



The Strongest Position I Ever Saw In My Life

Mapping and Site Study of the Rivers Bridge Battlefield

**A Project Report for the American Battlefield Protection Program
Grant GA 2255-03-017
FINAL REPORT**

**South Carolina State Park Service
South Carolina Department of Parks, Recreation and Tourism**

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**Project Report Prepared for
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Project Summary

The battle of Rivers Bridge was a small engagement fought in the waning days of the Civil War. Much of the battlefield is now preserved and interpreted by the South Carolina State Park Service as Rivers Bridge State Historic Site. Although Rivers Bridge is the oldest public Civil War site in the state, the physical remains of the battlefield have never been fully documented until now. Global Positioning Systems (GPS) was used to map the battlefield and graphically identify its different resources. Historical records on the battle and subsequent use of the site were thoroughly evaluated and the remains of the site closely explored. The results of these efforts were combined to identify and assess the battlefield's historical resources for use as baseline information in managing and interpreting Rivers Bridge State Historic Site.

This study identified the defining features of the battlefield and revealed that many of them still exist, both on and off State Park Service property, with a high degree of integrity. The results of the study—the data gathered and the maps created—will be used to inform and guide the management of the battlefield's remains at the site and, it is hoped, will serve as a starting point and framework for additional preservation in partnership with local landowners.

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Unless otherwise noted, all photographs are from the South Carolina State Park Service.

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David Lowe, with the National Park Service's Cultural Resources Geographic Information Service office, offered valuable suggestions in the earliest stages of the work. His questions about the Rivers Bridge battlefield maps led to a major revelation about these documents. His recommendation to maintain the integrity of the maps as historic documents and not alter them to fit the modern landscape greatly influenced the examination of these key pieces of the puzzle.

Steve Smith of the South Carolina Institute of Archaeology and Anthropology helped shape the project from the outset and shared his experience in mapping Civil War sites through the course of the work. With Jim Legg, Steve conducted the Global Positioning System survey of the battlefield's features. Steve and Jim brought their knowledge of Civil War history and their skill at reading landscapes to the project, which proved especially helpful in understanding the site and its post-battle alterations. Tamara Wilson, Geographic Information Systems specialist with the South Carolina Institute of Archaeology and Anthropology, assisted with some of the later field work and helped edit the data recorded on the site.

The institutional support needed to complete this work came from the South Carolina State Park Service. Several individuals in the agency deserve special notice for their contributions. At Rivers Bridge State Historic Site, manager Casey Connell enthusiastically supported and assisted with the project from its inception and handled all local coordination of the work. He questioned old assumptions and accepted wisdom about the battle, and was the first to recognize an important connection between the battlefield maps and some local sites. Park technician Timmy Hiers also contributed greatly to the effort, sharing his knowledge of the grounds and guiding the survey team through the swamp during the mapping phase. In the Resource Management office of the State Park Service, Stan Hutto, David Jones, and Al Hester deserve recognition. Biologist Stan Hutto conducted the on-site tree survey and prepared the final GIS maps for the report. Stan's decision to measure the crown diameters of the trees provided the study with some of the most important guides to the future management of the earthworks. Archaeologist David Jones assisted with the interpretation of the GPS data and final mapping. Historic sites coordinator Al Hester supported the project at all stages and offered an early observation that proved very important in the examination of the battlefield maps. Ashley Chapman, manager of Colonial Dorchester State Historic Site, helped formulate the strategies for using and questioning the maps that were employed in this study, giving freely of his time, his knowledge of GIS, and his interest in using historic maps to inform archaeological and historical research. In his previous guise as the site interpreter at Rivers Bridge, Frank Stovall, now the manager of Musgrove Mill State Historic Site, diligently searched for and located the manuscript battlefield maps that play vital roles as evidence in the following study. Terry Conway, interpretive coordinator for the lowcountry parks, supplied an important insight that led to major

conclusions about the maps and the evidence they contain. District manager Larry Duncan gave his backing to the effort and followed the results of the project. Although he did not participate in the study, new Rivers Bridge manager Jim Steele absorbed the draft of this report and eagerly followed the completion of the final version while he began to identify and address some of the deficiencies at the site.

Several people in the South Carolina Department of Parks, Recreation and Tourism, the parent agency of the State Park Service, deserve thanks for their efforts. Frances Miley handled the administration of the grant funds. Engineer Brian Klauk made large-scale scans of maps and aerial photos. David Elwart of Technology Services arranged for the assistance of GIS specialists in the South Carolina Department of Commerce through an interagency technology sharing program. Marion Weaver, also of Technology Services, answered questions that helped guide the final production of the report.

Amanda Drenning of the South Carolina Department of Commerce, assisted by Bridget Beesley and Corry Bennett, provided GIS work early in the project. Working out of their usual element, they overlaid battlefield maps from 1865 onto modern topographic maps and aerial photos to help assess the accuracy of the historic documents. Their work led to significant conclusions about the maps and their ability to serve as guides for locating cultural features.

Essential elements of the battlefield could not have been mapped without the cooperation of local landowners. Chester and Chad Kears and Joseph and Jo Bessie Bickley graciously allowed access to their property and shared a knowledge of the local landscape acquired through their families' long connection to the land. Jason Zettler, forester for the Kears Land and Timber Company, identified local features and supplied an important reference to past logging in the area.

Descendants of the man who gave much of the land for present-day Rivers Bridge State Historic Site were extremely helpful. David Jenny of Gatesville, Texas, and F. M. McKerley of Williston, South Carolina, contributed their knowledge of Jenny family history and lore. Mr. McKerley identified two house sites that will probably be keys to correcting misconceptions about some significant locations from the battle.

Several organizations and agencies supported the project during the grant application and followed its progress thereafter. The Rivers Bridge Memorial Association, the Sons of Confederate Veterans, Rivers Bridge Camp #842, and the Bratton-Jenkins Chapter of the United Daughters of the Confederacy deserve recognition and thanks for their assistance with this project and their longstanding commitment to the preservation of Rivers Bridge. Mrs. Betty Jane Miller of Barnwell, South Carolina, merits special thanks for sharing her extensive knowledge of local history and being one of the most consistent supporters any historic site ever had. The South Carolina Department of Archives and History, the South Carolina Battleground Preservation Trust, the Southern Regional Office of the National Trust for Historic Preservation, and Fort Sumter National Monument all lent their considerable support to this work. And for their reverence for Rivers Bridge and their dedication to the preservation of the battlefield, the reenactors of the 25th South Carolina Infantry deserve special thanks.

Thanks are also due Dr. J. Tracy Power of the Department of Archives and History and Mike Coker of the South Carolina Historical Society. Most of our knowledge of the battle is based on Tracy's original research, which he freely shared. Mike generously funneled new sources on the battle to us and continues to do so.

Herman Boland of Aiken, South Carolina, assisted by recalling the 1965 reenactment at the site. Dr. John Coski of the Museum of the Confederacy provided the transcript of a letter from an ancestor who fought in the battle and kindly allowed us to quote from it.

The staffs of the map collection at Thomas Cooper Library, University of South Carolina, and the Cartographic Records Branch of the National Archives and Records Administration, Dr. Richard Smith in particular, deserve mention and thanks for their assistance with locating the maps and aerial photos that were used so extensively in the examination of the Rivers Bridge battlefield.

Finally, thanks go out to the members of the Civil War Fortification Study Group. The “trench nerds” visited Rivers Bridge on March 4, 2005. Their expertise in recognizing eroded remnants of earthworks led to a reexamination of part of the site that may contain previously unidentified features from the battle. Dr. Philip Shiman and David Lowe of the Study Group graciously offered additional suggestions after the visit.

Kristen Stevens, Kathleen Madigan, and David Lowe of the National Park Service reviewed the report in its draft form, as did Casey Connell and Steve Smith. Their comments and corrections greatly improved the final version of this document.

CHAPTER 1

The Project

In the Civil War battle of Rivers Bridge, fought on February 2-3, 1865, General William Tecumseh Sherman's Union forces faced the stiffest Confederate resistance they encountered on their march through South Carolina. Today the land over which the soldiers fought is free of most modern intrusions and retains many of the features from the two-day battle. Earthen fortifications used by both Confederate and Union troops are visible and well-preserved on the battlefield. The battle's setting, a thickly wooded swamp, probably looks much as it did in 1865.

Rivers Bridge is the oldest preserved Civil War site in the state. It became a public park in 1941, and in 1945 it was added to the South Carolina State Park system as a historic site. Yet Rivers Bridge is little known outside of the counties and communities that surround it, and serious study of the battle and professional management of its remnants has begun only in recent years.

In July of 1993 the American Battlefield Protection Program (ABPP) of the National Park Service awarded a grant for \$7377.00 (GA-2255-03-017) to the South Carolina State Park Service to map the Rivers Bridge battlefield using Global Positioning Systems (GPS) and Geographic Information Systems (GIS) technology. It would be the first time the battlefield had been mapped since 1865. The project was designed to meet several goals:

- It was to provide the State Park Service with baseline geographic data on the extent and condition of the battlefield's features, data critical for management and interpretation of the site. In particular the GPS mapping of the battlefield would provide data on the earthen fortifications used by Union and Confederate troops. All the geographic data would be used to inform and guide a specific management plan (SMP) for the battlefield.
- Mapping of trees with GPS and GIS was to help the State Park Service develop a tree management strategy that would keep a protective canopy and cover of leaf litter on the earthworks to minimize erosion.
- The GPS mapping was also to be used to assess the accuracy of contemporary battlefield maps. If found to be accurate, contemporary battlefield maps could serve as guides to

locate previously undiscovered or lost battlefield elements. They could also be used to help guide any future improvements of the site.

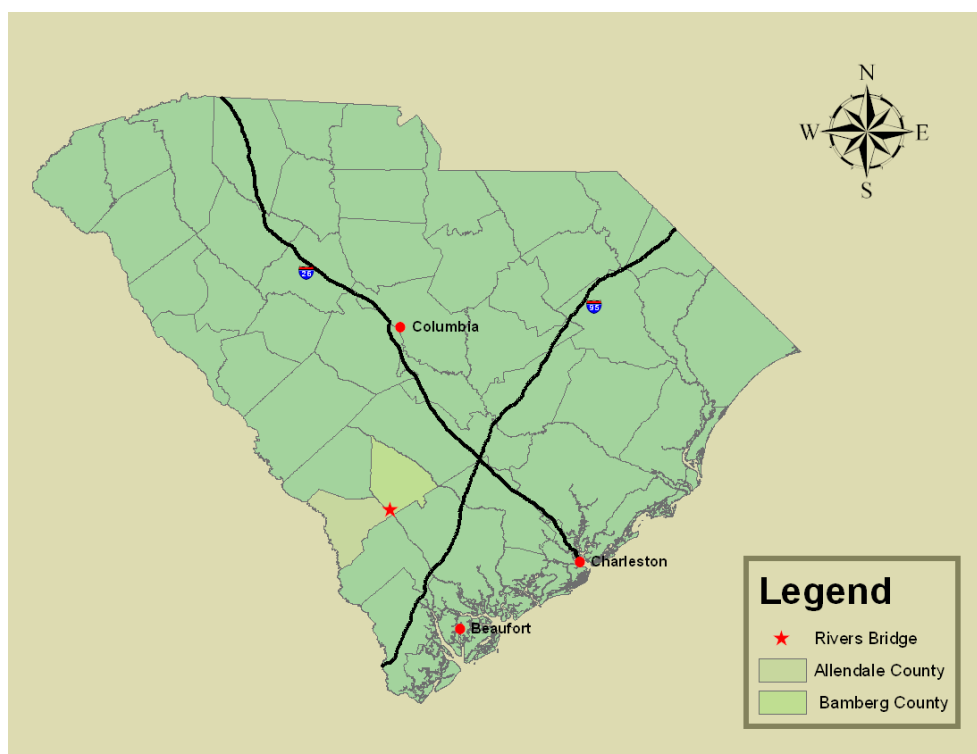
- The project was also to bring together all known evidence on the battlefield landscape, a task which had never been done at Rivers Bridge. This systematic examination of documentary sources and the actual physical remains of the battlefield, combined with the GPS mapping, would result in a more complete understanding of the battle of Rivers Bridge and the features at the site. Questions and inconsistencies arising from the historical record could be addressed by comparing the documentary evidence with the evidence found on the ground.
- Finally, the project was to give the South Carolina State Park Service a fresh look at one of its oldest historic sites. The terms of the grant specified that the South Carolina Institute of Archaeology and Anthropology (SCIAA) would conduct the GPS survey of the battlefield and its resources. It was hoped that the SCIAA archaeologists who have been trained to map earthworks with GPS and are familiar with the identification of Civil War earthworks would help identify features on the site that had confounded the State Park Service for years.

Other outcomes, unanticipated at the time of the grant application, presented themselves during the course of the project:

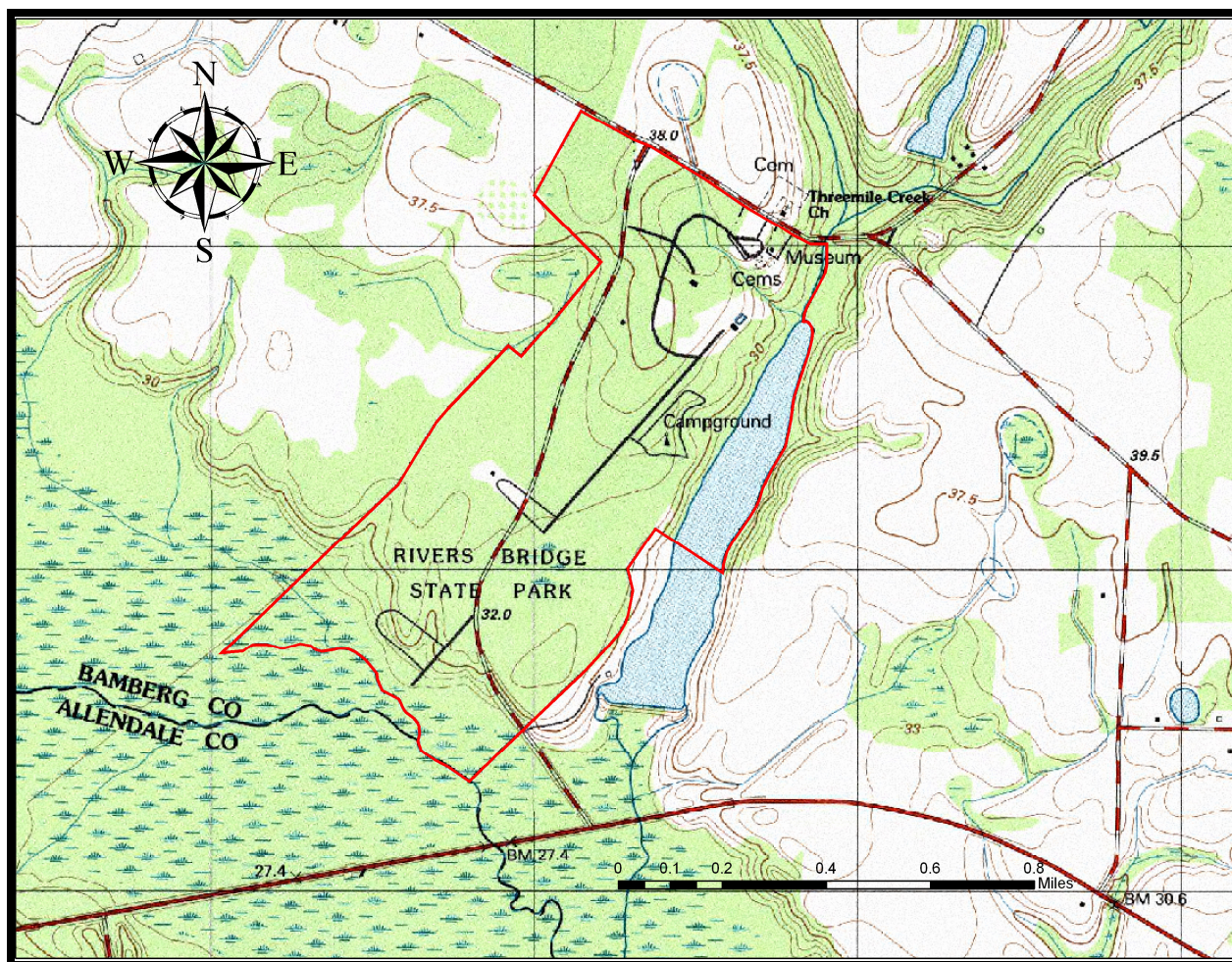
- The project would allow the State Park Service to update and revise the survey of Rivers Bridge conducted in 1992 for the Civil War Sites Advisory Commission. Errors in the original survey could be corrected, the core area of the battlefield could be better defined, and areas needing additional study and protection could be identified.
- The project also suggested the possibility of enlarging the boundary for the National Register of Historic Places listing for the Rivers Bridge battlefield. A revised boundary could better delineate the site and encompass features that figured significantly in the battle but are outside the present site boundary.

Rivers Bridge State Historic Site is in the South Carolina coastal plain in Bamberg County. Three other counties—Allendale, Colleton, and Hampton—make a juncture with Bamberg County nearby. The 390-acre site is an irregularly shaped parcel of land oriented on a southwest

to northeast axis that is a little over a mile long and, at most, about half a mile wide. The site's southwest border is formed by the Salkehatchie River, a blackwater river that flows through a wide cypress swamp. The Salkehatchie flows into the Combahee River, which then empties into the Atlantic ocean. Three-Mile Creek, a tributary of the Salkehatchie, defines much of the site's long southeastern boundary. State Secondary Route 31 bounds the park on the northeast. The park's long northwest boundary angles alongside land owned by a local timber company. The land around the park is rural and is used primarily for agriculture and timber production. The nearest towns, Ehrhardt and Hampton, are about eight and twelve miles away respectively. The site is about sixty miles south of the state capital of Columbia and some sixty miles west of Charleston. It is about an hour's drive off Interstate 26 from Orangeburg, South Carolina, and about a half-hour's drive off Interstate 95 from Walterboro, South Carolina. The battlefield faces no immediate development pressures, but growth projected for Walterboro might eventually extend such pressure closer to the site.¹ The park currently operates with a full-time staff of two: a site manager and a park technician.



