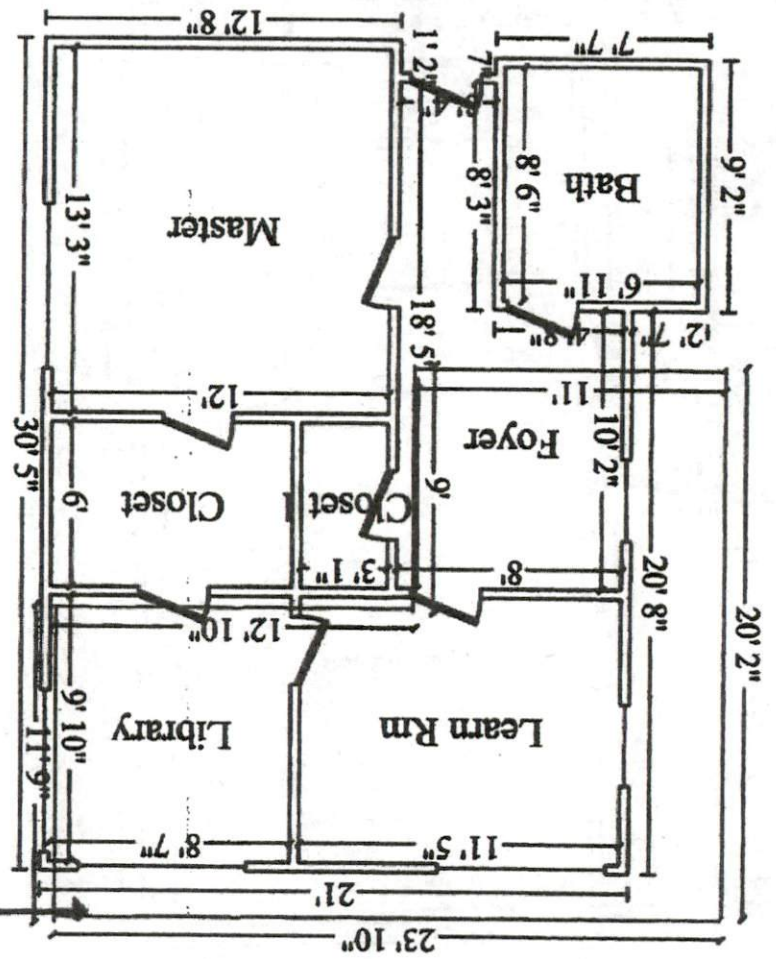
Kevin Pruemer, P.P.
Vice President, Engineering

