

Stones River National Battlefield Stones River National Cemetery

Murfreesboro, Tennessee

Cultural Landscape Report

November 2015

Prepared by: Wiss, Janney, Elstner Associates, Inc. 330 Pfingsten Road Northbrook, Illinois 60062

John Milner Associates, Inc. 300 West Main Street, Suite 201 Charlottesville, Virginia 22903

Liz Sargent HLA 1855 Winston Road Charlottesville, Virginia 22903

Prepared for: National Park Service Southeast Regional Office 100 Alabama Street SW Atlanta, Georgia 30303



Cultural Resources, Partnerships and Science Division Southeast Region National Park Service 100 Alabama Street, SW Atlanta, Georgia 30303 (404) 507-5787

About the front cover: View of grave markers in the cemetery, November 2010.

This manuscript has been authored by Wiss, Janney, Elstner Associates, Inc., and John Milner Associates, Inc., under Contract Number P09PC60883 with the National Park Service. The United States Government retains and the publisher, by accepting the article for publication, acknowledges that the United States Government retains a non-exclusive, paid-up, irrevocable, world-wide license to publish or reproduce the published form of this manuscript, or allow others to do so, for United States Government purposes.

Stones River National Battlefield Stones River National Cemetery

Murfreesboro, Tennessee

Cultural Landscape Report

Approved: 7/15/15	
Superintendent, Stones River National Battlefield	Date
Recommended: 4/8/16	pr928
Chief, Cultural Resources, Partnerships, and Science Division, Southeast Region	Date
Recommended: Shon of Ital 4/12/16	
Deputy Regional Director, Southeast Region	Date
Approved: Stan Custin 9/12/16	
Regional Director, Southeast Region	Date

Contents

Figures	vi
Foreword	x
Acknowledgements	xi
Introduction	
Management Summary	1
Description of Study Boundaries	3
Historical Summary	
Scope of Work and Methodology	
Summary of Findings	12
Recommendations for Further Study	14
Site History	
Early Settlement and Development	17
The Battle of Stones River, December 31, 1862, to January 2, 1863	21
Early Commemoration and Establishment of the National Cemetery, 1863–1868	23
Development of Stones River National Cemetery, 1868–1890s	
Commemoration of the Battlefield, 1890s–1927	
The Stewardship of the National Park Service, 1927–2014	
Mission 66	
Closing of the Cemetery	55
Continued Development and Maintenance of the National Cemetery	55
Existing Conditions Documentation	
Introduction	63
Environmental Context and Setting	
Cultural Context and Setting	
Description by Landscape Characteristic	
Patterns of Spatial Organization	
Natural Systems and Features	
Responses to Natural Features	
Topographic Modifications	
Views and Vistas	
Land Use	
Circulation	
Cultural Vegetation	
Buildings and Structures	
Small-scale Features	
Archeological Resources	
Analysis and Evaluation	
Introduction	107
Significance Evaluation	
Comparative Analysis of Historic and Existing Conditions	
Patterns of Spatial Organization	
Natural Systems and Features	
Responses to Natural Features	
Topographic Modifications	
Views and Vistas	
Land Use	

Circulation	124
Cultural Vegetation	127
Buildings and Structures	142
Small-scale Features	148
Integrity Assessment	160
Freatment Plan	
Introduction	165
Park Management Goals, Issues, and Concerns	166
Treatment Approach	172
General Guidelines for Treatment	174
Treatment Concept	177
Treatment Recommendations	178
Implementation Projects	
Bibliography	217

Appendices

Appendix A: Resource Inventory
Appendix B: Conservation Assessment
Appendix C: Non-Conforming Headstones
Appendix D: Lincoln Square Plantings

Figures

Introduction

- 1 Contemporary view of the Stones River National Cemetery.
- 2 Nineteenth-century photograph of the Stones River National Cemetery, including the rostrum.
- 3 Stones River National Cemetery is located near Murfreesboro, Tennessee.
- 4 Stones River National Cemetery is located northwest of Murfreesboro.
- 5 Stones River National Cemetery is located adjacent to Stones River National Battlefield.
- 6 Plan of Stones River National Cemetery.

Site History

- 7 Diagram illustrating the troop movements associated with the first day of the battle.
- 8 Diagram illustrating the troop movements associated with the second day of the battle.
- 9 An 1865 view of Stones River National Cemetery.
- 10 Circa 1865 sketch plan of the cemetery.
- 11 A sketch of the cemetery as it appeared in 1867 by E. B. Whitman.
- 12 Map of area from which bodies were gathered for reinterment at Stones River National Cemetery.
- 13 1865 Period Plan.
- 14 An undated view of the 1871 superintendent's lodge.
- 15 An undated view of the main drive looking toward Lincoln Square.
- 16 The rostrum at Stones River National Cemetery circa 1930.
- 17 An undated view from within the rostrum at the cemetery.
- 18 An iron plaque with the poem "The Bivouac of the Dead."
- 19 A mid-twentieth century postcard showing the U.S. Regulars Monument.
- 20 1888 Period Plan.
- 21 Plan of the cemetery in 1892 by the Office of the Quartermaster General of the U.S. Army.
- 22 A 1934 view of the railroad adjacent to the cemetery.
- 23 Signs were placed by the railroad to guide visitors to the site.
- 24 An early twentieth century postcard showing one of the cannon monuments near Lincoln Square.
- 25 An undated view of the service entrance gate; the 1913 iron shield is visible on the right pier.
- 26 Plan of the cemetery prepared in 1925.
- 27 An undated view of the 1926 superintendent's lodge.
- 28 The start of drainage work at the north entrance gate to the cemetery in spring 1934.
- 29 Flooding in the cemetery, February 1935.
- 30 An view of the completed main entrance gate, 1937.
- 31 The maintenance gateway undergoing reconstruction, 1937.
- 32 View of the cemetery and Superintendent's Residence from the entrance to the park.
- 33 View of the cemetery wall after screen planting.
- 34 North wall viewed from within the cemetery wall, after screen planting.
- 35 North wall viewed from within the cemetery wall, after screen planting.
- 36 View of the cemetery in September 1935, showing the cast iron plaques.
- 37 1934 Period Plan.
- 38 Plan of the cemetery prepared in 1934. Many of the nineteenth century trees had been lost.
- 39 Aerial view of the cemetery, looking west from U.S. 41 in 1967.
- 40 View of Lincoln Square after construction of the cannonball pyramid.
- 41 The commemorative marker at the General Bragg Headquarters Site.
- 42 1968 Period Plan.
- 43 An undated aerial view of the cemetery before planting was undertaken in the 1970s.
- 44 View of flooding in the cemetery soon after planting of the second row of Eastern red cedars in 1979.
- 45 View of flooding in the maintenance area of the cemetery circa 1979–1980
- 46 Resetting grave markers in the cemetery, 2001.
- 47 The reconstructed rostrum, 2007.
- 48 One of several trees and large branches that fell during storms on April 27, 2011.

- 49 The U.S. Regulars Monument narrowly escaped damage when a nearby tree was uprooted.
- 50 The maintenance shop prior to renovation, view from the northeast, November 2010.
- 51 The maintenance shop, view toward the east end of the north elevation, November 2010.
- 52 The maintenance shop prior to renovation, view from the northwest, November 2010.

Existing Conditions

- 53 Geological map of Rutherford County, Tennessee, prepared in 1919.
- 54 Existing Conditions.
- 55 CSX #7837 (C40-8W) travelling southeast along the rail line adjacent the cemetery.
- 56 The limestone perimeter wall marks the boundary of the cemetery.
- 57 Rows of eastern red cedar trees separate the lodge and service area from the burial grounds area.
- 58 The paved entrance drive, lined with rows of spruce trees, provides the primary organizing feature.
- 59 Grass avenues separate the lettered burial sections of the cemetery.
- 60 The burial sections are characterized by regularly spaced, uniform grave markers.
- 61 Lincoln Square forms a focal point for the burial section of the cemetery.
- 62 The rostrum is separated from the burial area by a screen of eastern red cedars.
- 63 The residential area includes three modest brick dwellings.
- 64 A chain link fence surrounds the maintenance yard.
- 65 Another chain link fence surrounds a storage area where the black powder is kept.
- 66 The national cemetery has an evenly graded lawn that is the result of fill and grading efforts.
- 67 The grass avenues were graded to create a smooth and even plane.
- 68 The flagpole is located on top of an earthen mound and marks a high point within the burial area.
- 69 The railroad bed has been elevated above historic levels and is visible from inside the cemetery.
- 70 Stone retaining wall behind Building 6.
- 71 The view of the cemetery as one approaches from the south along Old Nashville Highway.
- 72 The view of the cemetery from the railroad line.
- 73 The commercial development along Murfreesboro Road and the elevated railroad.
- 74 Dramatic views are available within the cemetery walls.
- 75 Views between the rostrum and the burial area are partially screened by rows of cedar trees.
- 76 Views down the grass avenues vary based on the varying combinations of sun, shade, and foliage.
- 77 The main entrance to the Stones River National Cemetery.
- 78 The entrance drive extends north from Old Nashville Highway up to Lincoln Square.
- 79 The entrance drive forms a loop around the area known as Lincoln Square.
- 80 Eleven pull-in parking spaces are located just inside the main gate.
- 81 Concrete curbing along Central Avenue as it loops around Lincoln Square.
- 82 A small concrete stair edges the sidewalk adjacent to the visitor parking area.
- 83 Eight principal grass avenues radiate from Lincoln Square.
- 84 The pedestrian gate is located across from the visitor center parking area.
- 85 A push-button pedestrian crossing warning light system is used to support safety.
- 86 The park has added a mulch-surfaced pedestrian path.
- 87 The gate associated with the access drive leads to the housing, offices, and maintenance facilities.
- 88 A gravel access road leads from the maintenance access drive to the sewer pump station.
- 89 The access drive extends in a north/south direction through the lodge and service area.
- 90 A pedestrian entrance associated with rail access was closed in 1963.
- 91 Cedars screen the burial area from the rostrum and the rostrum from the maintenance area.
- 92 New oak tree planted by the park near the rostrum in 2014.
- 93 Dense shade and foot and vehicular traffic make it difficult to maintain turf.
- 94 Shrubs including boxwood and yucca are planted inside the entrance gate.
- 95 The limestone perimeter wall completely surrounds the Stones River National Cemetery.
- 96 Overview of the rostrum.
- 97 In 2007, the park reconstructed the rostrum based on original designs for the structure.
- 98 Cornerstone inscribed with the date of construction of the replica rostrum.
- 99 Moisture-related staining at the base of the brick posts.
- 100 Detail of moisture-related staining at the base of the brick posts.
- 101 Deterioration of wood trellis.

- 102 Splitting and staining of wood trellis.
- 103 Previous patching and sealant failure at embedded railing post.
- 104 Cracking of stair tread at embedded railing post.
- 105 Spalled cast stone stair tread at embedded railing post.
- 106 View of Building 4.
- 107 View looking south of Building 4 (at right) and Building 5 beyond (at left).
- 108 Building 5 was constructed in the 1960s and is used by park staff for housing.
- 109 Front view of Building 6, looking north.
- 110 Cracked brick masonry, Building 6.
- 111 Cracked brick masonry near the roof of Building 6.
- 112 A low stone retaining wall is located behind Building 6.
- 113 View of the maintenance area buildings from the south.
- 114 The maintenance office and shop building, view from the northwest.
- 115 The maintenance office and shop building, view from the northeast.
- 116 The well house.
- 117 The garage is an open structure for storage of equipment.
- 118 The three-bay storage shed in the maintenance yard.
- 119 The existing powder magazine is a metal box.
- 120 The former powder magazine is a concrete masonry structure.
- 121 The fuel tank located within the maintenance yard.
- 122 A chain link fence topped with barbed wire surrounds the maintenance yard.
- 123 The main entrance gate is double-hung, and composed of wrought iron.
- 124 A single gate swings open to one side to permit visitors to enter the pedestrian entrance.
- 125 A sliding metal pole that extends from the west pier of the gate at the maintenance access drive.
- 126 A variety of grave markers can be found throughout the cemetery.
- 127 The grave markers are cleaned, repaired, and reset when necessary.
- 128 Older section markers are made of limestone with painted letters.
- 129 Newer section markers are precast concrete with painted letters.
- 130 A pyramid of black painted cannonballs is located in the front of Lincoln Square.
- 131 A pair of upright cannon tubes marks the back corners of Lincoln Square.
- 132 The 43rd Wisconsin and 180th Ohio Monument is located in Section E facing the train tracks.
- 133 The U.S. Regulars Monument is located just off Lincoln Square and is topped with a bronze eagle.
- 134 The U.S. Regulars Monument with the flagstaff beyond.
- 135 The flagstaff is located in the center of Lincoln Square.
- 136 One of the pre-cast concrete benches located within the cemetery.
- 137 An example of the limestone slab benches located throughout the cemetery.
- 138 An employee area located within the maintenance yard includes portable picnic tables and grill.
- 139 Seven painted metal plaques display the text of "The Bivouac of the Dead."
- 140 Overview of directional signage along Old Nashville Highway.
- 141 Directional sign for cemetery along Old Nashville Highway.
- 142 Shields are located on the piers that mark the main entrance gate to the cemetery.
- 143 A small metal USGS medallion is embedded in the limestone perimeter wall.
- 144 Detail of the small metal USGS medallion in the limestone perimeter wall.
- 145 Floral regulations sign.
- 146 Small metal plaques identify some of the oldest trees in the cemetery.
- 147 View of the small plaque identifying a red cedar tree.
- 148 A variety of signs edge the visitor parking area.
- 149 A brown painted wood sign identifies the maintenance and housing area.
- 150 A cannon and Mission 66 wayside exhibit are located just off Lincoln Square.
- 151 Two contemporary wayside exhibits are located within the cemetery.
- 152 A stone-faced headwall and culvert runs beneath the maintenance drive.
- 153 A fire department connection box is located on the lawn in front of Building 4.
- 154 A concrete storm water outfall is associated with draining the earthen base of the rostrum.
- 155 Manhole covers and utility box covers are found at various locations through the site.
- 156 A sewer pump station is located beside the gravel access road just inside the maintenance entrance.

Analysis and Evaluation

- 157 Prior to the onset of battle in 1862, the rural landscape was characterized by farms and woodlands.
- 158 Plan indicating the arrangements of avenues and Lincoln Square.
- 159 Flooding in the cemetery, 1972.
- 160 Views into the cemetery are afforded from the Old Nashville Highway.
- 161 Reciprocal views existed between the burial grounds and the rostrum.
- 162 View into the cemetery from a train as it approached the depot at the national cemetery.
- 163 Detail of 1934 planting plan showing the location of the railroad depot.
- 164 View of the railroad tracks and the cemetery wall.
- 165 Contemporary view over the cemetery wall toward the rail line and development beyond.
- 166 Canna lilies in the cemetery in the early 1930s.
- 167 Existing plantings in the cemetery (at right) in 1934 prior to the new planting campaign.
- 168 Plantings at the perimeter wall in front of the superintendent's residence.
- 169 In 1935, an ice storm caused extensive tree damage in the cemetery.
- 170 Detail of the 1964 planting scheme, for the area between the north wall to the burial grounds.
- 171 Planting scheme for Lincoln Square, 1970s.
- 172 The plantings at Lincoln Square in the 1970s.
- 173 Rider mower with trailer used to cut grass in the cemetery in the 1970s.
- 174 Repointing the perimeter wall along the railroad, circa 1980s.
- 175 Reconstruction of a portion of the perimeter wall, circa 1930s.
- 176 Key plan showing repointing work completed through May 1982.
- 177 The rostrum, circa 1930.
- 178 The reconstructed rostrum, 2010. In the reconstruction, the location of the stairs was reversed.
- 179 Detail of 1892 cemetery plan showing superintendent's lodge and outbuildings.
- 180 Circa 1935 view of the historic stable.
- 181 The superintendent's lodge constructed in 1926.
- 182 By the 1950s, the stable was used as a utility and maintenance building.
- 183 View of foundation construction for one of the new staff residences, June 1962.
- 184 The new staff residences under construction, September 1962.
- 185 The 1926 superintendent's lodge with a new staff residence beyond, circa 1963.
- 186 Drawing for the reconstruction of the cemetery entrance piers, circa 1896.
- 187 Postcard view of the main gate, circa 1910, showing rusticated concrete piers constructed in 1896.
- 188 View of the main entrance gate, circa 1935.
- 189 The completed main entrance, circa 1937.
- 190 The reconstructed main entrance gate, 1960s.
- 191 Entrance from the Old Nashville Highway, 2010.
- 192 The gates at the service entrance circa 1934, showing the concrete piers constructed in 1896.
- 193 The service gateway undergoing reconstruction, 1937.
- 194 The completed maintenance gate, March 1938.
- 195 Detail of a circa 1930s photograph showing the pedestrian gate along the Old Nashville Highway.
- 196 The reconstructed pedestrian gate, 2010, seen from the opposite angle.
- 197 Grave markers in Section B in Stones River National Cemetery, 1935.
- 198 Grave markers in Section B in Stones River National Cemetery, 2010.
- 199 Resetting grave markers in the cemetery, 2001.
- 200 View of the U.S. Regulars Monument and future site of the cannonball monument in the 1960s.
- 201 In the 1960s, the Gettysburg Address plaque was located at the edge of the cemetery parking lot.
- 202 Contributing Features

Treatment Plan

- 203 Treatment Plan: Overall Site Recommendations.
- 204 Treatment Plan: Lodge and Service Character Area Recommendations.
- 205 Treatment Plan: Burial Ground Character Area Recommendations.
- 206 Treatment Plan: Lincoln Square and Central Avenue Detail Area Recommendations.

Foreword

Stones River National Cemetery, dedicated in 1865, was one of the earliest national cemeteries created by the federal government following the American Civil War. It was a significant expression by the nation recognizing the sacrifice of its people during that tremendous conflict. The cemetery landscape has changed over the years through a long series of management choices, aesthetic tastes, and changing weather patterns. With this Cultural Landscape Report and the well described and consistent recommendations, we and future managers have the outline that will guide cemetery choices for many years. We hope that our work, guided by this report, will serve as an example of exceptional stewardship of one of our national treasures, Stones River National Cemetery.

We appreciate the contributions of all those who prepared this report from Wiss, Janney, Elstner, Associates, Inc., especially Deborah Slaton, Project Manager and Historian, as well as Laura Knott and Christina Osborn of John Milner Associates, Inc., and Liz Sargent, Historical Landscape Architect, of Liz Sargent HLA. We also thank the staffs of the National Park Service Southeast Regional Office who contributed to this work over many years, and to the park staff members who worked on it as well. Their good work will be reflected in visitor understanding and appreciation of Stones River National Cemetery for many years to come.

Acknowledgements

National Park Service – Southeast Regional Office

Laurie Chestnut, Contracting Officer Tracy Stakely, Chief, Cultural Landscapes Branch, and Contracting Officer's Technical Representative (former) David Hasty, Landscape Architect and Contracting Officer's Technical Representative Beth Wheeler Byrd, Landscape Architect

National Park Service – Stones River National Cemetery

Gayle Hazelwood, Superintendent Stuart Johnson, Superintendent (former) Gib Backlund, Chief of Operations Jim B. Lewis, Park Ranger John R. George, Museum Technician Troy Morris, Integrated Resources Manager Elizabeth Guercio, Park Volunteer Laura Olin, Park Volunteer

Wiss, Janney, Elstner Associates, Inc.

Deborah Slaton, Project Manager and Historian Kenneth Itle, Historical Architect Mike Ford, Historical Architect/Historian Tim Penich, Historical Architect/Historian

John Milner Associates, Inc.

Laura Knott, Principal Landscape Architect Jane Jacobs, Historical Landscape Architect Christina Osborn, Landscape Designer Lauren Noe, Landscape Designer

Liz Sargent HLA

Liz Sargent, Historical Landscape Architect

Introduction

Management Summary

Dedicated in 1865, Stones River National Cemetery marks the final resting place of more than 6,100 Union soldiers involved in Civil War battles within Middle Tennessee. The cemetery, which falls within the boundaries of Stones River National Battlefield, a unit of the National Park System, is located approximately three miles northwest of the city of Murfreesboro, and twenty-eight miles southeast of Nashville, Tennessee. The park protects a part of the battlefield associated with the December 31, 1862, to January 2, 1863, Civil War Battle of Stones River, a key contest in the campaign to control Middle Tennessee. Stones River National Cemetery was established for the reinterment of Union soldiers buried within ninety miles of Murfreesboro who lost their lives in the battles of Stones River, Franklin, and Spring Hill, as well as skirmishes that had occurred along the contested Nashville & Decatur Railroad line.

Work on the cemetery commenced in 1864, and was completed the following year. By 1867, reburial of Union soldiers was complete. The cemetery was later incorporated into Stones River National Military Park, established by Congress in 1927 for administration by the U.S. War Department, although it remained an active burial ground. In 1933, Stones River National Military Park was transferred to the administration of the National Park Service along with all of the U.S. War Department's historical land holdings. Today, Stones River National Battlefield, as it was renamed in 1960, is comprised of several noncontiguous parcels that encompass the battlefield core, the headquarters sites of the opposing generals, the McFadden Farm along Stones River, one of the Civil War's oldest

commemorative monuments, and fragments of a post-battle earthworks complex used by the Union army as a supply base, in addition to the Stones River National Cemetery.



FIGURE 1. Contemporary view of the Stones River National Cemetery. Source: Stones River National Battlefield, 2014.



FIGURE 2. Nineteenth-century photograph of the Stones River National Cemetery, including the rostrum behind the trees located left center. Source: Stones River National Battlefield Archives, Kern collection.

Of the 6,139 Union soldiers who died in Middle Tennessee in battles, camps, and hospitals and are buried in Stones River National Cemetery, the identities of 2,562 are not known. The cemetery is also the final resting place for 747 veterans who served in the U.S. military following the Civil War. Stones River National Cemetery was closed for new burial reservations in 1974, but still includes several open spaces reserved by military personnel prior to this date.

In 1978, Stones River National Battlefield was listed in the National Register of Historic Places for its associations with the Civil War Battle of Stones River. The nomination addresses both the battlefield and the cemetery, classifying Stones River National Cemetery as having "First Order of Significance" as the final resting place of all Union soldiers "known and unknown that were found in and around the battlefield."2 Additional documentation prepared for the battlefield park in 2003 suggests that the evaluation for the cemetery be expanded to include significance under Criterion C in the area of landscape architecture. Under this criterion, the cemetery is considered significant for its design, which exemplifies a formal geometric style and uses plants in symbolic ways and conveys a character of simple grandeur appropriate to honor the contributions of Union soldiers during the Civil War. The additional documentation also recognizes significance under Criterion A in the area of Commemoration, as exhibited by the various markers and monuments erected by states and veterans during the late nineteenth century.

Over time, the landscape of Stones River National Cemetery has evolved to reflect changing aesthetic styles, and in response to management and maintenance practices and the needs of visitors. As part of a larger battlefield park, Stones River National Cemetery is experienced by a wider range of visitors, and offers connections to the larger battlefield park, in terms of circulation and interpretation, that were not part of the original

In order to support informed planning for future management and preservation of the national cemetery, including protection and enhancement of the cemetery's integrity, the National Park Service engaged a team of preservation professionals that included Wiss, Janney, Elstner Associates, Inc. (WJE) of Northbrook, Illinois, and John Milner Associates, Inc. (JMA) of Charlottesville, Virginia, to prepare a Cultural Landscape Report (CLR) for the Stones River National Cemetery. CLRs serve several important functions. They are the principle treatment documents for cultural landscapes and the primary tool for long-term management of those landscapes. CLRs guide management and treatment decisions about a landscape's physical attributes, biotic systems, and use, when that use contributes to historical significance. Based on the identification of the landscape characteristics and associated features, values, and associations that make a landscape historically significant, and site management goals, such as access, contemporary use, and interpretation, a CLR outlines appropriate treatment for a landscape consistent with its significance, condition, and planned use.

design. In addition, during the last thirty years, commercial and residential development outside the park's boundaries has increased dramatically, threatening to impact the cemetery's historic integrity of setting. As the landscape surrounding the cemetery has changed, the historic viewsheds and the way in which visitors experience the site have been affected.

^{1.} In the South, the battle was referred to as the Battle of Murfreesboro.

Ron A. Gibbs, Stones River National Military Park / Stones River National Battlefield National Register Nomination (September 22, 1975).

Description of Study Boundaries

Refer to Figure 3, Project Context; Figure 4, Project Location; Figure 5, Stones River National Battlefield and Stones River National Cemetery map; and Figure 6, Plan of Stones River National Cemetery.

Stones River National Cemetery is located in Rutherford County, Tennessee, in close proximity to the city of Murfreesboro. The 20.1-acre cemetery is entirely contained within a perimeter wall. It is edged closely to the north by the CSX rail line, originally established by the Nashville and Chattanooga Railroad prior to the Civil War, and to the south by Old Nashville Highway, also present at the time of the Battle of Stones River. Immediately to the south of Old Nashville Highway lies the main battlefield unit of the park, and its visitor center. A path provides visitor access to the cemetery from the parking area associated with the visitor center. The cemetery is also accessed from a small parking area located further east along Old Nashville Highway.



FIGURE 3. Stones River National Cemetery is located near Murfreesboro, Tennessee. Source: www.greenwichmeantime.com, accessed January 31, 2011.



FIGURE 4. The cemetery is located northwest of Murfreesboro, connected by the Old Nashville Highway to the town's center. Source: USGS, Murfreesboro, 1983, and Walterhill, 1998, quadrangles.

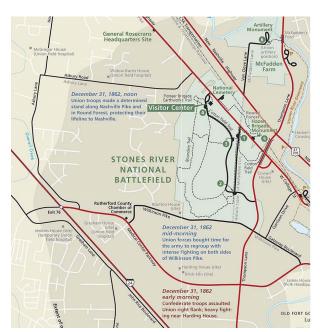


FIGURE 5. Stones River National Cemetery is located across Old Nashville Highway from the main unit of Stones River National Battlefield. Source: Stones River National Battlefield. Stones River National Battlefield web site.

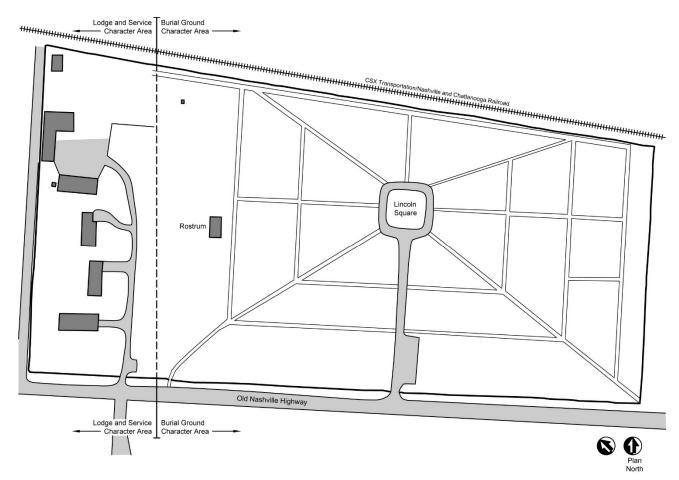


FIGURE 6. Plan of Stones River National Cemetery.

Historical Summary

Prior to the Battle of Stones River, the rural landscape that comprised the region was characterized by a pattern of scattered farms and woodlands, including dense stands of Eastern red cedar trees. The site where the cemetery would stand occupied a slight prominence, relatively clear of trees, between Stones River to the east and Overall Creek to the west. The linear parcel was bounded on the north by the tracks of the Nashville and Chattanooga Railroad and on the south by the Old Nashville Highway, then known as the Nashville and Murfreesboro Turnpike.

Rutherford County, located near the center of the state of Tennessee, was strategically positioned to control roads, railroads, and the movement of agricultural products. By late 1862, Murfreesboro had been developed to serve as the base of operations for the Army of Tennessee, the

Confederacy's principal western army, which was commanded by Gen. Braxton Bragg. Nashville, however, located nearly 30 miles to the northwest, was controlled by Union forces, who used the city as a forward supply depot. Control of Murfreesboro, and in particular the Nashville and Chattanooga Railroad, was an essential goal for the Federal 14th Army Corps (the Army of the Cumberland) to enhance their operations in Nashville and to supply Union forces in their planned campaign to take Chattanooga, Tennessee, located to the southeast.

The December 31, 1862, and January 2, 1863, Battle of Stones River occurred when Union forces, under the command of Gen. William S. Rosecrans, attacked Bragg's Confederate forces, who were camped along the Old Nashville Highway and the Nashville and Chattanooga Railroad to protect key transportation routes and the farms that supplied Confederate troops. The resulting two-day Battle of Stones River was one of

the bloodiest of the war, with more than 23,500 casualties. The Army of Tennessee lost control of the rich farmland of Middle Tennessee, which would now support the Union forces, and dissent was generated within its command. Following the battle, the Army of the Cumberland established a powerful defensive position in Middle Tennessee, which it retained for the remainder of the war. With the help of former slaves, Union forces constructed Fortress Rosecrans, a fortification that served as a supply depot and base of occupation for the Union for the duration of the war. Fortress Rosecrans was also important to the Union in protecting and maintaining control of the Nashville and Chattanooga Railroad throughout the war.

Before the Civil War was over, the federal government initiated a system of national cemeteries for the interment of Union soldiers who had died in the service of their country through an act of Congress passed on July 17, 1862. A national cemetery was proposed for the Stones River battlefield environs as early as 1864.

On March 29, 1864, Maj. Gen. George H. Thomas, commander of the Army of the Cumberland, ordered Maj. Gen. Horatio Van Cleve to select a site for the founding of a national cemetery at Stones River.³ Van Cleve subsequently detached Capt. John A. Means of the 116th Ohio for duty as a topographical engineer. The site chosen for the national cemetery was located on a high point between the Old Nashville Highway and the Nashville and Chattanooga Railroad, where Union artillery had repulsed Confederate attacks on the afternoon of December 31, 1862. Means oversaw the cemetery's layout from June 2, 1864, until his regiment left Murfreesboro on April 25, 1865.4

Means laid out the burial grounds in a generally symmetrical, axial, radial design around a broad drive leading to a central square, from which other avenues extended in several directions. A wooden picket fence was constructed to enclose the cemetery.

Beginning in October 1865, the 111th United States Colored Infantry began locating and reinterring Union dead from the immediate battlefield, as well as Murfreesboro and the surrounding area.⁵ This work continued until late 1867, including the interment of 1,360 bodies from Rose Hill Cemetery in Columbia, Tennessee, in November, where a national cemetery had been planned, but was never established. In contrast, most of the Confederate dead were buried in their home towns, or the nearest southern community. Some of those who died in the Battle of Stones River, however, were buried in a mass grave south of Murfreesboro, and later reinterred in another mass grave referred to as Confederate Circle within the town's Evergreen Cemetery.

At Stones River National Cemetery, the federal government began to plant trees by 1869, a practice that continued and later included ornamental shrubs, in the ensuing years. In 1871, new acreage was added to the cemetery property and a superintendent's lodge, along with accessory buildings, were constructed. The wooden picket fence was replaced with a limestone wall during the 1870s. Site furnishings were also installed during this time, and in 1882, a rostrum was constructed and commemorative plaques placed in the landscape.

In the 1890s, veterans and others began to suggest that the federal government consider establishing a national military park to commemorate the

- 4. Ibid., citing Report of Chaplain William Earnshaw to Brevet Major General J. L. Donaldson, Chief Quartermaster of the Department of Tennessee, October 5, 1866, 229.
- 5. James A. Sanders and Ron A. Gibbs, Historic Resource Management Plan for Stones River National Battlefield and Cemetery (Murfreesboro: National Park Service, July 1977), I:6.

^{3.} Sean M. Styles with Miranda Fraley; Mary O. Ratcliffe and Robert W. Blythe, eds., Stones River National Battlefield Historic Resource Study (Atlanta, Georgia: Cultural Resources Division, Southeast Regional Office, National Park Service, 2004), 39, citing Daniel A. Brown, Marked for Future Generations: The Hazen Brigade Monument, 1863-1929 (Murfreesboro, Tennessee: Stones River National Battlefield, July 1985), 19.

Battle of Stones River, similar to those being established at Antietam, Gettysburg, and other sites. However, the federal government lacked sufficient funds and supporting information to act upon the many requests it received to create national military parks at Stones River and other sites, beyond those that had been created in the 1890s at Antietam (1890), Chickamauga and Chattanooga (1890), Shiloh (1894), Gettysburg (1895), and Vicksburg (1899). For these reasons, no action was taken at the federal level on establishment of a national military park at Stones River for several decades.

In 1926, the Act for the Study and Investigation of Battlefields suggested that certain battlefields would merit protection as national military parks. Based on the recommendations in the study, Stones River National Military Park was established by Congress on March 3, 1927. The park was to be administered by the United States War Department.⁶ Between 1928 and 1934, additional land was acquired by donation from the Nashville, Chattanooga, and St. Louis Railway. The War Department began rehabilitation and alteration of the grounds in July 1930, and the park was officially dedicated in July 1932. In 1933, two executive orders relating to the Organization of Executive Agencies (6166 and 6228) were signed into law by President Franklin D. Roosevelt, which transferred the War Department's parks and monuments to the administrative responsibility of the National Park Service. In some cases, such as at Stones River, the historic properties included national cemeteries.

From 1933 until 1955, the park was administered by Chickamauga and Chattanooga National Military Park, after which Stones River was assigned its own superintendent. Beginning in 1933 and continuing through 1935, Public Works Administration (PWA) and Civilian Conservation Corps (CCC) workers made improvements to the national cemetery and the main battlefield. The advent of World War II significantly decreased the funding available for park operations, with most federal resources directed to the war effort. During this period, little work was accomplished within the cemetery, with the exception of the demolition of the rostrum in 1941.

On April 22, 1960, the park and the cemetery were collectively redesignated Stones River National Battlefield, as part of a larger reorganization of National Park Service unit administration and nomenclature. The Secretary of the Interior was directed to administer, protect, and develop the battlefield in accordance with the provisions of the National Park Service Organic Act of August 25, 1916.

As part of the nationwide Mission 66 initiative that sought to enhance the appearance and functionality of national park units, the superintendent's lodge and maintenance buildings were sold and moved or demolished in the 1960s, and three single-story brick homes and a new maintenance building were constructed in the same area. During this time, the entire cemetery wall was repointed and three pedestrian gates were eliminated. Vehicular entrances into the cemetery core and maintenance area were rebuilt to better accommodate larger vehicles and a small visitor parking lot was added near the main entrance gate inside the cemetery wall.7 Burials continued, but by the mid-1960s, Stones River National Cemetery had neared its capacity. The cemetery was officially closed to burials on January 31, 1974.8

^{6.} H.R. 6246, Public, No. 777, March 3, 1927.

Stones River National Battlefield Landscape, Stones River National Battlefield, Cultural Landscape Inventory (Atlanta, Georgia: Office of Cultural Resources Planning, Southeast Regional Office, National Park Service, 1994).

^{8.} Memorandum from Superintendent, Stones River National Cemetery, to Associate

Regional Director, Park Systems Management, January 11, 1974, Subject: Closure of Stones River National Cemetery. Folder 22, "A58 Interments," Box 4, catalogue number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

Scope of Work and Methodology

Project Scope

As described in the scope of work developed by the National Park Service for this project, the CLR for Stones River National Cemetery is intended to:

- Describe the historical development of the national cemetery
- Document its existing site conditions
- Analyze the landscape's potential National Register significance to confirm the primary period of significance, and identify other potential periods of significance
- Assess the landscape's integrity by comparing the existing condition to the condition present during the period(s) of significance
- Identify the site's character-defining features
- Identify a preferred treatment alternative and appropriate treatment recommendations and guidelines that balance preservation of park resources with contemporary needs of park operations
- Provide implementation strategies for landscape treatment

The scope also indicates that proposed implementation strategies are to be supported by the preparation of a prioritized list of project statements resulting from the treatment recommendations and guidelines. The statements are to offer a general outline for the work needed at the site in order to fully implement the recommended treatments. The project statements are also to be presented in a way that supports the National Park Service in seeking funding through the Project Management Information System (PMIS).

Project Methodology

The CLR for Stones River National Cemetery has been prepared in accordance with the guidance afforded in the scope of work and the most recent versions of various federal guidance documents, including:

- A Guide to Cultural Landscape Reports: Contents, Process, and Techniques
- The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes
- NPS Director's Order 10A: Design and Construction Drawings
- NPS Director's Order 28: Cultural Resources Management
- NPS Director's Order 61 and Reference Manual 61: National Cemetery Operations
- NPS Director's Order 77 and Reference Manual 77: Natural Resource Management
- NPS-SER-82: Biotic Cultural Resources: Management Considerations for Historic Districts in the National Park System, Southeast Region
- The Uniform Federal Accessibility Standard (UFAS) and Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- The National Park Service's Guiding Principles of Sustainable Design
- National Register Bulletin: How to Apply the National Register Criteria for Evaluation
- National Register Bulletin: How to Evaluate and Nominate Designed Historic Landscapes
- National Register Bulletin: Guidelines for Documenting and Evaluating Rural Historic Landscapes

- National Register Bulletin: Guidelines for Evaluating and Registering Cemeteries and Burial Places
- National Register Bulletin: Telling the Stories: Planning Effective Interpretive Programs for Properties Listed in the National Register of Historic Places

In addition, the methodology used to prepare each component of this study is described in detail below.

Background Research and Data Collection.

Prior to visiting the site in November 2010, CLR project team members from Wiss, Janney, Elstner Associates, Inc. (WJE), and John Milner Associates, Inc. (JMA), began to collect documents and other materials pertaining to the project and site. These included the National Park Service List of Classified Structures for park resources, secondary sources addressing the history of the site and region, and information available from the National Park Service Technical Information Center in Denver, Colorado. In preparation for field investigations, project personnel requested GIS files from the park and the National Park Service Southeast Regional Office to use in developing base maps for field inventory. Documentation previously gathered by the project team in preparing a CLR for Stones River National Battlefield, completed in June 2007, was also reviewed for this study.

Start-up Meeting. On November 8, 2010, WJE and JMA project team members met with park and regional National Park Service personnel at Stones River National Battlefield to initiate work on the CLR for Stones River National Cemetery. Those participating in the meeting included:

Southeast Regional Office

 Tracy Stakely, Chief, Cultural Landscapes, National Park Service Southeast Regional Office (SERO)

Stones River National Battlefield

Stuart Johnson, Superintendent, STRI

- Gib Backlund, Chief of Operations, STRI
- Jim Lewis, Park Ranger (Law Enforcement), STRI
- John George, Museum Technician, STRI

Wiss, Janney, Elstner Associates, Inc.

- Deborah Slaton, Project Manager/Historian
- Tim Penich, Project Intern Architect/Historian

John Milner Associates, Inc.

- Laura Knott, Principal Historical Landscape Architect
- Liz Sargent, Historical Landscape Architect
- Lauren Noe, Landscape Designer

During the meeting, the purpose, goals, methodology, and schedule for the CLR were reviewed by Tracy Stakely and project team members. Additional scope elements included in the project were reviewed, including the development of AutoCAD base maps and a conservation study for the perimeter wall, monuments, markers, and site furniture in the cemetery.

Research sources available to the project team were reviewed, including the Cultural Landscape Inventory (CLI) for the cemetery prepared by National Park Service SERO, the CLR for Stones River National Battlefield previously prepared by the WJE/JMA project team, two draft CLRs for the cemetery previously prepared by others, National Park Service management reports for the park, and a Historic Resource Study prepared by Sean M. Styles with Miranda Fraley and edited by Mary O. Ratcliffe and Robert W. Blythe. In addition, National Park Service and park planning documents currently in progress were discussed; these included Director's Order No. 61: National Cemetery Operation and the associated Reference Manual 61: National Cemetery Operations, a long

range interpretive plan for the park, and a new park brochure.

Recent and anticipated work at the cemetery was discussed, including the rehabilitation of the U.S. Regulars Monument in 1998, the replica rostrum completed in 2007, wall repair and repointing projects, maintenance and repair of gates and the flagpole, removal of dead or damaged trees, the addition of new wayside exhibits, and the ongoing project of resetting and pressure washing headstones.

After the meeting, National Park Service personnel toured the site with the CLR team to provide overview and orientation information. Park personnel indicated the locations of current and anticipated future rehabilitation and construction projects, and ongoing maintenance issues and concerns. Of note were the following concerns:

- The impacts of vegetation on the headstones and monuments
- The need for a consistent approach to planting and vegetation management in keeping with the historic design intent of the cemetery, yet appropriate to the park's maintenance capabilities
- The need for comprehensive ground cover to protect against erosion
- Consideration of options for a universally accessible route into and through the cemetery
- The need for additional interpretation
- An appropriate approach to interpreting the battle within the cemetery, and the amount of information and the media format that should be made available to visitors about the individuals buried in the cemetery

During the field orientation, park personnel noted specific maintenance concerns to be addressed by the CLR. These included the challenges associated with mowing around headstones, especially damage caused by string trimmers, and the difficulty associated with managing ground cover

in shaded areas. Other issues discussed during the tour included processes for tree maintenance and removal, ongoing wall repairs, site perimeter maintenance related to the railroad embankment, the desire for additional screening between the cemetery and nearby commercial development, placement of new wayside exhibits, possible removal of existing waysides and the cannon used to interpret battle events, possible removal or replacement of benches, maintenance of plaques, and possible replacement of missing historic signage.

Field Investigations. On November 8 and 9, 2010, CLR team members conducted preliminary field investigations by documenting landscape resources associated with the site. Team members photographed primary and representative landscape features, both cultural and natural, and annotated copies of base mapping with observations about materials, resource condition, and information to be used to update the mapping files. The location and orientation of photographs were noted on the field maps. Where available mapping was lacking in detail, team members prepared sketch maps in the field which were later used to enhance the electronic files. Jamie Clapper Morris, WIE conservator, participated in the second day of the site visit to conduct a conservation study of the perimeter wall, monuments, and headstones.

Historical Landscape Documentation and Site Physical History. The extensive historical context information collected by the project team for the 2007 CLR for Stones River National Battlefield served as the basis for research and documentation conducted as part of this study. Contextual information related to national cemeteries, compiled by the project team during previous studies of Andersonville National Cemetery and Vicksburg National Cemetery, was also collected for use in preparing the site history.

Subsequent directed research was conducted at the park headquarters, focusing on archival documents and photographs related to the cemetery. Among the park collection are digitized copies of an 1892 drawing of Stones River

National Cemetery, which was later used as a basis for tree plantings by the National Park Service from the 1970s to today. The drawing, together with numerous archival photographs in the park collection, proved extremely valuable in understanding the evolution of the cemetery design. In addition, project historians contacted the National Cemetery Administration, U.S. Department of Veterans Affairs (VA) historian Sara Amy Leach, who provided additional information about the National Cemetery System, including 1890s drawings for several cemeteries for comparison with Stones River.

In addition to the secondary sources noted above, the research team reviewed the National Shrine Commitment: Operational Standards and Measures (2009) developed by the Veterans' Administration for the national cemeteries which it administers. Although these standards were reviewed, they do not address contemporary needs for historic preservation and interpretation as addressed by National Park Service policy and were considered only as a source of background information.

The park brochure was updated during the course of the project, and a new version was made available for use by the project team in February 2012.

Additional research was conducted by the project team at the National Archives at College Park, Maryland, and at the Tennessee State Library and Archives in Nashville. Research materials were also provided to the project team by Stones River National Battlefield Chief of Operations Gib Backlund, Park Ranger Jim Lewis, and Museum Technician John George.

Base Mapping. Prior to the November 2010 site visit, the JMA project team prepared an AutoCAD base map of the cemetery by compiling information derived from GIS data provided by the National Park Service, maps generated for the CLI, and aerial photographs. These base maps were ground-truthed and augmented by measurements of landscape features taken in the field during the November 2010 site visit.

Historic Period Plan Preparation. Historic period plans of Stones River National Cemetery cultural landscape were prepared to represent the site during phases of its evolution to the present. The project team developed these plans through registration of historic mapping sources with existing conditions information; thus preparation of the base map discussed above preceded work on the historical base maps. Through review of historic photographs and written descriptions of the landscape found in the research materials collected for the project, the team augmented the base map to prepare a plan representing a key snapshot moment in the history of the site for each historic period identified in the site physical history as accurately as possible given available sources-1865, 1888, 1934, and 1968. Limited secondary sources were also used to corroborate information and to generate queries for primary sources. Secondary sources were typically evaluated for their credibility and utilized with caution.

Existing Conditions Documentation.

Existing conditions documentation was organized in accordance with the framework established in National Park Service guidelines and National Register bulletins listed above. It was developed through preparation of cross-referenced narrative, graphic, and photographic materials compiled from existing conditions base mapping, field investigations, field photography, and review of park planning documents, park files, and other relevant cultural and natural resource documents received from the National Park Service or acquired through research. Documents such as the soil survey for Rutherford County were helpful in establishing a geographic and geologic context for the cemetery and in understanding local conditions.

The resulting narrative description and existing conditions plan addressed the following cultural landscape features:

- Patterns of Spatial Organization
- Natural Systems and Features
- Responses to Natural Resources

- **Topographic Modifications**
- Views and Vistas
- Land Use
- Circulation
- **Cultural Vegetation**
- **Buildings and Structures**
- Small-scale Features
- Archeological Resources

Photographs of representative landscape features illustrate the narrative.

The team also prepared an inventory of existing landscape features based on documentation of the site and an understanding of historic conditions. The inventory was used to ensure that each feature was discussed in the text and served as the basis for condition assessments. Feature condition assessments were made using the categories suggested by the *Guide to Cultural Landscape* Reports: Good, Fair, Poor, and Unknown.9

The condition ratings were annotated as possible to include specific condition-related observations made in the field that help to justify the ratings.

Evaluation of Significance. Stones River National Cemetery was administratively listed in the National Register of Historic Places in 1968, although a nomination form was not completed until 1975. The nomination was accepted in 1978. Additional National Register documentation was prepared in 2003. Both the 1975 and 2003 documentation was reviewed by the project team and compared with the detailed historic documentation of the site developed for the CLR. Through this process, the CLR team identified several aspects of the nomination that could potentially be expanded to include additional areas, periods, and historic contexts of site significance in accordance with the guidance afforded in the National Register Bulletins titled How to Evaluate and Nominate Designed Historic

Landscapes, How to Apply the National Register Criteria for Evaluation, and Guidelines for Evaluating and Registering Cemeteries and Burial Places.

Comparative Analysis of Historic and Existing Conditions. To better understand the relationship between the existing landscape and the character of the landscape during the identified period of significance (1862–1974), the project team prepared a comparative analysis of historic and existing landscape conditions. The analysis focused on extant features and their dates of origin. The three primary goals of the comparative analysis were to:

- Understand which features survive from the period of significance;
- Establish the basis for an integrity assessment; and
- Provide an understanding of the similarities and differences between historic and existing conditions that would contribute to the development of a well-grounded treatment plan for the cultural landscape.

The analysis narrative was illustrated with photograph pairs that compare historic with existing conditions within the cemetery, and other graphics.

Identification of Character-defining

Resources. Based on the findings of the comparative analysis of historic and existing conditions, the project team identified the landscape resources and characteristics that are character-defining for the designed historic landscape. In addition to describing the design qualities, characteristics, materials, and forms that together form the basis for the character of the historic landscape, the CLR identifies those resources that contribute to its National Register significance (dating from the period of significance and associated with the identified areas of

> (Washington, D.C.: National Park Service, Park **Historic Structures and Cultural Landscapes** Program, 1998), 67.

^{9.} Robert R. Page, Cathy A. Gilbert, and Susan A. Dolan, A Guide to Cultural Landscape Reports: Contents, Processes, and Techniques

significance); those that are non-contributing (post-dating the period of significance, having lost integrity, or not associated with the areas of significance for the cemetery); those that are undetermined (too little information is known about the feature to make a definitive classification); and those that are missing (present during the period of significance but are no longer extant). This classification system aided in understanding which landscape features should be retained or restored, which features could be adapted to accommodate new changes, and which missing features might be returned to the landscape.

Assessment of Integrity. The CLR also assesses the cemetery's integrity in accordance with the seven aspects—location, design, setting, materials, workmanship, feeling, and association identified in the National Register Bulletin, How to Apply the National Register Criteria for Evaluation.

Treatment Plan. Development of the treatment plan was based upon the findings of each of the chapters conveyed in the CLR. The comparative analysis and the National Register-level significance evaluation suggested an overarching treatment approach of rehabilitation to address both long-term protection and management of the park's historic landscape character and park goals involving enhanced visitor access and interpretation. The CLR also presents a treatment concept narrative intended to serve as a framework for the treatment guidelines and recommendations that follow. Treatment guidelines and recommendations were developed to respond to the specific management issues and concerns conveyed to the CLR project team by the National Park Service during project meetings and in the project scope of work, the condition assessments of site resources developed through field investigations, and best management and stewardship practices relating to historic preservation and sustainability goals. Methods for achieving the treatment recommendations were identified through the development of several prioritized implementation projects, conveyed in a format that is consistent with the National Park

Service's PMIS statements to facilitate the preparation of funding requests.

Summary of Findings

The cultural landscape of Stones River National Cemetery is nationally significant under National Register Criteria A, C, and D as a designed historic landscape created to commemorate and honor those who served as soldiers in the United States Armed Forces. The cemetery is located on key terrain associated with the Battle of Stones River, and is the final resting place of the Union soldiers who gave their lives during this, and other, nearby Civil War battles. The Stones River National Cemetery is significant in the areas of Commemoration, Historic Archeology, Landscape Architecture, Ethnic Heritage, and Military History during the period 1862 to 1974, with 1862 representing the beginning of the Battle of Stones River and 1974 representing the closing of the cemetery for burial reservations.

Per Criterion A in the area of Military History, Stones River National Cemetery is associated with the Battle of Stones River, which occurred in the area from December 31, 1862 to January 2, 1863, and for the establishment of a cemetery on the battlefield for the reinterment of Union dead, and Commemoration of the contributions of federal soldiers to American liberty. The national cemetery is also significant in the area of Ethnic Heritage for the role that the U.S. Colored Troops and freed slaves who settled in the area played in establishing and maintaining the cemetery.

Per Criterion C in the area of Landscape Architecture, the design of Stones River National Cemetery is consistent with other early national cemeteries established during the nineteenth century that convey a classical sense of simple grandeur, which is distinctive and unlike the Romantic and picturesque landscapes that were popular during this time period. Features of Stones River National Cemetery, including its perimeter enclosing wall, tree-lined radial and orthogonal drives and walks, and its central square reflect formal design principles intended to honor the important contributions of United States

soldiers. The perimeter wall helps to establish an internally-focused sacred and hallowed space within the interior of the cemetery also designed to reflect the solemn heritage of the site through the use of permanent monuments and markers and simple elegant turf and plantings.

Mission 66-era resources at the national cemetery are also considered significant and contributing under Criterion C. The circulation features, three residences, maintenance building, well house, interpretive features, and plantings added to the national cemetery through the Mission 66 program are a generally intact enclave representative of Mission 66 planning, a recognized historic context for assessment of significance.

Per Criterion D, previous investigations of the cemetery suggest that it is likely to yield information important in history in the area of Historic Archeology, particularly relating to the Battle of Stones River and nineteenth-century burial practices.

The suggested period of significance for Stones River National Cemetery is 1862-1974, with the beginning date of 1862 coinciding with the Battle of Stones River, and the end date marking the closing of the cemetery to new burial reservations.

Stones River National Cemetery is one of fourteen national cemeteries administered by the National Park Service as part of a larger system that encompasses 146 sites. The National Park Service, while following the guidance offered by the National Cemetery Administration, Veterans Administration in management of the cemetery, also treats these properties as historic resources, affording an additional layer of consideration in protecting their original intended character. As such, evaluating the layers of history and determining how best to protect, maintain, and interpret associated resources require careful consideration. This CLR recognizes the many concerns and considerations involved in maintaining the cemetery as a place of honor, while also stewarding historic resources, and allowing for on-going use and interpretation for park visitors. The treatment recommendations

provided as part of the CLR are carefully balanced to suggest preservation of those historic elements that survive in their original location and in good condition, while also addressing the need to accommodate contemporary interpretation and access goals. Anticipated future threats to the cemetery, including climate change, have also been considered in developing the approach to treatment presented herein.

The overarching treatment approach recommended as part of this CLR is rehabilitation, which will protect historic resources while also allowing for modifications as needed to address access, interpretation, and anticipated environmental conditions associated with climate change. This approach and the associated treatment recommendations included in the report are intended to enhance the integrity of the historic cemetery, while increasing access for all visitors, and providing a rewarding interpretive experience. Rehabilitation will allow for the reestablishment or interpretation of certain key missing historic conditions when justified, which in some cases is intended to enhance the cemetery's integrity. The CLR also attempts to suggest methods for maintaining historic masonry, metal, and plant resources that address the threats posed by factors such as weather, visitor access, and regular mowing.

The treatment recommendations for the cemetery resulted in the identification of six prioritized implementation projects that collectively address the overarching goals for long-term landscape management. These projects are addressed in detail as part of the CLR. They include:

- Prepare a vegetation management plan.
- 2. Develop a maintenance manual for masonry and metal features of the cemetery, incorporating conservation best practices.
- 3. Address vegetation maintenance needs, taking into consideration the protection of grave markers and monuments.

- 4. Develop a universally-accessible pedestrian path system that provides access to the primary interpretive areas of the cemetery.
- 5. Consider methods for marking and interpreting the layers of history within the cemetery, including the locations of missing landscape features.
- 6. Establish a design guide for site furnishings and signage.

Recommendations for Further Study

Research conducted by the authors and the park in support of this study has indicated several subject areas and questions that would benefit from further exploration to enhance understanding of historical development of the site, confirm dates of origin of certain features of the cemetery, and inform development of treatment recommendations for specific projects. Recommendations for further study are noted below, with the understanding that some of these research topics may be addressed by the Administrative History and updated National Register documentation being developed for the park beginning in 2014.

- 1. Conduct oral history interviews with current and former park personnel and others with special knowledge of Stones River National Cemetery. Information gathered through these interviews will assist in understanding, interpreting, and planning for care of the national cemetery, and will also support development of the Administrative History of Stones River National Battlefield currently in progress.
- 2. Collect, and supplement as possible, documentation from past inventory efforts that record the privately erected (nonconforming) headstones in the cemetery.
- 3. Conduct research into the history of planting shrubs to replicate the form of Union Army corps badges in national cemeteries, and their

- use at Stones River. Consider this information when developing new interpretive programs for the cemetery.
- 4. Collect photographs, drawings, and other evidence of historic benches used in the cemetery to serve as the basis for reinstating earlier styles at Stones River National Cemetery.
- 5. Collect photographs, drawings, and other evidence of the original section markers used in the cemetery to serve as the basis for restoring the historic type of section markers at Stones River National Cemetery. Consider the role of oral history in the collection of this data.
- 6. Collect photographs, drawings, and other evidence of missing cannonball pyramids to serve as the basis for restoring the pyramids at the bases of the upright cannons.
- 7. Conduct further archival research to identify additional documentation of Mission 66-era planning and work conducted in the cemetery. In particular, conduct research on plantings in the area of the Mission 66 residences and maintenance structures.
- 8. Conduct further research to determine whether unused reservations exist for spaces 6417 to 6425 and spaces 6520 to 6525 within the burial ground, which do not contain burials, or whether there is another reason that these spaces are vacant.
- 9. Conduct further archeological investigations within the cemetery to understand features that are no longer extant above grade, such as the brick walks that are indicated in archival documentation to have existed between the superintendent's lodge, an outbuilding, and a cistern, as well as between the lodge and the gravel access drive leading to the highway. Other resources that may be revealed through further archeological investigation include a well that may exist along the Old Nashville Highway, the nineteenth century vitrified pipe system below grade within the cemetery, and

- the drainage structure that may exist through the railroad embankment. To guide these investigations, a set of research questions should be developed.
- 10. Consider preparing additional National Register documentation for Stones River National Cemetery to augment the analysis provided in the Additional Documentation to the National Register nomination for Stones River National Battlefield. As part of this effort, conduct further research on the ethnographic history of the cemetery, and specifically the participation of African Americans in its construction and development. Also conduct further research into the history of Mission 66 resources within the cemetery, particularly the three residences, to assess their significance. This research would include identifying documentation of other Mission 66 resources within Tennessee, and other Mission 66 residences within the region, to support assessment of the Stones River National Cemetery resources within these contexts.

Introduction

Site History

Early Settlement and Development

The earliest occupants of the Middle Tennessee region were likely the American Indians known as Mound Builders. Prior to the arrival of European settlers, Shawnee lived along the Cumberland River in Middle Tennessee, but were driven out by Cherokee and Chickasaw.¹⁰ Many battles occurred among the American Indian tribes in the region. The area was eventually regarded as a common hunting ground and no single tribe settled there.

The Middle Tennessee region remained unsettled by European colonists until approximately the 1760s, but was visited by explorers, hunters, trappers, and fur traders prior to that time. A trading post was established at French Lick (later Nashville) in 1710, and the first permanent settlement was established in the Nashville area in 1779–1780. The settlement survived despite attacks by American Indians on the unguarded settlers. The region that would become the State of Tennessee was part of North Carolina until 1796, and in 1783, Davidson County was created by an act of the legislature of North Carolina, incorporating what would later become Rutherford County. Attempts to establish permanent settlements in the area were initially

In 1786, forty grants of land were made in the vicinity of Stones River, many in return for military service; although some recipients never settled on or even visited the land they had been granted.¹² In 1795, the signing of Pinckney's Treaty ended Spanish attempts to control the Mississippi River, and Spanish encouragement of American Indians attacks on settlers in the region soon ended as well, encouraging additional settlement. The first permanent settlement in the Davidson County area occurred along the upper banks of Stones River in 1797.¹³ Among the earliest settlers in the area of Stones River were Samuel Wilson and Nimrod Menifee, who owned the land that was to become the site of the national cemetery.14

Through division of Davidson, Williamson, and Wilson counties, Rutherford County was organized by the Tennessee General Assembly on October 25, 1803. The county was named in honor of Gen. Griffith Rutherford, a Revolutionary War hero who also fought American Indians within the region.¹⁵ Several treaties, in particular the Third Treaty of Tellico with the Cherokee in 1805, led to increased settlement in Middle Tennessee.

By 1836, the boundaries of Rutherford County were amended to reach their present extent.¹⁶ The

- 10. Anne Wilson Willett, A History of the Stones River National Military Park, Thesis for Master of Arts degree (Murfreesboro, Tennessee: Middle Tennessee State College, August 1958),
- Carlton C. Sims, ed., A History of Rutherford 11. County (Murfreesboro, Tennessee: Rutherford Courier, 1947), 11.

- 13. Sims, 11.
- 14. Ibid., 16.
- 15. Ibid., 25.
- Sean M. Styles with Miranda Fraley; Mary O. 16. Ratcliffe and Robert W. Blythe, eds. Stones

unsuccessful because of hostile American Indians.11

^{12.} North Carolina issued titles to land in the area well after that state ceded its claim and after Tennessee became the sixteenth state in the Union on June 1, 1796.

Rutherford County seat remained at Jefferson, between the forks of the Stones River, until 1812 when it was moved to Murfreesboro, which was first named Cannonsburgh after Tennessee governor Newton Cannon, and renamed Murfreesborough after Captain Matthew Murfree on November 19, 1811.17 Murfreesborough was incorporated in 1817 and served as the capital of Tennessee from 1819 until 1826. At that time, Nashville was established as the state capital because of its favorable location on the Cumberland River.

To facilitate commerce, in the 1830s the state of Tennessee encouraged construction of several macadamized roads by providing funding to turnpike companies; these roads included the Nashville, Murfreesboro and Shelbyville Turnpike (referred to as the Nashville Turnpike, and presently known as Old Nashville Highway). 18 The turnpike and its related structures were completed by 1842, providing a high quality road that was later used by military forces for supply transport.¹⁹

The first railroad in the state, the Nashville and Chattanooga Railroad, was chartered in 1845 and began service from Nashville to Murfreesboro on July 4, 1851. The line was completed to Chattanooga in February 1854. The railroad linked Middle Tennessee with the ports of Charleston and Savannah, as well as the Ohio River at Louisville, Kentucky, and thus the Midwest. A workforce of slaves owned by the Nashville and Chattanooga Railroad, together with Irish immigrant labor, completed construction of the railroad through Rutherford County.

> River National Battlefield Historic Resource Study (Atlanta, Georgia: Cultural Resources Division, Southeast Regional Office, National Park Service, 2004), 17.

In 1860, the population of Rutherford County was 27,918 persons, nearly half of whom were slaves. Tennessee was the second largest corn producing region in the Confederacy east of the Mississippi River, and Rutherford County alone provided more than a million and a half bushels of corn annually. As recorded in the 1860 agricultural census, county farmers produced more than 150,000 bushels of wheat, more than 50 tons of sweet potatoes and Irish potatoes, and significant numbers of hogs, horses, and mules.²⁰ The rich farms of Middle Tennessee, including Rutherford County, would become a target of both the Union and Confederate armies as a food source for their soldiers.

Prior to the battle, the Stones River battlefield landscape was occupied by scattered farms edged by woodlands often composed of Eastern red cedar growing in dense thickets or "cedar brakes." Each farm typically consisted of a farmhouse, barn, and outbuildings such as corn cribs and shelters for cotton gins, as well as rectilinear cultivated fields of corn or cotton bordered by rail fences. The ground over which the Battle of Stones River would later be contested consisted of shallow soils overlaying limestone and shale bedrock, pitted with sinkholes caused by surface and underground water sources dissolving the limestone. These geological features would prove to be significant obstacles during the battle.

Following the election of Abraham Lincoln as President in November 1860, southern states began to consider secession from the Union. South Carolina was the first state to secede on December 20, 1860. The states of Mississippi,

- 19. Styles, 26. See also Edward C. Annable, Jr., A History of the Roads of Rutherford County, Tennessee, 1804–1878: Historic Road Research, and Its Applications for Historic Resource Surveys and Local History (Thesis for Master of Arts degree, Middle Tennessee State University, December 1982), 159-162.
- 20. Styles, 28, citing the United States Bureau of Census, Population of the United States in 1860: Compiled from the Original Returns of the Eighth Census (Washington: Government Printing Office, 1864), 136, 459.

Rutherford County. History of Tennessee 17. (Chicago and Nashville: The Goodspeed Publishing Company, 1887), 815. The spellings of the town names, Cannonsburgh and Murfreesborough, were later modernized.

^{18.} Macadamized roads were finished with a compacted layer of small stones, bound together with cement or asphalt, placed on top of a convex roadbed.

Florida, Alabama, Georgia, Louisiana, and Texas, all seceded by the end of February 1861.

As conflict loomed, secession meetings were held in Tennessee. In a referendum on February 9, 1861, the state voted against secession. Unlike east Tennessee, where pro-Union sentiment was strong, west and Middle Tennessee, including Rutherford County, initially supported slavery but wanted to remain neutral and part of the Union. 21

The Confederate attack on Fort Sumter on April 12, 1861, together with President Lincoln's call for troops to suppress the rebellion, resulted in the state legislature declaring Tennessee's independence and forming a military alliance with the Confederacy. A second referendum on secession was called for on June 8, 1861, at which time the citizens of Tennessee voted overwhelmingly to secede—the last state in the Union to do so.²²

The central location of Tennessee, combined with the number of railroads and rivers that passed through the state, made it extremely important to the success of both the Union and the Confederacy. Maintaining control of the state and its transportation routes was crucial to the Confederacy, as the rivers and railways could provide Union forces with access into the heart of the South.

By February 1862, the Union army had entered Middle Tennessee, seeking to control not only the food supplies of the area, but the turnpike, rail line, and an associated telegraph line that would facilitate attack on Confederate strongholds in the eastern part of the state in and around Chattanooga, Tennessee. On February 6, Brig. Gen. Ulysses S. Grant's forces captured Fort Henry on the Tennessee River and advanced on Fort Donelson, about 80 miles northwest of Nashville. On February 16, the exhausted

Confederate defenders surrendered unconditionally. After gaining Fort Donelson, Union forces began to advance along the Cumberland and Tennessee rivers into Middle and Western Tennessee. As the Union army approached, Confederate forces began to move south and east from Nashville, spending a few weeks in Murfreesboro before moving on.

A Union cavalry detachment led by Lt. Col. John Grant Mitchell entered Murfreesboro on March 7, 1862. On March 10 Union forces arrived and formally took possession of the town, with Col. J. G. Parkhurst as military governor, and began repairing the roads and bridges to Nashville. The Union army subsequently occupied Murfreesboro until September 1862, except for a brief two-day period in mid-July when Confederate cavalry contested the position just as the Union forces were ready to initiate their planned advance on Chattanooga. Not only was Union progress hindered by the destruction of rail lines around Murfreesboro and in the vicinity of Nashville, but the attack by Gen. Nathan Bedford Forrest on July 13, 1862, led to Confederate control of the Union garrison for a short time.

While his Union forces repaired the line, Maj. Gen. Don Carlos Buell feared an attack on Nashville, and began to withdraw troops from Murfreesboro to reinforce the city. Soon, Confederate Gen. John H. Morgan began destroying track and bridges on the Louisville and Nashville Railroad in Kentucky, suggesting an additional threat to the north. Before they left the area, the occupying federal forces caused extensive damage to local farm buildings and crops, as did the foraging by retreating Confederate forces in July.23

In October 1862, Buell and his Army of the Ohio left Nashville for the Bluegrass Country to the north to defend Kentucky's heartland. On October

23. Stephen V. Ash, Middle Tennessee Society Transformed, 1860-1870: War and Peace in the Upper South (Baton Rouge and London: Louisiana State University Press, 1988), 85.

^{21.} Larry H. Whiteaker, "Civil War," The Tennessee Encyclopedia of History and Culture, (December 2009), https://tennesseeencyclopedia.net/entry.php?r ec=265. Accessed October 2014.

^{22.} Ibid.

8, 1862, Buell's forces clashed with Gen. Braxton Bragg's Army of the Mississippi in the Battle of Perryville. Although considered a Union victory because the battle established Federal control over the critical border state of Kentucky for the rest of the war, Buell's leadership and inability to effectively defeat the weaker Confederate forces during the battle was questioned. Bragg's division subsequently retreated after the loss and reorganized as the Army of Tennessee, moving southeast toward the now abandoned Murfreesboro in order to go into winter quarters. The Confederates used the position to stage raids against Union supply lines in Tennessee, Kentucky, and Alabama.

As the Confederates moved to Murfreesboro, the Union army concentrated its forces in Nashville. Gen. William Starke Rosecrans, fresh from his victories at Iuka and Corinth, was engaged to replace Buell. Under General Order 168, Rosecrans became commander of the newly formed Army of Cumberland, also known as the 14th Army Corps, formed from three of Buell's divisions. Still intending to attack Chattanooga, Rosecrans realized that Confederate control of Murfreesboro and much of the Nashville and Chattanooga Railroad would be a significant impediment to his progress in an eastward direction. Murfreesboro soon became an essential target of the 14th Army Corps.²⁴ By December, Rosecrans had devised a plan to move on Murfreesboro.

On December 26, 1862, Major General Rosecrans initiated action against Confederate strongholds near Nashville, first reorganizing his forces into three wings, commanded by Maj. Gens. Thomas L. Crittenden, Alexander M. McCook, and George H. Thomas. These divisions began the Union offensive by positioning themselves in the vicinity of Confederate troops stationed at Franklin, Nolesville, and Murfreesboro.²⁵

Gen. Braxton Bragg's Confederate Army of Tennessee at Murfreesboro was organized into two corps, commanded by Gen. William Hardee and Gen. Leonidas Polk. As Rosecrans planned his offensive, Bragg's forces dwindled as an infantry division was sent to bolster the defenses at Vicksburg, Mississippi, and nearly two thirds of the Confederate cavalry set off on raids under Gen. Nathan Bedford Forrest and Gen. John Hunt Morgan.

It took Rosecrans's army four days to unite west of Murfreesboro, after delays resulting from cavalry resistance and weather that had included rain, sleet, and fog. In addition, wet weather had contributed to muddy road conditions, which served to slow the forward movement of troops, supplies, and artillery. By December 30, Rosecrans's lines stretched for three miles, from the Stones River at McFadden's Ford to the intersection of Gresham Lane and the Franklin Turnpike. Bragg's troops occupied lines approximately parallel to the Union forces, with Gen. John C. Breckinridge's division remaining on

- 24. Styles, 24. Soon after the Battle of Stones River, the 14th Corps was renamed the Army of the Cumberland. At that time, each wing became a corps. Citing Peter Cozzens, No Better Place to Die: The Battle of Stones River (Urbana, Illinois: University of Illinois Press, 1991), 14 -15.
- 25. The synopsis of the battle history is adapted from that presented in the Historic Resource Study for Stones River National Battlefield (Styles, with Fraley, 2004). The Historic resource Study references the following sources of information relative to the campaign: Charles M. Spearman, The Battle of Stones River; Peter Cozzens; No Better Place to Die: The Battle of Stones River; from the

Confederate perspective: Stanley F. Horn, The Army of Tennessee: A Military History; Thomas L. Connelly, Autumn of Glory: The Army of Tennessee, 1862 -1865; from the Union perspective: Thomas B. Van Horne, History of the Army of the Cumberland: Its Organization, Campaigns, and Battles and William Bickham's Rosecrans' Campaign with the Fourteenth Army Corps, or the Army of the Cumberland: A Narrative of Personal Observations . . . with Official Reports of the Battle of Stone River. More recent studies include Days of Glory: The Army of the Cumberland, 1861–1865, by Larry Daniel (2004), and Battle of Stones River, also by Daniel (2012).

the east side of the river to guard the northern approaches to Murfreesboro.

The Battle of Stones River, **December 31, 1862, and January 2, 1863**

On the night of December 30, Bragg and Rosecrans planned their strategies. Both men were determined to attack the right flank of the enemy and cut off their supply line and escape routes. Rosecrans's plan called for Crittenden's wing to leave its position on the west bank, ford Stones River, and attack Bragg's right the following morning. Rosecrans deployed the wings of McCook and Thomas on the west bank of the river, on his right and center respectively. Bragg had the same plan of attack, calling upon Maj. Gen. John C. Breckinridge's Division to hold his right flank on the river's east bank, while Lt. Gen. William Hardee's Corps assaulted on the left.²⁶

At dawn on December 31, 1862, Bragg's troops stormed across the fields to attack the Union right flank, hoping to drive enemy forces back to the river while cutting off their main supply routes at the Nashville Turnpike and the Nashville and Chattanooga Railroad (Figure 7). The Union troops were cooking breakfast when the Confederate forces swept in. Union commanders tried to halt and resist but the attack was too powerful. While the rocky ground and cedar forests blunted the assault to some extent, the Army of the Cumberland's right flank was in shambles by eight o'clock in the morning. Confederate units to the north began attacking the enemy in their front, to hold the Union units in place as the flanking attack swept up behind them. Gen. Philip Sheridan's troops were able to repulse the first enemy attack, but had to reposition themselves to maintain their escape routes. Confederate troops assaulted the Federals without coordination, as communication was made difficult by the terrain. Despite losing more than one-third of their men, the Union forces

eventually were able to slow the Confederate assault.

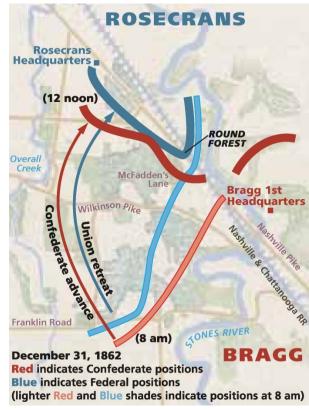


FIGURE 7. National Park Service diagram illustrating the troop movements associated with the first day of the Battle of Stones River. Source: Stones River National Battlefield, unigrid map.

General Rosecrans cancelled the attack across the river and brought his reserve troops into the fight. With Gen. George Thomas, Rosecrans rallied fleeing troops and formed a new line backed by artillery along the Nashville Turnpike. The horseshoe shaped line provided better communication, and the Union cannon covered the open fields between the cedar brakes and the road. The woods and rocky ground helped the Union. Confederate organization fell apart during the struggle through the cedar brakes, and the Confederate artillery was unable to penetrate the forest with its dense growth and uneven terrain. As night approached, the Union army retained control of the turnpike, its lifeline to Nashville, with access to supplies to continue the fight.

