Exhibit L

SHEARLOCK ENGINEERING
structural design consultants

110 Traders Cross
Second Floor
Okatie, SC 29909

HISTORIC TISON-DERST COTTAGE

113 Bridge Street, Bluffton, SC 29910

Structural Conditions Assessment and Code Study

Prepared May 2024

TABLE OF CONTENTS

EXECUTIVE SUMMARY:..... 3
INTRODUCTION:..... 4
QUALIFICATIONS:..... 5
METHODOLOGY:..... 5
ANALYSIS OF EXISTING STRUCTURAL SYSTEMS:..... 7
DETAILED ASSESSMENT OF COMPONENT SYSTEMS:..... 8
ASSESSMENT AND ADAPTIBILITY OF OVERALL STRUCTURE:..... 10
CONCLUSIONS:..... 10

EXECUTIVE SUMMARY:

Based on historic research and site/field observations of the existing state and conditions of this structure, the original construction techniques and methods used, as well as our evaluation of current code requirements necessary for ultimate occupancy of the structure, it is our professional opinion that it is feasible to rehabilitate the existing historic structure and/or relocate.

- Overall, the primary structure is currently in use as a single-family residence and is in generally good condition with no obvious signs of loss of strength or degradation.
- Multiple previous additions have occurred to and around the historic cottage, some of which have removed and replaced original components.

INTRODUCTION:

The one-story residential structure of interest is located at 113 Bridge Street, Bluffton, South Carolina. This building was constructed at an unknown date (possibly 1930s) in its current location as a one room cottage with front and rear porches facing the May River. A representative of ShearLock Engineering, a Professional Engineer registered in the state of South Carolina, performed a structural site conditions survey on May 7, 2024, to observe existing structural conditions and framing layouts, where possible, and record materials used in construction. The assessment was limited to physically accessible components of the building.

The existing structure is a one-story, wood-framed residence over a low crawlspace. The main volume is approximately 30’ wide by 48’ long with a 14’ deep porch on the river facing side. The images and floorplans provided by Court Atkins Group identify the building geometry and layout as of 1975 when it was designated as a historic structure. Since that time, multiple additions have been added to the building including a master-suite wing on one side of the main volume, a full-width front porch, an open carport, and an entirely new roof structure. The elements encompassing these additions are not the focus of this assessment. As such, the components within the 1975 building are primarily addressed.

The site surrounding this structure is generally level with positive drainage.

QUALIFICATIONS:

ShearLock Engineering, LLC is pleased to provide this structural engineering report for the evaluation of the above structure. This assessment has been conducted under the responsible charge of Jake Eavenson, P.E., S.E., a Principal Engineer with the firm. This firm's members, including the Principal Engineer, are proud to have extensive experience in the local historic districts with multiple creative and challenging projects. The team's qualifications and experience in historic preservation, rehabilitation, and renovation are demonstrated through several key projects within the local community completed by members of this design team while working under previous employment.

- Bluffton United Methodist Church Renovation and Addition
- The Graves House Restoration
- The Rate Restoration
- Vaux, Marscher, Berglind Office Restoration
- Red Dot Liquor Store Restoration
- HWY 46 and DuBois Lane Structural Assessment
- Pepper's Porch/Deer Tongue Barn Structural Assessment

Resumes or additional references can be provided to the town upon request.

METHODOLOGY:

Plans for the building and its future use are beyond the scope of this assessment. This assessment is based on methodology provided by the current governing codes; the 2021 South Carolina Residential Code (SCRC).

The current design criteria for this structure are based upon the 2021 South Carolina Residential Code. These criteria are listed in Figure 1 below. The structure resides in an area of Seismic Design Category D, and the component and cladding wind pressures listed are a resultant of the design wind event for the region. The Risk Category is a 2, based on its original and continued use as a residential building. It is important to note that the design criteria for which the building was constructed, as well as its various additions/renovations since that time, is likely to differ from the code noted above, with the most significant differences concerning wind pressure. The International Code Council (ICC) that governs over all current code previsions did not come to fruition until 1994 and the first International Building Code (IBC) was

not published until 1997. Therefore, it is likely that there was minimal code governance at the time of construction of this building.