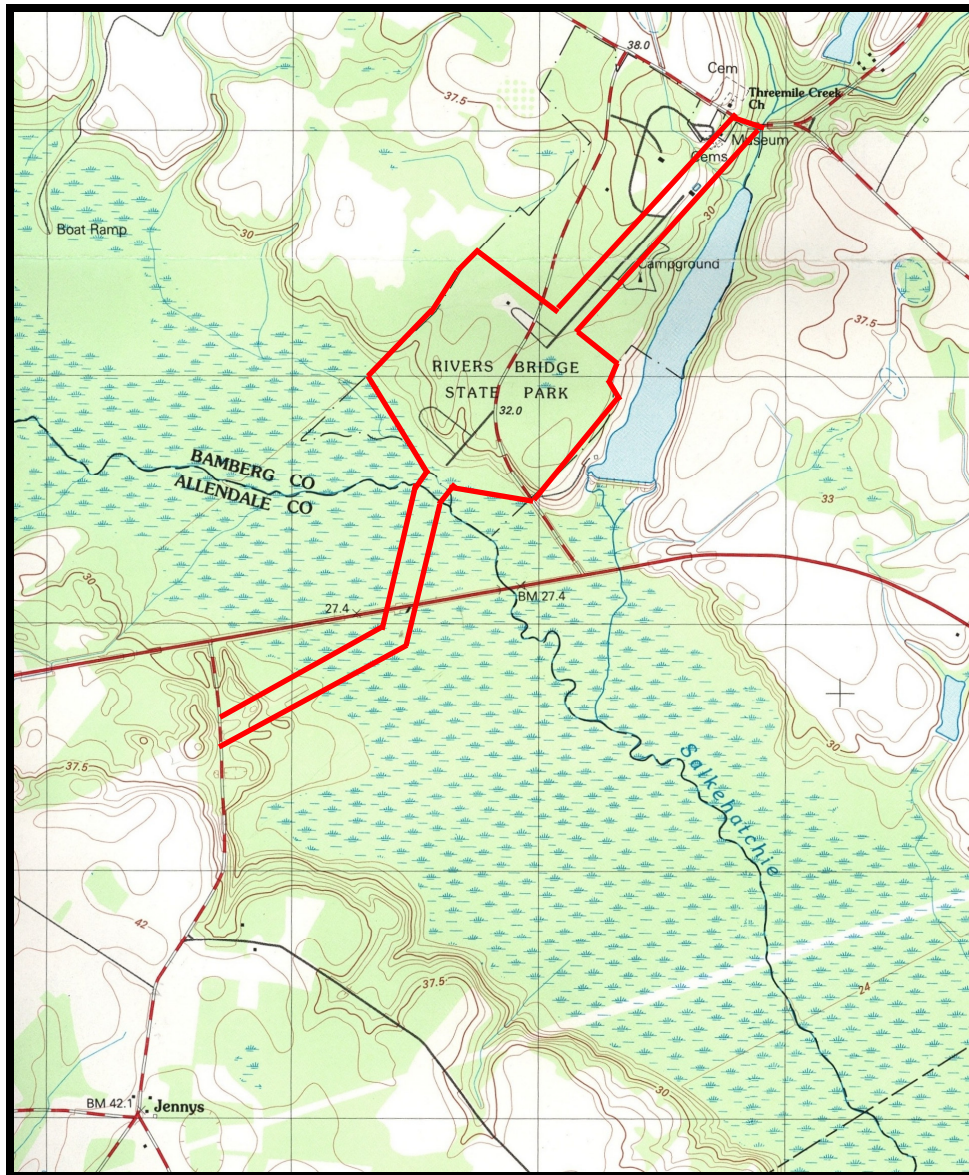
¹ At the time of the writing of this report, a Wal-Mart Supercenter in was planned in Walterboro at the interchange of I-95 and South Carolina Highway 64, the road that leads to Rivers Bridge. The town was also working to create an environmental attraction at a swamp near the same location. "Wal-Mart 'Mixed Blessing' for Town," *Charleston Post & Courier*, Oct. 24, 2004, and "Dilemma: Making a Big Swamp a Big Attraction," *Charleston Post & Courier*, Nov. 14, 2004.



Rivers Bridge State Historic Site as it appears on a modern topographic map. U.S. Department of the Interior Geological Survey, South Carolina, Ehrhardt Quadrangle, 1982, 1:24,000 (7.5 minute series). Since 1997 Rivers Bridge has officially been designated as a historic site, rather than a state park.

The area examined in this project did not include the entire park area. Only land where combat took place and physical traces from the battle remain were studied, roughly the lower two-thirds of the site. This area extends northeastward from the park's boundary on the Salkehatchie. It includes earthen fortifications from which Confederate troops defended the river crossing in 1865 and earthworks that Union troops built after they took the Confederate position. The area examined also extends into the Salkehatchie swamp to encompass the remains of a roadway that served as the main avenue of approach and attack for Union troops. Fighting and troop movements occurred there, and it is probable that other significant military sites, such as field hospitals, were in the area. This part of the study area is in Allendale County and is privately owned. The area studied in the project thus encompasses the "core area" of the

battlefield, defined as the total area in which combat occurred.² The owners, the Kearsse Land and Timber Company and Joseph and Jo Bessie Bickley, graciously allowed the State Park Service access to their property in the course of the study. The features to be mapped in the project covered an area estimated at fewer than fifty acres, although the project area encompassing these features is much larger.



Rivers Bridge mapping project: The area to be examined is roughly enclosed within the red lines. This large area contains the features, estimated to cover fewer than fifty acres, that were to be mapped with GPS.

² David Lowe, Battlefield Survey Manual (Washington, DC: American Battlefield Protection Program, January 2000), p. 4.

CHAPTER 2

The Battle of Rivers Bridge

After marching his army from Atlanta to Savannah in the fall 1864, Major General William Tecumseh Sherman devised a campaign to move his troops through South Carolina and North Carolina, and eventually link up with Ulysses S. Grant's Federal forces in Virginia. Sherman thought the campaign would be as effective as fighting the enemy in the field, costing fewer lives and bringing a quick and relatively humane end to the war. It would destroy the industries and transportation facilities that supported the Southern war effort. Bringing the war to the Southern homefront would demoralize Southern civilians and diminish their willingness to keep troops in the field. Finally, the march would punish South Carolina, widely viewed by Union troops as the state that had started the war.¹

In January of 1865 Sherman launched the invasion of South Carolina. His army of more than 60,000 marched into the state in two wings, just as it had through Georgia, to confuse the Confederates and prevent them from concentrating their forces in opposition. The left wing, led by Major General Henry W. Slocum and comprising the Fourteenth and Twentieth Army Corps, moved up both banks of the Savannah River as if threatening Augusta. The right wing, consisting of the Fifteenth and Seventeenth Corps under the command of Major General Oliver Otis Howard, marched from Beaufort with the appearance of threatening Charleston. In reality both wings were headed for the state capital of Columbia. The left and right wings were to make their first junction on the railroad line that ran from Augusta to Charleston. To get there, however, they had to first cross the Salkehatchie River.²

Sherman had recognized the strategic importance of the Salkehatchie before the march to Savannah, according to one of his staff officers. Major George Ward Nichols recalled Sherman

¹ John G. Barrett, Sherman's March Through the Carolinas (Chapel Hill: University of North Carolina Press, 1956), pp. 16, 26, 38-40. Barrett's account remains the best secondary work on the Carolinas Campaign.

² Ibid., pp. 26, 31-32, 39-41; J. Tracy Power and Daniel J. Bell, Rivers Bridge State Park Visitors Guide (Columbia: South Carolina Department of Parks, Recreation and Tourism, Division of State Parks, 1992), p. 1. " 'This Indescribably Ugly Salkehatchie': The Battle of Rivers Bridge, 2-3 February 1865," J. Tracy Power's history of the battle of Rivers Bridge on pages 1 through 12 of the Visitors Guide, is the best and most complete account of the action at the site. Dr. Power graciously provided the State Park Service with transcriptions of the primary sources he consulted in his research for the Visitors Guide. Many of the references cited throughout this report are from his original research.

conferring with his commanders at Gaylesville, Alabama, in October of 1864. Sitting on a stool outside his tent “with a map of the United States spread upon his knees,” Sherman traced routes of march across Georgia with his finger, asserting his conviction that his army could advance to Savannah. Then he turned his attention to the South Carolina lowcountry:

After studying the map a while, tracing upon the tangled maze of streams and towns a line from Savannah north and east, at Columbia, South Carolina, General Sherman looks up at General Howard with the remark, “Howard, I believe we can go there without any serious difficulty. If we can cross the Salkehatchie, we can capture Columbia.”³

The Salkehatchie and other rivers in the South Carolina lowcountry dictated Sherman’s advance into the state. He would move his army inland along the higher ridges between the watercourses. The troops would make crossings where the rivers narrowed upstream instead of downstream where they broadened to flow through wide marshes.⁴ Getting across the Salkehatchie would be a vital early goal in the march.

Confederate forces in South Carolina had recognized the strategic significance of the lowcountry rivers as well. After the evacuation of Savannah, General P. G. T. Beauregard established successive lines of defense along the rivers between the Georgia border and Charleston. The first was to be along the Combahee and Salkehatchie Rivers as far inland as the town of Barnwell. About six crossings of these rivers were to be guarded.⁵

In his initial advance, Howard’s right wing moved inland from Beaufort and quickly outflanked Confederate defenses at Pocatigo, a depot on the Charleston-Savannah railroad line. The small Confederate division there under the command of Major General Lafayette McLaws

³ George Ward Nichols, The Story of the Great March. From the Diary of a Staff Officer, (New York: Harper & Brothers, 1865; reprint ed., Williamstown, Massachusetts: Corner House Publishers, 1984) p. 35. The modern editors of another officer’s diary do not accept this as a verbatim quote but vouch for its essential accuracy: “Nichols doubtless put these words into Sherman’s mouth in retrospect, but they are basically true.” Richard Harwell and Philip N. Racine, eds., The Fiery Trail: A Union Officer’s Account of Sherman’s Last Campaigns (Knoxville: University of Tennessee Press, 1986), xxix.

⁴ Barrett, Sherman’s March, p. 40.

⁵ Power and Bell, Visitors Guide, p. 2; Christopher Olm Clement, Stephen R. Wise, Steven D. Smith, and Ramona M. Grunden, Mapping the Defense of the Charleston to Savannah Railroad: Civil War Earthworks in Beaufort and Jasper Counties, South Carolina (N.p: Report prepared for American Battlefield Protection Program, 2000), p. 48; The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies, 128 vols. (Washington, DC: U. S. Government Printing Office, 1880-1901), Series I, Vol. XLIV, pp. 970-971, 1010. Hereafter cited as OR, with all references being from Series I.

evacuated its fortifications on the night of January 14 and withdrew to prepared defenses farther inland on the north bank of the Salkehatchie. There the Confederates hoped the rain-swollen river and its thick swamp would impede the Union advance. Howard resumed his advance at the end of the month. His troops marched up the south bank of the Salkehatchie, intending to take one or more of the major crossings. The Fifteenth Corps under Major General John Logan advanced toward the northernmost crossing at Buford's Bridge. The Seventeenth Corps, led by Major General Frank Blair, headed for Rivers Bridge, about six miles downstream.⁶

On Thursday, February 2, 1865, the vanguard of Blair's Seventeenth Corps drove Confederate cavalry to Broxton's Bridge, a crossing of the Salkehatchie about six miles downstream of Rivers Bridge. A reconnaissance in force found Broxton's fortified and defended and its bridge burned. Leaving a regiment to keep the Confederates at Broxton's occupied, Blair moved rapidly up the roads paralleling the Salkehatchie. The Seventeenth Corps' First Division, led by Major General Joseph Anthony Mower, arrived at Rivers Bridge to find the long, narrow causeway and its multiple bridges through the swamp intact. Mower ordered a direct assault down the causeway, but Confederate artillery pieces firing from emplacements on the river's north bank stopped the attack. Union infantry deployed in the swamp and engaged a Confederate infantry brigade and dismounted cavalry who were fighting from breastworks and rifle pits. The battle was on, pitting about 5,000 Union infantrymen of Mower's division against about 700 to 800 Confederates. Even after they were reinforced on the following day, the Confederates holding Rivers Bridge could muster no more than about 1,200 men.⁷

Unwilling to risk another frontal assault, Mower decided to go around the Confederate position. He pulled most of his men back onto high ground on the south side of the Salkehatchie but kept rotations of troops from his three brigades in the swamp. There from the cover of the

⁶ Barrett, Sherman's March, p.46; Harwell and Racine, Fiery Trail, pp. 86-87; Power and Bell, Visitors Guide, pp. 2, 6; OR, Vol. XLVII, Part I, p. 19; Part II, pp. 999, 1013-1015.

⁷ OR, Vol. XLVII, Part I, pp. 194, 375-376, 386, 387; Power and Bell, Visitors Guide, pp. 6-8. The Visitors Guide gives the number of men in Mower's division as 7,000 to 9,000, but this figure has been shown to be inaccurate. See Epilogue and Appendix I: Order of Battle, Battle of Rivers Bridge, February 2-3, 1865. The Visitors Guide also asserts that Rivers Bridge became Blair's objective after the Confederates prevented him from at crossing at Broxton's. Site manager Casey Connell questioned this interpretation while reviewing a draft of this report. Subsequent reexamination of the sources showed that this version of the events leading to the attack on Rivers Bridge was inaccurate.

trees Union soldiers kept the Confederates' heads down with harassing fire. Meanwhile other Federal troops cut roadways through the swamp and laid corduroy—logs, saplings, and salvaged lumber that provided a rough, temporary road surface—to get around the Confederate right flank. On the afternoon of Friday, February 3, Union troops of the 32nd Wisconsin Infantry crossed the Salkehatchie on fallen logs just upstream of the causeway and established a bridgehead on the north bank. When he learned of the breakthrough, Mower halted work on the corduroy and threw most of his troops into an attack at the point of the breakthrough. At the same time he hurled several small diversionary attacks against other parts of the Confederate line. The 10th Illinois Infantry attacked just downstream of the causeway. Two companies managed to cross the river before they were pinned down. The 43rd Ohio Infantry, supported by several companies of the 63rd Ohio, charged down the causeway, only to be forced to take cover in the swamp. But these diversions had an effect. The Confederates concentrated their attention and their forces on the center of their line just as the bulk of Mower's command emerged from the swamp at their right. As the Confederate right at Rivers Bridge crumpled, another Union division crossed the Salkehatchie swamp midway between Rivers and Broxton's Bridges to threaten the Confederate left. Under cover of a smokescreen produced by rapid infantry and artillery volleys, the Confederates retreated. The Union breakthrough at Rivers Bridge rendered the Confederate fortifications at Broxton's and Buford's untenable. The Confederates abandoned their positions along the Salkehatchie and withdrew to another line of defense behind the Edisto River about twenty miles to the northeast. "It was with difficulty that my command could be withdrawn," McLaws reported the day after the battle, "as I was completely flanked on both sides."⁸

Both sides reported total losses of about one hundred men. Even though it was a relatively small engagement, the battle at Rivers Bridge had a significant outcome. Sherman believed the losses "very small, in proportion to the advantages gained, for the enemy at once abandoned the whole line of the Salkiehatchie."⁹ One of the major natural obstacles in the path

⁸Power and Bell, Visitors Guide, pp. 7-10; Mower's report, OR, Vol. XLVII, Part I, p. 388; McLaws' report, OR, Vol. XLVII, Part II, p. 1094.

⁹ William Tecumseh Sherman, Memoirs of General W. T. Sherman (New York: Literary Classics of the United States, Inc., 1990; single-volume reprint of 2-volume 2nd ed., rev., New York: D. Appleton and Company, 1886), p. 754.

of the Union advance had been crossed.¹⁰ The line of the Augusta-Charleston railroad was soon cut. The Confederates continued to retreat before Sherman's overwhelming force and did not mount any serious opposition to the march again until the campaign moved into North Carolina. Columbia fell two weeks after the battle. By early March, Sherman's forces had marched out of the state, leaving a path of destruction in their wake.¹¹

¹⁰ Major Nichols of Sherman's staff believed the Confederates could have put up a stiffer resistance in the state if they had concentrated their forces along the major rivers. Calling the defense of South Carolina "the most ridiculous farce of the war," Nichols asserted that the Salkehatchie and several other rivers were excellent positions from which to conduct a defensive war. He criticized Beauregard for defending cities and not concentrating all his troops along the Salkehatchie. Nichols considered the Salkehatchie "Beauregard's strongest line of defense." Even though he thought it would have been "no easy task," Nichols believed Union troops would have eventually outflanked a Confederate force concentrated on the Salkehatchie. Nichols, Story of the Great March, pp. 200, 279. A modern historian has concluded that Beauregard apparently had no intention of mounting serious resistance to Sherman in the state. Marion B. Lucas, Sherman and the Burning of Columbia (College Station: Texas A & M University Press, 1976; reprint ed., Columbia: University of South Carolina Press, 2000), pp. 41-45.

¹¹ Power and Bell, Visitors Guide, pp. 10-11; For the attitudes of Union troops toward South Carolina and the destruction they wrought upon the state, see Joseph T. Glatthaar's excellent study, The March to the Sea and Beyond: Sherman's Troops in the Savannah and Carolinas Campaigns (New York: New York University Press, 1985), pp. 140-146.

CHAPTER 3

The Landscape of Battle – A Study of the Documentary Evidence

A variety of sources provide detailed evidence on the Rivers Bridge battlefield and how the local terrain and features influenced and in some ways directed the fight. Together these sources paint a composite picture of the battlefield. The primary elements of the battlefield—those physical features that played the most prominent roles in shaping the battle and its outcome—are the Salkehatchie River and swamp, the causeway through the swamp, and the Confederates' earthen fortifications. The fortifications can be further subdivided into their component elements: an infantry breastwork, artillery emplacements, and irregular rifle pits, all further strengthened with abatis or slashing across open ground immediately in front of the works. Secondary elements of the battlefield include fields, woods, roads, waterways, and buildings; these features did not significantly shape the combat but played lesser roles in the battle and helped define the landscape on which it took place. Identification of these features in the historical record will help establish their location on the physical landscapes of 1865 and today.¹

The battle of Rivers Bridge was a small engagement fought during a campaign characterized by rapid movement and little large-scale combat. Still, a substantial number of records exist to document the battle. Because the battle was fought in a relatively small area by a limited number of troops, the documentary sources allow for a detailed reconstruction of the fight that is easily comprehended. The sources also allow for a detailed examination of the physical landscape of the battlefield as it existed in 1865.

WRITTEN ACCOUNTS

The most abundant written accounts of the battle are found in the after-action reports published in *The War of the Rebellion* and in the diaries, letters, and memoirs of the men who fought there. Nearly all comment on the major physical features that comprised the battlefield and shaped and defined the fighting there. These defining features of the battlefield are described in the following pages by the men who encountered them during the battle. Selected

¹ The battlefield features described in this and following chapters are listed in Appendix II: Defining Features, Battle of Rivers Bridge, February 2-3, 1865.

written accounts will be referred to throughout this report where they help illuminate other pieces of battlefield evidence.

The Salkehatchie River and Swamp

The Salkehatchie River and its wide swamp, the natural obstacle on which the Confederates based their defensive line, are described almost uniformly. The river was overflowing its banks and varying in depth. The surrounding swamp was wide, densely wooded, and apparently impenetrable. Sherman wrote that the Salkehatchie “presented a most formidable obstacle.”² Major General Frank Blair, commanding the Union Seventeenth Corps, estimated that the swamp at Rivers Bridge was a mile and half wide and that the Salkehatchie “spreads out into thirty-five small streams varying from two to six feet in depth.”³ Enlisted men echoed the comments of their officers. “There is one peculiarity of the rivers in this country,” wrote Private Joseph Mitchell Strickling of the 39th Ohio Infantry, “and that is they apparently have no banks and roam around over the country at their own sweet will.” The Salkehatchie, he continued, was “just as wet tho as any other river.” Strickling described the trees in the swamp as “a heavy growth of fine large timber of live oak and cypress, the trees standing very thick on the ground or water and even in the chanell and grown to magnificent height as straight as a line with very fine limbs except at the top.”⁴ Private Adelbert Bly slogged his way through the swamp with the 32nd Wisconsin Infantry. “The river flows through a swamp here and divides into numberless little channels four or five rods wide [66 to 82½ feet] and waist to neck deep,” Bly wrote. “The space between these channels is far from dry, all of it is very muddy and the water knee deep some of the time. This is the kind of ground we had to fight over on Feb. 3d 1865.”⁵ Captain F. Y. Hedley later recalled, “A dog could scarcely make his way through the swamp, much less a horse.”⁶ Howard simply called the setting “this indescribably ugly Salkehatchie.”⁷

² Sherman, *Memoirs*, p. 753

³ OR, Vol. XLVII, Part I, p. 375.

⁴ Typed reminiscences, Joseph Mitchell Strickling Papers, 1860-1865, Ohio Historical Society, p. 35. Hereafter cited as Strickling reminiscences.

⁵ Adelbert Bly to Anna, March 29, 1865, Adelbert M. Bly Correspondence, 1862-1910, Wisconsin Historical Society. A rod is a unit of length measuring 16½ feet.

⁶ F. Y. Hedley, *Marching Through Georgia. Pen Pictures of Every-day Life in General Sherman's Army, from the Beginning of the Atlanta Campaign until the Close of the War* (Chicago: Donohue, Henneberry & Co., 1890), p. 356.