The Round Forest, located between the Nashville Pike and Stones River, anchored the left of the Union line. At ten o'clock on the morning of December 31, Gen. James Chalmers' forces advanced across the fields in front of Col. William B. Hazen's men. Despite an additional attack by Gen. Daniel Donelson's Brigade through Cruft's Brigade south of the turnpike, Hazen's Brigade was able to hold to the north. During the afternoon of December 31, they deflected four Confederate attacks and provided an anchor for the Nashville Turnpike, which served as a critical supply for the Union forces. Hazen's Brigade was the only Union unit not to retreat on that day.²⁷ The location where Union artillery repulsed the Confederate attacks that afternoon would later be chosen as the site of the national cemetery and the Hazen Brigade Monument.

After spending January 1, 1863, reorganizing and caring for the wounded, the two armies engaged again on the afternoon of January 2. General Breckinridge attacked Gen. Horatio Van Cleve's Division on a hill overlooking McFadden's Ford on the east side of the river at 4:00 p.m. (Figure 8). The Confederate forces took the hill and continued on towards the ford, but soon came within range of fifty-seven Union cannon massed on the west side of the Stones River. In forty-five minutes, more than 1,800 Confederates were killed or wounded, and the Union counterattack that followed pushed Breckinridge's Division back to Wayne's Hill.28



FIGURE 8. National Park Service diagram illustrating the troop movements associated with the second day of the Battle of Stones River. Source: Stones River National Battlefield, unigrid map.

With the approach of Union reinforcements, the Army of Tennessee withdrew to the Duck River, 25 miles to the south, on the evening of January 3, 1863. On January 5, the Union army marched into Murfreesboro, a position they would not relinquish for the remainder of the Civil War.

The Battle of Stones River was one of the bloodiest of the war: the Confederate casualties numbered 10,268 of the 37,317 engaged, and the Union casualties were 13,249 of the 43,400 present.²⁹In all, more than 3,000 were killed, nearly 16,000 wounded, and nearly 5,000 captured during the battle. Some of the wounded spent as many as seven days on the field before help could reach

approximately 80,000 Union and Confederate soldiers participated in the battle, although recent research suggests that the number may have been closer to 100,000. Larry J. Daniel, Battle of Stones River (Baton Rouge, Louisiana: Louisiana State University Press, 2012), xi.

^{27.} Ibid., 33-34.

^{28.} Ihid

^{29.} Stones River National Battlefield web site, http://www.nps.gov/stri/faqs.htm, accessed October 2014. The numbers listed include persons killed, wounded, or captured. Prior research indicates that a total of

them.³⁰ The Army of Tennessee lost control of the rich farmland of Middle Tennessee, which would now be available to support the Union, and dissent was generated within its command.

The Battle of Stones River left a lasting impression on the local landscape. Artillery fire damaged, denuded, and killed many of the trees within the woodland areas. Both armies appropriated features of local farmsteads for use, particularly the wooden rail fences, which were used for firewood. After the battle, the many dead were buried on the battlefield, leaving the local landscape riddled with burial trenches holding more than 3,000 corpses. Soon after the battle and as a direct result of the engagement, the Hazen Brigade Monument was erected on the high ground overlooking the rail line and near the Nashville Turnpike, standing as a constant reminder of the events of December 31, 1862-January 2, 1863.

Early Commemoration and Establishment of the National Cemetery, 1863-1868

During the summer of 1863, members of the Hazen Brigade were detailed to construct a monument to their unit's heroism at Stones River. The site selected for the monument was an area in the Round Forest containing the graves of fortyfive of the brigade's fallen. Lt. Edward Crebbin of the Ninth Indiana Volunteers supervised construction of the monument from June to November 1863.31 The Hazen Brigade Monument consisted of an 11-foot-tall square limestone mass. The monument and adjacent cemetery were enclosed by a 4-foot-tall, dry laid stone wall, with access via three steps on the south side.

On July 17, 1862, legislation was passed by the United States Congress authorizing the President to purchase land to be used as national cemeteries. Fourteen national cemeteries were initially established, including a cemetery at Sharpsburg, Maryland, the site of the Battle of Antietam.³² Other national cemeteries were established from 1862 to 1872 for reinterments of soldiers who had died in battle, as prisoners, or in hospitals during the Civil War. In 1867, the federal government established twenty-six additional national cemeteries on or near Civil War battlefields.

As many of the early national cemeteries were being planned, Quartermaster Gen. Montgomery C. Meigs sought the advice of Frederick Law Olmsted concerning cemetery planting. Olmsted advised against too many plantings, stressing that simplicity and harmony should be the guiding principles for the landscapes of the national cemeteries.33

On March 29, 1864, Maj. Gen. George H. Thomas, commander of the Army of the Cumberland, ordered Gen. Horatio Van Cleve to select a site for the founding of a national cemetery at Stones River.³⁴ Van Cleve subsequently detached Capt. John A. Means of the 116th Ohio for duty as a topographical engineer. The site chosen for the national cemetery was located between the Nashville Turnpike and the Nashville and Chattanooga Railroad, on a slight rise where Union artillery had repulsed Confederate attacks on the afternoon of December 31, 1862. Means oversaw the cemetery's layout from June 2, 1864,

^{30.} Styles, 34, Citing Charles M. Spearman, The Battle of Stones River (Columbus, Ohio: Blue & Gray Enterprises, Inc., 1993), 27; Cozzens, 201; casualties from Official Records, vol. XX, 215, 261.

^{31.} Styles, 38. Citing Daniel A. Brown, Marked for Future Generations: The Hazen Brigade Monument, 1863-1929 (Murfreesboro, Tennessee: National Park Service, 1985), 7-8.

^{32.} "General History" and "Dates Established," United States Department of Veterans Affairs. http://www.cem.va.gov/CEM/hist/history.asp, accessed February 2013.

^{33.} Fraley, 17, citing David Charles Sloane, The Last Great Necessity: Cemeteries in American History (Baltimore, Maryland: The Johns Hopkins University Press, 1995), 115.

^{34.} Styles, 39, citing Brown, 19.

until his regiment left Murfreesboro on April 25, 1865.³⁵

When the cemetery was originally constructed, several gravel drives were present throughout the site. Almost no vegetation was present in the cemetery; this area had been open during the battle, enabling artillery fire. Trees were present at the perimeter of Lincoln Square and along the drives at the southern portion of the cemetery (refer to Figure 13).³⁶

The cemetery was laid out in an orderly manner with graves arranged in a trapezoidal pattern centered on a gravel carriage path leading to a central ceremonial open space, known as Lincoln Square (Figure 9 and Figure 10). A wooden flagstaff was placed at the center of Lincoln Square, with two standing cannon (siege gun) monuments nearby. A wood picket fence enclosed the cemetery (Figure 11).

Eight avenues extended from the central square in orthogonal and diagonal directions, defining fifteen interior burial blocks. As with other national cemeteries established at the time, uniform grave markers were arranged within these blocks in a formal geometric pattern, while the space between served as circulation routes. Each burial block was framed on three sides by panels of open lawn designated as future burial grounds, or in one plan, formal gardens.³⁷ The only exception

was the block now named Section I, which was originally named the Franklin Section, presumably as it was designated for Union dead from the Battle of Franklin.³⁸

A monument to the 43rd Wisconsin and 180th Ohio regiments was placed near the railroad tracks by the Tennessee Union Soldiers Railroad employees in 1865. A letter from Capt. A. R. Eddy of the Chief Quartermaster's Office in Nashville, dated December 1, 1865, recommended that the men of the 43rd Wisconsin who had been buried in the cemeteries at Decherd and Tullahoma. Tennessee, be reinterred at Stones River. The 43rd Wisconsin had been stationed at these locations to guard the railroad. The letter also suggested that the stone monument located near the original burials in Decherd also be relocated to Stones River, in the immediate vicinity of the graves. This suggests that the monument may have originally been built in Decherd, Tennessee.³⁹

Chaplain William Earnshaw took over command of the cemetery upon Means's departure. Under Earnshaw's direction, members of the 111th United States Colored Troops disinterred Union soldiers buried within a ninety-mile area of Murfreesboro for reinterment at Stones River National Cemetery (Figure 12). 40 By 1867, the reburial of Union soldiers at the cemetery was nearly complete.

- 35. Ibid. Report of Chaplain William Earnshaw to Brevet Maj. Gen. J. L. Donaldson, Chief Quartermaster of the Department of Tennessee, October 5, 1866, 229.
- 36. As shown in the photograph included as Figure 9, as well as the 1865 period plan. Sources for tree locations include the E. B. Whitman sketch, a 1865 photograph of the cemetery, and the map of the national cemetery surveyed and drafted under the direction of Brig. Gen. H. P. Van Cleve.
- Richard Clinton Genoble, "War, Memory, and Landscape: The Stones River National Cemetery" (Master of Landscape Architecture thesis, Louisiana State University, 1999), 53.
- 38. Ibid
- 39. Correspondence by Jim Lewis, NPS STRI, with Michael Panhorst, Auburn University 2012, referencing James L. Sellers, ed., "The Richard

- H. Mockett Diary: November 3, 1864–January 17, 1865," *The Mississippi Valley Historical Review* 26, no. 2 (September 1939), 233–240. See also letter from Office, Chief Quartermaster, District of Mid. Tenn., to Capt. A. R. Eddy, Chf. Qr. Mr. Dept. of Tenn., Nashville, December 1, 1865 (copy in park archives).
- 40. E. B. Whitman, Reports on National Cemeteries, Department of the Cumberland: No. 12: Stones River (September 26, 1867). Stones River National Battlefield Archives, Murfreesboro, Tennessee. Many of the members of the 111th continued working as contract laborers after their enlistments expired in 1866. Correspondence by the authors with Jim Lewis, Stones River National Battlefield.

Graves at the cemetery were originally indicated with wooden grave markers, while gravel walkways were constructed around the gravesites. 41 In 1865, soldiers of the 111th United States Colored Troops began construction of a limestone wall that would enclose the cemetery. The limestone wall, completed in 1871, replaced the wooden perimeter fence. As work on the stone boundary wall progressed, a hedge of Osage orange was planted along the inside face of the wall surrounding the cemetery (refer to Figure 13).⁴² The wooden grave markers were replaced by marble grave markers by 1876.43

Although construction of Stones River National Cemetery began in 1864, shortly after the site was selected, the land on which the cemetery was established was not formally owned by the federal government until 1868. In that year the government purchased 12-1/2 acres from James M. Tompkins for \$932.50, and 7-1/2 acres from Richard Wasson, et al., for \$594.50.44 Tompkins served as a justice of the peace, surveyor, and sheriff of Rutherford County, as well as a member of the Tennessee State Legislature, and was elected mayor of occupied Murfreesboro in 1862. He was one of the first people in Murfreesboro to take the oath of allegiance to the United States required of all persons doing business in the town by order of the military governor, Colonel Parkhurst. 45 A staunch Union supporter, Tompkins noted in his memoirs that he "... believed that the South had

been imposed on and our rights invaded and denied us, but he never believed in the doctrine of secession or the rights of States to secede from the Union at will."46

The first outbuildings constructed at Stones River National Cemetery were situated across the Nashville Turnpike east of the park, on private land that would later be acquired by the federal government. This included a "temporary" woodframed lodge for the use of the cemetery keeper and to store the burial records of the cemetery, erected in 1867.47

In the late 1860s, the cemetery was notified that it would be charged rent if it intended to continue to occupy the buildings east of Nashville Turnpike. With no land available for purchase on the east side of the road, the federal government purchased an additional 4 acres from James Tompkins in 1868 directly north of the cemetery, in order to construct a staff housing and maintenance area.48

^{41.} Whitman, 3.

[&]quot;Monthly Report of Progress on National 42. Cemeteries for December 1870." National Archives and Record Administration. Washington, D.C., Record Group 92, Entry 21.

^{43.} Miranda Fraley, Stones River National Cemetery Cultural Landscape Report, draft, 2002. Chapter 1, page 8, citing Capt. A. J. McGonnigle A.Q.M., U.S. Army and DeWitt C. Sage, Contract, December 31, 1873, catalog number STRI 4013, Museum Collection, Stones River National Battlefield; McGonnigle and Thomas P. Morgan, contract, December 31, 1873, catalog number STRI 4014; and Robbins to Quartermaster General, December 16, 1876.

^{44.} John Riley George, Stones River: Creating a Battlefield Park, 1863-1932, Dissertation for Doctor of Philosophy (Murfreesboro,

Tennessee: Middle Tennessee State University, May 2013), 35, citing Deed Book 15, 357; Deed Book 16, 30-32; Office of the Register of Deeds, Rutherford County, Tennessee.

^{45.} "Taking the Oath of Allegiance, May 17, 1862, in Annals of Rutherford County, Volume Two, 1829-1870, 165. Correspondence by John George, Stones River National Battlefield, with Professor Brenden Martin, Middle Tennessee State University.

^{46.} James M. Tompkins, "Memoirs of James M. Tompkins Written by Himself," News Banner, Tuesday, July 12, 1927.

^{47.} Whitman, 4-5.

^{48.} Fraley, 8, citing, E. B. Whitman to Thomas Sword, January 19, 18_ [year not legible], Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

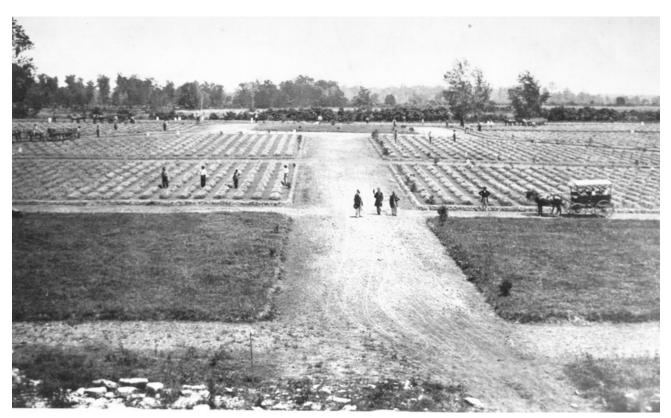


FIGURE 9. An 1865 view of Stones River National Cemetery. Source: Stones River National Battlefield Archives, image STRI-8x10p1920-0062.

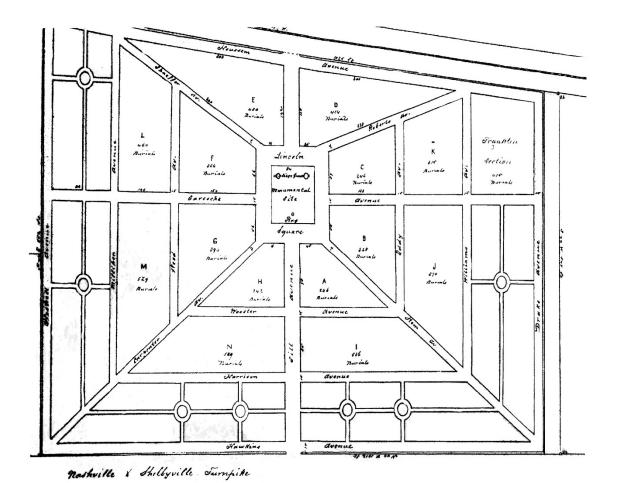


FIGURE 10. Circa 1865 sketch plan of the cemetery. Source: Genoble, citing Stones River National Battlefield.



FIGURE 11. A sketch of the cemetery as it appeared in 1867 by E. B. Whitman. Source: Stones River National Battlefield, Fraley, chapter 1, figure 4.

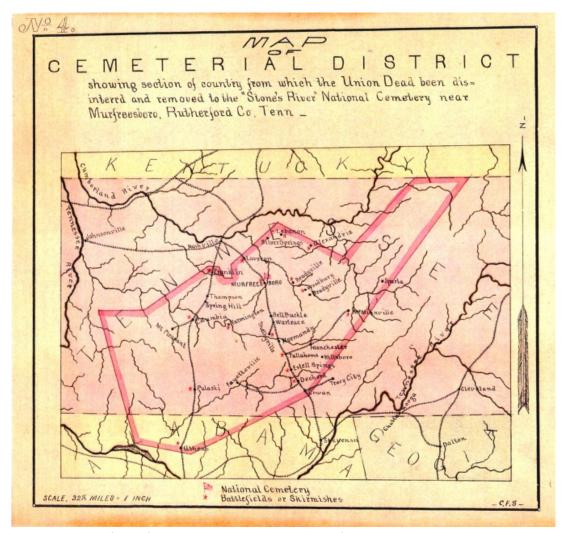
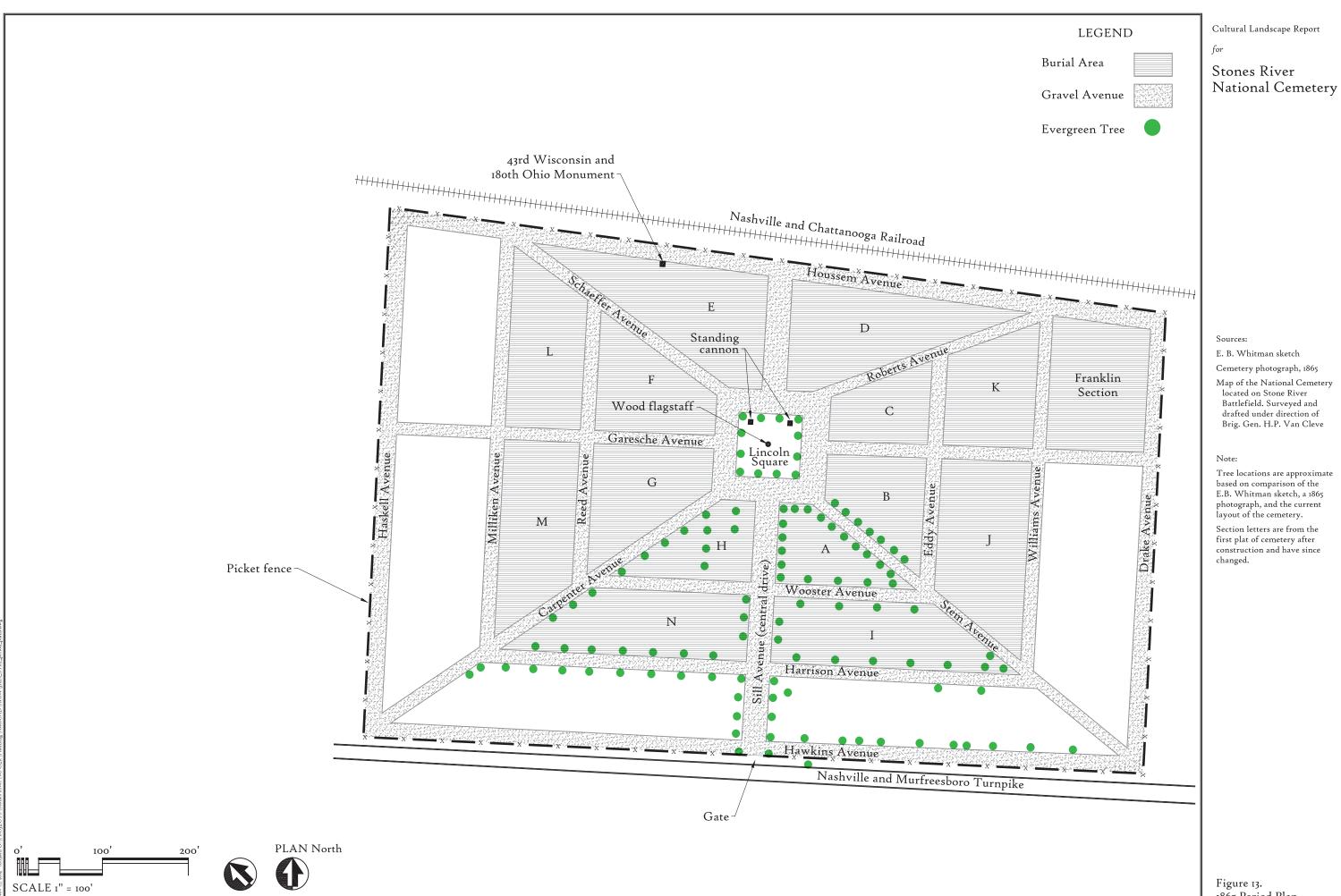


FIGURE 12. Map of area from which bodies were gathered for reinterment at Stones River National Cemetery. Source: Stones River National Battlefield Archives, in folder "VA 01-12-11," PTD0117.JPG.



1865 Period Plan

Development of Stones River National Cemetery, 1868– 1890s

In 1871, a new superintendent's lodge was constructed, based on designs prepared by Quartermaster Gen. Montgomery C. Meigs (Figure 14). The new building contained administrative offices and housing for the superintendent and his family.⁴⁹ By 1874, a wooden structure occupied by laborers, a barn, a wooden buggy house, and two hen houses had been constructed adjacent to the superintendent's lodge on the new property.⁵⁰ However, by 1892, only one wooden shed remained behind the superintendent's house, the other outbuildings having been removed.



FIGURE 14. An undated view of the 1871 superintendent's lodge. Source: Stones River National Battlefield.

Civil Engineer T. M. Robbins initiated a campaign of cemetery improvements in the 1870s and 1880s. Most likely influenced by the rural cemetery movement and the Victorian style popular at the time, his goal was to transform the national cemeteries into park-like spaces appropriate for commemorating those buried within and for recognizing the contribution of military personnel

to American freedom.⁵¹ In a departure from Olmsted's guiding principles of simplicity and harmony, Robbins and his successors directed the cemetery staff in a variety of planting campaigns that proceeded in an ad hoc manner for the next several years. There appeared to be no coherent planting plan or overarching vision for this program. While Superintendent Frame was involved in the selection and placement of plants, his decisions were constantly subject to review and approval by the variety of inspectors who visited the cemetery.⁵²

At Stones River, tree plantings were a focus of improvement efforts within the cemetery, with some success as noted by Robbins in an 1876 report:

The drives and walks are lined with very handsome Evergreens, of various kinds, and of fine size. There are a few native forest trees of good size in the eastern portion; and a number of young trees have been planted in the vacant area between the west wall & burial sections, and on the south side. All seem to be thriving.53

It is possible that Frame was guided in his efforts by a number of monthly journals, as suggested by Ekin in a report from the Quartermaster Department as follows:

Extract from report of Mr. C. M. Clarke, Civil Engr., Q.M. Dept. on the subject of Trees and Plants at National Cemeteries.

The instructions on pages 40 to 43, Compilation of Laws, Orders, and instructions, and Fullers Forest Tree Culturist are short but excellent concerning the matters, but it is found at inspection at different places that they are frequently not studied and familiarized, or are not followed in the planting and care of trees and plants. In some cases, where there has been a desire on the part of the Supts to become more thoroughly familiar with plants

number unknown. Museum Collection, Stones River National Battlefield.

- 52. Fraley, Chapter 2, 7.
- 53. Fraley citing Civil Engineer T. M. Robbins to Quartermaster General, December 16, 1876.

^{49.} Richard Clint Genoble, War, Memory, and Landscape: The Stones River National Cemetery (Masters of Landscape Architecture thesis: Louisiana State University, 1999), 74-75.

^{50.}

Fraley, citing T. M. Robbins to Quartermaster 51. General U.S.A., December 16, 1876, catalog

and beautifying the grounds, it has been found that such monthlies as the "Gardeners Monthly and Horticulturist" or "American Agriculturist" or similar publications, were taken; or on hand such books as Hoops "Book on Evergreens," Scott's "Suburban Home Grounds," and works on similar subjects, and, in these cases, good results in the taste, beauty and arrangement of the places are seen.⁵⁴

In 1876, the cemetery created a tree nursery on site at the suggestion of the Quartermaster Department. They were encouraged to collect a variety of species by Acting Assistant Quartermaster George M. Song, who declared: "... you have as many cedars set as I care to have; it is a great pity that you cannot get some other variety."55

Only a few days later, Song wrote to Frame about the project:

I must compliment you on the excellent start you have made in your Nursery, such enterprise on your part deserves success & you certainly have my good wishes that your Nursery may surpass my most sanguine expectations. Such zeal & energy as you have displayed in following out my suggestions deserves the approval with which I will surely

54. Fraley, citing James A. Ekin to Thomas Frame, May 21, 1878, microfiche of original ledger "Letters Received 1876-1881."

[attract?] when brought to the attention of those in authority at Washington 56

The nursery was located in the lodge and service area between the north wall and the lodge.⁵⁷ Two years later, the cemetery ordered 245 trees and 100 roses, which were planted in the cemetery by 1881.⁵⁸ The species list included Norway spruce (Picea abies), golden arborvitae (possibly a variety of Thuja occidentalis), white pine (likely Pinus strobus), "box tree" (either box elder [Acer negundo] or boxwood [Buxus sempervirens]), Japanese quince (listed as Pyrus japonica), variegated althea (likely Hibiscus syriacus), Retinospora (possibly false cypress, Chamaecyparis obtusa), magnolia (likely Southern magnolia [Magnolia grandiflora]), Irish juniper (likely Juniperus communis), forsythia (Forsythia sp.), and mountain ash (possibly Fraxinus sp. or Sorbus aucuparia). At the same time a pyracantha (likely *Pyracantha coccinea*) hedge was planted to separate the maintenance area from the rest of the cemetery Many of the new trees planted died by August 1881 due to a lack of rain.59

The landscape of the cemetery began to change significantly in 1876 as major projects took place to adjust the grading of the cemetery grounds and drives. In December 1876, T. M. Robbins

- 373, Museum Collection, Stones River National Battlefield.
- 56. Song to Frame, February 29, 1876, microfiche of original ledger "Letters Received 1876-1881."
- 57. Fraley, citing T. M. Robbins to the Quartermaster General, December 16, 1876, **Stones River National Battlefield Central Files** Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- 58. Fraley citing James A. Ekin to Thomas Frame, March 10, 1878, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- 59. Fraley citing Thomas Frame to James A. Ekin, August 11, 1881, ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

^{55.} George M. Song to Frame, February 22, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield. See also Song to Frame, February 9, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield; Song to Frame, February 12, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield; Song to Frame, February 29, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number

commented on the number of sunken graves at the national cemetery in his inspection report. Robbins estimated that 4,000 graves were sunken and required filling. Beginning in 1876, cemetery staff began to address Robbins's concerns about the appearance of the burial grounds by filling around the sunken graves, and then topdressing, rolling, and reseeding the areas, while initiating an extensive program of planting trees and shrubs throughout the cemetery.60

By the 1870s, only the main drive leading from the Nashville Turnpike to Lincoln Square and a drive from the Nashville Turnpike to the housing and maintenance area remained graveled (Figure 15). The other drives had been covered with sod. In 1879, the cemetery staff regraded the drives and spread topsoil and grass seed over the walks. In order to allow the new grass to grow, the main cemetery gate was closed in early 1880, requiring guests to enter through a gate near the superintendent's lodge.61

In 1878, a local stone mason repaired and replaced several of the limestone corner posts in the cemetery that marked the burial sections and avenues, as many of the posts were in a state of disrepair. At this time, the iron gates at the cemetery wall and the standing cannon markers were also painted, and the cemetery wall was repointed. Ten wood and iron settees were placed throughout the cemetery (refer to Figure 17). The following year, four iron hitching posts were placed near the superintendent's lodge for use by cemetery visitors arriving on horseback or in horse-drawn carriages.62

A new stable was constructed in the maintenance area in 1878 using the materials from the old stable.

In 1879, Superintendent Frame received two cast iron planters, or lawn vases, each 2 feet 3 inches tall and 1 foot 6 inches in diameter, which were to be placed near the lodge and planted with flowers and vines.⁶³ The vases were emptied and stored indoors during the winter.64

In 1882, a brick rostrum with a wood trellis roof was constructed in the cemetery, west of the burial area. The cemetery staff placed a variety of plants within and adjacent to the rostrum (Figure 16 and Figure 17).



FIGURE 15. An undated view of the main drive looking toward Lincoln Square. Source: Stones River National Battlefield Archives, image STRI-NN-0168.

^{60.} T. M. Robbins to Quartermaster General U.S.A., December 16, 1876, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

^{61.} Fraley citing Thomas Frame to James A. Ekin, February 9, 1880, transcript of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

Thomas Frame to James A. Ekin, September 9, 62. 1878, transcript of original ledger "Letters

Sent June 1, 1877-July 23, 1883. Catalogue number STRI 3237, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

^{63.} Fraley, citing Ekin to Frame, March 4, 1879, microfiche of original ledger "letters Received 1876-1881."

^{64.} Fraley, citing Frame to Ekin, September 15, 1879, handwritten transcripts "letters Sent June 1, 1877-July 23, 1883."



FIGURE 16. The rostrum at Stones River National Cemetery circa 1930. Source: Stones River National Battlefield Archives, image STRI-NN-0184.



FIGURE 17. An undated view from within the rostrum at the cemetery that includes two wood and iron settees like those placed within the cemetery in 1878. Source: Stones River National Battlefield Archives, image 1058.

Quartermaster General Meigs expected that the superintendent would maintain a home garden for food and general enjoyment. In 1881, he wrote:

I think it [is] important to encourage or compel the cultivation of Fruit Trees and shrubs. English Walnut, for example, is an excellent and beautiful tree. Also Filberts, Grapes, Peaches, Pear, Apricots. There are in every Cemetery, places, corners, boundary coppices, in which there is reason for a good number of plants, while give not only beauty but also utility.

Nothing contributes more to the pleasure of a Home—and the Lodges are the Homes of the Superintendents,—than an abundance of Fruits, Nuts, Berries, etc. They make the children happy, keep the family contented, and attach it to its Home, and thus tend to good behaviour industry and care on the part of the Superintendents.

There will be I think, no objection to the Superintendents selling such surplus fruit products as he and his family do not wish to use. The cultivation should be kept within bounds. The Cemeteries should not be converted into Orchards for the sole purpose of raising fruit. But a supply far beyond the wants of the Family of the Superintendent, or his successors, may be raised by judicious planting without in the least interfering with the ornamental character of planting.65

In addition to the newly constructed rostrum, several new monuments were added to the cemetery in the late 1870s and early 1880s. In 1878, a large iron tablet containing the text of President Lincoln's Gettysburg Address was installed in the cemetery, possibly near the lodge where Ekin suggested it be placed.66 In 1882, seven cast iron plaques with the poem "The Bivouac of the Dead" by Theodore O'Hara were placed in the cemetery.67

^{65.} M. C. Meigs to James Ekin. 11 May 1881. Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

Genoble, 100, citing letter of James A. Ekin, 66. April 24, 1878. Ekin states the tablet should be

[&]quot;placed in an conspicuous a place as possible near the lodge in order to attract attention."

O'Hara wrote the poem in 1847 to honor 67. fellow soldiers from Kentucky who died during the Mexican-American War. He was a

The plaques, supplied by the federal government, replaced wood panels previously placed in the cemetery (Figure 18, and refer to Figure 20).⁶⁸

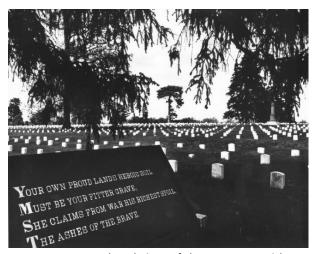


FIGURE 18. An undated view of the cemetery with an iron plaque with the poem "The Bivouac of the Dead" in the foreground. Source: Stones River National Battlefield Archives, image 0274.

In June 1883, veterans of the U.S. Army Regulars placed a monument honoring the soldiers of the Regular Brigade of the Army of the Cumberland who were killed in the Battle of Stones River.⁶⁹ The monument consisted of a sandstone pillar on a granite base, topped by a bronze eagle (Figure 19).

A new iron flagstaff with a decorative weathervane was erected in 1888 to replace the deteriorated wooden flagstaff that had been present since construction of the cemetery in the 1860s.

In 1892, a plan of the cemetery was prepared by the Office of the Quartermaster General of the U.S. Army (Figure 21).

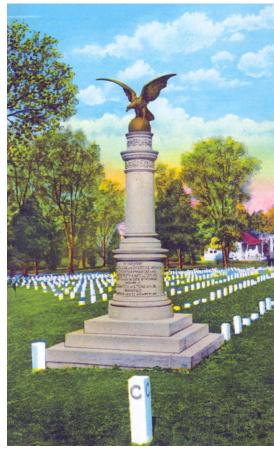


FIGURE 19. A mid-twentieth century postcard showing the U.S. Regulars Monument. Source: Stones River National Battlefield Archives, image 4733.

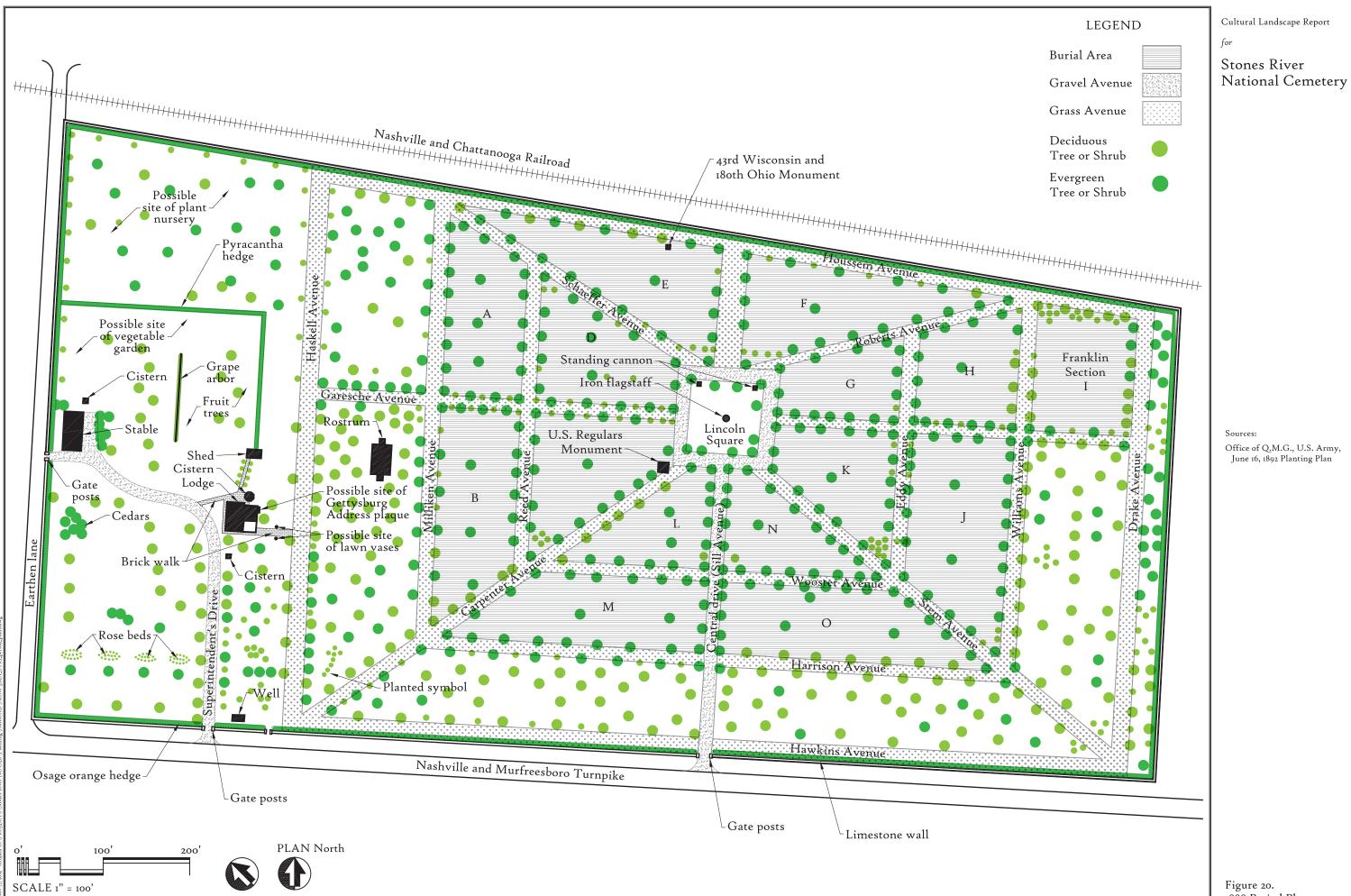
colonel in the Confederate Army during the Civil War.

^{68.} Fraley citing James A. Ekin to Thomas Frame, August 30, 1882, microfiche of original ledger, "Letters Received February 5, 1881-December 5, 1883," catalog number STRI 374, Stones River National Battlefield Archive, Murfreesboro, Tennessee. This source refers to

previous "wooden and painted posters," but it is not known when these earlier plaques were first installed in the cemetery. The cast iron plaques are stamped with the following designation: "Rock Island Arsenal, 1881," indicating the location and date of casting.

^{69.} George, 44.

Site History



1888 Period Plan

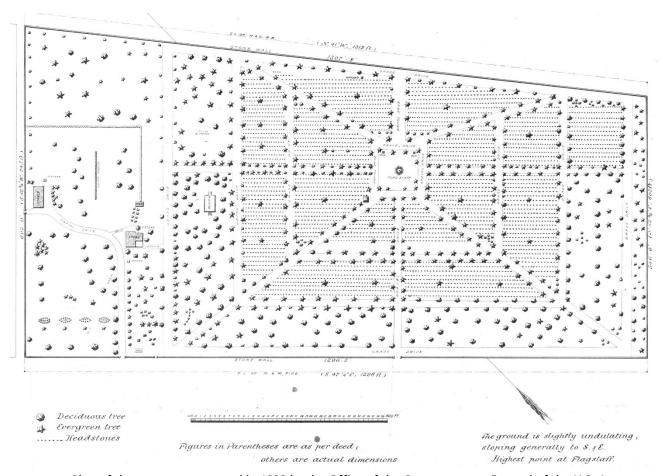


FIGURE 21. Plan of the cemetery prepared in 1892 by the Office of the Quartermaster General of the U.S. Army. Source: Stones River National Battlefield Archives, image STRI CEM 0047 GP 5.

The 1890s saw increased visitation to the cemetery, as many visitors began to arrive by rail. A depot structure was built to accommodate visitors. It was located northwest of the cemetery, just north of the cemetery wall (Figure 22 and Figure 23). In September 1895, thousands of people passed by Stones River on their way to the dedication ceremony of Chickamauga and Chattanooga National Military Park. Several of the passersby, who included veterans and their families and friends, stopped at Stones River National Cemetery to pay their respect. Entries in the register of visitors to the cemetery, which averaged approximately twenty per month in early 1895, climbed to over 600 in September 1895. Edwin P. Barrett, superintendent of the cemetery,

estimated that more than 2,000 visitors arrived at the cemetery during that month.⁷⁰

A new gate into the cemetery through the wall adjacent to the rail line near the depot was added in 1896 in response to pleas of Superintendent Edward P. Barrett, who complained of the destruction caused by visitors climbing over the wall from the railroad. Barrett sought more convenient access, particularly in light of the upcoming state centennial celebration that he expected would bring additional visitors to the cemetery. As he described it:

The only entrance available is a small gate near the stable about 400 feet from the rail road, approached by a lane belonging to the

River National Cemetery Letters Sent, 1890-1912, Stones River National Battlefield.

^{70.} George, 59, citing Stones River National Cemetery Register of Visitors, 1877-1925, Stones River National Battlefield; Edwin P. Barrett to John L. Clem, January 1896, Stones

adjoining farm, where cows, pigs &c herd at times and is in a filthy condition, and visitors, at least a large per cent, will not use in entering or leaving the grounds.

As the Centennial of the State is to be held at Nashville there will be many excursions to this Cemetery, and I think there should be a gate in the wall for the accommodation of visitors by rail road.

I am assured by one of the rail road agents that if a gate is put in place the R.R. company will erect a suitable platform alongside the track for the accommodation of visitors.71



FIGURE 22. A 1934 view of the railroad adjacent to the cemetery. Note railroad depot on the left, which was located near the northwest corner of the cemetery. Source: Stones River National Battlefield Archives, image STRI-ICP-0447.



FIGURE 23. Signs were placed by the railroad to guide visitors to the site. Source: Stones River National Battlefield Archives, image STRI-ICP-0470.

Also in 1896, the maintenance gate and main vehicular gate into the cemetery were rebuilt, with new rusticated concrete piers with pyramidal concrete caps.72

To serve the cemetery, three cisterns were built in the lodge and service area in the nineteenth century: two collected rainwater from the superintendent's lodge and a third from the stables.⁷³ To supplement this supply, a well was excavated close to the intersection of the superintendent's drive with the Old Nashville Highway.

In 1900, Section P was added to the burial areas within the cemetery (refer to Figure 21 and Figure 26). In this section and others already established, dead from the Spanish-American War, and later World War I, were interred.

A new stable was constructed in the maintenance area in 1906.74 The new stable was a gable-roof brick masonry structure. An early-twentiethcentury view of the cemetery, showing one of the standing cannon monuments in Lincoln Square, is shown in Figure 24.



FIGURE 24. An early twentieth century postcard showing one of the cannon monuments near Lincoln Square. Note the cannonball features at the corners of the monument base. Source: Stones River National Battlefield Archives, image 4734.

Ibid. 71.

^{72.}

^{73.} Openings to the cisterns are not visible today; they were filled in the 1960s.

^{74.} Fraley citing Clayton Hart to Depot Quartermaster, Jeffersonville, Indiana, September 29, 1906, original ledger on microfiche "Letters Sent July 10, 1890-August 3, 1912."

In 1913, two iron shields were provided to the superintendent for installation at the cemetery's entrance gates. The plaques identified the site as a U.S. National Cemetery. One plaque was placed at the main entrance, while the other was placed at the gate leading to the maintenance and housing area (Figure 25). The superintendent was instructed to paint the shields black and to use bronze paint for the lettering, border, and decorative motifs. 75



FIGURE 25. An undated view of main entrance gate; the 1913 iron shield is visible on the right pier. Source: Stones River National Battlefield Archives, image STRI-NN-0166. Note the rusticated concrete piers constructed in 1896.

Throughout the 1880s and 1890s, the superintendent's lodge required a great deal of maintenance. The structure continued to deteriorate and the lodge was eventually rebuilt in 1909 with existing materials. The rebuilding of the lodge did not entirely resolve the maintenance problems, as an inspector noted in 1913 that the lodge again required extensive repairs.⁷⁶

A detailed plan of the cemetery was prepared in 1925 (Figure 26).

76. H. R. Perry to John Thomas, May 12, 1913, microfiche of original ledger "Letters Received August 24, 1890-July 26, 1920," catalog number STRI 377, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

^{75.} Joseph T. Davidson to Thomas Frame, December 5, 1913, microfiche of original ledger "Letters Received August 24, 1890-July 26, 1920," catalog number STRI 377, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

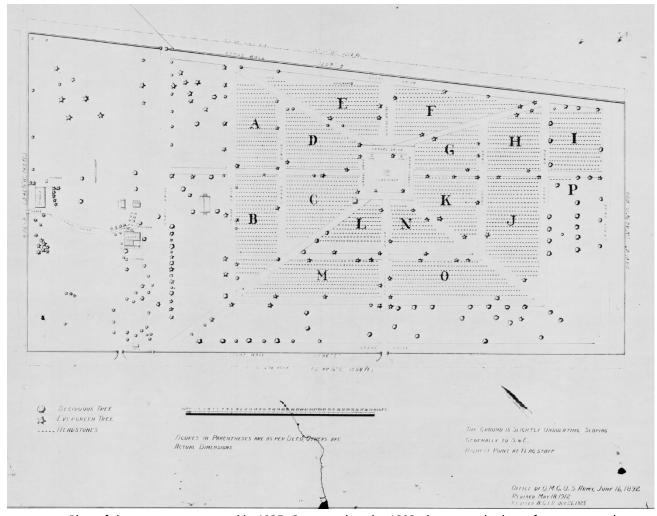


FIGURE 26. Plan of the cemetery prepared in 1925. Compared to the 1892 plan, note the loss of many trees, the opening of Section P for burials, and the creation of a new pedestrian gate at the north end along the railroad. Source: Stones River National Battlefield Archives, image STRI CEM 0048 GP 5.

In August 1926, the stone superintendent's lodge constructed in 1871 and reconstructed in 1909 was removed, and a new wood structure was completed on the same site (Figure 27). Like the old structure, the new superintendent's lodge served as an office as well as living quarters for the superintendent's family. A nineteenth century shed and privy remained behind the house (refer to Figure 27).



FIGURE 27. An undated view of the 1926 superintendent's lodge, with nineteenth century shed and privy remaining behind the house. Source: Stones River National Battlefield Archives, image STRI-NN-0133.

Commemoration of the Battlefield, 1890s-1927

The movement toward national reconciliation that marked the 1880s and 1890s, expressed in joint reunions of Union and Confederate veterans, focused on battlefield bravery and sacrifice.⁷⁷ Confederates participated in reunions after 1880, and in 1888, a watershed gathering of both Union and Confederate veterans occurred at the twentyfifth anniversary of the Battle of Gettysburg.

Two veterans' groups—the Societies of the Army of the Cumberland and the Army of Tennessee also urged the creation of parks, the former to preserve the battlefields of Chickamauga and Chattanooga and the latter to preserve the battlefield of Shiloh. A bill was submitted in early 1890 to create a national park at Chickamauga and Chattanooga that would mark the lines of both sides and interpret the tactical aspects of the battles with strategically placed observation towers. These two clashes had engaged troops from every southern state and eighteen northern states, and had involved famous generals as commanders on both sides. Realizing the national significance of the battlefield, Congress established a national military park at Chickamauga and Chattanooga on August 18, 1890, two years after the Gettysburg reunion. Congress later passed legislation that created national military parks at Antietam in 1890, Shiloh in 1894, Gettysburg in 1895, and Vicksburg in 1899. These parks were administered by the U.S. War Department, and were used in part for historical study and military training.

In December 1895, Tennessee Congressman James D. Richardson introduced legislation to establish a national military park at Stones River. The bill

initially proposed the acquisition of 1,000 acres in addition to the existing national cemetery, while later versions proposed acquiring 3,100 acres. When these bills were not secured, the association instead lobbied to have markers erected on the field.

The Stones River Battlefield and Park Association, chartered on April 28, 1896, included both Union and Confederate veterans. The association secured options for the purchase of property connected with the battle, reportedly 2,400 acres in January 1897 and 3,400 acres in June of that year.⁷⁹ However, due to a lack of funds, the association was unable to execute the options at the time. Members erected wooden signs to mark and interpret specific locations on the battlefield.

Efforts to recognize the importance of the Stones River battlefield continued during the early twentieth century. Creation of a park at Stones River, however, was delayed because of the many requests for establishment of military parks nationwide heard by a weary Congress. Lack of information available to support prioritization resulted in postponement of the establishment of new military parks around 1902, until a survey of sites could be completed.80 With no other recourse, the proponents adopted a different approach, supporting Senate Bill 4818 and House Resolution 18713, introduced in 1912, which called for the Chickamauga and Chattanooga National Park Commission "to establish an accurate system of markers on the battle field of Stones River, in Tennessee."81 Charles H. Grosvenor, Commissioner of Chickamauga and Chattanooga National Park, argued against the bill and the placement of markers at Stones River, stating, "More than fifty years have elapsed since the battle of Stone's River and the marks, locations, earth works, or whatever else there was

- 77. James M. Mayo, War Memorials as Political Landscape (New York: Praeger Publishers, 1988), 256; McConnell, 213-218; Foster, 79-87.
- 78. Styles, 62, citing John C. Paige and Jerome A. Greene, Administrative History of Chickamauga and Chattanooga National Military Park (Denver: National Park Service, Denver Service Center, 1983), 9-10; Lee, 28-32.

^{79.} Ibid., 65.

^{80.} Ronald F. Lee, The Origin and Later Evolution of the National Military Park Idea (Washington, D.C.: National Park Service, Office of Park Historic Preservation, 1973), accessed at www.nps.gov/history/ online_books/history_military/

^{81.} Ibid., 66.

there are entirely obliterated. . . . The Commission is of the opinion that the bill should not pass."82

It was not until after World War I that Congress finally authorized the proposed survey under the 1926 Act for the Study and Investigation of Battlefields. When completed, the study classified Stones River as a Class IIA battlefield, worthy of some kind of monument or marker. This assessment would result in the establishment of Stones River National Military Park by Congress on March 3, 1927.⁸³

The Stewardship of the War Department and the National Park Service, 1927–2014

Following the establishment of Stones River National Military Park by Congress in 1927, the administrative functions of the military park and the national cemetery were consolidated. Visitor contact, administrative, and utility functions operated out of the cemetery superintendent's lodge and dependencies. As part of the extensive construction work completed for the new military park, the two graveled drives in the cemetery were resurfaced with bituminous material.⁸⁴

In 1929, the water supply to the cemetery was improved with the drilling of a seventy-five foot deep well behind the superintendent's house. The well was later deepened to 100 feet in 1935. In the same year, a pump house was added.⁸⁵

In 1930, a brick addition with a shed roof was built onto the rear side of the stable.⁸⁶

On June 10, 1933, President Franklin D. Roosevelt signed Executive Order 6166, and on July 28, 1933, he signed Executive Order 6228. Through these orders, the National Park Service gained jurisdiction over all historic sites, battlefields, monuments, and parks previously administered by the War Department, the Department of Agriculture, and the Office of Public Buildings and Public Parks of the National Capitol.⁸⁷ Some of these historic properties, such as Stones River, included national cemeteries. With the transfer of administration to the National Park Service. Stones River was expanded to include an additional 65.6 acres of land in the main park unit. The total park acreage was brought to 344.69 acres by this acquisition.

From 1933 until 1955, the park was administered by Chickamauga and Chattanooga National Military Park, after which Stones River was assigned its own superintendent.

Much of the development of Stones River
National Military Park in the 1930s occurred
through the efforts of the new federal public
works agencies established under the National
Industrial Recovery Act of June 1933, which
provided relief for unemployed Americans and
helped to conserve land and water resources.
Agencies whose efforts benefited the national
parks included the Civilian Conservation Corps
(CCC), the Public Works Administration (PWA),
and the Works Progress Administration (WPA).
Projects in the national parks involved land
reclamation and park development, with \$40
million allocated by the PWA from 1933 to 1937 to
fund road and trail construction, campground

- Ibid., citing 54th Congress, 1st sess., H.R. 1996;
 56th Congress, 1st sess., H.R. 3363; C. H.
 Grosvenor to Secretary of War, June 7, 1912,
 Chickamauga and Chattanooga National
 Military Park archives, Folder 111, Box 7,
 Accession 205.
- 83. Enabling Legislation, Stones River National Military Park, An Act to establish a national military park at the battle field of Stones River, Tennessee, approved March 3, 1927 (44 Stat. 1399), amended April 1930 (46 Stat. 167).
- 84. Willett, 83.

- 85. Fraley, Chapter 4, 3, citing Financial Ledgers.
- 86. Melroe Tarter to Officer in Charge, September 4, 1930, Folder 337 "F-1423 Working Funds," Box 24, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- 87. Styles, 69. Citing Barry Mackintosh, *The National Parks: Shaping the System* (Washington, D.C.: U.S. Department of the Interior, 1991), 24.

development, museum construction, and restoration of historic structures.88

Beginning in 1933 and continuing through 1935, PWA and CCC workers made improvements to the national cemetery and the battlefield. In 1933 and 1934, the Nashville Turnpike adjacent to the cemetery was re-graded to improve drainage. However, these efforts did not prevent the significant flooding that occurred within the cemetery walls in February 1935 (Figure 28 and Figure 29). During this time workers also assisted in planting new vegetation in the national cemetery. Plantings by the CCC included five beds of canna lilies, present by 1934 (refer to Figure 37).89



FIGURE 28. The start of drainage work at the north entrance gate to the cemetery in spring 1934. Source: Stones River National Battlefield Archives, image STRI-ICP-0436.



FIGURE 29. Flooding in the cemetery, February 1935. Source: Stones River National Battlefield Archives, image STRI-ICP-1285.

In 1937, funding was provided to widen two avenues in the cemetery. The drive leading to the superintendent's lodge and maintenance area was widened from 8 to 12 feet, while the drive that connected the entrance gate with Lincoln Square was widened from 12 to 16 feet (Figure 30 and Figure 31). The road around Lincoln Square was widened to 18 feet (refer to Figure 40).90



FIGURE 30. A view of the completed main entrance gate, 1937. Source: Stones River National Battlefield Archives, image STRI-ICP-0405.



FIGURE 31. The maintenance gateway undergoing reconstruction, 1937. Source: National Archives, Record Group 79: Records of the National Park Service, Records of the Branch of Engineering, Final Construction Reports, 1934–1942.

Also during the mid-1930s, crews from the PWA and the CCC worked to improve drainage along the Nashville Highway and planted ornamental shrubs throughout the cemetery to serve as vegetative screens, primarily along the south boundary wall and also in the northwest corner (Figure 32 through Figure 35). They also planted trees to replace many lost to storm damage.

^{88.} Arthur M. Schlesinger, Jr., The Coming of the New Deal (Boston: Houghton Mifflin, 1959), 284-288; Unrau, 96-101.

^{89.} Canna lilies are present in photographs dated 1934.

^{90.} Willet, 92-95.



FIGURE 32. View of the cemetery and Superintendent's Residence from the entrance to Stones River National Military Park, looking across Old Nashville Highway, 1938. Source: National Archives, R.G. 79, NPS Central Classified File, 1933–1949: National Cemeteries, Stones River and Vicksburg, Box 2707, Entry P10, "Stones River National Military Park: Pictorial Report," November 16, 1938.



FIGURE 33. Cemetery wall looking west across Old Nashville Highway, after screen planting. Source: National Archives, R.G. 79, Records of the Branch of Engineering: Final Construction Reports, Box 1, Entry 75, Superintendent Richard B. Rudolph, "Report on Plating at Stones River National Military Park: Public Works Project No. 481" (February 6, 1935.)



FIGURE 34. North wall viewed from within the cemetery wall, after screen planting. Source: Ibid.



FIGURE 35. North wall viewed from within the cemetery wall, after screen planting. Source: Ibid.

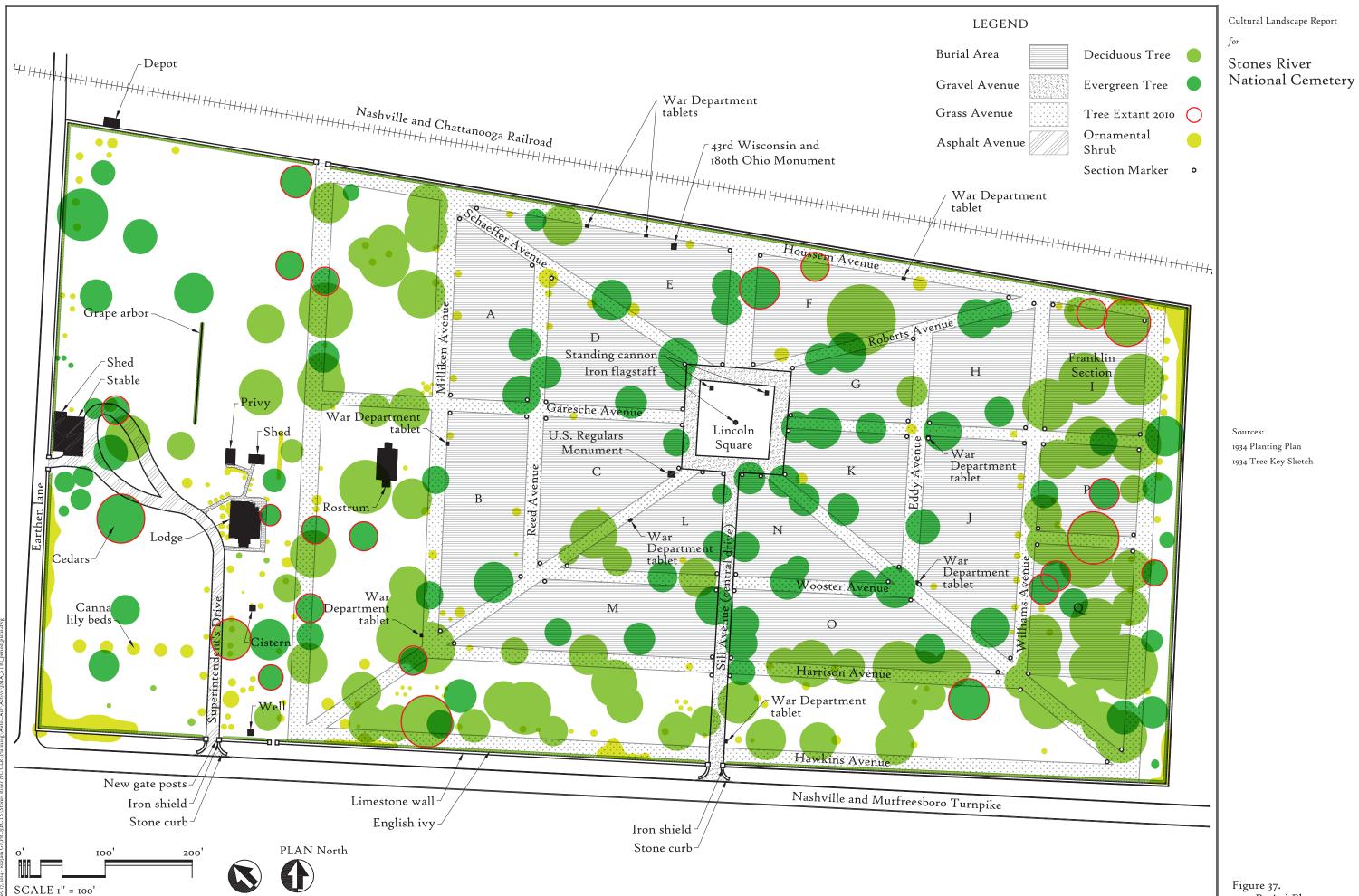
Stones River was also supplied with cast-iron tablets during the 1930s, possibly by the U.S. War Department following the establishment of Stones River National Military Park in 1927. The tablets served different purposes, but may have interpreted battle events consistent with the tablets found at other national military parks. One is known to have displayed the text of the "Act to Establish & Protect National Cemeteries Approved February 22, 1867."91 These tablets are visible in a 1935 photograph of the cemetery (Figure 36). Their locations are indicated on a 1934 planting plan for the cemetery (refer to Figure 38).92 In 1937, park staff placed a map of the Battle of Stones River in the cemetery. (The map remained in the cemetery until 1958, when it was removed to make way for new exhibits.)



FIGURE 36. View of the cemetery in September 1935, showing the cast iron plaques possibly supplied by the U.S. War Department. Source: Stones River National Battlefield Archives, STRI-Central Files 5566-Rinehart-Sept1935.

92. Photograph from Stones River National Military Park archives, STRI-Central Files 556-Rinehart-Sept1935.jpg; drawing, Stones River National Military Park Planting Plan, June 1, 1934, Denver Technical Information Center.

^{91.} John Auwaerter, Cultural Landscape Report for Poplar Grove National Cemetery, Petersburg National Battlefield, Dinwiddie County, Virginia, 75. These types of regulatory plaques are present at Vicksburg National Cemetery and Andersonville National Cemetery, for example.



1934 Period Plan

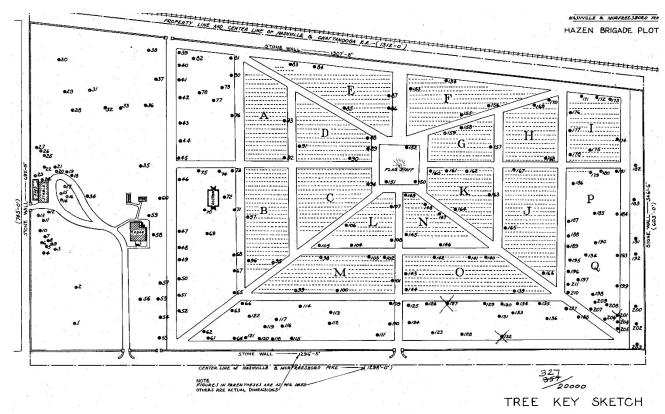


FIGURE 38. Plan of the cemetery prepared in 1934. Many of the nineteenth century trees had been lost. This plan shows the new superintendent's lodge built in 1926 and a rear addition to the stable. Source: Stones River National Battlefield Archives, image STRI CEM 0029 GP 5.

The advent of World War II significantly reduced the amount of funding available to the National Park Service, as resources were directed to the war effort. During this time, Acting Director of the National Park Service, A. E. Demaray, concluded that the rostrums present in several national cemeteries were no longer serviceable and should be removed, as the money to maintain them could be better used on other items. 93 As a result, the rostrum at Stones River National Cemetery was

In 1942, Section P was divided by a new cemetery avenue laid out to separate its eastern half, designated for whites, from its western half, Section Q, which was designated for African Americans. Sections R, S, and T, were also opened during this period; these sections are small, narrow, and close to the cemetery wall, and were

94. Fraley citing John F. Steffey, Superintendent to Superintendent, Chickamauga and Chattanooga National Military Park, November 2, 1942, folder 85 "H-30 Historic Structures," catalog number STRI 4242, Stones **River National Battlefield Central Files** Collection, Stones River National Battlefield, Murfreesboro, Tennessee. However, the rostrum is indicated on the plan of the cemetery dated January 18, 1954, NPS drawing 237-2029. This 1954 drawing may have been created by copying earlier plans and therefore may not accurately reflect existing conditions at that time.

demolished beginning in 1941. Due to the lack of available labor, the rostrum was not completely removed until November 1942.94

^{93.} Fraley citing A. E. Demaray, Acting Director of the National Park Service, to Superintendents at Chalmette National Historical Park. Gettysburg National Military Park, Petersburg National Military Park, Colonial National Historical Park, Chief of Memorial Section, National Capital Parks, Yellowstone National Park (Custer Battlefield), Stones River National Military Park, December 16, 1940, folder 85 "H30 Historic Structures," catalogue number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

created out of the avenue that surrounds the entire burial grounds. Graves in these sections are irregularly spaced.

In the late 1940s, following the conclusion of World War II, there was an influx of burials at Stones River National Cemetery. A joint effort between the Quartermaster Department and the National Park Service allowed for the interments of the remains of American soldiers in the national cemeteries no longer under the control of the War Department. The cemetery staff prepared the graves for burials while the War Department supplied grave markers. The War Department also reimbursed the National Park Service for any expenses related to the interments of World War II soldiers.95

Mission 66

The National Park Service Mission 66 program was developed to provide funding to revitalize the national parks over a ten year period concluding in 1966, to coincide with the agency's fiftieth anniversary. During and following World War II, limited funding and deferred maintenance had contributed to deterioration of the parks' infrastructure. At the same time, park visitation had increased as Americans had more income, more leisure time, and increased access to automobiles for transportation.

Conrad L. Wirth, a National Park Service landscape architect who had overseen recreational planning and state park development during the 1930s, was appointed director of the National Park Service in 1951. In January 1956, Wirth proposed the Mission 66 program, supporting the concept with a slide show depicting poor conditions in the

parks that was presented to President Dwight D. Eisenhower and his cabinet. The multimilliondollar Mission 66 program involved improvements to roads, expansion of park facilities, and repair of existing infrastructure.96

In support of the Mission 66 improvements proposed for Stones River National Battlefield, Park Superintendent Victor H. Shipley noted that:

The National Park Service is, without doubt, the greatest experiment of its kind in the whole world. Begun in 1916, with the ten or twelve parks then in existence, the Service has expanded until we find some part of it in every section of our great country. This vast empirefor-pleasure has been put together and maintained by those who believe in the philosophical principle that true patriotism has, among its many component parts, the two indispensable qualities which are known as pride and appreciation and that this pride in and appreciation for our native land can be increased by making it possible for any and all of us to make some sort of contact with these certain geographical sections which have, in some peculiar way, become a definite part of the American heritage. This philosophy, then, presupposes that these certain geographical sections which have been set aside as parks, monuments, military parks, etc., should be developed to the extent that all our people may have the opportunity to visit and become acquainted with them Development of a new entrance road, headquarters area and interpretation center, other facilities for visitor comfort and experience, and proper staffing as set out in Mission 66 for Stones River will permit this area to take its rightful place as one of the most important memorials of the American heritage.97

^{95.} Fraley citing E.M. Lisle to Superintendent, Chickamauga-Chattanooga National Military Park, memo, September 16, 1947, folder 333a "D-66 Signs, Markers & Memorials," box 24, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee. The War Department ceased to exist as of September 18, 1947, at which time it was divided into the Department of the Army and

the Department of the Air Force. These departments, along with the Department of the Navy, were placed in the new National Military Establishment, which was renamed the Department of Defense in 1949.

Conrad L. Wirth, Parks, Politics, and the People 96. (Norman, Oklahoma: University of Oklahoma Press, 1980), 111.

^{97.} Victor H. Shipley, Superintendent, Stones River National Military Park, Memorandum to Director, NPS, February 10, 1956. See section

Mission 66 work at the park was guided by the 1960 Master Plan for Stones River National Battlefield, including the historic fence and ground cover map prepared by NPS historian Edwin C. Bearss.98

On April 22, 1960, the park was re-designated as Stones River National Battlefield, part of a larger reorganization of National Park Service administration and nomenclature.⁹⁹ The Secretary of the Interior was directed to administer, protect, and develop the battlefield in accordance with the provisions of the National Park Service Organic Act of August 25, 1916.

Beginning in 1961 and continuing through 1963, the entire cemetery wall was repointed. 100 As work continued on the cemetery wall, the vehicular entrances to the cemetery and maintenance area were widened to accommodate motor vehicles. and the piers were again reconstructed with native limestone replacing the previously existing concrete. The 1937 iron gates were reinstalled at the main entrance, while the maintenance gate was widened and the gates were removed. At this time, a small parking lot containing eleven parking spaces was added near the main entrance gate inside the cemetery wall (Figure 39). 101

Also during Mission 66, three of the original pedestrian entrances were closed and the wall filled in. One of these, located on the northern cemetery wall, was closed in response to the cessation of passenger rail service along the adjacent rail line. The other two were located on the southern wall along the Old Nashville

> on "Philosophy and Accomplishments Proposed (Mission 66)."

Highway, and behind the stable where an earthen lane edged the western wall.

Within the burial grounds area, three new burial sections—R, S, and T—were created between Sections I, P, and Q and the cemetery boundary wall (refer to Figure 42). The graves were sited within a space originally designated for a cemetery avenue between the burial sections and the wall.



FIGURE 39. Aerial view of the cemetery, looking west from U.S. 41 in 1967. The row of Eastern red cedar east of the rostrum was planted by 1967 (as shown in this photo), while the row west of the rostrum was not planted until 1978–1979. Source: Stones River National Battlefield Archives, STRI-ICP-1125 - Aerial view of cemetery 1967.

In 1964, several wayside exhibits describing the battle were placed in the national cemetery. 102 At this time, the cemetery was also added as a stop on the tour route of the battlefield.

As part of the Mission 66 program, plans were made to construct three single story brick homes and a new maintenance building in the existing maintenance and housing area at the cemetery.

- 100. Completion Report: Repointing Stone Wall around National Cemetery, September 1, 1964. Lawrence W. Quist, Superintendent.
- 101. Fraley, Chapter 5, citing "Completion Report-Day labor Project-Repointing the Stone Wall around the National Cemetery," location of report not noted.
- 102. These signs were located at various locations in the cemetery, including near Lincoln Square and the parking area, and throughout the park. Several of the signs are in storage in the park's museum collection.

^{98.} Mission 66 Prospectus, Stones River National Military Park, Tennessee (Washington, D.C.: National Park Service, April 1956, revised October 1959); NPS drawing 327-3011, "Historical Fence and Ground Cover Map, Part of the Master Plan, Stones River National Battlefield," drawn by Edwin C. Bearss, December 1961.

^{99.} Pub. L. No. 86-443, 74 Stat. 82 (1960).

Two of the new residences were completed in April 1963, and the third residence was completed by November 1963. The single story residences each contained three bedrooms and one-and-one half bathrooms. The utility building, today called the maintenance office and shop, and the well house were completed at the same time as the first two employee's residences. Upon completion, the utility building consisted of a five-bay garage, a shop, and a storage area. The well house contained tanks, a chlorinator, and electrical controls for the new pump.¹⁰³ The existing superintendent's lodge was relocated to private property nearby, and the adjacent maintenance building and outbuildings were demolished to allow construction of the new buildings to proceed. The new buildings were aligned along an extended service drive, stepping down the slope. The drive was extended from the top of the ridge, downslope to the east towards the railroad, then curved to wrap around the east side of the maintenance building, creating a paved work yard. Driveways extended to the carport at each residence and walkways were laid from the driveways to the front entrances of the two upper houses. As part of the project, the superintendent's lodge and its outbuildings were removed, along with their brick walkways. The stable and its gravel circular drive were also demolished.

A new visitor center was constructed in 1964 at the battlefield, across Old Nashville Highway from the cemetery, replacing the visitor center that had been located in the lodge.

A pyramid of cannonballs was added in front of the flagstaff in Lincoln Square circa 1964 (Figure 40). Although the exact date of origin is not known, the monument is absent in a photograph from 1964, but appears by the 1970s in a planting plan for Lincoln Square and a photograph depicting the completed project. (Refer to Figure 171 and Figure 172 in the Analysis and Evaluation chapter.) The monument may have been constructed of cannonballs associated with the 1931 Bragg Headquarters monument, located south of the cemetery within the park, which were

103. Completion Report: Visitor Center, Utility Building, Two Employee Residences and Water and Sewer Utilities, April 12, 1963; Completion

replaced in the late 1960s with smaller shot (Figure 41).



FIGURE 40. View of Lincoln Square in the late 1960s or early 1970s, after construction of the cannonball pyramid. Source: Stones River National Battlefield Archives, image 0899.



FIGURE 41. The commemorative marker at the General Bragg Headquarters Site, in a photograph taken shortly after completion of the marker, circa 1931. Source: Stones River National Battlefield archives, image STRI-Central Files 640.

Report: One Employee Residence, September 17, 1964. Lawrence Quist, Superintendent.



Closing of the Cemetery

By the mid-1960s, Stones River National Cemetery had neared its capacity for burials. Expansion of the cemetery had been considered in the 1930s; however, it was decided that the cemetery should be closed when the existing gravesites were filled.

Expansion was again explored in 1969, when a proposal called for adding new gravesites within the wall of the cemetery. The new gravesites would have been added to flood prone areas, and as a result the expansion plans were never realized.¹⁰⁴ The cemetery was officially closed to reservations on January 31, 1974. Since that date, burials have slowed to about three per year. 105 As of 2010, the Stones River National Cemetery includes 6,886 interments, of which 6,139 are Union Civil War dead.

Continued Development and Maintenance of the National Cemetery

Flooding remained a problem in the national cemetery in the late 1960s and early 1970s. Burials in Sections R, S, and T ceased entirely in the 1970s due to ongoing problems with flooding.¹⁰⁶

In 1975, the NPS addressed the flooding problem by creating a drainage swale 2 feet deep that ran from the battlefield to the western boundary of the park. The Rutherford County Highway Department constructed culverts under Old Nashville Highway and nearby Asbury Lane, which allowed the water to drain to Stones River.107

Beginning in the 1970s, the staff of the park began an effort to restore the historic appearance of the national cemetery. Part of this program included extensive tree planting (Figure 43). Planting in the late 1970s and early 1980s was influenced by an 1892 plan of the cemetery. The park originally wanted to recreate the landscape as it appeared in 1865; however, only the 1892 landscape plan could be found to support this effort.¹⁰⁸

Several trees that were planted at this time were soon lost to damage and disease. In 1981, the park replaced fifty-five trees in the cemetery and hired a tree surgeon to trim and treat forty-three other trees. In 1985, a local nursery donated a number of additional trees to the cemetery. 109

- 104. Superintendent, Stones River to Regional Director, Southeast Region, "Available Space at Stones River National Cemetery," memo, May 13, 1969, folder 46 "A-56 Interments," box 3, catalog number STRI 4350, Cemetery Project Archives, Stones River National Battlefield, Murfreesboro, Tennessee.
- 105. Memorandum from Superintendent, Stones River National Cemetery, to Associate Regional Director, Park Systems Management, January 11, 1974, Subject: Closure of Stones River National Cemetery. Folder 22, "A58 Interments," Box 4, catalog number STRI 4242, **Stones River National Battlefield Central Files** Collection, Stones River National Battlefield, Murfreesboro, Tennessee. Also, correspondence with Gib Backlund, STRI, December 2012.
- 106. Memorandum, from John D. Hunter, Superintendent, Stones River National Cemetery, to Director, NPS SERO, December 21, 1972, Subject: Suspension of Interments at

- Stones River National Cemetery because of Flooding.
- 107. James A. Sanders in a Notice of Public Meeting, May 30, 1975, folder 1, "Flooding at the National Cemetery," box 3, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- Superintendent, Stones River to Associate Regional Director, Park Operations, SERO, Cemetery Administration, January 18, 1977, memo, folder 22, "A58 Interments," box 4, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- 109. Donald E. Magee, "Superintendent's Annual Report of Stones River National Battlefield and Cemetery for Calendar year 1985," February 27, 1986, page 7, folder 157 "A-2621 Annual Reports," box 1, catalog number 4242,



FIGURE 43. An undated aerial view of the cemetery before the extensive planting program was undertaken in the 1970s. Note the row of cedars established in 1967. Source: Stones River National Battlefield Archives, Central Files 009.