STRUCTURAL DESIGN CRITERIA

1. BUILDING CODE:
   2021 SOUTH CAROLINA RESIDENTIAL CODE (SCRC)

2. GRAVITY LOADS (ASCE 7-16):

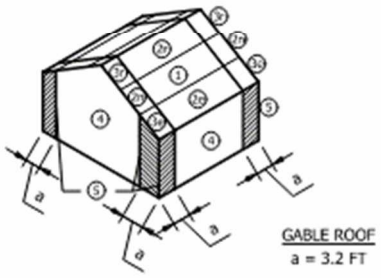
	DISTRIBUTED
ROOF	LL = 20 PSF DL = 20 PSF
1ST FLOOR	LL = 100 PSF DL = 50 PSF
COLLATERAL LOAD	CL = 5 PSF

3. WIND LOADS (ASCE 7-16/ 2021 SCBC):
   BASIC DESIGN WIND SPEED, V = 140mph
   ALLOWABLE STRESS DESIGN WIND SPEED, V_{ASD} = 108.4mph
   RISK CATEGORY II
   WIND EXPOSURE D
   INTERNAL PRESSURE COEFFICIENT, GC^pi = ±0.18

4. SEISMIC LOADS (ASCE 7-16/ 2021 SCRC):
   RISK CATEGORY II
   SEISMIC IMPORTANCE FACTOR, I_E = 1.00
   MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS:
   S_S = 0.411g; S_1 = 0.140g
   SITE CLASS D
   DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:
   S_{DS} = 0.403g; S_{D1} = 0.216g
   SEISMIC DESIGN CATEGORY D
   BASIC SEISMIC FORCE-RESISTING SYSTEM:
   EXISTING STRUCTURE

5. SNOW LOAD (ASCE 7-16):
   GROUND SNOW LOAD Pg = 0 PSF

6. RAIN LOAD DATA 2021 SCBC:
   RAIN INTENSITY i = 4.5 in/hr



GABLE ROOF
a = 3.2 FT

COMPONENTS & CLADDING
WIND PRESSURES (PSF)

	ZONE	AREA (SF)	+P	-P	ASD +P	ASD -P
ROOF: 7 TO 45 DEGREES	1	10	30.5	93.0	18.3	55.8
	1	20	27.5	93.0	16.5	55.8
	1	50	23.5	56.6	14.1	34.0
	1	100	20.5	29.0	12.3	17.4
	2e	10	30.5	135.7	18.3	81.4
	2e	20	27.5	117.3	16.5	70.4
	2e	50	23.5	93.0	14.1	55.8
	2e	100	20.5	74.6	12.3	44.8
	2n	10	30.5	135.7	18.3	81.4
	2n	20	27.5	117.3	16.5	70.4
	2n	50	23.5	93.0	14.1	55.8
	2n	100	20.5	74.6	12.3	44.8
	2r	10	30.5	135.7	18.3	81.4
	2r	20	27.5	117.3	16.5	70.4
	2r	50	23.5	93.0	14.1	55.8
	2r	100	20.5	74.6	12.3	44.8
	3e	10	30.5	135.7	18.3	81.4
	3e	20	27.5	117.3	16.5	70.4
	3e	50	23.5	93.0	14.1	55.8
	3e	100	20.5	74.6	12.3	44.8
	3r	10	30.5	161.3	18.3	96.8
	3r	20	27.5	138.2	16.5	82.9
	3r	50	23.5	107.6	14.1	64.6
	3r	100	20.5	84.5	12.3	50.7
WALLS	4	10	50.3	54.6	30.2	32.8
	4	20	48.1	52.3	28.9	31.4
	4	50	45.1	49.4	27.1	29.6
	4	100	42.8	47.1	25.7	28.3
	5	10	50.3	67.4	30.2	40.4
	5	20	48.1	62.9	28.9	37.7
	5	50	45.1	56.9	27.1	34.1
	5	100	42.8	52.3	25.7	31.4

FIGURE 1: CURRENT STRUCTURAL DESIGN CRITERIA

In addition to the above-listed building codes, guidance from the following sources was also used:

- Secretary of the interior's standards for the treatment of historic properties.
- Town of Bluffton requirements for Old Town Bluffton Historic District.
- Industry guidance for applicable structural materials to be evaluated.

ANALYSIS OF EXISTING STRUCTURAL SYSTEMS:

Our site visit on 5/7/2024 consisted of an interior and exterior survey, including the attic and crawlspace. The exterior walls were fully clad and unable to be observed. The observations and analysis of each system is outlined below to describe the integrity and quality.

Foundation:

- The foundation system for the building consists of masonry piers and continuous walls utilizing multiple material and construction types from at least four different significant construction activities.
- The oldest foundation systems included isolated multi-wythe brick piers over an unknown footing.
- A large multi-wythe brick base was found below the original central fireplace/chimney.
- The second phase of foundation work consisted of a continuous perimeter brick foundation wall and additional interior brick piers.
- Subsequent phases of foundation work included a later type of brick foundation wall elements, as well as traditional CMU block foundations.
- The foundation systems from the original two phases of construction appear to comprise the building footprint from the 1975 basis of the “historical scope of work”.
    - The foundation assemblies within this portion of the existing structure indicate signs of settlement and rotation common for the age but did not indicate the presence of any substantial loss of strength or distress.
- The foundation systems for the portions of the building outside of the phases noted above appeared in good condition with no significant signs of movement or distress.
- Additional supporting members were observed at intermediate floor span locations to provide additional stiffness or support.