⁷ OR, Vol. XLVII, Part I, p. 386.

Confederate assessment of the Salkehatchie was cautious. Colonel George P. Harrison, Jr., commanding the brigade that held Rivers Bridge during the battle, reported on January 23 of a reconnaissance he had made of his positions along the Salkehatchie, six crossings covering a front of more than twenty miles:

The river in most places is swimming. The swamp is soft but not boggy; could with some difficulty be penetrated by horsemen in many places; in many places footmen can cross by felling timber, which is very thick. The swamp is low and upon an average 1,200 yards wide. At this time it is entirely inundated. In many places other currents than the main stream are running several feet deep. There are blind paths which would be difficult to find except through guides between all the above points. The water covering the swamp is generally shallow—say from six to eighteen inches deep.⁸

Union Major Thomas Ward Osborn believed that the thick trees and underbrush partly explained why Mower advanced at Rivers Bridge without skirmishers. “He wished to move faster than men could get through this entanglement, as the men could only get through it by parting the undergrowth with both their hands.”⁹ Mower’s aggressiveness at Rivers Bridge is cited in several Union accounts. Major Oscar Jackson of the 63rd Ohio wrote in his diary, “Many censure Mower . . . for shoving his men in such a place.” According to Jackson, Mower launched his attacks on February 3 even though he knew other troops had crossed the Salkehatchie elsewhere. Mower ordered the 63rd Ohio down the causeway on February 3 “with an oath,” telling one of the unit’s officers not to stop until he captured the Confederate fortifications. “General Howard is said to have criticized the whole of Mower’s operation,” Jackson continued, “but it is Mower’s style.”¹⁰ Private Franklin Lesh of the 63rd Ohio wrote that Mower “was supposed to be intoxicated” and laughed when the 63rd moved up the causeway.¹¹

According to some Union soldiers, the thick swamp kept the Federals from employing their artillery. “We can’t use any artillery on acct. of the swamp,” Private Lesh confided to his diary. Captain Francis Guernsey of the 32nd Wisconsin agreed, writing that “the woods were too

⁸ Ibid., Part II, p. 1038.

⁹ Harwell and Racine, eds., *The Fiery Trail*, p. 97.

¹⁰ Jackson asserted he was present when a staff officer reported to Mower that other crossings of the Salkehatchie had been made. Oscar L. Jackson, *The Colonel’s Diary: the Journals kept before and during the Civil War by the late Colonel Oscar L. Jackson of New Castle, Pennsylvania, sometime Commander of the 63rd Regiment O. V. I* (Sharon, Penn.: N.p., 1922), p. 178.

¹¹ Franklin Lesh diary typescript, incomplete copy on file with the South Carolina State Park Service.

thick to use much artillery.” Private Ole Leiqvam of the 32nd Wisconsin recorded, “We didn’t have any cannons because it was hard to move forward on foot,” implying that the terrain made it impossible to maneuver the guns into position.¹² Whether it was due to the thick swamp or their hard driving commander, for the Federals the battle at Rivers Bridge was strictly an infantry fight.

While the thick swamp served the Confederates as a natural obstacle in front of their position, it also worked against them, covering and concealing the movement of Union troops. “The forest is so dense that the enemy could not see our column,” wrote Major Osborn in describing the Federals’ march from Broxton’s Bridge to Rivers Bridge.¹³ Union soldiers used the dense tree cover to creep within rifle musket range of the Confederate defenses. “Many of them during the night before and under smoke of the firing in the day had worked their way far into the swamp,” recalled Captain Benjamin S. Williams of the 47th Georgia Infantry, “and screening themselves in every way possible, kept up a hot fire upon our lines at the main battery and upon the guns of our battery.”¹⁴

Union troops scrambled over fallen trees and cut down standing trees to cross the swamp and make bridgeheads on the north bank. Troops of the 32nd Wisconsin crossed on logs on the second day of the battle, prompting the breakthrough that led to Mower’s flank assault.¹⁵ Men of the 10th Illinois Infantry cut trees to get across the river just downstream of the causeway in one of Mower’s diversionary attacks.¹⁶ After Captain Ephraim Wilson led Company G of the 10th across the Salkehatchie on a felled tree, he was hit in the shoulder by a Confederate minie ball. Wilson went back across the river on the same tree to seek medical aid.¹⁷ The thick swamp also provided much of the raw material to lay corduroy around the Confederate right. “Too much

¹² Ibid.; Francis Guernsey to Frances Eugenia Doty, March 27, 1865, typescript copy, from the personal collection of Dr. John M. Coski; Ole Kittelson Leiqvam, *Civil War Diaries, 1862-1865*, typed English translation, Wisconsin Historical Society, p. 23.

¹³ Harwell and Racine, eds., *The Fiery Trail*, p. 94.

¹⁴ Benjamin S. Williams, “A Confederate Soldier’s Memoirs,” *Charleston News*, March 8, 1914.

¹⁵ OR, Vol. XLVII, Part I, pp. 388, 400.

¹⁶ Janet Correll Ellison with Mark A. Weitz, eds., *On to Atlanta: The Civil War Diaries of John Hill Ferguson, Illinois Tenth Regiment of Volunteers* (Lincoln: University of Nebraska Press, 2001), p. 101; Matthew H. Jamison, *Recollections of Pioneer and Army Life* (Kansas City: Hudson Press, 1911; reprint ed., microfiche, Louisville: Lost Cause Press, 1975), p. 300.

¹⁷ Ephraim A. Wilson, *Memoirs of the War, by Captain Ephraim A. Wilson, of Co. “G”, 10th Illinois Veteran Volunteer Infantry. In One Volume* (Cleveland: W. M. Bayne Printing Co., 1893), pp. 411-412.

reliance, it seems,” the Charleston Mercury reported after the battle, “was placed upon the effectiveness of the river and the swamps which skirt it, as a bar to the enemy’s progress.”¹⁸

Causeway

The only road through the Salkehatchie swamp at Rivers Bridge was a long earthen causeway that had a number of small bridges crossing the many small channels of the river. Union troops attempting to attack here would be funneled down this bottleneck and bunched up under fire from the Confederates holding the north bank. The Confederate defense at Rivers Bridge focused on the causeway.

Major Jackson of the 63rd Ohio described the road through the swamp as “a kind of causeway built of logs and dirt where there is not too much water. Where there is much water there are bridges . . . many of them spanning considerable bodies of water.”¹⁹ The only major difference in contemporary descriptions of the causeway was in the number of bridges: some counted thirteen, others sixteen or seventeen.²⁰ The small bridges in the causeway ranged in length from twenty to forty feet, according to Jackson, and thirty to fifty feet by Blair’s estimate. The bridge that spanned the main run of the river, at the northern edge of the swamp, was, according to Blair, about seventy feet long.²¹

Accounts of the condition of the bridges during the battle are contradictory. Some claimed the bridges had been completely destroyed by the Confederates, others stated that they were intact, and others asserted that they had only been partly damaged. The standard interpretation of the battle is that after finding Broxton’s Bridge destroyed, Mower rapidly marched his troops upstream to Rivers Bridge. This quick movement prevented the

¹⁸ Charleston Mercury, Feb. 6, 1865.

¹⁹ Jackson, The Colonel’s Diary, p. 177.

²⁰ Jackson and Lieutenant George M. Wise of the 43rd Ohio reported thirteen bridges in the causeway. Generals Blair and Mower counted sixteen. At one point in his report, though, Blair states, “There were sixteen bridges, exclusive of the main bridge . . .,” making a total of seventeen bridges. After the battle Major Osborn reported that he “crossed *sixteen* clear and fine running streams, on an average of fifty feet wide and from one hundred to two hundred feet apart.” (Emphasis original.) Osborn’s account implies that sixteen bridges spanned these separate streams. Jackson, The Colonel’s Diary, p. 177; Wilfred W. Black, ed., “Marching Through South Carolina: Another Civil War Letter of Lieutenant George M. Wise,” Ohio History, 66 (April 1957), p. 189; OR, Vol. XLVII, Part I, pp. 376, 387; Harwell and Racine, eds., The Fiery Trail, p. 101.

²¹ Jackson, The Colonel’s Diary, p. 177; OR, Vol. XLVII, Part I, p. 376.

Confederates from destroying the bridges there, and the fact that the bridges at Rivers Bridge remained intact prompted Mower to force the crossing at this site. Howard, Blair, and Mower all concurred in their reports that the Confederates had not been able to destroy the bridges. Blair and Mower intimated that the bridges had been damaged, though, by mentioning that troops ordered to make a diversionary attack down the causeway on February 3 were carrying planks to repair the bridges.²² Troops of Mower's Second Brigade made the initial attack down the causeway on February 2. Their commander, Colonel Milton Montgomery, reported that the 25th Wisconsin Infantry drove in the Confederate skirmishers and then "followed them up with such rapidity that they were unable to destroy any of the bridges across the river or sloughs."²³ After this first attack failed, Union troops deployed in the swamp on either side of the causeway and sent out sharpshooters to try to silence the Confederate cannons. "The bridge is in possession of the enemy," [*sic*] wrote Major Osborn, "but our sharpshooters command it so effectually they cannot burn it, although the kindlingwood can be seen on it ready for the match."²⁴ Several accounts, however, insist that the bridges were destroyed. In his memoirs, Sherman wrote that the Confederates "had cut away all the bridges which spanned the many deep channels of the swollen river, and the only available passage seemed to be along the narrow causeways that constituted the common roads." Private Strickling of the 39th Ohio recalled that the bridges had been destroyed. Lieutenant George M. Wise of the 43rd Ohio wrote to his brother that "in this half mile of road no less than 13 bridges were torn up, which had to be replaced before men could be sent up the road." In a reconnaissance made on the night of February 2-3, Colonel Charles Sheldon of the 18th Missouri discovered that the planks of the main bridge had been taken up but the stringers remained in place.²⁵

A clue to make sense of the contradictions in Union accounts is found in the only known reference to the bridges made by a Confederate, Captain Benjamin S. Williams of the 47th Georgia:

²² OR, Vol. XLVII, Part I, pp. 194, 376, 377, 386, 387, 388; Part II, p. 206.

²³ Ibid., Vol. XLVII, Part I, p. 398.

²⁴ Harwell and Racine, eds., *The Fiery Trail*, p. 95.

²⁵ Sherman, *Memoirs*, p. 753; Black, ed., "Marching Through South Carolina," p. 189; Strickling reminiscences, p. 34; Leslie Anders, *The Eighteenth Missouri* (Indianapolis: The Bobbs-Merrill Company, 1968), p. 298.

Major Gen. McLaws, commanding our division, had ordered Col. Bacon to destroy the bridges on the approach of the enemy as soon as our forces in front were compelled to fall back upon our main line. The infantry companies forming our picket line in front on the west side of the river held their ground until about 3 o'clock in the afternoon, when they came in, closely followed by the enemy. Indeed, so closely pressed that it was with difficulty that the bridges could be destroyed after our men had crossed, the latter part of the work being done under a galling fire from the enemy.²⁶

What most likely happened is implied by Williams and by Union descriptions made after the first direct assault on the causeway. The causeway bridges were intact on February 2 when the Federals launched their direct attack. Afterwards, while Union forces deployed in the swamp and engaged the Confederates, the Southerners tore up as much of the bridges as they could, leaving them partially damaged but still reparable.

The Confederates clearly expected any Union advance at Rivers Bridge to come along the causeway. In addition to forcing the Federals to advance over a tightly restricted space, the causeway at its final approach to the north bank of the river provided a direct line of fire for the Confederate cannons. About halfway through the swamp from the southern bank the causeway made a sharp turn to the left and then appeared to run in a straight line to the main bridge and the Confederate position on the north bank.²⁷ All Federal reports agreed that Confederate artillery fire “commanded” this final stretch of the road.²⁸ Osborn noted that the dogleg turn in the causeway “was a tender point in the operations”:

If a single man showed himself in it, they opened fire but did comparatively little harm. They fired about ten feet too high, though a shell bursting a little short was dangerous. As staff officers had to cross this road frequently, they had the especial advantage of this battery. General Mower saved himself by one leap backwards which he made when he saw the flash of the gun, the shell burst right to have struck him.²⁹

Topography

The causeway emerged from the swamp on the north bank and rose to a flat headland. Howard noted that the Confederate works were sited “on a bluff that was enough higher than the

²⁶ Williams, “A Confederate Soldier’s Memoirs,” *Charleston News*, March 8, 1914.

²⁷ Harwell and Racine, eds., *The Fiery Trail*, p. 95. See also Colonel Milton Montgomery’s report for mention of the left turn in the causeway. OR, Vol. XLVII, Part I, p. 398.

²⁸ See the reports of Howard, Blair, and Mower, and two of Mower’s brigade commanders, Colonel Milton Montgomery and Colonel John Tillson, OR, Vol. XLVII, Part I, pp. 194, 376, 387, 398, 400; Part II, p. 206.

²⁹ Harwell and Racine, eds., *The Fiery Trail*, p. 95.

causeway to make the fire effective.” Blair wrote “the bank rises abruptly to the high table-land beyond.” Private Strickling of the 39th Ohio took part in the flank attack that fell on the Confederate right on February 3. He described the terrain where he came out of the swamp as “a low steep bluff just a little ways beyond the water.”³⁰ These are the only descriptive accounts of the land beyond the swamp. Apparently the terrain features that attracted the attention of most men at Rivers Bridge were the river, the swamp, and the causeway.

Confederate Field Fortifications

Confederate troops on the bluff overlooking the causeway were strongly entrenched in earthen field fortifications, with abatis or slashing cut across the front of the works as an obstacle to halt attackers.

It is not known who built the works or exactly when they were erected. In a December 20, 1864, communication on the new defensive lines between Georgia and Charleston, Beauregard wrote that several of the lines were “already more or less fortified,” but later in the same sentence he indicated that they must have been less fortified, for he wrote that “necessary reconnaissances and defensive works to complete the system have been ordered.”³¹ Confederate defensive works on the Combahee-Salkehatchie line were still incomplete on January 8, 1865, when Lieutenant General William J. Hardee, commanding the Department of South Carolina, Georgia, and Florida, wrote to President Jefferson Davis about his defensive arrangements. If forced out of its position at Pocataligo, McLaws’ division would make a stand on the Combahee River line, “which I am actively engaged in fortifying,” Hardee stated.³²

The works may have been partly or perhaps even completely built by gangs of slaves pressed into service shortly before the battle. Sherman noted the Confederates’ use of slaves to try to hold up his march. In his campaign report he wrote that at the beginning of his advance into South Carolina Confederate cavalry under General Joseph Wheeler “had, by details of negro laborers, felled trees, burned bridges, and made obstructions to impede our march.” During the Atlanta campaign Sherman recalled that the Confederates had used slaves behind their lines to

³⁰ OR, Vol. XLVII, Part I, pp. 194, 376; Strickling reminiscences, p. 35.

³¹ OR, Vol. XLIV, p. 970.

³² Ibid., Vol. XLVII, Part II, p. 999.

build the fortifications they would occupy as they fell back before the Union advance.³³ The works on the Salkehatchie line might have been built in a similar manner. Confederate troops were at Rivers Bridge by January 17.³⁴ On January 19, Colonel Harrison, commander of the brigade that would later fight at Rivers Bridge, wrote from Broxton's Bridge to describe the progress on the defensive works under construction at the Salkehatchie River crossings. "Very few hands are at work, and hence the works are progressing slowly," Harrison reported. "If you can furnish me tools I will put soldiers to work, but I think more negroes should be put on the line." Harrison's offer to have troops build the works if they could be supplied with tools pointedly implies that his soldiers had not provided labor toward the construction of the fortifications. His reference to "hands" building the fortifications and his recommendation that "more negroes" be put to work indicate that the job of constructing the fortifications was being done by slaves. In the same report, Harrison later stated that he intended to have an "acting engineer" lay out a road that would permit communication between the pickets in swamp and that soldiers would go to work in cutting the road.³⁵ Eventually Confederate soldiers might have been put to work building the fortifications. Captain Williams of the 47th Georgia recalled "throwing up breastworks and fortifying" after marching to Rivers Bridge.³⁶ It was most certainly a soldier—whether the unidentified acting engineer mentioned in Harrison's report or some officer with training or experience in erecting field works—who laid out the line for the works at Rivers Bridge.

Union descriptions differed in their details of the fortifications, but all declared them to be very formidable. Blair's description of the Confederate position at Rivers Bridge encompassed both the terrain and the field fortifications. On the bank beyond the main channel of the river, Blair wrote, "the enemy had built a very strong line of earth-works, with two strong redoubts and batteries commanding the main approaches."³⁷ Major Osborn examined the Confederate works the day after they fell to the Union attackers. "The enemy's works on the north side of the river," wrote Osborn, "consist of a redoubt for four guns, bearing on the section

³³ Ibid., Part I, p. 19; Sherman, *Memoirs*, p. 526.

³⁴ OR, Vol. XLVII, Part II, p. 1019.

³⁵ Ibid., pp. 1023-1024.

³⁶ Benjamin S. Williams, "A Confederate Soldier's Memoirs," *Charleston News*, Feb. 22, 1914.

³⁷ OR, Vol. XLVII, Part I, p. 376.

of road mentioned before, and an infantry parapet for about 2,000 men. The position could scarcely have been better”³⁸

Captain Williams of the 47th Georgia remembered that the Confederate guns “were planted so as the sweep the long, straight, causewayed road in front,” with “rifle pits on either side of the artillery . . . manned by the infantry and dismounted cavalry.”³⁹ The experienced Confederate soldier recalled that he had “never seen a more advantageous position for resistance of attack than that at Rivers’ Bridge.”⁴⁰ Union General Howard agreed. In his April 9, 1865, report of the Carolinas campaign Howard wrote, “I visited the field just after General Mower had carried the works. The position was as good for defense as any I ever saw, with abatis or slashing covering its front, and that undescribable river with its swamp to discourage every approach.” Writing to Sherman immediately after his victory, Howard said simply of Rivers Bridge, “It is the strongest position I ever saw in my life.”⁴¹ Others seconded Howard’s assessment. Lieutenant Cornelius C. Platter of the 81st Ohio Infantry crossed the Salkehatchie at Rivers Bridge on February 9. “The position was a very strong one,” Platter recorded in his diary, “and must have been badly managed. or else they could have held it.” [sic]⁴²

Federal accounts attest to the strength of the Confederate position at Rivers Bridge but provide few details. Most of the Union reports refer to the Confederate defenses simply as “works,” with some elaborating on this military shorthand by using the terms fort, redoubt, battery, or parapet to describe their features.⁴³ As noted above, Confederate Captain Williams referred to them as rifle pits. It is probable that the Confederate fortifications there were much like those found about six miles up the Salkehatchie at Buford’s Bridge. As at Rivers Bridge, the works at Buford’s consisted of infantry breastworks and artillery emplacements. Embrasures provided openings in the emplacements from which the cannons could fire, and the infantry

³⁸ Harwell and Racine, eds., The Fiery Trail, p. 101.

³⁹ Williams, “A Confederate Soldier’s Memoirs,” Charleston News, March 8, 1914.

⁴⁰ Benjamin S. Williams, “Mr. Williams Writes of Rivers’ Bridge,” Bamberg Herald, April 25, 1929.

⁴¹ OR, Vol. XLVII, Part I, p. 194; Part II, p. 286.

⁴² Cornelius C. Platter Civil War Diary, 1864-1865, University of Georgia, p. 101, Digital Library of Georgia, Hargrett Rare Book and Manuscript Library, online at <http://dlg.galileo.usg.edu/hargrett/platter>.