Dwelling - Exterior

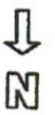


Exterior

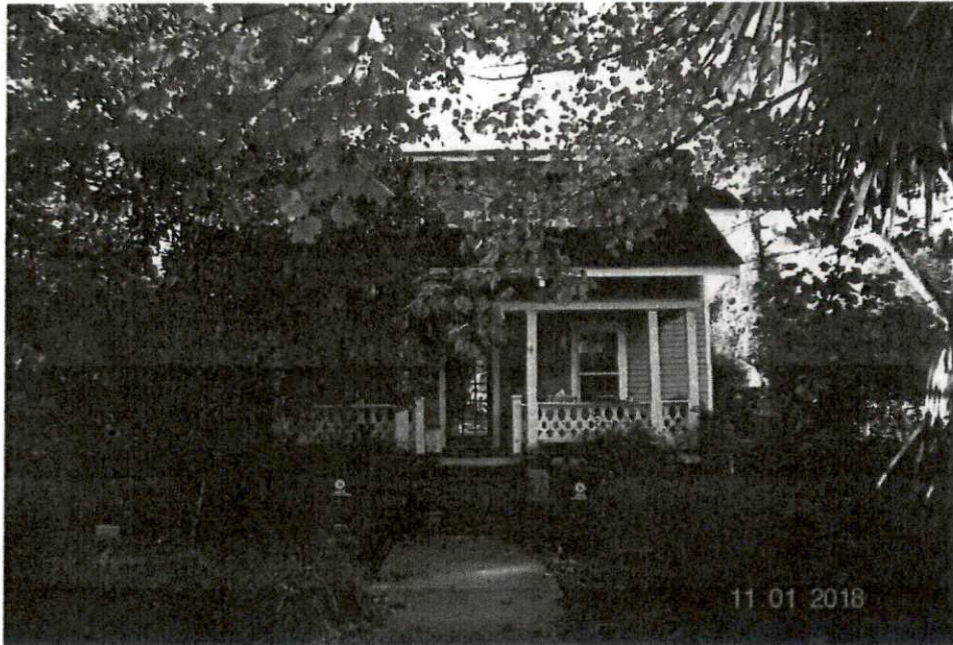




Areas inside green line are being repaired



2nd floor



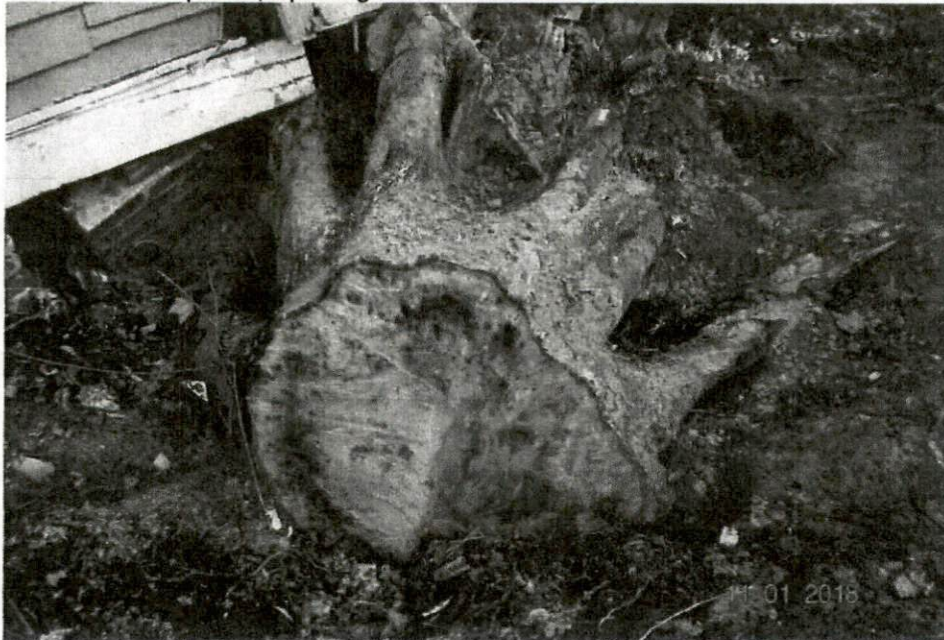
Photograph No. 1 – The insured risk was uplifted at the left rear corner by a large tree that was immediately adjacent to the rear wall and fell away from the house such that the root ball lifted the house framing.



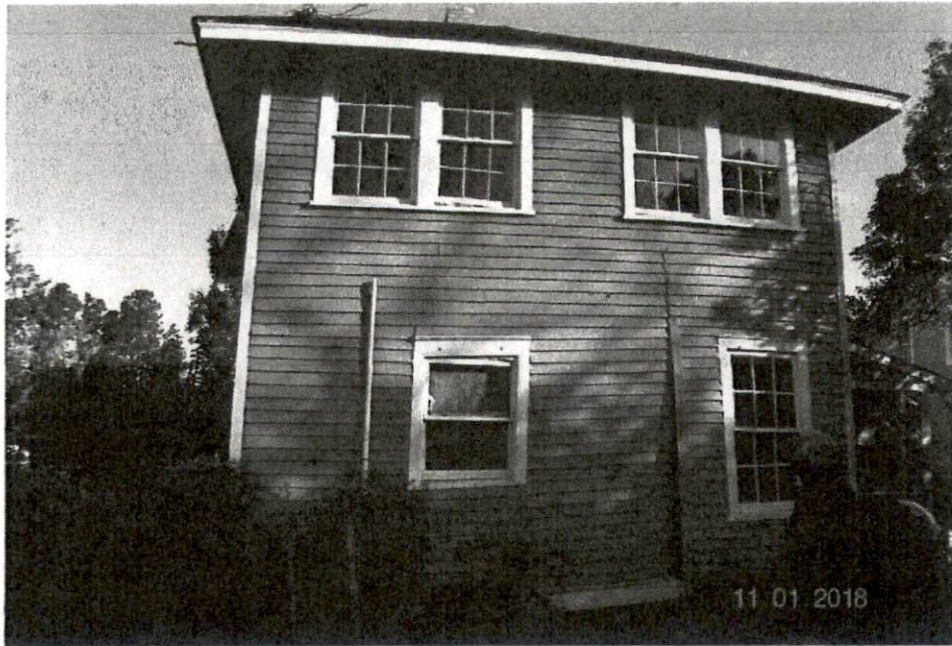
Photograph No. 2 – A view of the home from the right front.