The maintenance facilities in the cemetery were expanded in the late 1970s or 1980s by the addition of a wood-framed equipment shelter building, a gas pump, an open-sided metal equipment storage shed, and a powder storage structure.

In 1968, the bronze eagle on top of the U.S. Regulars Monument was stolen. In the early 1980s, as the park began restoring the monument, it was rumored that the eagle had been stolen by students at Tennessee Tech University in Cookeville, whose mascot was the Golden Eagle, before a sporting event against Middle Tennessee State University. It was also suggested that the eagle was being held at a fraternity house on the campus of Tennessee Tech in Cookeville. The park put up posters around the campus offering \$500 as a reward for returning the eagle. The eagle was returned and the monument was repaired and rededicated on Memorial Day, May 30, 1983, in honor of the structure's one-hundredth anniversary.110

Flooding continued to be a problem in the cemetery (Figure 44 and Figure 45). Burials in Sections R, S, and T ceased entirely in the 1970s due to regular problems with flooding. In 1975,

Stones River National Battlefield Central Files Collection, Stones River National Battlefield. Donald E. Magee, "Superintendent's Annual Report of Stones River National Battlefield and Cemetery for Calendar Year 1982," March drainage swales were constructed and fill was placed for flood control in the cemetery. In 1978, fill was added in the vicinity of the maintenance area. Fill was also added to the burial section where Vietnam veterans were buried in the 1970s. and 1980s.

In 1978, to address flooding problems in the northwest corner of the cemetery, the National Park Service added 3 feet of gravel fill, forming the basis for the present-day gravel parking area and the powder magazine enclosure.



FIGURE 44. View of flooding in the cemetery soon after planting of the second row of Eastern red cedars in 1979. Source: Stones River National Battlefield Archives, STRI-5X7P-0007.



FIGURE 45. View of flooding in the maintenance area of the cemetery circa 1979-1980. Source: Stones River National Battlefield Archives, STRI-5X7P-0008.

7, 1983, folder 157 "A-2621 Annual Reports," box 1, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Murfreesboro, Tennessee.

In the late 1970s, chain link fencing was added within the lodge and service area to contain the maintenance yard and powder magazine.

Prior to 1977, the cannonball pyramids were removed from the bases of the standing cannon markers in Lincoln Square.

Beginning in 1977 and continuing until 1983, contractors made repairs to the cemetery wall. Each year 300-foot portions of the wall were repointed using a latex mortar joint compound.¹¹¹ During the late 1970s and early 1980s, park maintenance personnel replaced deteriorated corner markers with new concrete markers.112 Also during this period, under the direction of Superintendent James A. Sanders, more than 600 trees were planted in the cemetery.¹¹³

During this time, park staff initiated interpretive programs aimed to give visitors a better understanding of the cemetery and its relationship to the battlefield. Initially, guided tours of the cemetery proved unsuccessful, as visitors were often more inclined to view the cannon demonstration at the battlefield.¹¹⁴ However, beginning in 1983, the park began to give evening tours using letters, diaries, and other accounts of soldiers who were buried there. This program proved to be a success and continued to be offered during the summer months for several years.¹¹⁵

The lantern tour, now known as *Hallowed Ground*, continues to this day.

An extensive grave marker and section marker replacement program was undertaken by the park beginning in 1986. Blank grave markers were provided by the U.S. Department of Veterans Affairs (VA). A local stonecutter altered the blank markers to match the design of the existing grave markers.116

In the early 1980s, new roofs were added to the houses and maintenance shop. Shingle roofing set on plywood decking was installed to replace the original cedar shakes, which had been attached to wood strips rather than continuous decking.

In 1984, the storage shed was constructed in the maintenance area. The building initially consisted of a single south wing; a second, north wing was constructed around 1985.

In the 1980s or 1990s, the park created a drainage opening through the base of the stone perimeter wall near its southwest corner to address flooding problems in this part of the cemetery. A pipe was placed through the hole that emptied into a 1-footwide open stone drain located outside the cemetery wall.

- 111. "Stones River National Battlefield 1980 Annual Report," page 8, folder 157 "A-2621 Annual Reports," box 1, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- 112. Correspondence by Gib Backlund, Stones River National Battlefield Chief of Operations, with Bobby Simerly, former park Chief of Maintenance (August 1977–April 1996). Former park maintenance worker Albert Pomplun was involved in the replacement of deteriorated section markers with concrete in the late 1970s and 1980s.
- 113. James Sanders was Superintendent at Stones River from 1974 through 1980.
- Fraley citing Chief 1&RM to Supt. S.T.R.I., "Thoughts on management of National Cemeteries," handwritten memo, January 11, 1977, folder 22 "A58 Interments," box 4,

- catalog number STRI 4242, Stones River National Battlefield, Murfreesboro, Tennessee.
- Donald E. Magee, "Superintendent's Annual Report of Stones River National Battlefield and Cemetery for Calendar Year 1983, February 10, 1984, 8, folder 157 "A-2621 Annual Reports," box 1, catalog number 4242, **Stones River National Battlefield Central Files** Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- Donald E. Magee, Superintendent, to Sarah Key, Monument Services, April 30, 1986, Folder 25, "A58 Interments—Routine Correspondence," box 4, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee. The extent of marker replacement is not clear from this documentation.

On March 22, 1991, tornado force winds damaged thirteen trees in the national cemetery. The damaged trees posed a threat to nearby grave markers and as a result had to be removed.¹¹⁷

In 1993, several repairs were made to the U.S. Regulars Monument by the NPS Southeast Region preservation crew working in conjunction with contractor personnel from Cathedral Stone Company. Work included repairing cracks in the monument's column and the placement of new steel-reinforced concrete around and beneath the lowest granite step of the monument. In addition to these repairs, the entire monument was cleaned by soaking with water for several days, followed by scrubbing with "mild soap and water." 118

Further repairs to the column, base, and eagle of the U.S. Regulars Monument were required in February 1995 after vandals again attempted to steal the eagle at the top of the monument. 119

Throughout the latter portion of the twentieth century and into the early twenty-first century, commercial development around Stones River National Cemetery greatly increased. During this period, a car dealership was constructed northeast of the cemetery, on the opposite side of the adjacent railroad line. This development is visible from the cemetery, although a row of trees has been planted by the car dealership as a screen.

Also visible from the cemetery is the rail bed, which the railroad has continued to reinforce by the addition of ballast. The rail bed is significantly higher than its elevation at the time of the Civil War. The date at which the rail bed was first elevated is not known; however, new ballast was added when the existing rail was replaced with seamless rail in the 1990s. The stone ballast has been renewed periodically in recent years. Its bright color and reflective nature has increased the visibility of the rail bed from within the cemetery.

In the 1990s, work began by private contractors engaged by the park to remove and reset grave markers throughout the cemetery (Figure 46). This program continued in 2009–2011, at which time approximately 2,000 grave markers in sections C, D, E, L, and M of the cemetery were reset.¹²⁰ Contractors working on marker resetting included Veterans of the Land, September 11 to November 22, 2009; Dozier Memorials, August 27, 2009, to April 15, 2011; and Avatara, June 1, 2009, to November 5, 2009.121

After 2000, two bays of the north (1985) wing of the storage shed in the maintenance area were enclosed with board and batten siding and garage doors were added to the building. After 2003, the wall of the storage shed adjacent the cemetery wall was clad with plywood.

Plans were made in July 2005 to reconstruct the rostrum at Stones River National Cemetery. The plans were based on 1878 plans that were used to construct rostrums at several national cemeteries. The new rostrum was completed in 2007 (Figure 47), matching the original design, except that the stairs were placed along the east half of the

- 117. Project Analysis/Advance Acquisition Plan, March 26, 1991, Stones River National Battlefield, Murfreesboro, Tennessee.
- 118. U. S. National Park Service, Southeast Regional Office, Historic Architecture Division, "Completion Report: Stones River National Battlefield U.S. Regulars Monument and Cemetery Wall 1993 Stabilization," folder 26 "H3015 Management, Preservation & Maintenance, List of Classified Structures: Wall & Regulars Mont," box 7, catalog number STRI 4350, Cemetery Project Archives, Stones River National Battlefield, Murfreesboro, Tennessee.
- Superintendent, Stones River National Battlefield to Exhibit Specialist Christian

- Bookter, Stewardship and Partnership Team, APSO, "Repair of Cemetery Wall and U.S. Regulars Monument," memo, February 28, 1996, folder 80; "D-66 Signs, Markers, & Memorial," box 23, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- Completion Report: Raise, Straighten and Align Historic Headstones, Stones River National Battlefield, PMIS 131327A (National Park Service, November 5, 2009).
- 121. Correspondence with STRI, December 2012.

north and south ends of the structure rather than the west half as originally built. 122



FIGURE 46. Resetting grave markers in the cemetery, 2001. Source: Stones River National Battlefield Archives, slides, collection 67, image 67-01-011-0011.



FIGURE 47. The reconstructed rostrum, shown in a 2010 photograph. Source: Photo by authors, 2010.

In 2009, personnel from the National Park Service Historic Preservation Training Center in Frederick, Maryland, implemented several maintenance and repair projects in the park, including reconstruction of a 100-foot-long section of the north cemetery boundary wall. The reconstruction work in 2009 included the use of some new stone supplied by the Smith Farms Stone Quarry in Woodbury, Tennessee, which was marketed as "Gray Glass" and "Regular Glass" limestone. The work also included replacement of approximately 160 linear feet of coping stones

along the south wall and repointing of selected masonry joints throughout the perimeter wall.¹²³ Some of the coping stones were replaced with concrete.

On April 10, 2009, while this project was underway, the park was struck by a tornado at approximately 12:20 p.m. that felled numerous trees. The tornado moved northeast through the park, narrowly missing the visitor center, and passed west of the Hazen Brigade Monument approximately 900 yards due east of the national cemetery. The fall of a mature tree within the cemetery crushed a twenty foot long section of the east perimeter wall.

In April 2011, a series of severe storms and tornados caused extensive tree damage in the park and cemetery (Figure 48). The U.S. Regulars Monument narrowly escaped severe damage when a nearby tree was partly uprooted and toppled by the storm (Figure 49).



FIGURE 48. One of several trees and large branches that fell during storms on April 27, 2011. Source: Stones River National Battlefield, photo by park staff, 2011.

Repair & Stabilize Pillars and Wing Walls at the Park Vehicle Entrance; and PMIS 128489: Preserve Hazen Brigade Monument Stone Walls, dated from April 8, 2009, to July 30, 2009.

^{122.} According to the Project Management Information System (PMIS), the rostrum project was officially completed on September 30, 2007.

^{123.} Weekly Field Reports for Project PMIS 128473: Repoint National Cemetery Wall; PMIS 137054:



FIGURE 49. The U.S. Regulars Monument narrowly escaped damage when a nearby tree was uprooted by a tornado. Source: Stones River National Battlefield, photo by park staff.

Over the years, trees damaged by storms or in decline due to age have been removed. In 2012, the park completed a tree inventory for the cemetery that included tagging every tree within the cemetery wall and logging global positioning system (GPS) information, species, diameter at breast height (dbh), and overall height.¹²⁴ This information was geo-referenced and developed as a geographic information system (GIS) data layer. The park also plans to document other features in the cemetery, such as monuments and markers, using GPS in the future.

A three-bay aluminum-framed storage shed was added to the maintenance area after 2003. This shed was later partially enclosed with wood.

A major renovation of the maintenance shop was completed in September 2012 (Figure 50 through Figure 52, and compare to similar views in the Existing Conditions Documentation chapter). As part of this work, the north elevation was altered by infilling two bays. At the second bay from the east end, the original recessed entry with a pedestrian door was altered to include brick infill and a paired window opening. The next bay toward the west was originally an overhead garage door but was altered to include brick infill and two

personnel doors. Additionally, a new personnel door was created at the west end wall.



FIGURE 50. The maintenance building before renovation, view from the northeast, November



FIGURE 51. The maintenance shop before renovation, view toward the east end of the north elevation, November 2010.



FIGURE 52. The maintenance shop before renovation, view from the northwest, November 2010.

The GIS data is available for download at 124. https://irma.nps.gov/App/Reference/Profile/ 2189751.

Stones River National Cemetery Chronology

1862–1863	The Battle of Stones River was fought on December 31, 1862, and January 2, 1863.		
1864	On March 29, George H. Thomas, commander of the Army of the Cumberland, ordered General Horatio Van Cleve to select a site for the establishment of a national cemetery at Stones River.		
1865	A monument to the 43rd Wisconsin and 180th Ohio regiments was placed near the railroad tracks by the Tennessee Union Soldiers Railroad employees.		
	Construction began on the limestone boundary wall, flagpole, avenues, and tree plantings.		
1867	The reburial of Union soldiers at Stones River National Cemetery was completed.		
1868	A 4-acre parcel was added to accommodate the lodge and maintenance area.		
1871	A superintendent's lodge was constructed north of the cemetery on newly acquired land.		
circa 1874	A wooden laborer's residence, barn buggy house, and two hen houses were constructed adjacent to the superintendent's lodge.		
1876	An extensive planting program was begun. Trees, shrubs, and flowers were planted throughout the cemetery.		
1878	Ten wood and iron settees were placed throughout the cemetery.		
1879	Four iron hitching posts were placed near the superintendent's lodge for use by visitors.		
1882	A masonry rostrum with a wood trellis roof was constructed on the north side of the cemetery.		
	Seven plaques with the poem "The Bivouac of the Dead" were added around Lincoln Square.		
1883	A monument to the United States Regulars was erected adjacent to Lincoln Square.		
1888	A new iron flagstaff was erected to replace the original wooden flagstaff.		
1906	A new stable was constructed in the maintenance area.		
1909	The superintendent's lodge was reconstructed using existing materials.		
1913	Two shields were placed on the entrance gates.		
1926	A new superintendent's lodge was constructed adjacent to the existing superintendent's lodge which was subsequently demolished.		

1927	Stones River National Military Park was established on March 3.		
1930	A new brick stable was constructed in the maintenance area.		
1933	Administrative responsibility of the Stones River National Battlefield and National Cemetery was transferred from the U.S. War Department to the National Park Service.		
1934	National Park Service generated a planting plan for the cemetery.		
1937	The two avenues in the cemetery were widened to better accommodate vehicular traffic.		
1941–1942	The rostrum was demolished.		
1961–1963	Three pedestrian gates were removed and the main vehicular gate was widened as part of a wall repointing project.		
1964	Two interpretive signs describing the Battle of Stones River were placed near Lincoln Square.		
1962–1963	Three new residences, as well as a new maintenance building and well house, were constructed as part of the Mission 66 program. The existing superintendent's lodge was relocated to nearby private property, while the existing maintenance buildings were demolished.		
1974	Stones River National Cemetery was closed to future burials as the final unreserved gravesite is filled.		
1970s-1980s	A planting program inspired by an 1892 landscape plan was initiated.		
2007	A new rostrum was constructed at the site of the original 1882 rostrum.		
2012	A tree inventory and geo-referencing project was completed by park. A major renovation of the maintenance shop was completed.		

Existing Conditions Documentation

Introduction

This chapter of the Stones River National Cemetery Cultural Landscape Report (CLR) is intended to provide a detailed description of the cemetery landscape as it currently exists, and as background information for the analysis and treatment recommendations presented in subsequent chapters. To this end, this chapter documents the existing landscape features of Stones River National Cemetery through narrative text, photographs, and mapping. The existing conditions documentation that follows was derived from on-site visits conducted by project team members in November 2010 and existing conditions source material, such as aerial photographs and GIS mapping, provided by park staff.

This chapter is organized into three sections: the first—Environmental Context and Setting—sets the site within a regional context and examines the broader natural systems that affect the property; the second—Cultural Context and Setting describes regional elements that provide a cultural framework for the site; and the third—Description by Landscape Characteristic—depicts in narrative and graphic form the landscape features and resources that comprise the cemetery. The property as a whole is divided into two character areas—the Burial Grounds, and the Lodge and Service Area—and features are identified as being located within one or the other. Each of the

cemetery's individual features is described in this chapter in accordance with the guidance afforded by National Register Bulletin: How to Evaluate and Nominate Designed Historic Landscapes and the National Park Service's A Guide to Cultural Landscape Reports: Contents, Process, and Techniques that recommend organizing existing conditions documentation into the following landscape characteristics categories:125

- Patterns of Spatial Organization
- Natural Features and Systems
- Responses to Natural Resources
- **Topographic Modifications**
- Views and Vistas
- Land Use
- Circulation
- **Cultural Vegetation**
- **Buildings and Structures**
- Small-scale Features
- Archeological Resources

An inventory list of each of the recorded landscape features follows the documentation section. Each feature discussed in the narrative is assessed as to its condition, and assigned a rating of good, fair, poor, or unknown. All features are assumed to be in good condition unless otherwise noted in the text.126 Features categorized as fair, poor, or

126. **Good**: indicates the cultural landscape shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The cultural landscape's historical and natural values are as well preserved as can be expected under the given

^{125.} Cathy Gilbert, Robert R. Page, and Susan Dolan, A Guide to Cultural Landscape Reports: Contents, Process, and Techniques (Washington, D.C.: National Park Service, 1997).

unknown are accompanied by a brief annotation to explain the rating. Throughout the text, List of Classified Structures (LCS) identification numbers for individual structures are provided, as applicable.127

Environmental Context and Setting

Refer to Figures 3 through 6 in the Introduction chapter.

Stones River National Battlefield, including the national cemetery, lies within a Tennessee physiographic region known as the Central Basin, a gently rolling area surrounded by steeper hills of the Highland Rim. Annual average precipitation totals between 48 and 50 inches of rainfall and 6.2 inches of snowfall. While some of this water moves to waterways over land, much of it is also absorbed into the local soils and moves through the underlying limestone bedrock as groundwater, creating the local karst topography. In fact, most of the groundwater in the region is found in solution cavities and cracks in limestone bedrock, and at least one cave and a number of sinkholes typical of karst topography—are found within the boundaries of Stones River National Battlefield. South of the cemetery and along the two forks of

> environmental conditions. No immediate corrective action is required to maintain its current condition.

Fair: indicates the cultural landscape shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within three to five years to prevent further harm to its historical and/or natural values. The cumulative effect of the deterioration of many of the significant characteristics and features of the cultural landscape, if left to continue without the appropriate corrective action, will cause the landscape to degrade to a poor condition. **Poor**: indicates the cultural landscape shows clear evidence of major disturbance and rapid deterioration by natural and/or human forces. Immediate corrective action is required to protect and preserve the remaining historical and natural areas.

the Stones River, outcroppings of thickly-bedded Ridley limestone that are part of this karst topography can be found. These outcroppings played an important role during the Battle of Stones River: the limestone outcroppings provided cover for the troops, but also served as obstacles to the movement of artillery pieces and wagons (Figure 53).

In general, the park occupies level to gently rolling land south of Stones River and northwest of Murfreesboro. The McFadden Farm unit of the park is edged to its north by the river; along the banks of Stones River, the land falls away more steeply toward the water course. The high ground along the western edge of Stones River was used to advantage by the Union artillery to fend off attack by Confederate soldiers on the afternoon of January 2, 1863. Elevations within the park range from about 520 feet to 600 feet above sea level. Except for specific areas of high ground, such as the Union artillery position, much of the park lies within the Stones River 100-year floodplain, including the cemetery.

The naturally-occurring vegetation community associated with the region is classified by Braun (1950) as the Western Mesophytic Forest Region, a variant of the Deciduous Forest Formation of eastern North America. Several species of oak

- **Unknown**: indicates that not enough information is available to make an evaluation.
- The List of Classified Structures (LCS) is a 127. computerized inventory of all historic and prehistoric structures, in which the National Park Service has, or plans to acquire, any legal interest. These structures must have historical, architectural, or engineering significance. Structures listed on the LCS must meet one of the following criteria: either the structure is listed individually or is eligible for the National Register of Historic Places or the structure is a contributing element of an historic site or district that is listed or is eligible for the National Register. In addition, the LCS includes other structures: moved, reconstructed, and commemorative structures, and structures which have achieved significance within the last fifty years that are managed as cultural resources.

dominate this community, which also features hickories, maples, yellow buckeye, serviceberry, birch, redbud, dogwood, beech, ash, American holly, magnolias, pine, sourwood, sassafras, hemlock, elms, and black gum in association depending on the environmental aspects of a site. Overall, the park contains more than 500 species of plants, a richness which not only promotes vegetative diversity but also creates and supports a range of wildlife habitat.

Although none of the vegetation within the cemetery is naturally derived, many of the tree plantings are native species. The tree plantings are managed to reflect a planting plan prepared in 1892 that indicated the arrangement of plant material to follow the main circulation routes, with other plantings placed within the sections surrounding the burial areas.

Some of the species formerly planted within the cemetery are today classified as invasive species. For example, English ivy (Hedera helix) was formerly planted on the cemetery walls and around the original rostrum during the nineteenth century for effect. This invasive vine damages masonry features and threatens tree health when not controlled or maintained. Invasive species have been the object of control and eradication programs conducted by the park.

Cultural Context and Setting

Stones River National Cemetery is located in close proximity to the town of Murfreesboro, the seat of Rutherford County. Today, Murfreesboro is one of Tennessee's fastest growing cities. In 2010, the federal census recorded a population of 108,755 residents within the city, a large increase from the 68,816 residents recorded ten years prior.

In its early years Murfreesboro was an agricultural hub, producing mostly corn, cotton, and tobacco; by 1853, the area was also known as an important educational center, with three colleges and several academies. Growth slowed during the Civil War, but by the early 1900s, two more colleges, the Tennessee College for Women and Middle

Tennessee State Normal School, had been established.

As Murfreesboro prospered in the years leading up to the Civil War, transportation networks grew, including the construction of a turnpike running from Nashville through Murfreesboro and to Shelbyville in 1842, and the extension of the Nashville and Chattanooga Railroad to Murfreesboro in 1851. The cemetery is bounded by these transportation corridors, existing today as the CSX Corporation railroad tracks and Old Nashville Highway. The new Nashville Highway (U.S. Highway 41/70S), built in the 1950s, is located just northeast of the CSX tracks and has brought commercial and industrial development to the area north of the battlefield, while other major road projects have brought commercial, residential, and medical development to the land south and east of the park.

Stones River National Battlefield is one of several historic sites within the region that commemorate the Civil War. The Oaklands Historic House Museum in Murfreesboro interprets Civil War military activities that affected life in Murfreesboro, as well as that of the household. The Battle of Franklin is interpreted at a site that protects a portion of the battlefield near the town, which is located one-half hour to the west of Murfreesboro. The Battle of Nashville is recognized through the placement of monuments at the Nashville Battlefield Park. Shiloh National Military Park and National Cemetery is located nearly three hours from Stones River near Memphis, Tennessee.

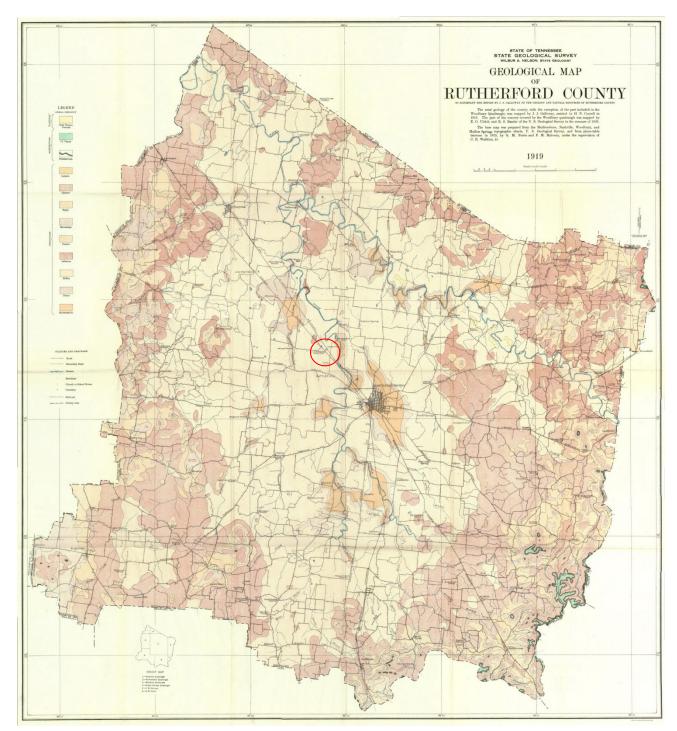
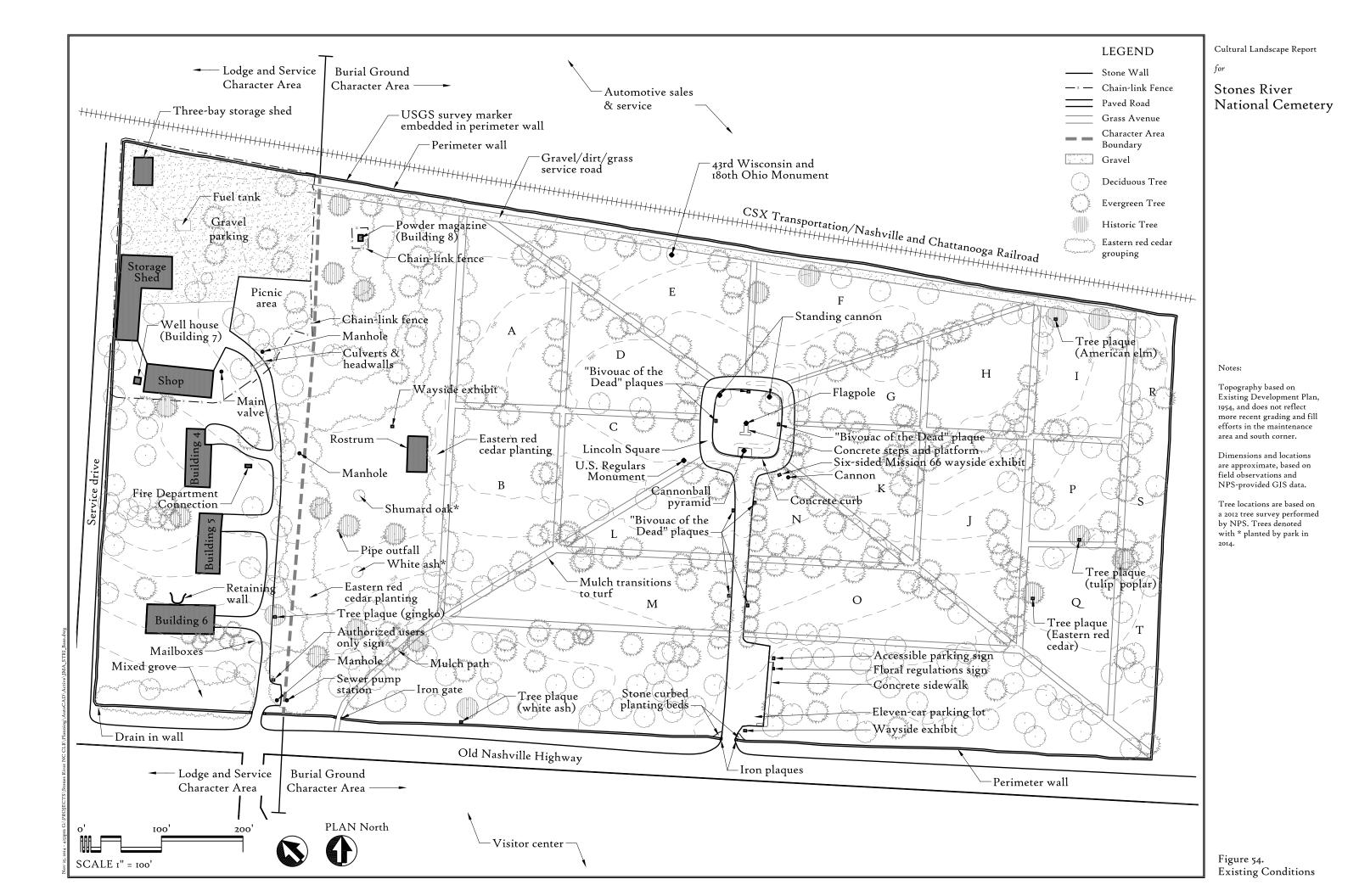


FIGURE 53. Geological map of Rutherford County, Tennessee, prepared in 1919. The red circle indicates the location of the Stones River National Cemetery. Murfreesboro lies southeast of the cemetery at the geographical center of the county. Source: J. J. Galloway, Geology and Natural Resources of Rutherford County (Nashville: Tennessee State Geological Survey, 1919).



Description by Landscape Characteristic

Refer to Figure 54, Existing Conditions.

This section provides a detailed description of existing landscape features and conditions found within Stones River National Cemetery, focusing on features that support and define its historic character. Contemporary site functions, visitor services, and natural resources are described to the extent that they contribute to or influence the character of the landscape and the recommendations provided in the Treatment chapter of this report.

Patterns of Spatial Organization

Stones River National Cemetery is located directly across Old Nashville Highway from the main unit of Stones River National Battlefield; the vehicular entrance into the park sits on axis with the pedestrian entrance into the cemetery.

The 20.1–acre Stones River National Cemetery is comprised of two distinct character areas—the burial ground and the lodge and service area each of which has its own internal patterns of spatial organization (Figure 54).¹²⁸ The burial ground character area is approximately 16 acres in size, while the lodge and service area totals approximately 4 acres.

Today, buildings located within this character area house park staff and office space, as well as maintenance activities.

The cemetery, which was sited to take advantage of a prominent knoll, is oriented toward, and lies parallel to, Old Nashville Highway. The Old Nashville Highway and the CSX railroad corridor define the northern and southern edges of the national cemetery (Figure 55). These edges, as well as the western and eastern boundaries of the cemetery, are marked by a limestone perimeter wall (Figure 56). Internally, the two character areas

128. Character areas are geographically unique land bays with a distinct, recognizable quality. They are defined using a combination of

are separated by rows of Eastern red cedar trees (Figure 57), a native species that thrives in the alkaline soils created by the underlying limestone bedrock. The burial ground character area is organized geometrically by interior circulation features that are arranged symmetrically around a central focal point—Lincoln Square with orthogonally and diagonally laid out structuring circulation elements—the avenues—forming the sections of the burial ground. The primary paved entrance drive and secondary grass avenues form an orderly system that defines the cemetery's fifteen original and five later-addition burial sections (Figure 58 and Figure 59). Turf lawn punctuated by deciduous trees set informally along the avenues characterizes much of the burial ground. Evergreens form a darker core of plantings around Lincoln Square. Denser tree plantings are associated with the lawn panels that form the southern edge of the cemetery.



FIGURE 55. CSX #7837 (C40-8W) traveling southeast along the rail line adjacent the cemetery. Note the proximity of the railroad grade to the cemetery wall. Source: Brian Coffey, National Park Service Southeast Regional Office.

factors such as landform and topography, vegetation patterns, land use, and cultural associations.



FIGURE 56. The limestone perimeter wall marks the boundary of the cemetery and provides a distinct visual break between the cemetery and the surrounding landscape characterized by the Old Nashville Highway, the battlefield park, and the railroad.



FIGURE 57. Rows of Eastern red cedar trees separate the lodge and service area from the burial grounds area of the cemetery.



FIGURE 58. The paved entrance drive, lined with evenly spaced rows of spruce trees, provides the primary central organizing feature in the geometric layout of the burial grounds.



FIGURE 59. Grass avenues separate the lettered burial sections of the cemetery.

The burial sections are characterized by regularlyspaced, uniformly-sized headstones set in rows designated by lettered section markers (Figure 60).

The center of Lincoln Square space is marked with a flagstaff (Figure 61). A replica rostrum edges the burial area to the west. It is set within a turf panel edged by rows of Eastern red cedar trees planted between 1967 and 1979 to screen the lodge and service area from view (Figure 62).

The lodge and service area includes a maintenance yard in its northwest corner, and a residential complex composed of a linear arrangement of three park dwellings. Two of the residences are occupied by park staff, while one is used as an office (Figure 63).

The maintenance yard is separated from the residential area by a chain link fence installed in the late 1970s (Figure 64). A second chain link fence surrounds a black powder storage area located to the east of the maintenance area (Figure 65). The original masonry powder magazine is no longer in use. A newer, active powder magazine has been built within the chain link enclosure.

These features are generally screened from view within the burial ground by rows of Eastern red cedar trees.

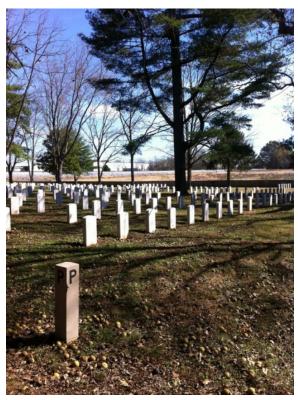


FIGURE 60. The burial sections are characterized by regularly spaced, uniform grave markers set in rows identified at the corners by lettered section markers.



FIGURE 61. Lincoln Square forms a focal point for the burial ground avenues with the flagstaff at the center.



FIGURE 62. The rostrum is separated from the burial area by rows of Eastern red cedar trees.



FIGURE 63. The residential area includes three modest brick dwellings. Building 4 is currently being used as office space. The buildings are accessed from the maintenance access road via paved driveways. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 64. A chain link fence surrounds the maintenance yard and separates it from the rest of the lodge and service area.



FIGURE 65. Another chain link fence surrounds a storage area where the black powder used in artillery demonstrations conducted by the park for visitors is kept. This area is shielded from view from most other areas of the cemetery by densely planted Eastern red cedars.

Inventory of Pattern of Spatial Organization Features

- Two distinct character areas—burial ground and lodge and service area—defined by tree plantings, land uses, and circulation
- Location of the cemetery on a prominent knoll
- Orientation of the cemetery to follow the adjacent road and rail line
- Perimeter wall enclosure
- The symmetrical, axial, radial and orthogonal layout of the burial grounds
- A formal geometric pattern of regularlyspaced, uniformly-sized grave markers set in rows
- A flagstaff used a focal point
- Fifteen original burial sections (A through O)
- Five additional burial sections (P through T)
- Open lawn sections
- Rostrum set within a turf lawn panel edged by tree plantings
- Rows of evergreen trees between the burial ground and the rostrum, and the rostrum and the lodge and service area
- Deciduous tree plantings set informally along the avenues

- Evergreens clustered around Lincoln Square
- Denser plantings along the southern edge of the cemetery
- Linear organization of residential and maintenance complex

Natural Features and Systems

Stones River National Cemetery is located within Tennessee's Central Basin, a physiographic region characterized by thin soils that lie atop limestone bedrock that presents itself in outcrops on the surface. The landform and topography associated with the local geology—known as karst—are the result of weathering and dissolution of the underlying calcium-rich limestone. The alkaline soils created by the limestone bedrock support the growth of Eastern red cedar groves, sometimes referred to as cedar brakes and glades, throughout the area.

The cemetery occupies a prominent knoll that lies between the Old Nashville Highway and the CSX rail line. Lincoln Square is set atop the high point of the knoll, with the land sloping away in all directions. The high point of the knoll reaches an elevation of 571 feet above mean sea level (AMSL). The cemetery flagstaff is placed atop this high point. The low point of the cemetery occurs near its southeastern corner at an elevation of 554 feet AMSL. The land is relatively level to gently rolling between the high and low points of the cemetery.

Inventory of Natural Features and Systems

- Native limestone bedrock
- Knoll and slope topography

Responses to Natural Resources

Stones River National Cemetery was located to take advantage of one of the high points of the area, which was also a key Union artillery position during the Battle of Stones River. From the central high point occupied by Lincoln Square, eight grass avenues radiate out, running generally downhill. The siting of these features responds to the local landform and topography.

The cemetery wall is constructed of locally quarried limestone. The choice of Eastern red cedar trees as a principal planting within the cemetery reflects both the native soil conditions as well as a tradition of using evergreen trees in traditional burial grounds to represent life everlasting.

A well house was constructed in 1962 in association with the residential and maintenance complex to support the water supply needs of the park that survives today west of the maintenance shop.

Drainage structures present in association with the cemetery also respond to natural features, particularly the management of storm water. Because the cemetery soils are quite thin and rainwater runoff moves quickly through the cemetery, there is a large quantity of overland flow during rain events. In the 1970s, a drainage ditch was established along the southern side of the burial grounds to convey storm water into a drainage pipe and out of the cemetery in an attempt to prevent flooding.

In 1978, to address flooding problems in the northwest corner of the cemetery, the National Park Service added 3 feet of gravel fill, forming the basis for the present-day gravel parking area and the powder magazine enclosure.

In the 1980s or 1990s, the park created a drainage opening through the base of the stone perimeter wall near its southwest corner to address flooding problems in this part of the cemetery. A pipe was placed through the hole that emptied into a 1-footwide open stone drain located outside the cemetery wall.

The P Section of the cemetery indicates the early practice of burying veterans and their spouses side by side. When the cemetery began to run out of space in the late 1970s and 1980s, this system was changed to bury spouses in a stacked manner, one on top of the other, with the associated marker inscribed on both sides. In Sections H and I, the ground is so rocky that the park was forced to remove the first casket, dynamite the rock, and

reinter the first casket followed by the second interment.

Currently, there are numbered spaces but no grave markers between spaces 6391 and 6396 due to the presence of large white pine tree roots.

Spaces 6417 to 6425 and 6520 to 6525 do not contain burials, although the park is not sure whether these spaces have been reserved.

Inventory of Responses to Natural Resources

- Lincoln Square set atop of the crest of the knoll
- The use of native limestone to construct the perimeter wall
- Plantings of native Eastern red cedar trees
- Drainage swale in the southeastern portion of the cemetery used to address storm water management
- Gravel fill added to the maintenance area to reduce flooding problems
- Drain hole established through the cemetery wall near its southwest corner to alleviate flooding
- Well house (Building 7) adjacent to maintenance shop

Topographic Modifications

Stones River National Cemetery is characterized by an evenly graded lawn that is the result of historic efforts to fill and grade the land in order to create a bucolic setting worthy of honoring fallen United States military personnel (Figure 66). Grading has been used to establish the grass avenues and asphalt-paved roads as smooth, evenly sloped travel corridors (Figure 67). Grading has also been used to fill sunken graves, and to emphasize the central focal point of the cemetery at Lincoln Square. Specifically, grading was used to create a mound atop which the flagstaff was set for emphasis (Figure 68).



FIGURE 66. Today, the national cemetery has an evenly graded lawn that is the result of extensive fill and grading efforts.



FIGURE 67. The grass avenues that divide cemetery burial sections were graded to create a smooth and even plane that emphasizes the geometric design of the cemetery and facilitates passage for visitors.



FIGURE 68. The flagstaff is located on top of an earthen mound and marks a high point within the burial area of the cemetery. A small concrete stair provides access to the base of the flagstaff mound.

The railroad line along the north wall of the cemetery occupies an elevated rail bed set atop ballast that has been built up substantially since the cemetery was first established. The rail bed is now visible from the cemetery (Figure 69).

During the 1960s, grading was used to create level areas suitable for the construction of the three housing units and maintenance facilities, as well as the access road and driveways, within the lodge and service area. A low stone retaining wall was constructed near the southernmost of the residences to protect a tree from the grading activities and altered finished grade (Figure 70).

In 1975, the park constructed a drainage swale to convey storm water away from the burial sections. As part of the project, soil was added in the southeast corner of the cemetery where flooding was particularly problematic. This resulted in the grade in this area being raised by 1 foot; in some cases the fill was placed over the top of existing graves.129

During the 1970s and 1980s, as many as 3 feet of fill were added to the area where Vietnam veterans were interred to diminish problems of subsidence and flooding.

As noted above, 3 feet of gravel fill was added to the maintenance area in 1978 to reduce problems with flooding. This fill section underlies the present-day maintenance area and powder magazine enclosure. The surrounding area continues to flood.

Stones River National Battlefield Central Files Collections, Stones River National Battlefield, Murfreesboro, Tennessee.

^{129.} James A. Sanders to unspecified family members of persons interred in the national cemetery, March 14, 1975, folder 22, "A58 Interments," box 4, catalog number STRI 4242,



FIGURE 69. The railroad bed just outside the north wall of the cemetery has been elevated above historic levels and is now visible from many points inside the cemetery.



FIGURE 70. Stone retaining wall behind Building 6. Source: Stones River National Battlefield, photo by park staff, 2014.

Inventory of Topographic Modifications

- Grading and fill used to establish evenlysloped lawn panels within the burial ground
- Grading to emphasize the knoll at the center of the cemetery marked by the flagstaff as a focal point
- Fill used to correct subsidence associated with graves
- Grading and fill used to establish smooth, evenly-sloped travel corridors including the grass avenues and paved roads such as Central Avenue
- Grading to construct the residences and maintenance facilities and the associated access road within the lodge and service area

- Construction of a low retaining wall north of Building 6 to protect a tree from the change of grade associated with construction of the residence
- Excavation and fill associated with the establishment of a drainage swale in the southeastern portion of the cemetery, including fill placed atop existing graves
- Gravel fill of up to 3 feet placed within the maintenance area to reduce flooding problems in 1978
- Fill of up to 3 feet added to the burial section where Vietnam veterans were interred in the 1970s and 1980s
- Raising of the elevation of the adjacent rail line corridor using ballast

Views and Vistas

There are several notable views within, from, and into the cemetery. For example, a view of the cemetery is afforded from the visitor center patio across the Old Nashville Highway. In addition, the open field to the east of the cemetery allows for views into the burial ground from Old Nashville Highway (Figure 71). The cemetery is also visible from the railroad tracks that run along the north wall (Figure 72).



FIGURE 71. The view of the cemetery traveling west along the Old Nashville Highway occurs across an open field. The forested cemetery stands in contrast to the open field.



FIGURE 72. The view of the cemetery from the railroad line.

Today, views afforded from inside the cemetery include the elevated railroad bed and commercial development beyond to the north along Highway 41/Broad Street (Figure 73). The view of the commercial development is somewhat buffered by volunteer vegetation and a screen planting of Southern magnolia trees installed along the far side of the train tracks by the commercial property owner. Views to the east are of the open field while to the west lies early successional forest that limits views beyond the wall in this direction. Old Nashville Highway and the Stones River National Battlefield Visitor Center beyond can both be seen to the south.

Views within the cemetery are generally limited by the tree plantings, although the sweeping sections of white marble headstones do provide for dramatic views within some of the sections (Figure 74). Views to and from the rostrum and its setting as an open space edged by rows of Eastern red cedars include the evenly-spaced rows of trees planted to screen the lodge and service area from the burial grounds. These trees have been limbed up above eye height and allow intermittent views to the burial grounds and lodge and service area from the site of the rostrum (Figure 75). The intended view between the rostrum and the burial ground is in fair condition due to the screen planting. A directed view to the flagstaff and Lincoln Square is presented from the entrance gate as well as from each avenue. From Lincoln Square, directed views down the grass avenues to the cemetery sections are emphasized by the linear layout of the tree-lined walks. Similar directed

views exist along the avenues throughout the cemetery and provide a variety of visual experiences due to varying combinations of sun, shade, and foliage (Figure 76).

Views within the lodge and service area are generally directed along the service road, and include the built features along its edge. Looking south, the view is directed between the stone piers that mark the road entrance through the perimeter wall toward the main unit of Stones River National Battlefield.



FIGURE 73. The commercial development along Highway 41/Broad Street and the track set over the top of an elevated berm of ballast can be seen from many locations within the cemetery.



FIGURE 74. Dramatic views are available within the cemetery walls.



FIGURE 75. Views between the rostrum and the burial area are partially screened by rows of Eastern red cedar trees planted between 1967 and 1979.

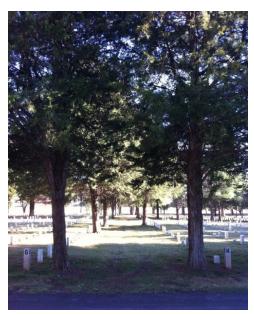


FIGURE 76. Views down the grass avenues vary based on combinations of sun, shade, and foliage.

Inventory of Views and Vistas

- Vista from the main entrance along Central Avenue to the flagstaff and Lincoln Square
- Vistas toward and away from Lincoln Square
- Views along the grass avenues and paved roads of the cemetery, often framed by tree plantings
- Views between the cemetery and the rail line
- Views between the cemetery and Old Nashville Highway

- Linear views along the access road within the lodge and service area that encompass the built features, including a view between the stone piers at the entrance along the Old Nashville Highway toward the park's main unit
- Views between the visitor center patio and the cemetery
- View across the open field east of the cemetery
- View of adjacent commercial development along Highway 41/Broad Street, partially limited by screen planting
- Views between the rostrum and the burial ground

Land Use

Land uses associated with the burial grounds include cemetery, commemoration, interpretation, and recreation. The many burials constitute a cemetery land use. Commemoration is represented through the monuments and other memorials placed within the cemetery. Interpretation is associated with the wayside exhibits placed around Lincoln Square and the parking area near the vehicular entrance to the cemetery. Passive recreation occurs in the form of strolling and walking along the circulation routes.

Land uses associated with the lodge and service character area include administration, housing, maintenance, and storage. The three residences accommodate staff housing and office uses, while the maintenance building and maintenance yard accommodate park maintenance needs. A metal box is used to store powder used in artillery firing demonstrations within the park.

Inventory of Land Use

- Administration
- Cemetery
- Commemoration
- Housing
- Interpretation
- Maintenance

- Recreation
- Supply/storage

Circulation

As noted previously, Stones River National Cemetery is bounded on two sides by non-park circulation routes including Old Nashville Highway (LCS ID 007037) to the south and the CSX Corporation Nashville Division railroad line (LCS ID 090232) to the north. The National Park Service owns a small portion of the land associated with the single-track, 200-foot-wide right-of-way. Although the rail corridor is considered a circulation feature for the purposes of this study, it is also managed as a structure in the LCS.

The burial grounds character area is accessed from Old Nashville Highway via the main entrance drive—Central Avenue—which leads from the main gate to Lincoln Square, and a pedestrian entrance that provides access to one of the avenues originally named Carpenter Avenue.

The main entrance gate is 16 feet, 8 inches wide, and set approximately at the center of the south side of the perimeter wall (Figure 77). Central Avenue is paved with asphalt and measures 14 feet in width.



FIGURE 77. The main entrance to Stones River National Cemetery is marked by stone piers and wrought iron gates.

After passing through the gate, Central Avenue continues to Lincoln Square where it encircles the central mound (Figure 78 and Figure 79). Visitors are expected to park their cars in a small parking area located just inside the perimeter wall to the

east of the road. The parking area accommodates eleven cars, including one designated universallyaccessible space (Figure 80). This parking area was added during the 1960s as part of the Mission 66 program, which also involved the widening of the main entrance to accommodate modern vehicles. Concrete curbing edges the parking area, as well as other sections of the road, such as portions of the margins of the loop road around Lincoln Square (Figure 81). A sidewalk is located along the edge of the parking spaces that leads to a small concrete stair (Figure 82).

A small concrete stair also leads up the turf mound at the center of Lincoln Square (refer to Figure 68).

These paved circulation features within the cemetery are in fair condition, with some cracking of the pavements and wear of surface finishes. The park is working to correct these pavement condition issues.



FIGURE 78. The entrance drive extends north from Old Nashville Highway to Lincoln Square. The cannonball pyramid and the flagstaff are visible on axis with the drive.



FIGURE 79. The entrance drive forms a loop around Lincoln Square where the flagstaff and other commemorative features are located.



FIGURE 80. Eleven pull-in parking spaces, including one universally-accessible space, are located just inside the main gate.



FIGURE 81. Concrete curbing along Central Avenue as it loops around Lincoln Square. Also visible is the cracked asphalt pavement of the road.



FIGURE 82. A small concrete stair edges the sidewalk adjacent to the visitor parking area.

Other circulation features include the seven additional grass avenues that radiate outward from Lincoln Square into all corners of the cemetery (Figure 83). The principal avenues are crossed by a series of secondary avenues arranged orthogonally around the central square. The spaces between the avenues form the lettered burial sections of the cemetery. No vehicles, other than those used for maintenance or funerals, are permitted to drive on these avenues, which are grass-surfaced, and thus not universally accessible. The grass avenues are in good condition.

The pedestrian entrance is located to the west of the central gate along the south wall. This entrance is 6 feet wide and is secured by a swinging iron gate (see the Small-Scale Features section below) (Figure 84). The pedestrian gate is connected to the visitor center by a crosswalk at Old Nashville Highway, marked by pedestrian crossing warning lights (Figure 85). An angled footpath, surfaced with mulch, leads from the pedestrian gate to Carpenter Avenue, which leads diagonally toward Lincoln Square. Carpenter Avenue is also surfaced with mulch to guide visitors to the cemetery (Figure 86). As currently surfaced, this path is not universally accessible.



FIGURE 83. Eight principal grass avenues radiate from Lincoln Square and are crossed by additional secondary grass avenues that connect the radial system.



FIGURE 84. The pedestrian gate is located across from the Stones River National Battlefield Visitor Center parking area, and connected to it by a sidewalk and cross walk.



FIGURE 85. A push-button pedestrian crossing warning light system is used to support the safety of pedestrians crossing Old Nashville Highway.



FIGURE 86. The park has added a mulch-surfaced pedestrian path linking pedestrian entrance with the grass avenue system.

Circulation within the lodge and service area features an access road, spur drives leading to the buildings, and a maintenance yard. The access road passes through a third gated break through the south side of the perimeter wall near its west end. This entrance is used by park personnel to access the staff housing, offices, maintenance, and storage facilities located within the character area. The vehicular gate associated with the entrance is 15 feet 2 inches wide (Figure 87). This entrance is typically left open, but can be secured by a pipe concealed within the west pillar and wall that slides out and hooks onto the east pillar using metal rings on the end of the pipe. A small gravel access road located just inside the gate to the east is used by the utility company to access a sewer pump station (Figure 88). The sewer line extends south under the cemetery wall and north to Broad Street to meet the public sewer line.

The access drive, which was repaved in 2011, is 12 feet wide. It parallels the western perimeter wall, providing access to the three residences as well as the maintenance shop and yard (Figure 89).

Asphalt-paved driveways extend perpendicularly from the access drive to provide access to the staff housing structures, one of which now serves office use. The access drive continues through a chain link gate into the maintenance yard, where it transitions to a gravel parking lot. The gravel drive in the maintenance area was constructed after 1978.

A former pedestrian gate that once provided entry from the rail line and a depot that was sited nearby was closed in 1963 using limestone similar to the remainder of the wall. The location of the former gate remains visible in the northwestern corner of the cemetery where the use of slightly different capstones and mortar are evident (Figure 90).



FIGURE 87. The gate associated with the access drive leads to the staff housing, offices, and maintenance facilities.



FIGURE 88. A gravel access road leads from the maintenance access drive to the sewer pump station, shown with a green cover, located inside the cemetery.



FIGURE 89. The access drive extends in a north/south direction through the lodge and service area.



FIGURE 90. A pedestrian entrance associated with rail access was closed in 1963 when passenger service was discontinued. It is likely that the variations in stone and mortar in the section of the wall shown here indicate the location of the former entrance.

Inventory of Circulation

- Main entrance gate
- Central Avenue
- Parking area inside the wall for eleven cars
- Sidewalk associated with parking area
- Steps leading from parking area
- Lincoln Square
- Steps leading into Lincoln Square
- Eight primary grass avenues
- Secondary grass avenues
- Grass avenue between sections P and Q
- Pedestrian gate

- Mulched path leading to Carpenter Avenue (also surfaced with mulch)
- Vehicular gate at the lodge and service area access road entrance
- Housing and maintenance access road
- Gravel access road to the sewer pump station
- Driveways to the residences and maintenance shop and yard
- Walks to residences
- Adjacent: Old Nashville Highway
- Adjacent: CSX rail line
- Adjacent: Pedestrian crosswalk with flashing safety light

Cultural Vegetation

Stones River National Cemetery contains a variety of evergreen and deciduous tree species, as well as a few shrubs (Table 1). These plantings are primarily of cultural origin and ornamental in their intent. Most trees edge the grass avenues that divide cemetery sections in the burial grounds. While examples of both evergreens and deciduous trees may be found throughout the site, the central portion of the burial area is predominantly evergreen and the outer areas more deciduous. A row of spruce trees (Picea sp.) lines each side of the entrance drive into the burial grounds (refer to Figure 58). The plantings transition to Eastern red cedar, spruce, and hemlock (Tsuga sp.) trees around Lincoln Square.

Eastern red cedar is the most abundantly used species throughout the cemetery. These trees have been plated in rows along the grass avenues, as well as in groves and rows that edge the space occupied by the rostrum between the burial ground and the lodge and service area. In 2004, rows of Eastern red cedar trees planted to screen the staff housing area were limbed up to facilitate mowing. The loss of the lower branches diminished their effectiveness as a screen (Figure 91 and refer to Figure 57).



FIGURE 91. Eastern red cedars screen the burial area from the rostrum and the rostrum from the housing and maintenance area. However, the trees have been limbed up to facilitate easier mowing, thus limiting their effectiveness as a visual buffer.

Many of the existing trees in the burial grounds date to a planting effort conducted in the early 1980s to reestablish tree species and locations indicated on an 1892 plan of the cemetery. However, there are also a few trees that survive from efforts conducted during the 1930s to replant trees that had been lost, as indicated on a map dated 1934. These older specimens are identified on the Existing Conditions map. Species include ash, ginkgo (Ginkgo biloba), Eastern red cedar, tulip poplar (Liriodendron tulipifera), Southern magnolia, spruce, pine, hemlock, and elm (Ulmus sp.). Two new trees were planted by the park in 2014 near the replica rostrum: a Shumard oak and a white ash (Figure 92).



FIGURE 92. New oak tree planted by the park near the rostrum in 2014. Source: Stones River National Battlefield, photo by park staff, 2014.

Turf is also used as a groundcover throughout most of the site, although shade and wear and tear due to foot and vehicular traffic inhibits its growth in many areas (Figure 93). Thought to have been originally planted in bluegrass (Poa pratensis), and later replanted with fescue (Festuca arundinacea), the cemetery currently contains a predominance of Bermuda grass (Cynodon dactylon), a nonnative invasive species.¹³⁰ The floor of the reconstructed rostrum has been planted in fescue.

Lincoln Square features plantings of yew (*Taxus* sp.) hedges around the standing cannon, as well as a dogwood tree (Cornus florida) in the eastern corner. Boxwood and yucca (Yucca sp.) are planted on either side of the inside of the entrance gate (Figure 94). A few additional shrubs are associated with the residences in the lodge and service area; some of these were planted in the 2010s.

In March 2012, the park discovered fire ants in the park and some mounds in the cemetery. The ants are being treated with an approved pesticide.



FIGURE 93. Dense shade and foot and vehicular traffic make it difficult to maintain turf along some of the grass avenues within the cemetery.



FIGURE 94. Shrubs including boxwood and yucca are planted inside the entrance gate.

of Kentucky bluegrass, it is possible that another species locally known as bluegrass was used instead. Park staff reported that although fescue is generally being planted, Bermuda grass is taking over in this hardiness zone.

^{130.} Note that "bluegrass" is the common name usually used today to describe Poa pratensis, also known as Kentucky bluegrass. The scientific name of the species used in the nineteenth century was not noted and because the site is on the far southern range

Inventory of Cultural Vegetation

- Turf lawn
- Evergreen tree plantings along avenues and clustered around Lincoln Square
- Deciduous tree plantings along avenues and in lawn panels
- Eastern red cedar, ginkgo, Southern magnolia, hemlock, Norway spruce, and tulip poplar trees surviving from the nineteenth and early twentieth centuries
- Grass-surfaced avenues
- Eastern red cedar trees planted in rows and groves for screening
- Shrub plantings in Lincoln Square, at the main entrance gate, and around the staff housing units
- Yews and dogwood planted in 1970 in Lincoln Square

Table 1. Existing Vegetation

Common Name	Botanic Name		
Boxelder	Acer negundo		
Red maple	Acer rubrum		
Silver maple	Acer saccharinum		
Sugar maple	Acer saccharum		
Red hickory	Carya ovalis		
Sugarberry	Celtis laevigata		
Eastern redbud	Cercis canadensis		
Flowering dogwood	Cornus florida		
Persimmon	Diospyros virginiana		
White ash	Fraxinus americana		
Green ash	Fraxinus pennsylvanica		
Ginkgo	Ginkgo biloba		
Witchhazel	Hamamelis virginiana		
American holly	Ilex opaca		
Butternut	Juglans cinera		
Black walnut	Juglans nigra		
Eastern red cedar	Juniperus virginiana		
European larch	Larix decidua		
Tulip poplar	Liriodendron tulipifera		
Southern magnolia	Magnolia grandiflora		
Crabapple	Malus micromalus		
Norway spruce	Picea abies		
Colorado blue spruce	Picea pungens		
Red spruce	Picea rubens		
White pine	Pinus strobus		
American sycamore	Platanus occidentalis		
Black cherry	Prunus serotina		
Bradford pear	Pyrus calleryana		
Common pear	Pyrus communis		
Sawtooth oak	Quercus acutissima		
White oak	Quercus alba		
Pin oak	Quercus palustris		
Shumard oak	Quercus shumardii		
Swamp post oak	Quercus lyrata		
Post oak	Quercus stellata		
Arborvitae	Thuja occidentalis		
Eastern hemlock	Tsuga canadensis		
American elm	Ulmus americana		
Rock elm	Ulmus thomasii		

Buildings and Structures

There are several buildings and structures associated with Stones River National Cemetery. Buildings include three residences, one of which is currently used as an office, maintenance office and shop, and a garage. Structures include the perimeter wall, the rostrum, as well as a sewer pump station, a retaining wall, storage shed, powder magazine, and fuel tank located in the maintenance area.

Perimeter Wall. A limestone masonry wall (LCS ID 090222) surrounds the cemetery, including both the burial ground and lodge and service areas (Figure 95). The wall also forms the project area boundary for the CLR. Based on review of various historic accounts of the cemetery, the wall is thought to have been constructed between 1865 and 1871 of local limestone. A report prepared in 1867 by E. B. Whitman, who after the Civil War became the assistant army quartermaster in charge of national cemeteries, indicates that "the best of stone for the completion of this work [wall construction] can be obtained within one-eighth of a mile of the cemetery."¹³¹ This report refers to the nearby Ridley limestone deposits along Stones River. Additionally, an October 1865 account from a New York Times reporter states that the 111th United States Colored Troops were working in squads to construct the wall using locally quarried limestone.132



FIGURE 95. The limestone perimeter wall completely surrounds Stones River National Cemetery.

The exterior of the wall facing Old Nashville Highway is regular ashlar construction with beaded mortar joints. All other portions of the wall are random ashlar construction with flush mortar joints. The large limestone coping stones match the stones in the field of the wall. The wall varies in height, but is generally about 4 feet in height, and is approximately 2 feet 4 inches wide. The outward facing portions of the northern, eastern, and western portions of the wall include regularly spaced buttresses. A drain hole was cut through the base of the wall in the 1980s or 1990s to alleviate flooding within the southwest corner of the cemetery. The wall has required repointing and replacement of stones throughout its history; the most recent repair work was completed in 2009.

Three entrances into the cemetery are provided through the south wall. There is a driveway to the service area at the western end, a gated pedestrian entrance along a path leading from the visitor center, and a gated principal vehicular entrance at the center of the cemetery for visitors. Piers of various heights and topped with flat capstones frame the breaks in the wall that allow for pedestrian and vehicular access; the piers at the maintenance entrance are 3 feet 8 inches tall, while those associated with the pedestrian entrance are 3

132. Cultural Landscapes Inventory: Stones River National Cemetery (National Park Service, 1998), 21; see also see also Fred Brigance, "A View of the Battle of Stones River," New York Times. September 2, 1865.

^{131.} E. B. Whitman, Report on National Cemeteries, Department of the Cumberland, No. 12; Stones River, September 26, 1867. Folder 339c, "H22 Cultural Resource Studies and Research." Stones River National Battlefield Archives.

feet 11 inches tall. The piers at the main entrance are 5 feet 5 inches tall. The main gate is framed by two stone-lined planting beds that abut the wall and extend 8 feet along the entrance drive before tapering to meet the wall approximately 15 feet from the piers.

Rostrum. A brick masonry and wood rostrum, built in 1882 and demolished in 1941-1942, was rebuilt in 2007 to replicate the original. The replica rostrum is located west of the burial ground area. It is not an exact reconstruction of the original rostrum due to the use of some contemporary construction techniques, such as the use of reinforced concrete for the foundation and concrete coping, and the inaccurate placement of the stairs on the east half of the north and south ends of the structure, rather than the west half as originally built.

The rostrum is a two-bay-wide by three-bay-long open-air brick structure with a grass-covered raised platform, approximately 36 feet 1 inch long by 19 feet 8 inches wide (Figure 96 through Figure 98). The base of the platform is red brick, set in a running bond pattern inset with geometric decoration differentiating the column bases and spandrel panels.

The platform is accessed by eight stone steps located on the east half of the north and south ends. Both the platform and the steps have a simple black painted steel railing. At the platform level, each bay is delineated by a square brick column, which supports the white painted wood trellis roof. Turf has been planted on the platform. Movable benches have been placed in the space for visitor use, as were present historically.



FIGURE 96. Overview of the replica rostrum. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 97. The original rostrum was demolished in 1941–1942 due to its poor condition. In 2007, the park reconstructed the rostrum based on original designs for the structure.



FIGURE 98. Cornerstone inscribed with the date of construction of the replica rostrum. Source: Stones River National Battlefield, photo by park staff, 2014.

The rostrum is in fair condition. Problems include failing paint coatings and cracked and rotted wood on the wood trellis, and failing paint on the metal railings (despite repeated repainting, according to park staff). The concrete steps are cracked and spalled at railing locations, possibly due to failure of the material in which the railings are set; patch materials and sealant at the railing embedments are cracked and deteriorated. Efflorescence and organic growth on the brick masonry piers and base indicates water movement through the brick, which also exhibits open mortar joints at various locations. The park has also reported problems with the rostrum drainage system (Figure 99 through Figure 105).



FIGURE 99. Moisture-related staining at the base of the brick posts. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 100. Detail of moisture-related staining at the base of the brick posts. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 101. Deterioration of wood trellis. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 102. Splitting and staining of wood trellis. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 103. Previous patching and sealant failure at embedded railing post. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 104. Cracking of stair tread at embedded railing post. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 105. Spalled cast stone stair tread at embedded railing post. Source: Stones River National Battlefield, photo by park staff, 2014.

Staff Residences. Three brick residences (Buildings 4, 5, and 6 from north to south) were constructed along the western edge of the cemetery within the lodge and service area during the Mission 66 initiative (Figure 106, Figure 107, Figure 108, and Figure 109). These structures, built in 1962–1963, are located along the maintenance drive; Buildings 5 and 6 are used for park housing, while Building 4 is used as office space. Each staff residence is a single story rectangular brick ranchstyle building. The red brick is set in a running bond pattern with punched door and window openings. Each window opening has a steel lintel, a brick sill, and red painted decorative shutters. The majority of the windows are two-over-two light double hung windows with aluminum tripletrack storm windows. There are also divided light fixed windows. The side-gable roof is covered with brown asphalt shingles and has a single chimney penetration at the center. At the gable

sides, the roof has an overhanging soffit and a wood fascia that supports an extruded aluminum gutter that connects to downspouts which drain at grade. An open carport is connected to each residence. The carport is constructed of brick to match the residence and also has a side-gable asphalt roof. Although these buildings are generally in good condition, Building 6 has experienced fairly serious cracking due to settling of the foundation (Figure 110 and Figure 111).



FIGURE 106. View of Building 4. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 107. View looking south of Building 4 (at right) and Building 5 beyond (at left). Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 108. Building 5 was constructed in the 1960s and is used by park staff for housing. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 109. Front view of Building 6, looking north. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 110. Cracked brick masonry, Building 6. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 111. Cracked brick masonry is evident near the roof of Building 6. Source: Stones River National Battlefield, photo by park staff, 2014.

Stone Retaining Wall. A low mortared stone retaining wall is located to the north of Building 6. It was built by the park to protect a tree that is no longer present (Figure 112).



FIGURE 112. A low stone retaining wall is located behind Building 6. It was built around a tree that has since been lost. Source: Stones River National Battlefield, photo by park staff, 2014.

Maintenance Buildings. The maintenance area is located north of the housing buildings (Figure 113). The maintenance office and shop is located just inside the chain-link fence and includes office as well as garage space (Figure 114 and Figure 115, and refer to Site History chapter). Originally built in 1962 as part of the Mission 66 program, the maintenance office and shop was renovated in September 2012. The rectangular brick building has seven bays at the front (north) elevation. The first bay includes brick infill and an original pedestrian door. The second bay previously was recessed with a pedestrian door but was altered to include brick infill and a paired

window opening. The next bay was originally an overhead garage door but was altered to include brick infill and two personnel doors. The remaining four bays include new overhead garage doors. The rear (south) elevation includes six window openings with limestone sills, each with a three-part window group. The east and west end walls were originally solid brick, but a new personnel door was created at the west end as part of the September 2012 renovation. The office has a side-gable roof with asphalt shingles. There is an overhanging soffit and a wood fascia supporting an aluminum gutter which connects to downspouts that discharge at grade.



FIGURE 113. View of the maintenance area buildings from the south, including the maintenance office and shop at center, the well house at left, and the storage shed and garage at right. Source: Stones River National Battlefield, photo by park staff, 2012.



FIGURE 114. The maintenance office and shop building, view from the northwest. Source: Stones River National Battlefield, photo by park staff, 2012.



FIGURE 115. The maintenance office and shop building, view from the northeast. Source: Stones River National Battlefield, photo by park staff, 2012.

The well house, constructed in 1962 as part of the Mission 66 program, is a small brick structure located behind the shop (Figure 116). The building is a simple rectangular structure with red running bond brick and a side-gable asphalt shingle roof. The structure contains one awning window on its west wall and a single painted steel pedestrian door on its east wall. Although it is generally in good condition, the building exhibits some minor staining on the brick masonry near grade.



FIGURE 116. The well house.

Landscape maintenance equipment is stored in the storage building and garage located near the shop building. The garage is a single-story wood-framed L-shaped structure with five open bays on one side of the L, and three bays at the opposite side. Of the three bays, the first is an open breezeway while the other two include overhead doors. The exterior of the three-bay portion of the building is clad in painted wood board and battens, while the fivebay wing is clad with T-111 plywood. The asphalt shingle covered roof is gable shaped with

aluminum gutters connecting to downspouts that drain at grade (Figure 117).

A metal-framed storage shed is located in the maintenance yard. The three-bay prefabricated aluminum storage shed has bays in the longitudinal direction that are open at the front, with T-111 plywood walls on the other elevations (Figure 118).



FIGURE 117. The garage is an open structure used to store equipment.



FIGURE 118. The three-bay storage shed in the maintenance yard is also used to store equipment and materials.

The powder magazine consists of a portable metal box, approximately 3 feet by 3 feet in plan, used to hold black powder for artillery firing demonstrations (Figure 119). The powder magazine is secured within a fenced area and located separately from the rest of the maintenance yard, for safety reasons. The former powder magazine is also located within the fenced area. It is composed of two stacked concrete masonry structures, each with a pre-cast concrete cover (Figure 120).

A fuel tank for park vehicle use is located within the maintenance yard. The equipment is located on a concrete pad, is protected by metal bollards (Figure 121).



FIGURE 119. The existing powder magazine is a metal box. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 120. The former powder magazine is a concrete masonry structure. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 121. The fuel tank located within the maintenance yard.

Inventory of Buildings and Structures

- Perimeter wall
- Replica rostrum
- Staff residences and offices (Buildings 4, 5, and 6)
- Retaining wall behind Building 6
- Maintenance office and shop
- Well house
- Garage
- Metal storage shed
- Powder magazines (2), current and former
- Fuel tank

Small-scale Features

Small-scale features located within Stones River National Cemetery include fencing, gates, grave markers, section markers, monuments and memorials, site furnishings, signs, interpretive exhibits, and utility features.

Fencing. The maintenance yard is surrounded by chain-link fencing topped with barbed wire. The fence extends beyond the perimeter wall along the northern and western sides of the maintenance yard (Figure 122). There is a gate located within the fence to allow passage into the maintenance yard by park staff. The gate is located at the intersection of the maintenance drive with the fence. A second gate is located in the northeast corner of the fence that provides access to the gravel-paved avenue that follows the north wall interior. There is also a pedestrian gate in the fence near the well house.

A second chain-link fence, also topped with barbed wire, encloses the powder magazine (refer to Figure 119).



FIGURE 122. A chain link fence topped with barbed wire surrounds the maintenance yard.

Gates. The main entrance gate into the burial grounds is composed of two wrought-iron arms, painted black, made from a frame inset with pickets. Each arm is hung from one of the piers that edge the entrance so that they meet in the middle when closed. In total, the gate is 16 feet 8 inches wide. The piers are each 2 feet 4 inches square in size, 5 feet 5 inches tall, and capped with a flat coping stone. The piers are constructed of native limestone to match the perimeter wall (Figure 123). The gates are composed of three horizontal elements that support a series of vertical pickets with pointed finials. A diagonal cross piece extends from the top left to the bottom right of each gate for added support. The gates are nearly as tall as the piers at the outside edge, but angle downward toward the center where the two panels meet. The pickets similarly descend in height from the pillars toward the center, forming an elliptical curve. Although the main entrance gate is in good condition, it can be difficult to close at times, possibly due to expansion and contraction associated with weather conditions. When the gate is difficult to close, it can scrape the asphalt paving.



FIGURE 123. The main entrance gate is double-hung, and composed of wrought iron. Each side swings inward on hinges attached to the stone piers.

The pedestrian gate into the national cemetery is composed of a single panel, 5 feet 10 inches wide and 4 feet 2 inches tall, made of wrought iron pickets set in an iron frame and painted black (Figure 124). It swings inward on hinges connected to the west pier that marks the opening. A matching pier to the east supports the latch for the gate. The gate includes two horizontal elements and sixteen evenly spaced vertical elements. Additional support is provided by crossbracing. The pickets of this gate are even in height at 3 feet 11 inches tall.

As noted previously, the opening in the perimeter wall at the maintenance access can be secured using a metal pipe concealed within the west pier and wall that slides out to hook to the east pier (Figure 125). The opening is 15 feet 2 inches wide and framed by 3 foot 8 inch tall piers that are 2 feet 4 inches square.



FIGURE 124. A single gate swings open to one side to permit visitors to enter the cemetery's pedestrian entrance along Old Nashville Highway.



FIGURE 125. A sliding metal pole that extends from the west pier of the gate at the maintenance access drive hooks onto the metal loop of the pier as shown to close this road to public access.

Grave Markers. The majority of the grave markers located throughout Stones River National Cemetery are of a standardized design, although they exhibit a range of variations in the thickness, width, and inscriptions of the stone. There are four different categories of grave markers included in Stones River National Cemetery. The majority of the markers are associated with Civil War Union soldiers, although there are two distinct types of markers that indicate whether the grave marks a known or unknown individual (LCS ID 007032). Intermixed among the Civil War markers are unique markers, which were privately

funded and placed by the family members of the deceased soldiers (Figure 126). Most of these are located within sections A through D. The southeastern sections of the cemetery—P through S—contain more recently placed grave markers. These include burials of veterans of the Spanish-American War, World War I, World War II, Korean War, and Vietnam War.

The grave markers associated with Civil War soldiers whose identities are known are composed of marble cut into an upright slab with a curved top. They are carved with an inscribed shield and text in relief on the front and inscribed numbers on the rear. These grave markers, first installed in 1876, are approximately 10 inches wide, 3-7/8 inches thick, and set at an average of 19-1/4 inches above grade. Some of these markers have been replaced over the years when their condition has deteriorated.

