

FINAL ASSESSMENT REPORT

KJG Project No. A2023.024

A Site and Facility Assessment for the Jerolaman Long Site 1004 E. Market Street Logansport, Indiana 46947



Cass County Historical Society 421 Broadway Street Logansport, Indiana 46942

DATE : May 9th ,2024



KJG ARCHITECTURE, INC.

ARCHITECTURE • ENGINEERING • RESIDENTIAL • INTERIOR DESIGN

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I. INTRODUCTION

The Cass County Historical Society of Cass County Indiana directed KJG Architecture, Inc. of West Lafayette, Indiana to perform an assessment on the buildings located at 1004 E. Market Street in Logansport, Indiana. Collectively known as the Jerolaman-Long Home Museum. The are (4) four structures located on this property. The structures include: Jerolaman-Long Home, the Carriage House, the Log Cabin and Log Barn.

KJG Architecture, Inc. made multiple site visits to gather information. The dates visited are August 11th, August 28th, and December 13th, all in the year 2023.

II. SITE CONSIDERATIONS

This site contains four separate structures. The fifth structure that used to belong to the CCHS has now been sold. It is a private residence. The four remaining facilities or split into three separate portions of this report, but the overall site will be addressed in this section of the report.

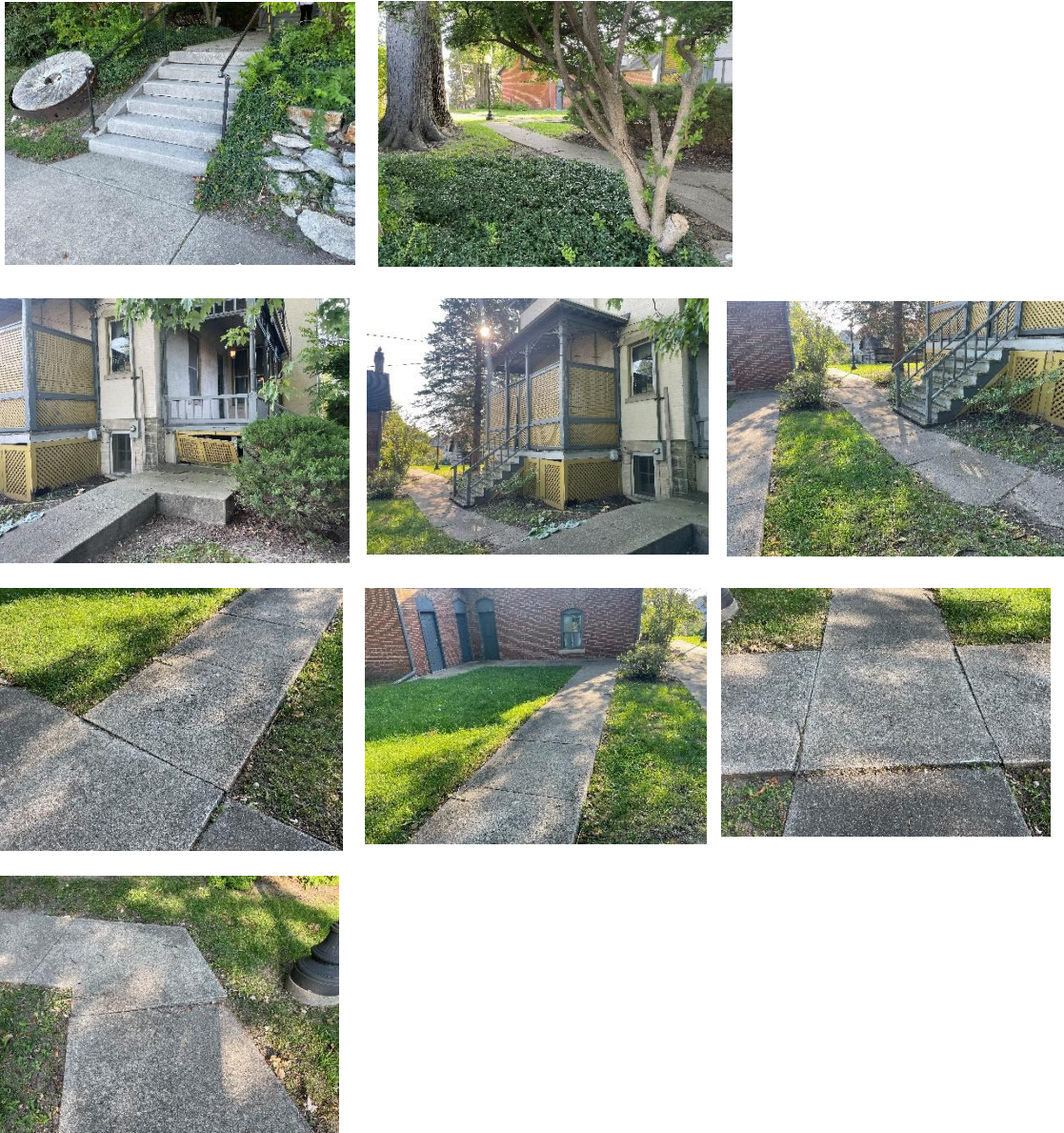
This site is very hilly making handicap accessibility routes somewhat difficult. Sidewalks are in generally good condition; however, there are places where the walks have separated from one another causing one section to be higher than the other. This will require removal of those sections and installing new sidewalks. See site map for locations of walks, stairs, and ramps to be replaced.