Photograph No. 3 – This is the left rear corner of the home. The tree fell toward the left in this photo, uplifting the left rear corner of the home.



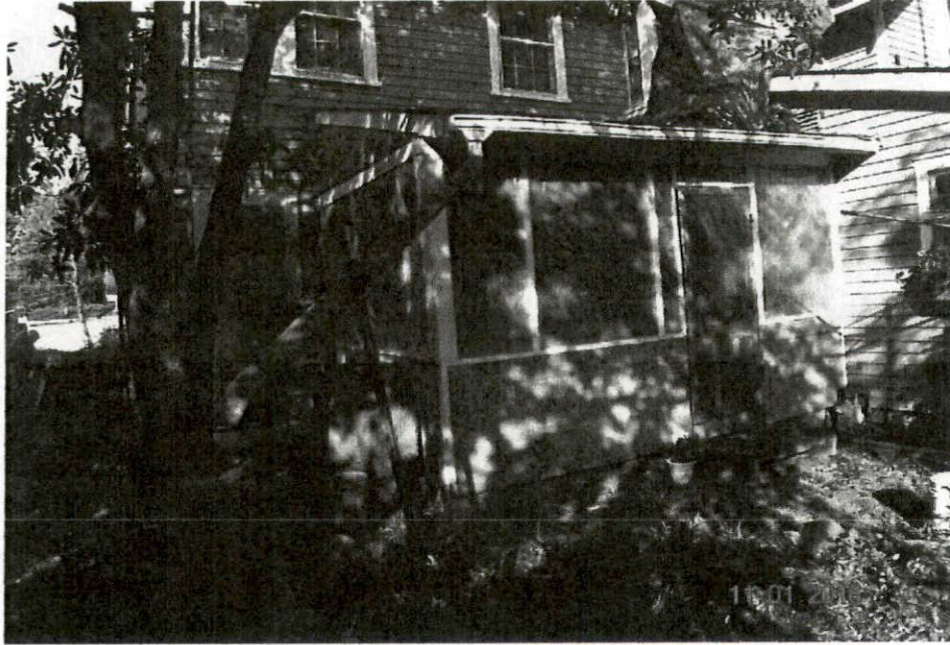
Photograph No. 4 – This is that tree stump. Note the failed brick face wall to the left. There is also a pier in that area that failed.



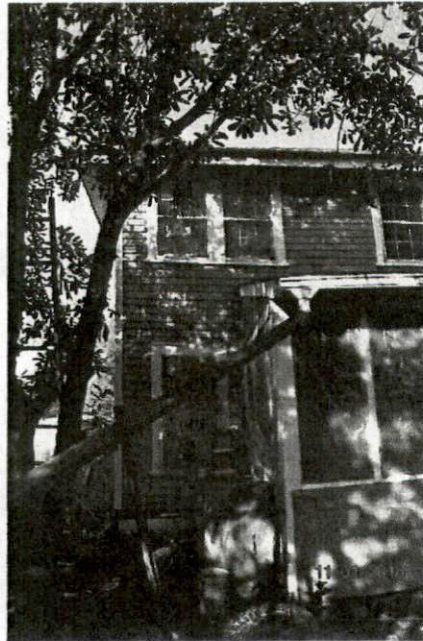
Photograph No. 5 – The rear of the home. The right side in this photo is uplifted and the tree stump is holding it in that elevated position.