The grave markers associated with Civil War soldiers whose identities are not known are square marble markers inscribed with numbers along the top. They are 6 inches square, and set at an average of 8 inches above grade.

The unique markers vary in size, shape, level of detail, and materials, although most are limestone or marble. Twenty-eight unique markers are present, based on a survey conducted by the park.

The grave markers for soldiers from more recent wars are arched marble markers with inscribed letters and religious emblems on the front. Inscribed numbers are typically found on the rear. Select markers include inscriptions on both sides; these mark locations where the spouse is buried in the same grave. 133 The typical marker is approximately 13 inches wide, 4-1/4 inches thick, and set at an average of 19-1/4 inches above grade. The inscribed letters are painted in black in Lithochrome, a decorative stain, on approximately forty of these grave markers. This method is part of a recent attempt by the Veterans Administration Although their overall condition is generally good, the grave markers exhibit evidence of past repair. The grave markers are reset, repaired, or replaced as needed in an ongoing effort to maintain a dignified appearance appropriate to a national site of respect and commemoration (Figure 127).



FIGURE 126. A variety of grave markers can be found throughout the cemetery. While most are standard marble military issue, some were privately acquired and unique in design.



FIGURE 127. Grave markers are cleaned, repaired, and reset when necessary in accordance with Director's Order No. 61: National Cemetery Operations.

to produce a more legible marking system. It has not been entirely successful, and Stones River National Cemetery requests other types of markers whenever possible. 134

^{133.} The practice of burying spouses in the same grave is a contemporary practice. Previously, spouses were more likely to be buried in side by side plots rather than stacked.

^{134.} Information provided to the authors by Stones River National Battlefield personnel.

Section Markers. The section markers that identify the corners of each cemetery section are square upright features, composed of limestone or precast concrete and inscribed with either a painted or carved letter to identify the adjacent cemetery section. In general, the concrete posts are replacements of older limestone posts and were installed and painted circa 1980. The limestone markers are in good to fair condition as a result of weathering and water damage, and exhibits problems with chipping, cracking, and soiling (Figure 128 and Figure 129).



FIGURE 128. Older section markers are made of limestone with inscribed letters painted black.



FIGURE 129. Newer section markers are precast concrete inscribed with letters painted black.

Monuments and Memorials

Cannonball Pyramid. A monument composed of a pyramid of black painted, 32-pounder cannonballs set on a concrete base is located on axis with Central Avenue within Lincoln Square (LCS ID 090228) (Figure 130). The cannonballs are arranged with seven across each face of the pyramid at the base, rising through seven rows to a single cannonball at the top. The monument does not appear in historic photographs of the area prior to 1964, and is thus believed to have been installed circa 1964, or later in the 1960s. The monument appears to have been installed around the same time that the Bragg Headquarters monument, located south of the cemetery within the park, was replaced, suggesting that it is possible the cannonballs associated with this monument were derived from the Bragg monument. Documentary evidence to confirm this possibility has not been located, however.



FIGURE 130. A pyramid of black painted cannonballs is located along the southern edge of Lincoln Square.

Cannon Tube Markers. Two upright black painted 24-pounder cannon tubes set in concrete bases (Figure 131) mark the corners of Lincoln Square. (The List of Classified Structures for the cannon tubes identifies these features as LCS ID 090227 for the cannon tube marker at the east corner of the square and LCS ID 1031310 for the cannon tube marker at the north corner of the square.) These cannon tubes were placed in the cemetery in 1866 to honor the fallen soldiers. 135 The trunions are stamped "McC, W&Co., P.P.F.," identifying them as having been manufactured at the Fort Pitt Foundry in Pittsburgh, Pennsylvania, operated by McClurg, Wade & Co., probably between 1831 and 1841.

A weathered bronze plaque is mounted on one of the cannon tubes, but is missing two of its four bolts. The plaque provides the establishment date for the cemetery and information regarding interments.



FIGURE 131. A pair of upright cannon tubes marks the corners of Lincoln Square. A bronze plaque on one of the cannon tubes provides information about the establishment of the cemetery and its interments.

43rd Wisconsin and 180th Ohio Monument.

The 43rd and 180th Ohio Monument (LCS ID 007041) (Figure 132), which is composed of limestone, stands approximately 4 feet tall by 2 feet wide by 2 inches thick. It is located east of Lincoln Square among the headstones of Section E. The monument's inscription faces the rail line. Dated 1865, the monument is one of the oldest Civil War monuments in the country. Recent research suggests that this monument may have been moved to the cemetery from Tullahoma with the remains of soldiers from these regiments.



FIGURE 132. The 43rd Wisconsin and 180th Ohio Monument is located in Section E and faces the rail line.

Fraley, Chapter 1, page 15, citing Whitman.

U.S. Regulars Monument. The U.S. Regulars Monument (LCS ID 007040) is located in Section C just west of Lincoln Square (Figure 133 and Figure 134). The monument is approximately 15 feet tall and is composed of a sandstone shaft set on a three-tiered stepped granite base. The shaft is topped with a bronze ball and eagle sculpted by Launt Thomson and cast by Bureau Bros of Philadelphia. In the 1880s, Maj. F. L. Guenther, 2nd Artillery, requested a monument be erected to the members of the Regular Brigade of the Army of the Cumberland that were killed at the Battle of Stones River on December 31, 1862. The U.S. Regulars Monument was subsequently erected in 1883 using funds provided by veterans of the brigade. 136 The monument underwent repairs several times to address deterioration and vandalism after attempts (one successful) to steal the bronze eagle from the top. The most recent restoration was completed in 1998.



FIGURE 133. The U.S. Regulars Monument is located just off Lincoln Square. The monument is topped with a bronze eagle.



FIGURE 134. The U.S. Regulars Monument with the flagstaff beyond. Source: Stones River National Battlefield Archives, photo by park staff, 2014.

Site Furnishings

Flagstaff. A cast-iron flagstaff topped with a metal weathervane (LCS ID 090226) is located at the center of Lincoln Square. The metal pole is painted white and is set on a black painted base (Figure 135). The banner-style weathervane is composed of metal with a cut-out that says "U.S." The weathervane was damaged in the late 1990s and repaired in 2007, but one piece is still missing, possibly reflecting previous repairs.¹³⁷ The flagstaff is otherwise in good condition.

^{136.} George, 44.

^{137.} Information provided by Gib Backlund, NPS STRI, August 2012.



FIGURE 135. The flagstaff is located in the center of Lincoln Square. It is painted white and has a black painted base.

Benches. Several benches are located throughout the burial ground character area. Some are precast concrete with ornamental designs (Figure 136). The precast concrete benches were in use within the cemetery by 1977, although the date of origin of this feature is not currently known. Others are rustic native limestone slabs set on paired bases (Figure 137). These benches are approximately 50 inches long, 22 inches wide, and 18 inches tall with pillars that are each about 12 inches by 20 inches by 14 inches and support a 4-inch-thick slab. The limestone benches were made out of leftover capstone materials by a Historic Preservation Training Center crew that repointed the cemetery boundary wall in 2009.



FIGURE 136. One of the pre-cast concrete benches located within the cemetery.



FIGURE 137. An example of the limestone slab benches located throughout the cemetery.

Picnic Tables and Grills. Other site furnishings include brown metal and wood picnic tables located in the maintenance yard section of the lodge and service area for the use of park employees. A metal grill set on a metal post embedded in concrete is also located in this area for employee use (Figure 138).



FIGURE 138. An employee area located within the maintenance yard includes picnic tables and a grill.

Signs

Plaques. Seven metal plaques displaying lines of "The Bivouac of the Dead," a poem by Theodore O'Hara, installed in 1882, are located along the entrance road and around Lincoln Square (Figure 139). The plaques (LCS ID 090223), which are painted black with raised lettering painted white, are mounted on wood posts. The original posts were indicated to be cedar, but the existing posts are treated pine, painted brown. These signs were manufactured in 1881 by Rock Island Arsenal and supplied to national cemeteries by the federal government. The signs and posts are in good condition.



FIGURE 139. Seven painted metal plaques set on painted wood posts and displaying the text of "The Bivouac of the Dead" are located along the entrance drive and around Lincoln Square.

Identity, Wayfinding, and Regulatory

Signs. Multiple types of signs are located at the approach to, and within, the national cemetery that provide identity, wayfinding and regulatory information. Several signs are located close to the main entrance gate.

Signs were placed along Old Nashville Highway in 2011 to indicate the vehicular entrance to Stones River National Cemetery (Figure 140 and Figure 141). The signs are brown-painted metal with white lettering. A sign is located on the right side of the road in each direction approaching the cemetery.



FIGURE 140. Overview of directional signage along Old Nashville Highway. Source: Stones River National Battlefield, photo by park staff, 2014.

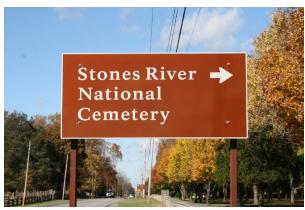


FIGURE 141. Directional sign for cemetery along Old Nashville Highway. Source: Stones River National Battlefield, photo by park staff, 2014.

A cast metal shield is affixed to each of the main entrance gate columns and identifies the site as a United States national cemetery. These shields are painted black with raised silver-painted lettering, borders, and decorations (Figure 142). There is also a sign indicating the park personnel entrance into the cemetery and a circular metal USGS marker mounted on the top of the limestone perimeter wall along the north side near the location of what had been the railroad entrance to the cemetery (Figure 143 and Figure 144).

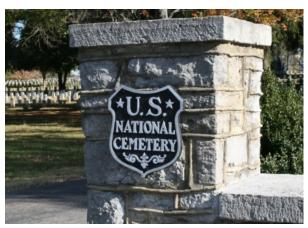


FIGURE 142. Painted metal shields are located on the piers that mark the main entrance gate to the cemetery.



FIGURE 143. A small metal USGS medallion is embedded in the limestone perimeter wall near what used to be the pedestrian entrance for visitors arriving by rail. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 144. Detail of the small metal USGS medallion in the limestone perimeter wall. Source: Stones River National Battlefield, photo by park staff, 2014.

A floral regulations sign is located near the parking lot. This sign is composed of a black plastic board with white lettering, mounted on a wood board and supported by a metal post (Figure 145). The date of installation of this sign is not known. The condition of the sign is judged to be fair.



FIGURE 145. Floral regulations sign. Source: Stones River National Battlefield, photo by park staff, 2014.

Five small aluminum tree identification signs with raised lettering, supported by a metal four-sided post, are placed at the base of the oldest trees within the cemetery, including a large white ash near the Old Nashville Highway, an Eastern red cedar in the southern part of the cemetery, a gingko along the maintenance drive, an American elm, and a tulip poplar (Figure 146 and Figure 147). Sixteen others are in curatorial storage in the museum, and include signs for an American hackberry, American holly, arbor vitae, black cherry, Carolina hemlock, crepe myrtle, cucumber magnolia, Eastern red cedar, red bud, Southern magnolia, sugar maple, sycamore, sweet gum, tamarack, white pine, and white spruce.¹³⁸



FIGURE 146. Small metal plaques identify five of the older trees in the cemetery. Source: Stones River National Battlefield, photo by park staff, 2014.

^{138.} These signs are items STRI 6616–6631.



FIGURE 147. View of the small plaque identifying a red cedar tree.

Other signs include a universally accessible parking space sign located by the parking area and set on a metal post, a 3-foot-tall black plastic plaque engraved with white lettering detailing burial plot decoration regulations is set on an angled wood base on a square metal post located by the parking area (Figure 148) and a brown painted wood sign with white painted routed lettering indicating the park staff entrance located on the west side of the maintenance access road near the entrance along Old Nashville Highway (Figure 149).



FIGURE 148. A variety of signs edge the visitor parking area that provide identity, wayfinding, and regulatory information.



FIGURE 149. A brown painted wood sign identifies the maintenance and housing area.

Interpretive Exhibits

Cannon. A Civil War-era cannon set on a reproduction carriage is located on the southern margin of Lincoln Square (Figure 150). The cannon is a 12-pound Napoleon with an original tube set on a reproduction carriage. The cannon was likely placed within the cemetery in association with the Mission 66 wayside exhibit circa 1965–1967. The cannon marks the approximate position of Battery H, 5th U.S. Artillery during the afternoon of December 31, 1862.139

^{139.} Gib Backlund and Jim Lewis, NPS STRI, correspondence with the authors, August 2012.



FIGURE 150. A cannon and Mission 66 wayside exhibit are located just off Lincoln Square. Source: Stones River National Battlefield, photo by park staff, 2014.



FIGURE 151. Two contemporary wayside exhibits located within the cemetery provide information about its history.

Wayside exhibits within the cemetery provide information about its history (Figure 151).

Utility Features

There are several features located within the cemetery that relate to utilities, including water, sewer, and electrical systems.

A fire hydrant is located along the maintenance access road beside the driveway to Building 4 (refer to Figure 64). A stone veneer headwall and culvert is located under the maintenance entrance drive just inside the chain-link fence that marks the boundary of the maintenance yard (Figure 152). There is also a fire department connection box located on the lawn in front of Building 4 within the staff housing area (Figure 153).



FIGURE 152. A stone-faced headwall and culvert runs beneath the maintenance area access drive just inside the chain-link fence that surrounds the maintenance yard.



FIGURE 153. A fire department connection box is located on the lawn in front of Building 4 within the staff housing area. Source: Stones River National Battlefield, photo by park staff, 2014.

A concrete storm water outfall that is associated with the rostrum drainage system is located southwest of the rostrum (Figure 154). Manhole and utility box covers indicate the presence of below grade utility infrastructure (Figure 155). Irrigation lines are present within the cemetery.

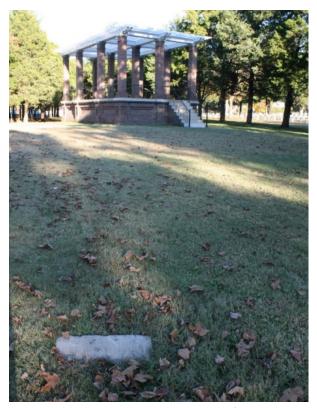


FIGURE 154. A concrete storm water outfall is located near the rostrum and is associated with draining the earthen base of the structure.



FIGURE 155. Manhole and utility box covers are found at various locations through the site, primarily in the lodge and service area.

A sewer pump station, protected by a green access hatch, is located beside the gravel access road just inside the maintenance entrance off Old Nashville Highway (Figure 156). Several mailboxes are located at the entrance to the maintenance drive associated with the park staff residences.



FIGURE 156. A sewer pump station is located beside the gravel access road just inside the maintenance entrance off Old Nashville Highway. Source: Stones River National Battlefield, photo by park staff, 2014.

Inventory of Small-scale Features

- Chain-link fencing surrounding the maintenance yard and gates
- Chain-link fencing surrounding the powder magazine and gate
- Main entrance gate
- Pedestrian gate
- Gates at maintenance access drive
- Limestone gate piers
- Grave markers, Civil War era, known and unknown soldier types
- Privately-placed grave markers
- Grave markers post-dating Civil War burials
- Native limestone section markers
- Cannonball pyramid monument
- Cannon tube markers
- 43rd Wisconsin and 180th Ohio Monument
- U.S. Regulars Monument
- "Bivouac of the Dead" poem plaques
- Wayfinding and regulatory signs
- National cemetery shields
- Tree identification plaques
- USGS marker
- Flagstaff

- Pre-cast concrete benches
- Rustic limestone slab benches
- Picnic tables
- Grills
- Cannon
- Wayside exhibits
- Mission 66 wayside exhibit
- Fire hydrants
- Culvert with headwall
- Storm water outfall associated with the rostrum
- Sewer pump station access hatch
- Manhole and utility box covers
- Irrigation lines
- Mailboxes
- Fire Department connection box
- Stone-curbed planting beds
- Replacement section markers
- Replacement grave markers

Archeological Resources

The archeological investigations that have been conducted at Stones River National Battlefield are documented in a report by John W. Walker, J. Donald Merritt, and Steven J. Shephard of the National Park Service Southeast Archeological Center (SEAC), completed in 1990.¹⁴⁰

The report describes archeological investigations conducted by SEAC staff in September and October 1976 to obtain data for an Environmental Assessment prepared for the park's General Management Plan. At the cemetery, the investigations were focused along the southeast side where construction of a new entry road and enlarged parking area was proposed. Survey and testing of these areas did not find artifacts or other evidence of either historic or prehistoric occupation.

Additional archeological investigations have occurred since the 1990 report was prepared. These were specifically conducted in 2004 to support proposed reconstruction of the rostrum by locating the site of the original structure. Ground penetrating radar survey was followed by limited subsurface testing.¹⁴¹ A newly acquired parcel of land outside the boundaries of the cemetery was also evaluated for archeological potential during this site work.

The investigation successfully identified the location of the original rostrum and documented remaining below-grade features. As documented in the archeological trip report, the majority of the foundation of the original rostrum remained intact, except where damaged by root activity from an adjacent tree. The archeological investigation

140. John W. Walker, J. Donald Merritt, and Steven J. Shephard, Archeological Investigations at Stones River National Battlefield, Tennessee (Tallahassee, Florida: National Park Service, Southeast Archeological Center, 1990).

141. Jessica McNeil, Archeological Technician, National Park Service, Southeast Archeological Center; Memorandum to the Director, Southeast Archeological Center, National Park Service; Subject: *Trip report on a geophysical* survey and archeological testing to determine

the location of the historic rostrum on the grounds of Stones River National Cemetery, April 19-April 23, 2004, SEAC Accession Number 1893. See also: Robert K. Nickel, and Catherine A. Nickel, Ground-Penetrating Radar Surveys of Civil War Sites: The Rostrum at the National Cemetery, Stones River National Battlefield, Tennessee, SEAC Accession Number 1893 (Tallahassee, Florida: National Park Service, Southeast Archeological Center, 2004).

revealed the following information about the original rostrum:

The [Stones River National Battlefield] rostrum was a large rectangular brick and mortar structure measuring 6 by 11 meters. The walls were five courses thick and were constructed in the running bond method. This method entails the use of all stretchers. Although this method of construction requires the use of reinforcements, none were evident. Historic maps indicate the presence of stairs on both the north and south ends. GPR results however, only demonstrate the presence of a stair case on the northern end of the structure. The possibility exists that the stairs on the southern end were not as substantial as those to the north and were completely obliterated when the structure was dismantled.142

grounds of Stones River National Cemetery, April 19-April 23, 2004.

^{142.} McNeil, Trip report on a geophysical survey and archeological testing to determine the location of the historic rostrum on the

Existina	Conditions	Docume	ntation

Analysis and Evaluation

Introduction

This chapter consists of three sections: an evaluation of the National Register-level significance of Stones River National Cemetery, a comparative analysis of historic and existing landscape conditions, and an assessment of the cemetery's historic integrity. Together, these sections support an understanding of what resources are character-defining for the historic landscape, support its significance, and relate to the important themes and contexts that connect the cemetery to local, state, and national trends in history and design.

The significance evaluation identifies the important historical associations of the property, as well as its architectural, archeological, and social value. The property's significance is tied to a discrete period of time in which its important contributions were made and to relevant national, state, and local historic contexts.

The analysis compares historic and existing landscape conditions, and provides an understanding of how much the cemetery and its resources today reflect their character and appearance during the period of significance. It also indicates those features and qualities that are character-defining for the historic landscape.

One of the byproducts of the comparative analysis is an inventory of resources that survive from the period of significance. These are referred to as contributing features. Resources that originated after the period of significance or which have lost integrity are identified as non-contributing. Features that are known to have existed during previous periods of the site's history but which are no longer extant are listed as missing resources.

This information is summarized in Appendix A, a table listing what is known about each of the features described in this chapter and the Existing Conditions chapter. The table conveys the names and alternate names for inventoried landscape features through time, identifies which features contribute to the significance of the landscape, and lists dates of origin and modification for each feature as known.

The final section of this chapter is an integrity assessment that summarizes to what degree the property retains its ability to convey landscape conditions present during the identified period of significance.

Significance Evaluation

Current National Register Status of Stones River National Cemetery

Stones River National Battlefield, including Stones River National Cemetery, was initially listed in the National Register of Historic Places on April 22, 1968, although a nomination form was not completed at that time. A National Register nomination was subsequently prepared for Stones River National Battlefield in 1975, resulting in the listing of the property in 1978. Additional National Register of Historic Places documentation was completed in 2003 that expanded on the earlier nomination.

The National Register nomination completed in 1975, which addresses the park as a whole, indicates that Stones River National Battlefield is significant due to its association with the Civil War. It only briefly discusses the national cemetery. The nomination classifies the cemetery as having "First Order of

Significance" and includes the following significance evaluation relative to the burial ground:

The National Cemetery contains the bodies of all Union soldiers known and unknown that were found in and around the battlefield. It also contains Union dead from battles such as Franklin, Spring Hill, and small skirmishes along the Nashville and Decatur Railroad. Today the cemetery is the final resting place for soldiers of all wars since the Civil War.¹⁴³

The Additional Documentation completed in 2003 discusses the significance of the national cemetery in more detail. It indicates that Stones River National Cemetery possesses local significance under Criterion C in the area of Landscape Architecture for its formal geometric plan and funerary sculpture.

The nomination also indicates that the cemetery design, as developed between 1864 and 1892, is a departure from the Victorian style of winding paths and naturalistic plantings that was popular at the time of its establishment, instead incorporating a more formal layout composed of rows of simple grave markers, orthogonal drives and walks, and a central focal point. Stones River National Cemetery exemplifies the style selected for national cemeteries to create a feeling of "simple grandeur" rather than the moody Romanticism that otherwise characterized the period of its development.

The Additional Documentation also suggests that Stones River National Cemetery possesses significance under Criterion A in the area of Commemoration. The nomination suggests that the creation of the national cemetery was in itself an act of commemoration. The commemorative function of the cemetery is also expressed through the placement of monuments by veterans and other groups to honor and pay tribute to those who fought valiantly during the Civil War. This practice began with the 43rd Wisconsin and 180th Ohio Monument, which was moved to the cemetery from Decherd, Tennessee, along with the remains of soldiers from these regiments in 1865.¹⁴⁴ The large U.S. Regulars Monument was built in the cemetery by a veterans' organization in 1883.¹⁴⁵ In keeping with other national cemeteries, the U.S. Army placed a series of seven metal plaques displaying lines of "The Bivouac of the Dead," a poem by Theodore O'Hara, within the cemetery in 1882. The plaques were cast at Rock Island arsenal in 1881, according to cast lettering along the edge of the plaque.

Throughout the late nineteenth and early twentieth centuries, gatherings at the cemetery by veterans and other visitors continued to commemorate those who had given their lives during the war. The scheduling of trains to bring visitors to the cemetery, and publications and signage developed by the Nashville, Chattanooga, and St. Louis Railway to encourage "heritage tourism," were other aspects of commemoration.

The nomination also notes the local significance of Stones River National Cemetery in the area of Ethnic Heritage for the role that African Americans played in helping to build the cemetery in the late 1860s. The cemetery was also a place of separate African American celebrations and commemorations during the late nineteenth and early twentieth centuries. The cemetery is also significant as the largest burial ground for United States Colored Troops (USCT) veterans in the county. 146

^{143.} Gibbs, National Register Nomination. See also Michael T. Gavin, Preservation Specialist, Tennessee Civil War National Heritage Area, and Sean M. Styles, Historian, Georgia Trust. Stones River National Battlefield National Register Nomination (Additional Documentation) (November 14, 2003).

^{144.} Correspondence by Jim Lewis, NPS STRI, with Michael Panhorst, Auburn University 2012, referencing James L. Sellers, ed., "The Richard

H. Mockett Diary: November 3, 1864–January 17, 1865," *The Mississippi Valley Historical Review* 26, no. 2 (September 1939), 233–240. See also letter from Office, Chief Quartermaster, District of Mid. Tenn., to Captain A. R. Eddy, Chf. Qr. Mr. Dept. of Tenn., Nashville, December 1, 1865 (copy in park archives).

^{145.} George, 44-45.

^{146.} Gavin and Styles.

The 2003 Additional Documentation noted the following contributing resources within the cemetery:

- Stones River National Cemetery (1864–1869)
- Stones River National Cemetery Markers (1867-1931), LCS ID 007032
- Standing Cannon Markers (1866), LCS ID 090227 (east), LCS ID 1031310 (north)
- Bivouac of the Dead Markers (1882), LCS ID 090223
- 43rd Wisconsin and 180th Ohio Regiments Monument (1865), LCS ID 07041
- Cemetery Flagstaff (1888), LCS ID 90226
- Cannonball Pyramid (circa 1964), LCS ID 90228147
- Stones River National Cemetery Wall (1865–1871), LCS ID 90222

CLR Significance Evaluation

The existing National Register documentation served as the foundation for evaluating the significance of Stones River National Cemetery as part of this CLR.148 The documentation was reviewed in terms of relevant National Register criteria and the guidance provided in the National Register Bulletin How to Apply the National Register Criteria for Evaluation. 149 The comprehensive investigation into the history of Stones River National Cemetery, coupled with the comprehensive view of the landscape, conducted as part of the CLR suggested aspects, areas, and period of significance beyond that afforded by the

National Register Criteria for Evaluation.

In order for a property to be eligible for inclusion in the National Register of Historic Places, it must possess significance under one of four criteria. The Criteria for Evaluation state:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.150

existing nomination and additional documentation that are incorporated into the discussion provided below.

^{147.} The date of installation of the monument is incorrectly identified in the LCS as the 1930s; research and review of archival documentation conducted for this study indicates that the cannonball pyramid was constructed circa 1964.

^{148.} Gibbs; Gavin and Styles.

^{149.} Patrick W. Andrus and Rebecca H. Shrimpton, eds., How to Apply the National Register Criteria for Evaluation (Washington, D.C.: National Park Service, 1990, revised 2002 for internet).

^{150.} National Register Bulletin: How to Apply the National Register Criteria for Evaluation (Washington, D.C.: Department of the Interior, 1995).

National Register Significance of Stones River National Cemetery. The cultural landscape of Stones River National Cemetery appears nationally significant under National Register Criteria A, C, and potentially D, as a designed historic landscape created to commemorate and honor those who served as soldiers in the United States Armed Forces. It appears significant in the areas of Archeology (Historic), Commemoration, Ethnic Heritage, Landscape Architecture, and Military History during the period 1862–1974.

Per Criterion A, Stones River National Cemetery is associated with events that have made a significant contribution to the broad patterns of our history. Under this criterion the site is significant both for its association with the Battle of Stones River, which occurred in the area on December 31, 1862, and January 2, 1863, in the Military History area, and for the establishment of a cemetery on the battlefield for the reinterment of the Union dead in the area of Commemoration. The Battle of Stones River provided an important victory for the Union as it sought to divide the Confederacy. The cemetery was established to allow for the proper burial of Union soldiers who died at the Battle of Stones River as well as in other battles nearby. In addition, the cemetery is significant in the area of Ethnic Heritage through the participation of African Americans in constructing the original cemetery, the interment of African Americans who served in the Civil War, and its importance in African American commemoration.

Per Criterion C, Stones River National Cemetery embodies the distinctive characteristics of a type, period, or method of construction. Capt. John Means, on orders from Maj. Gen. George H. Thomas, created the layout of the cemetery in 1864. The design of Stones River National Cemetery is consistent with several other early national cemeteries that convey a sense of simple grandeur, which is distinctive and unlike the Romantic and picturesque landscapes that were popular during the time, and conveys significance in the area of Landscape Architecture. Features of Stones River National Cemetery, including its perimeter enclosing wall, tree-lined radial and

orthogonal drives and walks, and its central square reflect formal design principles intended to honor the important contributions of United States soldiers. The perimeter wall helps to establish an internally focused sacred and hallowed space within the interior of the cemetery also designed to reflect the solemn heritage of the site. The national cemeteries at Andersonville and Antietam also share these characteristics. The majority of the landscape features that survive today within the cemetery were established during the period of significance, and reflect the original design intent for the property. These features help to convey its significance.

The resources constructed during the 1960s at Stones River National Cemetery are considered significant as representative of the National Park Service's nationwide initiative known as Mission 66. The ten-year program transformed the National Park System by facilitating new construction of visitor centers, administrative buildings, and support facilities at more than 100 national parks. The program focused on planning to provide an improved visitor experience while protecting the parks' natural resources, and on cost-effective construction using modern materials and the modern architectural style. Its goal was to reinvigorate the national park system, defining the parks as desirable travel destinations in the changing social and economic climate of postwar America.

Mission 66 efforts at the cemetery included the construction of three park staff residences, a maintenance shop, and a well house on the site of the former superintendent's lodge and the stable, a widened vehicular entrance leading to the area from Old Nashville Highway, and interpretive features. The new buildings were aligned along an extended service drive that extended from the highway toward the railroad. Driveways connected a carport at each residence with the service drive, and walkways were laid from the driveways to the front entrances of the houses.

The circulation features, three residences, maintenance building, well house, interpretive features, and plantings added to the national cemetery through the Mission 66 program are a generally intact enclave representative of Mission 66 planning, a recognized historic context for assessment of significance. Many of the features established during Mission 66 retain integrity and continue to convey their historic associations.

Per Criterion D, the site is likely to yield information important in prehistory or history. While no extensive archeological investigations have been performed at the national cemetery, investigations of specific areas, such as the rostrum, conducted by the National Park Service have indicated that this area is likely to yield important information about features of the cemetery that are no longer extant above grade. Activities related to historic burials and regrading of the cemetery landscape have likely disturbed archeological resources and thus may limit the information potential of the cemetery site. Other than the work done to locate the site of the original rostrum, none of the archeological investigations conducted to date within the cemetery have yielded artifacts or other evidence of other historic or prehistoric activities.

Period of Significance. The suggested period of significance for Stones River National Cemetery is 1862–1974, with the beginning date of 1862 coinciding with the Battle of Stones River, and the end date marking the closing of the cemetery to new burial reservations.

The period of significance includes the initial development of the national cemetery in 1864, as well as later development under the direction of the U.S. War Department as part of Stones River National Military Park beginning in 1927, and the National Park Service between 1933 and 1974. This period also encompasses the modifications and additions to the cemetery that occurred during the Mission 66 era.

Property Boundary. Stones River National Cemetery is enclosed by a historic stone masonry wall, built in the late 1860s and early 1870s as part of the initial development of the cemetery. The cemetery wall clearly demarcates the limits of the property, setting the cemetery apart as hallowed ground. All subsequent development of the cemetery has focused on the areas enclosed by this wall. Therefore, the boundary of Stones River National Cemetery is defined by the perimeter wall.151

Comparative Analysis of Historic and Existing Conditions

The comparative analysis of historic and existing conditions of the cemetery landscape that follows was developed to inform the integrity assessment section at the end of this chapter. The comparative analysis indicates the degree to which the cemetery landscape today reflects its character and appearance during the period of significance (1862–1974). Existing features are evaluated as either contributing or non-contributing to the historic character of the cemetery (refer to Figure 202 at the end of this chapter).

The narrative is organized in accordance with the landscape characteristics used to describe the cemetery in the Existing Conditions chapter. For each landscape characteristic, the discussion begins with a summary of the features surviving and missing from the period of significance, and an indication of the changes that have occurred since the period of significance. The introductory overview is followed by more detailed information, as known, about the evolution of individual resources and resource types over time. Evaluated features are identified in the narrative

The Hazen Brigade Monument, including the monument, surrounding wall, and grave markers, as well as two nearby graves, are related to but not a part of the national cemetery. The monument, wall, markers, and two nearby graves are considered contributing features of Stones River National Battlefield.

with bold text, maps and photographs that illustrate the narrative discussion.

Patterns of Spatial Organization

Throughout its history, Stones River National Cemetery has served as a distinctive inwardlyfocused space located between the Old Nashville Highway and the CSX rail line corridor; its enclosing boundary wall has distinguished it from the surrounding landscape. Within the wall, the cemetery is divided into two parts: the burial grounds area, with its formal, geometric organization; and the lodge and service area, organized more for function than ceremony. Trees planted within both areas define smaller spaces with vertical and overhead planes of trunks and branches. The lodge and service area has undergone more significant changes since the cemetery's initial establishment period than the burial grounds due to the loss of the superintendent's lodge and associated outbuildings. However, the lodge and service area now represent development during the Mission 66 period, with residences, maintenance facilities, and associated plantings.

Prior to the onset of the battle in 1862, the rural landscape of Rutherford County in the vicinity of Stones River National Cemetery was characterized by scattered farms and woodlands (Figure 157). The site of the future cemetery was an elevated knoll, relatively clear of trees, located between Stones River and an unnamed drainage channel along the Nashville Highway. 152 As is true today, the linear parcel was bounded on the north by the railroad and on the south by the Old Nashville Highway.

Within this parcel, Capt. John A. Means laid out the burial grounds around the knoll in 1864, using geometric forms to organize rows of headstones, edged by paths, which revolved around a central open space marked by a flagstaff. The army enclosed the space with a wooden picket fence to separate it from the surrounding rural landscape.

Acquisition of the cemetery was completed in 1868, when the government purchased 12-1/2 acres from James M. Tompkins and 7-1/2 acres from Richard Wasson, et al.¹⁵³ Within a 4-acre portion of the property acquired that edged the western boundary of the cemetery, the lodge and outbuildings were arranged in a cluster on a small hill around a service drive.

Construction of the cemetery's native limestone boundary wall enclosure was completed between 1865 and 1871. 154

The burial grounds area was organized in a relatively symmetrical, radial pattern about a primary central axis that was marked by a broad drive leading into the cemetery from Old Nashville Highway and terminating in a central square. Eight avenues extended from the central square in orthogonal and diagonal directions, defining interior burial blocks. As with other national cemeteries established at the time, uniform grave markers were arranged within these blocks in a formal geometric pattern, while the space between served as circulation routes (Figure 158).

This knoll was the location where Union 152. artillery had repulsed Confederate attacks on the afternoon of December 31, 1862. Means selected the knoll as the focal point in the cemetery design.

^{153.} George, 35, citing Deed Book 15, 357; Deed Book 16, 30-32; Office of the Register of Deeds, Rutherford County, Tennessee.

John Auwaerter, Cultural Landscape Report for Poplar Grove National Cemetery, Petersburg National Battlefield, Dinwiddie County, Virginia (Boston: National Park Service Olmsted Center for Landscape Preservation, 2009), 38-39.

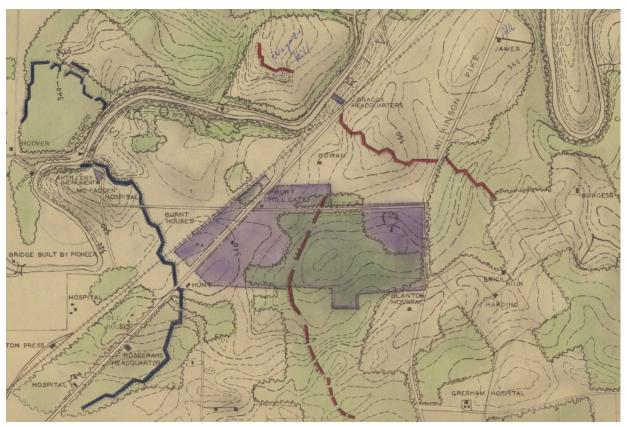


FIGURE 157. Prior to the onset of battle in 1862, the rural landscape of Rutherford County in the vicinity of Stones River National Cemetery was characterized by a pattern of scattered farms and woodlands. (The purple polygon, which includes green shading for tree cover, indicates the Stones River National Battlefield boundary at the time the map was created in 1952.) Source: Stones River National Battlefield Archives, NPS drawing 327-2003.

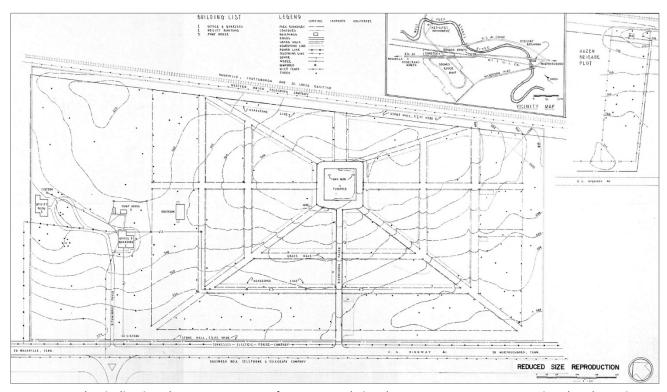


FIGURE 158. Plan indicating the arrangements of avenues and Lincoln Square, 1954. Source: National Park Service drawing 327-2029, "National Cemetery: Existing Development," dated January 18, 1954.

Here, the blocks were divided by avenues into fifteen burial sections. As a unit, these sections were framed on three sides by panels of open lawn designated as future burial grounds, or in one plan, formal gardens. 155 The only exception was the block now named Section I, which was originally named the Franklin Section, presumably as it was designated for Union dead from the Battle of Franklin. 156

In 1900, burial Section P was established along the southern edge of the cemetery from one of the three lawn panels. The other two panels remained open lawn until after World War II, when there was an influx of burials. In 1942, Section P was split by a new avenue that was used to divide it into a northern half, designated for whites, and a southern half, referred to as Section Q, which was designated for African Americans. Sections R, S, and T, were also opened during this period. These sections, created from the avenue that originally surrounded the burial grounds, are small and narrow, and edge the cemetery wall. Graves in these sections are irregularly spaced. Burials ceased entirely in these sections in the 1970s due to regular problems with flooding.

Allées of evergreen trees were planted between 1865 and the 1880s along the avenues of the burial grounds. The trees reinforced the organizational system of burial sections, while also enhancing its ceremonial quality. Evergreens have long served a symbolic role within burial grounds by conveying a solemn sense of reverence and representing the idea of rebirth. By placing the evergreens at the center of the cemetery, the designers reinforced the ceremonial and commemorative quality of the square. Elsewhere, canopies of scattered deciduous trees shaded many of the lawn panels.

Photographs from the 1930s suggest that while the original plantings had matured, many trees had died or were in decline. Trees continued to die through the mid-twentieth century and were not replaced, leading to a more open character within

Richard Clinton Genoble, "War, Memory, and 155. Landscape: The Stones River National Cemetery" (Master of Landscape Architecture

thesis, Louisiana State University, 1999), 53.

the cemetery. By 1981 only thirty of the original trees remained. At that time, the park initiated an extensive tree planting project that continued until 1985. The program was based on an 1892 plan of the cemetery that showed tree locations and identified the species by name (refer to Figure 22). Today, tree canopies continue to define the burial sections and contribute a vertical dimension to the organization of space within the national cemetery. (Refer to the Vegetation section, below, for more information.)

When it was constructed in 1882, the rostrum was sited within a lawn panel edged by tree plantings on the western edge of the burial grounds. In 1941–1942, the rostrum was demolished, returning the area to open lawn. In 1967, the first of several rows of Eastern red cedar trees was planted between the burial ground and the former rostrum site in an attempt to screen the staff housing and maintenance facilities from the burial ground. Additional rows of trees were added in 1978–1979 between the burial ground and the lodge and service area to screen views of the staff housing and maintenance area from the burial ground.

In 2007, a replica of the original rostrum was built on the earlier site, between the two groups of cedar tree rows. The trees were limbed up in 2004 to facilitate mowing, reducing their effectiveness as a screen planting. The parcel that comprises the lodge and service area was not included in the formal plan for the burial grounds; its development followed a less formal pattern. The landscape in this area was relatively organic and responded to a combination of functional needs and interests of various lodge residents. The 1892 cemetery plan (refer to Figure 21) shows a variety of garden spaces within this area, including an area of ornamental shrubs to the east of the service drive, flower beds to the west, an allée of trees along the drive, a vegetable and fruit garden surrounded by a pyracantha hedge (likely Pyracantha coccinea), and a tree nursery in the northwest corner. When the superintendent's

156. Ibid. lodge was demolished and replaced in 1926, the new residence was built on the same site, and many of the ornamental planting beds were retained.

In the 1960s, lodge and stable buildings were replaced with new brick structures. The new buildings were arranged in a linear fashion along the service drive, replacing the cluster arrangement of the original group. The area was screened from view of the cemetery by the plantings of Eastern red cedar trees described above, which introduced a new spatial division between the lodge and service area and the burial ground. Residential buildings replaced the gardens, while the other plantings were removed. The existing patterns of spatial organization date to the 1960s and thus fall within the period of significance. Overall, the patterns of spatial organization present today within Stones River National Cemetery survive with integrity from period of significance and contribute to the significance of the historic landscape.

Contributing.

- Two distinct character areas—burial ground and lodge and service area—defined by tree plantings, land uses, and circulation
- Location of the cemetery on a prominent knoll
- Orientation of the cemetery to follow the adjacent road and rail line
- Perimeter wall enclosure
- The symmetrical, axial, radial and orthogonal layout of the burial grounds
- A formal geometric pattern of regularlyspaced, uniformly-sized grave markers set in rows
- A flagstaff used as a focal point
- Fifteen original burial sections (A through O)
- Five additional burial sections (P through T)
- Although the original rostrum is no longer present, the existence of the current rostrum in the original location supports the historic pattern of spatial organization.

- Open turf lawn sections
- Rostrum located in a turf lawn panel edged by tree plantings157
- Rows of evergreen trees between the burial ground and the rostrum, and the rostrum and the lodge and service area
- Deciduous tree plantings set informally along the avenues
- Evergreens clustered around Lincoln Square
- Denser plantings along the southern edge of the cemetery
- Linear organization of residential and maintenance complex

Missing.

- Cluster arrangement of original and replaced superintendent's lodge, outbuildings, and stables
- Variety of garden spaces within the lodge and service area that included shrub and tree plantings

Natural Features and Systems

All of the extant natural systems and features associated with the cemetery, which include the knoll and slope topography of the site as well as the native limestone geology, have been present since the 1860s and remain character-defining features of the property. With the exception of fill that has been used to level the terrain in order to enhance the gently sloping character of the burial ground and to diminish problems associated with storm water, these natural systems and features survive with integrity from the period of significance and contribute to the significance of the Stones River National Cemetery.

The natural systems and features that characterize Stones River National Cemetery include the ridge that extends through the site from north to south, creating the knoll and slope topography characteristic of the cemetery. When Chaplain William Earnshaw assumed command of the cemetery, he reported that "the cemetery . . . is the admiration of all who visit it, being located on a beautiful knoll, directed in the centre of the immortal field of Stone's River, and where the battle raged the fiercest during the conflict."158

Plantings of Eastern red cedar trees within the cemetery reflect the native limestone geology and are characteristic of the region. Many of the trees planted within the cemetery were dug from the surrounding area. The native limestone has also been used to create key features of the cemetery, such as the perimeter wall. These natural features still function today in much the same way they did historically and contribute to the significance of the historic landscape.

Contributing.

- Native limestone geology
- Knoll and slope topography

Responses to Natural Resources

Several of the features associated with the national cemetery that were developed in response to natural resources available or occurring in the area, such as establishment of Lincoln Square atop a prominent knoll, the use of local limestone to build the perimeter wall, the incorporation of native Eastern red cedar trees into the planting design of the cemetery, and the management of storm water using ditches, culverts and pipes, and collection systems that were used to water cemetery plantings, can be tied to establishment during the period of significance and remain

William Earnshaw, report, October 5, 1866, 158. printed in Roll of Honor No. XI: Names of Soldiers Who Died in Defence [sic] of the American Union, Interred in the National Cemeteries at Chattanooga, Stone's River, and Knoxville, Tenn. (Washington: Government Printing Office, 1866; reprint, Baltimore: Genealogical Publishing, 1994), 227-228.

character-defining features of the property. Although changes have occurred in the character, materials, and layout of some of these features, particularly the storm water management structures, these responses to natural resources possess sufficient integrity to contribute to the significance of the national cemetery. Missing are some of the earlier storm water control and collection structures, and drainage swales established along the Old Nashville Highway during the New Deal era.

The design of the cemetery took advantage of the natural knoll and sloped topography of the property by placing the centerpiece of the cemetery, Lincoln Square, at the crest of the knoll. The superintendent's lodge and stables were constructed on the ridge located between the west perimeter wall and Lincoln Square.

Many of the trees that were originally planted in the cemetery were obtained from the Eastern red cedar brakes that were common in the surrounding area.

Locally-obtained native limestone was used to create the boundary wall of the cemetery. As previously described, various accounts support the idea that the wall is constructed of local limestone, including an 1867 report by E. B. Whitman indicating that "the best of stone for the completion of this work [wall construction] can be obtained within one-eighth of a mile of the cemetery," referring to the nearby Ridley limestone deposits along Stones River. 159 Additionally, an October 1865 account by a New York Times reporter states that the 111th United States Colored Troops were working in squads to construct the wall using locally quarried limestone.160

- E. B. Whitman, Reports on National Cemeteries, Department of the Cumberland: No. 12: Stones River (September 26, 1867), 2. Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- 160. Cultural Landscapes Inventory: Stones River National Cemetery (National Park Service,

The native stone boundary wall, completed in the 1870s, did not include any openings to accommodate the movement of storm water through and out of the cemetery. Since the 1870s, the burial grounds portion of the cemetery has been plagued by problems due to flooding. The problem has been addressed by a variety of means over the years. A report by civil engineer T. M. Robbins in 1876 described the problem in detail, including the inundation of Sections I, G, and E that occurred, as "about an acre in extent and some 2-1/2 to 3-1/2 feet deep, submerging about 100 graves in Section I and remaining from six days to two weeks."161 Robbins recommended the installation of vitrified pipe through the cemetery wall that would discharge into the drainage ditch along the Old Nashville Highway to the south, as well as a structure that would provide drainage through the railroad embankment to the north.¹⁶²

This work did not completely solve the problem, as Superintendent Frame reported flooding in 1882 as follows:

I am surrounded by water . . . the northeast side of cemetery the water comes up main gate covering part of the grave sections and part of three vacant sections[.] [T]he water is five foot deep . . . at south corner of cemetery[.] [T]o get to Murfreesboro you have to go about one mile through fields . . . the Nashville and Chattanooga train was stoped [sic] or delayed one hour in going through water near cemetery this morning . . . it is the greatest flood I ever saw at this place. . . 163

In the 1930s, the Public Works Administration (PWA) and Civilian Conservation Corps (CCC) tried to address the flooding by constructing a culvert and swale between the cemetery wall and the Nashville Highway. This solution was

modified at a later date that has not been determined so that the drainage was piped underground along the entire length of the south cemetery wall.

Flooding continued within the cemetery into the 1970s, particularly in the southeast corner, where water inundated the burials located in Section Q (Figure 159). Cemetery staff cut a 2-foot-deep drainage swale through the lawn panels between Sections M and O and the south boundary wall. The water was directed into large culverts that passed under the Old Nashville Highway to Stones River. The excavated soil was placed over graves in Section Q, raising the elevation of the area by 1 foot.164



FIGURE 159. Flooding in the cemetery, 1972. Source: Stones River National Battlefield Archives, image STRI-ICP-0252.

In 1978, to address flooding problems in the northwest corner of the cemetery, the National Park Service added 3 feet of gravel fill, forming the basis for the present-day gravel parking area and the powder magazine enclosure.

In the 1980s or 1990s, the park created a drainage opening through the base of the stone perimeter

- Quartermaster General U.S.A., Washington D.C., December 16, 1876.
- Fraley, citing Frame to Ekin, January 21, 1882 163. (original ledger "Letters Sent June 1, 1877– July 23, 1883," page 178).
- 164. James A. Sanders, Superintendent, to unspecified family members of persons interred in the national cemetery, March 14, 1975, STRI Central Files Collection, Folder 157, Box 1 "A-2621 Annual Reports."

^{1998), 21;} see also Fred Brigance, "A View of the Battle of Stones River," New York Times. September 2, 1865.

^{161.} Report written by T. M. Robbins, C.E. Q.M. Dept. to the Quartermaster General U.S.A., Washington, D.C., December 16, 1876.

^{162.} Miranda Fraley. Stones River National Cemetery Cultural Landscape Report, draft, 2002. Chapter 1, page 2, citing report written by T. M. Robbins, C.E. Q.M. Dept. to the

wall near its southwest corner to address flooding problems in this part of the cemetery. A pipe was placed through the hole that emptied into a 1-footwide open stone drain located outside the cemetery wall.

According to park staff, flooding continues to be a problem today, although it is much less severe now than previously.

To serve the cemetery, three cisterns were built in the lodge and service area in the nineteenth century: two collected rainwater from the superintendent's lodge and a third from the stables. To supplement this supply, a well was excavated close to the intersection of the superintendent's drive with the Old Nashville Highway. Openings to the cisterns are not visible today; they were filled in the 1960s. In 1929, after the creation of Stones River National Military Park, a 75-foot-deep well was drilled behind the superintendent's lodge; it was deepened to 100 feet in 1935 to support the needs of the park. A pump house was added in 1935.165 The well adjacent to the highway was in use in the 1930s; the well cover appears in photographs from 1934 as a small gabled structure. Today, there is a sewer pump station located within the cemetery adjacent to the maintenance area access drive just inside the southern wall, near the location of the well. A well house was built in 1962 as part of the development of the maintenance complex.

Responses to natural resources that survive with integrity and contribute to the significance of the historic landscape today include the siting of Lincoln Square on the crest of the knoll, the native limestone perimeter wall, and the plantings of native Eastern red cedar trees. Features related to the control and management of water, such as the cisterns, at least one of the wells, and the drainage swale along the Old Nashville Highway are no longer evident. The drainage swale constructed in 1975 post-dates the period of significance and thus constitutes a non-contributing resource.

Contributing.

- Lincoln Square set atop the crest of the knoll
- The use of native limestone to construct the perimeter wall
- Plantings of native Eastern red cedar trees
- Well house (Building 7) adjacent to maintenance shop

Undetermined.

- Well at Old Nashville Highway (existence not confirmed)
- Vitrified piping system from nineteenth century (existence not confirmed)
- Drainage structure through railroad embankment (existence not confirmed)

Non-contributing.

- Drainage swale in the southeastern portion of the cemetery used to address storm water management
- Gravel fill added to the maintenance area to reduce flooding problems
- Drain hole established through the cemetery wall near its southwest corner to alleviate flooding

Missing.

- Siting of the lodge and stable along the ridge
- Three cisterns
- Well along Old Nashville Highway
- Well behind the superintendent's lodge
- Pump house
- Drainage swale along Old Nashville Highway

Topographic Modifications

Character-defining modifications to the topography of Stones River National Cemetery that contribute to its historic significance include the original grading to create a smoothly sloping site and the drives and avenues, and the grading required for construction of the residences and maintenance area in the 1960s. Topographic modifications that post-date the period of significance include the construction of drainage swales and the placement of fill for flood control in 1975, and the addition of fill in the vicinity of the maintenance area in 1978. Fill was also added to the burial section where Vietnam veterans were buried in the 1970s and 1980s. Most notably missing today from the period of significance are the original grades associated with the lodge and service area buildings and structures and access roads, the original grade of Lincoln Square and the grass avenues, and a drainage channel established during the New Deal era along the Old Nashville Highway.

While no documentation has been located regarding the original grading plan, an 1865 photograph of the burial grounds suggests that to establish an orderly cemetery, some modification to the existing grade of the site was undertaken to create smoothly sloping lawn panels (refer to Figure 6). Additional grading created the cemetery's central drive, the mound associated with Lincoln Square, and the avenues.

In 1876, in response to a report prepared by Civil Engineer T. M. Robbins, cemetery staff began to fill sinking graves and to make other topographic modifications to meet the aesthetic standards set by the Quartermaster Department. Robbins' approach to solving the problem was dramatic:

As there is no sod on those remaining to be filled worth preserving, the Supt. has been instructed in future work of that kind, to cut the edges of the grave with a sharp spade deeply; then with about an 80 lb maul wielded by

two men standing astride the grave, (or if the force be small, by one man standing in the grave with a 50 lb maul) tamp the earth solidly, breaking down the coffin [emphasis added], if it is decayed; then fill in with good earth, tamping in same manner each layer or course of 12 or 14 inches.

When the graves are filled the entire surface between the lines to be top dressed with an inch or two of soil, carefully raked to an even grade and when the section is so completed, the whole to be heavily rolled until it is as smooth as a lawn.166

Numerous maintenance reports from the latenineteenth century regularly refer to grave-filling projects. At first, staff used a borrow site in the northwest corner of the cemetery to collect earth for use as fill. Once this area was depleted, it was necessary to obtain fill material off-site. Regular correspondence between the superintendent and the Quartermaster's office in Louisville contains exchanges regarding contracts with neighboring landowners to provide fill for this purpose.

In 1879, cemetery staff began to re-grade the cemetery avenues, adding soil purchased off-site. They raised the cemetery avenues to meet grade of the surrounding lawns and seeded them with grass.167

Other topographical modifications included the mound constructed for the cemetery flagstaff. In 1888, the original wooden flagstaff was replaced with a cast-iron feature set atop a newly-formed earthen mound.

Within the lodge and service area, modifications were made to the existing topography in the 1960s to accommodate the concrete foundations of the three new park personnel residences and the maintenance building, as well as to create driveways and the maintenance yard.

Fraley, citing Frame to Ekin, January 27, 1880 (handwritten transcripts "Letters Sent June 1, 1877-July 23, 1883").

Fraley, Chapter 2, page 1, citing Report written by T. M. Robbins, C.E. Q.M. Dept. to the Quartermaster General U.S.A., Washington D.C., December 16, 1876.

Contributing.

- Grading and fill used to establish evenlysloped lawn panels within the burial ground
- Grading to emphasize the knoll at the center of the cemetery marked by the flagstaff as a focal point
- Fill used to correct subsidence associated with graves
- Grading and fill used to establish smooth, evenly-sloped travel corridors including the grass avenues and paved roads such as Central Avenue
- Grading to construct the residences and maintenance facilities and the associated access road within the lodge and service area
- Construction of a low retaining wall north of Building 6 to protect a tree from the change of grade associated with construction of the residence

Non-contributing.

- Excavation and fill associated with the establishment of a drainage swale in the southeastern portion of the cemetery, including fill placed atop existing graves
- Gravel fill of up to 3 feet placed within the maintenance area to reduce flooding problems in 1978
- Fill of up to 3 feet added to the burial section where Vietnam veterans were interred in the 1970s and 1980s

Missing.

- Original grade of Lincoln Square
- Original grade of cemetery avenues
- Original grade of the lodge and service area
- Grading for flood control in the nineteenth century
- Drainage channel between the perimeter wall and Old Nashville Highway established in the 1930s

Adjacent Conditions.

Raising of the elevation of the adjacent rail line corridor using ballast

Views and Vistas

Views and vistas within Stones River National Cemetery include both designed vistas (intended for viewing from a single vantage point), as well as informal and dynamic views (those experienced while moving through the landscape). Views and vistas that survive from the period of significance include the vista from the main cemetery entrance to the Lincoln Square flagstaff, vistas and dynamic views along cemetery avenues between sections, and views into the cemetery from the Old Nashville Highway and the CSX rail line. Missing from the landscape is the vista from the rostrum to the U.S. Regulars Monument and the exchange of views between the lodge and service area and the burial grounds.

Consistent with the concept developed by quartermaster Montgomery C. Meigs for most national cemeteries during the 1860s, Stones River National Cemetery was designed with Lincoln Square and its flagstaff as a central focal point of a system of radiating avenues and directed vistas. The most important of these was the vista to Lincoln Square and the flagstaff from the main cemetery entrance along the Old Nashville Highway. Much photographed, this vista has been the subject of personal and professional photographers, alike (refer to Figure 190 and Figure 191, below). From Lincoln Square, vistas are also directed along the radiating avenues.

In support of these designed vistas, trees have been kept limbed up above eye level, allowing for views between burial sections along the connecting avenues. In addition, the park now maintains the tract to the east of the cemetery in native grasses, established in 2009, to protect the view into the cemetery from the Old Nashville Highway to the east (Figure 160).



FIGURE 160. Views into the cemetery are afforded from the Old Nashville Highway.

Until the 1960s, views were also afforded between the burial grounds and the residential and maintenance area where the superintendent's lodge served as a visitor destination and possible orientation site. Visitors were encouraged to visit the superintendent's lodge upon arrival at the site to register and become oriented to the cemetery. Circa 1967 and 1978–1979, as noted previously, Eastern red cedar trees were planted between the burial ground and the staff housing to provide greater privacy for park personnel and to screen maintenance operations from the cemetery. The screening qualities of the planting were compromised in 2004 when the cedars were limbed up to facilitate mowing.

The original rostrum was also designed with views in mind. It appears from historic photographs that the rostrum was located to frame a vista to the U.S. Regulars Monument (Figure 161). This view was lost when the rostrum was demolished in 1941-1942. Although reconstructed in its original location in 2007, the original vista is now partially blocked by the planting of Eastern red cedar trees planted east of the location of the original rostrum prior to construction of the replica rostrum.

FIGURE 161. Reciprocal views existed between the burial grounds and the rostrum before it was demolished in 1941–1942. Source: Stones River National Battlefield Archives, image STRI-NN-0183.

In addition to these views, there were also views afforded into the cemetery from the adjacent rail line (Figure 162). As William Earnshaw reported in 1866:

The cemetery itself is the admiration of all who visit it. . . . On the east side it is bounded by the Nashville and Chattanooga Railroad, being in full view of the thousands who pass over that great line of travel....¹⁶⁸

Today, trains that pass the cemetery carry freight, not passengers. Thus views from the train of the cemetery are available only to railway operators.

Roll of Honor No. XI: Names of Soldiers Who Died in Defence [sic] of the American Union, Interred in the National Cemeteries at Chattanooga, Stone's River, and Knoxville, Tenn. (Washington: Government Printing Office, 1866; reprint, Baltimore: Genealogical Publishing, 1994), 228.



FIGURE 162. View into the cemetery from a train as it approached the depot at the national cemetery. Source: Stones River National Battlefield Archives, image STRI-5X7P-0074.

The presence of the adjacent railroad tracks originally had limited visual impact on the cemetery. Tourists visited the cemetery via rail, debarking at the nearby Stones River depot, which was located adjacent to the cemetery along the western end of the north wall during the late nineteenth and early twentieth centuries (Figure 163). It was from this depot that crowds debarked to attend Memorial Day celebrations. Views of the cemetery, afforded by the train and depot, may have been promoted by the railroad as part of the arrival experience.

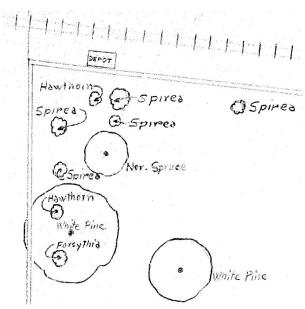


FIGURE 163. Detail of a 1934 planting plan showing the location of the railroad depot just outside the far northwest corner of the cemetery. Source: Detail of National Park Service drawing 327-1062, "Cemetery Planting Plan," dated June 1, 1934.

At the time of the establishment of the cemetery, the tracks were much lower than at present and, with the exception of the northwest corner of the cemetery, were concealed behind the cemetery wall well into the twentieth century (Figure 164). Sometime during the twentieth century, the tracks were reset at a higher grade atop ballast to help meet the elevation of a bridge crossing of Stones River. Today, the rail bed is higher than the perimeter wall and the rail line is highly visible from several points within the cemetery, diminishing the integrity of this view slightly.



FIGURE 164. View of the railroad tracks and the cemetery wall. Source: Stones River National Battlefield, Fraley, image fr.adjfield.

Between 1980 and 1999, the town of Murfreesboro grew quickly and expanded north towards Nashville. As part of this expansion, development has occurred nearby along Highway 41/Broad Street. This development includes a car dealership that is visible beyond the tracks from some portions of the cemetery. Views to the surrounding landscape have been negatively affected by this development, although screen plantings have been added by the car dealership that may diminish these views in the future (Figure 165).



FIGURE 165. Contemporary view over the northern cemetery wall toward the elevated rail line and the commercial development beyond. Source: Brian Coffey, National Park Service Southeast Regional Office.

Contributing.

- Vista from the main entrance along Central Avenue to the flagstaff and Lincoln Square
- Vistas toward and away from Lincoln Square
- Views along the grass avenues and paved roads of the cemetery, often framed by tree plantings
- Views between the cemetery and the rail line
- Views between the cemetery and Old Nashville Highway
- Linear views along the access road within the lodge and service area that encompass the built features, including a view south between the stone piers at the entrance along Old Nashville Highway toward the park's main unit

Views between the burial grounds and lodge and service area screened with plantings of Eastern red cedar

Non-contributing.

- Views to adjacent development along Highway 41/Broad Street, partially limited by screen plantings
- View between the visitor center patio and the cemetery
- View across the open field east of the cemetery
- Views between the rostrum and the burial ground

Missing.

- Reciprocal views between the original rostrum and the U.S. Regulars Monument
- Reciprocal views between the lodge and service area and burial grounds

Land Use

Land uses have remained fairly consistent within the cemetery since initial establishment; surviving historic land uses include administration, cemetery, commemoration, interpretation, maintenance, housing, and recreation. Supply/storage is a relatively recent addition that post-dates the period of significance and thus does not contribute to the significance of the cemetery. Missing from the historic cemetery landscape are the horticultural uses that characterized the nineteenth and early twentieth century cemetery landscape.

The primary land use associated with the cemetery was burial. This practice continues today, and there are typically two to three interments in the cemetery each year. The cemetery has also served a commemorative function throughout its history. Of the twenty acres of land acquired for the national cemetery, 4 acres were reserved for a "Keeper's Garden." This four-acre reservation would become the site of a series of superintendent lodges, which were later replaced by the present staff housing and maintenance facilities. Since the 1860s, this area has accommodated housing, maintenance, and

administrative uses, and to a lesser degree passive recreational use through the opportunities afforded to stroll along the avenues. During the nineteenth and early twentieth centuries, this area was also used for horticultural purposes. With the exception of horticultural activities, these land uses also survive today.

In 1927, the development of Stones River National Military Park, followed by National Park Service administration of the historic property in 1933, introduced interpretive uses that also survive today. Uses introduced since the period of significance include supply/storage associated with the storage of black powder near the maintenance area in 1975.

Contributing.

- Administration
- Cemetery
- Commemoration
- Interpretation
- Maintenance
- Housing
- Recreation

Non-contributing.

Supply/storage

Missing.

Horticultural

Circulation

Circulation features present within the Stones River National Cemetery landscape that were established during the period of significance include the alignment of Central Avenue and the primary and secondary grass avenues, the circular drive around Lincoln Square, the maintenance access drive, and the walks and stairs that provide access to features of the cemetery and housing area established during Mission 66.169 The most notable features missing from the period of significance include the pedestrian gates on the north and west walls, the circular gravel drive to the stables, and the brick walkways around the superintendent's lodge. The pedestrian gate was removed during Mission 66 and not replaced until 1977. The replacement feature is not consistent with its historic counterpart.

Beyond the cemetery walls, two key circulation corridors existed by the time the burial ground was established that provided access to the site: the Old Nashville Highway and the historic railroad corridor of the Nashville and Chattanooga Railroad.

The rectangular parcel in which the national cemetery was developed was bounded on two sides by important transportation routes: on its north stood the Nashville and Chattanooga Railroad corridor while on its south was the Old Nashville Highway. Both of these routes were present by the Civil War and played an important role in the Battle of Stones River. Both of these routes remain today in their original locations, although alterations to the height of the rail line and to the alignment and height of the road corridor have been made to adjust for

^{169.} Today's CSX is the most recent of a long line of railroad companies running freight on what is now their Nashville Division. CSX is the result of a series of consolidations of earlier railroads that also used the corridor that abuts the cemetery. These include, in chronological order, the Nashville and Chattooga Railroad, the Nashville, Chattanooga and St. Louis Railway, the Louisville and Nashville Railroad (L&N), the Seaboard System Railroad, and eventually CSX.

contemporary transportation needs. For example, the rail line track has been elevated several feet above its historic elevation to meet the grade associated with the newer, taller bridge over Stones River. Although the rail line served as an important means for visitors to reach the cemetery during the nineteenth and early twentieth century, automobile use replaced the rail line in popularity. Today, the rail line no longer accommodates passenger service, but remains a busy freight route for CSX Transportation.

As designed by Captain John A. Means, the cemetery features a central focal point comprised of a grassy space encircled by a road corridor referred to as Lincoln Square. The central road is reached via a wide, straight avenue that extends to the main cemetery entrance at Old Nashville Highway. Radiating outward from Lincoln Square is a system of eight avenues. These are connected by a system of secondary roads placed equidistantly about Lincoln Square. The avenues were named after Union generals who had died during the Battle of Stones River and whose names were once painted on stone posts along the avenues.¹⁷⁰ The central drive was Sill Avenue, while the others were named Eddy, Garesché, Harrison, Hawkines, Houssuem, Milliken, Reed, Roberts, Schaeffer, Williams, and Wooster, (refer to Figure 10).

The avenues that bordered the graves were originally surfaced with gravel.¹⁷¹ In 1879, these were re-graded and seeded with grass; they remain grass-surfaced today. 172 As developed during the

Within Lincoln Square, the central mound was originally a simple turf form; at some time during the 1960s, the park added a concrete slab around the flagstaff base and concrete stairs for access.

In 1882, the Army Quartermaster Department, as part of its campaign to improve conditions within the lodge and service area, directed that brick walks be constructed between the superintendent's lodge, an outbuilding, and a cistern, as well as between the lodge and the gravel access drive leading to the highway. 173 No evidence of these walks survives aboveground today.

After the establishment of Stones River National Battlefield in 1927, the cemetery became part of a larger effort to interpret the battle for the public.¹⁷⁴ To address increased visitation, the War Department resurfaced the central drive and the service drive with gravel. The maintenance drive was extended 125 feet to the northwest, and a spur was added to connect the stable, now adapted for use as a visitor center.¹⁷⁵ In 1932, a bituminous surface was poured over the gravel on both the central and superintendent's drives.¹⁷⁶

In 1937, the National Park Service widened the two vehicular entrances and their associated drives to better accommodate motor traffic. In 1942, Section P was divided by a new cemetery avenue laid out to separate its eastern half, designated for whites, from its western half,

nineteenth century, the avenues are edged by stone section posts and allées of trees.

^{170.} Fraley, Chapter 1, pages 9–10.

^{171.} Whitman, 3.

Fraley, citing Frame to Ekin, January 27, 1880 (handwritten transcripts "Letters Sent June 1, 1877-July 23, 1883").

Fraley, citing Frame to Ekin, April 5, 1882, microfiche of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number 3236, Museum Collection, Stones River National Battlefield; Frame to Ekin, May 19, 1882, microfiche of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number 3236, Museum Collection, Stones River National Battlefield, Murfreesboro,

^{174.} Ibid., Chapter 4, 1.

Ibid., Chapter 4, 3, citing Financial Ledgers.

Ibid., Chapter 4, 4, citing Willet, "A History of Stones River National Military Park," 83.

Section Q, which was designated for African Americans.

In 1960, a master plan for the park was developed as part of the nationwide National Park Service program known as Mission 66. Under the program, the National Park Service constructed three new park staff residences and a maintenance shop on the site of the former superintendent's lodge and the stable. The new buildings were aligned along the service drive, stepping down the slope. The drive was extended from the top of the ridge, downslope to the east towards the railroad, then curved to wrap around the east side of the maintenance building, creating a paved work yard. Driveways extended to the carport at each residence and walkways were laid from the driveways to the front entrances of the two upper houses. As part of the project, the superintendent's lodge and its outbuildings were removed, along with their brick walkways. The stable and its gravel circular drive were also demolished.

It was also during Mission 66 that three of the original pedestrian entrances were closed and the wall filled in. One of these, located on the northern cemetery wall, was closed in response to the cessation of passenger rail service along the adjacent rail line. The other two were located on the southern wall along the Old Nashville Highway, and behind the stable where an earthen lane edged the western wall.

The two vehicular entrances at Old Nashville Highway were widened during Mission 66 to accommodate motor vehicles, with the piers rebuilt at their margins. In addition, a parking lot was installed just inside the main gate to the east of Central Avenue.177

Within the burial grounds area, three new burial sections—R, S, and T—were created between Sections I, P, and Q, and the cemetery boundary wall. The graves were sited within a space

originally designated for a cemetery avenue between the burial sections and the wall.

After Mission 66, few changes occurred to circulation patterns within the cemetery, with the exception of the reopening of the pedestrian gate in the front wall along Old Nashville Highway to link the park visitor center and the cemetery by 1977. ¹⁷⁸ A mulched path was later added to connect visitors with Carpenter Avenue and Lincoln Square.

A crosswalk was added across the Old Nashville Highway to enhance the safety of visitors walking between the visitor center area and the cemetery. The crosswalk was improved in the mid-1990s with the use of highly-reflective thermoplastic materials. Additional safety features include a pedestrian crossing sign with solar-powered warning signals controlled by a push button.

Along the maintenance access drive, a small gravel pull-off was established after the period of significance to provide utility company access to a sewer pump station located within the southern perimeter wall.

Contributing.

- Main entrance gate
- Central Avenue (Sill Avenue)
- Parking area inside the wall for eleven cars
- Sidewalk associated with parking area
- Concrete stair leading from sidewalk
- Lincoln Square
- Stair leading into Lincoln Square
- Eight primary grass avenues
- Secondary grass avenues
- Avenue between sections P and Q
- Housing and maintenance access road

Ibid., Chapter 5, citing "Completion Report-Day Labor Project-Repointing the Stone Wall around the National Cemetery," location of report not noted.

^{178.} Correspondence by Gib Backlund, STRI, with Teresa Watson, STRI, December 2012.

- Driveways to residences
- Walkways to residences

Adjacent:

- Old Nashville Highway
- Nashville and Chattanooga railroad corridor
- Earthen lane along western wall

Non-contributing.

- Pedestrian gate
- Gravel pull-off to access the sewer pump station
- Mulched path leading to Carpenter Avenue

Adjacent:

Pedestrian cross walk with flashing safety light

Missing.

- Gravel surfacing of cemetery avenues
- Brick walkways to lodge
- Pedestrian gate at railroad
- Pedestrian gate on west wall
- Original gate openings widths
- Circular gravel drive at stables
- Site for a cemetery avenue along the eastern wall

Cultural Vegetation

Cultural vegetation located within Stones River National Cemetery that contributes to its significance include the expanse of turf lawn; the plantings of evergreen trees along the cemetery avenues, particularly around the central portion of the burial ground; the Eastern red cedar rows and groves, and the rows of deciduous trees that follow the avenues along the burial sections. A few of the individual specimen trees within the cemetery likely survive from late nineteenth century planting efforts. These include several Eastern red cedars, a ginkgo, and a Southern magnolia. Character-defining vegetation associated with the period of significance that is no longer present includes additional deciduous and evergreen tree plantings; ornamental shrubs, perennials, and annuals; an Osage orange (Maclura pomifera) boundary hedge; a pyracantha hedge; five planting beds of rose (Rosa sp.) and canna (Canna sp.); English ivy growing on the boundary wall; flowers planted in lawn vases; a curved cross symbol created of shrubs; and fruit trees, a vegetable garden, grape arbor, and plant nursery associated with the lodge.

By the late nineteenth century, vegetation within Stones River National Cemetery was characterized by plantings of evergreen and deciduous trees, as well as ornamental shrubs, vines, perennials, and annuals. Evergreen trees, traditionally considered a symbol of everlasting life, were planted in the burial grounds to line the cemetery drives and avenues. Deciduous trees were planted to provide a canopy above the lawn panels that surrounded the burial grounds. Plantings associated with the cemetery were likely consistent with the design recommendations provided by Frederick Law Olmsted, the noted landscape architect, who was hired as an advisor to Quartermaster Montgomery C. Meigs in the design of national cemetery grounds. Olmsted is known to have eschewed ornamental shrubs, hedges, vines, and flower beds. Over the course of the nineteenth century, however, the design of the cemetery would evolve to reflect the more ornate style of the Victorian era through the inclusion of ornamental shrubs, vines, and planting beds filled with displays of annuals. These plants eventually declined and were

removed. Trees planted in the cemetery also declined through the twentieth century and by the 1970s, only a small percentage of the original tree planting remained. The National Park Service initiated a planting campaign in 1975 to restore trees to the cemetery according to as-built conditions documented in 1892 by the War Department. Many of these trees have survived to the present day. A small number of trees existing today survive from the nineteenth century.