There is a sidewalk that runs next to the streets and it is our understanding that these walks are the property of the city of Logansport and CCHS we'll need to negotiate with the city for possible replacement of damaged walks.

The general landscaping is in good condition but does need some basic trimming back of bushes and general sculpting of trees.

Some of the downspouts located on the Jerolaman-Long Home are no longer connected to the gutters. Some of the gutters have fallen off the home and thus allowing water run off to hit the ground and causing some trenches and worn spots in the dirt. This will be covered more specifically in Section 3 of this report.

a. PHOTOGRAPHS



b. LIST OF PRIORITIES

1. Replace sidewalks as needed to make paths smooth and level and in compliance with accessibility standards. **(This work has been done since the site visit.)**
2. Have existing trees examined by a certified arborist to determine their structural stability. **(This work has been done since the site visit.)**

c. COST ESTIMATE

This section is not applicable.

III. THE JEROLAMAN-LONG HOME MUSEUM

a. NARRATIVE

1. The Jerolaman-Long Home is an approximately 6,000 square feet two-story house with a full basement originally constructed as a private residence. Over the years many changes have been made to turn this house into a museum. The house is in reasonable condition with only minor issues regarding structural, mechanical electrical, water tightness, and accessibility. This home was approximately built in the 1850s.

b. STRUCTURAL

1. The inside surface of the exterior walls throughout the house shows signs of water infiltration causing the plaster to delaminate from the lathe and paint is starting to blister on wood surfaces.
2. Along the east exterior wall of the basement, it was noted that the floor is separating from the wall and it appears the substructure is decaying.
3. The exterior of the front steps is badly deteriorating and needs to be replaced. As part of this replacement, the cast iron handrails should also be restored and then reinstalled. The railing should have the paint removed and be repainted.
4. The exterior balconies and wood decking is rotting. The iron brackets are rusting and the paint is chipping off. The wood deck should be replaced and the iron brackets should be restored.
5. The porch along the west side and northside needs to be repaired and repainted.
6. The decorative fascia at the roof line has panels that are loose or have fallen off. These panels need to be reinstalled. Investigate the substructure to see if these are damaged and if so, repair substructure.
7. Several of the downspouts have come loose from the gutters and have pulled away from the wall, there is one portion of downspouts laying on the ground. Gutters and downspouts need to be kept in good working order. Reinstall loose or missing downspouts and verify that the gutters are adequately attached to roof fascia.