Floor:

- The floor system for the building is a wood-framed joist and girder system.
- The typical assembly appeared to approximately consist of full sawn 4x8 girders supporting 2x8 floor joists with diagonal 1x floor decking above.
- Typical wear and imperfections expected for the age of the building were found.
- Based on general observation, no significant signs of acute degradation or loss of strength were identified and there is no evidence of an inability for this system to safely support typical occupancy loadings.

- Various floor joists and beams were found to have been reconstructed with non-original lumber during some previous renovation.

Wall:

- Walls are assumed to be framed with full sawn wood studs with exterior sheathing updated to modern OSB or Plywood.
- Based on general observation, no signs of degradation or loss of strength was obvious and there is no evidence of an inability for this system to safely support typical occupancy loadings.

Ceiling:

- The ceiling systems were constructed with varying types and directions of wood joists.
- The ceiling framing over the original center portion of the building appeared to be original and consisted of full sawn 2x6 joists spanning approximately sixteen feet.
    - A noticeable deflection occurred under the weight of the Engineer, but no obvious signs of recent movement or destabilization were found.
- Other areas of the ceiling framing varied from solid sawn 2x6 joists to modern 2x8 joists with a combination of 1x and OSB Decking.

Roof:

- The roof system had been replaced in full during the most recent renovation/addition.
- The roof framing elements appeared in good condition and consisted of modern light-framing roof assemblies.

DETAILED ASSESSMENT OF COMPONENT SYSTEMS:

Foundation:

- For relocation and rehabilitation of this building, a new foundation at the proposed foundation utilizing isolated masonry piers over a shallow concrete foundation with perimeter CMU walls would be required.
- The location of interior piers would be based on the existing pier and girder locations.
- This system shall be designed and detailed by a Professional Engineer licensed in the state of South Carolina.

Floor:

- Reinstallation of the support for the floor would be necessary once the structure is moved, but no repairs or retrofit replacement are anticipated except as noted below:
    - Locations where existing girders are supported by other girders through the use of notches or nails will require the addition of either a dedicated foundation element or retrofit connector.

Walls:

- Work done during previous renovations appear sufficient to provide the necessary capacity for the structure under current code requirements once in its final location.
- Any areas found without OSB sheathing will require the retrofit addition either on the inside or outside face of wall.

Ceiling:

- The original ceiling joists over the central room shall be supplemented in place with additional members designed to provide adequate load-carrying support for the existing condition.
- Other than the element stated above, the work done previously appears to be sufficient to provide the necessary capacity for the structure under current code requirements once in its final location.

Roof:

- The historic roof structure no longer exists, therefore, a new roof constructed with modern light-frame residential construction techniques shall be constructed to match the intended geometry.

ASSESSMENT AND ADAPTIBILITY OF OVERALL STRUCTURE:

As discussed in the previous section, the roof would require reconstruction, and the limited addition of retrofit members and connectors at noted assemblies would be required after rehabilitation to the historic footprint. These tasks are, in our professional opinion, reasonable and feasible to achieve under the definition of rehabilitation for a historic structure.

Consideration to relocation was evaluated as part of our analysis. We do not foresee any unusual or inordinate risk to achieving this goal. The re-occupancy and residential use of the building after relocation, in our professional opinion is reasonable and feasible to achieve under the definition of rehabilitation for a historic structure.

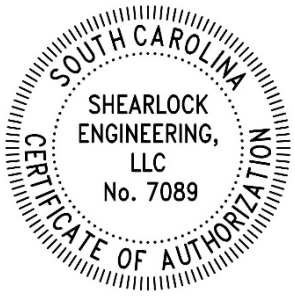
CONCLUSIONS:

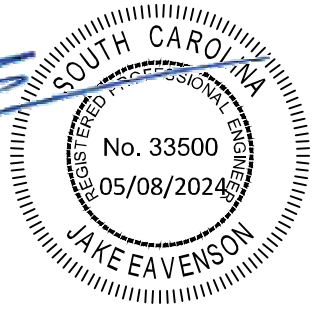
Based on the observations and review of this project, it is our professional opinion that this structure be approved for relocation and re-occupancy with consideration to the structural aspects. Once moved, the structure should require minor structural work to allow for re-occupancy and use as a residential structure.

Thank you for allowing us to provide continued assistance for your engineering needs. If you have any questions regarding this report or if there are any concerns, please let us know.