Early Design Concept. In 1870, the War Department set aside funds for the purpose of adding trees to improve the appearance of the national cemeteries. To this end, Quartermaster Meigs turned to Frederick Law Olmsted for advice. Olmsted recommended that the overall planting design for the cemeteries remain simple, and that the detail and ornament popular in the Victorian landscape be avoided. Olmsted wrote:

I would recommend that it (the general design) should be studiously simple The main object should be to establish permanent dignity and tranquility. Looking forward several generations, the greater part of all that is artificial at present in the cemeteries must be expected to have either wholly disappeared or to have become inconspicuous and unimportant in the general landscape This then is what I would recommend to be aimed at: A sacred grove, sacredness and (protection) being expressed in the enclosing wall and in the perfect tranquility of the trees within.¹⁷⁹

Olmsted also recommended substituting a cover of trees and shrubs for a formal lawn; using native trees transplanted from local woodlands; establishing an on-site nursery for ongoing tree replacement; and avoiding the use of fast-growing, weak-wooded trees, such as poplar, linden, silver maple, and arborvitae. 180

Although no formal plans have been located to indicate the early plantings in Stones River National Cemetery, it appears that the designers adhered to Olmsted's recommendations. However, after trees were initially established in the landscape, the planting design was left to the superintendent to develop as he saw fit. As with many other national cemeteries, superintendents at Stones River followed popular tastes, and within twenty years, the cemetery had acquired the ornamental flowerbeds and other accoutrements that Olmsted had advised against.

In 1892, the Quartermaster's Department undertook documentation of the as-built conditions of every national cemetery, which were considered substantially complete by that time. The documentation did not record the location of most of the smaller features such as flowerbeds, but did show trees and larger landscape features.¹⁸¹ Much of the following discussion references the plan prepared in 1892 (refer to Figure 22), along with correspondence between the cemetery superintendents and inspectors from the Quartermaster's Department, which oversaw cemetery management.

Trees and Ornamental Plantings. When it was first laid out by Captain Means in 1865, the burial grounds were devoid of trees. As burials were added, new plantings of evergreens were established along the avenues (refer to Figure 9). Within the next ten years, numerous deciduous trees were planted within the lawn panels surrounding the burial grounds. 182

As work on the stone boundary wall progressed, a hedge of Osage orange was planted along the

Auwaerter, 59, quoting Frederick Law Olmsted to Montgomery Cunningham Meigs, August 2, 1870, The Papers of Frederick Law Olmsted: Volume 6 (Baltimore: The Johns Hopkins University Press, 1992) 386-388. 180. Ibid.

^{181.} Auwaerter, 94, referencing book of national cemetery plans by the Quartermaster General, 1892-1893, Records of the Quartermaster

^{182.} Civil Engineer T.M. Robbins to Quartermaster General, December 16, 1876.

inside face of the wall surrounding the cemetery. 183 Articles from *The Horticulturalist*, a journal published from 1853 to 1874, recommended the Osage orange as an excellent hedge plant, particularly for the exclusion of grazing animals. It was said to be easily seeded and fast growing, and if maintained and sheared on a regular basis, this thorny plant would develop into a dense and impenetrable hedge. 184 It is possible that the hedge had been established to supplement the wall, adding height to the enclosure. The hedge flourished from the 1860s until 1891, when it was removed and replaced with English ivy. 185

The 4 acres of the cemetery along the western wall were intended for use as the "Keeper's Garden." By 1868, the first Superintendent's Lodge had been built in this area. It was soon replaced in 1871 by a stone building. Development of the property included the establishment of a home garden. Indeed, in 1876, Inspector Robbins noted that the superintendent and his staff were cultivating a vegetable garden. However, the appearance of the garden may not have been considered appropriate for a federal reservation. A letter to the Quartermaster General from the Quartermaster's Office in Nashville complained that:

When I visited the Cemetery it looked more like a Farmer's House with its surroundings, than a Public institution, and I found fault with

183. "Monthly Report of Progress on National Cemeteries for December 1870," National Archives and Record Administration. Washington, D.C., Record Group 92, Entry 21. the general appearance of barn yards &c &c. hence my letter to the Department.186

Robbins recommended that instead, "the greater portion of this area should be sown in bluegrass & clover and converted into a lawn and planted with trees the coming season."187 Possibly as a compromise, two years later Superintendent Frame wrote Inspector Ekin about the installation of a pyracantha hedge around his garden, as follows:

I would respectfully state that in digging the trench for the Pyrocanthis [sic] hedge we come on some large rocks and it became necessary to purchase blasting power and fuse to blast the rocks out of this trench.188

He had planted the hedge within the next six days and by June, he wrote of his success as follows:

I would respectfully state that the hedge plants are doing very well, better than Mr. Clarke or I thought from their appearance the time he was here. When I planted the hedge there was a good many plants left over which I trenched in. There will be so many of the plants living as will replace all the dead ones in the hedge row which I think is about 150.189

This hedge appears in an 1892 site plan of the cemetery (refer to Figure 22), extending out from the west wall and perpendicular to it east to a point

- 186. Quartermaster's Office, Nashville, Tennessee to Quartermaster General., January 31, 1874. Stones River National Battlefield Archives, Folder 30.
- 187. Civil Engineer T.M. Robbins to Quartermaster General, December 16, 1876. Note: it is not known which species of bluegrass Robbins had in mind. If there was a bluegrass turf in the cemetery in the nineteenth century, this coolseason bunch grass has since been crowded out by the more aggressive warm-season Bermuda grass.
- 188. Fraley, citing Frame to Ekin, April 12, 1878, handwritten transcripts "Letters Sent June 1, 1877-July 23, 1883."
- Fraley, citing Frame to Ekin, June 18, 1878, handwritten transcripts "Letters Sent June 1, 1877-July 23, 1883."

P. Barry, A. J. Downing, J. Jay Smith, Peter B. Mead, F. W. Woodward, Henry T. Williams, eds., The Horticulturalist, and Journal of Rural Art and Rural Taste 13.

^{185.} R. C. Taylor to J. W. Scully, July 15, 1891, microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number STRI 372, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee; R. C. Taylor to J. W. Scully, December 10, 1891, microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number STRI 372, Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.

even with the superintendent's lodge, where it makes a ninety-degree turn to end at a shed close to the house. While the vegetable garden is not marked in this plan, a long grape arbor oriented approximately north to south is depicted. Any trace of these features was removed during construction of the new maintenance area in the 1960s.

It is apparent that Superintendent Frame also cultivated other food plants, as a list of replacement trees he submitted to the Quartermaster Department included apple, peach, pear, plum, cherry, English walnut, and filbert trees, as well as raspberry, gooseberry, rhubarb, and strawberry plants. 190 Referencing Meigs's 1878 letter, Frame requested more of the fruit trees and shrubs in 1890, asking for apples, cherries, peaches, pears, gooseberries, and raspberries to plant within the pyracantha hedge. 191 A few days later, he detailed his request, specifying:

- 3 good Summer apple trees 7 feet high
- 6 [good] Winter apple trees Large and good Keepers 7 feet high
- 4 Summer Cherry trees 6 [feet high]
- 4 Early Peach free Stone 6 [feet high]
- 4 Pears Bartlett 7 [feet high]¹⁹²

It is not known if these were ever ordered, received, and planted in the garden, but the 1892 plan for the cemetery (refer to Figure 22) indicates a few small trees in irregular rows inside the pyracantha hedge—possibly the trees that Frame ordered for his garden.

Inspector Robbins initiated a new campaign of cemetery improvements in the 1870s and 1880s. In a departure from Olmsted's guiding principles of simplicity and harmony, Robbins and his

successors directed the cemetery staff in a variety of planting campaigns that proceeded in an ad hoc manner for the next several years. There appeared to be no coherent planting plan, nor any references to an overarching vision, for this program. While Superintendent Frame was involved in the selection and placement of plants, his decisions were constantly subject to review and approval by the variety of inspectors that visited the cemetery. 193 It is possible that Frame was guided in his efforts by a number of monthly journals, as suggested by Ekin. He recommended that cemetery superintendents refer to journals such as the Gardeners Monthly and Horticulturalist or the American Agriculturalist, as well as a number of gardening books.

Features that Robbins and Superintendent Frame introduced during that period included four round planting beds for roses and an eclectic collection of ornamental trees and shrubs set out in a random pattern as per popular tastes of the time. There may have also been carpet beds of low annual flowers arranged in patterns around a central vertical plant, which was a common feature of the Victorian garden utilized in national cemeteries, or beds emulating one of the Civil War Corps badges, which was also common.¹⁹⁴ The 1892 plan (refer to Figure 22) shows a few patterns in the cemetery landscape that may reflect these features. Within the lodge and service area, ornamental vegetation features were added to a functional landscape of vegetable and fruit gardens, including a straight, tree-lined drive to the superintendent's lodge and the screen hedge of pyracantha around the superintendent's garden.

In 1879, Superintendent Frame received two cast iron planters, or lawn vases, which were to be placed near the lodge and planted with flowers

^{190.} Fraley, citing Frame to Ekin, original ledger "Letters Sent June 1, 1877-July 23, 1883," 173.

^{191.} Fraley, citing Frame to Major J. W. Scully, February 13, 1890, original ledger on microfiche "Letters Sent July 27, 1883-June 30, 1890," 182.

Fraley, citing Frame to Mr. P. J. Birkman, Augusts, Georgia, February 15, 1890, original ledger on microfiche "Letters Sent July 27, 1883-June 30, 1890," 183.

Fraley, Chapter 2, 7. 193.

^{194.} Auwaerter, 73.

and vines. 195 This led to the annual task of emptying the vases and storing them indoors during the winter.¹⁹⁶ In 1884, Frame wrote to Assistant Quartermaster General Rufus Saxton requesting more flowers for the vases, which he described as 2 feet 3 inches tall and 1 foot 6 inches in diameter. Frame included a list of his favorites: "Mrs. Pollock" geranium, verbena in assorted colors, dusty miller, double petunia, heliotrope in assorted colors, salvia, and ice plant, with "racilus" (possibly meant to read 'Gracilis,' an evergreen shrub cultivar) for the centers of the pots.¹⁹⁷ No references to the vases after 1884 have been found in maintenance records and these features are not present within the cemetery today.

In 1881, Superintendent Frame received delivery of 100 dormant roses for installation in four lozenge-shaped beds in the southwest corner of the cemetery. 198 He described his ideas for planting to Ekin as follows:

I have prepared fo[u]r circular beds 25 Roses to each bed[,] big one center of bed[,] first circle 8 and outside circle 16 Roses and I would prefer the colors to be Dark and bright red yellow with Bronze and Pink and any other colors you may think suitable for the beds. . . . I think each circle should be one color[.] But-however your better Judgment will decide as you know best what colors are suitable[.]199

Ekin replied later regarding the roses that:

In regard to your suggestion to have each circle of the 4 circular beds contemplated of one color, my experience is that a variety of colors would be much more pleasing to the eye, and it will be best to have it so....Of the Roses ordered, there will be the following species, Tea, Bourbon, Anisette, and Perpetual, these

will thrive better if each of these varieties is place in a separate bed.200

The superintendent appears to have abandoned rose cultivation by the early twentieth century. A 1934 planting plan implemented by the CCC depicts five beds of canna lilies. Cannas appear in photographs of the area taken in 1934 (Figure 166).



FIGURE 166. Canna lilies in the cemetery in the early 1930s. Source: National Archives, Record Group 79: Records of the National Park Service, Records of the Branch of Engineering: Final Construction Reports, Box 1, Entry 75, "Report on Plating at Stones River National Military Park: Public Works Project No. 481, by Superintendent Richard B. Rudolph, dated February 6, 1935.

Only a few of the trees depicted on the 1892 plan (refer to Figure 22) can be found at the cemetery today. Remaining trees include five of the seven original Eastern red cedars that appear in a circular pattern on the plan on the north end of the cemetery, and another cedar to the south of the maintenance building. The circular pattern of cedars was likely a purposeful design element or may have been simply a natural grove. In addition, a ginkgo and a Southern magnolia found along the maintenance drive, as well as a hemlock, a Norway spruce, a tulip poplar, two other Southern magnolias, and a number of other Eastern red

- Fraley, citing Frame to Ekin, April 12, 1881, 198. handwritten transcripts "Letters Sent June 1, 1877-July 23, 1883."
- Fraley, citing Frame to Ekin, April 12, 1881, handwritten transcripts "Letters Sent June 1, 1877-July 23, 1883."
- Fraley, citing Ekin to Frame, April 16, 1878, microfiche of original ledger "Letters Received 1876-1881."

Fraley, citing Ekin to Frame, March 4, 1879, 195. microfiche of original ledger "letters Received 1876-1881."

Fraley, citing Frame to Ekin, September 15, 1879, handwritten transcripts "letters Sent June 1, 1877-July 23, 1883."

^{197.} Fraley, citing Frame to Saxton, April 15, 1884, original ledger on microfiche "Letters Sent July 27, 1883-July 30, 1890," 25.

cedars may also date from the nineteenth century planting period.

In 1876, cemetery staff created an on-site tree nursery at the suggestion of the Quartermaster Department. Superintendent Frame and his staff were sent out into the surrounding area to collect small trees for transplanting to the nursery. They were encouraged to collect a variety of species by Acting Assistant Quartermaster George M. Song, who declared: "... you have as many cedars set as I care to have; it is a great pity that you cannot get some other variety."201 The nursery was located in the lodge and service area between the east wall and the lodge.²⁰²

The variety of plants was increased in 1878 when Frame ordered and received 245 trees and 100 rose bushes, which were to be planted throughout the cemetery by 1881.²⁰³ The species list included Norway spruce, golden arborvitae (possibly a variety of Thuja occidentalis), white

201. George M. Song to Frame, February 22, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield. See also Song to Frame, February 9, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield; Song to Frame, February 12, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield; Song to Frame, February 29, 1876, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield.

202. Fraley, citing T. M. Robbins to the Quartermaster General, December 16, 1876, folder 33, photocopy of cemetery inspection report from STRI.

203. Fraley, citing Ekin to Frame, March 10, 1878, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number 373, Museum Collection, Stones River National Battlefield. This shipment was to include the following (it seems that a few substitutions were later

pine (likely *Pinus strobus*), "box tree" (either box elder, Acer negundo, or boxwood, Buxus sp.), Japanese quince (listed as Pyrus japonica), variegated althea (likely Hibiscus syriacus), Retinospora (possibly false cypress, Chamaecyparis obtusa), magnolia (likely Southern magnolia, Magnolia grandiflora), Irish juniper (likely Juniperus communis), forsythia (Forsythia sp.), and mountain ash (possibly *Fraxinus* sp.). Mountain ash was pointed out specifically as doing extremely well in the Nashville area.²⁰⁴ It should be noted that despite Olmsted's early warnings, one of these species—white pine—is notoriously fast growing and weak wooded.

The trees were designated for planting in the burial grounds and the roses for the creation of an ornamental garden near the superintendent's lodge as noted above. Unfortunately, nearly all of the trees planted in this campaign died by August 1881 due to a lack of rain, and Frame had to order replacements that year.²⁰⁵ In 1882, Frame

- made): 35 Norway Spruce, 40 Golden Arbor Vitae, 30 Retinospora, 20 White Pines, 20 Magnolias, 20 Box Trees, 20 Irish Junipers, 20 Pyrus Japonica, 20 Forsythia, 20 Althea Variegated, and 10 Mountain Ash.
- 204. Fraley, citing Ekin to Frame, March 10, 1878, microfiche of original ledger "Letters Received 1876-1881." The list included here is taken from notes in the ledger, which mixed common and scientific names; where species are not clear from the information given in the ledger, they are listed as "possibly" or "likely" in the text above. Also note that scientific names for plants have changed from that period to the present.
- 205. Fraley, citing Frame to Ekin, August 11, 1881, ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield; and Ekin to Frame, January 1, 1881, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number STRI 373, Museum Collection, Stones River National Battlefield. The Quartermaster Department accepted Gall's recommendation and placed an order for the following trees and shrubs: 30 Norway Spruce, 40 Golden Arborvitae, 30 Retinospora, 20 White Pine, 20 Magnolia, 20 Irish Junipers, 20

requested additional canopy trees, as well as some fruit trees.²⁰⁶

In 1882, a brick rostrum with a wood trellis roof was constructed at the west end of the burial grounds area. Frame ordered vines, including English ivy, Chinese wisteria (likely Wisteria sinensis), Virginia creeper (Parthenocissus quinquefolia), and trumpet creeper (likely Campsis radicans) for planting at the rostrum to cover the overhead trellis.²⁰⁷ Overall, the rostrum project won the inspectors' approval; in March 1883, Quartermaster Inspector James Gall wrote that "the Rostrum is beautifully located in a grove of native trees, is in fine condition and will be very greatly appreciated by people who attend the Decoration ceremonies."208

Gall complimented the process of cemetery improvement that had proceeded since Robbins's first negative observations in 1876. In 1883, Gall wrote that "the whole place has wonderfully improved in condition and in all its appointments during the past few years and seems now to receive the very best of care from the Superintendent." He added that "no more trees or shrubs will be required for this cemetery."209

Superintendent Frame and his staff worked for the next several years to maintain the cemetery. Tree

> Box Trees, 20 Pyrus Japonica, 20 Forsythia, 20 Althea Verigata, and 100 roses. Note the similarity with the previous order.

trimming was limited to pruning to remove dead wood and maintain the form and structure of the trees. Staff removed and replaced dead trees and reseeded lawn grasses. Relieved from new planting projects for a short time, cemetery personnel could focus on repairs to the lodge and the ongoing project of repointing the cemetery wall.

Eight years later, in 1891, the Quartermaster Inspector directed the staff to remove the Osage orange hedge that lined the cemetery wall and to plant English ivy in its place.²¹⁰ That year had been one of the driest on record, so to provide for the newly-planted ivy and some additional vines at the rostrum, an old well next to the Old Nashville Highway was reopened.²¹¹

During the next few years, the English ivy quickly grew to cover all four walls of the cemetery. When, in 1896, Superintendent Edwin P. Barrett wrote to the Quartermaster Department requesting the addition of a gated entrance to the cemetery, he explained:

The inside of the wall is covered with Ivy plant, or would be if visitors arriving on excursion trains would not climb on the wall when leaving the grounds to reach their trains, but in climbing over they tear the Ivy loose and it is impossible to keep them from doing so, as the wall extends over 1300 feet along the track, and

- number STRI 374, Museum Collection, Stones River National Battlefield.
- R. C. Taylor to J. W. Scully, July 15, 1891, 210. microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number STRI 372, Museum Collection, Stones River National Battlefield; R. C. Taylor to J. W. Scully, December 10, 1891, microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number STRI 372, Museum Collection, Stones River National Battlefield.
- 211. Frame to Rufus Saxton, May 16, 1887, microfiche of original ledger, "Letters Sent July 27, 1883-June 26, 1890," catalog number STRI 3237, Museum Collection, Stones River National Battlefield; Taylor to Scully, July 15, 1891, microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number STRI 372.

^{206.} Fraley, citing Frame to Ekin, January 5, 1882, "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield.

^{207.} Fraley, citing Frame to Ekin, March 27, 1883, microfiche of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield.

^{208.} Fraley, citing Ekin to Frame, April 14, 1883, microfiche of original ledger "Letters Received February 5, 1881-December 5, 1883," catalog number STRI 374, Museum Collection, Stones River National Battlefield.

Fraley, citing Ekin to Frame, April 14, 1883, microfiche of original ledger "Letters Received February 5, 1881-December 5, 1883," catalog

they climb over the nearest point. . . . Last September there were at least 2,000 visitors here by rail road and the Ivy was damaged very much.... Memorial day there are trains run hourly . . . the visitors (about 75 percent are negroes) will climb the wall. . . . If there were no Ivy plants it would not make so much difference, but it is quite noticeable that the three other walls are entirely covered with the plants, while the one next to the rail road is torn loose in places. . . . The only entrance available is a small gate near the stable about 400 feet from the railroad, approached by a lane belonging to the adjoining farm, where cows, pigs &c herd at times and is in a filthy condition, and visitors, at least a large per cent, will not use in entering or leaving the ground.... I am assured by one of the rail road agents that if a gate is put in place the R.R. company will erect a suitable platform alongside the track for the accommodation of visitors.212

The English ivy eventually became troublesome; as it was meant only to ornament the inside of the cemetery walls, cemetery staff spent much time keeping it trimmed from the top of the wall. The ivy also began to climb trees in the cemetery and had to be removed. It persisted in the cemetery well into the middle of the twentieth century, appearing in photographs as late as the 1930s. Most of the ivy had been removed from the boundary wall by the time the brick residences were constructed in the cemetery in the early 1960s, but continued to be a problem in

association with several trees near the residences into the late 1990s, including a large ginkgo. Concerted efforts by park staff were needed to remove ivy from these trees, although some was also removed when the trees died.

During the first quarter of the twentieth century, the cemetery staff focused more on the failure of the lodge structure and other issues including the installation of plaques and memorials, and preparation for and cleanup after annual Memorial Day celebrations at the cemetery.

In 1927, Congress authorized the establishment of Stones River National Battlefield, and administration and management of the cemetery was transferred to the U.S. War Department as part of the battlefield park. The War Department appointed an "Officer in Charge of the Park" to oversee development, and to serve as superintendent of the cemetery. Melroe Tarter was initially named cemetery superintendent in charge of daily operations, and later became superintendent of the entire battlefield.²¹³ Tarter remained in this position after the battlefield was transferred to the jurisdiction of the National Park Service in 1933.

This period marked the cemetery's first "modernization" campaign. In August 1929, Tarter acquired the cemetery's first motorized lawnmower. In the same year, a seventy-five foot deep well was drilled behind the superintendent's

- 212. Edwin P. Barrett to John L. Clem, January [?], 1896, microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number STRI 372, Museum Collection, Stones River National Battlefield.
- George M. Chandler to the Quartermaster General, "Stones River National Military Park," memo, July 15, 1929, folder 337 "F-1423 Working Funds," box 24, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield; John T. Harris to Geo. M. Chandler, "QM 121.2 A-M (Stones River) 1st Ind.," memo, July 14, 1930, folder 337 "F-1423 Working Funds," box 24, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National

Battlefield; John T. Harris to H. J. Connor, "Transmittal of Pay Rolls," memo, August 7, 1930, folder 337 "F-1423 Working Funds," box 24, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield: John T. Harris to Geo. M. Chandler, "QM 121.2 A-M (Stones River) 1st Ind.," memo, July 14, 1930, folder 337 "F-1423 Working Funds," box 24, catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield. See also Ann Wilson Willett, A History of Stones River National Military Park (M.A. thesis, Middle Tennessee State College, 1958), 82.

house; the well was deepened to 100 feet in 1935 to support the needs of the park.²¹⁴

In the mid-1930s, crews from the PWA and the CCC were employed to work at the battlefield park and the cemetery. They improved drainage along the Nashville Highway and planted ornamental shrubs throughout the cemetery to serve as vegetative screens, primarily along the south boundary wall, although some were also planted in the northwest corner. They also planted trees to replace many lost to storm damage.

A planting plan for the cemetery dated June 1, 1934, provides an overview of existing and proposed plantings (refer to Figure 38). Plants identified in this plan by name only are assumed to have been existing and plants identified by a name and a number indicating how many specimens to plant are assumed to be proposed. This can be further verified by photographs taken in 1934 prior to the new planting campaign, which show the existing plants (Figure 167 and refer to Figure 166). None of these plants are in evidence in the cemetery today.



FIGURE 167. Existing plantings in the cemetery (at right) in 1934, prior to the new planting campaign. Source: Stones River National Battlefield Archives, image STRI-ICP-0438.

Existing trees included white spruce (possibly Picea glauca), red cedar (likely Eastern red cedar, Juniperus virginiana), maple (Acer sp.), sycamore (Platanus occidentalis), white pine, Norway spruce, box elder (Acer negundo), white ash (Fraxinus americana, possibly misnamed mountain ash in earlier lists), walnut (Juglans sp.), magnolia (likely Southern magnolia), gingko, mulberry (*Morus* sp.), tulip poplar, hemlock, oak (Quercus sp.), larch (Larix sp.), cherry (Prunus sp.), hickory (Carya sp.), and persimmon (*Diospyros* sp.).²¹⁵ Shrubs appeared in an irregular pattern throughout the cemetery, likely remnants of the ornamental designs of the late-nineteenth century. Evergreens included privet (likely Ligustrum japonicum), "box" (likely boxwood), and arborvitae (Arborvitae sp.). Deciduous shrubs and small ornamental trees included mock-orange (possibly Philadelphus maculatus), althea (Hibiscus sp.), spirea (Spiraea sp.), hydrangea (Hydrangea sp.), hawthorn (possibly Crataegus sp.), forsythia, lilac (Syringa sp.), and rose. Perennial cannas were growing in five flower beds and peonies (Paeonia sp.) were identified in a bed adjacent to the superintendent's house.

Screening plantings were concentrated along the inside of the perimeter wall, generally along its east and south sides. Proposed species included honeysuckle (Lonicera sp.), forsythia, peach (Prunus sp.), barberry (Berberis sp.), althea, spirea Van Houttei (Spiraea × Van Houttei), dogwood (Cornus florida), and fragrant sumac (Rhus aromatica).

Additional plantings were proposed for the superintendent's residence, including barberry, privet, Van Houttei spirea, Pfitzer juniper (Juniperus Pfitzeriana), holly grape (likely grape holly, Mahonia sp.), althea, and peach. Photographs taken after the project was complete show that at least some of these proposed plantings were actually installed (Figure 168). None of these plants were identified in the field investigation for this report. In 1935, an ice storm caused extensive tree damage (Figure 169). It is

215. Only common names were provided on the planting plan.

Fraley, Chapter 4, page 3, citing Financial 214. Ledgers.

thought that PWA workers responded by planting seedlings along the inside of the cemetery wall.²¹⁶



FIGURE 168. Plantings at the perimeter wall in front of the superintendent's residence. Source: Stones River National Battlefield Archives, image STRI-NN-0163.



FIGURE 169. In 1935, an ice storm caused extensive tree damage in the cemetery. Source: Stones River National Battlefield, Fraley, image sectm1934.

Much of the vegetation identified in the 1930s within the cemetery walls was lost by the end of the Mission 66 program. Many of the plants in the lodge and service area were removed when it was graded for new housing and the relocation of the superintendent's lodge in the 1960s. Plants remaining from the period before the 1960s include a large gingko growing along the service drive and a large Southern magnolia growing adjacent to the lodge site.

In 1964, a new planting scheme was proposed for the area between the west wall of the cemetery and the edge of the burial grounds (Figure 170). Eastern red cedar trees were later planted between 1967 and 1974 in staggered rows to provide a vegetative screen between the burial grounds and the lodge and service area. These survive today.

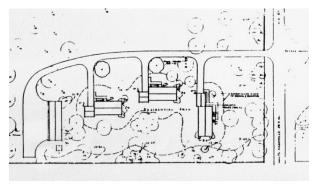


FIGURE 170. Detail of the 1964 planting scheme, for the area between the west wall of the cemetery and the west edge of the burial grounds. Source: Stones River National Battlefield, *Fraley, image 64plan*.

A curved planting bed was also designed along the inside of the west boundary wall that is not in evidence today.

A curved length of stone retaining wall exists on the north side of Building 6 that may have been built to protect a tree when the southernmost residence was constructed, but the tree is no longer present.

Shrubs were planned for the corners and entrances of the residences. Most of these have been replaced, some during the 2010s. Additional trees may also have been included to supplement those already present. This plan does not appear to include any changes to the vegetation within the burial grounds.

^{216.} Fraley, Chapter 4, page 3, citing Financial Ledgers.

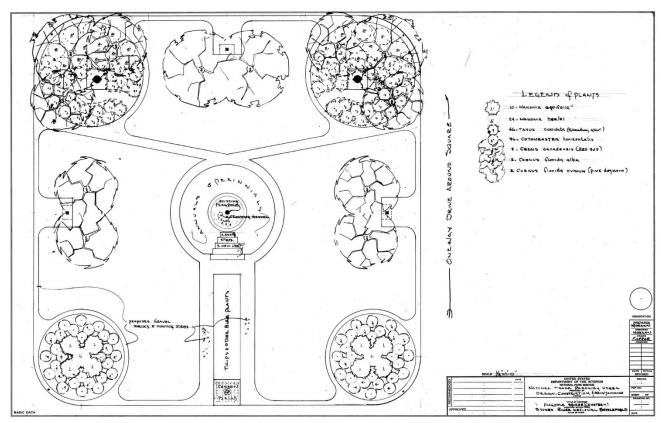


FIGURE 171. Planting scheme for Lincoln Square, 1970s. Source: Stones River National Battlefield Archives, image STRI CEM 0007 GP 5.

In 1975, park staff undertook an extensive planting campaign within the burial grounds area. They searched for, but did not find, the original planting plans from 1864. They were, however, able to locate the as-built plan from 1892 that included trees that had likely survived from plantings installed circa 1865 (refer to Figure 21). The 1975-1976 planting campaign interpreted this original concept by replacing evergreens to match the patterns indicated in the earlier plan.

Numerous trees planted during this campaign survive today, although many have also been lost to damage and disease. In 1981, the park replaced In addition to plans prepared for planting the cemetery avenues, a new planting scheme was developed for Lincoln Square in 1970 (Figure 171).²¹⁸ It called for a symmetrical framework of gravel paths and mowing strips, and paths leading to the flagpole and to three "Bivouac of the Dead" plaques arranged around it. The gravel path to the flagpole was divided by a bed of tulips and other bulbs. The flagpole mound was

fifty-five trees in the cemetery and hired a tree surgeon to trim and treat forty-three others. In 1985, a local nursery donated several additional trees to the cemetery.²¹⁷

^{217.} Donald E. Magee, "Superintendent's Annual Report of Stones River National Battlefield and Cemetery for Calendar year 1985," February 27, 1986, page 7, folder 157 "A-2621 Annual Reports," box 1, catalog number 4242, **Stones River National Battlefield Central Files** Collection, Stones River National Battlefield. (Per discussion with STRI staff in December 2012, the park does not have any records related to the trees donated at that time.

However, Bobby Simerly, former maintenance chief, noted that a local nursery donated trees in exchange for cuttings from the ivy on the cemetery wall.)

^{218.} Acting Regional Director, Southeast Region to Superintendent, Stones River," Cemetery Planting," February 6, 1970, Folder 46, Box 3, Project Files, "A-56 Interments," Stones River National Battlefield Central Files Collection, Stones River National Battlefield.

designed to be planted in annuals and perennials. Around the standing cannons, beds of spreading yew (Taxus cuspidata) and Oregon grape holly (Mahonia aquifolium) were designed and ornamented with dogwood and redbud. In the two opposite corners were matching beds of leatherleaf mahonia (Mahonia bealei) and rockspray cotoneaster (Cotoneaster horizontalis). Three pairs of redbuds were planted between the flagpole and the plaques. The design was implemented and appears mature in a photograph possibly taken in the late 1970s (Figure 172). Today, all that remains of the plantings are a few of the yews around the cannons and one dogwood on the northeast corner of Lincoln Square. There are no gravel mowing strips, presumably having been lost to Bermuda grass. Areas that were to be used for bulbs, annuals, and perennials are now covered in Bermuda grass.



FIGURE 172. The plantings at Lincoln Square in the 1970s. Source: Stones River National Battlefield Archives, image STRI-8X10P-0288.

In 1986, the park superintendent reported that in the previous year:

...low temperatures caused considerable damage.... Over 125 shrubs and trees were killed in the National Cemetery and Battlefield. Most of the Buford Holly and boxwood were killed outright. One outstanding boxwood in section K of the Cemetery measuring 20 feet high and 43 feet 6 inches in circumference was lost. All of the leaves of the Southern Magnolia trees turned brown and fell off. Recover of the trees during the rest of the year was slow. There were no spring buds on the dogwoods or redbuds....²¹⁹

This was another example in a century of struggles to maintain an ornamental landscape within the cemetery. Cemetery and park staff reported numerous events of severe weather damaging or killing plants and trees, with conditions ranging from high winds, to deep freezes, to summer droughts. Strained budgets and limited staff have made the replacement of ornamental shrubs and perennials a low priority. With the exception of the yews planted in Lincoln Square and a handful of shrubs at the cemetery entrance, all of the shrubs planted in the nineteenth and twentieth centuries are gone.

Maintaining the Lawn. When it was first laid out by Means in 1864–1865, the cemetery grounds were likely kept in pasture to protect against the growth of trees and shrubs. The 4 acres of land added to the west of the cemetery for the superintendent's lodge in 1871 would have been in similar condition. After the Civil War, the cemetery was scraped clean of vegetation to prepare for the burials and its avenues were paved in gravel. As mentioned above, a photograph from 1865 shows the graves and Lincoln Square planted in grass and a few evergreens placed along the avenues (refer to Figure 6).

Maintenance challenges began within ten years of the completion of the original plantings, likely due to the thin and infertile soils. In 1876, Quartermaster Inspector T. M. Robbins reporting

Calendar Year 1986," February 2, 1987, Donald E. Magee, page 15.

^{219.} "Superintendent's Annual Report of Stones River National Battlefield and Cemetery for

on his visit to the cemetery, described the following:

> Ravages of Moles: The damage to sod and grass roots caused by moles is greater at this Cemetery, than at any other I have visited. With the exception of two or three of the lately filled sections, their destructive energy is visible everywhere.220

He suggested a planting of castor bean, which had been effective in mole control at Fort Scott, Fort Leavenworth, and the Jefferson Barracks. It is not known if this was ever attempted; moles continue to be present within the cemetery today.

Possibly in response to the perceived mole problem, in 1879 the cemetery avenues were transformed into greenswards with bluegrass, as mentioned above. Cemetery staff graded the avenues, adding topsoil imported from off-site, then rolled and seeded them to extend the expanse of lawn across the entire cemetery.²²¹ This left only the central drive, the loop around Lincoln Square, and the access drive to the superintendent's house and stable in gravel.

The War Department and its Quartermaster officials required national cemeteries to cultivate and maintain manicured lawns and invested large sums of money to grade, fertilize, and seed the burial grounds at Stones River.²²² Cemetery staff attempted to match these requirements focusing on the quality of the lawn. Staff relied on the Quartermaster Department to provide the soil amendments necessary to keep the grass healthy and acquired tons of manure and bone meal to spread throughout the cemetery. When the soil was prepared, staff sowed 50 bushels of bluegrass seed and 20 pounds of white clover.²²³

The area of Tennessee in which Stones River National Cemetery is located is on the southern edge of the climate where bluegrass thrives, and cemetery staff had a difficult time keeping the turf alive in the hot summers of the area. In 1881, Superintendent Frame reported: "I think the Blue Grass is all killed, roots burned up."224 Frame continued to try and cultivate bluegrass in the cemetery and vowed to plant the seed in January for maximum root development before the summer.225

- 220. Report written by T. M. Robbins, C.E. Q. M. Dept. to the Quartermaster General U.S.A., Washington D.C., December 16, 1876, Museum Collection, Stones River National Battlefield.
- 221. Frame to Ekin, February 9, 1880, transcript of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield.
- 222. Fraley, 4.
- Ekin to Frame, January 13, 1881, microfiche of original ledger "Letters Received September 30, 1876-February 2, 1881," catalog number STRI 373, Museum Collection, Stones River National Battlefield; Frame to Ekin, January 28, 1881, transcript of original ledger "Letters Sent June 1,1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield; Ekin to Frame, February 2, 1881, transcript of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield.
- Note that "bluegrass" is the common name usually used today to describe Poa pratensis, also known as Kentucky bluegrass. The scientific name of the species used in the nineteenth century was not noted and because the site is on the far southern range of Kentucky bluegrass it is possible that another species locally known as bluegrass was used instead.
- 224. Frame to Ekin, August 11, 1881, microfiche of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield.
- 225. Frame to Ekin, December 20, 1881, microfiche of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield; see also Frame to Ekin, January 9, 1882, microfiche of original ledger "Letters Received February 5, 1881-December 5, 1883," catalog number STRI 374, Museum Collection, Stones River National Battlefield.

Superintendent Frame was required to maintain a manicured lawn throughout the cemetery, but found the standards of the Quartermaster Department difficult to meet with his small staff and equipment consisting of a clipper mower and some scythes for trimming around the headstones. To help, the department provided a horse-drawn lawnmower to save on labor costs and even developed specifications for mowing the lawn after an inspector complained about its condition in 1885.²²⁶ Frame, however, was also concerned about the inefficiency of the horse lawnmower, writing:

I would respectfully state that in compliance with your letter of instructions of the 18th inst[ant] I divided the Burial Sections between two Laborers giving to Each 3072 graves. I find that after the sections are cut over with Horse Lawn mower a Laborer can cut with Hand Lawn mower between headstones cleaning around stones with scyth[e] and hands from 600 to 700 stones per day. At this rate it would take two men five days to clean up burial sections. It takes one man two days to cut grave sections and walks with horse Lawn mower and three days to cut vacant lots and lot round Lodge this lot has to be cut with hand Lawn mower.227

Lawn maintenance continued to challenge maintenance staff. In 1887, Frame ordered 20 bushels of bluegrass seed, stating that the entire cemetery lawn needed to be re-sown.²²⁸

226. Fraley, noting that for information about tension between cemetery superintendents and quartermaster officials concerning horse lawnmowers see T. M. Robbins to Quartermaster General, December 16, 1876.

Superintendent Taylor, who replaced Frame around 1890, developed the following plan for rehabilitating the lawn:

In this cemetery there are many places where the grass is scant, with no white clover whatever. I intended to rake in clover seed, in these places, sowing no blue grass seed. Thus the white clover seed would have been utilized. The Red Clover seed I had intended to use on the outside lot adjoining & planting the "Hazen Brigade" lot, where the soil has been taken out for use in this Cemetery, for filling grave &c. I thought it a good idea to harrow over the ground, after we had got through the soil hauling, which will be required to fill graves this winter and then sowing the Red Clover Seed there, that the ground might be improved, and look better from the Pike on which it fronts.229

In 1892, Taylor proposed that grave sections that were "nearly entirely denuded of Grass" be plowed over, fertilizer added, and be completely reseeded.²³⁰ Bluegrass and clover had been the original mix, but in 1913, the Quartermaster Department suggested this formula:

10 lbs. ex. fancy Kentucky bluegrass, 5 lbs. Red Fescue (recleaned) 2 lbs. Red Top (recleaned) 1 lb. white clover 18 lbs. equaling 1 bushel Seed to be sowed 5 bushels to the acre.²³¹

- 228. Frame to Rufus Saxton, May 16, 1887, microfiche of original ledger, "Letters Sent July 27, 1883-June 26, 1890," catalog number STRI 3237, Museum Collection, Stones River National Battlefield.
- F. R. C. Taylor to J. W. Scully, October 30, 1891, 229. microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number 372, Museum Collection, Stones River National Battlefield.
- 230. Taylor to Scully, July 11, 1892, microfiche of original ledger "Letters Sent July 10, 1890-August 3, 1912," catalog number STRI 372, Museum Collection, Stones River National Battlefield.
- 231. H. R. Perry to Frame, August 14, 1913, microfiche of original ledger "Letters Received

^{227.} Ekin to Frame, May 23, 1878, microfiche of original ledger, "Letters Received September 30, 1876-February 2, 1881," catalog number STRI 373, Museum Collection, Stones River National Battlefield; Frame to Ekin, June 4, 1878, transcript of original ledger "Letters Sent June 1, 1877-July 23, 1883," catalog number STRI 3236, Museum Collection, Stones River National Battlefield.

Cemetery staff also struggled to maintain the turf that covered the floor of the rostrum that was constructed in 1882. They experimented with seed and then sod, but eventually gave up and installed gravel.232

In 1929, the cemetery acquired its first motorized lawn mower.²³³ This, along with assistance from the PWA and CCC, likely helped considerably with lawn maintenance for the next decade. During World War II, however, labor was scarce and money scarcer. In August 1948, one Quartermaster Inspector reported that "at the entrance and along the roadways, over hanging grass marred the appearance. . . . Lawns have not been mowed for some time and the appearance of the lawn indicated lack of care."234

Lawn care has continued to be the primary focus of cemetery maintenance staff. Solutions to caring for such a large and complex lawn have varied. One consisted of a rider mower with a trailer on which two workers armed with lawn trimmers sat in wooden captain's chairs facing in opposite directions so that trimming of either side of the aisle might occur simultaneously (Figure 173). Safety regulations discourage similar solutions today, so staff relies on rider mowers and string trimmers.

Today, the turf within the cemetery is primarily Bermuda grass, combined with other turf grasses and low herbaceous lawn species in varying combinations depending on available light. Park staff continues to struggle with turf maintenance issues. While open lawn can be cut with rider mowers, trimming around headstones is challenging. The invention of string trimmers led to a more manicured aesthetic character within the cemetery, as it was easier to cut around the headstones. However, string trimmers have also

caused extensive damage to the grave markers and other features.



FIGURE 173. Rider mower with trailer used to cut grass in the cemetery in the 1970s. Source: Stones River National Battlefield Archives, image STRI-4X5P-1189.

Contributing.

- Turf lawn
- Evergreen trees along avenues and clustered around Lincoln Square
- Deciduous trees along the avenues and in lawn panels
- Eastern red cedar, ginkgo, and Southern magnolia, hemlock, Norway spruce, and tulip poplar trees surviving from the nineteenth and early twentieth centuries
- Grass-surfaced avenues
- Eastern red cedar trees planted in rows and groves for screening east of the original rostrum location in 1967
- Shrub plantings in Lincoln Square
- Yews and dogwood planted in 1970 in Lincoln Square

Non-contributing.

- Trees planted in 1975–1976 campaign
- 234. Charles W. Berry, Jr., Lt. Col. AMC, to Chief, Memorial Division, "Report of Official Travel," memo [1948], folder 37 "A-58 Interments: Correspondence," box 2, catalog number STRI 4350, Cemetery Project Archives, Stones River National Battlefield.

August 24, 1890-July 26, 1920," catalog number STRI 377, Museum Collection, Stones River National Battlefield.

^{232.} Fraley, Chapter 3, 18.

^{233.} Fraley, Chapter 4, 3.

- Eastern red cedar trees planted in rows and groves for screening west of the original rostrum location in 1978–1979
- Bermuda grass turf
- Turf rostrum floor
- Shrub plantings around the staff housing units and at the main entrance gate

Missing.

- Osage orange hedge
- Vegetable garden
- Pyracantha hedge
- Grape arbor
- Fruit trees and shrubs
- Ornamental trees and shrubs in superintendent's lodge environs
- Lawn vases planted with flowers and vines
- Four lozenge-shaped beds of roses
- Five beds of canna lilies
- Tree nursery
- English ivy, Chinese wisteria, Virginia creeper, and honeysuckle vines trained on rostrum
- English ivy on boundary wall
- Vegetative screen planted in the 1930s
- Bluegrass lawn
- Possible corps badge plantings

Buildings and Structures

Several historic structures located within the Stones River National Cemetery landscape were built during the period of significance and survive with integrity today. These include the perimeter limestone wall, three staff residences (Buildings 4, 5, and 6), a stone retaining wall, a well house (Building 7), and the maintenance shop. Buildings and structures that have been added since the end of the period of significance include the replica rostrum, and a number of maintenance- and utility-related buildings and structures.

The most notable features missing from the period of significance are the former superintendent's lodges; a brick stable; a laborer's house, barn, buggy house, shed, privy, henhouses, and other support structures. The historic chronology of development of the surviving resources is outlined below.

Perimeter Wall. The cemetery is surrounded by a limestone masonry wall built between 1865 and 1871. The wall has required continual maintenance and repair, including repointing of mortar joints (Figure 174) and occasional reconstruction to address damage due to storms, vehicle accidents, and general deterioration (Figure 175). A drain hole was cut through the base of the wall in the 1980s or 1990s to alleviate flooding within the southwest corner of the cemetery.

Most recently, a 60-foot-long section of wall required repair after being damaged by a tree that fell during the tornado that passed through the area on April 10, 2009. Most, if not all, sections of the wall have been repointed since the late 1970s. Nonetheless, the majority of the existing stone units are original. The capstones installed during repair work, however, are generally replacements composed of a compatible stone material. In some cases, though, concrete has been used to replace deteriorated capstones, which has diminished the integrity of materials. The use of concrete and differences in weathering between the original and new stones results in an uneven appearance of the wall along its top. Despite these changes, the wall survives with sufficient integrity to continue to

convey its historic associations and contributes to the significance of the national cemetery landscape.



FIGURE 174. Repointing the perimeter wall along the railroad, circa 1980s. Source: Stones River National Battlefield Archives, image STRI-4X5P-1307.



FIGURE 175. Reconstruction of a portion of the perimeter wall, circa 1930s. Source: Stones River National Battlefield Archives, image STRI-AN-035b.

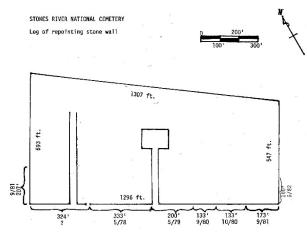


FIGURE 176. Key plan showing repointing work completed through May 1982. Repointing of the remainder of the wall continued into the early 1990s. Source: Stones River National Battlefield Archives, file CW1, "Log of Repointing Stone Wall," 1982.

Rostrum. A replica of the brick and wood rostrum, originally built in 1882 and demolished in 1941-1942, was built in 2007 based on documentary evidence relating to the original design.²³⁵ Inconsistencies in the replica include the steps on the north and south ends, which are located at the east half, rather than the west half as in the original rostrum, and the use of contemporary construction materials and techniques. Thus the rostrum is not an accurate reconstruction and cannot be assessed as a contributing resource due to the fact that it postdates the period of significance (Figure 177 and Figure 178).²³⁶

because it was not present during the period of significance. However, the existing rostrum is commemorative in nature and could be reevaluated for inherent significance under the theme of commemoration once it reaches fifty years of age.

^{235.} NPS drawing 327-80015 dated July 2005.

^{236.} The guidance provided by National Register Bulletin: How to Complete the National Register Registration Form on distinguishing between contributing and noncontributing resources indicates that the replacement rostrum is in itself not a contributing feature



FIGURE 177. The rostrum, circa 1930, view looking southeast. Note the location of the stairs on the western half of the structure's north end. Source: Stones River National Battlefield Archives, image STRI-4X5P-1088.



FIGURE 178. The reconstructed rostrum, 2010, view looking southeast. Note the position of the stairs on the eastern half of the north end.

Superintendent's Lodge, Outbuildings, **Staff Residences, and Maintenance**

Buildings. In 1867, a temporary wood-framed lodge was built for the use of the cemetery keeper and to store the burial records of the cemetery. The structure was located across the Old Nashville Highway (known as the Nashville and Murfreesboro Turnpike at the time) from the burial grounds. This temporary structure was replaced by a stone masonry lodge in 1871 consistent with those designed for other national cemeteries by Army Quartermaster Montgomery C. Meigs. Correspondence from the early years of the cemetery indicates that other buildings constructed nearby as part of the administrative complex for the cemetery included a wooden structure occupied by laborers, a barn, a wooden buggy house, and two hen houses. No specific documentation of the design, materials, or exact location of these 1870s outbuildings has been located.

As shown on an 1892 plan of the cemetery, the 1871 superintendent's lodge was an L-shaped building with a mansard roof (refer to Figure 12). Behind the lodge to the northeast was a small outbuilding. North of the lodge, closer to the west perimeter wall, was a stable. Three cisterns were located nearby, in front of and behind the lodge, and adjacent to the stable (Figure 179).

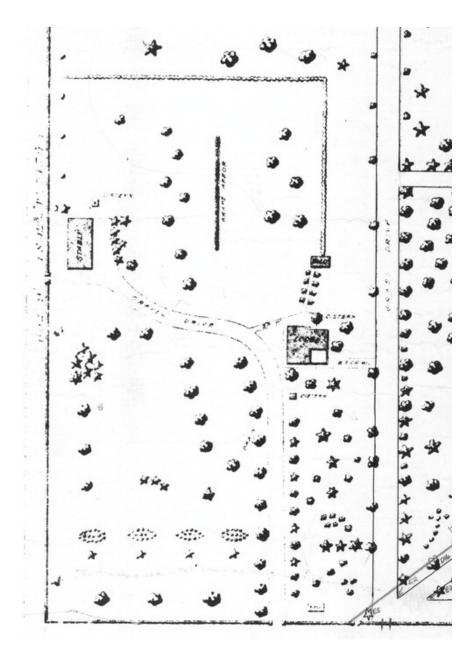


FIGURE 179. Detail of 1892 cemetery plan showing superintendent's lodge and outbuildings. The stable shown on this plan was replaced by a new brick structure on the same site in 1906. Source: Stones River National Battlefield Archives, image 0253.

The original stable was replaced in 1906 by a rectangular gable-roof red-brick structure with six-over-six double hung windows and a double door on the eastern facade (Figure 180).

The lodge, which had required extensive repairs, was demolished and replaced by a new residence on the same site in 1926 (Figure 181). By the 1930s, a pump house had been constructed behind the house; the nineteenth century stable and outbuilding still existed (refer to Figure 27). By the

1950s, as shown on National Park Service drawing 2029 dated January 18, 1954, the stable was being used as a utility building (Figure 182). The 1920s lodge and the two outbuildings remained. All of these buildings were demolished to accommodate the planned construction of staff housing during Mission 66.



FIGURE 180. Circa 1935 view of the brick masonry stable. Source: Stones River National Battlefield Archives, image STRI-ICP-0442.



FIGURE 181. The superintendent's lodge constructed in 1926. Source: Stones River National Battlefield Archives, image STRI-NN-0132.



FIGURE 182. By the 1950s, the stable was used as a utility and maintenance building. Source: Stones River National Battlefield Archives, image STRI-ICP-0400.

In 1962, construction began on these new dwellings and an adjacent maintenance complex that included a maintenance shop and well house. Work followed demolition of the earlier stable (Figure 183). Two of the new staff residences were completed in 1962, while the third residence, a

maintenance shop, and a well house were completed in 1963 (Figure 184 and Figure 185). A stone retaining wall was installed to protect the roots of a tree located north of Building 6 as grading was conducted to construct the foundation. This wall survives today, although the tree does not.

Prior to construction of the third dwelling, the 1926 superintendent's lodge was moved to a location along the Old Nashville Highway northwest of the park and abandoned. Although severely deteriorated, the building was still standing as of 2011.

Since 1963, several changes have been made to the residences, including the replacement of the original windows during the 2000s, as well as the original cedar shake roofs. Detailed records indicating the work involved in these changes could not be located for this project.

The maintenance shop was renovated in 2012. Work involved alteration of the original entrance and one original garage door, and the addition of new personnel doors.

These buildings survive with integrity from the Mission 66 period and contribute to the significance of the historic cemetery landscape.

Other buildings have been added to the maintenance area since the end of the period of significance, including a garage, metal storage shed, fuel tank, and a powder magazine first established in 1975 that has since been replaced. None of these buildings contribute to the significance of the cemetery landscape.



FIGURE 183. View of foundation construction for Quarters 6, June 1962. The former site of the stable is beyond, where disturbed earth is visible. The well house is visible at upper right in this view. Source: Stones River National Battlefield Archives, image STRI-ICP-1208.



FIGURE 184. The new staff residences under construction, September 1962. The maintenance office and shop building is visible beyond, at right in this view. Source: Stones River National Battlefield Archives, image STRI-Central Files 679.



FIGURE 185. The 1926 superintendent's lodge with a new staff residence beyond, circa 1963. Source: Stones River National Battlefield Archives, image STRI-ICP-1205.

Contributing.

- Perimeter wall
- Well house (1962)
- Staff residences and offices (Buildings 4, 5, and 6) (1962, 1963)
- Retaining wall behind Building 6
- Maintenance office and shop (1962; renovated 2012)

Non-contributing.

- Powder magazine (1975; replaced 2010s)
- Garage (circa late 1970s–1980s)
- Metal storage shed (circa late 1970s–1980s)
- Fuel tank (circa late 1970s–1980s)
- Replica rostrum (2007)

Missing.

- Original rostrum (1882)
- Temporary lodge (1867)
- Superintendent's lodge (1871)
- Laborer's house, barn, buggy house, and two henhouses (late 1860s or early 1870s)
- Brick stable (1906, addition 1930)
- Shed behind lodge (before 1892)
- Privy behind lodge (circa 1900)
- Superintendent's lodge (1926)

Small-scale Features

Many of the small-scale features located within Stones River National Cemetery survive with integrity from the period of significance and can be tied to its significant historic contexts, thereby constituting contributing resources. These features include many of the extant gates, grave makers, section markers, monuments and memorials, signs, and plaques. Those features that do not contribute are either additions that have been made to the landscape since 1974, or are replacements of earlier features that were not inkind. Several of the small-scale features included in the early cemetery design that were consistent with elements used throughout the national cemetery system, such as cast-iron tablets, castiron and wood settees, and cast-iron lawn vases, are no longer present within the cemetery landscape.

Fencing. The cemetery was first enclosed with a wooden picket fence between 1865 and 1871.²³⁷ E. B. Whitman, in his 1867 report, described it as: "A substantial picket fence of the prescribed pattern, 3294 feet in length has been erected about four feet inside the boundary line so as to afford room for the erection of a stone wall."238 In 1870, it was described as "in good condition . . . it needs a good many [repairs?], which so far [can?] manage with hammer and nails."239 In December 1870, the monthly report stated, "Fence is being removed and placed on the boundary line," suggesting that it may have been used to secure the cemetery during completion of the stone wall.²⁴⁰ The fence is missing from the site today.

Fencing was installed within the lodge and service area in the late 1970s to contain a maintenance yard and the powder magazine. This chain-link fencing does not contribute to the significance of the cemetery landscape.

Gates. Upon its completion, the cemetery perimeter wall included four gates, two for vehicles and two for pedestrians. The vehicular gates both faced the Old Nashville Highway and included the main entrance gate, aligned to the central cemetery drive, and the service gate, for a service drive leading to the superintendent's lodge. These two gates are shown in a plan of the cemetery from 1892 (refer to Figure 22). When first installed, the metal gates that spanned the limestone piers at the two vehicular entrances were of cast iron painted black, as indicated in superintendent's reports.²⁴¹

In 1896, Superintendent Edward P. Barrett suggested changes to the gates to improve the appearance and utility of the cemetery:

I respectfully recommend that a gate be placed there and suggest that the gate now over the main entrance (old pattern) be removed to the enclosing wall next to the rail road track, and a new modern gate; with drive gates in the center and small gates at the side for pedestrians, be put in its place; this will be, I think, the more economical as well as improve the looks of the front of the Cemetery, and I herewith respectfully submit an estimate in duplicate of the probably cost of the improvement.²⁴²

The expense was authorized. As implemented and documented in early-twentieth century photographs, the new service and main gates included concrete piers with pyramidal concrete caps (Figure 186 and Figure 187).²⁴³ The concrete caps, no longer part of the piers, may be located in

- 237. Fraley, Chapter 1, page 15 citing Whitman.
- 238.
- 239. Monthly Report of the Condition of Stones River National Cemetery at Murfreesboro Tennessee for the month of August 1870. Museum Collection, Stones River National Battlefield.
- 240. Fraley, Chapter 1, page 8 citing Monthly Cemetery Report, December 1870.

- Frame to Ekin, My 9, 1878, handwritten transcripts "Letters Sent July 1, 1877-July 23, 1883."
- 242. Barrett to John L. Clem, January [?], 1896, original ledger on microfiche "Letters Sent July 10, 1890-August 3, 1912," 112-113.
- 243. Note: these caps are currently located in the storage yard outside the cemetery boundary wall north of the maintenance area.

one of the park's storage areas. The piers were rusticated with horizontal grooves to give the appearance of masonry. In 1913, cast-iron plaques were added on the east pier of each gate (Figure 188; see also Figure 193).

Photographs from the early-twentieth century also show curving low stone curbs installed to contain the two driveways as they crossed over the drainage ditch that paralleled the Old Nashville Highway. These were likely installed as part of work completed in 1896. The curb at the main cemetery drive was later raised later to prevent vehicles from driving into the adjacent ditch. These curbs are not evident in the landscape today. There are, however, two low stone curbed planting beds on the inside of this gateway. It is not known when these were installed.

The vehicular gates were again reworked in 1937. Originally constructed for horse-drawn carriages, they were too narrow for motorized traffic. At the main entrance, both piers were demolished, the opening was widened from 12 feet to 16 feet, and two new concrete piers were built, matching the style of the 1896 piers. (See Figure 189 through Figure 194 for images of the gates over time.) At the service entrance, only the west pier was demolished, and the entrance was widened from 8 feet to 12 feet. A new west pier was built, matching the 1896 design.²⁴⁴ Because both gateways were widened as part of this work, the iron gates must also have been replaced or modified as part of this work to accommodate the wider opening.

The gates were again rebuilt in the early 1960s to widen the entrance road to meet the needs of larger vehicles, although the gate remains too narrow for a bus to enter easily today. The completion report for the cemetery wall repointing project prepared in 1964 also notes that the gate was "rebuilt, strengthened, and refinished according to its original design."245 The concrete gate piers were replaced with rusticated native limestone piers that match the limestone boundary wall.

The 1913 cast-iron plaque was removed from the service gate and reinstalled on the new west pier of the main gate. Reportedly, the circa 1937 iron gates at the main gate were repaired and reinstalled.²⁴⁶ The swinging gates at the service drive were removed and replaced with a pipe that slides out from the interior of the west pillar and wall to attach to the east pillar. A number of the original masonry units removed from the wall as part of the widening of the entrance are in storage in a lot just north of the cemetery.

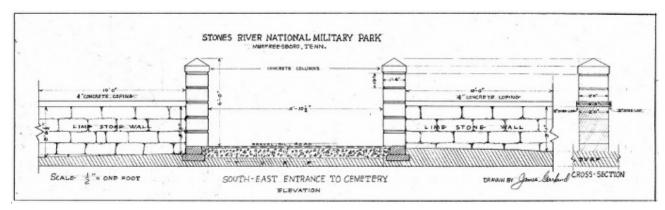


FIGURE 186. Drawing for the reconstruction of the cemetery entrance piers, circa 1896, showing concrete piers and stone curbs along the entrance drive. Stones River National Battlefield Archives, image STRI CEM 0025 GP 5.

^{244.} Fraley, Chapter 4, page 4, citing Willet, "A History of Stones River National Military Park," 83.

^{245.} Completion Report: Repointing Stone Wall around National Cemetery, September 1, 1964. Lawrence W. Quist, Superintendent.

Information derived from caption for image 246. STRI-Central Files 516.



FIGURE 187. Postcard view of the main gate, circa 1910, showing rusticated concrete piers constructed in 1896. This view predates the addition of a cast iron plaque to the east pier in 1913. Note raised stone curbs adjacent to the drive. Source: Stones River National Battlefield Archives, image STRI 4735.



FIGURE 188. View of the main entrance gate, circa 1935. Note the cast iron plaque on the east pier. Source: Stones River National Battlefield Archives, image STRI-ICP-0441.



FIGURE 189. The completed main entrance gate, circa 1937. Note the freshly repointed joints in the limestone wall adjacent to each pier, indicating the extent of the wall affected by the 1930s work. Source: Stones River National Battlefield Archives, image STRI-ICP-0405.



FIGURE 190. The reconstructed main entrance gate, circa 1961-1963. The cast metal plaque at the service entrance was moved to the west pier of the main entrance. The 1937 cast iron gates were repaired and reinstalled. Source: Stones River National Battlefield Archives, image STRI-Central Files 516.



FIGURE 191. Entrance from the Old Nashville Highway as it appeared in 2010.



FIGURE 192. The gates at the service entrance were cast iron. This view, circa 1934, shows the concrete piers constructed in 1896. Source: Stones River National Battlefield Archives, image STRI-ICP-0439.



FIGURE 193. The service gateway undergoing reconstruction, 1937. Source: National Archives, Record Group 79: Records of the National Park Service, Records of the Branch of Engineering, Final Construction Reports, 1934-1942.



FIGURE 194. The completed maintenance gate, March 1938. Source: Stones River National Battlefield Archives, image STRI-ICP-0440.

As noted above, the cemetery wall originally included two pedestrian gates. One pedestrian gate was located east of the service gate, at the end of one of the radiating avenues, and served as the primary entrance from the Old Nashville Highway. A second pedestrian gate was located adjacent to the stable near the middle of the west wall. These two gates are shown in a plan of the cemetery from 1892 (refer to Figure 22).

In 1896, a third pedestrian gate was installed on the north wall almost directly opposite the

entrance on the Old Nashville Highway side. It was added in response to the pleas of Superintendent Barrett, who complained of the destruction caused by visitors climbing over the wall after arriving by rail.

In a 1963–1964 construction campaign associated with the Mission 66 program, the cemetery boundary wall was repointed, and the three pedestrian entrances were closed and walled in.²⁴⁷ The current pedestrian gate along the Old Nashville Highway was reopened by 1977.²⁴⁸ During the early twentieth century, this entrance featured a simple cast iron picket gate (Figure 195). As part of its reestablishment, a black-painted, flattopped picket gate was used (Figure 196). Also, as reestablished, the piers were constructed flush and integral with the perimeter wall. Originally, the pedestrian gate piers projected slightly forward from the wall. This gate post-dates the period of significance and does not contribute to the significance of the historic cemetery landscape.



FIGURE 195. Detail of a circa 1930s photograph showing the pedestrian gate along the Nashville Highway. Source: Stones River National Battlefield Archives, image STRI-ICP-0434.

248. Correspondence by Gib Backlund, STRI, with Teresa Watson, STRI, December 2012. See also Completion Report: Repointing Stone Wall around National Cemetery, September 1, 1964. Lawrence W. Quist, Superintendent.

^{247.} Fraley, Chapter 5, citing Completion Report: Repointing Stone Wall around National Cemetery, September 1, 1964. Lawrence W. Quist, Superintendent.



FIGURE 196. The reconstructed pedestrian gate, 2010, seen from the opposite angle. The piers as constructed are different from those shown above circa 1930s, with the cap at the top of the wall extending through the pier rather than stopping at the pier face.

Grave Markers. When the cemetery was first established, each grave was identified with a wooden headboard, painted white and lettered with the soldier's name, rank, company, regiment, and date of death.²⁴⁹ These headboards, however, deteriorated rapidly and by 1870, the superintendent reported that they "all show signs of rot with many of them rotted off at the ground."250 In 1873 and 1874, the Quartermaster Department ordered new marble markers to replace the wooden headboards, which were deteriorating. These were installed in 1876.251 Most of these marble markers survive today (Figure 197 and Figure 198).



FIGURE 197. Grave markers in Section B in Stones River National Cemetery, 1935. Source: Stones River National Battlefield, Fraley, image sectb1935.



FIGURE 198. Grave markers in Section B in Stones River National Cemetery, 2010.

Mixed in amongst the standard marble markers are unique markers which were privately funded and placed by family members of the deceased soldiers in the years immediately following the Civil War. Cemetery sections established after 1900 contain headstones with Spanish-American War and World War II-era designs that are distinct from those that honor the Civil War dead. All of these grave markers were installed during the period of significance and contribute to the significance of the historic cemetery landscape.

^{249.} Roll of Honor No. XI: Names of Soldiers Who Died in Defence of the American Union, Interred in the National Cemeteries at Chattanooga, Stone's River, and Knoxville, Tenn., 228.

Fraley, Chapter 1, citing "Cemetery Monthly Report for December 1870," Record Group 92, national Archives, Washington, D.C.

Fraley, Chapter 1, citing Capt. A. J. McGonnigle A.Q.M., U.S. Army and DeWitt C. Sage, Contract, December 31, 1873, catalog number STRI 4013, Museum Collection, Stones River National Battlefield; McGonnigle and Thomas P. Morgan, contract, December 31, 1873, catalog number STRI 4014; and Robbins to Quartermaster General, December 16, 1876.

In 1986, a headstone and section marker replacement program was initiated by the park. Because the Department of Veterans Affairs (VA) would only issue modern standard-sized replacement headstones, the park engaged a local stonecutter to resize the stones to match the Civil War era proportions.²⁵² The marker stones are regularly reset, repaired, or replaced as their condition dictates (Figure 199).



FIGURE 199. Resetting grave markers in the cemetery, 2001. Source: Stones River National Battlefield Archives, slides, collection 67, image 67-01-011-0009.

Section Markers. Within ten years of the cemetery's establishment, the War Department installed native limestone posts to mark each cemetery section to ease the challenge of locating graves. In 1878, Superintendent Frame inventoried the posts and reported that:

[t]here are 84 stone corner posts in this cemetery. These posts are rough dressed ... hammered limestone with the name of

different generals painted on two sides of each stone and the name of the deceased President Lincoln on four of these forming a square at the flagstaff. The others are placed at the intersection of the walks one at each corner. The lettering is very much defaced and nearly all washed off from the effects of the weather.²⁵³

According to Bobby Simerly, park Chief of Maintenance between August 1977 and April 1996, several concrete section markers with painted letters were installed in the cemetery to replace deteriorated limestone markers in 1980.

A second attempt was made to replace approximately fifty-five damaged section markers in 1986. The Veterans Administration advertised for bids to do the work, but received none.²⁵⁴ However, in 1988, the superintendent ordered and received twenty-two section markers to replace those that were broken or missing.²⁵⁵ Today, it is evident that some of the section markers have been replaced with concrete posts. None retain the names of the generals that were painted on them originally; instead, they are painted with letters representing the sections. Photo comparisons suggest that after the 1930s, the section markers along the central drive were relocated further away from the edge of the road, presumably to protect them from damage by vehicles (refer to Figure 188 through Figure 190). While some of the section markers along the drive may be original to the period of significance, their locations are not, thus diminishing their integrity.

- 254. Fraley citing Kenneth L. McConoughey, Director, Monument Services to Donald E. Magee, Superintendent, Stones River, November 21, 1986, folder 33, "A-98 Conservation & Preservation: Headstone Replacement," box 4, catalog number STRE 4350, Cemetery Project Archives, Stones River National Battlefield.
- 255. "Superintendent's Annual Report of Stones River National Battlefield and Cemetery for Calendar Year 1987," March 2, 1988, Donald E. Magee, 14.

Donald E. Magee, Superintendent, to Sarah Key, Monument Services, April 30, 1986, folder 25, "A58 Interments—Routine Correspondence," box 4 catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield; Donald E. Magee, Superintendent, to Sarah Key, Monument Services, April 17, 1986, folder 25, "A58 Interments—Routine Correspondence," box 4 catalog number STRI 4242, Stones River National Battlefield Central Files Collection, Stones River National Battlefield.

^{253.} Frame to Ekin, April 12, 1878, handwritten transcripts "Letters Sent June 1, 1877-July 23, 1883."

Surviving examples of native limestone section markers contribute to the significance of the historic cemetery landscape.

Monuments and Memorials.

Cannonball Pyramid. A pyramid of cannonballs was added in front of the flagstaff in Lincoln Square circa 1964. Although the exact date of origin is not known, the monument is absent in a photograph from that year (Figure 200), but appears by the 1970s in a planting plan for Lincoln Square and a photograph depicting the completed project (refer to Figure 171 and Figure 172; see also Figure 130 for comparison). The monument may have been constructed of cannonballs associated with the 1931 Bragg Headquarters monument, located south of the cemetery within the park, that were replaced around this time with smaller shot. Documentary evidence to confirm this possibility has not been located, however. The cannonball pyramid appears to date to the period of significance and thus contribute to the significance of the historic cemetery landscape.

Cannon Tube Markers. In his early reports, E. B. Whitman noted the presence of "two Siege Gun Monuments" composed of standing cannon tubes that were placed within Lincoln Square by 1866.²⁵⁶ Originally associated with these markers were cannonball pyramids. These features were removed from the bases of the markers prior to 1977. These remain today in their original location. Despite the loss of the cannonball pyramids, the cannon tube markers survive with integrity from the period of significance, and contribute to the significance of the historic landscape.



FIGURE 200. View of the U.S. Regulars Monument in the 1960s. The future site of the cannonball pyramid monument is the open grass area at right. Source: Stones River National Battlefield Archives, image STRI-4X5-0690.

43rd Wisconsin and 180th Ohio Monument.

One of the earliest monuments placed in the cemetery was a limestone marker dedicated in 1865 by Tennessee Union Soldiers Railroad Employees to honor the 43rd Wisconsin and 180th Ohio regiments.²⁵⁷ This monument was moved to the cemetery from Decherd, Tennessee, with the remains of soldiers from these regiments. It survives with integrity today and contributes to the significance of the historic landscape.

U.S. Regulars Monument. In 1882, the veterans of the U.S. Army Regulars were granted permission "for the erection of a Monument in Stones River National Cemetery to the memory of the officers and soldiers of the Regular Brigade of the Army of the Cumberland, who were killed in battle there December 31, 1862."258 The U.S. Regulars Monument, a sandstone column

Fraley, Chapter 1, page 15, citing Whitman. 256.

^{257.} Fraley, Chapter 1, page 10.

Frame, Chapter 2, 7, citing Ekin to Frame, 258. February 7, 1883, microfiche of original ledger

[&]quot;Letters Received February 5, 1881-December 5, 1883," catalog number STRI 374, Museum Collection, Stones river national Battlefield Murfreesboro, Tennessee.

surmounted by a bronze eagle and set on a granite base, was subsequently placed adjacent to Lincoln Square at the corner of one of the burial sections in 1883.

Site Furnishings.

Flagstaff. A sketch prepared by E. B. Whitman in 1869 depicts the cemetery as it appeared in 1867, including the original wood flagstaff installed in Lincoln Square by 1865 (refer to Figure 9). It is likely that the original wooden flagstaff was a ship's mast. Maintenance of the flagstaff proved to be a challenge in the early years of the cemetery, as the wood deteriorated from exposure to the weather. In 1877, there was discussion of covering the flagstaff in tin.²⁵⁹ The condition of wooden flagstaffs throughout the national cemetery system was noted by Meigs in January 1878, when he wrote the following to the Chief Quartermaster:

It is inferred from occasional reports which reach this office that at several of the National Cemeteries, the national flag is often not displayed when it should be.

The excuse sometimes given is that a storm is expected, or that the flag is worn out, or the halyards broken, or that the Superintendent has "gone to town."

The flag should be kept up, when it does not actually storm even if it has to be raised and lowered several times during the day.

Timely requests should be made for new flags and halyards before the old ones become unserviceable, the case should be promptly reported and steps taken to erect a new pole immediately upon the receipt of the necessary authority.260

This letter was almost immediately passed on from Inspector Ekin to Superintendent Frame. Frame responded with a request to have the flagstaff painted that spring. In a letter from to Frame, Ekin stated:

You are respectfully informed that an arrangement has been made with Messrs. Tucker and McNichols of Nashville to paint the Flag-Staff at the Cemetery under your charge, and that one of the members of the firm with an assistant will be at the Cemetery for that purpose on or about the 11th instant.²⁶¹

In April of that same year, Frame reported that a windstorm had blown down the flag halyards. They were very quickly replaced the following month.262

Regular maintenance involving painting and halyard replacement was required over the next ten years to keep the old flagstaff in good condition, despite reports as early as 1881 that "the upper part of the main mast... is full of holes and perfectly rotten."263 In 1883, the flagstaff was described as "considerably decayed and woodpecker eaten, but will probably last some time yet."264 It lasted five more years and was replaced in 1888 with a cast-iron flagstaff, which remains in place today.

The new flagstaff was manufactured in New York and shipped directly to the cemetery depot by rail. The structure was topped with a weathervane, similar to that used in many national cemeteries. The weathervane included of a banner motif crafted of metal with "U.S." in cut out letters; Frame described it as "well done and the Flagstaff

^{259.} Ekin to Frame, July 2, 1877, microfiche of original ledger "Letters Received 1876-1881."

^{260.} Ekin to Frame, January 24, 1878, microfiche of original ledger "Letters Received 1876-1881."

^{261.} Ekin to Frame, April 6, 1878, microfiche of original ledger "Letters Received 1876-1881."

^{262.} Frame to Ekin, April 24, 1878 and Ekin to Frame, May 9, 1878, microfiche of original ledger "Letters Received 1876-1881."

^{263.} Frame to Ekin, April 20, 1881, handwritten transcripts "Letters sent June 1, 1877-July 23, 1883."