c. ARCHITECTURAL

1. The architectural survey looks primarily at the interior finishes are in good shape and in good working order.
2. Other than noticing water infiltration along exterior walls, especially at the ceiling wall connection, the general shape of the interior walls is in good condition.
3. The interior doors are also in good condition and function appropriately.
4. The exterior doors are in good condition and function appropriately.
5. Ceilings are in good condition except where they meet the exterior walls. Water damage was seen at multiple locations.

d. MECHANICAL

1. The mechanical survey was conducted and the following areas need to be addressed:
 - a. All systems need to meet temperature and humidity standards for a museum.
 - b. Independent systems need to be designed as per building sections.
 - c. State release will have to be obtained for this aspect of the project.

e. ELECTRICAL

1. The electrical survey was conducted and the following areas need to be addressed:
 - a. Updating of the existing electrical systems.
 - b. Main distribution panel and subpanels need to meet new state requirements.

- c. Lighting needs to meet museum standards for proper lighting and to not deter from the integrity of the artifacts within the space.

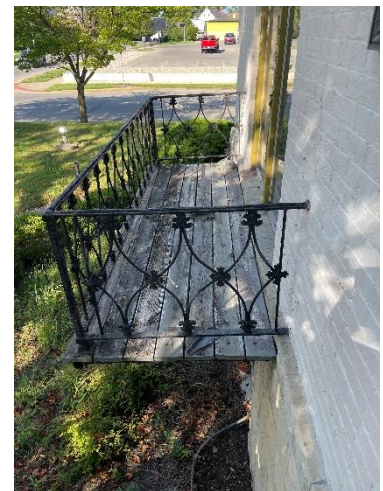
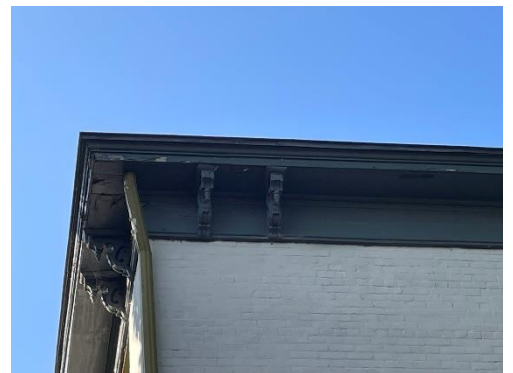
f. PLUMBING

- 1. The plumbing survey was conducted and the following areas need to be addressed:
 - a. All plumbing needs to conform to state standards.
 - b. Plumbing supply lines and drain lines need proper attention.

g. ADA ACCESSIBILITY

- 1. An ADA survey was completed and the following areas need to be addressed:
 - a. Building accessibility is being addressed in this report (Section II b.).
 - b. All building programs need to be evaluated.
 - c. ADA Transition Plan needs to be completed.

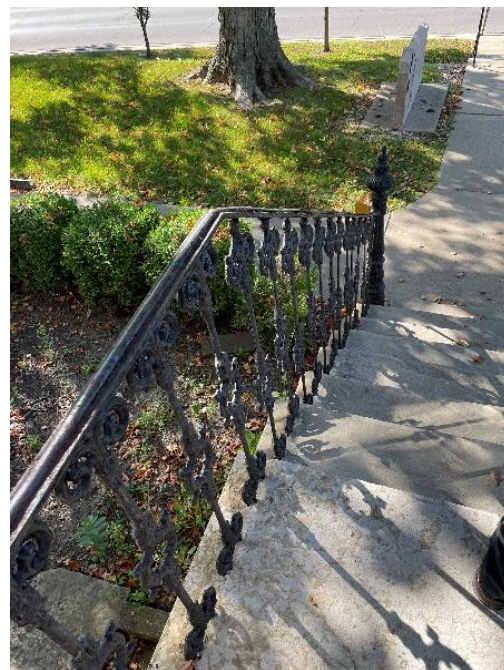
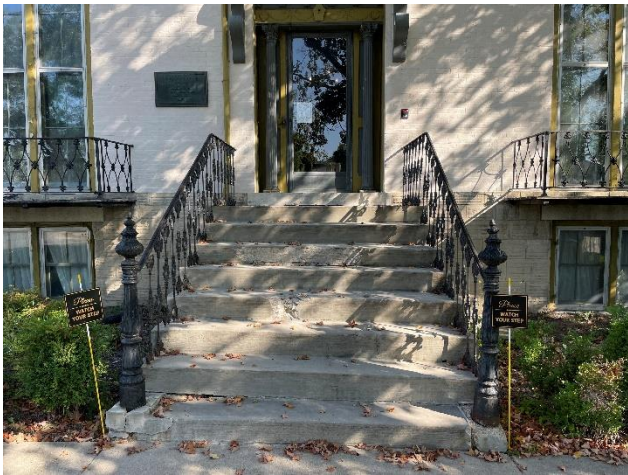
h. PHOTOGRAPHS