⁴³ See the accounts of Howard, Blair, Mower, and Mower’s three brigade commanders in OR, Vol. XLVII, Part I, pp. 194, 376, 386, 387, 388, 389, 393, 394, 398, 400, 401. As already noted, Major Osborne described the Confederate defenses as having an infantry parapet and a four-gun redoubt. Harwell and Racine, eds., The Fiery Trail, p. 101.

parapet was topped with a head log to give additional cover to the defenders.⁴⁴ Confederate defenses at Buford's and Rivers Bridges were similar to those encountered earlier by Union troops advancing through the South Carolina lowcountry: earthworks for infantry and artillery commanding a narrow causeway leading through a thick swamp. In all instances, the Confederates were flanked out of these positions.⁴⁵

The Federals' victory at Rivers Bridge is due more to their success in flanking the Confederate line than it is to any failure of the Confederates to mount an adequate defense from their works. Despite its strength, the position at Rivers Bridge was vulnerable, and the Confederates knew it. Colonel Harrison, commanding the brigade that held Rivers Bridge, wrote from Broxton's Bridge on January 19 that individual fortifications guarding the crossings of the Salkehatchie and anchored on the swamp would not be enough to hold back a Union advance. "The swamp is quite an obstacle," Harrison wrote, "but by no means do I consider it impassable for infantry. It will require a continuous line of skirmishers between the different crossings to prevent the enemy from flanking our works at the different bridges." Harrison went on to suggest that "inclosed works should be erected at each bridge, in order that they may [be] held in case the enemy cross above or below them until re-enforcements could be brought to the point attacked. This is being done at this point but at neither of the other bridges."⁴⁶ There were too few Confederate troops to hold the line against any attempts by the Federals to flank it. "We anticipated a flank movement and dreaded it more than a square face-to-face fight," recalled Captain Williams of the 47th Georgia. Almost fifty years after the battle, Williams seemed to still resent the Union troops for flanking his position instead of making another frontal assault.

⁴⁴ Nichols, *Story of the Great March*, p. 138. "The accuracy of the fire of sharpshooters on both sides led the troops to adopt the 'head-log' in all their rifle trenches," wrote Orland Poe, Sherman's chief engineer. "This is a good, stout log of hard wood if possible, which is cut as long as possible and laid upon blocks placed on the superior slope a foot or two outside the interior crest. The blocks supporting the 'head-log' raise it sufficiently from the parapet to allow the rifle musket to pass through underneath it and steady aim to be taken, while the log covers the head from the enemy's fire. Frequently the blocks are replaced by skids, which rest on the ground in the rear of the trench, so that if the 'head-log' is knocked off the parapet by artillery fire it rolls along these skids to the rear without injuring anybody." OR, Vol. XLVII, Part I, p. 176. Sherman described head logs as being "composed of the trunk of a tree from twelve to twenty inches at the butt, lying along the interior crest of the parapet and resting in notches cut in other trunks which extended back, forming an inclined plan, in case the head-log should be knocked inward by a cannon shot." Sherman, *Memoirs*, p. 526.

⁴⁵ M. A. DeWolfe Howe, ed., *Marching with Sherman: Passages from the Letters and Campaign Diaries of Henry Hitchcock, Major and Assistant Adjutant General of Volunteers, November 1864 – May 1865* (New Haven: Yale University Press, 1927; reprint ed., Lincoln: University of Nebraska Press, 1995), pp. 223-224, 229.

⁴⁶ OR, Vol. XLVII, Part II, p. 1023.

Of the second day's fighting he wrote, "We were holding our position and could have held it until now against the force in our front, though 10 to 1 against us, if they had remained in our front and fought it out there."⁴⁷ The Confederate officer in immediate command of the works at Rivers Bridge also recognized their strength and vulnerability. When asked by McLaws on the second day of the battle how long he could hold his ground, Lieutenant Colonel Edwin H. Bacon, Jr. of the 32nd Georgia is reported to have replied, "I can hold my position here, General, until next Christmas if you can keep them off my flanks."⁴⁸ It was a statement that mixed bravado with harsh reality.

Union Corduroy Roads

While he kept elements of his force in the swamp to engage the Confederates, Mower had other troops cutting trees and laying logs to build a corduroy road to bypass the Confederate defenses. In his post-battle report, Mower wrote that he ordered his pioneers to begin cutting a corduroy road through the swamp on the first day's fighting. Mower's pioneers were not soldiers but freed slaves employed by the army as laborers. The next day he ordered Brigadier General John W. Fuller, First Brigade commander, and Colonel Milton Montgomery, Second Brigade commander, to begin work on two additional corduroy roads, "with a view of moving my three brigades on three different roads."⁴⁹

How far these roads progressed is uncertain, for Mower halted work on them when he learned of the breakthrough effected by the 32nd Wisconsin and threw most his troops into an attack on the Confederate right. To approach the Confederate right on the second day Major Daniel Weber marched the 39th Ohio into the swamp on the causeway road and then "filed to the left on a plank road through the swamp nearly to the Salkehatchie River, where the command again had to wade the swamp for some distance." The regiment then crossed the river on logs

⁴⁷ Williams, "A Confederate Soldier's Memoirs," *Charleston News*, March 8, 1914.

⁴⁸ Williams, "Mr. Williams Writes of Rivers' Bridge," *Bamberg Herald*, April 25, 1929. In an earlier article, Williams made no mention of Bacon's declaration. He reported that Bacon requested McLaws take personal command of the works as a military courtesy. McLaws declined, Williams remembered, noting he would be needed elsewhere since the entire Salkehatchie line would have to be abandoned. "Keep them at bay until night and save your artillery," Williams quoted McLaws, "and I will be perfectly satisfied." Williams, "A Confederate Soldier's Memoirs," *Charleston News*, March 8, 1914.

⁴⁹ OR, Vol. XLVII, Part I, pp. 387-388. During the Atlanta campaign Sherman authorized division commanders to organize detachments of pioneers from among freed slaves. His forces continued to make use of black pioneer detachments through the rest of the war. Sherman, *Memoirs*, p. 526.

and formed up under fire from Confederate skirmishers on the north bank of the river.⁵⁰ The 39th followed a corduroy road that had been built about a mile upstream of the causeway, according to Private Strickling. “We got along all right till we come to the end of the roadway which terminated suddenly across the channel,” Strickling wrote, “and we had to jump off into four feet of ice cold water.”⁵¹

It is also unclear from the written accounts whether construction on the two additional roads was actually commenced. Blair simply referred to roads without specifying a number, and Howard twice wrote that Mower’s division had built two “infantry roadways” through the swamp to help carry the Confederate position.⁵² Howard, Blair, and Mower are the only commanders who mentioned more than one road. Neither Fuller nor Montgomery reported that their brigades were working on separate corduroy roads; both implied that their men were at work on only one road when they were ordered out to support the breakthrough.⁵³ Major Weber and Private Strickling of the 39th Ohio in the First Brigade and Captain Matthew Jamison of the 10th Illinois in the Third Brigade mention only one plank or corduroy road, being built to the left of the causeway road to approach the Confederate right upstream.⁵⁴

Union Rifle Pits

From field fortifications quickly constructed in the swamp, Union sharpshooters trained their rifle muskets at the Confederate artillery positions. In his report on the action, Mower mentioned how “some slight works” built in the swamp by men of the 18th Missouri Infantry on the night of February 2 “were of great advantage in keeping the enemy from using his artillery during the greater part of the day” on the 3rd.⁵⁵ Fuller, commanding Mower’s First Brigade, reported that the 18th Missouri spent the night of February 2 and 3 in the Salkehatchie swamp, deployed to the left of the causeway road with five companies out as skirmishers and the rest held in reserve on the road. “During the night,” Fuller wrote, “some of the skirmishers constructed some rifle pits on the road near to the enemy’s battery, with a view of rendering it

⁵⁰ OR, Vol. XLVII, Part I, p. 396.

⁵¹ Strickling reminiscences, p. 35.

⁵² OR, Vol. XLVII, Part I, Blair’s report, p. 376; Howard’s reports, pp. 194, 386.

⁵³ Ibid., pp. 393, 398.

⁵⁴ Ibid., p. 396; Strickling reminiscences, p. 35; Jamison, *Recollections of Pioneer and Army Life*, p. 300.

⁵⁵ OR., Vol. XLVII, Part I, p. 388.

hazardous for him to use his guns.”⁵⁶ A modern history of the 18th Missouri states that marksmen from the 10th Illinois occupied the rifle pits on the morning of February 3, and that the Confederate cannons “silenced the sharp shooters instead by covering them with mud.”⁵⁷ Third Brigade commander Colonel John Tillson also reported how his men fought from rifle pits in the swamp. After marching about half a mile into the swamp on February 3, Tillson posted three companies of the 32nd Wisconsin Infantry on what he believed was the first of three main channels of the river. He also deployed “a picked force of fifteen men, under Lieutenant Johnston, in a rifle pit in the road, within 200 yards of the Confederate battery, with instructions to keep down the enemy’s gunners. This last duty was handsomely executed by the trusty officer in command.”⁵⁸

Union Defensive Fortifications

After carrying the Confederate position at Rivers Bridge, some Federal troops entrenched to protect their foothold on the north bank of the Salkehatchie.⁵⁹ The 39th Ohio Infantry was one of the regiments that charged out of the swamp onto the Confederate right flank as darkness was falling on February 3. Major Daniel Weber, commander of the 39th, reported that his regiment followed the retreating Confederates before coming to a halt and putting up a temporary barricade. Shortly afterward the unit then “changed direction, facing north, forming on the right of the Sixty-fourth Illinois Infantry. During the night the regiment intrenched itself in this position.”⁶⁰ To the left of these two regiments of the First Brigade were the troops of Mower’s Second Brigade. They, too, fortified their position after halting on the evening of February 3.⁶¹

Recalling the Atlanta campaign, Sherman wrote that his troops could build defenses with four- to six-foot-high parapets in a single night. Sherman tried to free his troops from this labor by employing freed slaves in divisional pioneer corps. “These pioneer detachments became very

⁵⁶ Ibid., p. 393.

⁵⁷ Quoted in Anders, *Eighteenth Missouri*, p. 299.

⁵⁸ OR, Vol. XLVII, Part I, p. 400. The “trusty officer” Tillson praised was 1st Lieutenant David B. Johnston. Johnston’s Company G lost two men killed, one mortally wounded, and five wounded in the fighting on February 3. *Roster of Wisconsin Volunteers, War of the Rebellion, 1861-1865*, 2 vols. (Madison, Wisconsin: Democrat Printing Company, State Printers, 1886), Vol. 2, pp. 489-492.

⁵⁹ See Blair’s report, OR, Vol. XLVII, Part I, p. 377.

⁶⁰ OR, Vol. XLVII, Part I, p. 396.

⁶¹ Ibid., p. 398.

useful to us during the rest of the war,” Sherman wrote, “for they could work at night while our men slept.”⁶² It is not known if the black pioneers or the white troops or both built the Union defensive works at Rivers Bridge.

Landscape Features Behind the Confederate Line

In the immediate rear of the Confederate earthworks was an open field or meadow, then a small stand of timber, and apparently a cultivated field. At the top of the bluff where the Confederates were dug in, Private Strickling of the 39th Ohio found “a beautiful level meadow a mile or more wide and as far ahead of us.”⁶³ After they emerged from the swamp on the Confederate right flank, the 39th “advanced under fire from the enemy’s skirmishers across an open field and through a narrow belt of timber, where it was halted and a rail barricade erected.”⁶⁴ The rails used to build the temporary field fortification probably came from a nearby fence—possibly a snake or worm fence—which had most likely defined the edge of a cultivated field. Troops of Colonel Tillson’s Third Brigade “drove the enemy over a large open field” beyond the swamp near the causeway road. After crossing the Salkehatchie, General Fuller led his First Brigade “forward to the high and open ground near the enemy’s position” and continued to advance until coming to a halt at “the line of woods, which is nearly in rear of the enemy’s works.” Mower accompanied the advance to the “belt of timber” as darkness fell on the battlefield.⁶⁵

Confederate Field Hospital

About a mile to the rear of the Confederate line next to the road was a small wooden building that served as the Southerners’ field hospital. After the Federals took Rivers Bridge, they found a number of Confederate dead and wounded left in this structure. Captain Benjamin Williams of the 47th Georgia bitterly recalled that his division surgeon had failed in his

⁶² Sherman, *Memoirs*, p. 526.

⁶³ Strickling reminscences, p. 35.

⁶⁴ OR, Vol. XLVII, Part I, p. 396.

⁶⁵ *Ibid.*, pp. 388, 394, 401.

responsibility to provide for the wounded, leaving most of them behind when the Confederates retreated.⁶⁶

Structures

Except for the Confederate field hospital, the only structure mentioned in written accounts is “a little log cabin a short way down the riverside” that Captain Williams and another officer of the 47th Georgia occupied with Lieutenant Colonel Bacon of the 32nd Georgia.⁶⁷ No mention of this cabin has been found in any other written accounts.

One possible explanation for the scarcity of references to buildings on the battlefield is that they were destroyed. On February 3 Mower ordered that a regiment from the Second Brigade be detailed to tear down houses to furnish lumber for the corduroy roads. The duty apparently fell to the men of the 35th New Jersey Infantry, for Colonel Montgomery reported that they had been assigned to carry boards for the road into the swamp. Planks carried into action by Union troops to repair the causeway bridges on February 3 might have come from demolished buildings that had stood nearby.⁶⁸

Union Field Hospital

The Union field hospital is mentioned in a few accounts, but none indicate its location on the battlefield. It was undoubtedly on high ground on the south side of the swamp, and probably near a road to provide access for ambulances and wagons. Field hospitals were usually sited beyond enemy artillery range, a mile and a half to two miles in the rear of the action. In letters written while he was recuperating in a Beaufort hospital, Captain Wilson of the 10th Illinois told of wading three miles through the swamp to reach the field hospital shortly before dark; a surgeon there cut a minie ball from his back the next morning. The gloom of the swamp at dusk combined with the severity of Wilson’s wound—he wrote of blood gushing into his boots and losing the use of both arms—may have caused him to exaggerate the distance to the field hospital. The experience of Captain Henry Markham of the 32nd Wisconsin, however, echoes

⁶⁶ Williams described the structure only as a “small plank house.” Williams, “A Confederate Soldier’s Memoirs,” *Charleston News*, March 8, 1914. Union accounts do not describe the building. OR, Vol. XLVII, Part I, p. 394; Part II, p. 309; Ellison and Weitz, eds., *On to Atlanta*, p. 102.

⁶⁷ Williams, “A Confederate Soldier’s Memoirs,” *Charleston News*, March 8, 1914.

⁶⁸ OR, Vol. XLVII, Part I, pp. 387, 388, 398.

Wilson's belief that the Union hospital was far to the rear. Markham was shot through the right thigh when his unit crossed the river upstream of the causeway on the evening of the 3rd. With his arms across the shoulders of two men, he hobbled back to the south side of the river, reaching the field hospital at about eleven that night.⁶⁹

Markham and Wilson and the other Union wounded were probably treated at a single divisional field hospital. During the war field hospitals came to be organized around larger units such as brigades and divisions, with operations conducted by specially assigned surgeons while other medical staff tended other duties. Printed medical records identify two Second Brigade surgeons who performed primary amputations—removal of damaged limbs within twenty-four hours of the wound—on casualties from Mower's First and Second Brigades. The regimental surgeon of the 10th Illinois was in the swamp, apparently at a forward aid station, where he staunched the flow of blood from Wilson's wound before sending him farther to the rear.⁷⁰

The fact that Wilson was not treated until February 4 indicates that the field hospital remained in the same location on the south side of the river, treating casualties that night and the following day. On the night of February 3 Oscar Jackson of the 63rd Ohio saw the "horrid results of every battle" at the field hospital: "Men mutilated in every shape conceivable, groaning, begging for assistance and gasping in death." A number of wounded had to stay all night in the swamp, Jackson wrote, until they could be found and carried out on a narrow foot bridge. "Many have had their heads propped up out of the water where they lay to keep them from drowning."⁷¹

Battlefield Burial Sites

Less is known of burial sites on the battlefield. Evidence suggests that there were originally two Confederate burial sites. Union soldiers reported finding Confederate dead at two

⁶⁹ Wilson, *Memoirs*, pp. 407-408, 411-413; Henry Harrison Markham biographical statement, c. 1889, Hubert Howe Bancroft Collection, University of California, p. 10.

⁷⁰ George Washington Adams, *Doctors in Blue: The Medical History of the Union Army in the Civil War* (Baton Rouge: Louisiana State University Press, 1952; paperback reprint, 1996), pp. 88, 101, 134; *The Medical and Surgical History of the Civil War* (Wilmington, North Carolina: Broadfoot Publishing Company, 1991; reprint ed. of *The Medical and Surgical History of the War of the Rebellion*, Washington: Government Printing Office, 1876), Vol. IX, p. 411; Vol. X, pp. 944, 949, 971, 975; Vol. XI, pp. 255, 260; Wilson *Memoirs*, p. 412.

⁷¹ Jackson, *The Colonel's Diary*, pp. 177-178.

locations: on the field, presumably in and around their fortifications, and at the Confederates' field hospital.⁷² Union troops probably buried the bodies not far from where they were found. Only one dead Confederate was taken from the field. The body of artillery Lieutenant Simeon S. Kirby was carried on a caisson to the railroad depot at Branchville.⁷³

It is assumed that most of the Union dead, like the Confederate dead, were buried where they died. Those killed outright on the first day were either left in the swamp for later burial or pulled out for burial on the south side of the river. All the Federals killed outright on February 2 were members of the 25th Wisconsin Infantry, the regiment that made the failed frontal assault down the causeway.⁷⁴ The body of one man was carried out of the swamp that night.⁷⁵ It is possible the others killed in Mower's failed attack on the causeway were also carried out of the swamp and then buried at some spot out of range of Confederate fire. Those who died while being treated or awaiting treatment at the field hospital were probably buried there. The only contemporary account of Union burials is a brief mention of dead from the 10th Illinois being interred "on a little elevation in the swamp."⁷⁶ If the dead from other Federal regiments were buried in a similar manner, then additional Union burial sites may be inferred at the 32nd Wisconsin's breakthrough upstream of the causeway and near the causeway where the

⁷² Fuller reported finding about twenty dead and wounded in the Confederate field hospital. Tillson merely noted "many" dead Southerners on the field. According to Blair, sixteen dead Confederates were left on the field and seventeen wounded in the hospital. John Hill Ferguson of the 10th Illinois wrote in his diary that seven dead and thirty or forty wounded Confederates had been left at the Confederate field hospital. OR, Vol. XLVII, Part I, pp. 394, 401; Part II, p. 309; Ellison and Weitz, eds., On to Atlanta, p. 102.

⁷³ Typescript copy of letter of W. M. Larke, n.d., South Carolina State Park Service, provided by Mrs. Isabel White, Camden, South Carolina. Ninety-three-year-old veteran J. R. Childers recalled at the 1937 Rivers Bridge memorial service that he had helped take Kirby's body to Branchville. "Greenville Veteran Recalls Struggle Against Federals," Charleston News & Courier, May 1, 1937. Kirby is buried in a marked grave at the Elim Baptist Church cemetery near Effingham, South Carolina. I am grateful to Mr. J. R. Fisher for providing the location of Kirby's burial site.

⁷⁴ Colonel Montgomery of Mower's Second Brigade reported three killed and four wounded from the 25th Wisconsin in the February 2 attack. OR, Vol. XLVII, Part I, p. 398.

⁷⁵ Lesh Diary.