^{264.} Ekin to Frame, April 14, 1883, microfiche of original ledger "Letters Received 1881-1883," copying letter to the Quartermaster General from James Gall regarding his inspection of the cemetery.

looks very pretty."265 The new flagstaff also proved a maintenance challenge only three years later when the superintendent reported that it "needs painting badly, nearly all the paint having flaked off—similar to white wash flaking . . . the iron is corroding in several places" and that "[p]ainting this staff will be difficult, having no cleats on it, and a scaffold 35 to 40 feet will the painters claim have to be constructed, and extension ladders used the balance of hight [sic]."266 Because of this, bids for painting the flagstaff proved very high, so the cemetery staff painted it themselves.

The weathervane atop the flagstaff was damaged in the late 1990s and repaired in 2007, but one piece is said to be still missing.²⁶⁷ The flagstaff remains in its original location today and otherwise retains integrity, albeit diminished due to the incomplete repairs associated with the weathervane. The flagstaff contributes to the significance of the historic landscape.

Benches. In 1878, the cemetery superintendent received ten cast-iron and wood settees, or park benches, which were to be placed at his discretion throughout the cemetery. Likely obtained from the Composite Iron Works Company of New York City, the "Composite Settee" was constructed with cast-iron frames set with white oak slats, painted green.²⁶⁸ These settees were maintained throughout most of the history of the cemetery with occasional repainting in chrome green. A few settees were kept in the rostrum, but were removed in 1941 when the structure was demolished. The rest were kept throughout the cemetery until as late as 1964, when they appear in The settees were eventually replaced with cast concrete benches. The cast concrete benches were installed prior to 1977, according to park staff. In 2009, slab benches, constructed from pieces of stone salvaged from the perimeter wall during a repair project, were also added to the cemetery. Constructed by a Historic Preservation Training Center crew, the benches consist of a single limestone slab set atop two large limestone blocks. It is not known if these benches were placed where the settees had been or if they are in new locations.

Picnic Tables and Grills. Existing examples of picnic tables and grills that support the needs of park staff within the lodge and service area appear to post-date the period of significance and do not contribute to the significance of the historic cemetery landscape.

Lawn Vases, Hitching Posts, and Carts. In 1879, Superintendent Frame received two castiron lawn vases, which were to be placed near the lodge and filled with flowers and vines during the spring, summer, and fall.²⁶⁹ No references are made to the vases after 1882. The vases are no longer present within the cemetery.

Frame also received four cast-iron hitching posts in 1879, which he was directed to place "in such positions as will be the most advantageous, and ...

a photograph (refer to Figure 161). One of the settee frames is held in curatorial storage in the park museum collection.

^{265.} Frame to Henry C. Hodges, June 18, 1888, original ledger on microfiche "Letters Sent July 27, 1883-June 30, 1890," 151.

R. C. Taylor to Major J. W. Scully, November 266. 25, 1891, original ledger on microfiche "letters Sent July 10, 1890-August 3, 1912," 13.

Correspondence with Gib Backlund and Jim 267. Lewis, STRI, December 2012.

^{268.} John Auwaerter, Cultural Landscape Report for Poplar Grove National Cemetery, Petersburg National Battlefield, Dinwiddie County, Virginia (Boston: National Park Service Olmsted Center for Landscape Preservation, 2009), 72, citing A. F. Rockwell, Captain and Assistant Quartermaster, bids for "1,100 Park Settees," June 1878, RG, Entry 689, Sketches of iron Railings, Gates, and Headstones, and Proposals and Specifications Related to National Cemeteries," NARA I, box 1.

^{269.} Ekin to Frame, March 4, 1879, microfiche of original ledger "Letters Received 1876-1881."

put at least 3 feet into the ground."270 Frame installed the posts close to the lodge. They are also no longer present and it is assumed that they were removed in the twentieth century when automobile travel became common.

There appear to have also been carts and other maintenance vehicles, possibly quite colorful, at the cemetery as referenced by Inspector Song to Frame in 1876:

The red & blue colors are included for the carts[,] the fence[,] for the running gear & the latter for the bodies, the black is for the iron on each & the gun monuments & and whole for the Post at the gate & the morning machine.²⁷¹

None of this equipment survives today.

Signs.

Plaques. Plaques have traditionally been used within the cemetery to inspire, educate, and regulate visitors to the site. Some of these have been located within the burial grounds while others were placed within the lodge and service area.

Because it was expected that visitors to the cemetery would first approach the superintendent's lodge for orientation, a number of signs and plaques were located in its vicinity. For example, around 1875, Superintendent Frame erected a wood-framed sign containing orders from the War Department that forbade visitors from driving in the national cemetery faster than a walk. Its frame, as well as one containing a poster directing visitors to register at the lodge, had

deteriorated by 1881, causing Frame to replace them.²⁷² These signs were later replaced with castiron signs in the same location.

In 1882, each of the national cemeteries was supplied with a set of cast iron plaques bearing verses from Theodore O'Hara's poem, "The Bivouac of the Dead." Superintendents were instructed to replace "painted wooden posters now in use," and were given directions on how to set the plaques and how they were to be painted.²⁷³ Frame was directed to set the plaques within the burial grounds on cedar posts, 5 inches square and 6 feet long, set into the ground 3 feet. He was to paint the letters of each plaque white, using a technique specified by the Quartermaster General. Three years later, Frame reported that the tablets "are commencing to look rusty" and requested a supply of black paint. He painted them black in April, repainting the letters in white.²⁷⁴ The superintendent continued to include this on the list of regular maintenance tasks through the 1880s, to be performed every one to three years. Seven of these plaques exist within the cemetery today. It is not known how many were originally installed in the cemetery or if the plaques remain in their original locations. The posts used to mount the plaques were historically unpainted red cedar.

Almost twenty years later, in 1910, the Quartermaster Department provided the cemetery with a large cast-iron plaque bearing the text of Abraham Lincoln's Gettysburg Address. With it came instructions to paint it and attach it to one of the walls of the lodge with bolts, in a location low enough that it could be read by visitors.²⁷⁵ The

- 270. Ekin to Frame, November 20, 1879, microfiche of original ledger "Letters Received 1876-
- 271. George M. Song to Thomas Frame, February 15, 1876, microfiche of original ledger "Letters Received 1876-1881."
- Frame to Ekin, October 18, 1881, original ledger "Letters Sent June 1, 1877-July 23, 1883," 160.
- 273. Ekin to Frame, August 30, 1882, microfiche of original ledger, "Letters Received February 5, 1881-December 5, 1883," catalog number STRI 374, Museum Collection, Stones River National Battlefield.
- Fraley quoting Frame to Rufus Saxton, April 7, 1885, original ledger on microfiche "Letters Sent July 27, 1883-June 30, 1890," 54.
- 275. Joseph T. Davidson to F.B. Delaplane, August 6, 1909, transcript of original ledger "Letters Received August 24, 1890-July 26, 1920,"

plaque was removed from the lodge at a later date; it appears in one photograph of the cemetery in the 1960s at the edge of the cemetery parking lot (Figure 201). The plaque was removed from that location sometime between 1975 and 1991 and placed in storage. In curatorial storage today in the museum collection, the plaque is damaged along the top, and is in several pieces.

Stones River was also supplied with cast iron tablets during the 1930s, possibly by the U.S. War Department following the establishment of Stones River National Military Park in 1927. These likely served different purposes, but may have interpreted battle events consistent with the tablets found at other national military parks. One is known to have displayed the text of the "Act to Establish & Protect National Cemeteries Approved February 22, 1867."276 These tablets are visible in a 1935 photograph of the cemetery (refer to Figure 36 in the Site History chapter), and their locations are indicated on a 1934 planting plan for the cemetery (refer to Figure 38 in the Site History chapter).277



FIGURE 201. In the 1960s, the Gettysburg Address plaque was located at the edge of the cemetery parking lot. By 1991, this wayside exhibit had become damaged beyond repair and was moved to curatorial storage. Source: Stones River National Battlefield Archives, image STRI-5X7P-0031.

Identity, Wayfinding, and Regulatory

Signs. In 1913, two cast-iron identity shields were provided to the superintendent for installation at the cemetery gates. One was affixed to the east pier at the main entrance and the other to the east pier of the superintendent's driveway. The superintendent was instructed to paint the shields black and to use bronze paint for the lettering, border, and decorative motifs.²⁷⁸ These shields are currently affixed to both piers at the main entrance.

A circular metal USGS marker is mounted on the top of the perimeter wall. The date of origin of this feature is not currently known.

At least five small cast-aluminum tree identification signs, each mounted on a short metal post, identify surviving historic trees within the cemetery. It is not known when these were installed, although it is possible they were added in the 1930s. Sixteen other signs are currently in curatorial storage within the park, removed when the associated tree died or was removed due to condition concerns.

Regulatory signs include one communicating national cemetery rules for floral decoration and one identifying the maintenance entrance as for authorized use only, which was installed in the mid-1990s. Both signs post-date the period of significance and as such do not contribute to the significance of the historic cemetery landscape.

Interpretive Exhibits.

Cannon. Located within the cemetery is a Civil War-era cannon set on a contemporary carriage. The cannon is used to interpret battle events that occurred over the same ground where the cemetery was later established. The cannon was

- 277. Photograph from Stones River National Military Park archives, STRI-Central Files 556-Rinehart-Sept1935.jpg; drawing, Stones River National Military Park Planting Plan, June 1, 1934, Denver Technical Information Center.
- Fraley, Chapter 4, 17.

catalog number STRI 377, Museum Collection, Stones River National Battlefield.

^{276.} John Auwaerter, Cultural Landscape Report for Poplar Grove National Cemetery, Petersburg National Battlefield, Dinwiddie County, Virginia, 75. These types of regulatory plaques are present at Vicksburg National Cemetery and Andersonville National Cemetery, for example.

likely placed within the cemetery in association with the Mission 66 wayside exhibit circa 1965-1967. It marks the approximate position of Battery H, 5th U.S. Artillery, during the afternoon of December 31, 1862.²⁷⁹

Wayside Exhibits. A contemporary low-profile wayside exhibit is located just inside the front gate. A second wayside exhibit of the same style is located near the rostrum. These signs were installed circa 2007–2008. As such they post-date the period of significance and thus do not contribute to the significance of the historic cemetery landscape.

During the Mission 66 period, several six-sided wayside exhibits were placed within the cemetery. All but one of these have been removed and are in the park's curatorial storage facility. The last one, located near the cannon in Lincoln Square, is slated for removal.

Utility Features. Utility features that are visible within the cemetery, which include a sewer pump station along the access road to the lodge and service area, manhole and utility covers, a culvert with headwall, and storm water outfall associated with the rostrum post-date the period of significance and do not contribute to the significance of the historic cemetery landscape. Water pipes are known to have been added within the cemetery in 2012-2013 that also do not contribute.

Contributing.

- Civil War-era marble grave markers
- Privately-placed grave markers
- Grave markers post-dating Civil War burials (associated with the Spanish-American War, World War I, World War II, and Vietnam era)

- Native limestone section markers
- 43rd Wisconsin and 180th Ohio Monument
- U.S. Regulars Monument
- Flagstaff
- Cannon tube markers
- "Bivouac of the Dead" poem plaques
- Gates at main entrance (1937)
- Gate at the maintenance access drive
- National cemetery shields (1913)
- Tree identification plaques
- Limestone gate piers (1960s)
- Mission 66 wayside exhibit
- Cannonball pyramid
- Cannon

Non-contributing.

- Replacement headstones²⁸⁰
- Concrete section markers
- Gate at pedestrian entrance (circa 1970s)
- Rustic limestone slab benches
- Pre-cast concrete benches
- Wayside exhibits
- Wayfinding and regulatory signs
- Stone-curbed planting beds
- Sewer pump station cover
- Manhole and utility box covers
- Water pipes

Undetermined.

USGS marker

279. Gib Backlund and Jim Lewis, Stones River National Battlefield, correspondence with the authors, August 2012.

280. Per the National Register Bulletin How to Complete the National Register Registration Form, the replacement headstones are not in themselves contributing features because they were not present during the period of significance. Similar to the replacement rostrum, the replacement headstones could be reevaluated for inherent significance (as commemorative features) once they reach fifty years of age.

Missing.

- Wood headboards
- Wood flagstaff
- Wood picket fence
- Original stone piers at vehicular gates (circa 1860s)
- Rusticated concrete piers and cast iron gates at vehicular entrances (1896)
- Reconstructed concrete piers at vehicular entrances and iron gates at maintenance entrance (1937)
- Piers and gates at pedestrian entrances (two circa 1860s; one in 1896)
- Low stone curbs
- Cast-iron and wood settees
- Cast-iron lawn vases
- Cast-iron hitching posts
- Colorful carts and maintenance vehicles
- Wood frame signs, nineteenth century
- Cast iron tablets
- Gettysburg Address plaque
- 1937 Battle of Stones River map

Integrity Assessment

The primary objective of this section is to describe the extent to which Stones River National Cemetery retains its integrity and hence its ability to convey its historical associations with significant events in American history. National Register Bulletin: How to Apply the National Register Criteria for Evaluation states that:

Integrity is the ability of a property to convey its significance. . . . Historic properties either retain integrity (that is, convey their significance) or they do not. Within the concept of integrity, the National Register criteria recognize seven aspects or qualities that, in various combinations, define integrity.

To retain historic integrity a property will always possess several, and usually most, of the aspects. The retention of specific aspects of integrity is paramount for a property to convey significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant.²⁸¹

Assessment of integrity is based on an evaluation of the existence and condition of physical features dating from a property's period of significance, taking into consideration the degree to which the individual qualities of integrity are present. The seven aspects of integrity included in the National Register criteria are location, design, setting, materials, workmanship, feeling, and association.

Overview Assessment of Integrity

Based on the assessment of the criteria for evaluation, relevant areas of significance, and historic and existing conditions, the Stones River National Cemetery possesses sufficient integrity for the identified period of significance (1862– 1974) to convey its important historical associations. The primary significance of the site is related to the Battle of Stones River, which resulted in the deaths and onsite burials that were later reinterred within the cemetery; the initial

National Park Service, National Register 281. Bulletin: How to Apply the National Register Criteria for Evaluation, 44.

development of the national cemetery starting in 1864; and the development that occurred throughout the time in which the cemetery was under the administration of the War Department. The 1974 end date for the period of significance marks the year that the cemetery was closed to new burials. Although development continued at the cemetery after this date, the majority of the components envisioned when the cemetery was established were completed well prior to 1974.

Modifications to the historic landscape during the period of significance have been extensive. They include the removal of three superintendent's lodges, the demolition of the stables and other outbuildings, and the subsequent construction of three brick residences and the maintenance building, all of which occurred in the 1960s. Other modifications have included closing of three pedestrian entrances in the perimeter wall, and reopening of one of these, as well as widening of the two vehicular entrances. In addition, the original rostrum was demolished in 1941–1942, and a replica rostrum was constructed in 2007. The composition and character of ornamental plantings has constantly evolved since the nineteenth century; several efforts have been made to replace earlier plantings, but the mortality rate of vegetation within the cemetery remains high and a challenge for park maintenance. Overall, a general pattern of lining the grass avenues with deciduous shade tree plantings, and Lincoln Square with evergreens survives, while the more ornamental plantings involving shrubs and bedding plants do not.

The setting of the cemetery has been affected through construction of the Stone River National Battlefield Visitor Center across Old Nashville Highway, as well as commercial development across the CSX rail line. Despite these changes, Stones River National Cemetery retains a high level of integrity as related to the 1862-1974 period of significance, and continues to convey the character and configuration representative of the vision proposed by Meigs for the national cemetery system.

The symmetrical organization of the cemetery; the radial pattern of circulation; the orderly pattern of marble headstones; the arrangement of evergreen and deciduous trees; the granite, bronze, sandstone, and marble monuments; the surrounding native limestone wall; and the cast iron flagstaff and gun monuments, all contribute to the integrity of the cemetery as an expression of Meigs's vision.

Integrity Assessment by Quality

Location is the place where the historic property was constructed or the place where the historic event occurred. Stones River National Cemetery retains integrity of location due to the continued occupation of the 20 acres first acquired in 1868.

Setting is the character of the physical environment within and surrounding a property. The cemetery retains its setting as defined by the boundary wall. The setting outside the wall has been altered by nearby development, including light industrial and commercial buildings across the railroad tracks, and the Stones River National Battlefield visitor center across the Old Nashville Highway. However, nearby developments are generally low rise structures that are relatively unobtrusive in the landscape, and, while visible, do not significantly affect primary views from within much of the cemetery. The continuing presence of boundary features, including the cemetery wall, the railroad line, and the Old Nashville Highway, help to communicate the historic character of the cemetery's setting. In general, although views outward from the perimeter of the cemetery are to some extent diminished by these developments, the cemetery itself retains sufficient integrity of setting to convey its historic associations.

Design is the combination of elements that create the form, plan, space, structure, and style of a property. Stones River National Cemetery retains the original landscape plan, organization of gravesites, and circulation pattern as laid out in 1864, comprising an almost symmetrical arrangement of burial sections centered on an axial drive that leads to the central square. The regular pattern of headstones persists, although additional burials in new sections established after World War II altered this pattern along the eastern edge of the cemetery through the development of

new burial sections that did not conform to the original layout.

Also lost has been the series of three superintendent lodges that occupied the lodge and service area between 1868 and 1963, and associated stables and other outbuildings demolished to construct present-day staff housing and maintenance facilities. The integrity of design within the cemetery has been diminished through the loss of patterns of shrubs and flower beds and removal of small furnishings. Due to the survival of the original burial plan, circulation pattern, and the pattern of trees as originally designed, the cemetery retains moderate integrity of design.

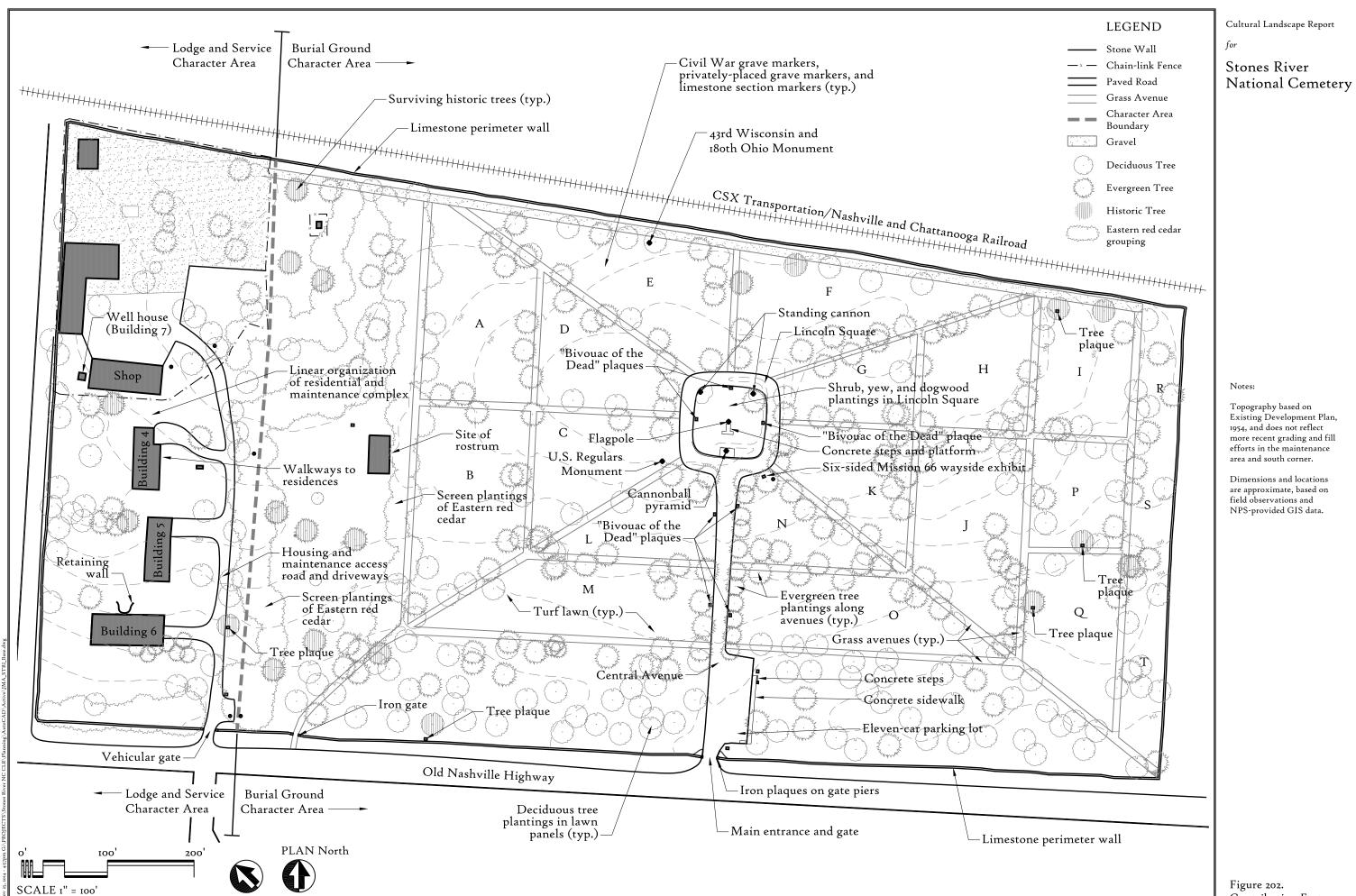
Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. In terms of built materials, Stones River National Cemetery retains native limestone in its boundary wall, marble and granite in its headstones and monuments, and cast iron in its plaques and gun monuments. In terms of natural materials, although the original species of ornamental shrubs and flowers are missing, the palette of lawn and specimen trees remains generally consistent with those used during the period of significance and envisioned in the original design. However, the cemetery is missing the original cast-iron and wood settees; cast-iron tablets, lawn vases, and hitching posts; as well as the stone and wood materials used in the two superintendent's lodges and the brick and wood used to construct the original rostrum. Stones River National Cemetery therefore retains moderate integrity of materials.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Stones River National Cemetery retains integrity of workmanship characteristic of its initial development during the late nineteenth century in the overall grading of the burial area and Lincoln Square, the masonry of its native limestone boundary wall, the metalwork of the gun monuments, the sculpture of two memorials, and in the headstones except where they have been replaced in a way that does not match the original.

Missing is the workmanship that was exhibited in the cast-iron site furnishings, the original stone work at the vehicular and pedestrian entrances, the brickwork around the superintendent's lodge, and the horticultural skill that was exhibited in the ornamental plantings within the cemetery no longer present today. The cemetery nonetheless retains moderate integrity of workmanship.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time resulting from the presence of physical features that, taken together, convey the property's historic character. Within its boundaries, Stones River National Cemetery retains the sense of solemn dignity that characterized it historically and was shared by numerous other Civil War-era cemeteries. The boundary wall, the organization of headstones and cemetery avenues, and the pattern of evergreen and deciduous trees communicate this historic character and feeling. Although development has occurred to the north and east of the site and there is noise from traffic at busy times of the day, the cemetery itself retains much of the feeling of isolation and separation that define its historic character. Stones River National Cemetery thus retains integrity of feeling.

Association is the direct link between an important historic event or person and a historic property. Stones River National Cemetery remains intimately associated with the events of the Battle of Stones River and forms an integral part of the national park unit devoted to preserving and interpreting the battlefield. The association of the cemetery with the events of the Civil War is made apparent through the 6,100 interments of that conflict. Furthermore, the cemetery retains its association with subsequent military history, with nearly 1,000 burials of veterans of subsequent wars, as well as some family members. The cemetery landscape retains many of the physical resources that illustrate its historic association with the national cemetery system. Stones River National Cemetery therefore retains integrity of association.



Contributing Features

Treatment Plan

Introduction

This treatment plan has been prepared to provide the National Park Service with an overall vision for the cultural landscape of the Stones River National Cemetery, and is intended to guide and support long-term management and interpretation of the site and its resources. The plan includes treatment guidelines, recommendations, and implementation projects.

The treatment plan portion of a Cultural Landscape Report (CLR) typically addresses resource management by providing a preservation master plan or blueprint for the historic landscape in the short- as well as long-term. One of the goals of the treatment plan is to enhance the historic character of a cultural landscape while accommodating contemporary function and use. The treatment plan establishes how the landscape should look and be maintained in the future to protect historic integrity and character. While focused on historic landscape preservation, the treatment plan also addresses other park management goals, such as access, sustainability, and interpretation, as well as routine and cyclical maintenance measures that are necessary to perpetuate the identified desirable character of the landscape.

A General Management Plan (GMP) was prepared for Stones River National Battlefield, of which the national cemetery is a part, in 1999. The resource management strategies presented in the GMP have served as a baseline for this treatment plan and its approach to resource protection and interpretation.

The treatment plan also responds to specific management issues, concerns, and objectives shared with the CLR team by park and regional National Park Service personnel during a start-up meeting conducted on behalf of this project, and in follow-up conference calls to discuss treatment issues and recommendations.

The treatment plan chapter is organized into eight sections:

- 1. Park Management Goals, Issues, and Concerns, which describes the issues raised by the park for consideration by the CLR treatment plan.
- 2. Regulatory Considerations, which summarizes the regulations and other relevant guidelines that inform management and care of national cemeteries under the administration of the National Park Service.
- 3. Treatment Approach, which presents the four approaches recognized by the Secretary of the Interior for treating historic properties, and identifies the CLR's recommended approach for Stones River National Cemetery.
- 4. Implications for Management, which discusses how the recommended treatment approach guides future actions.
- 5. General Guidelines for Treatment, which provides a series of specific guidelines for resource management within the Stones River National Cemetery landscape that form a framework for all future treatment.
- 6. **Treatment Vision**, which describes the future desired character of the landscape and outcome of implementation of the CLR treatment plan.

- 7. Treatment Recommendations, which identifies the specific actions recommended for the historic landscape based on work conducted on behalf of the CLR.
- 8. Implementation Projects, which identifies and describes a series of six projects that effect implementation of the CLR treatment recommendations.

Park Management Goals, **Issues, and Concerns**

The management goals, issues, and concerns to be addressed by this treatment plan were identified in several ways. Most were conveyed during a project kick-off meeting held at the park on November 8, 2010, that was attended by National Park Service park and regional personnel, and members of the WJE/JMA CLR project team, and in follow-up conference calls to discuss treatment issues. Others were identified during field investigations and from review of park planning documents, such as the GMP.

Seven specific areas of concern were identified for consideration as part of the treatment plan:

- 1. integrity, surfacing, and accessibility of circulation systems;
- 2. themes, media, and locations of interpretation;
- 3. tree stewardship;
- 4. integrity of historic views to, from, and within the cemetery;
- 5. repair and maintenance of grave markers and monuments:
- 6. turf lawn maintenance; and
- 7. site furnishings.

The concerns and issues relating to each of these topics as presented for consideration in the CLR are summarized below.

Integrity, surfacing, and accessibility of circulation systems. Stones River National Cemetery historically featured three circulation systems: a primary access route for vehicles from Old Nashville Highway to Lincoln Square; a secondary access route for service, maintenance, and residential use; and a system of pedestrian paths that edge and provide access to the individual burial sections. Although some of the surfacing materials have changed over the years, the systems retain a high degree of integrity, and current surfacing is appropriate to meet contemporary needs of access and maintenance. There are two exceptions, however.

The first is the lack of a universally accessible route that can provide a means for all visitors to appreciate and learn about the cemetery. Alternatives for establishing universal accessibility within the cemetery include adaptation of existing circulation systems, or the provision of new accessible routes, that meet the Americans with Disabilities Act Standards for Accessible Design. Currently, neither Central Avenue nor the primary pedestrian path that links the park's visitor center parking area across Old Nashville Highway and Lincoln Square is accessible. Central Avenue exceeds the maximum slope of 5 percent to meet should follow the guidance afforded in Americans with Disabilities Act Accessibility Guidelines (ADAAG) standards, while the pedestrian path is surfaced with mulch, which does not meet ADAAG standards.

The second circulation issue to be addressed is the character and surfacing of Houssem Avenue, which parallels the north wall. This avenue was stabilized with gravel for a contemporary wall repointing project, but has not been returned to its historic character and grass surfacing.

Themes, media, and locations for interpretation. Interpretation within the cemetery currently consists of three wayside exhibits, two of which are contemporary and one that survives from a Mission 66-era interpretive plan, and a Civil War-era artillery piece positioned to suggest the role of the cemetery landscape in the Battle of Stones River. These interpretive features

are located at the parking area, in association with the reconstructed rostrum, and in Lincoln Square. The park is interested in developing an approach to interpretation within the cemetery that is consistent with the GMP but which also respects the historic character, significance, and layered history of the landscape that includes its roles as a battlefield and a burial ground. While the themes, media, and locations of interpretive information will ultimately be addressed as part of a long-range interpretive plan to be prepared in the future, the CLR should offer guidance that can be used in developing the plan such as diminishing the visual impact that wayside exhibits may have on the integrity of the historic landscape, and the appropriate character, size, number, and locations of signs and other features. In addition, the CLR should suggest ways to address the layers of history exhibited by the cemetery.

Tree stewardship. Stones River National Cemetery contains numerous evergreen and deciduous trees. Trees were first planted within the cemetery as part of its early nineteenth-century design. Although few historic documents survive to illustrate the specifics of the original design, a plan dated 1892 offers a good record of latenineteenth-century plantings and the way in which they were used to complement the formal geometry of the burial ground. Evergreens, which have traditionally been used in burial grounds as a symbol of everlasting life, are used extensively along Central Avenue and the perimeter of Lincoln Square to emphasize the ceremonial heart of the cemetery. Deciduous trees, which are more ornamental in character, are included in the plantings that loosely edge the avenues along the margins of the burial sections. While many of the original nineteenth-century tree plantings have been lost, the National Park Service has conducted replacement planting programs in the 1930s, 1960s, 1970s, and 1980s using the 1892 plan as a guide to maintain the historic character of the cemetery.

However, maintenance of the tree plantings has remained challenging. Issues of concern include pruning, removal, and replacement, as well as maintenance of problems resulting from the trees, such as turf care in areas shaded by the trees, soiling and biological growth affecting grave markers underneath the trees, and the threat of physical damage to grave markers and monuments from fallen limbs and tree trunks.

Many of the existing trees are likely to require significant care on an ongoing basis. A replacement policy is not currently in place for trees lost to age, disease, or weather. Climate change, already affecting local weather patterns, is anticipated to further stress the existing trees. The treatment plan should provide guidance on tree care, maintenance, and replacement, and mitigation strategies to address the effects of trees on other historic resources and landscape character.

The integrity of views to, from, and within **the cemetery.** Although much of the landscape within view of the cemetery falls within park boundaries and within the control of the National Park Service, land to the north, including most of the CSX Corporation rail line and adjacent commercial properties, is not. The adjacent rail line, although it remains in the same location as at the time of the Battle of Stones River, has been elevated several feet from its original bed, and is edged by extensive amounts of ballast. The crushed granite used for ballast is brightly colored and reflective, and is highly visible from the cemetery, presenting a view that is not consistent with historic conditions. This fact is counterbalanced by the fact that it remains an active rail line, and does not impair the rail line's integrity of location and association. Beyond the rail line, views of commercial development are apparent from several areas of the cemetery. The owner of the adjacent land has planted a row of evergreen trees to help diminish the impact on the viewshed on the cemetery. Integrity issues resulting from twentieth-century changes to the character of the rail line and views of contemporary development should be addressed by the CLR.

Within the cemetery, Eastern red cedar trees were planted to screen the Mission 66 residences and maintenance shop from the rest of the burial grounds. These trees have been limbed up to

facilitate mowing, diminishing their value as a screen planting. The CLR should also consider mitigation of the views of Mission 66-era features as necessary.

Repair and maintenance of grave markers and monuments. Repair and maintenance are needed to address a range of condition issues within the cemetery associated with grave markers and monuments. These issues include soiling, chipping, cracking, biological growth, erosion and surface wear, marker resetting, and the need for replacement. Shade from the cemetery tree plantings has contributed to problems with biological growth on grave markers. Condition issues for features such as the U.S. Regulars Monument and metal elements include incompatible previous repairs, soiling, and metal coating deterioration. Contributing to the condition problems are lawn maintenance practices, previously used cleaning processes and chemicals, impact damage from trees, and soiling due to thinned ground cover at the base of the markers. Replacement of historic markers affects the integrity of the cemetery, but is often necessary to address condition problems. The CLR should suggest appropriate methods or guidelines for repair and maintenance to address these issues and help protect the historic character, condition, and integrity of grave markers and monuments.

Maintenance of turf lawn. Turf lawn is a character-defining element of the national cemetery that has been an integral part of the design since early establishment. Turf is currently, and was historically, the primary ground cover used within the cemetery. Maintaining the health and character of turf can be challenging, but is critical both from an aesthetic viewpoint, and as part of the care of grave markers, which are subject to soiling where turf is missing, and damage caused by mowing equipment. The CLR treatment plan should address turf maintenance within the context of current and desirable future conditions within the cemetery.

Site furnishings. The cemetery includes several benches, of a variety of styles, provided for the comfort of visitors. The existing benches are

replacements for those originally used in the cemetery during the nineteenth century. Several of the benches are unstable; the seats are not properly anchored and have a tendency to fall off when used. The CLR treatment plan should recommend an appropriate standard style of bench to be used in the cemetery in the future that will be compatible with its historic character, and identify possible locations for the siting of new benches. Addressing other site furnishing and signage needs would also be of interest to the park.

It is also important to note that, at the initiation of the CLR project, one of the issues of concern to be addressed was the possible relocation of the maintenance facilities from the cemetery. Over the course of the project, the park received funding to update the facilities, rather than relocate them. For the time being, the rehabilitated maintenance facilities are anticipated to remain in their present location. The CLR has therefore not considered this issue further.

Regulatory Considerations. Treatment recommendations for Stones River National Cemetery need to be consistent with the existing legislative framework established by the federal government for cultural resources, burial grounds, and national cemeteries, and federal historic preservation guidelines. They must also be consistent with National Park Service agency standards and park planning documents, such as the 1999 GMP.

Current national cemetery management policies are reflected in Director's Order No. 61: National Cemetery Operations (July 2010) and Reference Manual 61: National Cemetery Operations (November 2011), as updated by the National Park Service to guide administration of fourteen of the

nation's historic national cemeteries.²⁸² These documents make reference to the regulations and standards established for the National Cemetery System by the National Cemetery Administration, an agency of the Department of Veterans Affairs. Although the cemeteries administered by the National Park Service are excluded from National Cemetery Administration oversight, the National Park Service works to meet its policies and shares in its mission to honor the dead and keep their burial places sacred forever, as embodied in a Congressional Joint Resolution of April 3, 1866.

Included in these documents is the requirement that all National Park Service national cemeteries have either an approved CLR or National Register documentation that adequately addresses the cultural landscape, identifies contributing landscape characteristics and features, and establishes criteria for analyzing the historic significance and integrity of the landscape.²⁸³ Director's Order No. 61 also provides general direction on visitor use; interment eligibility, limitations, facilities, and services; disinterment; headstones, markers, and commemorative markers; and ceremonies and special events.

Management and treatment of Stones River National Cemetery, as a component of the National Park System, is also guided by the mission of the National Park Service "... to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."284 The application of this mission to cultural landscapes is articulated in the Secretary of the Interior's Standards for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes. 285 As a cultural resource, management of Stones River National Cemetery is defined in federal regulations by 36 CFR Part 2: Resource Protection, Public Use and Recreation, section 2.1: Preservation of Natural, Cultural, and Archeological Resources. The application of these regulations to cultural landscapes is considered within National Park Service Management Policies 2006, Director's Order No. 28: Cultural Resource Management, and NPS-28: Cultural Resource Management Guideline.

In addition to its management as a cultural resource, Stones River National Cemetery is also subject to National Park Service regulations and policies relating to national cemeteries including 36 CFR Part 12: National Cemetery Regulations. Specifically, these regulations note:

All national cemeteries administered by the National Park Service will be managed as historically significant resources, and as integral parts of larger historical parks. Burials in national cemeteries will be permitted, pursuant to applicable regulations, until available space has been filled

The enlargement of a national cemetery for additional burials constitutes a modern intrusion, compromising the historical character of both the cemetery and historical park, and will not be permitted.²⁸⁶

The National Park Service regulations are modeled after the regulations published by the National Cemetery Administration, 38 CFR Part 38: National Cemeteries of the Department of Veterans Affairs.

- 282. As reorganized in 1973, the National Cemetery System is comprised of 146 important national cemeteries under the jurisdiction of the Department of Veterans Affairs, and 14 national cemeteries associated with historic sites and battlefields managed by the National Park Service.
- 283. National Park Service, Reference Manual 61: National Cemetery Operations (Washington, D.C. Department of the Interior, November 2011), 6.

^{284.} National Park Service Organic Act, 16 U.S.C. 1, 3, 9a, 460 1-6a(e), 462(k) (1916).

^{285.} http://www.nps.gov/tps/standards/fourtreatments/landscape-guidelines/index.htm, accessed February 1, 2013.

^{286.} National Park Service, Management Policies 2006, section 8.6.10.1.

Policies established by the agency to guide national cemetery management are found in several Department of Veterans Affairs publications:

- National Cemetery System Policy Manual M40-1 (May 5, 1975)
- Operations of National Cemetery Manual M40-2 (May 1, 1984)
- Headstones and Markers Manual M40-3 (December 3, 1982)

The Headstone and Markers Manual, which is currently in the process of being revised by the National Cemetery Administration, details the eligibility requirements for receiving headstones, and the styles of markers available. The specifications included in the manual that are relevant to the treatment plan include the types of headstones furnished, the disposition of removed headstones, and the policies for headstone replacement. Replacement of historic headstones is also addressed in National Cemetery Administration Notice 2004-06, which includes information about the importance of preservation of the cultural landscape, within the context of correcting inaccurate information on nineteenthcentury markers.

The 2010 revision of Director's Order No. 61 and other National Park Service management policies regarding national cemeteries in part reflects changes made by the National Cemetery Administration to its guidelines on management of cemetery landscapes in response to the Veterans Millennium Health Care and Benefit Act of 1999 (Title VI, Subtitle B, Section 613). The Act stipulated an evaluation of the repairs needed at national cemeteries to meet care and appearance standards. Based on this study, the National Cemetery Administration established the National

Shrine Commitment, which articulates an overall vision for national cemeteries as national shrines:

A national shrine is a place of honor and memory that declares to the visitor or family member who views it that, within its majestic setting, each and every veteran may find a sense of serenity, historic sacrifice and nobility of purpose. Each visitor should depart feeling that the grounds, the gravesites and the environs of the national cemetery are a beautiful and aweinspiring tribute to those who gave much to preserve our Nation's freedom and way of life.287

The current version of National Shrine Commitment: Operational Standards and Measures is the most current in a long line of published national cemetery standards beginning with War Department administration in 1911, which themselves expanded on standards established during the founding of the National Cemetery System during the Civil War. The National Shrine Commitment assumes a high level of care and maintenance for all cemeteries within the system. The current standards provide detailed direction on the treatment of headstones, buildings, and grounds. They outline the requirements for maintenance, including the percentage of lawn that must be weed free and the percentage of headstones that must not show evidence of debris or objectionable accumulations.

While these standards and measures, and the *National Shrine Commitment*, pertain specifically to the National Cemetery Administration, standards designed to impart honor, memory, majesty, serenity, and beauty perpetuate qualities identified as desirable during the nineteenth century, when many national cemeteries including Stones River—were established. These qualities suggest applicability of the National Cemetery Regulations to the treatment of the Stones River National Cemetery. However, while these suggested measures provide an appropriate basis for the treatment of historic landscape

National Cemetery Administration, National Shrine Commitment: Operational Standards and Measures, Version 4.0 (Washington, D.C.: U.S. Department of Veterans Affairs, October 2009), 4.

features, they do not address contemporary needs for historic preservation and interpretation as addressed by National Park Service regulations and policies, setting up an internal conflict for management.

It is therefore important that the treatment plan consider both the directive to impart honor, memory, majesty, serenity, and beauty, as suggested in the National Shrine Commitment, as well as appropriate application of the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment Cultural Landscapes.

Finally, it is also important that the treatment plan be consistent with park planning documents, particularly the preferred alternative of the GMP, which indicates that enhancing interpretation and the ability of the visitor to experience a "sense of place" within the battlefield is the primary objective of management. One of the vehicles for enhancing interpretation indicated in the plan is the establishment of new interpretive exhibits. In addition, while the GMP recommends returning the landscape of the park to its 1860s appearance, the notable exception indicated is the national cemetery, which "artistically and tangibly illustrates the nation's respect for the war dead, and dramatically underscores the battlefield's sacredness and its profound meaning to the county and its people. By now, the cemetery has reached the full capacity of the 1892 design, and would continue to be maintained as close as possible to the spirit of that design, allowing for modern techniques in horticultural practices."288

As suggested in the GMP, interpretation would be enhanced in part through a modified auto tour, new exhibits in the visitor center, and through the establishment of new waysides. The park anticipates gaining a long-range interpretive plan in the future, this plan is due to be complete in Fiscal Year 2015. The guidance afforded in the

288. National Park Service, Final General Management Plan: Development Concept Plan: Environmental Impact Statement: Stones River National Battlefield, Rutherford County, Tennessee (Murfreesboro, Tennessee: Stones River National Battlefield, 1999), 26.

GMP as it relates to interpretation and the role of the national cemetery is as follows:

Stones River National Cemetery is historically significant, provides another human dimension to battle-related events, and has proven to be of great interest to visitors in the past. Its formal manicured design dates back to 1892 and has been modified over the years by park administrators. The design elements, including the stone wall, the arrangement of headstones, commemorative cast-iron markers, the trees and landscaping, the flagpole, the monuments, and the benches, all contribute to a pleasing and memorable visitor experience. The national cemetery is a tangible reminder of how the United States memorializes its dead and how Civil War battlefields became symbols of the constant price of sustaining a republic.

In order to improve the chronology of the auto tour and to preserve the contemplative atmosphere of the cemetery, the site would not be included as a tour stop. To ensure that visitors are aware of the existence of this important site, the park folder would feature a section about the cemetery. This would highlight the cemetery as a significant site in itself, as a place of reflection and illustrative of the memorial efforts on the battlefield.²⁸⁹

The auto tour improvements and updates to the park folder have been completed.

As a cultural landscape, Stones River has a rich and complex history. Interpretation of the cemetery to meet the objectives set forth in the GMP may require that new measures be considered to convey the multiple significant historic periods represented on site. In addition to the fact that the cemetery site was integral to the Battle of Stones River, the later establishment and design of the cemetery is significant within a larger context of the National Cemetery System developed by the federal government in the 1860s and 1870s. Changes to the cemetery that occurred during the New Deal and Mission 66 periods are reflective of

289. Ibid., 31. contexts that are significant in the history of the National Park Service. The CLR provides suggestions for how resources relating to different periods of the site's history should be managed and maintained, and the layers interpreted.

Treatment Approach

In order to meet all of the federal regulations that relate to Stones River National Cemetery, it will be important to establish a framework for treatment that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. There are four treatment approaches recognized by the Secretary of the Interior for historic properties: preservation, rehabilitation, restoration, and reconstruction. These are described in the Secretary of the Interior's Standards for Historic Properties as forming "the philosophical basis for responsible preservation practice and enable long-term preservation of a landscape's historic features, qualities, and materials."290 They are defined as follows:

Preservation: the act or process of applying measures necessary to sustain the existing form, integrity, and material of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction.

Rehabilitation: the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Restoration: the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by removing features from other periods

in its history and reconstructing missing features from the restoration period.

Reconstruction: the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

As part of the CLR treatment plan, these approaches have been considered in conjunction with the objectives presented to the planning team by the park, and the GMP preferred alternative, to determine the most suitable approach for the Stones River National Cemetery landscape.

Based upon the goals for the property set forth by the park and in the GMP preferred alternative, which identifies the need for changes to the cultural landscape to meet current and projected future interpretive, functional, and management goals, rehabilitation is recommended by the CLR as the most appropriate overarching treatment approach for the Stones River National Cemetery. Because rehabilitation is defined as the act or process of making possible a compatible use for a property, this approach allows for protection of the site's historic character and resources while carefully addressing the need for limited enhancement of interpretive opportunities and circulation routes, sustainability, and the improvement of visitor amenities. As part of rehabilitation treatment, stabilization, protection, and preservation of historic and natural resources are assumed even when new uses are accommodated.

In considering the other treatment alternatives recognized by the Secretary of the Interior for possible application to the Stones River National Cemetery cultural landscape, the CLR found them inappropriate for the following reasons. **Preservation** is overly restrictive because it does not allow for the site enhancements associated

^{290.} Robert R. Page, Cathy A. Gilbert, and Susan A. Dolan, A Guide to Cultural Landscape Reports; Contents, Processes, and Techniques (Washington, D.C.: Department of the Interior, 1998), 82.

with interpretation and access that are currently needed; restoration and reconstruction are also inappropriate approaches for the Stones River National Cemetery landscape because they assume, as a prerequisite, that sufficient documentation exists to accurately portray a lost historic condition. At this time, it does not appear that there are documentary sources detailed enough to support comprehensive restoration or reconstruction of the park's cultural landscape to a particular year or period. Removal of existing features and replacement missing historic features is not warranted or supported by available documentation.

In 1998, a Cultural Landscape Inventory was prepared for the national cemetery. The document recommended that restoration may be an appropriate treatment approach for the cemetery. As noted above, given the extent to which the cemetery has changed over time to accommodate post-Civil War burials in particular, this CLR concludes that it is not practical to return the cemetery to a specific period of time. Change has occurred constantly within the cemetery, including the resurfacing of road corridors; closing, opening, and widening of gates; the removal of the original superintendent's lodge and the buildings that supported maintenance of the cemetery; tree and shrub plantings removal, replacement, and alteration; expansion of the number of burial sections and inclusion of military personnel associated with post-Civil War-era conflicts; and replacement of grave markers. Removal of many later additions is neither practical nor desirable.

Implications of the Approach

The Secretary of the Interior has developed standards for rehabilitation as applied to historic properties. There are ten basic principles that comprise the standards. These are intended to help preserve the distinctive character of a historic property while allowing for reasonable change to meet new needs. The standards (36 CFR Part 67) apply to historic properties of all periods, locations, sizes, conditions, and uses. These standards create a baseline of guidance to which intended changes to the historic landscape must be compared. These standards are neither technical nor prescriptive, but promote responsible preservation practices as follows:

- 1. A property will be used as it was historically, or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

- 9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- 10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

General Guidelines for Treatment

The following section provides general guidelines for the treatment of the Stones River National Cemetery landscape that are intended to support the recommended rehabilitation approach as well as all treatment recommendations and alternatives developed in support of this CLR that follow. These guidelines relate to a philosophy of cultural landscape treatment based on the Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural Landscapes, and a comprehensive view of the national cemetery as a whole. They should be used when planning for any and all landscape changes, and should be considered in connection with each of the proposed landscape treatments included in this CLR.

Land Use

- Avoid land use activities, permanent or temporary, that threaten or impair known or potential archeological resources.
- Monitor and regulate use of the landscape to minimize immediate and long-term damage to cultural resources.
- Consider equally both natural and cultural features in treatment decisions.

Buildings and Structures

- Consider the interpretive value of nonintrusive, non-contributing buildings and structures, and retain when possible.
- Consider the removal of non-contributing structures that are intrusive to the historic landscape only if they are found to be without historical or functional merit or value.
- Avoid conjectural reconstruction of historic buildings and structures.

Circulation

- Minimize the visual impacts of vehicles and vehicular access systems. Consider the impact on views when proposing new circulation systems. Also consider noise and other impacts that parking will have on the visitor experience and historic resources.
- Encourage pedestrian circulation throughout the cemetery as an alternative to vehicular access.
- Minimize the visual impacts of new pedestrian access systems.
- Address the need to provide universal access to the cemetery. Universally accessible paths should follow the guidance afforded in the Americans with Disabilities Act Accessibility Guidelines.
- Ensure that all paths are wide enough for two people to walk comfortably side by side, and ensure that they are evenly graded and welldrained to prevent trampling of vegetation, soil compaction, and erosion of the path margins.

Sustainability

Institute cultural and natural resource treatment and maintenance methods that are environmentally and culturally sensitive and sustainable over the long term.

- Minimize the extent of any ground disturbance, earth grading, compaction, and drainage pattern alteration.
- Promote biodiversity and native plant species.
- Limit the use of new mitigating devices such as retaining walls, closed drainage systems, and grading.
- Implement the least intrusive measures and those involving stabilization first, and subsequently proceed to the most invasive as necessary. Limit major new interventions to areas that have previously been disturbed.
- Emphasize landform-based solutions, such as grading, over hardscape solutions, such as retaining walls to address concerns relating to circulation, drainage, and new construction.
- Take into consideration life-cycle costing of materials, including their long-term wearing capacity and maintenance costs when evaluating options. Always consider materials that are non-toxic, durable, long-lived, and low-maintenance.

Topography

- Minimize soil disturbance and grading.
- Preserve existing landforms and natural drainage patterns to the greatest extent possible.
- Avoid attempts to reconstruct or restore historic grades unless supported by clear documentary evidence of their appearance or original design during a specific period.

Land Cover Management

Encourage best management practices (BMPs), integrated pest management (IPM), and soil and erosion control measures in all maintenance and management practices in order to minimize water pollution and degradation of natural systems.

Establish native vegetative cover for erosion control. Consider planting species that are suited to the local soil and moisture conditions.

New Design and Construction

- Avoid altering existing features or adversely affecting the landscape's historic character when adding new features to support interpretive, management, and visitor access functions. Features that facilitate access and interpretation should be designed to minimize adverse impacts on the character and features of the landscape. Design larger facilities, such as the maintenance area, to be as non-intrusive as possible while allowing for accessibility and safety. Limit the construction of new facilities to those that are absolutely necessary. Consider the use of temporary structures that do not require founding in the ground, or involve soil disturbance.
- Site necessary new buildings and structures out of key viewsheds. Consider designing necessary new facilities as low buildings situated in such a way as to be screened from view from primary visitor use areas. A cluster of smaller buildings that are tightly grouped and follow a consistent orientation is preferable to the establishment of one very large building. As possible, situate new structures relatively close to existing road corridors to limit the establishment of new roads. New buildings and structures should be compatible with local traditions of design and constructed of locally-available and indigenous materials such as stone and wood. The design of new buildings and structures should also be sympathetic to local traditions in terms of scale, massing, roof form, and details. New buildings and structures should be situated to lie lightly on the land, minimizing soil disturbance, particularly cut and fill. Sustainability should be considered in the choice of materials and energy use. Consider incorporating passive solar energy conservation strategies into the design of new buildings and structures. Also consider the local climate in the siting and design of

buildings and their relationship to solar orientation, heat gain, shading, prevailing winds, and seasonal average temperatures to minimize energy costs. Limit the footprints of new buildings and structures by optimizing use and flexibility of both indoor and outdoor spaces.

- Evaluate all proposed new uses in consultation with a historical landscape architect and other appropriate professionals.
- Undertake sufficient study and recordation of landscape features requiring modification, repair, or replacement before work is performed to protect research and interpretive values.
- Limit the use of destructive techniques, such as archeological excavation, to providing information required to support research, interpretation, and management goals.
- Consider interpretation of typical features in cases where restoration is not possible but providing the information is important to the visitor experience.
- Design new features, systems, and programs to be as accessible as possible.
- Establish new wayside exhibits in the least intrusive manner possible to fulfill proposed new interpretive goals.
- Minimize disturbance associated with the installation of visitor access facilities.
- Complete necessary NEPA and Section 106 compliance before undertaking any projects that may affect the historic landscape.

Adjacent Lands and Visual Quality

Monitor local zoning and planning activities related to nearby adjacent development that may adversely impact the character and cultural resources within the viewshed of the cemetery. Consider participating in the early stages of any development plans for adjacent

- sites by working with developers during the planning process, suggesting increased setbacks and the least intrusive siting and character for new structures and roads.
- Coordinate with planning authorities on the development and construction of new features within view of the cemetery that may impact the park visually or physically such as roads, zoning changes that may result in higher density residential or non-residential uses, sale of land to non-governmental entities, and cell towers or antennae.
- Work with neighbors and community groups to develop a program of monitoring unauthorized access to the cemetery and destruction of resources.
- Educate adjacent property owners regarding resources located on their lands. Work with these owners to develop programs for the protection of the resources.
- Develop or maintain visual buffers along property lines abutting development. Develop relationships with adjacent landowners to determine the need for establishing additional buffers.
- Utilize screening methods that blend with the surrounding character of the site, such as planting native vegetation, and do not become a secondary visual intrusion.
- Coordinate with adjacent and nearby property owners to determine if they are amenable to selling or donating scenic easements for all adjacent property that will remain visible from the cemetery.
- Work with the CSX Corporation to ensure that historic resources and park character are considered in the development of any changes to the adjacent rail line.

Access to Resources

Develop an interpretive program that addresses cultural resources, natural systems,

- and their interrelationships, as well as layers of landscape history.
- Minimize the visual and physical impacts of interpretive and visitor access facilities on cultural resources and natural systems.
- Erect the minimal number of signs necessary to meet identity, directional, interpretive, and regulatory needs.
- Develop interpretive programs and media to be as accessible as possible for the widest range of visitors.

Role of Preservation Specialists

Undertake all treatment projects under the direction of appropriate specialists, including historical landscape architects, historical architects, archeologists, conservators, natural resource management specialists, and qualified technicians and artisans.

Documentation

Document, through drawings, photographs, and notes, all changes and treatments. Maintain records of treatments and preserve this documentation according to professional archival standards.

Treatment Concept

Stones River National Cemetery is a sacred and well-preserved historic landscape of honor and memory. The national cemetery provides a respectful environment that honors the final resting place of more than 6,000 individuals who lost their lives during the Civil War, and 1,000 additional veterans and their spouses. It is instantly recognizable as a part of the larger National Cemetery System due to the presence of several character-defining features, notably the perimeter wall, carefully laid out geometric arrangement of burials, commemorative monuments, ceremonial entrance and central square focused around a flagstaff, unified collection of grave markers, symbolic cluster of evergreen trees surrounding the core, use of

deciduous shade trees to frame the surrounding burial sections, and quality of peaceful, solemn, reverence. Appropriate long-term treatment measures for Stones River National Cemetery will preserve and protect these qualities and characterdefining features while maintaining in good condition the historic resources of the cemetery. Important considerations include protecting original historic fabric, replacing deteriorated features in kind where necessary, and addressing contemporary needs in the least intrusive and most compatible manner possible. The landscape should be well maintained and reflect the historic characteristics of Civil War-era national cemeteries. Treatment of the historic landscape will comply with federal regulations.

Recommended maintenance practices are intended to meet the spirit of Veterans Administration goals of honor, while protecting the integrity of historic cemetery features. To meet these goals, the vision for turf and tree maintenance is to retain and maintain tree plantings as indicated in nineteenth century plans and photographs of the cemetery, while promoting sustainability, identifying a manageable approach to turf maintenance that promotes the health and viability of the cemetery lawn, and reducing the frequency of mowing as possible to help protect historic grave markers. In some cases, this approach suggests a less manicured appearance than is recommended by the National Cemetery Administration.

The landscape of Stones River National Cemetery has the potential to tell the story of the role of terrain in the military action during the Battle of Stones River, as well as the cemetery's initial establishment in 1864 and development throughout the nineteenth century as a Civil War burial ground, later expansion to include military personnel associated with later conflicts under the War Department between 1927 and 1933, and subsequent National Park Service administration. The treatment recommendations therefore also include ideas for expanding interpretation within the cemetery to include layers of history and where to site new exhibits so that they are the least intrusive possible.

Overall treatment objectives for the setting and approach to Stones River National Cemetery are to retain and enhance the historic rural setting by anticipating development, working to control it within the viewshed of the historic landscape, and ensuring that it is screened from view as necessary.

Treatment Recommendations

The treatment recommendations conveyed below are organized into three parts: cemetery-wide recommendations, and recommendations specific to the Lodge and Service area and Burial Grounds character areas. These recommendations should be considered in conjunction with the guidelines conveyed above. They are also supported by the section that follows—Implementation Projects which offers more specific methods for undertaking recommendations as part of six broader endeavors. Reference is made to the relevant implementation projects in parentheses at the end of each treatment recommendation as appropriate.

Cemetery-wide Recommendations

The primary goal of the treatment recommendations that follow is the long-term preservation and protection of the features that contribute to the historic character and significance of Stones River National Cemetery. They are supported by the identification of methods by which park managers can maintain, repair, manage, and repair historic characterdefining features as discussed in the implementation project section. Given the extensive period of significance for the historic property, the goal of treatment will not be to restore the cemetery to a particular period of time, but rather to protect and enhance the integrity of the overall historic design intent. The specific objectives of treatment can be summarized as follows:

Preservation and enhancement of the landscape character of Stones River National Cemetery and the original form and fabric of the historic burial ground.

- Recognition of the role that vegetation and management and maintenance play in protecting the historic character and heritage of the cemetery.
- Preservation, repair, restoration, and conservation of masonry and metal structures and small-scale features.
- Improvements to circulation and access to the cemetery.
- Enhancement of the visitor experience that emphasizes that the cemetery is a place for quiet contemplation, but also provides interpretation that affords a deeper understanding of its significance.

The goals for maintenance include balancing the high degree of care recommended by the National Shrine Commitment: Operational Standards and *Measure* with appropriate historic resource preservation, which may suggest a less manicured appearance is acceptable without evoking an unintentional message of disrespect. In some cases, historic resource protection may suggest less frequent mowing, the use of gentler cleansing materials that may not result in a bright appearance, and the retention of trees, which are not recommended by the National Cemetery Administration. The park must therefore carefully implement maintenance and treatment measures that preserve the historic character and materials of the landscape, while working as possible to meet the spirit of National Cemetery Administration guidelines. The park may elect to explain this approach to the visitor.

Cemetery-wide Recommendations.

Refer to Figure 203.

Update the National Register documentation for Stones River National Cemetery as part of the park-wide nomination update currently in progress as part of development of an Administrative History for the park (2014), using this CLR as the basis for developing additional documentation for the cemetery. If appropriate based on the level of detail that

- can be afforded the cemetery in the park-wide nomination update, consider developing a separate nomination update for the national cemetery to provide an opportunity to incorporate a greater level of detail about the cemetery.
- Maintain the landscape features of the historic cemetery in good condition. Protect historic resources to avoid damage that will lead to condition problems or the need for replacement in the future. Repair features assessed in fair or poor condition. Repair, rather than replace, historic resources whenever possible. Replace severely deteriorated features in kind whenever possible. Replacements should match the original in design, color, texture, materials, size and scale, and appearance. Existing materials should be reused to the greatest extent possible. If replacement in kind is not possible, select replacements that are compatible in character with the historic and site them to maintain historic spatial patterns. (Refer to Implementation Projects 2 and 3.)
- Base all repair and replacement work on historical documentation.
- Document all alterations to historically significant landscape features through scaled drawings, notes, and photographs, tied to electronic recordation systems, giving particular attention to materials, color, texture, dimensions, and construction techniques. Maintain this information in a centralized location and the database of electronic information recommended herein. Ensure that the database is easily accessed and amended as work is conducted.
- Employ available technology, such as Geographic Information Systems (GIS), Global Positioning System (GPS), as well as remote sensing and related archeological methodologies, such as ground penetrating radar (GPR), in inventorying, documenting, and recording information relating to the cemetery's historic resources.

- Avoid reconstructing missing historic features or introducing conjectural features into the historic landscape, which may create a false sense of history and mislead the visitor. The CLR does not recommend restoring the landscape to a particular period of time, but rather the interpretation of its various layers of history and changes over time, including the Civil War Battle of Stones River, initial cemetery establishment, and administration by the War Department and National Park Service. For missing features of importance, such as the Superintendents' Lodges, consider various means and methods for their interpretation that will help the visitor to visualize and conceptualize the role and spatial presence of the missing features. (Refer to Implementation Project 5.)
- Avoid adding new features within the cemetery, except for new grave markers associated with new burials or as replacements for severely deteriorated or damaged markers, particularly features that are not reversible. The limited addition of interpretive signage, removable site furnishings, and plantings are the only exceptions to this recommendation.
- Ensure that any ground-disturbing activity is monitored by a qualified archeologist. Involve archeologists in early planning for new projects that require ground disturbance. The exception to this recommendation is for ground disturbance associated with grave openings, closing of graves, and filling sinkholes or grave subsidence.
- Use the smallest machinery possible for excavation of graves or for maintenance purposes to reduce damage to roads, grave markers, and monuments. (Refer to Implementation Project 2.)
- Develop a site furnishings guide that identifies appropriate styles for benches, trash receptacles, lighting, and all sign types to be used consistently throughout the cemetery. (Refer to Implementation Project 6.)

- Develop a vegetation management plan that preserves the historic character of the cemetery by identifying a planting and replacement policy for trees and shrubs that contribute to its significance. Use the 1892 cemetery plan as the basis for developing the planting plan. Consider the viability of all species indicated in the 1892 plan for use in the future. Develop a list of recommended plants as part of plan, taking into consideration the accumulated experience of park maintenance personnel regarding the species that have performed well in the cemetery environment and local climate. The use of native species should take precedence over non-native species. Identify the goals for tree and shrub plantings so that species substitutions can be made should conditions change. The plan should also identify appropriate native tree species that should be used for planting and replacement to meet the goals identified. Appropriate species are those that can be maintained in current and anticipated future climate and soil conditions. (Refer to Implementation Project 1.)
- Maintain and update existing surveys of cemetery tree and shrub plantings using GPS technology and add this information to the park's GIS database to aid in vegetation management. (Refer to Implementation Project 1.)
- Educate cemetery maintenance staff on the significance of historic vegetation, and ensure that they receive training that is appropriate to the unique conditions within the cemetery. (Refer to Implementation Project 1.)
- Maintain historic vegetation by stabilizing and pruning to protect against structural failure caused by wind, ice, snow, or age. (Refer to Implementation Project 1.)
- Implement a cyclical maintenance program that includes periodic inspection of all trees for damage, disease, and or evidence of decline in order to prevent deterioration or loss of plant material. Treat each condition appropriately and ensure that maintenance

- actions are documented for the database record. Regular maintenance of vegetation will also prevent damage to adjacent and nearby resources, such as grave markers, monuments, and the perimeter wall. (Refer to Implementation Project 1.)
- Make every reasonable effort to treat or stabilize a historic tree that is diseased or damaged prior to considering removal. Avoid removing historic specimen trees unless they pose a safety threat to visitors, are in advanced decline, or present a risk to other historic resources. (Refer to Implementation Project 1.)
- Replace historic trees and other plants based on the proposed planting plan developed for the cemetery that takes into consideration the original design intent of plantings, particularly the role of evergreen and deciduous trees in creating space, character, and a symbolic sense of place. (Refer to Implementation Project 1.)
- Ensure that the root zones of historic trees are not compacted by circulation routes or storage of equipment or materials. (Refer to Implementation Project 1.)
- Protect existing vegetation, especially trees, in areas impacted by new burials or other excavation activity, and closely monitor throughout the disturbance period. Tree roots typically extend well past the drip line of the tree. At a minimum, the area within the drip line should be protected from soil compaction from heavy equipment, which will inhibit air and water penetration to the root zone and threaten the health of the tree. If major roots are to be affected, use an Air Spade to clear soil from those roots so that the mass can be tied back away from the area of excavation. Once the work is completed, replace the roots at their original level and back fill. (Refer to Implementation Project 1.)
- Monitor for and control, or preferably eradicate, invasive plants. (Refer to Implementation Project 1.)

- Prune trees infringing on circulation routes to 80 inches above the ground to provide safe passage. Evergreens used as a screen should not be limbed up. (Refer to Implementation Project 1.)
- Maintain the open character of the field to the east of the cemetery to serve as an appropriate open foreground for views of the cemetery along the Old Nashville Highway, and to maintain historic patterns of open space. The existing warm-season grass meadow is an acceptable ground cover for this purpose.
- Assist adjacent property owners in the development of scenic easements on the commercial properties to the north, which are designed to protect the viewshed from the cemetery. Encourage adjacent land owners to retain and enhance the existing screen planting that helps to diminish the visual impact of commercial developments. Conduct a seen-area analysis of the commercial property to the north during the winter months. Mark a map indicating where additional screen plantings would be of value on the adjacent property to enhance the visual quality of the historic cemetery.
- Avoid planting screen buffers to limit views to the north that would be inconsistent with the historic design intent and character of the cemetery. Interpret differences between the historic character of the rail line and its present elevated alignment. Work with CSX Corporation to limit the visual impact of any proposed future changes on the cemetery.
- Maintain a viewshed between the park's visitor center patio and the national cemetery when developing planting plans. (Refer to Implementation Project 1.)
- Develop a repair and maintenance plan for cemetery circulation systems. The plan would include guidelines for maintenance of road and avenue surfacing and repair. (Refer to Implementation Project 4.)

- Ensure that a unified wayside exhibit design style is used for all signage and identity features associated with the cemetery. Consider using electronic media methods that do not require the addition of new site features within the historic landscape as part of the interpretive program available to visitors. (Refer to Implementation Project 6.)
- Provide enhanced interpretation of the cemetery based on the preparation of a longrange interpretive plan. Consider the information afforded by this CLR in the development of the plan, such as the layers of history associated with the cemetery, its relationship to the nationwide National Cemetery System, and the features that were historically present, but are no longer extant. Consider alternatives for interpreting the locations and forms of the missing buildings and landscape features. (Refer to Implementation Project 5.)
- Consider reinstalling the original War Department tablets within the cemetery in their original locations, or alternatively interpreting their former role in the cemetery.
- Consider reinstalling the Gettysburg address plaque within the cemetery. Because it cannot be returned to its original location in front of the no longer extant superintendent's lodge, consider alternate placements, including in priority order, near the replica rostrum, Lincoln Square, or near the parking area inside the cemetery wall.
- Consider replacing the existing plastic nonhistoric Floral Regulations sign with a cast metal sign similar to those found in other national cemeteries.

Recommendations for the Lodge and Service Character Area

Refer to Figure 204.

The overall treatment objective for this character area, which includes the area northwest of the screen plantings of Eastern red cedar trees and

encompasses the residential and maintenance area, is to retain and maintain historic features such as the perimeter wall, Mission 66-era residences, maintenance shop, well house, and road, as well as the landform and topography; to screen the service area from view from the burial grounds character area; and to maintain all features in good condition. Specific recommendations for treatment of resources within this character area include the following:

- Retain and maintain the features that are character-defining for the lodge and service character area:
 - The ridge extending west to east through the center of the character area
 - The graded, sloped topography, and level areas associated with the residences
 - The linear arrangement of buildings that parallels the western boundary wall and is edged by a service road corridor
 - o The maintenance access road
 - The entrance marked by piers at the opening in the perimeter wall
 - o The driveways to the residences
 - The walkways to the residences
 - Historic shrub and tree plantings associated with the residences
 - The perimeter wall constructed of native limestone
 - The well house
 - The three residences
 - The stone retaining wall north of Building 6
 - o The maintenance shop
- Retain the screen planting of Eastern red cedar trees between the replica rostrum and the staff

- housing until they decline, at which point they should not be replaced (See also recommendation in burial grounds character area relating to interpretation of the lodge and service character area.) (Refer to Implementation Project 1.)
- Repair paved roadways and paths that exhibit problems with cracking and spalling. Ensure that the soil of the adjacent ground meets the margins of the circulation systems smoothly at the same grade.
- Consider collecting water from the roof drains associated with each residence and the maintenance complex in rain barrels. Use the collected water to maintain plantings within the cemetery.
- Establish and implement consistent site furnishing standards for trash receptacles, tables, grills, and benches to ensure a unified appearance throughout the cemetery. (Refer to Implementation Project 6.)
- Consider opportunities to provide interpretation to visitors regarding the features that are no longer extant within this area, including the former superintendents' lodge structures, particularly the lodge design developed by U.S. Army Quartermaster Montgomery Meigs that was used in many national cemeteries around the country, as well as other buildings and garden features that comprised the area. (Refer to Implementation Project 5.)

Recommendations for the Burial Grounds Character Area

The overall treatment objective for this character area, which includes the majority of the cemetery within the perimeter wall with the exception of the Lodge and Service character area, is to:

- perpetuate the sacred and well-maintained character of the landscape;
- maintain and provide legible and historically appropriate grave markers;

- enhance the Lincoln Square landscape by repairing features with condition problems;
- enhance interpretation and visitor amenities;
- address the need for a comprehensive planting plan.

Maintenance procedures for masonry and vegetation features are of the utmost importance to the protection and preservation of the historic cemetery landscape; they are addressed further in the Implementation Projects section that follows, as well as Appendix B, Conservation Assessment. Appendix C, Non-Conforming Headstones, provides additional documentation of the privately erected headstones in the cemetery. The recommendations for the burial grounds area are further divided into Overall Burial Grounds and the Lincoln Square and Central Avenue.

Overall Burial Grounds.

Refer to Figure 205.

- Retain and maintain the features that are character-defining for the Burial Grounds Character Area:
 - Knoll and slope topography with a central ridgeline
 - Perimeter wall constructed of native limestone
 - Symmetrical, axial, radial layout
 - o Formal geometric pattern of uniform gravestones
 - Twenty burial sections composed of smoothly sloping lawn panels with deciduous tree plantings
 - The site of the rostrum located in a lawn panel edged by tree plantings
 - Fill along the eastern margin of the cemetery to address storm water management and drainage

- Views between the sections along the avenues
- Views between the cemetery and Old Nashville Highway
- Views between the cemetery and the rail line
- Views to the cemetery from the Stones River National Battlefield visitor center
- Vehicular and pedestrian entrances marked by limestone gate piers
- Individual specimens of Eastern red cedar, ginkgo, Southern magnolia, hemlock, Norway spruce, and tulip poplar surviving from the nineteenth and early twentieth centuries
- Graded turf surfacing of cemetery avenues
- Civil War-era marble markers
- Civil War-era privately erected headstones
- o Grave markers from Spanish-American War, World War I, World War II, and Vietnam era
- 43rd Wisconsin and 180th Ohio Monument
- Native limestone section markers
- Cast-aluminum tree identification sign
- Design a universally-accessible walk that allows visitors to travel through key areas of the cemetery and affords access to the primary features and interpretive opportunities available. Consider developing the existing pedestrian path that links the pedestrian gate at the Old Nashville Highway with Lincoln Square and follows much of the historic alignment of Carpenter Avenue. Rehabilitate the existing mulch-surfaced path by removing the mulch and replacing it with brown-hued asphalt. This treatment will be compatible with the historic character of the cemetery,

- and avoid the need for soil disturbance or excavation. (Refer to Implementation Project 4.)
- Rehabilitate the turf avenue that edges the north cemetery wall. Remove existing gravel surfacing, conduct fine grading to restore the historic grade of the avenue, and reestablish turf. To continue use of the avenue for maintenance needs, consider mixing gravel into the soil to create a stabilized turf that can support light vehicle traffic.
- Consider interpreting the historic use of clipped evergreen shrubs during the nineteenth century in national cemeteries, including Stones River, to represent corps badges. Conduct additional research to determine whether this practice occurred at Stones River, and which corps badges were represented in this way. (Refer to Implementation Project 5.)
- Complete analyses intended to support the management of vegetation within the cemetery, including testing and evaluating the pH, fertility, composition, and tilth of the soil to determine its suitability for proposed plantings and need for soil amendments. Consult with a knowledgeable expert regarding the list of species, including turf mixes, appropriate for planting in the cemetery given the existing soil and moisture conditions identified through testing and analysis. (Refer to Implementation Project 1.)
- Consider a program of applying compost and soil amendments over an extended period to improve the soil of the cemetery to support the health and longevity of tree plantings and turf. Consider options for addressing soil compaction problems that might be leading to a decline in tree and turf health in consultation with an expert. (Refer to Implementation Project 1.)
- Evaluate trees annually by engaging a professionally-licensed arborist who will assess each tree and provide prioritized

- maintenance recommendations. (Refer to Implementation Projects 1 and 3.)
- Rehabilitate the cemetery turf to improve its health and appearance. To achieve goals of uniformity of appearance, vibrant green color, low percentage of weeds, and absence of debris, use species that are adapted to the geographic region. Replace Bermuda grass with an appropriate non-invasive cool-season turf grass mix that is suited to the environmental conditions of the cemetery. Design two turf mixes for the cemetery that can be used in areas of full sun and in areas that experience more shade. Implementation of this recommendation will require the eradication of Bermuda grass.
- Develop a lawn maintenance and mowing schedule and best practices that are specifically designed to prevent damage to grave markers and other masonry features. Keep turf neatly cut. Turf should be carefully trimmed around the headstones, signs, buildings, and structures to prevent damage to these features. Avoid damage by following the best practices developed to address this need. Avoid impacts from line trimmers and mowers. (Refer to Implementation Projects 1 and 3.)
- Employ alternative ground cover plantings in areas of high shade where grass turf is not expected to grow. Current evidence of horseherb (Calyptocarpus vialis), observed to be growing in the cemetery, should be evaluated for expanded use in cemetery shade conditions. This species is low-growing, spreads in the shade, and can be maintained through mowing. (Refer to Implementation Project 1.)
- Maintain the existing avenues of grass that form the circulation routes through the burial sections. Keep these areas free of future plantings and burials.
- Maintain the replica rostrum. Although this structure is not historic, it remains an important feature of the cemetery.