KJG ARCHITECTURE, INC.
A SITE AND FACILITY ASSESSMENT REPORT FOR THE JEROLAMAN LONG SITE
CASS COUNTY HISTONCAL SOCIETY
PROJECT No. A2023.024



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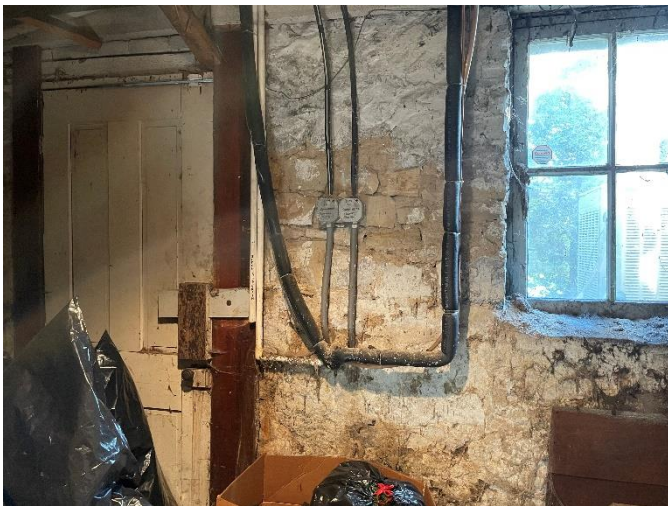


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i. LIST OF PRIORITIES

1. Exterior Items

1. Fix and repair fascia, soffit, gutters, and downspouts.
2. Install sealant around all windows and doors.
3. Replace the front stairs and handrails.
4. Replace wood floor decking on front decks, repair and paint cast iron brackets.
5. The side porch is to be reconstructed.
6. The back porch is to be reconstructed.
7. Connect the side porch and back porch together.
8. Install new wheelchair handicap lift at side porch.
9. Repair structural damage to floor in basement.
10. Remove damaged plaster from walls and ceilings, install new plaster.
11. Paint or reinstall wall covering on walls that have been repaired.
12. All systems need to meet temperature and humidity standard for museum.
13. Independent systems need to be designed as per building sections.
14. Update existing electrical systems.
15. Main distribution panel and subpanels need to meet new state requirements.
16. Lighting needs to meet museum standards for proper lighting and not deter from the integrity of artifacts within the space.
17. All plumbing needs to conform to state standards.
18. Plumbing supply lines and drain lines need proper attention.
19. Building accessibility concerns are listed in Section II (b) of this report.
20. Programs need to be evaluated.

j. COST ESTIMATE

▪ Fix and repair fascia soffit gutters and downspouts.	\$50,000.00
▪ Install sealant around all windows and doors.	\$5,000.00
▪ Replace the front stairs and handrails.	\$60,000.00
▪ Replace wood floor decking on front decks, repair and paint cast iron brackets.	\$20,000.00
▪ The side porch is to be reconstructed.	\$20,000.00
▪ The back porch is to be reconstructed.	\$20,000.00
▪ Connect the side porch and back porch together.	\$10,000.00
▪ Install new wheelchair handicap lift at side porch.	\$25,000.00
▪ Repair structural damage to floor in basement.	\$5,000.00
▪ Remove damaged plaster from walls and ceilings and install new plaster.	\$30,000.00
▪ Paint or reinstall wall covering on walls that have been repaired.	\$15,000.00
▪ HVAC work	\$80,000.00
▪ Electrical work	\$65,000.00
▪ Plumbing work	<u>\$35,000.00</u>
Subtotal	\$440,000.00

