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April 5, 2023

Mr. Trevor Nuttall
City of Asheboro
146 North Church Street
Asheboro, NC 27203

Reference: Building Structure Report
205 S. Cox Street
Asheboro, NC 27203
SEA Job No. E-8628

Dear Mr. Nuttall:

Per your request, the above referenced residence was visited to perform an “as-is” non invasive visual inspection of the existing house to determine its general condition and what improvements are necessary to ensure the building construction and components are structurally sound, Code compliant, and ADA accessible. Based on our visual inspection of the property, we would like to provide the following information:

This property and house is proposed to be used for the Center City Garden Site. As part of the proposed improvements, the existing house will either be renovated or torn down and a new building constructed, to provide a multi-purpose public facility associated with the Center City Garden project. This report will explain what repairs and improvements will be necessary for the existing house to bring it into compliance with current standards, and acceptable for the proposed use.

The house was originally built in 1955 according to public records. It is a two-story wood framed stick structure over an unfinished basement. Additions were built onto the left and right ends of the house sometime after its original construction. The house foundation appears to be constructed of single layer brick with a secondary exterior veneer layer that extends to the roof line. Hardwood flooring is present throughout most of the original house interior. Carpet and laminate are present at other areas. Most of the interior wall and ceiling finishes are lath and plaster. Plumbing piping original to the house is galvanized and cast iron materials, but some portions have been upgraded to modern materials such as PVC or PEX. Based on our observations of the electrical panel located in the basement at the south wall, the house has a 200amp service connection. Although the panel has been upgraded, most of the electrical wiring throughout the house appears to be 2-wire conductors that are ungrounded. Throughout the exterior, we found various areas of exposed wood trim, such as around wall opening and roof soffits, which has experienced varying degrees of moisture decay. The brick veneer throughout, and especially along the left end and rear of the

house, is experiencing significant cracking and beginning to pull away from the house. Detailed descriptions of our findings are given in the following sections of this report.

Based on our visual observations of the property, below is a list of known repairs which are necessary. For clarity, directional references throughout this report are described from the standpoint of facing the front of the house from South Cox Street.

Exterior:

1. Brick veneer throughout the house exterior is failing. Areas of significant vertical and stair step style cracking are present at several locations. Along the left upper gable end of the house, multiple stair step style cracks are visible over each side of the second story window. At the rear of the house, more cracking is visible, typically of 1/4-inch or more in width. Many of the cracking tends to be located in the areas surrounding the door and window openings. Similar cracks are also present along the front of the house above and/or below the windows and front entry door. Other areas of cracking, not specifically mentioned, may also be present. Multiple factors may be contributing to the brick veneer's failure, such as settlement due to an insufficient or damaged footing. Another factor could be the condition of the brick ties which are responsible for anchoring the veneer to the wood framework of the house. If too few brick ties were used during construction, or if the existing brick ties have rusted and corroded over time, then the veneer will not be held in place sufficiently and could easily begin to shift, as appears to be occurring at this property. To properly repair the existing veneer, it will likely be necessary for the exterior veneer to be removed in its entirety. Then, the veneer would need to be replaced, from the ground up, beginning with a new concrete footing being placed in the ground, assuming the existing footing beneath the veneer is insufficient or non-existent. It should be noted, the foundation layer of the brick as visible from the basement area, which is a separate inner layer from the outer veneer, appears to be in generally good condition. No signs of excessive cracking or settlement were visible in the inner foundation layer at the time of our inspection. However, we did observe extensive moisture intrusion through the brickwork from ground water saturation. The lot along the front of the house is generally damp and is sloping towards the front foundation wall. More information about drainage and lot slope will be given in another section of this report. If during the exterior brick veneer repair foundation settlement, currently concealed, is revealed, additional remedial measures such as the installation of a series of helical piers may also be required.

2. The roof was visually inspected from the ground. Based on our observations, it appears that the roof is in poor condition and may be leaking at serval areas. Water is ponding on the flat roof at the left end of the house, over the addition. Flashing is missing at multiple locations. There are holes between the brick and facia or soffit trim at areas as well. As a result, the building envelope is not weather tight and we believe water to be regularly entering into the framework of the house. It is unknown if moisture decay damage has occurred to portions of the inner framing which is not currently visible. But it was obvious that the exposed trim and woodwork that is visible has experienced decay and therefore must be replaced. The entire existing roof shingling would need to be removed

along with existing associated trim and flashing. When the roof framework and sheathing is exposed and visible, any damaged components would need to be replaced or reinforced as needed. Then a new roof along with all associated flashing, trim work, and exterior cladding can be replaced.

