



Niota Train Depot

PRESERVATION NEEDS REPORT



December 2007



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Niota Train Depot Niota, Tennessee

Prepared for Mayor Martha Walden

Sponsored by the
Tennessee Civil War National Heritage Area

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The Tennessee Civil War National Heritage Area (TCWNHA) is a statewide program dedicated to the interpretation and preservation of Tennessee's Civil War and Reconstruction legacies. Partially funded by the National Park Service, the TCWNHA is one of several projects administered by the Center for Historic Preservation at Middle Tennessee State University

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INTRODUCTION

The Niota Depot is a significant building representing the antebellum industrial history of Tennessee and the impact of the Civil War on rural Tennessee. Built in 1854, it is the state's oldest extant train depot, noted for its fine brick construction and its antebellum railroad design. Known as the Mouse Creek Depot until the city changed its name to Niota in 1897, it was built by the East Tennessee and Georgia Railroad (later the East Tennessee, Virginia and Georgia Railroad) and acquired by the Southern Railway in 1894. The depot remained in continuous passenger and freight use until 1972 when the Southern Railway deeded it to the City of Niota. When it was listed on the National Register of Historic Places in 1974, the Depot still had a terracotta tile roof dating to circa 1900. In 1990, the tiles were removed and the roof replaced with sheet metal. The depot now houses the Niota City Hall.

The fact that brick construction was used for such an early railroad depot in East Tennessee suggests the antebellum agricultural prominence of northern McMinn County. The city of Niota is justly proud of this handsome building and concerned about its preservation. All interested parties agree that it is critical that the depot be restored and maintained according to current preservation standards. As an important heritage asset, the Niota Depot will require further development of its historical interpretation and a plan for future adaptive reuse. However, first priority should be given to the pressing preservation needs outlined in this report.

This report is divided into three sections: the first details urgently needed preservation measures, the second lists other immediate concerns, and the third includes suggestions for preventive and annual maintenance.

We strongly urge consultation with qualified contractors who have documented experience in the preservation of historic architecture for final building examination and renovation plans.



BUILDING ASSESSMENT



A multitude of issues caused by water damage can be alleviated by correcting drainage problems.

URGENT REPAIRS

First and foremost, inspection of the building suggests that most of the deterioration to the Depot's exterior surfaces is the result of water damage to the brickwork. Since the Depot is the earliest brick railroad depot in Tennessee, the condition of the brick is of paramount importance. Therefore, there is no point in performing maintenance to the several areas of damaged brick until drainage problems are resolved.

I. Improve Drainage Around the Depot

- A. Purchase or fabricate new adapters for drainpipe leaders so there is a tight line and water is not leaking around foundation of building. Plastic adapters that convert from round to flat configurations (as needed for the above connection) are relatively inexpensive and readily available at most home improvement centers.
- B. Refasten drainpipes and make sure they are long enough to direct water away from the building. A French drain system could be put into place if problems persist, but once area is regraded, water should drain away.
- C. Regrade area around building to eliminate pooling that occurs on the northeast and southeast corners of the building's east side. Several loads of topsoil may be needed to raise the ground level. A tractor with scraping blade should be sufficient for this task. The grade should be sloped away from the building at a minimum slope of 1 in 12.
- D. Impermeable ground surface due to the presence of compressed ballast (cinder material) and old driveway or roadbed may also be part of problem—regrading should help this situation.

URGENT REPAIRS

II Repair Brickwork (both interior and exterior):

A. Remove Portland cement from between bricks if brick is cracking or mortar is unsightly and repoint it with softer mortar (custom mix of sand, lime, etc.). Portland cement, which is harder and denser than brick, can cause bricks to crack or to retain water.

(see attached National Park Service Preservation Brief 2: Repointing Mortar Joints in Historic Brick Buildings)

B. Replace missing brick and redo previous repair work where necessary. There is some old brick underneath the Depot that could be used, additional brick will need to be matched to original.

C. Stains and moss can be removed from the brick with bristle brush and a solution of Muriatic acid. Test the acid solution in a hidden place before starting full-scale cleaning.

(see attached National Park Service Preservation Brief 1: The Cleaning and Waterproof Coating Of Masonry Buildings and Brief 6: Dangers of Abrasive Cleaning to Historic Buildings)



The solid surface created by inserting Portland cement into mortar joints has caused the more porous brick to crumble.

IMMEDIATE NEEDS/CONCERNS

The repairs involved in this portion of the rehabilitation are not as pressing as those outlined in Section I, and should not be attempted until the most pressing repairs have been completed. However, the immediate needs outlined here also must be addressed for the preservation, as well as to the ultimate look and feel, of this important historic building.