IV. THE CARRIAGE HOUSE

a. NARRATIVE

1. The Carriage House is a load bearing brick masonry structure with a wooden framed roof. It has two levels. The Carriage House was built in approximately 1853. The ground level has a concrete floor on top of the ground. The second level has a wood frame floor system. In a previous renovation a new mechanical system along with electrical upgrades were completed.

b. STRUCTURAL

1. This structure is in very good shape. Previously, significant structural repairs were made to help stabilize the exterior of the building.

c. ARCHITECTURAL

1. The exterior of this building is in good shape except for the two man-doors located on the southwest side of the structure. These doors appear to be waterlogged and are now delaminating. Doors and frames should be replaced.
2. The interior is in good condition with no notable architectural issues.
3. The only means of access between the two floors requires you to exit the structure and enter through a separate staircase. With a simple modification to the stairs, it could be extended to connect both floors internally. Such a connection would be desirable for the day-to-day operations of the Carriage House.

d. MECHANICAL

1. A new forced air heating and cooling system was installed within the last 10 years; however, the ductwork primarily feeds the first floor. The second floor does not receive adequate heating or cooling. Either ductwork needs to be modified to supply air to the second floor or a second HVAC system should be installed to handle the second floor.

e. ELECTRICAL

1. The electrical system has been upgraded and is in good working order.

f. PLUMBING

1. There is no plumbing connected to this building.

g. ADA ACCESSIBILITY

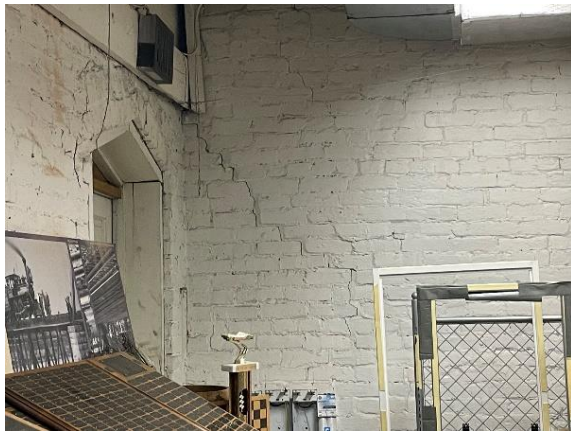
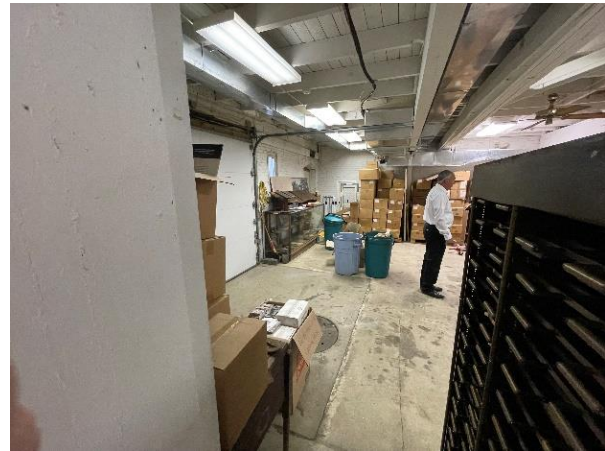
1. The main part of the first floor is accessible from a ground level entrance door. However, the 2nd floor is not ADA accessible this is not necessarily a problem since this area is solely used for storage.

h. PHOTOGRAPHS (NEXT PAGE)

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i. LIST OF PRIORITIES

1. Replace damaged exterior man-doors.
2. Develop new internal stairway between floors.
3. Upgrade or install a new mechanical system for the second floor.