3. Moisture damage was visible at the front door threshold and trim work surrounding the door. Rotten and damaged wood will need to be replaced, along with flashing and other weather proofing measures installed, to ensure the door opening is watertight. The rear basement door is also in poor condition and must be replaced.

4. Windows throughout the house exterior appear to be in questionable to poor condition. The existing windows also appear to be single paned and are not energy efficient by today's standards. We advise for all the windows to be replaced. Trim work and flashing around the windows will also need to be replaced to ensure the wall openings are watertight.

5. A sunporch addition has been built onto the right end of the house sometime in the past. At the time of our inspection, the porch structure appears to be settling and pulling away from the house. Extensive measures to reinforce the sunporch foundation will likely be needed or the porch addition in its entirety may need to be demolished and rebuilt.

6. The wooden decks at the right end and front of the house are in poor condition. Expansive wood decay is present. All decayed or otherwise damaged wooden components must be replaced.

7. Exterior paint was not tested by our firm but given the age of the home we suspect it may contain lead. Further testing is recommended.

8. Vegetation is overgrown adjacent to the house exterior. Mature trees are located in proximity to the house and may undermine the structural integrity of the foundation in the future. All overgrown vegetation and trees near the house should be trimmed and/or removed as needed. Vine growth at the rear of the house inhibited the entirety of the veneer from being visually inspected. We also recommend for trees which are desired to be left in place to be inspected by a qualified arborist to determine if they pose a falling risk. At minimum, limbs overhanging the house should be trimmed back to reduce the possibility of one falling on the house and causing damage to the building and occupants.

Interior:

1. Structural damage from moisture decay was visible to the wood framing components of the floor structure as visible form the basement, beneath the first floor hall bathroom. All damaged joists and sub-flooring components would need to be replaced as needed.

2. Damage from a past termite infestation was visible on a portion of the rim joist and sub-flooring along the left side basement wall, adjacent to the addition crawlspace. This damage did not appear expansive but reinforcement to the

damaged area is advised. We also recommend for the house to be inspected by a qualified pest control professional and treatment provided as recommended by them to ensure no active or future infestations occur.

3. Moisture decay damage was present to the floor framing beneath the fireplace hearth. Damaged components must be replaced as needed.

4. Signs of water intrusion were present along the front basement foundation walls. The front yard generally slopes down towards the house from the street and sidewalk. As a result, water has been seeping through the front basement wall for many years. Measures to improve exterior water flow are recommended, such as re-grading the lot as needed, and/or installing exterior inlet drains. A foundation perimeter drain system with sump pump has been installed at the right half of the basement where a dirt floor is present. This drain system appears to be functioning as intended. While this drain system is advantageous, it does not prevent water from protruding through the walls. Therefore, measures to prevent intrusion from the exterior are recommended. It may be advantageous to excavate along the front of the house and install a water proofing membrane on the wall surface along with an exterior perimeter foundation drain system at the footing level. However, if foundation is excavated, great care must be taken not to damage the structural integrity of the existing house.

5. The left half of the basement contains a concrete floor. There is a sump pump located at the back left corner of the basement (separate from the sump pump at the right side, referenced above). This sump pump at the left side basement was not functioning at the time of our inspection and multiple inches of standing water was present at this area as a result.

6. Termite damage was visible to areas of the interior wood flooring. We assume that when carpet was previously in place, termites infested the area between the carpet and floor. The damage appeared isolated to a few specific locations, primarily in the dining room.

7. The existing wooden stairs leading to the basement from the main level have experience significant moisture decay at the base of the stair stringers and are no longer structurally sound. The existing stairs also do not meet current Building Code standards due to the rise/run height and headroom clearance.

8. We assume there to be little or no insulation in the exterior walls of this home. An invasive inspection was not conducted, so it is unknown what if any insulation is currently installed in the walls. However, insulation properties throughout the house will need to be brought up to current Code standards if the house is renovated for its proposed use.

9. Portions of the plaster finishes throughout the house show signs of stress and/or structural cracking, likely as a result of natural settlement and movement to the home over time. Sings of water damage from roof and/or plumbing leaks were also visible at certain areas.