⁷⁶ Jamison, Recollections of Pioneer and Army Life, p. 301. Three men from the 10th Illinois have been identified as killed at Rivers Bridge on February 3: Privates Phillip S. Lent of Company D, David S. Handley of Company E, and Henry W. Brasche of Company K. Two others, Privates William Aggert and William Morris of Company C died on February 3. Morris is listed in the printed state roster as having died of wounds on that day; Aggert's listing does not mention the cause of his death. It is uncertain if they died as a result of wounds received at Rivers Bridge. Report of the Adjutant General of Illinois, 8 vols., rev. (Springfield, Ill.: H. W. Rokker, State Printer and Binder, 1886), Vol. I, pp. 480, 483, 489, 500.

diversionary attack of the 43rd and 63rd Ohio ground to a halt.⁷⁷ Federal dead may still be on the field. Some accounts claim that Union dead were removed from the battlefield and reinterred in Beaufort, but nothing has been found to substantiate them.⁷⁸ At least some Federal graves were still on the battlefield in 1898, when a newspaper reporter wrote of crossing the Salkehatchie and seeing the “strangely uncared for graves” of Union dead.⁷⁹

Bivouac or Camp Sites

Confederate troops are known to have been at Rivers Bridge by January 17.⁸⁰ Until their withdrawal on the evening of February 3, they probably camped in or just to the rear of their fortifications. The only mention of Confederates camping in the area just before the battle is a single reference, already cited, of several officers occupying a log cabin near the river.

During the battle Union troops not engaged in the fighting would have bivouacked on high ground south of the swamp. When the fighting stopped at nightfall on the 3rd, Union troops camped on the ground they had taken on the north side of the swamp. “We camp tonight in the Confederate fort,” wrote John Hill Ferguson of the 10th Illinois.⁸¹ The Federals who followed the retreating Confederates and then entrenched certainly camped behind their field works. William Henry Pittenger of the 39th Ohio simply noted that his outfit bivouacked for the night on the north side of the river. Private Strickling of the same regiment wrote of going into camp after a march of few miles.⁸² Where the Confederates halted for the night is uncertain. Sergeant John Moore of the 3rd South Carolina Cavalry later reported that his unit camped about two miles away from the Union troops.⁸³

⁷⁷ Ongoing research by the South Carolina State Park Service to identify casualties from the battle indicates sixteen to twenty Federals were killed outright or died of wounds on February 3. Rivers Bridge Casualties research file, South Carolina State Park Service.

⁷⁸ An account of the battle printed before the 1950 Rivers Bridge commemoration stated that the Federal dead had been removed in 1867. “74th Annual Rivers Bridge Celebration Will be May 12,” Charleston News & Courier, April 20, 1950. Information on the battle printed the following year stated that the Federal dead were disinterred in 1898. Notes from the 1951 memorial service, from notes on Rivers Bridge memorials compiled from the Bamberg Herald, provided by Betty Jane Miller, Barnwell, South Carolina.

⁷⁹ “Our Trip to Rivers’ Bridges,” The Barnwell People, May 12, 1898.

⁸⁰ OR, Vol. XLVII, Part II, p. 1019.

⁸¹ Ellison and Weitz, eds., On to Atlanta, p. 102.

⁸² William Henry Pittenger Diary, typescript, Ohio Historical Society, p. 315; Strickling reminiscences, p. 35.

⁸³ “A Glance at the Long Ago: Recollections of Goneby Days from the Pen of a Brave Confederate Soldier,” Bamberg Herald, April 20, 1905.

After the battle Union troops of the Seventeenth Corps camped at Rivers Bridge for several days before resuming the march on February 6, and the Fourth Division of Logan's Fifteenth Corps crossed the Salkehatchie there after the battle. Unit itineraries mention camping at or near the site on both sides of the river, but no specific locations are provided.⁸⁴ Private Lesh wrote that the 63rd Ohio crossed the river "in peace" on the night of the 4th. Private Leiqvam of the 32nd Wisconsin reported moving camp about eighty rods, or a quarter-mile, on the same day.⁸⁵ Because there were so many Federal soldiers around Rivers Bridge, their camps were probably spread over a wide area. It is also likely that tactical considerations required them to move forward to establish defensive perimeters at key points, such as the roads that linked Buford's Bridge, Rivers Bridge, and Broxton's Bridge. Special Field Orders No. 31, issued from Howard's headquarters at Rivers Bridge on February 4, ordered the Seventeenth Corps to cross the Salkehatchie at Rivers Bridge and camp on each side of the road "on the first favorable ground," with one division camped in an advanced position three to four miles from the river.⁸⁶

Union troops entered the campaign equipped with only fly tents or shelter-halves for their camps.⁸⁷ It is not known how well or poorly equipped for camping the Confederates were at the time. Captain Williams of the 47th Georgia made a passing reference to his troops "stretching 'flys'" at a bivouac shortly before Rivers Bridge, indicating that some of the Confederates, at least, were traveling as light as their Union foes.⁸⁸

ILLUSTRATIONS

Two artists from *Harper's Weekly*, William Waud and Theodore W. Davis, accompanied Sherman's troops on the Carolinas campaign.⁸⁹ Although a number of illustrations showing the

⁸⁴ OR, Vol. XLVII, Part I, pp. 86, 95, 97, 100, 103-104. The 81st Ohio Infantry of the Fifteenth Corps crossed the Salkehatchie at Rivers Bridge on February 9, as already noted. Cornelius C. Platter Civil War Diary, pp. 100-101.

⁸⁵ Lesh Diary; Leiqvam Diaries, p. 24.

⁸⁶ OR, Vol. XLVII, Part II, pp. 294-295. In compliance with this order, the Third Division of Blair's corps was ordered across the Salkehatchie to take up an advanced position about four miles from the river. *Ibid.*, p. 296.

⁸⁷ Only commanders at the army, corps, division, and brigade were allowed to take wall tents into the field. Glatthaar, *March to the Sea and Beyond*, p. 101. This prohibition even extended to staff officers. See Nichols, *Story of the Great March*, p. 129, and Howe, ed., *Marching with Sherman*, p. 215.

⁸⁸ Williams, "Confederate Soldier's Memoirs," *Charleston News*, Feb. 22, 1914.

⁸⁹ Major Henry Hitchcock of Sherman's staff specifically mentioned Waud and Davis in an entry in his campaign diary written on February 4, 1865. Howe, ed., *Marching with Sherman*, pp. 250-251. William F. Thompson, *The Image of War: The Pictorial Reporting of the American Civil War* (Baton Rouge: Louisiana State University Press,

march through South Carolina appeared in the magazine, none of them are identified as specifically depicting Rivers Bridge. The cover illustration of the March 4, 1865, issue may show Union troops at Rivers Bridge. In the foreground soldiers advance and fire over fallen trees at infantry breastworks in the background. The caption describes the scene simply as, “Sherman’s march through South Carolina – road at the swamp crossing,” identifies Davis as the illustrator, and refers to text in the magazine. The text merely describes the difficulties faced by Sherman’s force in South Carolina; it makes no reference to Rivers Bridge, nor does it identify the swamp crossing shown in the picture.⁹⁰ A search for Davis’ original sketch has so far been fruitless. Still, the illustration provides an excellent visual image of how Union soldiers advanced through the Salkehatchie swamp at Rivers Bridge.

1959), pp. 162-163. Thompson writes that Sherman accepted Waud and Davis as “unofficial members of his staff” despite his well-known dislike of reporters. *Ibid.*, p. 79.

⁹⁰ Harper’s Weekly, Vol. 9, March 4, 1865, pp. 129, 133-134.



Engraving from a Theodore W. Davis sketch showing Union troops crossing felled trees to attack a fortified Confederate position. This may or may not depict part of the action at the battle of Rivers Bridge. Image from the University of Michigan Digital Library Production Service.

William Waud did make a drawing of Rivers Bridge. An original illustration by Waud showing a scene from the battle has survived and is housed in the Library of Congress. Waud's quick pencil sketch, entitled "Charge at Rivers Bridge," shows the Union diversionary attack launched down the causeway on February 3. From the hasty notes he wrote on the sketch to guide the *Harper's Weekly* engravers, it is clear that Waud either saw the action or was told of it shortly afterward. Union troops of the 43rd and 63rd Ohio Infantry are depicted at the bend in the causeway advancing on the run with their rifle muskets at shoulder arms. Notes next to the

troops leading the attack toward the main bridge identify them as “Company in front—10 men with axes,” followed by “50 men with boards.” Behind them are “The Balance of the regiment about 400 men marching at the double quick.”⁹¹ The men leading the attack were to repair damages made by the Confederate defenders. The only other known reference to this is in two Union after-action reports of the battle dated February 4 and February 8, 1865. After the diversionary attack by the 10th Illinois bogged down below the causeway, Mower sent the 43rd Ohio, supported by several companies of the 63rd Ohio, into an assault down the road through the swamp. Colonel Milton Montgomery’s February 4 report of the Second Brigade’s action at Rivers Bridge described this second attack:

Forty-third Ohio, Maj. Horace Park commanding, moved forward to the angle of the road and halted for a short time. Two companies, with bayonets fixed, one on either side of the road, were then sent forward; directly two companies carrying boards to repair the bridges partially destroyed were sent forward; finally the whole regiment was moved up the road, under fire from the battery in front.⁹²

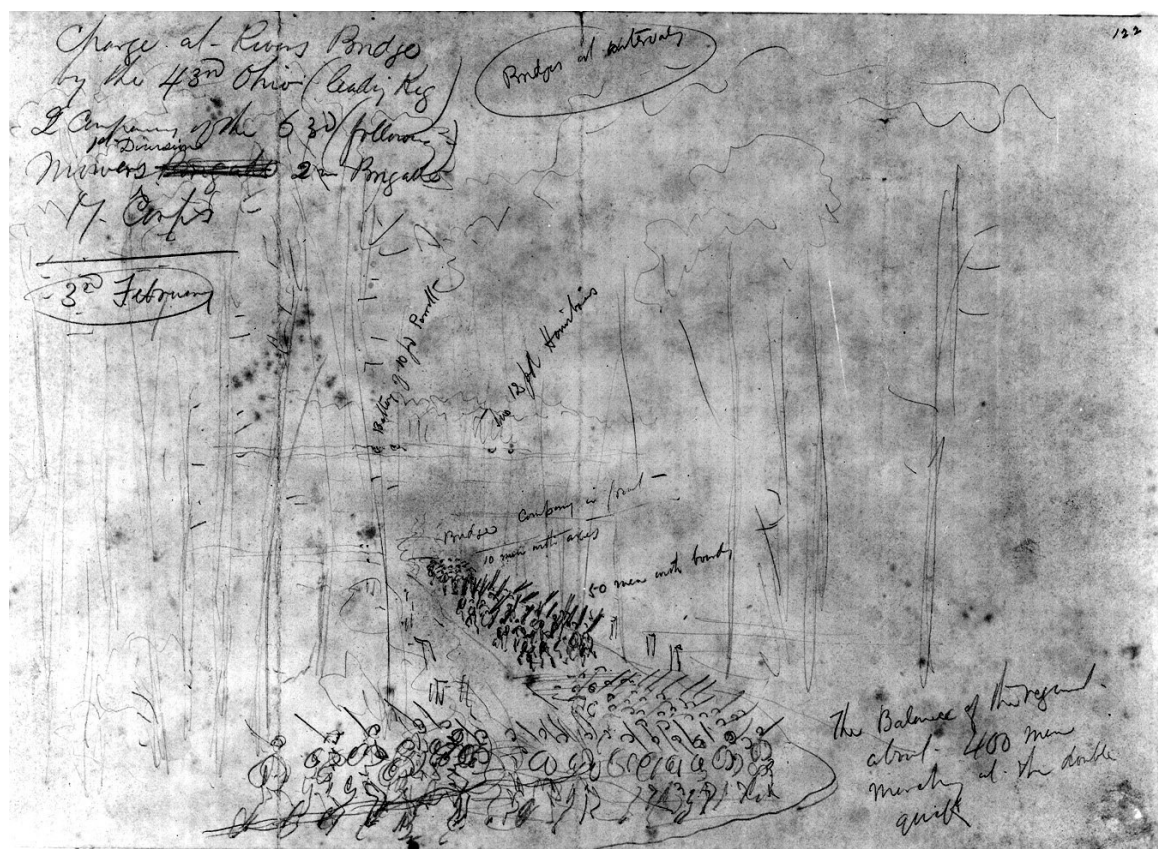
Mower’s report of February 8 detailed his orders to Major Park of the 43rd Ohio:

I instructed him to have fifty of his men get planks (which were close by) and put them in the rear of the leading company of his regiment, with some axmen. After he had complied with this I directed him to move his regiment forward one company at a time at double-quick, “by file,” to the right and left of the road, and move up to the bridge and if possible cross the river, using the planks he had with him to repair the bridge.⁹³

⁹¹ William Waud, “Charge at Rivers Bridge,” Civil War Drawings Collection, Library of Congress.

⁹² OR, Vol. XLVII, Part I, p. 398.

⁹³ Ibid., p. 388.



William Waud's sketch of the second diversionary attack on the Confederate works at Rivers Bridge, February 3, 1865. The notes in the upper left corner read, "Charge at Rivers Bridge by the 43rd Ohio (leading Reg) 2 Companies of the 63rd (following) Mowers 1st Division 2nd Brigade 17 Corps 3rd February." Library of Congress.

Waud's sketch is a quick, rough study of this particular incident from the battle. Its broad outlines provide few details. The engravers were to fill those using Waud's notes and generic depictions of troops.⁹⁴ In the faint horizontal lines that represent the Confederate earthworks, two seemingly minor details stand out. Notes point out the locations of two pairs of cannons at two gun emplacements and identify the types of guns at those sites. A "Battery of 10 pd Parrott" appears to be in line to fire at the soldiers charging down the causeway after the sharp bend in the road. To the right of the Parrotts are "two 12 pd Howitzers." Small arcs drawn under the cannons seem to indicate that the guns fired from embrasures, openings cut through the parapet.

⁹⁴ For a good account of how Civil War sketch artists prepared their quick illustrations for the engravers, see Thompson, *The Image of War*, pp. 70-72, 81-83.



Detail of Waud's illustration showing the Confederate artillery emplacement at Rivers Bridge.

These small details are very significant for several reasons. The notes identifying the guns correspond almost exactly with an armament report for the Confederate artillery battery at Rivers Bridge made less than a month before the battle. In a report of the batteries of light artillery in the Department of South Carolina, Georgia, and Florida, dated January 6, 1865, Captain William E. Earle's Furman Light Artillery is listed as being armed with two 12-pound howitzers, one 10-pound Parrott, and one 12-pound Napoleon.⁹⁵ It is possible that Waud (or an informant who witnessed the action if Waud did not), saw the distinctive wrought iron breech band of the Parrott and assumed that both guns in that emplacement were Parrotts.

⁹⁵ OR, Vol. XLVII, Part II, p. 992. Earle's Battery was also known as the "Furman Artillery" or Company A, South Carolina Palmetto Light Artillery Battalion (or 3rd Light Artillery Battalion). Stewart Sifakis, Compendium of the Confederate Armies, 10 vols. (New York: Facts on File, Inc., 1992-1995), South Carolina and Georgia, pp. 24-25.

The alignment of the guns in the left of Waud's sketch meshes with the observations of several Federal officers, and the drawing and its notes confirm the number of Confederate guns in action. Union accounts agree that the Confederate guns commanded much of the causeway, but Mower and his Second Brigade commander Colonel Montgomery wrote of only two guns firing down the road. Colonel John Tillson of the Third Brigade reported four guns.⁹⁶ As already mentioned Blair described the Confederate works after the battle as having "two strong redoubts," implying the presence of four guns, and Union artillery commander Major Osborn wrote of seeing "a redoubt for four guns."⁹⁷ Perhaps Mower and Montgomery noticed only the two guns that fired down the length of the causeway road—the Parrott and Napoleon—because of their deadly long-range effect.

Waud's sketch gives visual emphasis to the testimony of Union troops on the effect of the fire from those guns. Colonel Milton Montgomery wrote how Confederate artillery fire stopped the assault of the 25th Wisconsin on February 2. "Up this road Company I, of the skirmishers, moved by the flank and when about half way to the fort were shelled, killing the first sergeant of the company and the chief bugler of the regiment."⁹⁸ The memories of Jeremiah Rusk, who commanded the 25th Wisconsin at Rivers Bridge, were even more vivid. "You will all recall the terrible swamp through which we charged on that occasion," Rusk said before an 1887 regimental reunion. "It was in that charge that Sergeants Tomlinson and Church fell, and Bugler Knudson had his head blown off by a cannon ball."⁹⁹ Private Franklin Lesh of the 63rd Ohio was similarly blunt in describing the effects of shell fire from the Confederate guns. In his diary entry for February 2, Lesh wrote, "the Confederates had a battery planted in the road across the river and the road being very straight could see any of our men on the road they would surely kill some of them." Lesh later removed one of the casualties from the 25th Wisconsin. "I helped to carry a man out of the swamp that had one side of his head shot off. It looked dreadful."¹⁰⁰ The

⁹⁶ OR, Vol. XLVII, Part I, pp. 387, 398, 400. The references to two cannons led State Park Service staff to assume that only two guns of Earle's four-gun battery were in the battle. This erroneous assumption was held until it was invalidated by the discovery of the Waud sketch in 2000.

⁹⁷ OR, Vol. XLVII, Part I, p. 376; Harwell and Racine, eds., *The Fiery Trail*, p. 101.

⁹⁸ OR, Vol. XLVII, Part I, p. 398.

⁹⁹ "Governor Rusk's Address to 25th Wis. Vols.," *Wisconsin State Journal*, June 10, 1887, in Wisconsin Local History & Biography Articles (WLHBA), Wisconsin Historical Society Digital Library and Archives, online at <http://www.shsw.wisc.edu/wlhba>.

¹⁰⁰ Lesh Diary. The typescript entry identifies the dead man as "an orderly Sergeant of Co. 2 25 Wis." The transcriber of Lesh's diary clearly erred on the man's company designation. The dead man was almost certainly

highest-ranking Federal casualty of the battle, Colonel Wager Swayne of the 43rd Ohio Infantry, fell to the long-range Confederate cannon fire on the causeway. A shell fragment hit him while he was deploying his troops in the swamp on the first day of the battle. Swayne's badly shattered right leg was later amputated, and command of his regiment passed to Major Horace Park.¹⁰¹ When the 63rd Ohio launched its diversionary attack down the causeway on the second day, they quickly came under fire from the Confederate guns trained on the road. "No sooner had they started," Private Lesh wrote in his dairy, "than a shell bursted right in among them killing three almost instantly and two others wounded."¹⁰²

Union casualties from Confederate shell fire could have been higher. "The enemy has shown no skill in the use of the battery," asserted Major Thomas Ward Osborn, Howard's chief of artillery. If the Confederates had trained their guns over a slightly wider area, Osborn believed they could have covered the causeway before it turned and thus inflicted heavy casualties on the Union troops as they gathered to stage their assaults:

They have only directed their fire down the straight section of road while if they had swept an arc of ten or fifteen degrees, and so have commanded the road over which our troops passed to reach the last section they would have done us great damage. Any sensible officer would have known this, as of necessity in approaching a field of operations an Army always masses to a certain extent very near the point from which they deploy, and to get this point we would fill the second section with troops and ordnance wagons. The second section was the only one on which they should have fired,

Sergeant William Tomlinson of Company I. Four men from the 25th Wisconsin have been identified as killed or mortally wounded in this initial attack. They are Tomlinson, Privates Peter Knudson (the bugler) and David R. Chase of Company K, and Private John W. Church of Company A. Church was wounded and died in Beaufort on March 7. Roster of Wisconsin Volunteers, Vol. 2, pp. 284, 307, 308, 309. Church is buried in Beaufort National Military Cemetery, section 42, number 4934.

¹⁰¹ OR, Vol. XLVII, Part I, pp. 375, 398; O. O. Howard, Autobiography of Oliver Otis Howard, Major General United States Army, 2 vols., (New York: The Baker & Taylor Company, 1908), Vol. II, p. 107.