j. COST ESTIMATE

▪ Replace damaged exterior man-doors.	\$8,000.00
▪ Develop new internal stairway between floors.	\$12,000.00
▪ Upgrade or install a new mechanical system for the second floor.	<u>\$25,000.00</u>
Subtotal	\$45,000.00



May 7, 2024

Project: #A2023.024

Cass County Historical Society
1004 E Market Street
Logansport, IN 46947

**RE: Structural Inspection
Historic Carriage House
Logansport, Indiana**



On April 29, 2024, KJG Engineering visited the Historic Carriage House located off the alley between 10th and 11th Streets, and Market & Broadway Streets in Logansport, Indiana. The structure is two stories with approximately 1,500 square feet on each floor. KJG's services were requested specifically to inspect the condition of the west gable-end wall and the header above the north loading door. We were also asked to comment on the amount of storage that should be permitted on the second floor.

The structure appears to have been built in two phases with the northern portion along the alley likely constructed around 1853 and the southern addition some years later. The exterior walls consist of multi-wythe brick. The floor and roof framing are wood. Much of the wood framing appears original, but some framing—particularly the two large interior beams supporting the floor—appear to be more recent construction. In general, the structure appears in generally good condition. While there has been obvious movement over time, the structure has been well maintained and, in our professional opinion, has decades of serviceable life remaining.

We observed the west gable-end wall to not be perfectly plumb (see Pictures 1 & 2). The wall bows out slightly to the west just above the second floor level, and then the top of the wall leans slightly east. This characteristic is noticeable when standing parallel with the wall. However, KJG observed no significant cracks in the wall or other indications of recent movement. Evidence of previous tuckpointing is apparent, but that work does not appear recent and remains intact. If the wall had experienced measurable movement since the previous tuckpointing, KJG would expect to see noticeable horizontal and stair-step cracks, particularly around the second floor level. But we judged the only need for tuckpointing to be near the base of the wall where rain and snow have worn down some of the mortar joints.

The north loading door has a large timber header above it which supports the weight of the brick wall above the opening and the second floor framing (see Pictures 3 & 4). The header appears original and has deflected downward several inches at its mid-span over the years. It is normal for wood to creep (i.e. deflect) gradually over time when subjected to continuous loading. The downward deflection appears to have caused significant cracks in the brick above the opening several years ago, but those cracks have been tuckpointed for some time, and no new cracks or other indications of recent movement is visible above the opening. We also did not judge any instability in the second floor structure just inside this opening. In fact, the ceilings of the second floor are covered with modern gypsum board

which is a brittle material susceptible to cracking even with modest structural movement. Yet we did not observe any notable defects in the gypsum board ceilings (see Pictures 5, 6 & 7). While it is possible that further creep could occur in the north timber header, it is our professional opinion that the header is currently stable and not in need of immediate repair unless new cracks become evident above the opening.

The first floor contains a concrete slab-on-grade which can sustain relatively large storage loads. KJG did not observe any items currently stored on the first floor which we believe would cause any damage or notable settlement to the concrete slab. The second floor consists of wood planks running perpendicular to sawn lumber floor. The joists are supported either by the exterior brick walls or by large laminated lumber beams joists (see Pictures 8, 9 & 10). The second floor is relatively full of historic artifacts, but KJG did not judge the cumulative weight of the items to be significant. KJG did not perform a structural analysis of the existing joists, but we judged the joist size, spacing, and condition be typical of older residential homes which generally have a load capacity between 25 to 35 pounds-per-square-foot. That load rating is roughly equivalent to adults standing shoulder to shoulder and likely well above the cumulative weight of the contents we observed. With that said, KJG does not recommend using the second floor for large gatherings or for excessive storage. Even moderate loads, if applied continuously, will gradually cause creep in the floor joists. Therefore, KJG recommends minimizing storage on the second floor in order to extend the serviceable life of the structure.