Electrical:

Existing electrical wiring throughout, which is original to the home, appears to be 2-wire non-grounded conductors. Some wiring and outlets may have been upgraded over the years, but all wiring that is not Code compliant will need to be replaced.

HVAC:

It is our understanding that there is no existing functional HVAC system at this property.

Plumbing:

As previously stated, the existing original plumbing of this house is constructed of galvanized and cast iron piping which would have to be replaced. Close to 100% of the plumbing would need to be replaced anyway to meet the demands of the new proposed use for this building, including one or multiple public ADA accessible restrooms.

Accessibility:

1. If the existing house is renovated to meet the proposed use for the Center City Garden project, all entry and exit ways, corridors, restrooms, etcetera will have to meet current ADA requirements. This house was originally built as a single-family residence and does not meet necessary ADA requirements in its current condition. Therefore, extensive renovations and alterations would have to be conducted for the house to meet these standards.

2. Exterior entries into the house are too narrow and must be widened to 36-inches minimum to meet ADA requirements.

3. The existing entries into the house are not ADA accessible. Ramps or other means of access must be constructed to meet the requirements.

4. New restrooms would have to be built to meet ADA requirements.

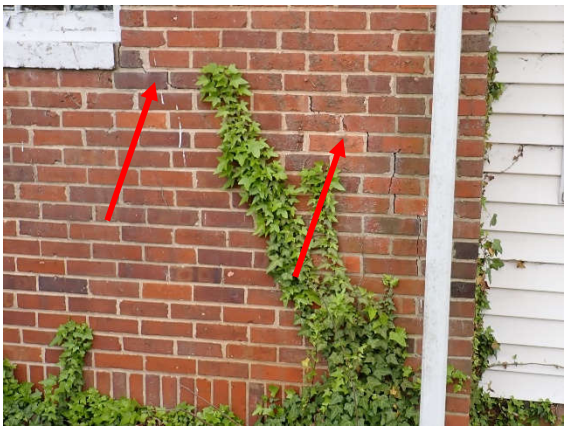
5. Stairs to second floor of house are not ADA accessible, nor do they meet current NC Residential Building Code requirements (tread depth and step height dimensions are not compliant). The upstairs of this house would have to be closed off to the public and/or an elevator would need to be installed. The stairs down to basement also do not meet current Code requirements.

6. In the basement, the existing ceiling height clearance are too low at some locations, due to ductwork or other obstructions in the way. Doorways exiting the basement do not provide enough headroom.

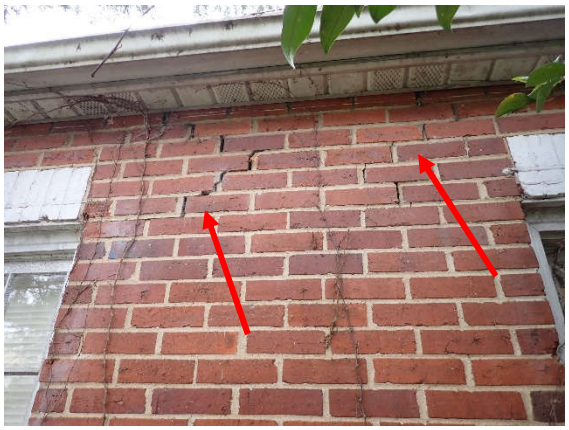
If it is decided to renovate this existing structure and bring it into modern Building Code and ADA compliance, additional Engineering may be required for multiple facets of the renovation process. This office can provide such Engineering if requested but it is outside the scope of this report summary.

Pictures below were taken during the visual inspection of the property:

Picture 1 Front of subject house



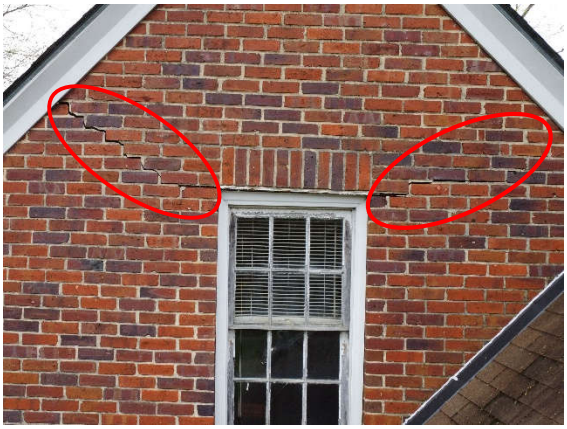
Picture 2 Veneer cracking at front of house, right