¹⁰² Lesh Diary. The casualties Lesh mentions were all from Company A of the 63rd. Those killed outright have been identified as Sergeant William Boughner, Corporal William Cunningham, and Private Curtis Gudgen. The men wounded by the shell burst might have been Privates Daniel Sidders and Lewis H. Zimmerman, both identified as wounded on February 3 at Rivers Bridge. Private James M. Knight suffered a gunshot wound and later died at Beaufort. He is buried in the national military cemetery there in section 9, number 70. Ohio's published troop roster identified Private Rosel Ryther of Company C as another man killed at Rivers Bridge, but the unit's commander in the campaign wrote that Ryther was killed by Confederate cavalry on February 23 on the Wateree River. Official Roster of the Soldiers of the State of Ohio in the War of the Rebellion, 12 vols. (Akron: The Werner Ptg. And Mfg. Co., 1887), Vol. 5, pp. 385, 386, 387, 388, 395; Medical and Surgical History of the Civil War, Vol. IX, p. 411; Jackson, The Colonel's Diary, p. 186.

and as long as they knew the distance, it made no difference whether they could see the troops or not.¹⁰³

Osborn's criticism of how the Confederates used their artillery might not be warranted, for the swamp could have restricted the Confederates' line of sight as much as it did the Federals'. It is possible that the thick woods confined the Confederates' long-range cannon fire to the long, straight stretch of the causeway in the swamp. The manner in which the Confederate guns were mounted in the works certainly affected their field of fire. In a barbette battery, the guns would have been mounted to shoot over the top of the parapet. This arrangement allowed the guns to be fired in a wide range, but it exposed the gunners to enemy fire. Embrasures offered cover to the gunners but they restricted their guns to a very limited field of fire.¹⁰⁴ Again, Waud's sketch seems to depict the guns firing through embrasures. A letter written many years after the war by a gunner in Earle's Battery confirms the manner in which the Confederate guns were mounted at Rivers Bridge. W. M. Larke wrote that all three casualties in the unit were inflicted by a Union sharpshooter who "shot through the port holes." He also wrote that his commander, Lieutenant Simeon S. Kirby, continually jumped onto the parapet for a better view of the Federals, something he would not have had to do if the guns had been mounted in a barbette battery.¹⁰⁵ Despite having a very narrow field of fire, the four Confederate cannons had been sited in a way to make the best use of their capabilities, as an examination of the battlefield maps will show.

BATTLEFIELD MAPS

The final documentary sources to be examined for evidence of the site's defining features are battlefield maps of Rivers Bridge. Because of the level of detail they provide and the amount of information they convey, the maps will be examined separately in the following chapter.

¹⁰³ Osborn did concede, however, that the Confederate gunners let the Union skirmishers pass and opened up on the main column as it followed onto the road. Harwell and Racine, eds., *The Fiery Trail*, p. 95.

¹⁰⁴ D. H. Mahan, *A Treatise on Field Fortification, Containing Instructions on the Methods of Laying Out, Constructing, Defending, and Attacking Intrenchments, with the General Outlines also of the Arrangement, the Attack and Defence of Permanent Fortifications* (New York: J. Wiley, 1856), pp. 52-56.

¹⁰⁵ W. M. Larke letter.

CHAPTER 4

The Landscape of Battle – The Rivers Bridge Battlefield Maps

Maps of the Rivers Bridge battlefield provide a broad perspective of the landscape that was not available to the soldiers. Most of the fighting men saw only those small parts of the battlefield in their immediate front. The maps clarify many descriptions given by the troops. When combined with the written and visual accounts, the battlefield maps give a comprehensive view of the field of conflict.

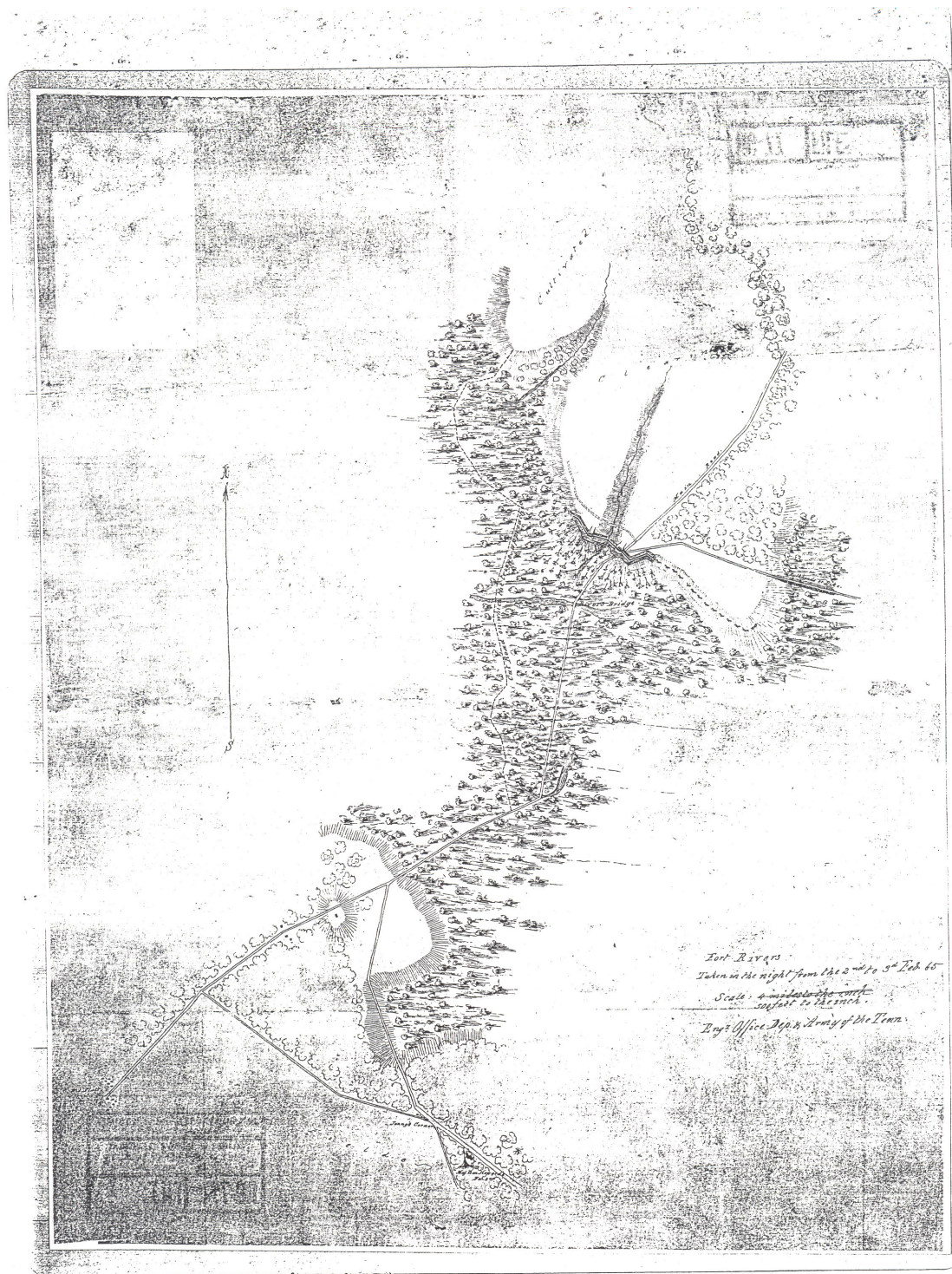
Three versions of the same battlefield map exist: two manuscript maps housed in the National Archives and a lithographed copy of the map prepared for the *Atlas to Accompany the Official Records of the Union and Confederate Armies*.¹ The maps are not graphic representations of the battle; they do not indicate troop positions or movements. Rather, they are cartographic images of the ground over which the battle was fought, visual records of the real estate taken by Mower's troops.

The maps depict a relatively small area, about 1860 acres. All three show the same major elements of the battlefield in almost identical fashion. The Salkehatchie swamp is the dominant feature, centered in and occupying about half the total space of each map. Converging roads on the south side of the swamp lead to the causeway, which spans the swamp to connect headlands on the north and south. On the northern headland the Confederate earthworks are depicted as a single indented line and a broken line of dashes or Vs. Behind the Confederate works the main road from the causeway runs roughly to the northeast and a secondary road diverges from it, running east and connecting to a dike. A single corduroy road snakes through the swamp west of and roughly parallel to the causeway; it approaches the Confederate right and then makes an abrupt left turn to emerge on another headland to the west. Fields and structures, some of them identified with names, are on both sides of the river.

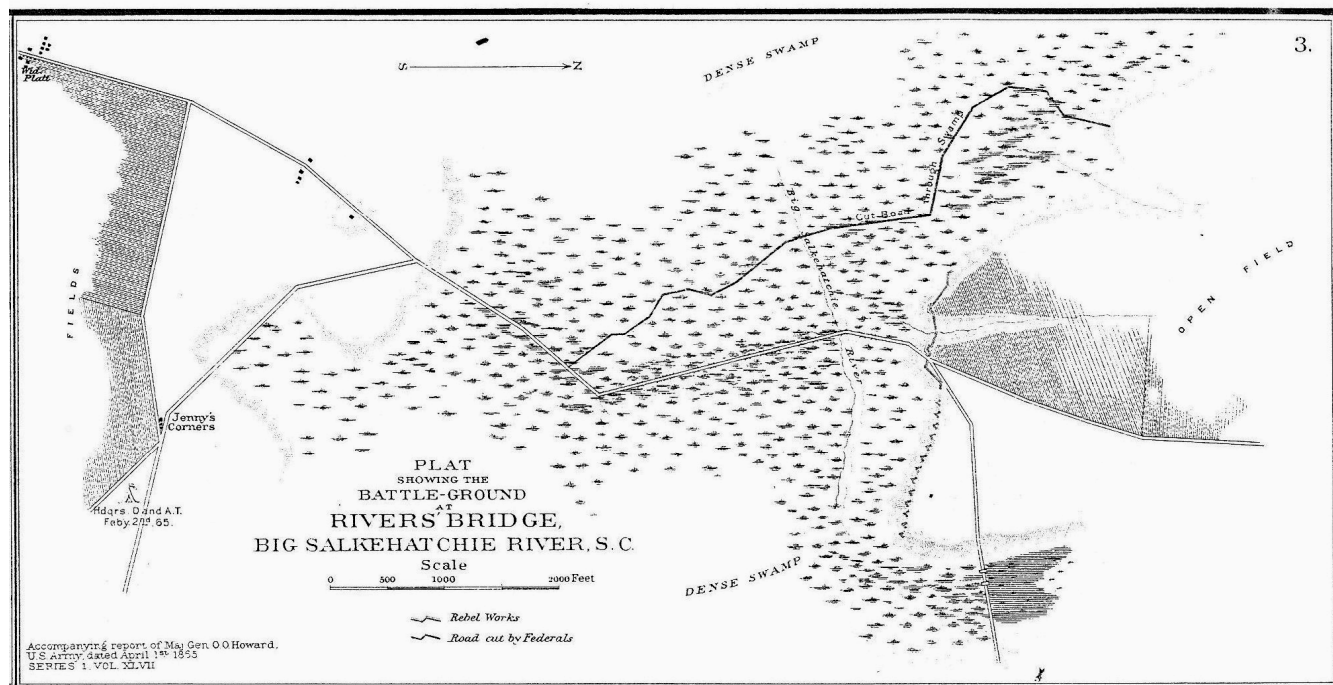
¹ RG 77, Records of the Office of the Chief of Engineers, Civil Works Maps File, Z12-10 and Z12-10a, National Archives and Records Administration, Cartographic Branch, College Park, Maryland. The Official Atlas of the Civil War (New York: Thomas Yoseloff, 1958; reprint ed. of Atlas to Accompany the Official Records of the Union and Confederate Armies, Washington, DC: Government Printing Office, 1891-1895), Plate LXXVI (76), no. 3: "Plat showing the Battle-Ground at Rivers' Bridge, Big Salkehatchie River, S.C." Hereafter cited as OR Atlas.



The first of two manuscript maps of the Rivers Bridge battlefield, apparently a draft version. Untitled draft map, RG- 77, Civil Works Map File, Z12-10, National Archives.



The second of two manuscript maps of the Rivers Bridge battlefield, apparently a finished version of the draft map. "Fort Rivers Taken in the night from the 2nd to 3d Feb. 65," RG 77, Civil Works Map File, Z12-10a, National Archives.



Lithographed version of the battlefield map as it appeared in the printed *Atlas to Accompany the Official Records of the Union and Confederate Armies*, or the *OR Atlas*.

The two manuscript maps are better graphic representations of the battlefield than the version printed in the *Atlas*. The manuscript maps are large, drawn on a scale of 500 feet to the inch. The first map is 28 inches high by 24½ inches wide, and the second is 25½ inches high by 20 inches wide. Their size makes them much easier to read and their features easier to measure from the scale. The printed map is very small, only 5½ inches by 10½ inches, making it too small for careful examination of its details and nearly impossible for taking scaled measurements. The *Atlas* map also differs from the manuscript maps in two major ways. First and most important, it is not oriented correctly. The North arrow on the *Atlas* map, pointing to the viewer's right, is skewed by about twenty-five degrees. Both manuscript maps are drawn oriented to the North, with the arrow pointing to the top of the sheets. David Lowe of the National Park Service's Cultural Resources Geographic Information Service has suggested that the lithographed version of the map might simply have been rotated and its North arrow canted accordingly to make it fit in its position in a corner of a page in the *Atlas*.² Second, the printed

² The differences in orientation became apparent during a telephone conversation with David Lowe on September 25, 2003. I am greatly indebted to him for directing me to compare the orientation of the maps and for his suggested explanation of the misorientation of the map in the *OR Atlas*.

map depicts an opening in the Confederate earthworks for the causeway road. Both manuscript maps, however, show the Confederate fortification built across the road to block its passage. Finally, because they obviously were drawn by Army cartographers who saw the battlefield and measured its features shortly after the battle, the manuscript maps must be considered the more accurate depictions of the site.

The first of the two manuscript maps is a rough representation of the Rivers Bridge battleground, most likely the draft on which the second, more finished, map is based. Both show the same features of the battlefield with only minor differences in detail. Full-size copies of the maps obtained from the National Archives permitted close examination of their features and measurements of those features using the scale of 500 feet to the inch. Illustrations that follow showing details from these maps are taken from the draft map because its simplicity allows for easier reading and comprehension. In all instances these details are shown oriented North to South, with North at the top of the page. Some illustrations from the finished map are provided to show how the details in this version of the map differ from those in the draft version.

High ground overlooking the swamp defines the lower left (southwest) and upper right (northeast) sections of the maps. Elevations are depicted with hachures, rather than contour lines. These short parallel lines indicate high ground in a readily recognizable visual shorthand without providing actual elevations.³ These headlands project like fingers into the swamp, particularly on the north bank. Between the projecting headlands is the thickly wooded Salkehatchie swamp, measuring about a mile wide. Roads on which Union troops approached the swamp are shown converging at the southern headland in the bottom left of each map. The rear of the Confederate line and forking roads coming out of the swamp dominate the upper right section of each.

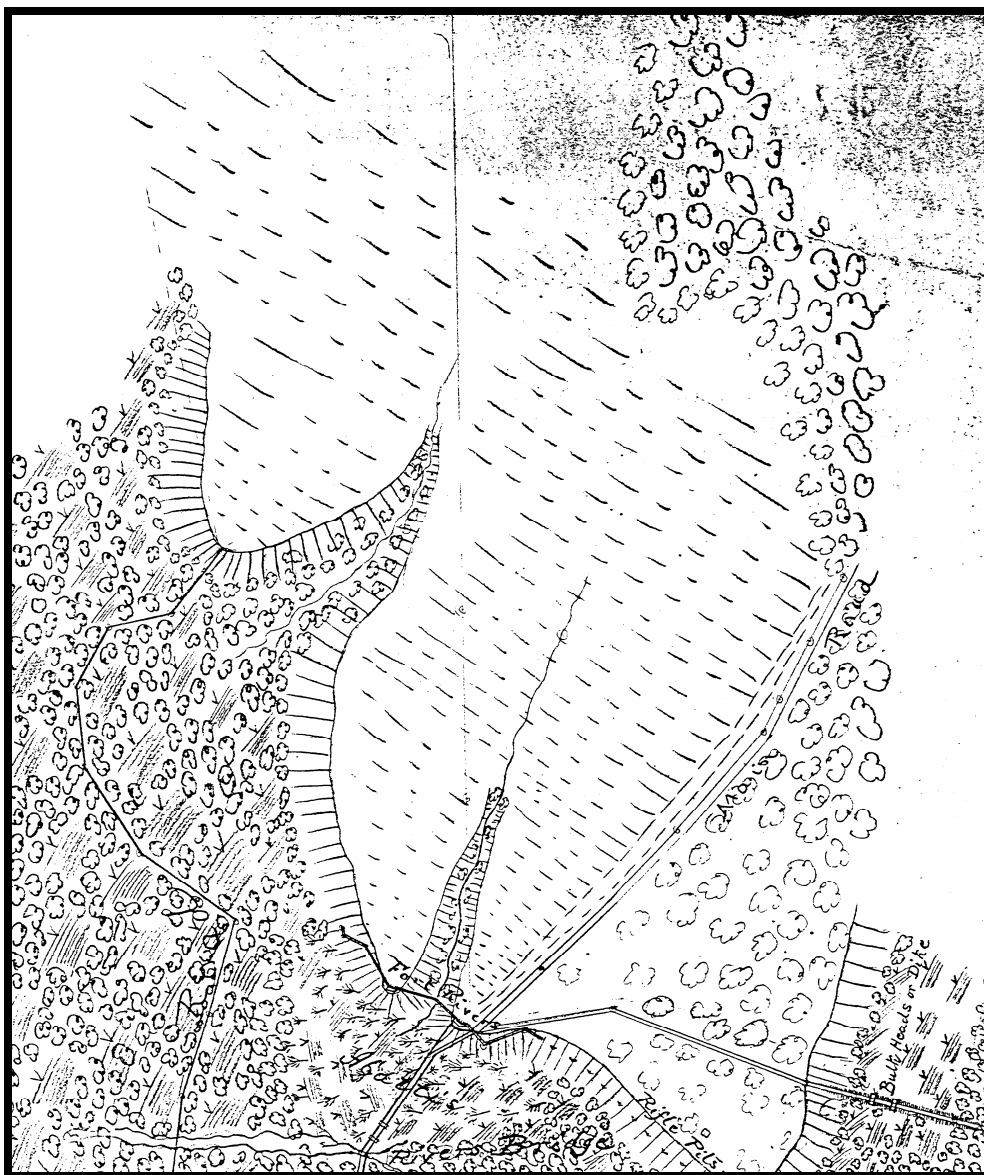
³ Earl B. McElfresh, Maps and Mapmakers of the Civil War (New York: Harry N. Adams, Inc., Publishers, in association with History Book Club, 1999), p. 25.



From the southwest, the causeway begins where the roads meet and the terrain slopes downward into the swamp. The causeway runs in a northeasterly direction through the swamp, takes a sharp turn to almost due north and continues in that direction until it reaches the main run of the Salkehatchie River. The multiple bridges that spanned the river's many channels are clearly evident, especially in the draft map. From the sharp dogleg turn on the causeway to the main run of the river there are thirteen bridges, including the bridge at the main run. Two more bridges are shown on the causeway road after it emerges from the swamp on the northern bank. After crossing the main run of the river, the causeway road moves on to the headland on the northern bank, making two slight turns toward the northeast as it proceeds.

The causeway road with its multiple bridges as shown in the draft map.