- Ensure that each grave marker and monument within the cemetery has been documented using GPS/GIS technology (including rear as well as front face of each marker) and maintain the information in a workable database that is used to record condition issues and treatments.
- Repair the limestone section markers, which are exhibiting problems with weathering and water damage. (Refer to Implementation Project 2.)
- Repair any damage to the limestone wall, taking care to correct any past repair efforts that resulted in additional problems or were not consistent with the approach recommended herein. (Refer to Implementation Project 2 and Appendix B.)
- Consider replacing the concrete section markers with limestone markers that are consistent with surviving historic limestone markers.
- Repair rather than replace grave markers with condition issues. Avoid replacing markers unless the problems are irreparable. (Refer to Implementation Project 2.)
- Prepare a comprehensive masonry and metalwork maintenance guide that includes a manual to direct work on each type of marker or monument. Identify specific appropriate stone cleaning methods for grave and section markers and monuments, train personnel in the methods, and ensure that they are followed. (Refer to Implementation Project 2 and Appendix B.)
- Inspect grave markers and monuments regularly to ensure that they remain in good condition. Document inspections with reports and photographs to aid in the understanding of any chronic conditions, and record the information in the electronic database of information recommended above. (Refer to Implementation Project 2.)

- Consult with the Southeast Region List of Classified Structures Coordinator to transfer information from latest park-level, condition assessments and summaries of planned and completed maintenance.
- Avoid the use of chemical pesticides, herbicides, and fertilizers around historic grave markers. Acidic chemicals can deteriorate marble and limestone, while alkaline chemicals can deteriorate granite. Consider the use of organic methods. Treat weeds by hand pulling. (Refer to Implementation Projects 1, 2, and 3.)
- Establish and implement a site furnishings plan that establishes a unique identity and cohesive design aesthetic for the cemetery. Devise standards for benches and other contemporary features, including trash receptacles, to ensure a unified appearance throughout the cemetery. Identify in the plan the appropriate locations for new furnishings. Consider the historic bench design for replacement as part of the plan and conduct research to identify the style of other historic site furnishings. If a non-historic style is selected, the design should be contemporary and a product of its own time, yet complement the overall historic character of the cemetery in scale, design, and materials. (Refer to Implementation Project 6.)
- Consider placing benches in association with wayside exhibit groupings or nodes, and at other natural stopping points along the universally-accessible path. (Refer to Implementation Project 6.)
- Evaluate site drainage for the entire cemetery and address areas of ponding and flooding, as well as existing erosion problems.
- Repair erosion associated with the base of the 43rd Wisconsin and 180th Ohio Monument. Fine grade the base, scarify the soil, and seed during the appropriate season, protecting the repaired and seeded area with erosion control matting.

- Continue to proceed with new burials in accordance with procedures already in place.
- Retain and maintain the existing screen planting of Eastern red cedar trees between the replica rostrum and the burial grounds until the trees decline, at which point they should not be replaced (Refer to Implementation Project 1.)
- Consider relocating the powder magazine to a location near the three-bay storage shed.
- Consider establishing a viewing location near the rostrum that allows for a view to one of the Mission 66 staff housing units through the trees. Consider options for interpreting the history of the lodge and service area from the viewing location, potentially using historic images of features no longer present to support visitor understanding of the area over time.

Lincoln Square and Central Avenue.

Refer to Figure 206.

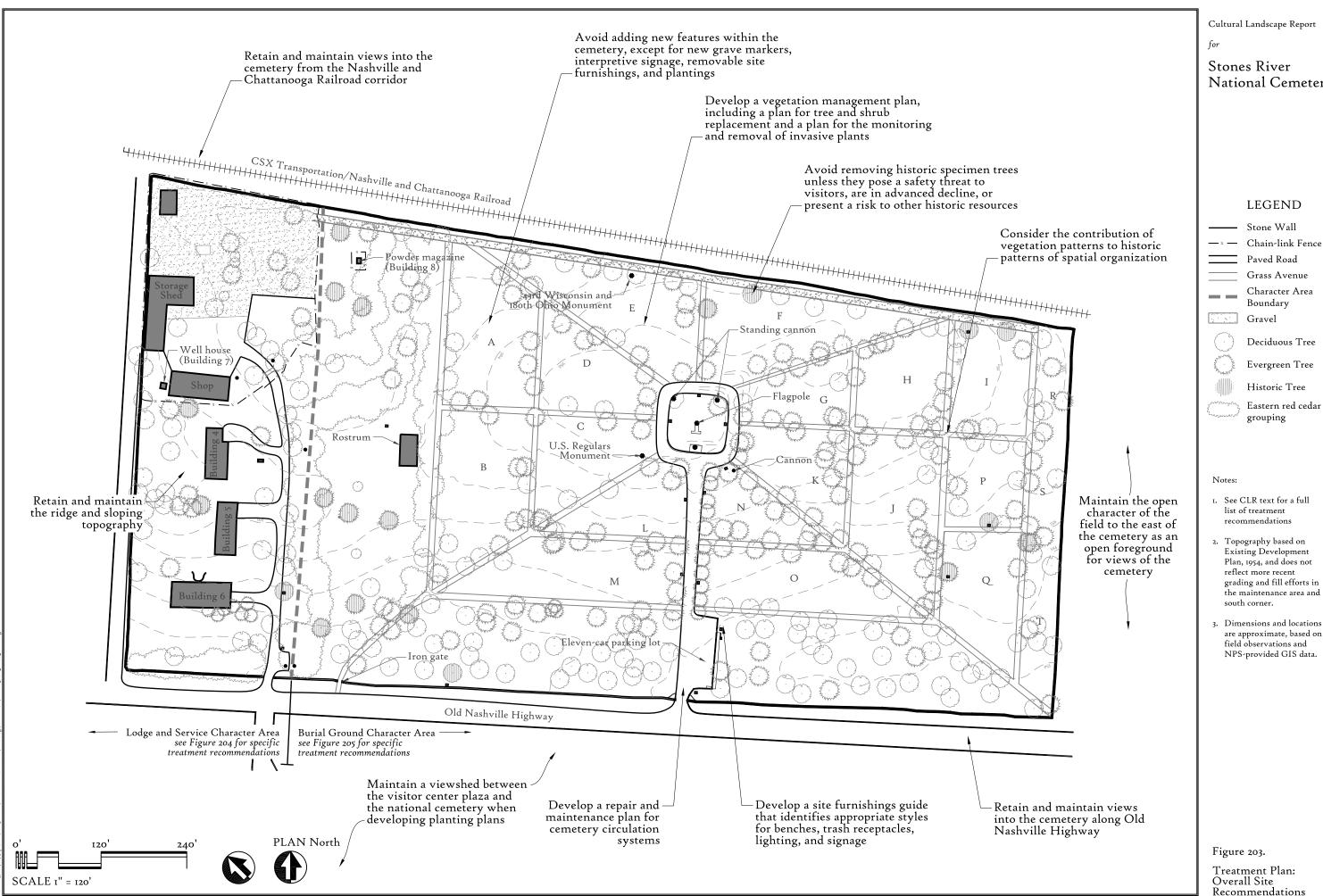
- Retain and maintain the features that are character-defining for the Burial Grounds Area:
 - Limestone gate piers and cast-iron gates at the main entrance
 - Cast-iron national cemetery shields
 - Paved central drive
 - o Parking lot along central drive
 - Lincoln Square sited atop the crest of the central knoll centered on a flagstaff set atop an earthen mound
 - Cast-iron flagstaff as focal point
 - o U.S. Regulars Monument
 - Standing cannon tubes
 - o Cannonball pyramid monument

- Seven "Bivouac of the Dead" plaques
- Allées of evergreen trees surrounding central core and Lincoln Square
- Grading associated with the central drive and the road encircling Lincoln Square
- Vista to the flagstaff on axis with the central drive
- Vistas toward and away from Lincoln Square
- The last Mission 66-era wayside exhibit is planned for removal from the cemetery. If it is removed, the exhibit should be relocated to the park's artifact collection.
- Ensure that visitors have the information they need to locate known individuals buried in the cemetery. Include this information on a web site and establish a grave locator within the cemetery, possibly near Lincoln Square or the visitor parking area, for the benefit of visitors. Base the design on the historic grave locator that was formerly associated with the superintendent's lodge.
- Standardize interpretive signage within the cemetery. (Refer to Implementation Project 6.)
- Repair all areas undergoing soil erosion, such as the sloped portions of Lincoln Square and the base of the U.S. Regulars Monument.
 Protect against further erosion by establishing new turf ground cover. Use erosion control fabric to cover areas of exposed soil until which time the new ground cover can be established.
- Consider replacing the plantings within Lincoln Square. The existing shrubs are overgrown and obscure important views of the landscape and features within Lincoln Square. Evaluate both the 1892 and 1934 planting plans as possible designs for replacing the existing plantings, many of which were added in 1970. Ensure that the new plantings do not obscure key visual relationships within

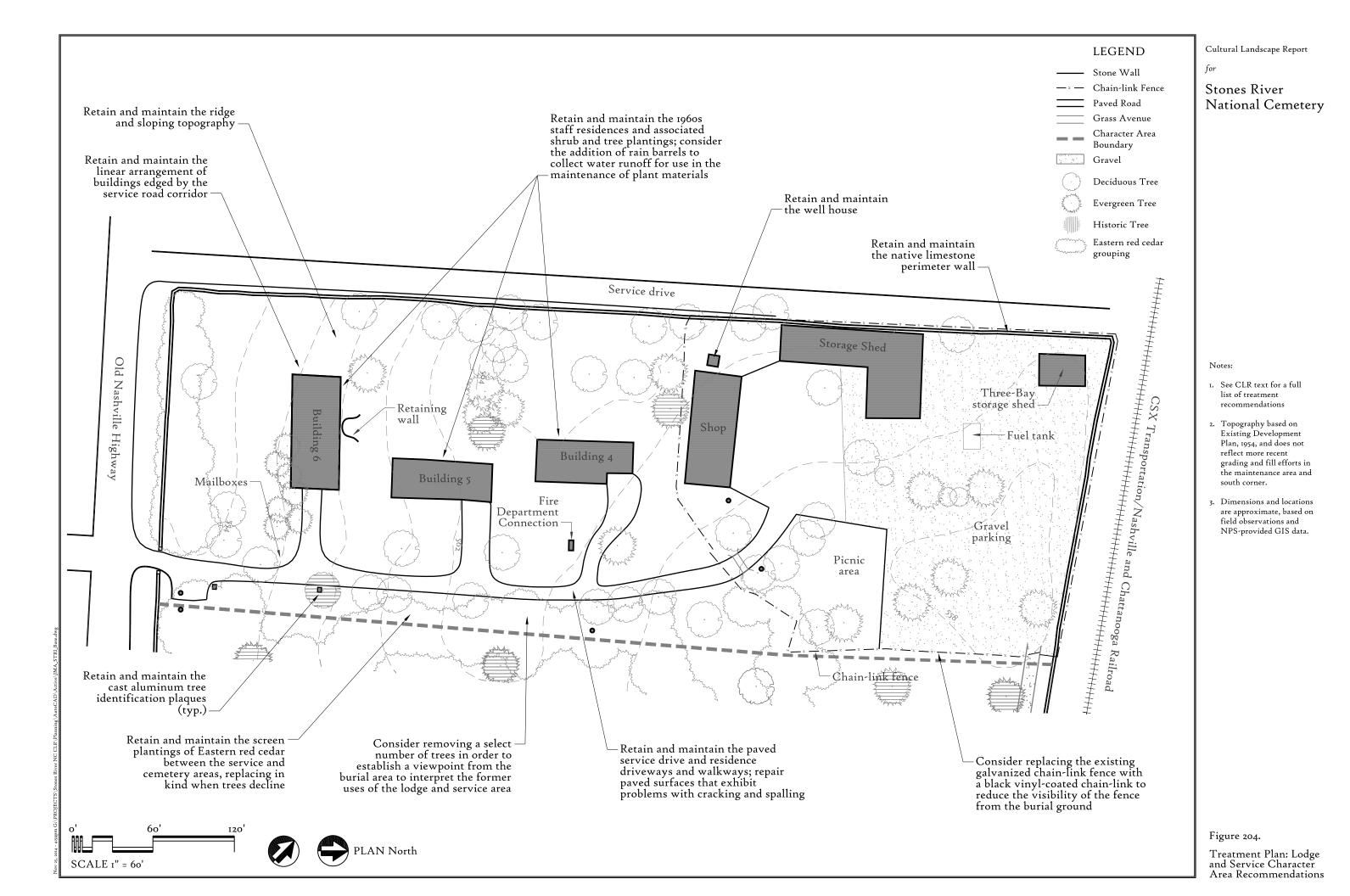
Lincoln Square. (Refer to Implementation Project 1.)

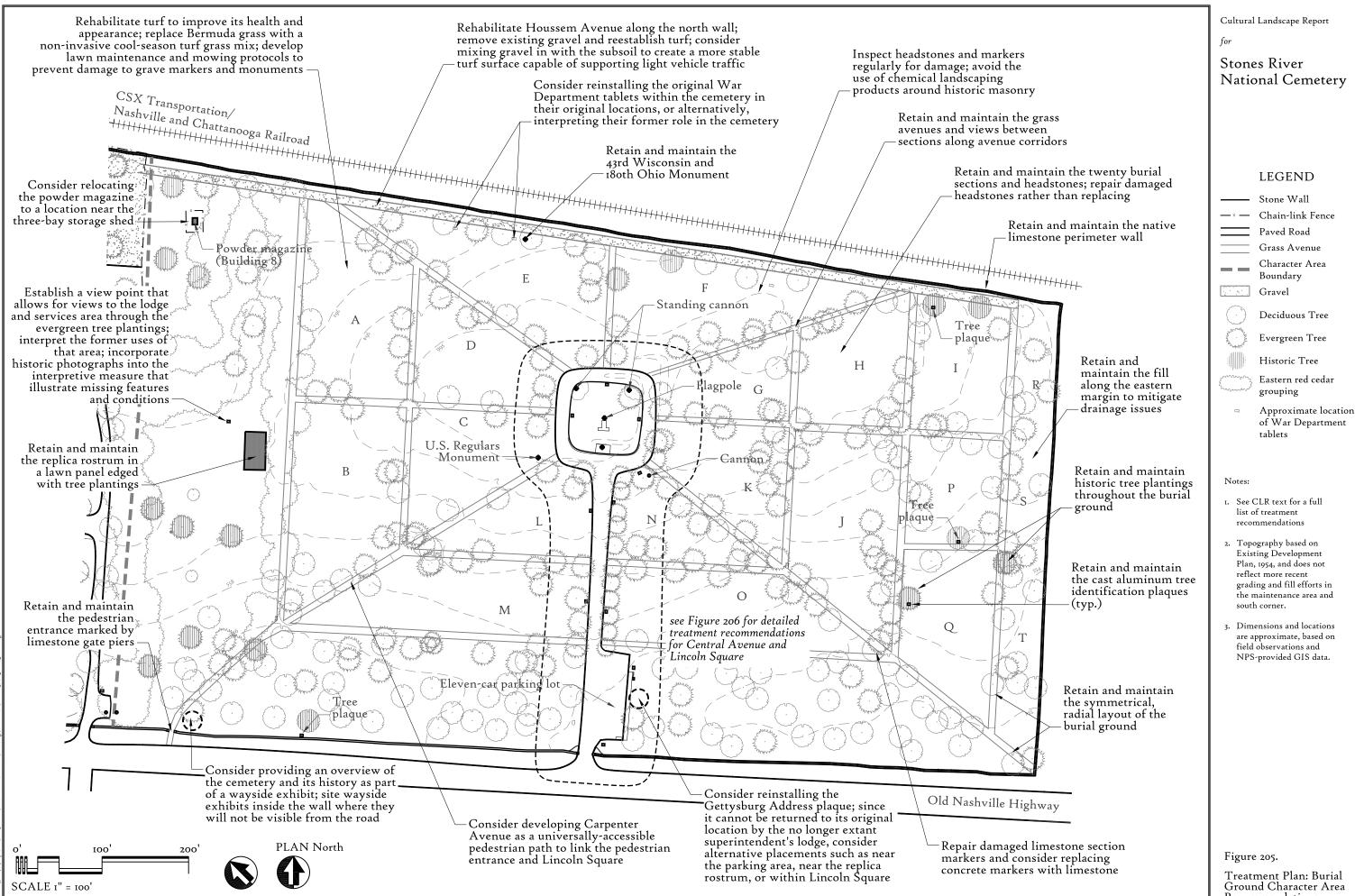
- Consider replacing the cannonball pyramids that originally accompanied the standing cannon tubes.
- Consider replacing the unpainted red cedar posts that originally support the "Bivouac of the Dead" plaques.
- Consider providing a single universally accessible parking space along the margin of Lincoln Square that can be used to provide an alternative universal access route to the cemetery core. Site the parking space carefully to reduce its visual impact by limiting the size of the space, avoiding placing it on the central axis line, and reducing the degree of change to existing grades. Consider the use of compact shrubs at either side of the space to enhance screening, and alternative paving materials that might incorporate grass panels.
- Consider retaining the existing cannon as part of the interpretive program of the cemetery. Consider interpreting the role that terrain played in the outcome of the Battle of Stones River. (Refer to Implementation Project 6.)
- Ensure that the new pedestrian universal access route allows for a smooth transition to the pavement at Lincoln Square without barriers, and that the pavement around Lincoln Square meets universal accessibility criteria. (Refer to Implementation Project 4.)

Treatment Plan



National Cemetery



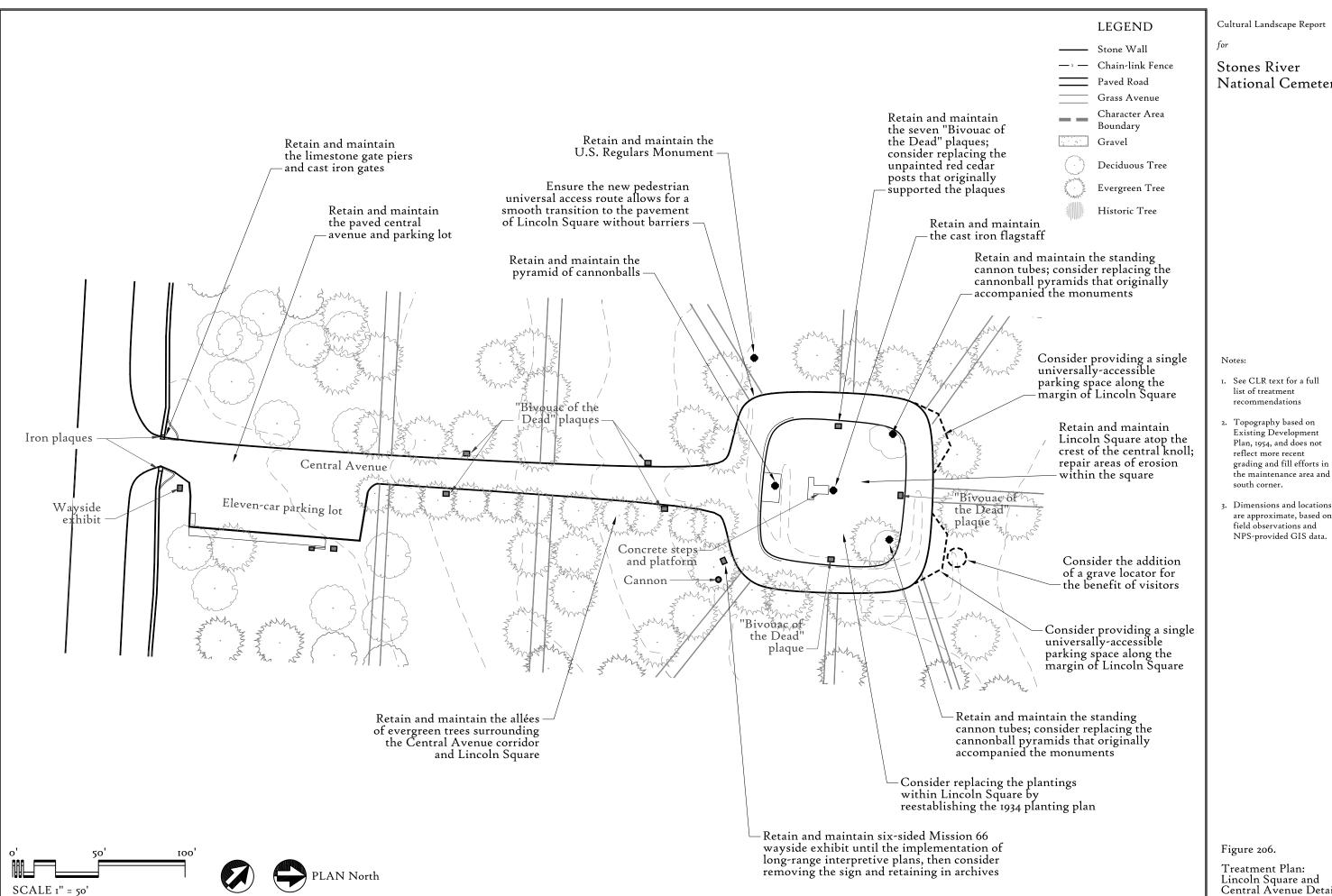


National Cemetery

of War Department

are approximate, based on

Ground Character Area Recommendations



National Cemetery

are approximate, based on

Lincoln Square and Central Avenue Detail Area Recommendations

Implementation Projects

This section provides guidelines for implementing many of the recommendations conveyed above. These implementation guidelines have been organized into a series of prioritized projects, each presenting a goal or vision for treatment and laying out a process for achieving it. The six projects included below are intended to support the park's ability to secure funding and are presented in a format that is consistent with National Park Service Project Management Information System (PMIS) Facility Management Software System (FMSS) forms. Responding to the guidance offered in the park's GMP and other planning documents, these projects also address life safety considerations and visitor accessibility and interpretation needs. All projects are subject to review under Federal Section 106 and National Environmental Protection Act (NEPA) compliance. Most of the projects depend on the completion of one or more park- or area-wide studies or plans, some of which are currently underway. The breakdown of tasks for each project does not include project management, compliance-related reviews, and other procedures typically undertaken by National Park Service personnel as part of the planning, design, and construction phases of a project.

The projects are each presented in a consistent format of six sections: 1) description; 2) location; 3) considerations; 4) additional studies recommended; 5) related implementation projects; and 6) project implementation process.

The six implementation projects conveyed over the pages that follow include:

- 1. Prepare a vegetation management plan.
- 2. Develop maintenance manual for masonry and metal features of the cemetery, incorporating conservation best practices.
- 3. Address vegetation maintenance needs, taking into consideration the protection of grave markers and monuments.

- 4. Develop a universally-accessible pedestrian path system that provides access to the primary interpretive areas of the cemetery.
- 5. Consider methods for marking and interpreting the layers of history within the cemetery, including the locations of missing landscape features.
- 6. Establish a design guide for site furnishings and signage.

1. Prepare a vegetation management plan

Description. A vegetation management plan is currently needed for the Stones River National Cemetery to facilitate appropriate maintenance of the historic landscape in good condition and perpetuate its historic integrity. Goals for the plan would include the identification of short- and long-term vegetation management approaches, appropriate and preferred maintenance procedures, a planting plan to guide replacement of deciduous and evergreen trees and shrub plantings within Lincoln Square, and BMPs for planting, pruning, mowing, tree removal, and applying soil amendments.

The vegetation management plan would specifically address:

- treatment of specimen trees and shrubs
- treatment of turf lawn and other ground covers
- restoration of historic vegetation conditions that have been lost over time, based on review of historic plans, maps, photographs, and other primary source materials
- development of a planting plan to guide replacement of trees and shrubs when needed
- invasive species control

Location. The vegetation management plan would pertain to plantings located throughout Stones River National Cemetery.

Considerations. A vegetation management plan will serve a crucial role in implementing the recommendations included in this CLR. The vegetation management plan should address the inherent needs of the species present in the most sustainable manner, while also establishing processes and methods that support historic landscape preservation and interpretation.

As a first step in developing a vegetation management plan, the park should complete any outstanding inventory and evaluation needs to serve as a baseline of information. The information should be recorded, as noted in the treatment recommendations section, using electronic mapping, photography, and notes that are accessible and suitable for additions over time to keep track of treatments. The origin of existing plantings should be identified using available resources such as historic plans and aerial photographs, so that they are tied to the various planting programs discussed in the site history and analysis sections of the CLR. The 1892 plan that provides the most specific information about nineteenth century plantings should be considered a baseline of information regarding past planting intentions. Proposals for plantings in the future should evaluate the viability of the plantings included in the 1892 plan given the experience of the National Park Service on site since 1933. Very few trees survive from the 1892 plan or from planting efforts conducted in 1934, and should be identified as such in the database that reflects the recommended inventory and assessment program. They should also be indicated on the mapping included in the vegetation management plan. Many other plantings were established in the 1970s and 1980s, and this information should also be recorded, as should any planting that occurs in the future. The species included in the earlier planting plans, and the overall plan for the siting of deciduous versus evergreen specimens should be respected in the planting plan. The viability of the species used in the past, given the potential impacts of climate change on temperature, precipitation, and severe weather, should be evaluated. Substitutions should be considered for species that are not anticipated to thrive under emerging climate conditions and for non-native species that may constitute invasive exotics.

The vegetation management plan should include a planting plan that reflects the historic intent for the cemetery plantings and indicates where replacement in-kind is appropriate and where replacement from a list of recommended species is acceptable. Some of the original plantings are over-mature or require care and maintenance. Others have been lost. New plantings have been added to the site that may not be consistent with

the historic design intent and approach. The planting plan should also indicate where plants should be added to restore aspects of the historic landscape that have lost integrity based on comparison of historic plans with current conditions, and address contemporary needs such as screening the maintenance facilities.

The vegetation management plan should provide guidance for maintaining the existing and proposed tree, shrub, and other ornamental plant materials in good condition.

Non-native species with the potential to disrupt native plant communities, such as English ivy (*Hedera helix*), were included in the original plantings within the cemetery. The English ivy has since been removed, and should not be replaced. Similarly, any other non-native species that are considered a threat to native vegetation within central Tennessee should not be replanted. Bermuda grass is currently part of the turf composition within the cemetery. This aggressive invasive species will be very difficult to control and potentially eradicate. Development of a monitoring program that identifies and records the locations of invasive exotic plants, and followup management and maintenance strategies for their removal, should be included in the vegetation management plan.

Additional Studies Recommended.

- This project should be considered in conjunction with interpretive planning efforts.
- BMPs for tree planting, removal, and pruning, turf maintenance, and invasive species control and eradication should be identified and prepared as part of the vegetation management plan.

Related Implementation Projects.

Project 3. Address vegetation maintenance needs, taking into consideration the protection of grave markers and monuments.

Project Implementation Process.

- 1. Undertake the studies necessary to support the vegetation management plan, including maintenance planning.
- 2. Prepare the vegetation management plan, utilizing the studies cited above and the CLR's recommendations relating to control, removal, and modification of existing vegetation in support of historic, cultural, and natural resource management. Involve park staff and regional natural resource specialists in preparation of the plan. Identify priority projects and implementation phasing options in the plan.
- 3. Prepare a planting plan based on the vegetation management plan to guide proposed rehabilitation and restoration efforts.
- 4. Initiate CLR projects relating to vegetation management.

2. Develop maintenance manual for masonry and metal features of the cemetery, incorporating conservation best practices.

Description. The grave markers, monuments, and other commemorative and interpretive features of the Stones River National Cemetery are important historic resources as well as honorific memorials. These features are constructed of masonry-limestone, marble, sandstone, and granite—as well as concrete and metal, and are subject to damage and deterioration due to weather, lack of maintenance, inappropriate past repairs and conservation, and vandalism. In addition, the grave markers and monuments, as well as the metal elements and wall, can be damaged by vegetation and the methods used to maintain it. Grass, tree roots, and branches, and vegetation and tree maintenance practices, can damage grave markers and other masonry and metal features. A maintenance manual is needed to address all aspects of care relating to these significant historic resources. Sources including the National Center for Preservation Technology and Training (NCPTT) provide treatment guidelines and information on current best practices.

Location. The features that are the focus of the maintenance manual are primarily located within the Burial Grounds character area.

Considerations. It is important that a detailed assessment of the condition of grave markers and monuments be completed to document and evaluate the likely or possible causes prior to the implementation of conservation treatments. When considering repairs to cemetery features, it is important to consider both immediate and longterm needs. The repair work should correct the immediate problem while also working to eliminate or reduce the cause of the deterioration. Repair work should also not accelerate deterioration or cause more problems in the future. All repair and maintenance efforts should be approached using a conservative and adaptive approach, applying the least intrusive methods and using the least amount of force, as aggressive

repairs may permanently alter the historic fabric. Specific treatments should always be tested on inconspicuous small areas of markers prior to full scale implementation. Ideally, repairs and treatments will be reversible. Conservation of the grave markers should use compatible materials and the treatments should be re-treatable to the greatest extent possible. The conservation of grave markers and monuments should comply with the Secretary of the Interior's Standards for Preservation and the American Institute of Conservation's Code of Ethics and Guidelines for *Practice*. Repairs to the historic cemetery features should only be performed by those with proven experience in the preservation of historic materials. All work should be documented, evaluated, and considered within a framework of an adaptive strategy.

Typical condition concerns for the masonry and metal features at Stones River National Cemetery include the following (see also Appendix B: Conservation Assessment):

Biological Growth. Biological growth is unwanted vegetative growth that impacts the feature, or an infestation of fungi, algae, or microbes on the surface of the feature itself. Biological growth may result in organic staining and bio-deterioration of the masonry pore structure from invasive root structures. The grave markers are exhibiting black and green biological growth, which is not consistent with maintenance goals. The limestone perimeter wall exhibits problems with black and green biological growth as well as vegetative growth.

Chipping. Many of the grave markers exhibit problems with chipping at the edges that can be directly attributed to lawn maintenance. Chipping is also evident in association with the limestone section markers.

Coating erosion. The metal features such as the cannon monuments exhibit some surface roughness associated with a loss of protective coating material.

Cracking and crazing. Grave markers exhibit varying degrees of cracking, including horizontal cracks at the base of the markers, and vertical cracks through natural veining at the top of the markers. Cracking and crazing is evident in association with the parged section markers. Narrow, medium, or wide separations in surfaces that extend through the thickness of the layer or stone can promote loss of material strength and further deterioration through moisture penetration. Some previous repairs performed with inappropriate materials or techniques that are damaging to the stone may be contributing to this problem.

Deterioration of sealant joints between coping stones. This problem was observed in association with the limestone perimeter wall, and is primarily associated with sealant that is beyond its useful service life. Sealant should only be used selectively, such as at upward facing joints that are vulnerable to water entry, while mortar should typically be used at most joint locations.

Displacement. Markers may be out of plumb or not level due to installation, insufficient footings (where present), or movement of earth related to thermal and moisture cycles.

Erosion and surface wear. The marble grave markers are exhibiting erosion and surface wear. This is likely due to natural weathering, and possible previous chemical and high-pressure water cleaning efforts. The concrete section markers exhibit problems of weathering on the top surface associated with a loss of edge definition, paste erosion, and increased aggregate exposure.

Incompatible mortar or grout. Some of the cemetery features have been repaired using visually and physically incompatible mortar and grout materials. Where mortar or grout is harder than the adjacent substrate, deterioration of the stone can occur.

Soiling. Soiling is caused by foreign matter, inorganic or organic, which accumulates on the surface of the features over time. Soiling was observed at the base of most grave markers as a result of rainwater splashing adjacent soil onto the surface of the stone. Limestone section markers exhibit a small degree of soiling at the base. Soiling

is also in evidence in association with the U.S. Regulars Monument.

Open joints. This problem refers to deterioration of the mortar joint between adjacent masonry units or materials. The perimeter wall exhibits problems with open mortar joints at ashlar wall faces. The upright cannon also exhibit problems with open joints at the connection of the cannon and the limestone base.

Ponding. When water collects in pools on flat surfaces, it causes the saturation of surrounding materials and can lead to deterioration.

Rising damp. This is the movement of moisture upward through permeable building materials by capillary action. Salts may be deposited in the voids, pores, and cracks.

Additional Studies Recommended. BMPs for maintenance processes involving masonry and metal should be identified and prepared as part of this project, incorporating conservation best practices. BMPs should establish protocols for care of grave markers as well as reporting any problems. Development of BMPs should take into consideration information available based on the experience of others conducting similar efforts. Sources to be considered include:

- Association for Gravestone Studies. (www.gravestonestudies.org)
- Chicora Foundation, Inc. "Best Practices for Cemetery Lawn Maintenance." (www.savinggraves.org)
- Save Our Cemeteries. (www.saveourcemeteries.org)
- Strangstand, Lynette. "Preservation of Historic Burial Grounds." National Trust for Historic Preservation, Preservation Booklet, 1995.
- Striegel, Mary. "Stopping the Hands of Time: Nine Tips for Cemetery Preservation." *NCPTT* Notes No. 39 [2001]. (www.ncptt.nps.gov/ NCPTT-Notes/Issue-39)

National Park Service preservation briefs, (www.nps.gov/tps/how-topreserve/briefs.htm)

Related Implementation Projects.

Project 3. Address vegetation maintenance needs, taking into consideration the protection of grave markers and monuments.

Project Implementation Process.

- 1. Undertake the studies necessary to support the masonry and metalwork management plan, including maintenance planning.
- 2. Prepare the management plan, utilizing the studies cited above and the CLR's recommendations in support of historic. cultural, and natural resource management. Identify priority projects and implementation phasing options in the plan.
- 3. Initiate CLR projects relating to masonry and metalwork maintenance.

Guidelines for consideration in the development of the maintenance manual.

The following sections provide general guideline for many of the typical issues to be addressed by the manual: marker cleaning; marker damage repair; marker resetting; masonry repointing; and metalwork maintenance. For all cleaning and repairs, the workability, constructability, and safety requirements of the materials should be considered and noted in the specifications for each project. Specific conservation treatments should be used on a trial basis depending on the results of a detailed condition assessment. Conservation treatments should be recommended for widespread implementation based on the result of field trials. Implementation of trials and conservation work should be undertaken by trained conservators, or as appropriate by trained park staff under the direction of conservators.

Marker cleaning. Clean grave markers to the degree necessary to reveal the original colors and other qualities of a stone, uncover inscriptions that are hidden by biological growth and dirt, or

remove accumulated material that could lead to deterioration of marble and limestone.

- Evaluate the need for cleaning grave markers. Light soiling and biological growth may be acceptable. Some surfaces may be too delicate to clean.
- Prune or remove adjacent shrubs or ground cover growing on cemetery features. Removal of overgrown vegetation may effectively stop some forms of soiling. Remove plants attached to masonry by first cutting them off at the base and then removing the dead vegetation by hand.
- Consider the most appropriate cleaning treatment for each condition encountered in association with cemetery features. Cleaning treatments fall into three general categories: water-based, chemical, and mechanical methods. Water-based methods include pressurized water spray, heated water or steam treatments, and misting. Chemical methods involve the use of products ranging from nonionic soaps and detergents to acidic or alkaline cleaners, as well as biocidal treatments, in a variety of gels, liquids, pastes, and poultices. Mechanical cleaning methods include the use of tools, such as brushes, scrapers, and specialized rotating and laser-based cleaning equipment. It is possible to combine treatments for the best results, such as using mild detergent methods with low pressurized water spray.
- Use the gentlest means possible when cleaning is necessary. Low-pressure water washing can be effective. Water pressure should be no greater than 100 to 200 pounds per square inch (psi), or less as indicated by trial samples. Any cleaning method using water should not occur when the temperature will fall below 50 degrees Fahrenheit for at least 72 hours after cleaning.
- Consult a masonry conservator before using any chemical or detergent cleaners. Chemical treatments should be approached with great caution because they can cause irreversible

- damage. Do not use any household chemicals, such as bleach, on grave markers unless specifically recommended by the conservator.
- Develop and carefully evaluate test panels for proposed chemical applications to avoid overcleaning. Chemical cleaners must be chosen by a conservator who understands the type and condition of the masonry material to be cleaned. Non-acidic detergents should be used in conjunction with non-metallic brushes or scrapers; metal brushes can permanently damage masonry. Cleaners containing strong acids or which are highly alkaline can damage historic materials and should be avoided.
- Avoid using solvents and other chemical cleaners to remove graffiti on masonry elements without researching proven past experience in their use on similar substrates and coatings. Some chemical cleaners may result in further staining of porous masonry.
- Remove biological staining using an approved masonry cleaner containing a quaternary ammonium compound, if shown to be appropriate for the stone.
- Use appropriate water pressure, nozzle, distance, and fan tip based on cleaning trials and conservator's microscopic examination. Use only stainless steel nozzles with fan tip spray, typically 40 degrees, held a minimum of 12 to 18 inches from the surface being cleaned.
- Avoid using high-pressure, abrasive blasting with hard, sharp blasting media on historic masonry because it is extremely damaging. Very low pressure (less than 75 psi) microabrasive cleaning with soft media may be appropriate, depending on trial samples.
- Consider the use of chemical cleaners in poultices to remove grease and oil stains on marble and limestone.
- Protect metal elements during cleaning of stone and stone elements during cleaning of metal features. Some cleaners that are suitable

- for one substrate can damage or stain another substrate.
- Pre-wet the stone thoroughly with clean, potable water during chemical cleaning, and keep the stone wet during the entire washing process.
- Use natural bristle, wooden-handled brushes of various sizes for prewetting, cleaning, and rinsing. Avoid the use of plastic handled brushes that can leave colored material on the stone that is difficult to remove. Lichens and algae can be removed by first thoroughly soaking the stone and then using a wooden scraper to gently remove the biological growth. This process may need to be repeated several times.
- Rinse cleaned surfaces thoroughly afterwards using clean, potable water.
- It may not be possible to remove all stains, and stone should not be expected to appear new after cleaning.
- Coordinate cleaning of metal elements with other treatments such as corrosion removal, refinishing, patination, and waxing.
- Avoid cleaning marble, limestone, or sandstone more than once every 18 months, since cleaning will typically result in the removal of some of the face of the stone. Rinsing with clean water to remove bird droppings and other accretions can occur more frequently.
- Keep a treatment record of the cleanings, including date of cleaning, materials used, and any change in condition since the previous cleaning. Maintain the records in a centralized and accessible location so that the conditions of the stones can be easily monitored over time.

Marker repairs. Grave marker repair should be conducted by qualified conservators familiar with the materials and their particular qualities. The

conservators should approach monument repair as follows:

- Identify materials and document their condition before treating masonry. It is important to understand that different types of masonry have different physical properties, weights and densities, and weathered surfaces.
- Consider that not all cracks in masonry require repair. Cracks may simply be a part of the natural weathering process for some stone masonry. Small, hairline cracks on vertical surfaces of stone masonry should not be repaired unless they are deep or run through the masonry unit.
- Document every monument to be repaired with diagrams, notes, and photographs before, during, and after restoration.
- Develop a procedure for documenting and handling loose marker fragments, which are vulnerable to theft, discard, or damage from vandalism or maintenance practices.
- Consider using threaded nylon rods and polyester resins or other approved materials to mend broken vertical stones, particularly marble.
- Consider that cracking through masonry units may require the installation of a pin for reinforcement and a cementitious patch or grout repair using a compatible mineral-based material. Long, deep cracks in the masonry must be patched using a knife-grade patching compound to prevent further moisture penetration. The visual impact of such a repair should be minimized by using a colored mortar that is similar to the color of the masonry being patched.
- Consider that chips or other voids can be filled with mortars made of lime, cement, and stone dust matching the original material, which together create a simulated stone that matches the stone to be repaired. Proprietary patching compounds must only be installed by trained masons. Many manufacturers offer training

- courses and product certification for masons. Commercially-available patching compounds can be either portland cement-based or limebased materials. It is important to choose a patching compound that is compatible with the masonry to be repaired.
- Consider that large losses may be filled with compatible mineral-based patching materials. Very small losses should be left unrepaired, or in some cases stone may be redressed on surfaces without inscriptions.
- Consider that damaged areas of masonry that are too large to patch may be repaired by installation of a masonry dutchman. In this procedure, the deteriorated portion of the masonry is cut away and a new piece of masonry (the dutchman) is installed to match the existing. Dutchman repair is a much more durable repair than a cementitious patch repair. A cementitious patch may need to be replaced after ten to fifteen years, while a properly installed dutchman should last as long as the masonry itself. Dutchman repairs require skill to install correctly and should not be attempted by inexperienced personnel.

Resetting grave markers. A marker should be reset only if in danger of toppling or breaking because of severe leaning. Document the marker carefully before commencing work and do not proceed without professional advice if the maker appears fragile.

- Determine the cause of the displacement (for example, installation, open joints, or tree roots) and correct the cause of the problem if possible.
- Use compatible materials that match the physical properties of the adjacent original material to reset grave markers.
- Take particular care in resetting marble or limestone markers, as they are vulnerable to interior fractures that may be invisible from the outside.

- Reset granite monuments or other heavy stone markers using appropriate lifting equipment. Smaller stones can typically be lifted by two people. Larger stones may require a mechanical hoist or lifting system. A tripod hoist is an economical option for medium sized stones. Follow the manufacturer's instructions when renting hoist or lifting equipment. Larger stones may require a hydraulic hoist operated by a skilled technician.
- Use woven nylon straps for lifting stones. Do not use chains or cables, which can damage the stone.
- Stabilize leaning or loose grave markers.
- When breakage occurs, document the breakage, and label and store broken materials on-site in a secure location until repairs are possible.
- Remove metal pins in entirety, using a drill or core drill if necessary. Replace pins with new threaded stainless steel or nylon rods. Rods should be smaller in diameter than the existing holes and shorter than the original pins. Set new rods in lime mortar or other flexible setting mortar.
- Remove old mortar with a hammer and chisel. Apply new mortar at the stone base.
- Place the upper stone on the base stone using lead shims to make sure stone is plumb and level. Use hoisting equipment for medium to large stones.
- Make sure that the base stone is stable and plumb and squarely rests on the foundation.
- Remove any excess mortar. Repoint joint between base and upper stone where necessary.
- Brace the stone while the mortar sets.

Masonry repointing. Mortar should only be removed when it is absolutely necessary, such as when it is unsound, cracked, eroded, or crumbling. Unsound mortar should be removed to a depth of 2-1/2 times the width of the joint, or to sound mortar, whichever is greater. Work should be performed using handheld, non-power tools, unless the mason is able to complete appropriate trial repairs using power tools to remove existing mortar without damage to the adjacent masonry.

- Repoint open joints using appropriate mortars that match existing historic mortars. Avoid the use of hard portland cement-based mortars on older weathered masonry. Mortar installed prior to 1900 was typically composed of lime, which is more flexible and permeable than portland cement-based mortars. Modern portland cement mortars are designed to match the characteristics of new, unweathered stone and contemporary hard brick, not historic, weathered masonry. Laboratory analysis of the stone and existing mortar may be necessary to identify a compatible mortar.
- Avoid commercially-available masonry mortars because they can contain unnecessary, and undisclosed, additives and fillers.
- Rake out existing masonry joints and spot repoint all grave markers as necessary with compatible mortar.
- New work should match historic mortar joints in color, texture, joint size, profile, and tooling.

Metalwork maintenance. Repair and treatment of metalwork should be undertaken only when necessary. Maintenance tasks such as cleaning and application of coatings should be scheduled on a cyclical basis, as confirmed by annual monitoring of existing conditions of historic metal features.

- Maintain protective coatings, such as annual applications of paste wax for bronze and copper plaques, and paint on ironwork.
- Maintain bronze elements through the application of clear wax or acrylic coatings. Wax coatings require more frequent reapplication, but are easier to touch up. Acrylic

- coatings must be entirely stripped and replaced.
- Remove deteriorated paint on ironwork using appropriate methods, including wire-brushing for non-decorative elements exhibiting light rust, or chemical paint removal for heavier built-up paint that obscures details. Clean metal surfaces, when appropriate, to remove corrosion before repainting. First test to assure that the cleaning method will not damage the metal, as soft metals can be easily abraded by wire brushes or blasting. For cast iron, hand scraping and wire brushing with a fine wire brush are appropriate methods for removing finishes and surface corrosion. Low pressure grit blasting may also be used if it does not abrade the surface. Elements with severe corrosion should be removed to a shop for repair. Newly-cleaned metal should be protected immediately with a rust-inhibiting primer. Epoxy and alkyd-based coatings are recommended for field finishing. Zinc-rich primers may be applied in a carefully controlled shop setting. Latex and other water-based paints are not recommended, as they will not be as durable.
- Choose colors that do not detract from the historic character of the cemetery.
 Appropriate colors are typically black or dark green. Review archival documentation and, as appropriate, engage a conservator to conduct finishes analysis to determine original colors.
- Tighten by hand all loose bolts, screws, and other anchors using a lubricant. Replace missing anchors where necessary with new stainless steel anchors.
- Install new architectural grade, polyurethane sealant at all joints between metal pieces and at all bolts and other anchors. The correct installation of sealant will help keep water out of joints.
- Replace metalwork components that are beyond repair and broken pieces with reproduction metalwork. However, custom cast metalwork pieces can be costly, requiring

- unique casts that are appropriately scaled. Decorative elements must be reproduced to match the existing historic elements in size, thickness, and details.
- Ensure new ironwork is compatible with the character of the historic features.

3. Address vegetation maintenance needs, taking into consideration the protection of grave markers and monuments.

Description. Protection of masonry grave markers and monuments, while caring for the living, growing plantings around them, poses a difficult challenge. In particular, maintaining turf lawn through mowing poses a threat to grave markers, monuments, and other historic resources. In addition, trees can fail, leading to other types of damage. While maintenance of the cemetery to careful standards of care is a critical mission conducted to honor American military personnel, it must be undertaken in a way that limits the potential hazard to historic masonry features. The challenge is best approached in two ways: through encouraging healthy vegetative growth, and following specific care protocols for mowing, pruning, and tree removal that allow for the least damage to markers and monuments.

Location. The vegetation maintenance needs relating to the protection of grave markers and other features are specifically associated with the burial grounds.

Considerations. Issues to be considered in developing a strategy for maintaining vegetation at Stones River National Cemetery include ensuring that activities are technically successful and do not affect the integrity of the resource. Also of importance is implementing strategies that are consistent with park capabilities, while also maintaining historic character.

Many trees in Stones River National Cemetery are historic features that help convey the unique character, grace, and spatial order of the cemetery. There are several older specimens present within the cemetery. Later plantings appear to have been based on historic maps and thus perpetuate the original design intent. Preservation, care, and maintenance of these trees are critical for protecting the integrity of the historic cemetery. Maintenance of the trees requires strategies for preservation, removal, re-planting, and developing horticultural practices for proper nutrition and growth.

Work conducted to maintain cemetery plantings should be tied to the detailed survey and inventory of trees recommended in the treatment plan. The inventory should include information such as species, location, approximate age, trunk diameter, height, and condition. The regular assessment and recordation of plant conditions can be conducted using a tree inventory data sheet, potentially developed by a certified arborist. The data sheet can help rank the tree as either in good, fair, poor, dead, or hazard condition using a matrix of points.

Turf to be used in the cemetery should be based on selection of a grass or grass species mix that meets the visual, physical, and environmental criteria identified by the park, and is adapted to the growing conditions associated with the cemetery and its mixture of sun and shade conditions. Seed mixtures may include native and innocuous non-native warm- and cool-season grasses. Bermuda grass is currently present within the turf. This is an aggressive non-native invasive that should be eradicated. However, this process will take time and resources to accomplish.

Seeding or drilling must be undertaken during the appropriate season for the individual species. Cool-season grasses are best seeded in early spring or early fall, while native warm-season grasses should be seeded between April and June. When replacement of turf is required during other times of the year, it is possible to apply a temporary measure such as installation of an erosion control fabric or a non-invasive annual grass to protect the soil until the planting season. Erosion control fabrics are biodegradable products that can be placed over exposed soil to afford temporary soil stabilization and protection. These fabrics can include geotextile matting and blankets. Blankets block the force of the rain, prevent wind erosion, and sometimes act as a degradable mulch. Geotextile matting is a fabric made of either natural or man-made material with the purpose of providing temporary soil stabilization. Erosion control matting is manufactured in many forms. Erosion control materials used to protect the soil from erosion after repair should be biodegradable. Several options exist to disperse the seed mix, including hydroseeding, drilling, broadcast seeding, the use of plugs, or the use of sod. Stones River should consider using its own sod for turf repairs and replacements in the cemetery.

Newly-seeded areas should be mulched using native hay and/or straw. They should also be watered regularly during the first year and subsequently during droughty periods the second year. A water truck will likely be needed to address this need. Access routes for the water truck will need to be carefully considered to avoid damaging healthy turf areas.

More closely approximating the level of care recommended by the National Cemetery Administration, which suggests that turf lawns meet a "Class A" level of care, characterized by uniformity of appearance, low tolerance for weeds, a vibrant green color, and absence of debris, should be a goal, but not a requirement of maintaining the Stones River National Cemetery turf. To meet the spirit of the goal, the park should evaluate the efficacy of the grass species or mix in use to ensure that is adapted to the geographic region, and follow a regular mowing regime that achieves a well-kept appearance. Routine mowing requires special care near monuments and historic plantings. Without proper instruction, training, and supervision of maintenance personnel, turf lawn maintenance can be the most damaging activity to the grave markers. Training and care instructions for those working on the lawn will be required.

Grass should also be kept neatly trimmed around all grave markers, trees, drives, and other objects, avoiding impacts from line trimmers and mowers. The lawn was not irrigated historically, and therefore would have gone into dormancy (turned brown) during dry summer months; natural seasonal changes in the appearance of the lawn is therefore appropriate from the standpoints of both historic character and natural resource conservation.

As part of improving the health and appearance of the lawn, the grade of any sunken and low areas should be adjusted through the addition of fill,

rather than cutting, to protect the graves. Sunken areas detract from the historic uniformity of the lawn, and present a trip hazard. It may also be necessary to raise the grade of any low areas to create positive drainage.

Invasive species have the potential to gain a foothold and edge out desirable species with better soil holding capacity. The selective and limited use of herbicides may be needed to eradicate species that cannot be controlled through mowing. Unless invasive species have formed a large colony, herbicides should be applied as needed using a spot treatment for small stands or individual plants using a wick applicator. For invasive species control, monitoring and recordation are an important part of an overall adaptive management strategy that constantly evaluates the effectiveness of the control measures employed. In general, invasive species populations should be mapped before treatment and monitored afterwards to determine effectiveness. An in-the-field trial and error approach to invasive species control can be highly valuable.

Additional Studies Recommended, Soil analysis or testing should be undertaken to determine soil type, fertility, and pH, and identify appropriate soil amendments that will be needed to ensure that the selected seed mix will grow successfully. Guidelines for identifying an appropriate grass species or mix include the following:

- The long-term cover species must be perennial or self-perpetuating, although temporary cover species may be annual.
- Species must be suited to the local soil, planting zone, and rainfall conditions.
- Species should be drought tolerant.
- Preference will be given to native species over non-native species.
- Preference will be given to species that are relatively easy to establish.
- Invasive species will not be used.

Related Implementation Projects.

- Project 1. Prepare a vegetation management plan.
- Project 2. Develop maintenance manual for masonry and metal features of the cemetery, including conservation best practices.

Project Implementation Process.

- 1. Undertake the studies necessary to address maintenance needs and develop BMPs.
- 2. Prepare maintenance protocols and use them to conduct regular inspections, pruning, removal, replanting, mowing, and soil amendment needs.
- 3. Initiate CLR projects relating to vegetation maintenance.

General tree maintenance guidelines.

- Plant the right tree in an appropriate location and maintain it properly so that it thrives and does not cause harm to other historic features or visitors.
- Fertilize trees periodically as needed using a slow release fertilizer.
- Inspect trees regularly, and after damaging storms, for pruning needs to ensure that the trees are healthy do not present a hazard. Also inspect trees to make sure the root systems are not interfering with gravestones.
- Follow an overall planting plan (refer to Implementation Project 1) when addressing the need for tree planting replacements.
- Follow best management practices for tree removal.
- Ensure that the root zones of historic trees are not compacted by parking, spoils storage, or storage of equipment or materials.
- Protect existing vegetation, especially trees, in areas impacted by new burials or other excavation activity, and closely monitor

- throughout the construction period. Tree roots typically extend well past the drip line of the tree. At a minimum, the area within the drip line should be protected from soil compaction from construction equipment, which will inhibit water penetration to the root zone and threaten the health of the tree. If major roots are to be affected, use an air spade to clear soil from those roots so that the mass can be tied back away from the area of excavation. Once the work is completed, replace the roots at their original level and back fill.
- Implement a cyclical maintenance program that includes periodic inspection of all trees for damage, disease, and or evidence of decline in order to prevent deterioration or loss of plant material. Treat each condition appropriately and ensure that maintenance actions are documented for the record. Frequent and careful maintenance of vegetation will also prevent damage to adjacent and nearby resources, such as grave markers.
- Educate cemetery maintenance staff on the significance of historic vegetation, and ensure that they receive training that is appropriate to the unique conditions within the cemetery.

Guidelines for tree pruning. A five-year cycle of pruning is advised for normal maintenance. Prior to pruning, erect plywood structures over grave markers and monuments to protect them from damage. Pruning should be conducted according to a three-pronged prioritization strategy. The highest priority for pruning is to address safety considerations by removing hazardous limbs and trees. The next priority is to prune to preserve the health of a tree, including improving its internal structure, and to allow passage beneath limbs, maintain sight lines, and to encourage air circulation that will lessen the growth of biological growth on grave markers. The lowest priority for consideration is to prune for aesthetics that are intended to enhance the natural form and character of a tree or to promote flowering.

Guidelines for tree removal.

- Remove historic vegetation only when it poses a hazard to humans, cultural resources, or natural resources due to its potential to drop limbs, fall, or transfer disease to other plants.
- Engage a certified arborist with successful experience working at historically significant sites to conduct the work.
- Utilize hand-pulling or removal with small tools to remove vegetation that is close to other historic features.
- Avoid using chemicals for vegetation control in the vicinity of other historic materials, because such chemicals are absorbed by masonry, thus hastening their deterioration.
- Minimize the use of heavy vehicles in or around the root zone of nearby trees in order to limit soil compaction; restrict use to times when soil is firm to reduce erosion potential.
- Field-check clearing locations prior to tree removal with an archeologist, natural resource specialist, and/or historical landscape architect to ensure that other natural or cultural resources will not be adversely affected.
- Cut all tree and shrub trunks to be removed flush with the ground.
- Allow the stump to decay rather than grinding or removing it. This is the least invasive technique for tree removal which will cause negligible disturbance to the surrounding area. The stump may take from between 12 and 36 months to decay, depending on the tree species and local conditions. The following procedures should be followed:
 - Flush cut the tree trunk as close to the ground as possible and remove bark from the stump.
 - Drill a series of holes 3/4 inch to 1 inch in diameter, 6 inches deep, and 2 to 3 inches apart into the stump.

- Fill holes with a mixtures of 1 part screened compost, 1 part screened topsoil, and 1 part slow release organic highnitrogen fertilizer such as feather-meal or cottonseed-meal.
- Keep the stump moistened during dry periods and re-fill holes as needed with compost/soil/nitrogen mix.
- Check the stump periodically. Within 12 to 36 months, the stump should be adequately decayed to remove remaining material with hand tools. After removal, backfill the hole with soil that matches the texture and composition (sand: silt: clay) of the original soil as closely as possible and reseed the area.
- Remove felled trees and large shrubs without dragging, which can gouge the ground surface.
- Seed and cover immediately with erosion control material, such as straw, or use hydromulch, to reduce the potential for soil erosion.
- Ensure that the removal of historic trees is noted in the tree inventory.

Guidelines for new planting. Many of the historic trees have died and been removed, and they will continue to die from age related disease and weather conditions. Also, as trees mature and their root systems spread, they can overtake the grave markers, threatening the integrity of the marker. Therefore, careful site selection for replanting is required.

Development of a planting plan for the entire cemetery would provide a strategy for selecting appropriate locations for new or replacement plantings. The plan would delineate where trees could be planted to retain the historic design intent. Planting in existing stumps is recommended when the stumps have decayed to the extent that replacement trees with small root balls can be accommodated. This allows replacement in kind and in the same location as historic trees.

Replacement of trees in a cultural landscape requires methods that respect the sensitivity and importance of the cemetery and its major features, in particular the grave markers. The following guidelines offer methods for minimizing adverse impacts to the grave markers, walls, and monuments, and protect the character and integrity of the cultural landscape.

- Replace dead or damaged historic plant materials in-kind, whenever possible, using specimens of the same species, variety, and form.
- Replace with species of similar size, shape/habit, texture, and color if in-kind replacements are not available or appropriate (due to disease, hardiness, maintenance requirements, etc.).
- Ensure that replacement vegetation is added to the tree inventory.
- Consider that procedures for replanting trees can be disruptive and damaging to resources adjacent to the planting site, especially grave markers and avenues. Equipment needed for planting trees may need to be brought into the cemetery, so site selection and correct procedures are critical to the success of the planting and protection of nearby historic features.
- Consider the potential to plant into a decayed stump. Assess the extent of decay within the stump. Replanting in the same location will only be effective if the decomposition is well advanced. Select the smallest acceptable plant size for replacement. The rootball must be small enough to fit into the decomposed area of the stump with at least 6 to 8 inches of additional space around the roots to backfill with soil. Using hand tools, break up and remove the decayed wood remaining from the stump. Create adequate space for planting the rootball and backfilling with soil.
- Elevate the top 2 to 3 inches of the rootball above the surrounding grade when planting new trees. Backfill the hole with soil that

- matches the texture and composition of the original soil as closely as possible.
- Engage a qualified archeologist to monitor new planting efforts in areas that may contain subsurface cultural resources.

Guidelines for turf care.

- Conduct careful training of maintenance personnel in maintenance practices that avoid damage to gravesite features during mowing operations.
- Utilize appropriate mowing equipment in the vicinity of gravestones. Avoid heavy machinery and equipment that will damage grave markers or exacerbate erosion. Grass should be cut by the mower up to, and no closer than 3 inches from the markers. Avoid the use of string trimmers.
- Use turf wheels on riding mowers.
- Equip all mowers with rubber bumpers on the decks, any axle assembly, or other feature that might come in contact with a stone while mowing. This can be fabricated out of old inner tubes or tires and can be riveted on. Loose cell foam can also be used as a bumper.
- Include and use discharge guards on all mowers used in the cemetery to protect the gravestones and workers from thrown debris.
- Direct the discharge chute of the mower away from markers while mowing around gravestones.
- Avoid contact with grave markers when using mowing equipment.
- Cut grass to a height of 3 inches unless unique considerations require a different height that is agreed to prior to mowing.
- Rake up and discard off premises all large clumps of grass debris left by the mowers.
- Train staff to report any damage immediately to the chief of maintenance.

Avoid the use of fertilizers, biocides, and landscape equipment that can damage gravesite features.

4. Develop a universally-accessible pedestrian path system that provides access to the primary interpretive areas of the cemetery

Description. Stones River National Cemetery is characterized by turf paths, and a central asphaltpaved drive that connects Old Nashville Highway with a parking area, as well as Lincoln Square. Currently, there is no universally-accessible path for visitors within the cemetery. The road between the parking area and Lincoln Square is too steep to meet ADA criteria. The park should address the need for a universally-accessible system of access to the cemetery in two ways. The first would be to establish an accessible walking path between the visitor center parking lot and Lincoln Square that affords access to the key elements of the cemetery. The second would be to provide a single parking space at Lincoln Square to allow accessibility via vehicle to the heart of the cemetery. Alternatively, the park may need to develop an accessible trail leading from the existing parking area to Lincoln Square, although this option is likely to result in extensive alteration of the historic character of the cemetery.

Location. The proposed universal access improvements would link the pedestrian gate with Lincoln Square along the route identified as Carpenter Avenue in early cemetery plans. Additional universal accessibility improvements would be focused on the central drive and Lincoln Square. Access to these areas would be designed to offer all of the information available as part of the primary intended visitor experience.

Considerations. The proposed accessible path should be surfaced with brown, warm-hued asphaltic concrete to blend in with the historic character of the cemetery, or alternatively with other similar surfacing that meets Americans with Disabilities Act Standards for Accessible Design but does not require excavation of the soil or other disturbance to install. Surfaces that are composed of a blue-hued material are visually intrusive and should be avoided. Asphalt will allow for construction of a path that does not require excavation or disturb tree roots. The path would

need to measure 6 feet in width. Installation of the path may require modification of the junction between the path and the road at Lincoln Square to ensure a barrier-free connection between the two systems.

Additional Studies Recommended.

- This project should be coordinated with the park's interpretive planning process to ensure that all proposed wayside exhibits are part of the accessible route for visitors.
- Additional research and archeological investigations should be conducted to determine if any resources will be adversely affected by the project.
- Potential impacts to archeological resources within the proposed trail corridor should be identified and mitigation actions to protect those resources recommended.

Related Implementation Projects.

- Project 5. Consider methods for marking and interpreting the layers of history within the cemetery, including the locations of missing landscape features.
- Project 6. Establish a design guide for site furnishings and signage.

Project Implementation Process.

- 1. Engage a historical landscape architect to design the new path and accessibility improvements for the path, Central Avenue, and Lincoln Square, including the provision of a universally-accessible parking space.
- 2. Stake the changes in the field.
- 3. Engage a qualified archeologist to perform archeological monitoring of the trail establishment.
- 4. Grade the new trail alignment if necessary to meet universal accessibility criteria. Avoid excavation to a depth that might disturb archeological resources.

- 5. Surface the trail corridor with the proposed new material.
- 6. Install any additional wayside exhibits and signage in accordance with a revised park long-range interpretive plan.
- 7. Install any new benches in accordance with the proposed site furnishings plan.
- 8. Maintain the new systems in good condition.

5. Consider methods for marking and interpreting the layers of history within the cemetery, including the locations of missing landscape features

Description. Many aspects of Stones River National Cemetery have evolved since its original establishment in the 1860s, including development in the 1870s, 1890s, 1930s, 1960s, 1970s, and 1980s. Several buildings have been demolished, relocated, and replaced during the extended period of significance. Because of the ongoing use of the cemetery, it has been determined that restoring the cemetery to an earlier period in its history is not an appropriate or desirable action. Rather, it will be of interest and value to interpret the evolution of the cemetery landscape to visitors, including the various layers of history and their rationales through means other than restoration or reconstruction.

Many of the buildings and structures that characterized Stones River National Cemetery prior to 1974 have been lost to time, including several iterations of Superintendents' Lodges and maintenance structures, as well as gardens and ornamental plantings. Historic maps and photographs exist to illustrate the character, configuration, and use of these features. These images also connect the cemetery to national trends and developments within the broader National Cemetery System. These missing features are not currently interpreted for the benefit of the visitors. The park should consider updating the current interpretive programming within and about the cemetery to incorporate information about its physical evolution and missing features.

Location. Three possible locations to be considered for interpretive programming include 1) in association with the pedestrian path and gate leading into the cemetery from Old Nashville Highway across from the Stones River National Battlefield Visitor Center parking area; 2) at the vehicular parking area inside the main gate; and 3) near Lincoln Square, which serves as the heart of the cemetery. These locations could serve as nodes where information is grouped, and benches are

provided for the comfort and convenience of visitors. Also of possible interest for extended interpretation is a location that affords a view of the lodge and service character area, where many of the missing features were located. The rostrum should continue to be interpreted as at present.

Considerations. While reconstructing missing buildings and structures would provide the most tangible interpretive aid for visitors, this approach is not appropriate as an interpretive aid at Stones River National Cemetery due to the existence of serviceable buildings on the former sites of missing buildings, and a lack of historic documentation to accurately depict the missing features. Other interpretation options exist that could be considered for representing the missing features, such as indicating their former locations using maps, posts, or vegetation; providing historic graphics on wayside exhibits; and/or providing podcasts or apps with images that could help visitors visualize the missing features while standing on site. These options not only avoid historical inaccuracy, but are often less costly both in terms of initial installation and maintenance. Creative exhibit design could be coordinated with rehabilitation of historic vegetation patterns to support this project.

Park managers and interpretive planners should determine which features would be best to interpret, and consider the most appropriate representation methods for each. The design of these new site improvements should be determined as part of the future long-range interpretive plan to be prepared for the park which will examine the park's interpretive program as a whole.

Additional Studies Recommended.

- This project should be developed as part of the park's interpretive planning process.
- Archival research should be conducted as part of the data collection required to support development of new wayside exhibits.

Related Implementation Projects.

- Project 1. Prepare a vegetation management plan.
- Project 4. Develop a universally-accessible pedestrian path system that provides access to the primary interpretive areas of the cemetery.

Project Implementation Process.

- 1. Assess which features should be interpreted by determining those that will deliver the most educational value to visitors.
- 2. Enlist an exhibit designer, in coordination with park staff, to plan features.
- 3. Consider interpreting missing buildings, using documentary or archeological evidence, through various means.
- 4. Enlist a qualified archeologist to monitor ground-disturbing activities during construction and to determine potential impacts of proposed site improvements.
- 5. Enlist qualified park staff or a landscape contractor to install the chosen representative features, as well as any wayside signage.
- 6. Supplement existing interpretive media and programs with electronic options.

6. Establish a design guide for site furnishings and signage

Description. Stones River National Cemetery currently features a variety of site furnishings and sign types, few examples of which are historic or contribute to the significance of the landscape. Historically, the cemetery included benches of a much different character than the benches currently available to visitors. The existing benches are unstable and it is desirable to replace them. Signage within the cemetery varies in its character and level of detail in conveying information. There is a need to offer a more comprehensive interpretive program within the cemetery, establish a graphic identity for the cemetery, mark certain features, and provide wayfinding aids and other information for which signs are appropriate. The design of these signs, as well as benches and other site furnishings as needed, should be considered holistically and within the context of the historic character of the cemetery. Preparation of a design guide that establishes a comprehensive standard for contemporary site furnishings would facilitate the addition of necessary new features, as well as the replacement of unstable or unmatched nonhistoric features. The guide would illustrate standards for site furnishings to accommodate visitors and associated interpretation. The guide would identify products, materials, and dimensions for site furnishings, and include typical details and installation information. Use of the guide would enhance the cemetery's unique identity, and simplify the palette of materials, which in turn would diminish the impact of nonhistoric features on the historic scene.

Location. This project applies to the cemetery as a whole.

Considerations. Design guidelines for site furnishings and signage at Stones River National Cemetery would need to be compatible with National Park Service system-wide standards, the standards established for the park, as well as the existing character of the historic landscape. New features should generally be a product of their own time, and as simple, sturdy, and unobtrusive

as possible. The design guidelines would address appropriateness of scale, materials, and physical composition to ensure visual compatibility, consistency, and integration with the overall character of the cemetery landscape. The exception would be for the park to reinstate the historic bench type that was present within the cemetery during the late nineteenth and early twentieth century. To reinstate this feature, research will need to be undertaken to identify historical documentation that is sufficient to accurately replicate these missing features.

Standards for signage could also be developed that would follow the guidance afforded in the National Park Service Sign Standards Reference Manual, Uniguide Sign Program, Uniguide Standards Manual, and Graphic Identity Program.

Additional Studies Recommended. In anticipation of preparing site furnishing design guidelines, the park should collect the information available regarding National Park Service standards for signs and other contemporary landscape features.

Related Implementation Projects.

- Project 4. Develop a universally-accessible pedestrian path system that provides access to the primary interpretive areas of the cemetery.
- Project 5. Consider methods for marking and interpreting the layers of history within the cemetery, including the locations of missing landscape features.

Project Implementation Process.

- 1. Assemble a design team, including a historical landscape architect and park maintenance staff to develop the site furnishings design guide.
- 2. Consider carefully the character and identity that is appropriate for site furnishings associated with Stones River National Cemetery that will convey a unique identity, but is compatible with the character of the historic landscape.

- 3. Review photographs of current examples of site furnishings, signage, and visitor use and interpretation features used within the park. Consider whether to use these existing features as the cemetery standard.
- 4. Review product catalogues for images of additional appropriate features.
- 5. Review the individual elements proposed for inclusion within the design guideline.
- 6. Develop details, installation procedures, and other supporting information for each standard feature.
- 7. Consider the palette in its totality to ensure the individual elements are cohesive and work well together, and are consistent with National Park Service standards, before making final selections.

Bibliography

- Annable, Edward C., Jr. A History of the Roads of Rutherford County, Tennessee, 1804-1878: Historic Road Research, and its Applications for Historic Resource Surveys and Local History. Thesis for Master of Arts degree, Middle Tennessee State University, December 1982.
- Ash, Stephen V. *Middle Tennessee Society Transformed, 1860–1870: War and Peace in the Upper South.*Baton Rouge and London: Louisiana State University Press, 1988.
- Auwaerter, John. *Cultural Landscape Report for Poplar Grove National Cemetery, Petersburg National Battlefield, Dinwiddie County, Virginia.* Boston: National Park Service Olmsted Center for Landscape Preservation, 2009.
- Backlund, Gilbert J. *Patriotism on the Battlefield: The National Park Service and Mission 66 at Stones River*. Thesis for Master of Arts degree. Murfreesboro, Tennessee: Middle Tennessee State University, December 2005.
- "The Battlefield of Stone [sic] River." Cincinnati Commercial Tribune XXX, no. 27, September 1869, 2.
- Barry, P., A. J. Downing, J. Jay Smith, Peter B. Mead, F. W. Woodward, Henry T. Williams, eds., *The Horticulturalist, and Journal of Rural Art and Rural Taste* 13.
- Battle Reports, December 26, 1862, to January 5, 1863. Battle Report No. 10, Report of Capt. James St. Clair Mortor, U.S. Engineers, commanding Pioneer Brigade. O.R., Series I, vol. XX, pt. I, sec. 29.
- Blee, Catherine H., Archeologist. An Assessment of the Cultural Resources of Stones River National Battlefield and the Proposed Development Impacts on Them. Denver, Colorado: National Park Service, Denver Service Center, January 1976.
- ———. An Inventory of the Archeological Resources of Stones River National Battlefield. Denver, Colorado: National Park Service, Denver Service Center, no date [1976].
- Brigance, Fred. "A View of the Battle of Stones River." New York Times. September 2, 1865.
- Camp, Oswald E., Junior Historian. *Report on Roads, Stones River National Military Park and Cemetery.*National Park Service. October 16, 1935.
- The Civil War in Middle Tennessee. Rutherford County Historical Society Publication No. 27. Murfreesboro, Tennessee: Rutherford County Historical Society, no date.
- Conklin, John F. Major, U.S. Army Corps of Engineers, with John D. Hanson, Union Veteran, and Sam H. Mitchell, Confederate Veteran. *Report on Inspection of Battlefield of Stones River, Tennessee.*July 17, 1928.
- Conner, Capt. H. J., Officer in Charge of Stones River National Military Park. Memorandum to Quartermaster General, July 8, 1932.
- Cozzens, Peter. *No Better Place to Die: The Battle of Stones River.* Urbana, Illinois: University of Illinois Press, 1990.
- Daniel, Larry J. Battle of Stones River. Baton Rouge, Louisiana: Louisiana State University Press, 2004.