Picture 3 Veneer cracking at front of house, left

Picture 4 Moisture decay, rot damage at front door threshold & trim

Picture 5 Right end sunporch addition, may be settling & pulling away from house



Picture 6 Veneer cracking, left gable end, over 2nd story window

Picture 7 Standing water on flat roof, left rear addition

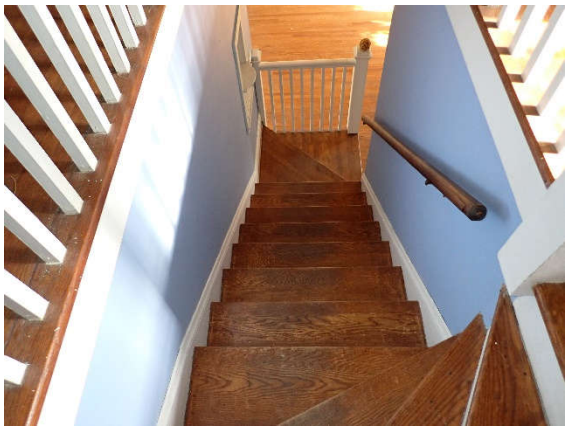
Picture 8 Side and front decks, poor condition

Picture 9 Veneer cracking, rear of house

Picture 10 Veneer cracking, rear of house by corner

Picture 11 Water & cracking damage to interior ceiling

Picture 12 Water damage to interior ceiling



Picture 13 Existing interior stairs, not Code compliant

Picture 14 Moisture intrusion through fireplace brick (from exterior)

Picture 15 Non-grounded two wire receptacle (typical)

Picture 16 Basement stairs, poor condition & not Code compliant

Picture 17 Basement stair stringer, rotted

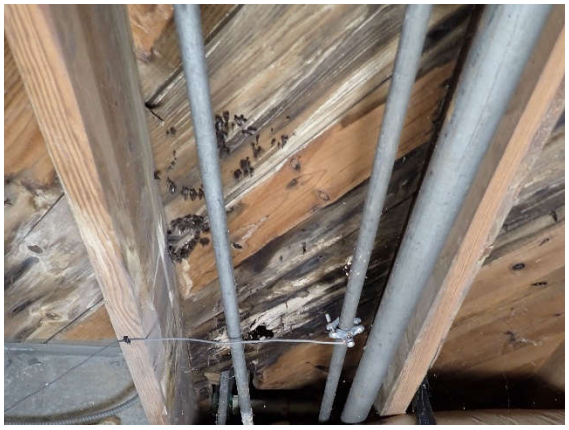
Picture 18 Right half basement/cellar, dirt floor, functional drain system

Picture 19 Moisture intrusion through front basement wall (typical)

Picture 20 Standing water at basement, left half

Picture 21 Termite damage, left side basement wall

Picture 22 Moisture decay damage to wood structure beneath fireplace hearth



Picture 23 Moisture decay damage to floor structure beneath 1st floor hall bathroom

Picture 24 Termite damage to hardwood floor, dining room

Note: pictures displayed above are intended only to give a general representation of the items viewed during the inspection but do not necessarily depict all the structural and Code compliance issues present at this residence.

After completion of our visual inspection and Building Code review of the existing structure, in regard to its proposed future use as a multi-purpose public facility to be used in conjunction with the Center City Garden site, we have concluded the following: The existing incompatible floor plan layout combined with the cost of repair and upgrading to current Building and ADA Code compliance, would be cost prohibitive. Therefore, it is our professional opinion that the more cost effective option would be to remove the existing structure and construct a new building, designed to meet the specific needs of the Center City Garden project.

Please note that all items generated within this report are based on a visual inspection of the property and address only the issues as noted above. No other aspects of the house construction are part of this report summary. As in any inspection of this nature there could be items that cannot be seen visually. Summey Engineering Associates, PLLC is not responsible for those items if they exist.

Should you have any questions or comments please do not hesitate to call me at 336-328-0902.

Sincerely,
Summey Engineering Associates, PLLC

H. Mack Summey, Jr., PE

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CC: File

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