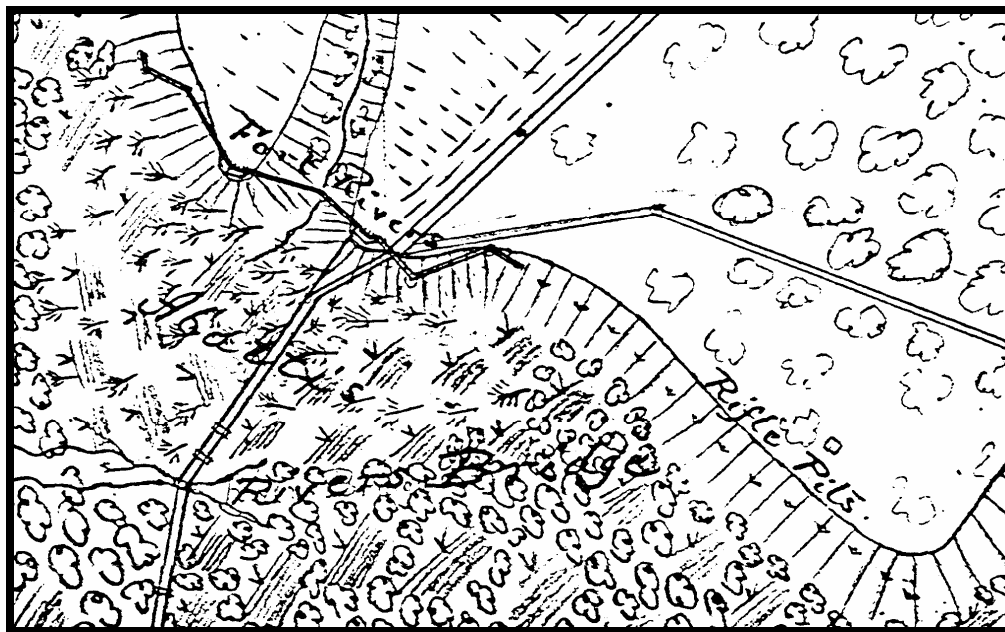
The road runs on to the northeast behind the Confederate earthworks, with another road branching off immediately in the rear of the works; this second road runs roughly to the east and then south-southeast, where it crosses a dike that appears to be holding in some sort of impoundment above the swamp. The causeway road or "Main Road," as it is identified on the maps, is most certainly the route the Confederates followed as they withdrew from the field. Cultivated fields, clearings, and woodlands lie behind the Confederate works.



The landscape on the north side of the Salkehatchie swamp, as depicted on the draft map.

The Confederate defensive line overlooks the causeway where it runs out of the swamp onto the north bank. A creek bed that appears to drain the headland splits the high ground into two fingers, with a ravine or gully between them that opens onto the low ground next to the swamp. Two separate sections make up the Confederate defensive works. The first is a regular field fortification, shown as an indented line that runs just below the crest of the two fingers of high ground. Both maps identify the fortification as “Fort Rivers”—the draft map with a label directly behind the line of works, and in the title printed on the more finished map. The fortification consists of an infantry parapet with two artillery emplacements built continuously

into the works. This combination of infantry and artillery fortifications probably accounts for the confusing variety of terms that participants in the battle used to describe them. The artillery emplacements are the “redoubts” that General Blair and Major Osborn saw. One is built on the top of one finger of the headland. It lines up to fire down the length of the causeway to the dogleg turn. The second emplacement is across the ravine on top of the second finger of the headland. This emplacement sits almost astride the road and lines up to fire down the causeway where it emerges from the swamp. The low ground in front of this part of the Confederate fortification is covered with abatis to impede an attacking force and open a clear field of fire for the defenders. The right of the infantry works forms the right of the Confederate line. The works here are turned back to anchor on the swamp and appear to begin about halfway down the slope of the bluff. The left of the line of infantry works ends abruptly just beyond where it turns to almost touch the secondary road that forks off the main road.



The Confederates' fortified line at Rivers Bridge, as shown on the draft battlefield map.

The second half of the Confederate defenses consists of a long line of rifle pits. Represented by dashed lines on the draft map and V shapes on the finished version, the rifle pits extend the Confederate left to anchor on another projection of the bluff into the swamp.

Abatis is shown with a label and depictions of felled trees. Both maps indicate that this crude obstacle, designed to stop an attacker in front of a position and subject him to close-range fire, had been placed from the foot of the bluff in front of the Confederate works to the main run of the river. Scaled measurements from the maps suggest that the clear field of fire afforded by the abatis would have been only a few hundred feet at the most directly in front of the works, and less near the flanks. Abatis is not pictured below the rifle pits on the Confederate left. Fire from the Confederates' rifle muskets would thus have been effective only in a limited arc in front of the infantry works, and such fire could only be delivered once Union troops crossed the main run of the river and found themselves in the abatis.⁴ The abatis may have even worked to the Confederates' disadvantage. One Confederate account suggests some Federals used the slashing to cover their advance on the Confederate works. A survivor of Earle's Battery recalled that all the casualties from his unit were caused by a single Union soldier shooting from behind a log "in about 20 or 30 steps of our breastworks."⁵

The Confederate works at Rivers Bridge conform to several principles of field fortification expounded by West Point instructor Dennis Hart Mahan in his widely used textbook, *A Treatise on Field Fortification*.⁶ They take advantage of the terrain, with the flanks anchored on strong natural features. Most of the main fortification and the irregular rifle pits are built into the brow or "military crest" of the high ground to give the defenders visual control of the sloping ground in front of them. The main fortification is in the form of an indented line and is well-adapted to the slope of the ground, especially where the center of the infantry parapet follows the ground along the creek bed. The salient (outward facing) and reentering (inward facing) angles of the fortification are designed to fire into the flank of an attacking force, provide overlapping fields of fire and covering fire for adjoining sections of the fortification, and reduce

⁴ For the effectiveness of abatis as a short-range obstacle in front of fortifications, see Paddy Griffith, *Battle Tactics of the Civil War* (New Haven: Yale University Press, 1987), pp. 127, 129.

⁵ W. M. Larke letter.

⁶ Mahan's work was first published in 1836. For discussions of Mahan's influence, see Edward Hagerman, "From Jomini to Dennis Hart Mahan: The Evolution of Trench Warfare and the American Civil War," pp. 35-39, in *Battles Lost and Won: Essays from Civil War History*, edited by John T. Hubbell (Westport, Connecticut: Greenwood Press, 1975), David Russell Wright, "Civil War Field Fortifications: An Analysis of Theory and Practical Application," M.A. thesis, Middle Tennessee State University, 1982, pp. 9-12, and *Guide to Sustainable Earthworks Management*, 90% draft (National Park Service in association with the Georgia Trust for Historic Preservation, 1998), pp. 5-8.

areas not directly covered by gunfire.⁷ The artillery emplacements are set into salient angles and are sited to cross their fire over the ground Union troops would be expected to attack.⁸ The abatis covering the ground at the base of the main works is an obstacle to halt attackers and bring them under deadly, close-range gunfire. Its representation on the map as felled trees is a visual echo of Mahan's description of one way to make this obstacle: "fell the trees so that their branches will interlace, cutting the trunk in such a way that the tree will hang to the stump by a portion uncut."⁹ The thickness of the swamp, though, shows that it was impossible for the Confederates to have cut down all the trees within cannon range, as Mahan advised. Mahan also cautioned against placing too much reliance on even strong natural obstacles, "as the strongest natural position may be carried if not vigilantly guarded."¹⁰ As already shown, Union forces overcame the obstacle of the swamp.

The roads Union troops followed to the Salkehatchie are shown running along the high ground south of the swamp and then converging at the causeway through the swamp. The land between the roads is taken up by cultivated fields and woods. Prominent sites in this area include Jenny's Corners, marked by several structures where two roads meet and then diverge. Nearby is the site of Howard's headquarters on February 2. As will be shown later in this report, this was most likely the residence of George Jenny. The 1860 census identified him as George "Jeanny," a 55-year-old farmer living with a wife and six children in the Angley Branch Post Office enumeration district. One of the children was a son, John Daniel Jenny, then age eleven. In 1860 Jenny's real estate was valued at \$3000 and his personal estate at \$1560. At that time he owned no slaves and raised livestock and grew mainly corn and wheat on 100 improved acres.¹¹ On the road that runs northwesterly to the swamp is a concentration of buildings identified as belonging to the "Widow Platt." This was possibly the home of Christine Elizabeth Shubert

⁷ Mahan, Treatise on Field Fortification, pp. 3-5, 76-77; Guide to Sustainable Earthworks Management, pp. 9-10.

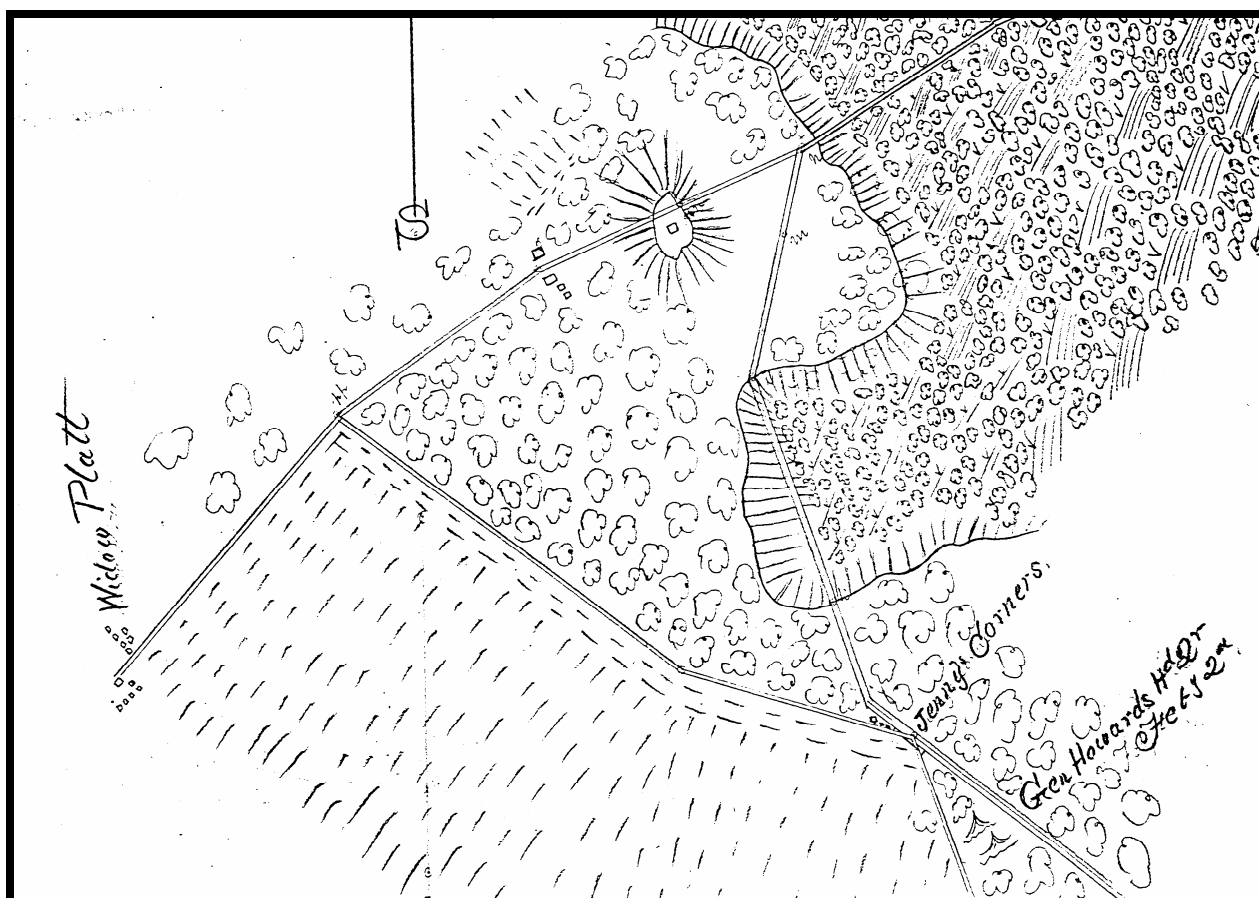
⁸ Mahan, Treatise on Field Fortification, xxv, p. 52.

⁹ Ibid., pp. 43, 45.

¹⁰ Ibid., pp. 43, 44.

¹¹ Population Schedules of the Eighth Census of the United States, 1860, National Archives Microfilm Publications, Microcopy 653 (Washington, DC: National Archives and Records Service, General Services Administration, 1967), Reel 1213, South Carolina, Volume 1, Barnwell District, p. 493; Population Schedules of the Eighth Census, Reel 1229, South Carolina (Slave Schedules), Volume 1, Barnwell District; U.S. Census: Original Agriculture, Industry, Social Statistics, and Mortality Schedules for South Carolina, Agriculture, Eighth Census, 1860, South Carolina Archives Microcopy Number 2 (Columbia: South Carolina Department of Archives and History, 1971), Reel 3, Barnwell District, pp. 249-250.

Platts, second wife and widow of John Platts (1790-1861).¹² In 1860 John Platts was a seventy-year-old planter, with real estate valued at \$20,000 and personal property worth \$43,500. Part of Platts' wealth was tied up in his force of forty-six slaves who lived in eight slave houses. On 500 acres of improved land, Platts' slaves raised mostly corn, cotton, and wheat.¹³ Closer to the swamp and alongside both sides of the road sits another group of buildings. Finally, there is a high knoll with a structure on it about 1200 feet from the junction of the roads above the swamp. Why these buildings are featured so prominently on the map and what role, if any, they played in the battle remain unknown.

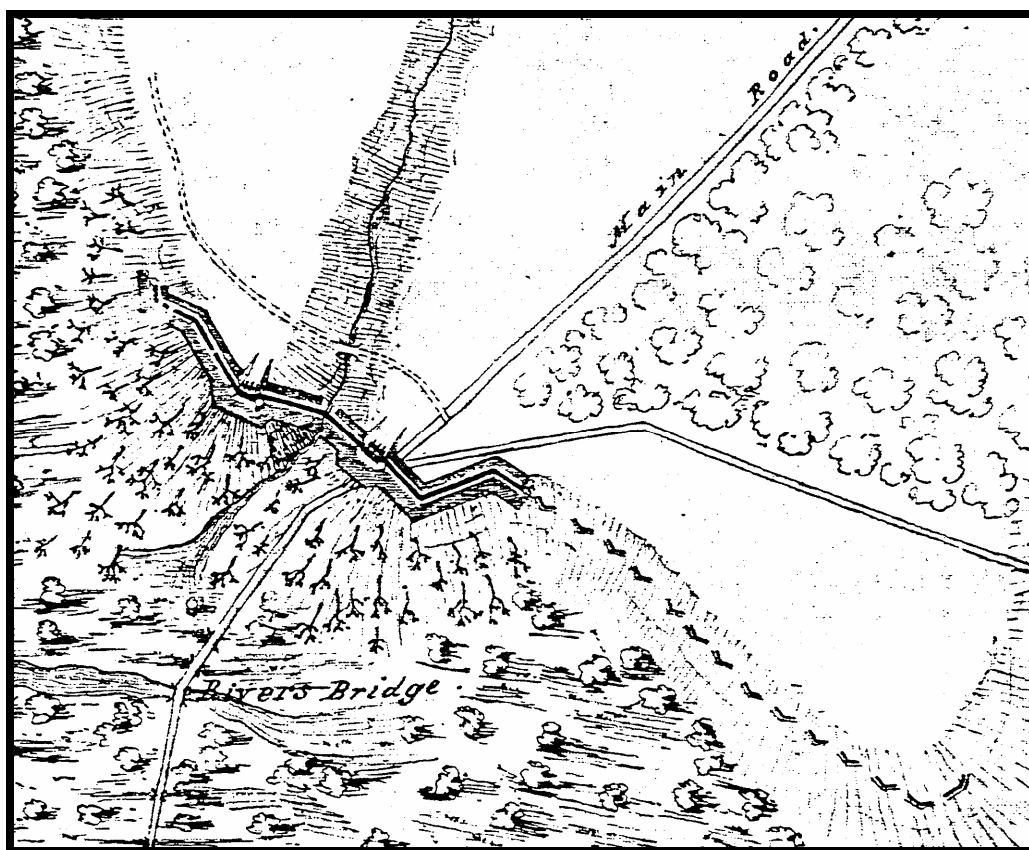


The features on the south side of the Salkehatchie swamp, from the draft battlefield map.

¹² From genealogical data in "Edward Breland – Ancestors & Family Master Index" online at <http://www.cwoodcock.com/ebfamily/ebfamily.html>.

¹³ Population Schedules of the Eighth Census, South Carolina, Volume 1, Barnwell District, p. 493; Population Schedules of the Eighth Census, South Carolina (Slave Schedules), Volume 1, Barnwell District, p. 284; South Carolina, Agriculture, Eighth Census, Barnwell District, pp. 249-250.

The two maps differ only slightly, as if the second, more polished version had been prepared with the use of notes taken in the field to add detail.¹⁴ The draft map depicts the infantry fortification and artillery emplacements as simple lines. The finished manuscript map shows these features in what appears to be a plan view, with parapets, firing steps or banquettes, and artillery platforms and gun ramps. What is not indicated is whether the guns in the emplacements were firing through embrasures in the parapet or over the top of the parapet as barbette batteries. The Waud drawing and written accounts point to the likelihood that the Confederate cannons were firing through embrasures.



The Confederate fortifications as seen in the finished battlefield map. The infantry works and attached artillery emplacements appear to be drawn in plan, abatis extends across the Confederate right, and the rifle pits on the Confederate left are turned, or refused, to follow the curve of the headland. Note, too, the dashed line representing a lane or roadway behind the main fortification.

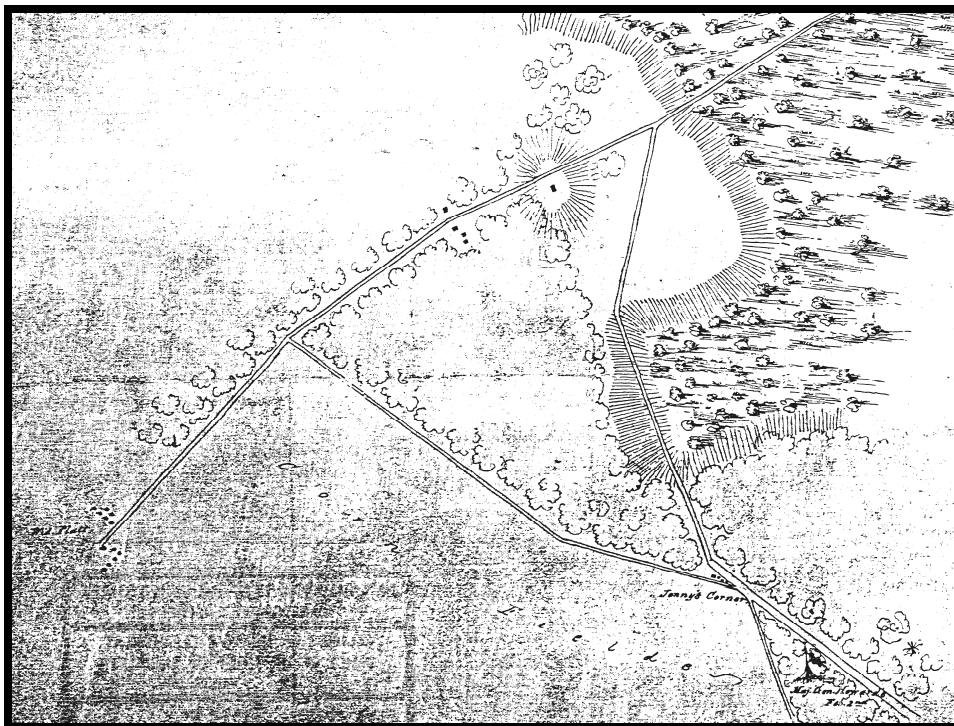
¹⁴ See McElfresh, Maps and Mapmakers of the Civil War, pp. 31-32 and 67-68 for a description of how maps were prepared in the field.