I. Remove, Repair, and Replace Platform/Deck:

A. Pressure-treated lumber of deck appears to be bearing on the brick foundation below and may cause damage to either the foundation and/or brick itself if the present condition is not mitigated. Any deck or platform constructed for the depot in the future should be freestanding.



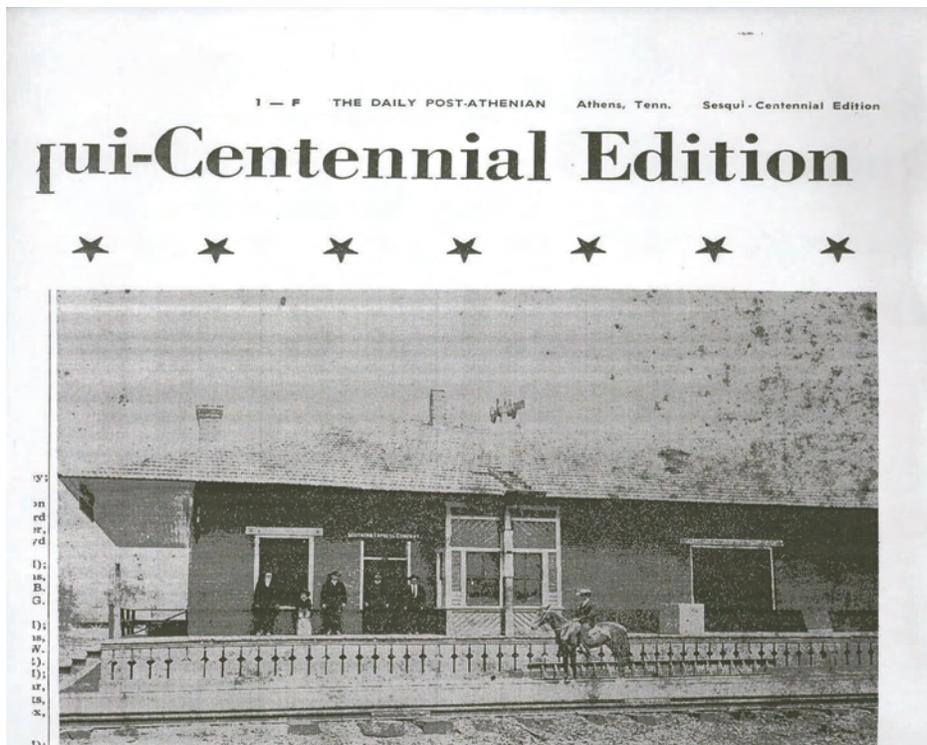
Note visible water damage on the wall next to support beam for deck at right. Exposed pipe at left should be inspected and possibly relocated. The adjoining corner of the foundation indicates possible previous damage to the foundation that may have been caused by drainage problems.

IMMEDIATE NEEDS/CONCERNS

B. Latticework is not historically accurate. Consider replacement of decking with appropriate railway platform that is compatible to the wide roof overhang. Further research might reveal additional details of the historic platform. Image below indicates that there was a wooden railing along platform at one time. Ramp, platform, and railings will need to comply with Americans with Disabilities Act regulations.