In summary, KJG judged this structure to be in generally good condition and well-maintained. However, we did observe the need for routine tuckpointing on the exterior of the building. The upper brick on the east wall needs tuckpointed as does the lower brick and limestone blocks around the majority of the building's base (see Pictures 11 thru 17). One other recommended repair involves the wood post just inside the east wall. This post carries the roof ridge beam and extends through the second floor down to the first floor concrete slab. The post was originally set on a concrete base which has since spalled and no longer provides full support to the wood post (see Picture 18). We recommend a new concrete or composite stand-off base be installed to provide full support to the post and protect it from moisture.

Please note that our inspection was only visual in nature, and we did not test or take material samples of any components in the home. Also note that our inspection only considered the overall performance of the structural systems, and this report should not be construed as a complete structural analysis or review of building code compliance. Our observations and recommendations are professional opinions based on engineering principles and evidence visible at the time of our inspection. Further information such as soil analysis, material samples, and load-testing would be required to confirm our opinions or calculate the exact structural capacity of building components as they exist today.

Sincerely,



Jeremy S. Duff, P.E., S.E.

Photographs



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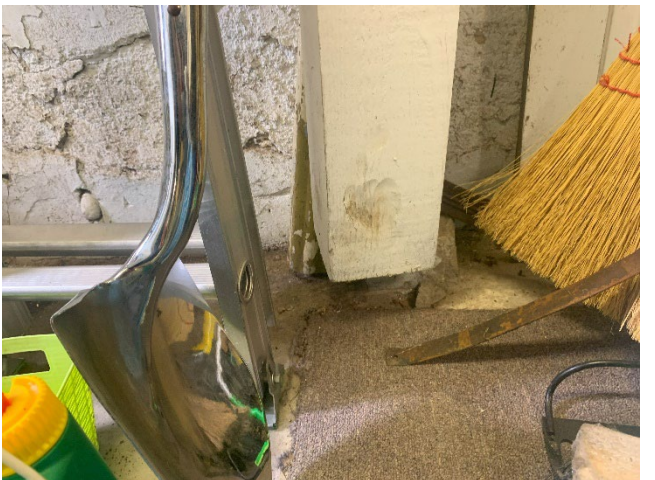
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16



17



18

V. LOG CABIN AND BARN

- a. NARRATIVE
 - 1. These structures were relocated to this site sometime in the early 1980s. The exact year of their construction is unknown but is assumed to be sometime in the early 1800s.
- b. ARCHITECTURAL
 - 1. It is the recommendation of KJG Architecture that Cass County Historic Society seek the assistance of experts in this type of construction. Request a survey of the structure and recommendations for maintaining and/or repairing the damage to these buildings.
- c. MECHANICAL
 - 1. There is no mechanical system in these buildings.
- d. ELECTRICAL
 - 1. There is no electrical system in these buildings.
- e. PLUMBING
 - 1. There is no plumbing system in these buildings.
- f. ADA ACCESSIBILTY
 - 1. There is an accessible path to the front door of the cabin. The cabin itself has no accessibility to the interior.
- g. PHOTOGRAPHS





- h. LIST OF PRIORITIES
 - 1. Seek qualified historical log cabin experts to assist with restoration of structures. Request inspection for structural soundness.
- i. COST ESTIMATE
 - Have a third-party expert evaluate the structures \$6,000.00

VI. SURMMARY OF COST

a. THE JEROLAMAN-LONG HOME MUSEUM	
i. Subtotal	\$440,000.00
ii. 20% Contingency	\$87,000.00
iii. Architectural/Engineering Fee	<u>\$30,000.00</u>
iv. Total	\$ 557,000.00
b. THE CARRIAGE HOUSE	
i. Subtotal	\$45,000.00
ii. 20% Contingency	\$9,000.00
iii. Architectural/Engineering Fee	<u>\$5,000.00</u>
iv. Total	\$59,000.00
c. THE LOG CABIN AND BARN	
i. Total	\$6,000.00
d. TOTAL ALL PROJECT COST ESTIMATE	
i. Jerolaman-Long Home Museum	\$557,000.00
ii. Carriage House	\$59,000.00
iii. Log Cabin and Barn	<u>\$6,000.00</u>
iv. Total	\$622,000.00