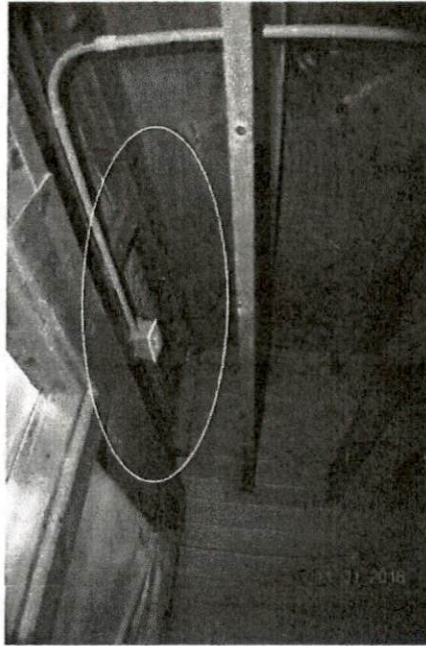
Photograph No. 6 – The left corner pier is damaged. Note the sill beam.



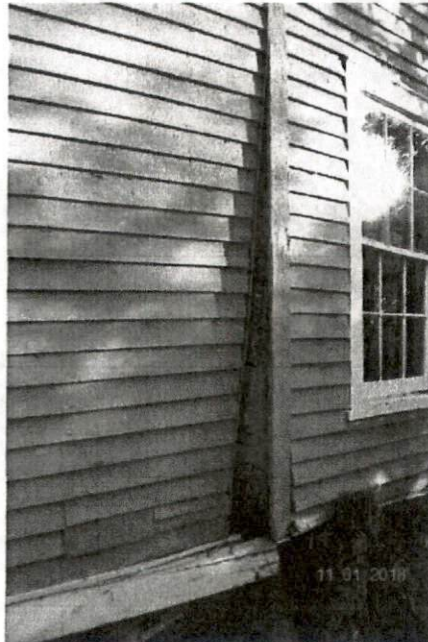
Photograph No. 7 – This is the screened porch along the left side of the home and towards the left rear corner.



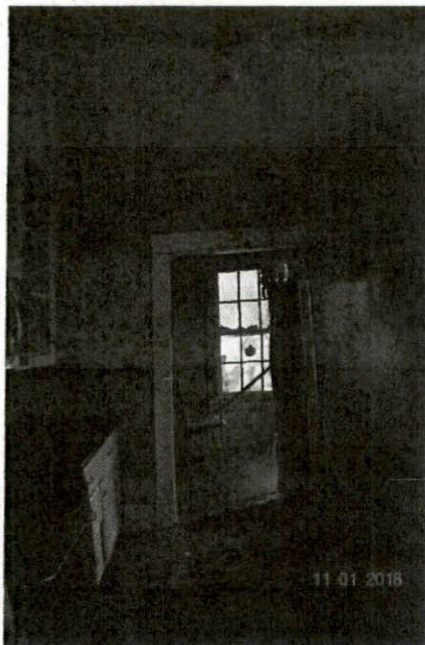
Photograph No. 8 – Another view of the porch and the left rear corner that is uplifted. The rear of the porch also lifted a bit.



Photograph No. 9 – The interior framing of the porch showing some separation at the house.



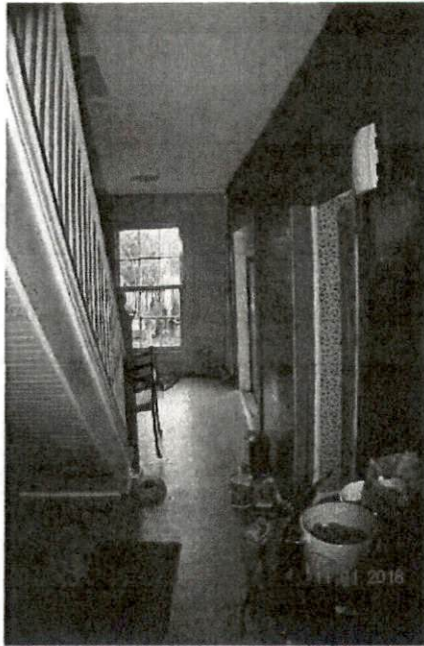
Photograph No. 10 – There is a load bearing wall between the hallway and kitchen. The floor is framed differently on each side of this wall. The hallway side (to the right in this photo) of the rear wall is pushed out a bit.



Photograph No. 11 – The kitchen is on the right side of the rear wall, and the hallway is on the left. This photo looks from the kitchen to the hallway. Note the uplift in the hallway floor.



Photograph No. 12 – The stump is right underneath this hallway.