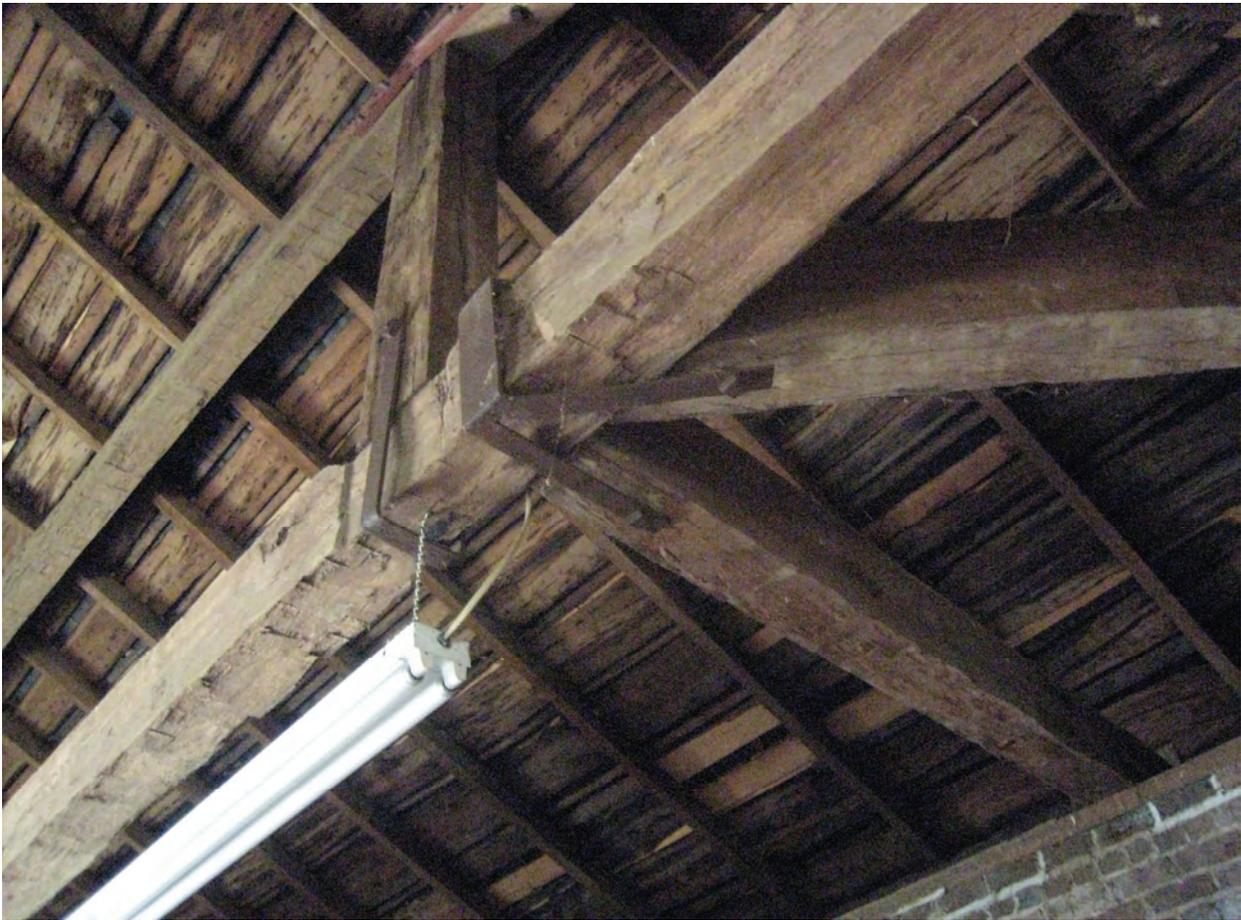
In the circa 1900 photo below, it appears that wood siding was used to hide the foundation below platform railing. Recommend restoring the platform to its historic appearance.



IMMEDIATE NEEDS/CONCERNS

II. Evaluate, Repair, and Clean Interior Baggage Area:

A. Structural metal rods and fasteners for beams should be inspected by a contractor who has documented experience with historic materials or by a preservation specialist. It is possible that metal elements were used to reinforce the roof structure when the terra cotta tile roof was added circa 1900. An expert in historical construction methods might be able to determine the approximate age from the workmanship, design, or materials used. Inspection recommendations for cleaning, painting, sealing, and/or other repair should be followed and a regular maintenance schedule established for interior and exterior metal fixtures. These are an important part of the historic fabric and of interest for those studying early technology in Tennessee.



Finding out when and where the metal brackets supporting and anchoring the wooden roof beams were fabricated might lead to more information about the depot and its original and replacement roofing.

IMMEDIATE NEEDS/CONCERNS

B. Baggage doors are now a combination of original and replacement material. Are they functional? Recommend that wood be refurbished and repaired (if necessary) and that facsimiles of the original hardware be obtained if possible. Graffiti on doors is historic record that might yield more information about the depot's history. Care should be taken to preserve it.



Before any sort of cleaning is attempted, a conservation inspection, including a test patch, should be done to ensure that no graffiti will be lost. Metal hardware should also be examined by a preservation specialist and treated in accordance with their recommendations.

IMMEDIATE NEEDS/CONCERNS

C. Clean walls and trusses to remove bird droppings, accumulated dust and grime. Clean gun-ports, but do not replugin holes because they are important to the depot's history.



The line of bricks that were punctured in order to serve as gun-ports while the depot was occupied is an important historic element in the Civil War interpretation of the depot. Care should be taken as brick below is cleaned and refurbished to preserve them.

IMMEDIATE NEEDS/CONCERNS

D. Parquet floor is serviceable but not historic. Recommend removal of parquet surface to reveal the historic flooring that appears to be intact underneath. Floor may need to be cleaned and refurbished.



The baggage room, when restored to its historic appearance, with the original wooden plank flooring and the removal of the elevated stage, will provide a glimpse into what was once one of the most active parts of the depot. An enhanced focus on the cargo doors, the railroad timetable blackboard, and the gun ports, plus the addition of exhibition panels illustrating the history of Niota, and the Civil War story of the depot, will provide important historical context.