- ———. Days of Glory: The Army of the Cumberland, 1861–1865. Baton Rouge, Louisiana: Louisiana State University Press, 2012.
- Davies, Wallace E. *Patriotism on Parade: the Story of Veterans' and Hereditary Organizations in America, 1783–1900.* Cambridge, Massachusetts: Harvard University Press, 1955.
- Dunkerly, Robert M. Stones River National Cemetery: General History and Cultural Resource Report. May 1997.
- Eicher, David J. *Mystic Chords of Memory: Civil War Battlefields and Historic Sites Recaptured.* Baton Rouge, Louisiana: Louisiana State University Press, 1998.
- "Elaborate Event with Colorful Exercises Will Mark Dedication of Stones River Park Tomorrow," Rutherford Courier [Murfreesboro, Tennessee], July 14, 1932, 1.
- Elliott, Collins D. An Address for the First Tennessee Confederate Regiment Re-union at Murfreesboro, Tenn., Oct. 9, 1885. Nashville, Tennessee: 885.
- Emery, George F., Assistant Historical Technician, Fort Oglethorpe, Georgia. Memorandum regarding Artillery Needs, Stones River National Military Park, January 6, 1941.
- Final General Management Plan / Development Concept Plan / Environmental Impact Statement. Stones River National Battlefield, Tennessee. 1998.
- Flood Plain Information Study, Murfreesboro, Tennessee, West Fork Stones River, Lytle and Sinking Creeks. Prepared for Murfreesboro and Rutherford County Planning Commission by U.S. Army Engineer District, Nashville, Corps of Engineers, 1965.
- Forsythe, Regina. *Battle of Stones River as Recorded in Two Museums and in the Life of a Confederate Soldier.* History course paper, Murfreesboro, Tennessee: Middle Tennessee State University, December 5, 1991.
- Fraley, Miranda L. *The Politics of Memory: the Civil War in Rutherford County, Tennessee*. Ph.D. dissertation, Indiana University, 2004.
- ———. Stones River National Cemetery Cultural Landscape Report, draft, 2002.
- Gavin, Michael T., Preservation Specialist, Tennessee Civil War National Heritage Area, and Sean M. Styles, Historian, Georgia Trust. *Stones River National Battlefield National Register Nomination* (Additional Documentation). November 14, 2003.
- Geerdes, Raymond J. *Interim Interpretive Prospectus, Stones River National Battlefield.* Southeast Region, National Park Service, 1976.
- Genoble, Richard Clinton. War, Memory, and Landscape: The Stones River National Cemetery. Master of Landscape Architecture thesis, Louisiana State University, 1999.
- George, John Riley. Stones River: Creating a Battlefield Park, 1863–1932. Dissertation for Doctor of Philosophy in Public History. Murfreesboro, Tennessee: Middle Tennessee State University, May 2013.

- Gibbs, Ron A., Chief of Interpretation and Resource Management, Stones River National Battlefield, Murfreesboro, Tennessee. *Stones River National Military Park / Stones River National Battlefield National Register Nomination*. September 22, 1975. Entered into the National Register, January 26, 1978.
- Handbook of Murfreesboro and Rutherford County, Tennessee. Murfreesboro, Tennessee: The Mutual Realty & Loan Co., n.d.
- Helm, Amy Cimarolli, and James E. Johnson. *A Handbook for Forest Vegetation Management in Recreation and Historic Parks.* Blacksburg, Virginia: Virginia Cooperative Extension, 1995.
- Henry, Robert Selph, ed. As They Saw Forrest. Jackson, Tennessee: McCowat-Mercer Press, 1946.
- Hess, Earl J. Banners to the Breeze: the Kentucky Campaign, Corinth, and Stones River. Lincoln, Nebraska: University of Nebraska Press, 2000.
- Historic Resources Documentation, Stones River National Battlefield. Prepared by Office of Cultural Resources, Southeast Regional Office, National Park Service, 1994. Includes List of Classified Structures reports and photographic documentation, and draft amendment to the park's National Register documentation.
- Honey Springs and Stones River National Battlefields: Hearing before the Subcommittee on National Parks, Forests, and Public Lands of the Committee on Natural Resources. United States House of Representatives, One Hundred Third Congress, second session, on H.R. 4821, to establish the Honey Springs National Battlefield and Washita Battlefield National Historic Site in the state of Oklahoma, and for other purposes: H.R. 4266, to expand the boundaries of the Stones River National Battlefield in Tennessee, and for other purposes, hearing held in Washington, DC, 1994. Serial no. 103–111. (microfiche).
- Horn, Stanley Fitzgerald. The Battle of Stones River. Eastern Acorn Press, 1972.
- Horvath, Elizabeth, Archeologist, NPS Southeast Archeological Center. Memorandum to Chief, SEAC. *Trip Report for the Stones River Field Survey.* SEAC Accession Number 1134, May 23–25, 1994.
- Interpretive Plan, Stones River National Battlefield, Tennessee: A Plan for the Interpretation of Stones River National Battlefield, Tennessee. Harpers Ferry, West Virginia: Harpers Ferry Center, Division of Interpretive Planning, 1996. Final draft.
- Interpretive Report, Stones River National Battlefield. Harpers Ferry, West Virginia: Harpers Ferry Center, Division of Interpretive Planning, January 1983. Final draft.
- Lee, Ronald F. *The Origin and Later Evolution of the National Military Park Idea*. Washington, D.C.: National Park Service, Office of Park Historic Preservation, 1973, accessed at www.nps.gov/history/online_books/history_military/
- Logsdon, David R. *Eyewitnesses at the Battle of Stones River*. Nashville, Tennessee: Kettle Mills Press, 2002.

- McNeil, Jessica, Archeological Technician, National Park Service, Southeast Archeological Center. Memorandum to the Director, Southeast Archeological Center, National Park Service; Subject: *Trip report on a geophysical survey and archeological testing to determine the location of the historic rostrum on the grounds of Stones River National Cemetery, April 19–April 23, 2004.* SEAC Accession Number 1893.
- Mayo, James M. War Memorials as Political Landscape. New York: Preager Publishers, 1988.
- Miller, James H. *Non-native Invasive Plants of Southern Forests: A Field Guide for Identification and Control*, rev. ed. Asheville, North Carolina: U.S. Department of Agriculture, Forest Service, Southern Research Station, 2003.
- Miller, Wihry, and Lee, Landscape Architects and Engineers. *Master Plan, Stones River National Battlefield*. Louisville, Kentucky, August 1974.
- Miller, Wihry, and Lee, Inc., Landscape Architects, Engineers, and Planners, and Dr. Elsie Quarterman, Ecologist, Professor Emeritus, Vanderbilt University. *Stones River National Battlefield Cedar Glades Report.* Prepared for the Denver Service Center, U.S. Department of the Interior, National Park Service. Nashville, Tennessee, November 1976.
- National Archive and Record Administration, Washington, D.C., Record Group 92, Entry 684.
- National Cemetery Administration. *National Shrine Commitment: Operational Standards and Measures.* Version 4.0. Washington, D.C.: U.S. Department of Veterans Affairs, October 2009.
- National Park Service. *Director's Order No. 28. Cultural Resource Management.* Washington, D.C.: National Park Service, June 1998.
- ———. *Director's Order No. 61: National Cemetery Operations*. Washington, D.C.: National Park Service, July 2010.
- ———. Management Policies 2006. Washington, D.C.: Government Printing Office, 2006.
- . Mission 66 Prospectus, Stones River National Military Park, Tennessee (Washington, D.C.: National Park Service, April 1956, revised October 1959.
- ———. NPS-28: Cultural Resource Management Guideline. Washington, D.C.: National Park Service, June 1998.
- ———. Reference Manual 61: National Cemetery Operations. Washington, D.C.: National Park Service, November 2011.
- ———. Stones River National Battlefield Geologic Resources Inventory Report. Denver, Colorado: National Park Service, Geologic Resources Division, September 2012.
- National Register Bulletin: How to Apply the National Register Criteria for Evaluation. Washington, D.C.: Department of the Interior, National Park Service, 1995.
- Nickel, Robert K., and Catherine A. Nickel. *Ground-Penetrating Radar Surveys of Civil War Sites: The Rostrum at the National Cemetery, Stones River National Battlefield, Tennessee*. SEAC Accession Number 1893. Tallahassee, Florida: National Park Service, Southeast Archeological Center, 2004.

- Page, Robert R., Cathy A. Gilbert, and Susan A. Dolan. A Guide to Cultural Landscape Reports: Contents, Processes, and Techniques. Washington, D.C.: National Park Service, Park Historic Structures and Cultural Landscapes Program, 1998.
- Pittard, Homer Peyton. Legends and Stories of Civil War Rutherford County. Thesis for Master of Arts degree, George Peabody College for Teachers, August 1940. Rutherford County Historical Society, Publication 25. Murfreesboro, Tennessee: Rutherford County Historical Society, Summer 1985.
- Pittard, Mabel. A Yankee in Rutherford County. Rutherford County Historical Society, Publication 26. Murfreesboro, Tennessee: Rutherford County Historical Society, Winter 1986.
- Potter, Elisabeth Walton, and Beth M. Boland. National Register Bulletin: Guidelines for Evaluating and Registering Cemeteries and Burial Places. Washington, D.C.: National Park Service, 1992.
- Randall, John M., and Janet Marinelli, eds. Invasive Plants: Weeds of the Global Garden. Brooklyn, New York: Brooklyn Botanic Garden, 1996.
- Randolph, Richard B., Superintendent of Chickamauga and Chattanooga National Military Park. Letter to Mr. Cammerer, Director, Office of National Parks, regarding inspection of Stones River. October 13, 1933.
- Superintendent's Narrative Report. March 1935.
- Record Group 79. National Archives II, College Park, Maryland. Correspondence, photographic, and cartographic files.
- Register Number 10, Civil War Collection Confederate and Federal. Manuscript Division, Tennessee State Library and Archives, March 1, 1966.
- Reports on National Cemeteries, Department of the Cumberland. No. 12: Stone's [sic] River. September 26, 1869. (Manuscript)
- Road Inventory and Needs Study for Stones River National Battlefield and Cemetery. Arlington, Virginia: Federal Highway Administration, 1980.
- Roberts, Thomas H., and Kenneth L. Morgan. Inventory and Classification of Wetlands at Stones River National Battlefield, Murfreesboro, Tennessee. Center for the Management, Utilization, and Protection of Water Resources, Tennessee Technological University, Cookeville, Tennessee. Report prepared for the National Park Service, December 2006.
- Roll of Honor No. XI: Names of Soldiers Who Died in Defence [sic] of the American Union, Interred in the National Cemeteries at Chattanooga, Stone's River, and Knoxville, Tenn. (Washington: Government Printing Office, 1866; reprint, Baltimore: Genealogical Publishing, 1994), 228.
- Rutherford County. History of Tennessee. Chicago, Illinois and Nashville, Tennessee: The Goodspeed Publishing Company, 1887.
- Sanders, James A., Superintendent. Natural Resource Management Plan. Stones River National Battlefield and Cemetery. October 1976.

- ———, and Ron A. Gibbs. *Historic Resource Management Plan for Stones River National Battlefield and Cemetery*. Revision of Charles W. Snell, *Historic Resource Management Plan*, 1973.

 Murfreesboro, Tennessee: Stones River National Battlefield and Cemetery, National Park Service, July 1977.
- Schlesinger, Arthur M., Jr. The Coming of the New Deal. Boston, Massachusetts: Houghton Mifflin, 1959.
- "Sectional Views of Beautiful National Cemetery at Murfreesboro and Impressively Pretty Entrance to Stone's River National Military Park." *Rutherford Courier* [Murfreesboro, Tennessee], December 5, 1931.
- Sellers, James L., ed. "The Richard H. Mockett Diary: November 3, 1864–January 17, 1865," *The Mississippi Valley Historical Review* 26, no. 2 (September 1939), 233–240.
- Sims, Carlton C., ed. *A History of Rutherford County.* Murfreesboro, Tennessee: Rutherford Courier, 1947.
- Spence, John C. *The Annals of Rutherford County,* Volume II: 1829–1870. Murfreesboro, Tennessee: The Rutherford County Historical Society, 1991.
- Stephenson, Richard W. Civil War Maps: An Annotated List of Maps and Atlases in Map Collections of the Library of Congress. Washington, D.C.: 1961.
- Stevenson, Alexander F. *The Battle of Stone's River near Murfreesboro', Tenn.: December 30, 1862 to January 3, 1863.* Gettysburg, Pennsylvania: Civil War Times Illustrated, 1974. Reprint of the 1884 edition.
- Stones River National Battlefield Cemetery Project Archives, Stones River National Battlefield, Murfreesboro, Tennessee.
- Stones River National Battlefield Central Files Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- Stones River National Battlefield Completion Report, Stones River National Battlefield, Murfreesboro, Tennessee. Work Order No. B-1 (fourth revision): *Repointing Stone Wall around National Cemetery*, February 1, 1964 (date completed).
- Stones River National Battlefield Completion Report, Stones River National Battlefield, Murfreesboro, Tennessee. Work Order No. B-2: *Visitor Center, Utility Building Two Employee Residences, and Water and Sewer Utilities*, April 12, 1963 (date completed).
- Stones River National Battlefield Completion Report, Stones River National Battlefield, Murfreesboro, Tennessee. Work Order No. B-6 (first revision): *One Employee Residence*, November 13, 1963 (date completed).
- Stones River National Battlefield, Fire Management Plan. National Park Service, 2003. With memo dated 9 May 2003 from Regional Director, Southeast Region, to Superintendent, Stones River National Battlefield, finding of No Significant Impact for Fire Management Plan.
- Stones River National Battlefield Fire Management Plan Environmental Assessment, February 2003.

- Stones River National Battlefield and Cemetery, Murfreesboro, Tennessee. Final Environmental Statement for General Management Plan and Development Concept Plan. Prepared by Denver Service Center, National Park Service, United States Department of the Interior. Draft, July 1979. Final, 1980.
- Stones River National Battlefield and Cemetery, Murfreesboro, Tennessee. General Management Plan and Development Concept Plan. Prepared by Denver Service Center, National Park Service, United States Department of the Interior, 1980.
- Stones River National Battlefield Landscape, Stones River National Battlefield, Cultural Landscape Inventory. Atlanta, Georgia: Office of Cultural Resources Planning, Southeast Regional Office, National Park Service, 1994.
- Stones River National Battlefield Museum Collection, Stones River National Battlefield, Murfreesboro,
- Stones River National Battlefield PMIS 131327A Component Completion Report, Raise Straighten, and Align Historic Headstones, November 5, 2009 (completion date).
- Styles, Sean M., with Miranda Fraley. Mary O. Ratcliffe and Robert W. Blythe, eds. Stones River National Battlefield Historic Resource Study. Atlanta, Georgia: Cultural Resources Division, Southeast Regional Office, National Park Service, 2004.
- A Survey of Civil War Period Military Sites in Middle Tennessee. Tennessee Department of Conservation, Division of Archeology, Report of Investigations, No. 7, 1990.
- True, J. C., W. C. Jackson, E. P. Davis, C. F. Wharton, and O. G. Sprouse. Soil Survey of Rutherford County, Tennessee. United States Department of Agriculture Soil Conservation Service in cooperation with University of Tennessee Agricultural Experiment Station, 1977.
- Walker, John W., J. Donald Merritt, and Steven J. Shephard. Archeological Investigations at Stones River National Battlefield, Tennessee. Tallahassee, Florida: National Park Service, Southeast Archeological Center, 1990.
- Whitman, E. B., Reports on National Cemeteries, Department of the Cumberland: No. 12: Stones River. September 26, 1867. Museum Collection, Stones River National Battlefield, Murfreesboro, Tennessee.
- Willett, Anne Wilson. A History of the Stones River National Military Park. Thesis for Master of Arts degree. Murfreesboro, Tennessee: Middle Tennessee State College. August 1958.
- Willett, John T., Superintendent. Master Plan for Stones River National Military Park, Mission 66 Edition. Murfreesboro, Tennessee: Stones River National Military Park, 1960.
- Wirth, Conrad L. Parks, Politics, and the People. Norman, Oklahoma: University of Oklahoma Press, 1980.
- Womack, Bob. Stone's River National Military Park. Reprinted from Tennessee Historical Quarterly. 1962.

Maps

Bearss, Edwin C., Research Historian. Stones River National Military Park. Stones River." April 1959.	"Cavalry Operations - Battle of
———. "The Union Artillery and Breckinridge's Attack." July 1959.	
"The Rebels Concentrate at Stones River." March 1960.	

——. "The History of Fortress Rosecrans." December 1960.

[&]quot;Map of Rutherford County Tenn." Compiled and published by D.G. Beers & Co., Philadelphia, Pennsylvania, 1878.

[&]quot;Map of Battlefield of Stones River, Tennessee." Surveyed by Oscar Jones. 1899.

[&]quot;Map of Rutherford County." 1916. State of Tennessee, State Geological Survey.

[&]quot;Stones River National Military Park Commission Map No. 3. Land to be Acquired." Revised May 18, 1929.

[&]quot;Stone's [sic] River Battlefield, Tennessee." Army Quartermaster Corps. N.d. [early 1930s].

[&]quot;Topography of Stone [sic] River National Military Park Tennessee." National Park Service Branch of Engineering. August 1936. 2 sheets. Includes list of inscriptions on markers.

[&]quot;Map of Rutherford County." 1937. State of Tennessee Department of Conservation. Division of Geology.

[&]quot;Master Plan for Stones River National Military Park." National Park Service Branch of Plans and Design, 1939. 4 sheets. Draft versions dated 1937 and 1938 also exist.

[&]quot;General Highway Map of Rutherford County, Tennessee." 1966. Tennessee Department of Transportation.

Appendix A: Resource Inventory

Feature Name	Contributing	Non- Contributing	Missina	Date of Origin	Modifications	Condition	TCS ID
Patterns of Spatial Organization)				
Two character areas-burial ground and lodge and service area-defined by tree plantings,	×			1868-871		рооб	
land uses, and circulation Location of the cemetery on a prominent knoll	×			1864-1871		рооб	
Orientation of the cemetery to follow the alignment of the adjacent road and rail line	×			1864-1871		рооб	
Perimeter wall enclosure	×			1865-1871		Роод	
The symmetrical, axial, radial and orthogonal layout of the burial grounds	×			1864-1865		рооб	
A formal geometric pattern of regularly-	*			1863-present		poor	
rows	'					5	
A flagstaff used as a focal point	×			1860s		Рооб	
Fifteen original burial sections (A through O)	×			1860s		Good	
Five additional burial sections (P through T)	×			20th century		роо5	
Open turf lawn sections	×			1863-1865		роо5	
Rostrum located in a turf lawn panel edged by tree plantings	×			1870s		роо5	
Deciduous tree plantings set informally along the avenues	×			by 1892		рооб	
Evergreens clustered around Lincoln Square	×			by 1892		Good	
Denser plantings along the southern edge of the cemetery	×			by 1892		рооБ	
Linear organization of residential and maintenance complex	×			1962-1963		poog	
Rows of evergreen trees between the burial							
ground and the rostrum, and the rostrum and the lodge and service are	×			1967-1972			
Cluster arrangement of original and replaced superintendents' lodges, outbuildings, and			×	1871-1963		N/A	
Variety of garden spaces within the lodge and service area that included shrub and tree			*	1871-1963		N/A	
plantings							
Natural Features and Systems							
Native limestone geology	×			by 1863		Good	
Knoll and slope topography	×			by 1863		Poop	

Feature Name	Contributing	Non- Contributing	Missing	Date of Origin	Modifications	Condition	TCS ID
Responses to Natural Resources	,	,)	1			
Lincoln Square set atop the crest of the knoll	X			1863-1865		Poop	
The use of native limestone to construct the perimeter wall	×			1870s		Poob	
Plantings of native eastern red cedar trees	×			by 1892		Poop	
Drainage swale in the southeastern portion of							
the cemetery used to address storm water		×		1970s		Poop	
Gravel fill added to the maintenance area to							
reduce flooding problems		×		1978			
Drain hole established through the cemetery							
wall near its southwest corner to alleviate flooding		×		1980s or 1990s			
Well along Old Nashville Highway	Undetermined			1870s	existince of this feature cannot be confirmed	N/A	
Vitrified piping system from nineteenth century	Undetermined			19th century	existince of this feature cannot be confirmed	N/A	
Drainage structure through the railroad embankment	Undetermined			19th century	existince of this feature cannot be confirmed	A/N	
Well house (Building 7) adjacent to	×			1963		роо5	
maintenance snop				107		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
J. U			×	1971		A/N	
5. USGU			×	1870s		N/A	
Well behind the superintendent's lodge			×	1929			
Pump house			×	1935		N/A	
Drainage swale along Old Nashville Highway			×	1930s		N/A	
Topographic Modifications							
Grading and fill used to establish evenly-sloped	>			1876_1883		Poor	
lawn panels with the burial ground	Α.			10/0-1003		noon	
Grading to emphasize the knoll at the center of the cemetery marked by the flagstaff as a focal	×			1888	some erosion has occurred	Good	
point							
Fill used to correct subsidence associated with	*			1876		poor	
graves	٧			200			
Grading and fill used to establish smooth, evenly-sloped travel corridors including the grass avenues and paved roads such as Central Avenue	×			1870s		poog	
Grading to construct the residences and maintenance facilities and the associated access	×			1962-1963		роо5	
road within the lodge and service area							

Feature Name	Contributing	Non- Contributing	Missing	Date of Origin	Modifications	Condition	TCS ID
Construction of a low retaining wall north of Building 6 to protect a tree from the change of grade associated with the construction of the residence	×			1962-1963		рооб	
Excavated and fill associated with the establishment of a drainage swale in the southeastern portion of the cemetery, including fill placed on graves in 1975		×		1975		рооб	
Raising of the elevation of the adjacent rail line corridor using ballast	×			ח		poog	
Gravel fill of up to 3 feet placed within the maintenance area to reduce flooding problems in 1978		×		1978		рооб	
Fill of up to 3 feet added to the burial section where Vietnam veterans interred in the 1970s and 1980s		×		1970s and 1980s		роо5	
Original grade of Lincoln Square			×	1864-1888		N/A	
Original grade of the lodge and service area			×	1863		N/A	
Original grade of cemetery avenues			×	1864		N/A	
Grading for flood control in the 19th century			×	19th century		N/A	
Drainage channel between cemetery wall and Old Nashville Highway			×	1930s		N/A	
Views and Vistas							
Vista from the main entrance along Central Avenue to the flagstaff and Lincoln Square	х			by 1888		рооб	
Vistas toward and away from Lincoln Square	X			by 1870s		роо5	
Views along the grass avenues ad paved roads of the cemetery, often framed by tree plantings	×			by 1870s		роо5	
View between the cemetery and the rail line	×			1864		poog	
Views between the cemetery and Old Nashville Highway	х			1864		рооб	
Views between the burial grounds and lodge and service area screened with plantings of eastern red cedar	×			1967-1972		роо	
Linear views along the access road within the lodge and service area that encompass the built features, including a view south between the stone piers at the entrance along Old Nashville Highway toward the park's main unit	×			c. 1963		рооб	

Feature Name	Contributing	Non- Contributing	Missing	Date of Origin	Modifications	Condition	0/3//
View between the visitor center patio and the		×		1964: 2004		poor	
cemetery		*		1007, 2001			
View across the open field east of the cemetery		×		2009		рооБ	
View of adjacent development along Highway 41/Broad Street, partially limited by screen planting		×		c. 1970s		рооб	
Views between the rostrum and the burial ground		×		1882; 2007	Eastern red cedar trees planted after 1964 limit view	Fair	
Reciprocal views between the original rostrum and the U.S. Regulars Monument			×	1882-c. 1941		N/A	
Reciprocal views between the lodge and service area and burial grounds			×	1871-c. 1964		N/A	
Land Use							
Administration	X			1871		N/A	
Cemetery	×			1864		N/A	
Commemoration	×			1865		N/A	
Housing	×			1963		N/A	
Interpretation	×			1930s		N/A	
Maintenance	×			1871		N/A	
Recreation	×			1870s		N/A	
Supply/storage		×		1970s		N/A	
Horticultural			×	19th century		N/A	
Circulation							
Main entrance gate	X			1865	widened 1937; 1964	Poop	
Central Avenue (Sill Avenue)	X			1865	paved 1960s	Fair	
Parking area inside the wall for eleven cars	X			1960s		Fair	
Sidewalk associated with parking area	×			1960s		Fair	
Concrete stair associated with the sidewalk adjacent to parking area	×			1960s		Fair	
Lincoln Square	X			1865		Fair	
Stair leading into Lincoln Square	×			1960s		Fair	
Eight primary grass avenues	X			1865	1870s	Good	
Secondary grass avenues	×			1865	1870s	Good	
Grass avenue between sections P and Q	X			1942		Good	
Vehicular gate at the lodge and service area access road entrance	×			1865	widened 1937; 1964	рооб	
Pedestrian gate		×		1865; 1977	removed 1961-1963	роо5	
Housing and maintenance access road	×			1963	paved 1960s	роо5	
Driveways to the residences and maintenance shop and yard	×			1963		Poop	
Gravel maintenance yard		×		post 1978		роо5	
				-	_		

Owen Many	soit: dista	Non-	Adiction	ot of Origin	A An olifications	40:4:100	5
Walkways to residences	×	Contribating	griissiivi	1963	MOGILICATIONS	Good	20.52
Gravel access road to the sewer pump station		×		Undetermined		Good	
Mulched path leading to Carpenter Avenue (also surfaced with mulch)		×		1977		Poog	
Adjacent:							
Old Nashville Highway	×			by 1864		Good	
Nashville and Chattanooga Railroad corridor	×			by 1864		рооб	
Pedestrian crosswalk with flashing safety light		×		1970s; 1990s		роо5	
Gravel surfacing of cemetery avenues			×	1865		N/A	
Brick walkways to lodge			×	1870s		N/A	
Pedestrian gate at railroad			×	1930s		N/A	
Pedestrian gate on west wall			×	1870s		N/A	
Original gate opening widths			×	until 1937		N/A	
Circular gravel drive at stables			×	1930s		N/A	
Site for a cemetery avenue along the eastern wall			×	until 1942		N/A	
Cultural Vegetation							
Turf lawn	×			1865-1879		Good	
Evergreen tree plantings along avenues and clustered around Lincoln Square	×			1870s-1892; 1934		роо5	
Deciduous trees along the avenues and in lawn panels	×			1870s-1892; 1934		рооБ	
Eastern red cedar, ginkgo, Southern magnolia,							
hemlock, Norway spruce, and tulip poplar trees surviving from 19th and early 20th centuries	×			19th century		рооб	
Grass-surfaced avenues	×			1879		Good	
Eastern red cedar trees planted in rows and groves for screening	×			1967-1972		Poog	
Yews and dogwood planted in 1970 in Lincoln Square	×			1970		рооБ	
Shrub plantings at the main entrance gate and around the staff housing units		×		1990s-2010s			
Trees planted in 1975-1976 campaign		×		1975-1976		Poop	
Bermuda grass turf		X		N		Good	
Osage orange hedge along inside of wall			×	1870	removed 1891; replaced with English ivy	N/A	
Vegetable garden			×	1876		N/A	
Pyracantha hedge			×	1878			
Grape arbor			×	1892		† 	
Fruit trees and shrubs			×	1878-1890			

		Non-					!
Feature Name	Contributing	Contributing	Missing	Date of Origin	Modifications	Condition	7CS 1D
Ornamental trees and shrubs in			×	1870s, 1880s			
superintendent's lodge environs			1				
Lawn vases planted with flowers and vines				1879-1884			
Rose beds, lozenge-shaped (4)			X	by 1892		N/A	
Canna lily beds (5)			X	1934		N/A	
Shrubs and perennials and trees			X	1878-1881		N/A	
Tree nursery				1876			
English ivy, Chinese wisteria, Virginia creeper			×	1882	Finally removed in 1977	A/N	
and honeysuckle trained on rostrum			1	!		,	
English ivy on inside of perimeter wall			X	1891		N/A	
Vegetative screen planted in the 1930s			X	1930s			
Bluegrass lawn			x	1892			
Turf rostrum floor			X	1882			
Roses (100) by Superintendent's lodge			X	1881		N/A	
Rows of trees along avenues and around			X	hv 1892		δ/N	
Lincoln Square			^	by 1002			
Bluegrass lawn			X	1879		N/A	
Symbolic planting beds (Corps badges)			×	by 1892		A/N	
Buildings and Structures							
Perimeter wall					A drainage hole was cut		98483
	×			1865-1871	through the southwest corner wall in the 1980s or	рооБ	
Well house	X			1963		poob	
C+2ff rocidoncoc and officer (2)	;			5901 5901		5000	
Maintenances and Offices (3)	×			1902-1903	0000	0000	
Maintenance office and shop	×			1967	renovated 2012	000g	
Garage		×		late 1970s-1980s		Good	
Metal storage shed		×		late 1970s-1980s		Good	
Powder magazine		x		1975		Good	
Fuel tank		×		late 1970s-1980s		Good	
Replica rostrum		×		2007		Fair	
Retaining wall behind Building 6	X			1963		Poop	
Original rostrum			X	1882	razed 1941-1942	N/A	
Superintendent's lodge (temporary)			X	pre 1867	wood lodge across Pike	N/A	
Superintendent's Lodge			x	1871-1925	stone lodge	N/A	
Laborer's house, barn, buggy house, two henhouses			×	late 1860s-early 1870s		N/A	
Brick stable			X	1906; 1930		N/A	
Shed behind lodge			×	by 1892	relocated to private property; abandoned	N/A	
Privy behind lodge			X	19th century		N/A	
Superintendent's lodge			×	1926	moved 1963	N/A	
						*	

Feature Name	Contributing	Non- Contributing	Missing	Date of Origin	Modifications	Condition	TCS ID
Small-Scale Features							
Grave markers, Civil War era, known and unknown soldier types	×			1876		роо5	
Privately-placed grave markers	X			1876		Good	
Grave markers post-dating Civil War burials	×			1900		Good	
Native limestone section markers	×			1875		Good/Fair	
Cannonball pyramid monument	×			c. 1964		роо5	
Cannon tube markers	×			1866	cannonball pyramids removed by 1977	Poop	
43rd Wisconsin and 180th Ohio Monument	×			1865		роо5	
U.S. Regulars Monument	×			1883		Good	
"Bivouac of the Dead" poem plaques	×			1882		5 poo5	90223
National cemetery shields	×			1913	reinstalled 1937		07040
Tree identification plaques	×			c. 1930s) poo5	07041
USGS marker	Undetermined			N		Good	
Flagstaff	×			1888		5 poo5	97706
Gates at the main entrance	×			1865	widened 1937; 1960s	Good	90227
Gate at maintenance access drive	×			1865	originated 1865; widened 1937; 1960s		
Gate at the pedestrian entrance		×		1977	closed 1963-1964; reopened 1977	рооб	
Limestone gate piers		×		1977	closed 1963-1964; reopened 1977		
Pre-cast concrete benches	Undertermined			pre-1977			
Rustic limestone slab benches		×		2009			
Picnic tables		×		post 1970s			
Grills		×		post 1970s			
Cannon		X		post 1970s			
Wayside exhibits		×		post 1970s			
Mission 66 wayside exhibit	×			1960s		Good	
Fire hydrants		×		post 1970s			
Culvert with headwall				D			
Storm water outfall associated with the rostrum		×		2007			
Manhole and utility box covers		×		post 1970s			
Sewer pump station cover		×		post 1970s			
Irrigation lines		X		post 1970s			
Mailboxes		X		post 1970s			
Stone-curbed planting beds		X		N		Poop	
Replacement grave markers		×		1980; 1986		Poop	
Replacement concrete section markers		×		1988		Good	
Wayfinding and regulatory signs		×		post 1970s		Poop	

		-uoN					
Feature Name	Contributing	Contributing	Missing	Date of Origin	Modifications	Condition	TCS ID
Chain-link fencing surrounding the maintenance yard and gates		×		late 1970s		poog	
Chain-link fencing surrounding the powder magazine and gate		×		late 1970s		Poog	
Wood headboards			×	1865-1870		N/A	
Wood flagstaff			×	1865		N/A	
Wood picket fence			×	1865-1871		N/A	
Original stone piers at vehicular gates			×	1860s		N/A	
Rusticated concrete piers and cast iron gates at vehicular entrances			×	1896		N/A	
Piers and gates at pedestrian entrances			×	1871		N/A	
Low stone curbs			×			N/A	
Cast-iron and wood settees			×	1878		N/A	
Cast-iron and lawn vases			×			N/A	
Colorful carts and maintenance vehicles			×			N/A	
Wood frame signs, 19th century			×	19th century		N/A	
Cast-iron tablets			×	1930s		N/A	
Gettysburg Address plaque			х	1910	relocated 1960s; removed between 1975 and 1999	N/A	
1937 Battle of Stones River map			×	1937		N/A	
Cast-iron hitching posts			×	1879		N/A	

Appendix B: Conservation Assessment

Background

On November 8, 2010, Deborah Slaton, Jamie Clapper Morris, and Tim Penich of WJE performed a site visit at Stones River National Cemetery near Murfreesboro, Tennessee. The purpose of the site visit was to conduct a visual survey and develop narrative and photographic documentation for a limited conservation assessment of the perimeter wall, markers, monuments, and site furniture within the cemetery. The conservation assessment includes general documentation, preliminary condition assessment, and baseline recommendations for conservation and maintenance of the perimeter wall, markers, monuments, and site furniture.

Cemetery General Description

Stones River National Cemetery was established in 1864 with Civil War-era burials in 1865 and 1866. The cemetery predominantly includes the graves of Union soldiers from the Battle of Stones River and other battles and skirmishes nearby. Nearly 40 percent of the burials are of unidentified soldiers.

The cemetery encompasses approximately 20 acres of former battlefield ground located north of the visitor center and Old Nashville Highway, and south of the Louisville and Nashville Railroad tracks (Figure B-1). The cemetery landscape includes gently sloped grassy terrain with mature native trees surrounded by a limestone site wall. An asphalt-paved road leads from a parking area inside the site wall, to and around the center section of the cemetery (Figure B-2). A flagpole, cannon ball pyramid, upright cannon, and interpretive signage are located within the center section. West of the center section, a large monument known as the U.S. Regulars Monument is located in Section C (Figure B-3). Grassy pathways radiate from the center of the cemetery and lead through the various burial sections (Figure B-4).





FIGURE B-1, left. General overview of a portion of Stones River National Cemetery. **FIGURE B-2, right.** Asphalt-paved road around the center section of the cemetery.





FIGURE B-3, left. U.S. Regulars Monument.

FIGURE B-4, right. Grassy path between cemetery sections.

Observations and Discussion

Site Wall. A site wall constructed of native limestone surrounds the cemetery and maintenance/housing buildings to the west. The exterior of the wall facing Old Nashville Highway is regular ashlar construction with beaded mortar joints (Figure B-5). All other portions of the wall are random ashlar construction with flush mortar joints (Figure B-6). The large limestone coping stones match the stones in the field of the wall (Figure B-7).

The outward facing portions of the north, east, and west portions of the site wall include regularly spaced buttresses (Figure B-8). Three entrances into the cemetery are provided through the south portion of the wall. There is a driveway to the maintenance/housing buildings toward the west end of the south wall, a gated pedestrian entrance along a path leading from the visitor center, and a gated driveway entrance for cemetery visitors.

The site wall reportedly receives regular maintenance. In isolated areas, coping stones have been replaced with stone or concrete. In addition, areas of the wall have been repointed and reconstructed. All observed upward facing joints between coping units contain sealant. All other observed joints contain mortar; joints in the street-facing side of the wall have a beaded profile. Typical distress conditions observed include deterioration of sealant joints between coping stones, open mortar joints at the ashlar wall face, soiling, biological growth, and plant growth (Figure B-9 through Figure B-12).





FIGURE B-5, left. Ashlar stone with beaded mortar joints at the street-facing portion of the site wall. FIGURE B-6, right. Interior portion of the site wall, with flush mortar joints and random ashlar construction.





FIGURE B-7, left. View of coping stones and wall field stone. FIGURE B-8, right. Buttresses on rear portion of the site wall.





FIGURE B-9, left. Failing mortar joints at the street-facing portion of the site wall. FIGURE B-10, right. Soiling at interior of site wall.





FIGURE B-11, left. Plant growth at mortar joints. FIGURE B-12, right. Bond failure at sealant between coping stones.

Grave Markers. There are four different categories of grave markers present in Stones River National Cemetery. The majority of the markers are for Civil War soldiers, both known and unknown. Intermixed among the Civil War markers issued by the federal government are unique markers that were privately funded and placed by family members of the deceased soldiers. Eastern sections of the cemetery contain more recently placed grave markers. These include burials of war veterans from the Spanish-American War, World War I, World War II, the Korean War, and the Vietnam War.¹

The grave markers for Civil War known soldiers are arched marble markers with an inscribed shield and projecting letters on the front, and inscribed numbers on the rear (Figure B-13). The typical marker is 10 inches wide, 3-7/8 inches thick, and approximately 19-1/4 inches above grade on average.

The grave markers for Civil War unknown soldiers are square marble markers with inscribed numbers on the top surface (Figure B-14). The typical marker is 6 inches square, and averages 8 inches above grade.

The unique grave markers from the Civil War era include a range of size, shapes, level of detail, and materials (limestone and marble). Twenty-four unique markers were observed during the assessment. Representative unique markers are shown in Figure B-15 through Figure B-20.

The grave markers for soldiers from more recent wars are arched marble markers with inscribed letters and religious emblems on the front, typically with inscribed numbers on the rear (Figure B-21 through Figure B-23). Select markers, such as where a spouse's grave is adjacent that of a veteran and both are memorialized on a single headstone, include inscriptions on both sides. The typical marker is 13 inches wide, 4-1/4 inches thick, and approximately 19-1/4 inches above grade on average. The inscribed letters are painted on a small number of the grave markers. According to park staff, the coating is a product called Lithochrome, which was applied to the markers to darken the lettering.²

Several typical conditions were observed to affect the majority of the various marble grave marker types and a limited number of unique limestone markers. The most prevalent condition observed is an accumulation of black biological growth. This growth was observed in varying quantities on a majority of the markers (Figure B-24). Another prevalent condition includes minor chipping and wear at the edges of the grave markers. This is most common at the portions of the markers located closest to grade and is attributed to lawn maintenance. Soiling was also observed at the base of most markers as a result of rainwater splashing adjacent soil onto the surface of the stone and rising damp

Other typically observed conditions are related to the stone material, which includes a range of marble types with various grain sizes and veining characteristics. Erosion and surface wear of the stone was observed on a majority of the carved markers (Figure B-25). This is likely due to a combination of natural weathering, previous chemical cleaning campaigns that may have used hydrochloric (muriatic) acid, and previous cleaning with high-pressure water.³

^{1.} Two existing references include information regarding individual markers. The web site http://www.stonesrivernc.org includes a database searchable by the names of the interred. Each listing includes the information on the grave marker as well as an undated photo. In addition, a survey conducted by the NPS in 2003 includes a brief condition description of each marker and photographs.

^{2.} Lithochrome Chemstain, manufactured by the L. M. Scofield Company, is a proprietary stain marketed for use on concrete. For the color CS-1, Black, the material safety data sheet indicates that the product contains hydrochloric acid, as well as sodium bichromate and manganese chloride. This product is problematic for this application because it contains acids; hydrochloric acid in particular can etch the stone. Park staff also noted that the Veterans Administration is moving away from the use of this coating because it tends to break down.

^{3.} Early memoranda mention the use of acid for cleaning. Since 1991, the park has used Photo-Flo and D-2 Biological Solution for cleaning the headstones, as well as Vulpex liquid soap. D-2 is reportedly the product

In addition to the widespread conditions described above, a few grave markers include atypical levels of distress. These distress types include horizontal cracks at the base of the markers and vertical cracks typically occurring through natural veining at the top of the markers (Figure B-26 and Figure B-27). Cracks were estimated to occur in approximately 5 percent of the grave markers. Previous repair materials were also observed at some of the more significantly cracked stones. A small number of previous repairs were observed to have been performed with inappropriate materials or techniques that are damaging to the stone. This includes the use of visually and physically incompatible grout and mortar materials. Green biological growth was observed on a small number of grave markers.





FIGURE B-13, left. View of typical Civil War era grave marker for a soldier of known identity. FIGURE B-14, right. View of typical Civil War era grave marker for an unknown soldier.





FIGURE B-15, left. Example of a unique Civil War era grave marker. FIGURE B-16, right. Example of a unique Civil War era grave marker.

currently in use for this purpose. Correspondence with G. Backlund and J. Lewis, Stones River National Battlefield, August 2012. D-2 is now distributed by Limeworks.us (http://www.limeworks.us/blog/index.php/d2biological-solution/, accessed January 2013).





FIGURE B-17, left. Example of a unique Civil War era grave marker. FIGURE B-18, right. Example of a unique Civil War era grave marker.





FIGURE B-19, left. Example of a unique Civil War era grave marker. FIGURE B-20, right. Example of a unique Civil War era grave marker.





FIGURE B-21, left. View of grave marker from modern war. FIGURE B-22, right. Inscription for spouse on reverse of grave marker.





FIGURE B-23, left. Typical modern era grave marker. FIGURE B-24, right. Black biological growth on modern era grave markers.





FIGURE B-25, left. Erosion and surface wear of inscribed shield and projecting lettering on Civil War era grave

FIGURE B-26, right. Vertical/diagonal crack through grave marker.



FIGURE B-27. Horizontal crack at base of a Civil War era grave marker.

Section markers. The cemetery includes twenty sections. The boundaries of each section are indicated by section markers, which are rectangular prism shaped units measuring approximately 5-3/4 inches square on top and averaging 24 inches above grade. Each marker has a 5 inch high black painted letter on each of the four sides. The markers are fabricated of various materials including limestone, concrete, and cementitious parging over an unknown base material (concrete, masonry, or stone).

Typical conditions among the section markers are related to the materials comprising the markers. Limestone markers were typically observed to be in good condition with minor soiling at the base of the stone and minor chipping of the corner edges (Figure B-28). Concrete markers are typically weathered at the top surface, resulting in a loss of edge definition, as well as in paste erosion and increased aggregate exposure (Figure B-29). The parged section markers exhibit the most deterioration. Typical conditions include crazing and map cracking of the parged surface. Some cracks appear to be limited to surface crazing while a few cracks are wider than hairline and appear to penetrate into the depth of the marker (Figure B-30).







FIGURE B-28, left. Example of limestone section marker with chipping at the corners. **FIGURE B-29, center.** Concrete section marker with weathered top surface, paste erosion, and increased aggregate exposure.

FIGURE B-30, right. Parge coated section marker with surface crazing and penetrating cracks.

U.S. Regulars Monument. The U.S. Regulars Monument is located in Section C, immediately southwest of Lincoln Square (Figure B-31). The monument, which was erected in 1882, includes an approximately 14-foot-tall sandstone shaft set on a three-tiered stepped granite base and topped with a bronze ball and eagle sculpted by Launt Thomson and cast by Bureau Brothers of Philadelphia.⁴

In 1969 the bronze eagle was stolen from the top of the monument. The eagle was recovered in 1982, after a publicity campaign requesting its return in time for the rededication in that year.⁵ Restoration work performed in 1993 included repairs to the concrete foundation, resetting and repointing of the granite base stones, repairs to vertical cracks and missing carved portions of the sandstone shaft, repair and replacement of lead pointing, and cleaning of the sandstone shaft and bronze eagle.⁶

^{4. &}quot;United States Regulars Monument," National Park Service. Stones River National Battlefield Archives.

^{5.} National Park Service, Press release, "\$500 Reward Offered by National Park Service," March 3, 1982.

^{6.} Stones River National Battlefield US Regulars Monument and Cemetery Wall, 1993 Stabilization (Atlanta, Georgia: National Park Service, Southeast Region Historic Architecture Division, 1993).

In 1995 vandals displaced the eagle and the top of the sandstone shaft, damaging both the eagle and the shaft.⁷ The eagle was repaired by Modern Art Foundry in 1995. Repairs included mechanical reattachment, cleaning, and resetting.8

The U.S. Regulars Monument was reviewed from grade; close-up inspection was not performed as part of this study. Typical conditions observed on the U.S. Regulars Monument include discoloration of previously placed patch material, slight soiling, and biological growth on the sandstone shaft; slight corrosion of the bronze eagle element; open joints and soiling of the granite steps; and erosion of the ground at the base of the sculpture (Figure B-32 and Figure B-33).







FIGURE B-31, left. View of U.S. Regulars Monument.

FIGURE B-32, center. Discolored previously placed stone patching material at the U.S. Regulars Monument. FIGURE B-33, right. Soiling, open joints, and grade erosion at the granite steps and base of the U.S. Regulars Monument.

Benches. The benches currently located within the cemetery are relatively modern additions from an unknown date. Cast iron benches with wood seating slats were originally located within the cemetery. (Parts of the original benches are stored in the park museum collection.)

The current benches are informally located near the grassy aisles of the cemetery and consist of two types. Limestone benches are composed of two simple limestone supports spanned by a limestone slab seating area. The slabs are reportedly coping stones from the site wall removed during previous repairs (Figure B-34). According to park staff, the limestone benches were constructed by NPS National Preservation Training Center personnel within the last few years. Cast concrete benches have scroll patterns cast into the supports and an egg and dart pattern cast into the edge of the seating slab (Figure B-35). The dates of the cast concrete benches are not known; however, park staff suggested that they were placed in the cemetery in the 1960s.

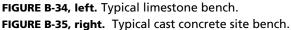
The limestone benches appear to be in good condition. Typical conditions observed include general soiling and biological growth. The limestone benches are in weathered condition with chips and surface irregularities; however, this is understood to be the intent of the aesthetic.

Cast concrete benches appear to be in fair condition. Typical distress conditions include soiling, biological growth, surface crazing, cracks, and weathering of the cast ornamental detail.

^{7. &}quot;Vandalism Probed," The Tennessean, February 8, 1995.

^{8.} Robert J. Spring, "Treatment Summary" (Astoria, New York: Modern Art Foundry, January 15, 1995).







Metal Elements. In addition to interpretive signage, metal commemorative elements located within the cemetery include two upright cannon situated north of the flagpole, a cannon ball pyramid located south of the flagpole, and a cannon located in Section N. All of the metal elements are cast iron coated with black paint (Figure B-36 through Figure B-38).

Conditions of the upright cannon include open joints at the connection of the cannon and the limestone base, streaking of the coated surface under the bronze plaque on the northernmost cannon, missing fasteners at the bronze plaque, and cracks in the limestone base of the second cannon. In addition, each limestone base includes four anchor locations at each corner, where pyramids consisting of five cannonballs were previously located. Slight surface roughness was observed in the coated surface of some metal elements.



FIGURE B-36, left. View of cannonball pyramid. FIGURE B-37, right. General view of upright cannon.





FIGURE B-38. Plant growth in open joint at the base of an upright cannon.

Recommendations

According to the Secretary of the Interior's Standards for the Treatment of Historic Properties, preservation is defined as the "... act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction "

According to the American Institute for Conservation of Historic and Artistic Works, "conservation activities include examination, documentation, treatment, and preventive care, supported by research and education." Conservation includes work to physically save cultural property from the negative effects of time, the impact of pollution, and distress from natural and man-made conditions.

Following the definitions and guidelines noted above, the recommended approach for the future treatment of the constructed historical elements contained within the Stones River National Cemetery is preservation through implementation of conservation activities. The goal is to protect and stabilize the historic features and materials included within the cemetery while maintaining documentation related to their current conditions and measures implemented for their conservation. Gentle preventative treatments and maintenance may be performed periodically; however, more extensive or more involved treatments should only be performed after careful review and research. General maintenance procedures can be performed by park staff, although more complex conservation treatments should be performed by trained conservators.

Site Wall. The site wall is maintained by park staff on a continuous as-needed basis. The reoccurring maintenance work includes localized repointing/rebuilding of the wall, replacement of deteriorated coping stones with matching units, and replacement of sealant in upward facing coping joints.

Recommendations for the future treatment of the site wall include:

- Continue to perform periodic maintenance on the wall, including repointing of joints in the face of the wall and coping, and resealing of upward facing joints in the coping.
- Repointing materials should be selected to be compatible with the stone. Petrographic examination of a sample of original mortar (if available) should be performed to characterize the mortar's binder and aggregate, and to determine if a pigment is present. Chemical studies can also be performed to provide further information about mortar composition. The results of laboratory studies will provide information for use the selection of aggregate and binder materials for a new mortar that will be a close visual match to the original mortar. Joint profiles should match the original,

including beading where appropriate, with the pointing placed at the narrowest joint between two units to avoid placing mortar on the face of the stone. Sealant materials should be a single component system that is non-sagging grade, non-traffic class, and non-staining. The sealant should be installed following manufacturer's instructions. Trial repairs for both pointing and sealing should be performed and reviewed prior to overall implementation of the repairs.

- As indicated by periodic inspections, replace severely deteriorated coping stones to match original units.
- Perform an annual assessment to identify and remove plant growth originating at mortar joints.
- Perform a periodic assessment to review for repair and maintenance needs.
- To remove biological growth and grade soiling, clean the limestone wall periodically with D/2 Biological Solution using soft, medium to long bristle brushes and low pressure water from a garden hose, with a 40-45 degree fan tip stainless steel spray.
- Include a detailed condition assessment of the site wall in the inventory assessment program.

On the cemetery wall, as well as on grave markers and other masonry features of the cemetery as discussed below, the use of water cleaning at high pressures should be avoided. Low pressures (generally less than 200 psi, and less than 100 psi on marble) are recommended for prewetting, cleaning, and rinsing to avoid etching or eroding the stone. Cleaning products containing strong acids should be avoided. Products containing hydrofluoric and hydrochloric acid, even in small quantities or very dilute concentrations, can cause damage to masonry materials and are extremely hazardous to persons, animals, and the environment. These acids can cause damage such as surface etching, resulting in unsightly streaking and accelerated dirt accumulation after cleaning. Acid cleaners can also cause severe staining on substrates containing ferrous minerals, and can contribute to corrosion and deterioration of metals. (Where localized stains cannot be removed by water or detergent cleaning, some mild acids may be used; for example, a 10 percent solution of oxalic acid can help remove ferrous staining from certain substrates. However, trial samples are always required and even mild acids must be used with proper precautions.)

Grave Markers. Grave markers are cleaned and reset as part of ongoing cyclical maintenance. According to park staff, grave markers are cleaned as needed, on request, and now often by Boy Scouts performing Eagle Scout projects. Grave markers in the entire cemetery are not often cleaned at once, although that was the case in the 1990s, when a contractor performed pressure washing of all of the markers. Park staff reported that cleaning procedures include treatment with Cathedral Stone Products D/2 Biological Solution and pressure washing; however, the exact water pressures used in past cleaning projects are not known. Previous cleaning techniques that included the use of strong acidic cleaners have been discontinued.

Resetting of markers was in progress in the west portion of the cemetery during the site visits performed for this study. This process was observed to include removing grade near the base of the marker, removing the marker, and resetting the marker in a vertical position with a standard height of the marker exposed.

Regular lawn maintenance typically includes mechanical trimming directly adjacent to the grave markers. This process contributes to damage such as chipping and scratches at the base and corners of the markers.

Recommendations for the future treatment of the marble grave markers include:

- Monitor the condition of the stones on an annual or biannual basis and maintain inventory assessment forms, preferably using a digital database.
- Perform periodic inspections to review the markers for repair and maintenance needs.

- Edit existing (2003) inventory assessment forms to include the following information for markers for both known and unknown soldiers:
 - Provide a list of previously performed treatments such as dates for stone cleaning and resetting.
 - Document standard stone dimensions on inventory forms.
 - Provide fields for thumbnail sketches of the front, back, top, and side surfaces to help document, locate, and monitor any unique distress conditions.
 - Provide photographs of the front, rear, and top surfaces of each marker. Photograph markers
 with supplemental lighting or reflectors if required to provide clear images. Color scales such as
 a Tiffen Color Separation Guide may be used as a reference when photographing in color.
 - Record recommended treatments on inventory forms. Provide a guideline or justification for repair and cleaning recommendations, (for example, "cleaning recommended, 40 percent of stone obscured by biological growth").
 - Document in detail the treatments implemented on each marker (water pressures, cleaning products, repair materials, and equipment used, as well as dates and personnel performing treatments).
 - Provide updated photos after treatments. Include record photos of back and top sides of each marker (The 2003 inventory only included photos of front side.)
- Discontinue the practice of using high pressure water to clean stone markers. Limit water pressures
 used to not more than 50 psi, or less as indicated by trial samples, with water applied from a 40-45
 degree fan tip stainless steel spray held a minimum of 12 to 18 inches from the surface being
 cleaned
- To remove biological growth and grade soiling, clean markers periodically with D/2 Biological Solution using soft medium to long bristle brushes, and very low pressure water from a garden hose with a 40-45 degree fan tip stainless steel spray.
- Evaluate the frequency with which markers are reset to minimize handling of the stone markers.
- Review lawn maintenance procedures to assess the possibility of using hand operated clippers for grass growing adjacent to the grave markers.
- Temporarily remove, repair, and reset isolated cracked grave markers with pinning, epoxy, grout injection, and mortar repair techniques as appropriate.
- Remove invasive or damaging previous repairs from isolated grave markers and replace previous repairs with appropriate treatments such as stainless steel pins, epoxy, and stone patching materials.
 Treatments should be based on examination of the substrate.
- Regularly maintain tree branches to prevent them from falling and impacting the grave markers.
 (Additional recommendations related to landscape features are provided in the Treatment chapter of the CLR.)

Section markers. Several non-historic concrete section markers were observed within Stones River National Cemetery. Based on historic photographs, research, and aesthetics, it is presumed that the limestone markers are the original section marker type.

Recommendations for the future treatment of the section markers include:

- Remove the non-historic section markers and replace with new markers replicating the original design. (Further research is required to confirm the exact appearance of the historic markers to be replicated.)
- To remove biological growth and grade soiling, clean markers periodically with D/2 Biological Solution, soft medium to long bristle brushes, and low pressure water from a garden hose with a 40-45 degree fan tip stainless steel spray.
- Maintain the painted identification lettering on the section markers with periodic paint reapplication. New paint should match the existing glossy black paint.

- Include section markers in the inventory assessment program.
- Perform periodic assessments to review markers for repair and maintenance needs.

U.S. Regulars Monument. According to park staff, there is no current formal, systematic program for maintenance of the monument.

Recommendations for the future treatment of the U.S. Regulars Monument include:

- Replace eroded grade at the base of the monument.
- Repoint open joints at the granite base. Repointing materials should be selected to be compatible with the stone. Petrographic examination of a sample of original mortar (if available) should be performed to characterize the mortar's binder and aggregate and to determine if a pigment is present. Chemical studies can also be performed to provide further information about mortar composition. The results of laboratory studies will provide information for use the selection of aggregate and binder materials for a new mortar that will be a close visual match to the original mortar. Joint profiles should match the original, including beading where appropriate, with the pointing placed at the narrowest joint between two units to avoid placing mortar on the face of the stone. Trial repairs should be performed and reviewed prior to overall implementation of the repairs.
- To remove biological growth and grade soiling, clean the granite base and sandstone shaft periodically with D/2 Biological Solution, soft medium to long bristle brushes, and low pressure water from a garden hose with a 40-45 degree fan tip stainless steel spray.
- Blend non-matching previous patching repairs by application of a waterborne masonry stain.
- Regularly monitor previously injected vertical cracks for dimensional change.
- Perform periodic assessments to review monument for repair and maintenance needs.
- Continue regular maintenance schedule as presented in the 1993 Completion Report for the U.S. Regulars Monument.
- Include a condition assessment of the U.S. Regulars Monument in the inventory assessment program.

Benches. The benches currently included within the cemetery are not original to their setting. Several historic cast iron bench supports are currently being stored in the park museum collection.

Recommendations for the future treatment of the benches include:

- Research the appearance and placement of the original cemetery benches.
- Replace non-historic site benches with benches matching the appearance of the original benches, designed based on archival documentation and cast iron bench supports in the park museum collection
- Perform periodic assessments to review benches for repair needs.

Metal Elements. According to park staff, there is no current formal, systematic program for maintenance of the metal elements, other than recoating painted features when existing paint is observed to be failing.

Recommendations for the future treatment of the metal elements include:

- Repair the cracked limestone base of the southernmost upright cannon. Possible repair methods include pinning, grout injection, or mortar patching.
- Replace the surface sealant at the metal/limestone interface of the base at both upright cannon.
- Research and replace missing cannonball pyramids at bases of the upright cannon.

- Replace the missing fasteners at the bronze plaque attached to the northernmost upright cannon with historically appropriate bronze fasteners.
- Perform maintenance cleaning of the painted surfaces of metal elements to remove dirt accumulation. Use very low pressure water and mild, non-ionic detergents for cleaning.
- Annually review the coated surfaces for signs of corrosion.
- Perform periodic assessments to review the metal elements for repair and maintenance needs.
- Perform spot maintenance of coating until comprehensive recoating is warranted due to agerelated deterioration of the existing coating.
- Refer to U.S. Regulars Monument recommendations above for treatment of the bronze eagle.
- Include a condition assessment of the metal elements in the inventory assessment program.

Appendix C: Non-Conforming Headstones

Headstone Number Name of Interred Dimensions	Transcription ¹	Photograph ² (1984)	Photograph ³ (2014)	
A-0381 Henry E. Hartsock 27 x 20 x 2 inches	Henry E. Hartsock Born at Liberty Tiaga Co., Pa Sept. 30, 1843 Died at Columbia, Tenn Sept 6, 1864 A member of Co. B 7th Penn Cavalry	HENRY EMARTSOCA Born of Liberty Theory of Fair Prince of Columbia Tests Sept. 8, 1804		
D-1404 Charles Castimore 24 x 18 x 2 inches	Charles Castimore Co. G 19th Ohio Vols. Killed at Stones River Battle Janry 2nd 1863 Aged (seventeen)		This Classifier is a state of the state of t	
D-1419 Smith Brown 25-1/2 x 10 x 2 inches	Sargeant Smith Brown Simonson Battery Ind Vol Died April 16 1862 farewell for a time dear wife and child my life for my country I have given I trust we greet each other again on the beautiful plains of heaven	SLITH BROWN STATE OF THE STATE	SWATTANO MASSAGE AND	

D-1655 Leander D. Tillman 14-1/2 x 11 x 2 inches	In memorium Leander D. Tillman Pvt Comp A 3. OVI Born in (illegible) Co. Ohio Died Ap. 25, 1862 Aged 23 years	The state of the s	La Principal Control of the Control
D-1713 J. H. Andes 15 x 11 x 2 inches	J. H. Andes (illegible) Sarg't. Co. K 2nd E. Tenn. Vol. Son of John & Litty Andes Died Jan 29, 1863 Aged 20 years	Antes Constitution of the constitution of the	I. H. ANDES. Ord Surge O. R. 12 "F. Termyel- Sou of the Shirty Andes Riol Jan. 23. 1863 Agreet 20 Years.
E-1777 John A. Jonson 42 x 17-1/2 x 5 inches	In memory of John A. Jonson Co. B 19th OVI Mortaly wounded at the Battle of Stones River Died the 26th of Jan 1863 Aged 26 yrs		

E-1798 John Martin 36-1/2 x 20 x 1-1/2 inches	Sarg. John Martin Co D 4th Ohio Cav Aged 21 year He was a good man & a faithful soldier Death with its dart did pierce my heart When I was in my prime Weep not for me my loving friend It was God's appointed time With humble hopes in peace to rest Among the (illegible) of the blest.	Section Provide Texts	
E- Lewis Flatt 21 x 16 x 2 inches	In Memory of Lewis Flatt Comp I Ninth Reg. Mich Vols. Born 1818 Died April 28, 1862 Blessed are the dead who died	Total Service Control of the Control	April 28.18 G2 Missed are the dead at hard is the Land.
E-1822 George Herrick 24 x 16-1/2 x 2 inches	George Herrick 10 regimet Wisconsin Vol Born 1843 Died April 19, 1862 Remember friends as you pass by As you are now so once was I But as I am now you shall be Prepare yourselves to follow me.	GEORGE HERRICK III regarded theorem to be It are in the Dreat the control of the	GEORGE HERRICA THE THIRD THE PARTY OF T

F-2260 M. R. Butler 28 x 14-1/2 x 1-1/2 inches	Maj. M. R. Butler 2nd East Tenn. Cavalry Died Mar 10, 1863 Aged 25 years	May M. R. BUTLER Sert lenn fivalry D/sel May 10, 1863 Final S. Van	May M. S. SUTLES 2 That Journals Died Mar 10. 1864 Adaptive 25 Nove
F-2417 Robert W. Springer 16 x 14 x 1-1/2 inches	Robert W. Springer of Co. C 98 III Vol. Born Oct 23, 1839 Died at Murfreesboro Tenn April 3, 1863	RODE STRINGER DE COSTILLOT BERNOCH CASS DE CAS	ROBERT W. SPRINGER Of Co. Cy 3 JUL VOL. Birin Oct 22, 1839 District Machinerator Toma Justin 3, 1863.
F-2500 Henry Day	Henry Day Co H 37 Indianna Vols.	Photo not available	37 Internation
H-2881 Charles Gillen	In memory of Charles Gillen 9. Regt. Mich. C.O. G.V. Born 1811 Died May 13 1862 This loss is deeply mourned by his friends (becomes unreadable)	Photo not available	Traismont of the state of the s

H-3081 J. D. Elliott 39 x 24 x 8 inches	Lt. Col. J. D. Elliott 102 Reg't OVI Wounded Sept 24, 1864 In a battle fought at this place between General Forrest and himself Died Oct 13, 1864	Photo not available	
H-3159 Jonathan E. Shearer 19 x 12 x 2 inches	Jonathan E. son of Peter & W Shearer A member of Co (Illegible) 9th Reg't Pa. Cav. Died April 23, 1863 Aged 21 yrs. 6 mos.	PETER SVISHEARER Literature of Co. 25 Reart. Ph. Gov. Died iprel 28 1888 Agen 28 Xv. 6 Alus.	
H-6141 Aggie Williams 22-1/2 x 11 x 2 inches	Our little Aggie youngest daughter of Rev. G. W. & M. S. Williams Aged 1 yr., 7 mos., & 20 d's Ere sin could blight or sorrow fade death came with friendly care (illegible) heav- en conveyed and (illegible) blossom there.	A G G IE. S omnes A anniho at S os. S. M. M. S. WILLIAMS VILLIAMS VILLIAMS	A C IE A
H-6142 Hester Bell Woodward 18-1/2 x 11 x 3 inches	Hester Bell Woodward died Dec 15, 1864 Aged 8 years and 7 months Dearest daughter thou hast left us Here thy loss we deeply feel But tis God hath bereft us He can all our sorrows heal	Photo not available	Der 15/1/5 1 Figer 7 months The months

			-
H-6143 Wm. Z. Ross and Sarah E. Ross 49-1/2 x 30 x 4 inches	In memory of Wm Z Ross Born Dec 24 1822 died Oct 11 also of his daughter Sarah E Ross who died Sept 29 1866 They were lovely in their lives and in death are not divided (on base) Calhoon Bros Shelbyville, Ten	TOTAL	
H-6150 Anna Tarter 34-1/2 x 20 x 3 inches	Anna Tarter Nov 18, 1884 Sept 16, 1926		
I-3254 David Hode 44 x 20 x 3 inches	In memory of David Hode Co H 1st Middle Tenn Stok's Cavalry USVA Killed on picket Dec 10 1862 Native of Indiana Aged 24 years Erected by his company A friend to the Union and Freedom's Cause Our Constitution and Christian Laws He gave his life a soldier brave Man's greatest right on Earth to save.	Photo not available	

K-4366 Thomas Miller	Thomas Miller of Co. B 90 Reg't OVI Killed in Dec Battle at Stones River Dec 31, 1862 Aged 20 yrs 2m 19d Long live the memory of all who For their country's freedom fell of him who shared the mortal strife And gave in youth his precious life.	Solven Red Solven Buttle Malled in the Buttle of Slave Rice Dec. 31 1562 Ager R. D. accord on the to list medical control of the list medical control of	SSIMA STATE OF THE
L-4621 Charles R. Barnett 15 x 9 x 2 inches	In Memory of Charles R. Barnett son of Soloman and Mary Barnett Born Sept 4, 1840 Died May 30, 2865	The reserve to the second seco	DIED MYACTICES DIED MYACTICES DIED MYACTICES DIED MYACTICES DIED MYACTICES TOTAL TOTAL TOTAL
M-4849 Benj. L. Demoss 19 x 18 x 2 inches	Benj. L. Demoss Private Co. H 37th Indianna Vols.	BEYONL REMOSS. Print Co. H. 37 - Indum Mr.	BENJ. L. BEMONS Private Co. H. 37 f. Indiam Vol. Died Viav 418 63
M-5094 Jasper Quigley 30 x 19-1/2 x 2 inches	Jasper Son of Elijah & Eliza Quigley Born in Edwards County, III Jan 15, 1849 Died in the US Service March 29, 1865 Aged 16 yrs 2 mos 14 days	Photo not available	JASPER Son of Edgald Bland OUIGLEY Sepa as Edward Confer From 15 18-49 Son of Start Confer From 25 18-59 The Start Confer The Start

O-5602 Henry C. Crow 13 x 13-1/2 x 1-1/2 inches	Henry C. Crow Co D 4, E. Tenn. Cav. Born Died Oct 4, 1863	HENRY C. CROW. Co.D. 1. E. Tron. Par. Born Oird Oct. 4, 1863.	
O-5619 A. G. Andes	A. G. Andes Corp. Co. M (illegible) Son of John & Litty Andes Died April 25, 1863 Aged 31 years		
O-6124 Joseph Guest 21 x 16-1/2 x 2 inches	Joseph Guest Consort of Mary A. Guest Private in the 12 Reg. Ind. Vol. Born Sept 30, 1828 Fell in the Battle of Stones River Dec 31, 1862	Photo not available	Consert of 1 Consert of 1 MARY A. GUEST: Private in the 12 Ring Ind. Fol. 300TN Sept. 30, 1828: Foll in the hatte of Since Biase Dec. 33, 1862
O-6135 Unknown (eleven unknown soldiers)	This grave contains the remains of Eleven unknown Soldiers	Photo not available	613

None

13th Regiment Wisconsin Volunteers

41 x 22-1/2 x 14 inches

Erected by the 13th Regmt Wis. Vol Inf. in memory of deceased soldiers in that reg't and of the 130th Ohio Tennessee **Union Soldiers** Railroad Employees & c. 1865

Photo not available



^{1.} Transcripts from survey cards, "Survey of Private Memorial markers Found in Stones River National Cemetery," by Michael Harris, Park Technician, 1984.

¹⁹⁸⁴ photographs by Michael Harris, Park Technician.

^{3. 2004} photographs by Laura Olin and Elizabeth Guercio, park volunteers.

Appendix D: Lincoln Square Plantings

In December 2014, at the request of Stones River National Military Park, Liz Sargent reviewed documentation of plantings historically present in Lincoln Square and prepared comments and recommendations for new plantings to be added to Lincoln Square in Stones River National Cemetery. This consultation was provided in coordination with development of the Cultural Landscape Report for Stones River National Cemetery by the project team.

Historical Plantings

Documentation in the 1934 plan (Figure D-1) does not specify or indicate any plantings within Lincoln Square.

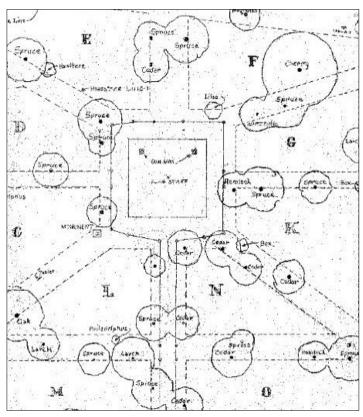


FIGURE D-1. Stones River National Cemetery, 1934 planting plan, excerpt showing Lincoln Square area of cemetery. Source: National Park Service drawing 327-1062, "Cemetery Planting Plan," dated June 1, 1934.

There are shrubs indicated elsewhere within the cemetery in this plan. Species include:

- Spiraea
- Mock orange
- Privet
- Forsythia
- Rose
- Hydrangea
- Sumac
- Mahonia (leatherleaf and Oregon grape holly)
- Lilac
- Box

A plan prepared in 1970 (Figure D-2) does specify plantings with Lincoln Square. Species indicated include:

- Taxus cuspidate
- Cotoneaster horizontalis
- Cornus florida (pink and red)
- Cercis Canadensis
- Perennials, annuals, tulips and other bulbs

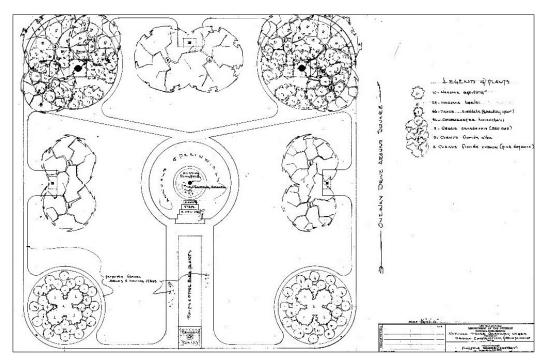


FIGURE D-2. Stones River National Cemetery, 1970s planting plan, excerpt showing Lincoln Square area of cemetery. Source: Stones River National Battlefield Archives, image STRI CEM 0007 GP 5.

2014-2015 Planting Program

Although the 1970 plan falls within the identified period of significance (1862–1974) for the cemetery, the park noted its reluctance to restore Lincoln Square to include the proposed plantings based on the fact that the perennial and annual component may require more care than the park can provide in terms of budget and personnel. However, the plan was considered notable for the layout of the planting beds. Based on discussion with the park, the following approach was recommended.

- Use the original layout with replacement plantings that include:
 - Flowering shrubs, which could be timed to bloom during Memorial Day or at other times of year during which events or ceremonies occur
 - Evergreen shrubs
 - Compact forms
 - Low growth habit (2 to 4 feet), to avoid obscuring views of the cannon and other views into and from Lincoln Square
 - Consider rejuvenating the corner plantings of flowering trees (redbud and flowering dogwood) that have declined
 - Consider using only native species

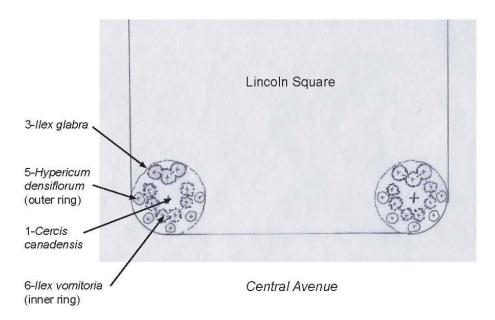
The park asked that consideration be paid to whether the yews currently present in Lincoln Square should be removed or left it place. Removal was considered acceptable as the yews were large and blocking the

views of the cannon. The park therefore decided to remove the yews as part of the recent planting program.

Based on further discussion with the park, Liz Sargent developed the planting plan and guidelines shown in Figure D-3. Initial plantings were completed by the park in December 2014. The plants were purchased with donations to the park by Modern Woodmen of America. Additional plantings were installed by the park in 2015 to complete the areas not covered by the initial donations. Views of the plantings as of November 2015 are provided in Figures D-4 through D-8.

Planting Guidelines

- 1. Establish two 20-foot diameter mulched beds as shown. Maintain with a spaded edge.
- 2. Plant new redbuds at the center of each mulched bed.
- 3. Dig holes for the new plants that are 3 times as large as the pots. Do not dig deeper than the root ball of the plant. The current soil level should be maintained when the plants are set into the new holes.
- 4. Use the new plants to (nearly) complete one of the planting beds. One additional llex vomitoria will be need to complete this planting.
- 5. Plant the two remaining llex glabra in the second bed, paired along the front of the
- 6. To complete the project later, acquire 1-llex glabra, 7-llex vomitoria, and 5-Hypericum densiflorum.



Stones River National Cemetery New Plantings for Lincoln Square

Not to scale

Figure D-3. Planting plan and guidelines for new plantings in Lincoln Square, Stones River National Cemetery. Source: Liz Sargent HLA, 2014.



Figure D-4. Lincoln Square with new plantings in foreground, view looking northeast, November 2015. Source: Stones River National Battlefield.



Figure D-5. Lincoln Square with new plantings in foreground, view looking northeast, November 2015. Source: Stones River National Battlefield.



Figure D-6. New plantings in Lincoln Square, view looking southeast, November 2015. Source: Stones River National Battlefield.



Figure D-7. New plantings in Lincoln Square, view looking north-northeast, November 2015. Source: Stones River National Battlefield.



Figure D-8. New plantings in Lincoln Square, view looking northwest, November 2015. Source: Stones River National Battlefield.