It is our understanding that this report completes are authorized scope of work for this project. We will stand by for any additional work requested.

Sincerely,





ShearLock Engineering, LLC

Jake Eavenson, PE, SE

Principal Engineer

Exhibit L

Photo Appendix

Figure 1: River-side Elevation

Figure 2: Street-side Elevation

Exhibit L

Figure 3: Side Elevation

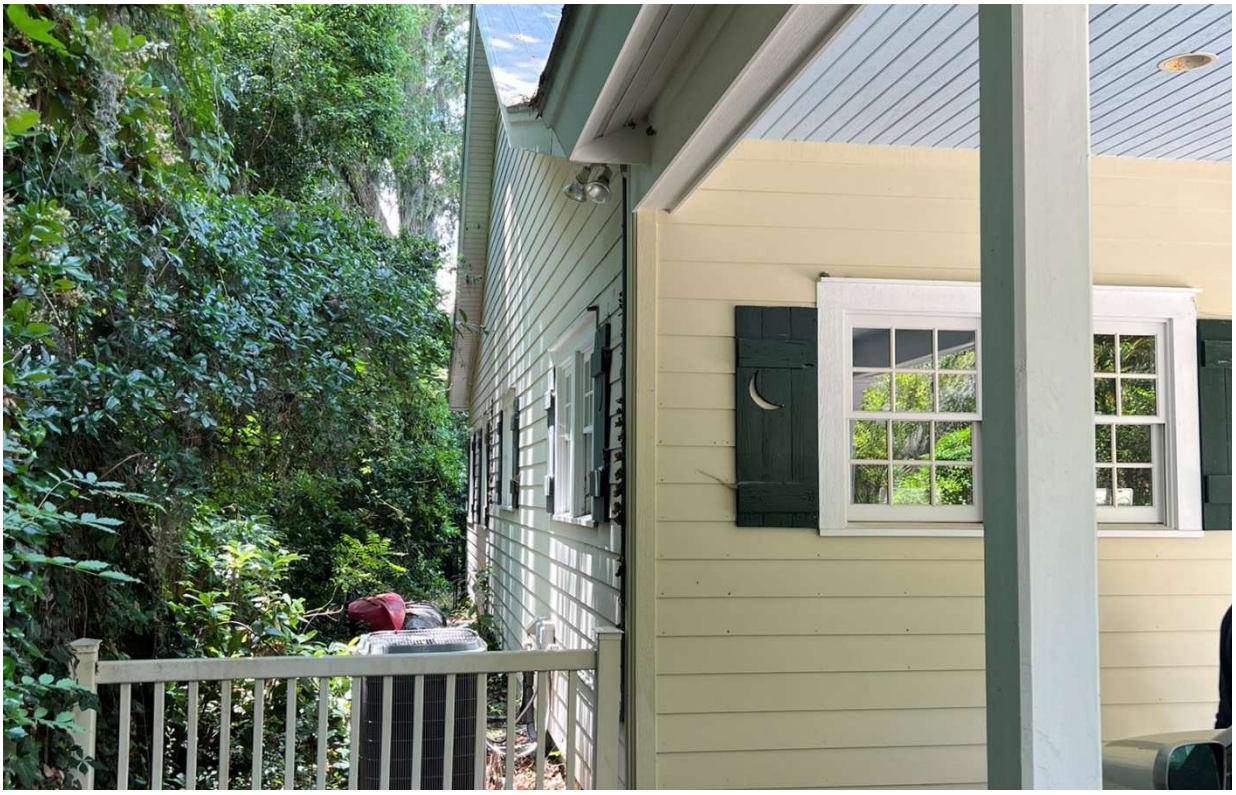


Figure 4: Side Elevation

Exhibit L

Figure 5: View of Existing Crawlspace Condition

Figure 6: View of Existing Crawlspace Condition

Exhibit L

Figure 7: View of Existing Crawlspace Condition

Figure 8: View of Existing Crawlspace Condition

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Figure 9: View of Existing Crawlspace Condition

Figure 10: View of Existing Crawlspace Condition

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Figure 11: View of Existing Crawlspace Condition

Figure 12: View of Existing Crawlspace Condition

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Figure 13: View of Existing Crawlspace Condition

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Figure 15: View of Existing Crawlspace Condition

Figure 16: View of Existing Crawlspace Condition

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Figure 17: View of Existing Crawlspace Condition

Figure 18: View of Existing Crawlspace Condition

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Figure 19: View of Existing Crawlspace Condition

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Figure 21: Attic

Figure 22: Attic

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Figure 23: Attic

Figure 24: Attic

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Figure 25: Attic