ENERGY CONSERVATION

A well-constructed older building is generally more energy efficient than new construction. Caution should be the watchword when considering future work on energy conservation and weatherization, such as window or door replacement or the installation of HVAC systems. Some measures designed to reduce perceived energy loss may result in inappropriate alteration of architectural features, or worse, cause serious damage. For example, the original windows, which are important components of the historic look of a building, can be made more energy efficient by reputtying and using double pane glass.

(see attached National Park Service Preservation Brief 3: Conserving Energy in Historic Buildings)



Note the bullseye moulding at the ends of the lintel above the cargo door. Such decorative elements can be important for dating architectural features.

MONITORING RENOVATION AND FUTURE MAINTENANCE

Once the recommended maintenance needs outlined in this report have been completed, stewards of the building should faithfully inspect the building and site inside and out and from top to bottom every year to determine ongoing preventive maintenance needs.

- A. Maintenance needs checklist can be compiled based on the recommendations in this report or obtained from further inspections by preservation specialists.
- B. A form can be created for supervised maintenance requests to the City of Niota.
- C. Documentation should be maintained in the form of photographs and completed maintenance forms filed in chronological order, most recent first.



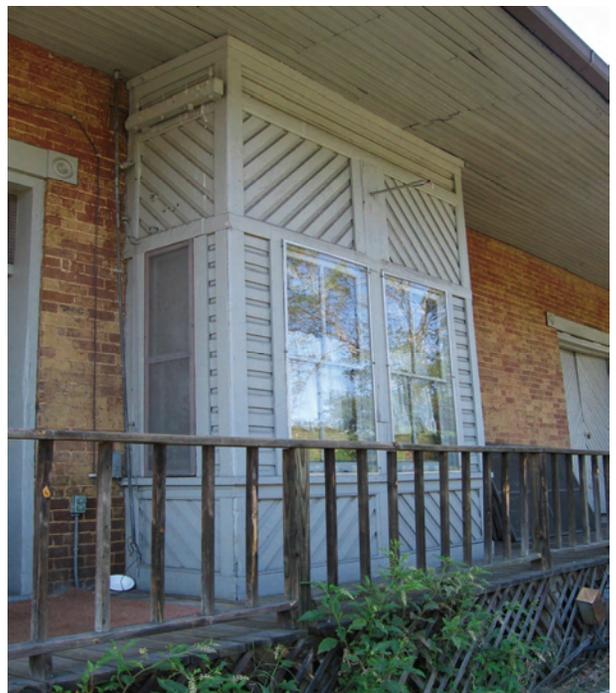
SUGGESTED ACTION STEPS (PRELIMINARY BUDGET ESTIMATES)

The budget amounts listed here are for planning purposes only. Actual costs may vary and will depend upon real-time quotations from qualified contractors.

- | | |
|--|--------------------|
| A. Remove and dispose of deck, steps, ramp, lattice work. | \$2000 |
| B. Correct water drainage problems by attaching new gutter leaders and regrading surrounding land surface areas so that water drains away from building. | \$15,000 |
| C. Following Secretary of the Interior/National Park Service guidelines, clean and repair brick and repoint mortar. | |
| (25-40% of structure) | \$65,000-\$100,000 |
| D. Have interior structural metalwork assessed & treated according to findings. | \$5000 |
| E. Remove parquet flooring and restore original floor in baggage room. | \$15,000 |
| F. Repair exterior doors, reconfigure interior to restore Ticket Booth. | \$75,000 |
| G. Add historic reproduction platform, railing, steps and ramp (ADA compatible) | \$5,000 |



Moving the sink and converting the kitchenette window back to the original ticket office would provide an appropriate historical setting for telling the railroad history of Niota.



SUGGESTED ADAPTIVE REUSE: A Community Heritage Center

- Baggage Storage Room to be maintained for community use once restored to original appearance
 - Conference table and chairs could be added to create public meeting space.
 - Removal of elevated stage would aid in restoring historic appearance.
- Create 3-part exhibition on Niota railroad history in baggage storage room and former ticket booth
 - 1) Ticket Booth: Panel exhibit focus on railroad history, train travel
 - 2) Baggage Room wall facing tracks (east wall): Exhibit panel on Civil War connections of depot and what happened in that area.
 - 3) On Baggage Room wall facing town (west wall): Create exhibition Panels on Niota history and voting history.
- Matching funding may be available for the Civil War interpretive exhibit panels through the Tennessee Civil War National Heritage Area. Contact person: Laura Holder, Manager, TCWNHA.
- Explore possibility of excursion train on existing track with Norfolk Southern Railroad.

Panel exhibit on the Civil War in Murfreesboro. Downtown Heritage Center, Murfreesboro, Tennessee, December 2007.

Design by Julie Lenger and Ashley Tate, Center for Historic Preservation, Middle Tennessee State University.