Photograph No. 13 – That hallway as seen from the front of the house.



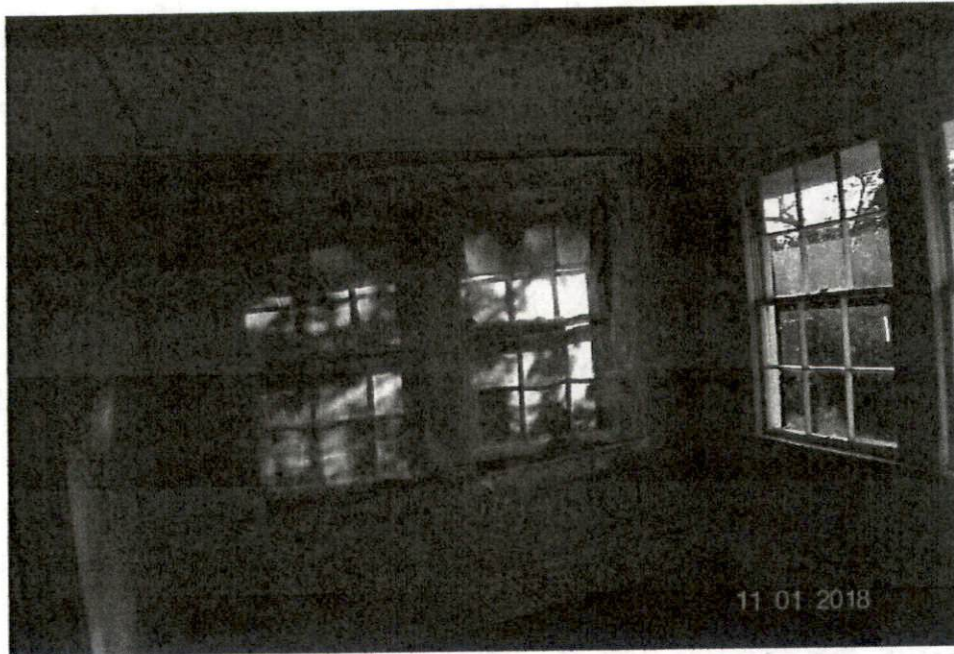
Photograph No. 14 – The rear wall is pushed out a bit.



Photograph No. 15 – This window on the left side at the left rear corner is wracked.



Photograph No. 16 – The room immediately above went along for the ride and shows some distress...



Photograph No. 17 – ...as does the room at the right rear above the kitchen.



Photograph No. 18 – Looking from the crawlspace under to the rear, showing the root ball.



Photograph No. 19 – The pier supporting the left-to-right girder on the left wall is in good shape...



Photograph No. 20 – ... but the face wall is not. The face wall is not a structural component.



Photograph No. 21 – The only damaged framing member observed is this floor joists above the tree stump. There may be other framing members damaged but they are not visible at this time. We cannot see the sill beam beyond the stump and this may be damaged.



Photograph No. 22 – A root that extended well under the floor framing.



Photograph No. 23 – This photo is taken looking under the kitchen from the left toward the right rear corner. The framing under the kitchen appears undamaged.



Photograph No. 24 – This photo is taken from the front looking to the right side of the rear wall. The face wall along the rear is damaged.



FORENSIC™
ANALYSIS & ENGINEERING

Policyholder: Randall & Kathy Griffen
Claim Number: 33-5770-G43
FAEC File Number: 500-248-NC-18
Date of Loss: 9/14/2018

We have appreciated the opportunity to be of support to State Farm Insurance and your insured in this matter. We trust that you will find our report to be suitable for its intended purposes. We look forward to earning an opportunity to prove our technical competence once again in the near future.

Respectfully submitted,
FORENSIC ANALYSIS & ENGINEERING CORPORATION

E-SIGNED by Dana Shave
on 2018-11-12 19:36:00 UTC

Dana F. Shave, P. E.
Vice President, Engineering
North Carolina PE License 031625



This firm follows a practice of having all technical reports read and reviewed by a peer for understanding and technical accuracy. This report has been reviewed by the undersigned for the firm.

E-SIGNED by Kevin Pruemer
on 2018-11-12 17:35:38 UTC

Kevin Pruemer, P.P.
Vice President, Engineering