A double dashed line representing a roadway, perhaps a farm lane, is shown in the finished map running about 150 to 200 feet behind the Confederate works; the road runs parallel to the edge of the headland across the small creek to a junction with the main road. The juncture of the main road and the secondary road appears to be covered by the fortifications in the finished map; in the draft map the two roads branch immediately behind the works. Abatis is shown on the finished map extending around the Confederate right flank. The finished map also shows the end of the line of rifle pits turning to the northeast, providing more length to the Confederate line. A rectangle drawn behind the rifle pits on the draft map, apparently depicting a structure, does not appear on the finished map. This could possibly be a representation of the log cabin occupied by several Confederate officers. Strangely, this apparent structure does appear on the published version of the map.

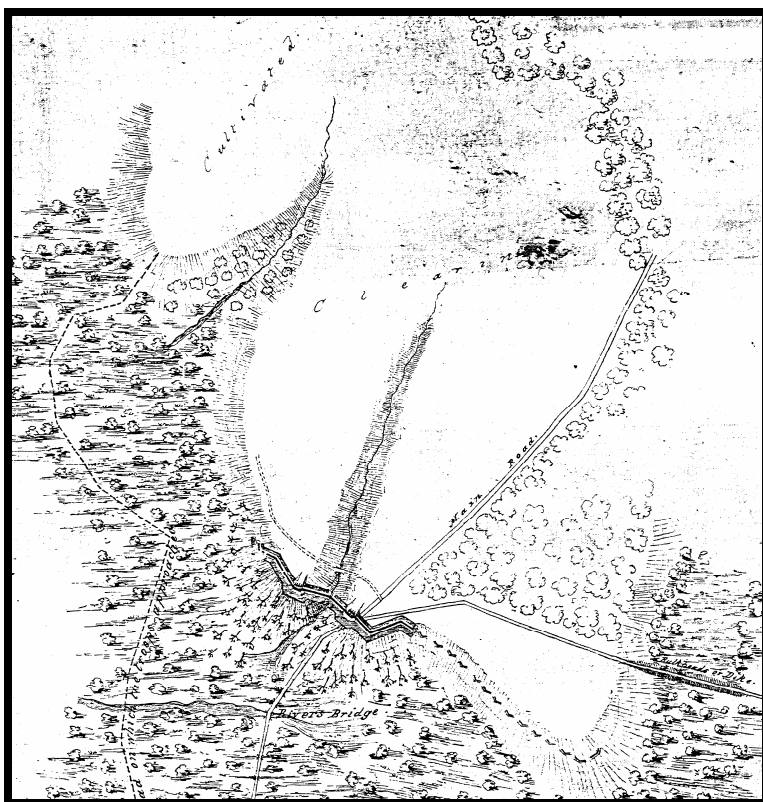


The structure above the Confederate rifle pits, as shown in the draft map (left) and the printed map that appeared in the *OR Atlas*. No such structure is indicated in the finished manuscript map.

The finished map adds several landscape details that are only sketched in on the draft map. The cultivated area between Jenny's Corners and Widow Platt's are labeled "corn fields." On the other side of the swamp, the headland on which the Union corduroy road terminates is labeled "cultivated," and the open area behind the Confederate works is identified as a "clearing."



Union approaches to the Rivers Bridge battlefield on the south side of the Salkehatchie, as shown on the finished map. Note the label “Corn Fields” in the lower middle section of the illustration.



The north side of the Salkehatchie swamp at Rivers Bridge. Note the references to the fields beyond the Confederate works as “cultivated” and “clearing.”

The details of these maps illuminate some of the written accounts of the battle. In some instances they give visual confirmation to written accounts on the nature of the combat. They offer clues to clarify some of the confusion in the documentary record. They even allow greater interpretation of the battle using other documentation and some educated guesswork. Finally they raise questions about parts of the battlefield that are not mentioned at all by any of the men who fought there.

The artillery emplacements are sited to command the causeway, just as Union accounts described them. The guns of Earle's Battery—a 12-pound Napoleon, a 10-pound Parrott, and two 12-pound howitzers—have been identified, and the location of those guns has been shown in Waud's illustration. As already noted, their field of fire was limited to a narrow arc because they were apparently mounted to fire through embrasures. But even a narrow field of fire was effective from their locations. From the emplacement west of the creek bed, the Napoleon and Parrott were in position to fire down the long stretch of the causeway after the road made its dogleg turn to the left in the swamp.¹⁵ Using the observations of Union commanders and scaled measurements from the maps, it is possible to indicate where Union troops came under artillery fire as they entered the Salkehatchie swamp. Colonel Milton Montgomery reported that the Confederate guns opened up on the 25th Wisconsin “about half way to the fort” when that outfit charged down the causeway on February 2. Major Thomas Ward Osborn, Howard's chief of artillery, applied his trained gunner's eye to estimate that the Confederate cannons fired on Union troops when they were about 200 yards beyond the bend in the road.¹⁶ When depicted visually on the maps, these accounts indicate artillery fire from that emplacement striking the causeway from about 500 yards to a little more than 800 yards. This is well within range for a Parrott and a Napoleon to fire spherical case shot, long-range antipersonnel shells.¹⁷ The effective long-range fire from these two guns continued to make itself felt on the second day of the battle, despite the efforts of Union sharpshooters to silence them. As already mentioned, when the 63rd Ohio began its diversionary assault down the causeway on February 3, the

¹⁵ This alignment was first pointed out in the early 1990s by the late Donnie Barker, former archaeologist with the South Carolina State Park Service, who noticed it while examining the version of the map in the OR Atlas.

¹⁶ OR, Vol. XLVII, Part I, p. 398; Harwell and Racine, eds., *The Fiery Trail*, p. 95.

¹⁷ Harold L. Peterson, *Round Shot and Rammers: An Introduction to Muzzle-Loading Land Artillery in the United States* (New York: Bonanza Books, 1969), pp. 90, 96; The table of fire pasted to the inside of ammunition chests for 12-pound Napoleons called for spherical case shot to be used “against masses of troops, at not less than 500 yards; generally up to 1,500 yards.” *Ibid.*, p. 90.

explosion of a single shell killed three men and wounded two others.¹⁸ The shell fire remained intense, forcing the men of the 63rd off the causeway and into the swamp. There the commander of the 43rd Ohio, which had preceded the 63rd, ordered the men of the other Ohio regiment “not to try to go any farther as it was madness.”¹⁹

The two 12-pound howitzers fired from the emplacement closest to the road. On the maps this emplacement lines up to fire down the portion of the causeway road where it emerges from the swamp and turns to the northeast up the bluff. From there the howitzers would have been well positioned to make use of their limited capabilities. With narrowed breeches for smaller powder charges, howitzers were designed to lob shells over obstacles. They did not have the range of a Napoleon or rifled Parrott gun. They could, however, be effective antipersonnel weapons firing canister at short range.²⁰ Earle’s howitzers appear to have been posted to fire at any Union troops forming up after crossing the main run of the river. The two long-range guns in the other emplacement could also fire canister into Union troops massing at the base of the headland. There the Federals would be subject to converging close-range antipersonnel fire from the two artillery emplacements.

Examination of the gun emplacements on the map might explain why some Union accounts counted two Confederate guns and others counted four. Federal witnesses who wrote of two cannons sweeping or commanding the causeway were probably referring to the longer-range Napoleon and Parrott in the emplacement west of the creek bed. Waud’s sketch, if accepted as completely accurate, indicates that both Confederate gun positions were visible from the causeway in the swamp. Some Union observers might have seen all four Confederate cannons but saw fit to comment only on the two that could fire down the causeway. The howitzers probably did not even begin shelling the Federals until they approached the main run of the river. It is also possible that Waud’s sketch is not accurate in showing both emplacements

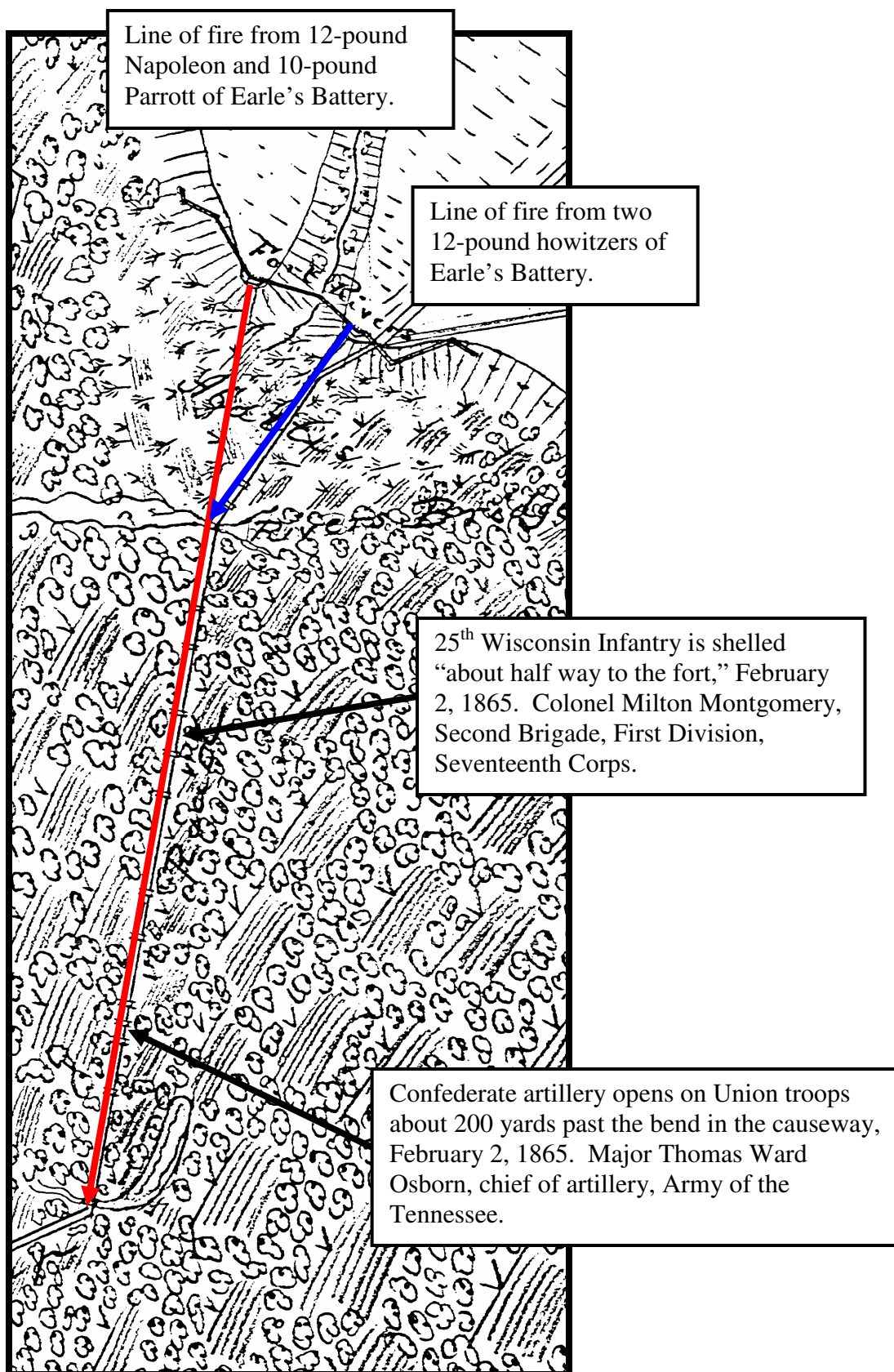
¹⁸ Lesh diary.

¹⁹ Jackson, *The Colonel’s Diary*, p. 178. This remarkable action by Major Horace Park of the 43rd Ohio effectively countermanded the order of General Mower, the division commander. Jackson noted that many of the troops were harshly critical of Mower for his aggressiveness at Rivers Bridge. He shared that opinion later in the published version of his diary, writing, “one of the worst things about soldiering is that men’s lives may be sacrificed, or they may be condemned to life-long mutilation uselessly by some blundering, pig-headed officer.” Ibid.

²⁰ Peterson, *Round Shot and Rammers*, p. 36; Warren Ripley, *Artillery and Ammunition of the Civil War*, 4th ed., rev. (Charleston, S.C.: The Battery Press, 1984), p. 45.

being visible from the bend in the causeway and that some Union troops saw only the two guns that fired down the road through the swamp. Maybe Waud could see only the emplacement with the Parrott and Napoleon but sketched both to graphically depict the Confederate position.

The only effective long-range fire in the battle of Rivers Bridge came from the Parrott and Napoleon of Earle's Battery shooting down the causeway into the swamp. The rest of the fighting at Rivers Bridge took place at much shorter range.



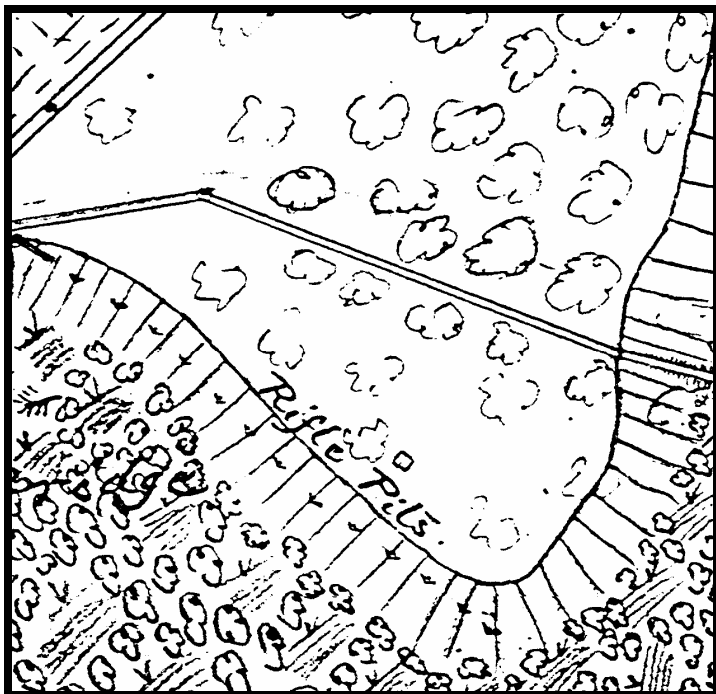
Lines of fire from the Confederate artillery emplacements at Rivers Bridge.

As already mentioned, all the casualties of Earle's Battery were shot at one gun emplacement by a single Federal sharpshooter. The marksman had worked his way to within "20 or 30 steps" of the Confederate works and taken position behind a log. W. M. Larke was serving a gun in the emplacement where two men were wounded and one killed. "The gun I loaded had a fair sweep of the bridge and road," Larke remembered in a letter written decades after the battle, "and I heard that the first fire of my cannon killed forty (men) dead and wounded forty more." It is not clear from Larke's recollection whether the Confederates were shot at the emplacement with the Parrott and Napoleon or the emplacement with the howitzers. He did not specify what type of gun he loaded. He referred to the guns of Earle's Battery simply as "cannons" throughout his letter.²¹ A cannon with a "fair sweep of the bridge and road" could have been one of the longer-range guns shooting into the swamp along the causeway, or it could have been one of the howitzers aimed at the main bridge and the causeway road where it emerged from the swamp.

Rifle pits make up more than half the total length of the fortified Confederate line. A rifle pit was a shallow, rectangular hole—four feet long, three feet wide, and three feet deep, according to one contemporary authority—with the excavated soil piled up in front to form a low parapet to shield two men. Rifle pits have been likened to latter-day foxholes, small holes dug by individual soldiers to quickly provide cover.²²

²¹ W. M. Larke letter. The same Federal marksman took off a hank of Larke's hair with one shot and grazed his neck with another. Larke then borrowed a rifle musket from a Georgia infantryman in the works to shoot back. "I took aim at the fellow and hollered at him, when he looked up I shot him clear through just about the same spot where he shot our Lieutenant [sic]."

²² Henry Lee Scott, *Military Dictionary* (New York: D. Van Nostrand, 1861), p. 532; Patricia L. Faust, ed., *Historical Times Illustrated Encyclopedia of the Civil War* (New York: Harper Perennial, 1991), s.v. "rifle pit," p. 634.



Confederate rifle pits extending the left of the Confederate line at Rivers Bridge.

It seems strange that so much of the Confederate earthen defenses would have been made up of extemporized, individual fortifications. Scaled measurements taken from the two manuscript maps indicate more than 1100 feet of the more substantial infantry parapet, enough to be manned by the estimated 700 to 800 Confederates holding the position on February 2.²³ By comparison, scaled measurements from the maps showed that more than 1300 running feet of the line was held by rifle pits. As already noted, Union Major Osborn thought the infantry works were large enough to hold a force of 2,000.²⁴ Maybe the works at Rivers Bridge had not been completed as planned at the time of the Union attack and additional defenses in the form of rifle pits were needed quickly. Or maybe the planned fortifications had been completed, and the long line of rifle pits points to a flaw in the Confederate defensive line that was hastily corrected. The bluff line projects into the swamp beyond the left end of the Confederate infantry breastworks. Without the rifle pits, the Confederate left would be critically exposed to a flank attack. Union troops that got onto the bluff at that point could have moved into the Confederate rear via the

²³ The estimate of the number of Confederates at Rivers Bridge prior to their reinforcement is from Williams, "A Confederate Soldier's Memoirs," *Charleston News*, March 8, 1914. According to a return dated January 28, 1865, Confederate infantry then at Rivers Bridge totaled 565 men: The 32nd Georgia Infantry had a total effective strength of 324, and the 47th Georgia counted 241 effectives. OR, Vol. XLVII, Part II, p. 24.

²⁴ Harwell and Racine, eds., *The Fiery Trail*, p. 101.

secondary road, enfiladed the Confederate line, and possibly cut off any avenue of retreat by way of the main road. (The absence of rifle pits on the Confederate right might be explained by the absence of a road there that could have been exploited by a Union flank attack; or perhaps the Southerners simply had more confidence in the swamp as a natural barrier on this end of their line.) Troopers of the 3rd South Carolina Cavalry took up positions in the swamp between Broxton's and Rivers Bridges on the battle's second day. "Co. C was on the right of our extended line, just below the works which covered and protected the causeway and bridges," remembered Sergeant John A. Moore. "We were scattered along the swamp in little squads at intervals, with a commissioned or non-commissioned officer in command of each squad."²⁵ It is possible that Sergeant Moore and the other troopers from C Company fought from the hastily improvised shelter of rifle pits on the Confederate left.

Only one corduroy road is shown on the maps. Scaled measurements taken from the draft map show the road beginning at a point about 375 feet southwest of the dogleg in the causeway. The road parallels the causeway, running in a roughly northward direction. It crosses the main run of the Salkehatchie about 875 feet due west of the main bridge on the causeway. The corduroy road continues in its roughly northward direction until it takes a sharp turn to the northwest at a point about 500 feet from the extreme right of the Confederate earthworks. Then it angles back to the northeast and finally strikes a headland on the north side of the Salkehatchie. The high ground where the corduroy road ends is separated by a creek or drain from the headland where the Confederate fortifications sit.²⁶

²⁵ "A Glance at the Long Ago," Bamberg Herald, April 20, 1905.

²⁶ The finished map shows the corduroy road as a dotted line. The draft map depicts the road as a series of points connected by straight lines, perhaps as an indication of distances and bearings taken by the engineer who drew the map. I am indebted to Al Hester, Historic Sites Coordinator with the South Carolina State Park Service, for pointing out this aspect of the map and suggesting its interpretation.



General Mower's orders to build three separate corduroy roads through the swamp apparently were never carried out. Rather than build three roads, the troops seem to have all worked on the same single road. Written accounts that describe two infantry roads through the swamp probably refer to the single corduroy road that the troops built and to the causeway road where the troops repaired damaged bridges while under fire.

The corduroy road built by Union troops to flank the Confederate right. Note how the road makes a sharp turn to the northwest when it comes abreast of the Confederate works and continues on to another headland that projects into the swamp.

Why do the maps show the corduroy road continuing to end at another headland? It is clear from both the written records and the maps that the Union troops did not flank the Confederate line by taking the corduroy road to its end.

Coming across the corduroy road at the terminus shown on the map would have put Union troops

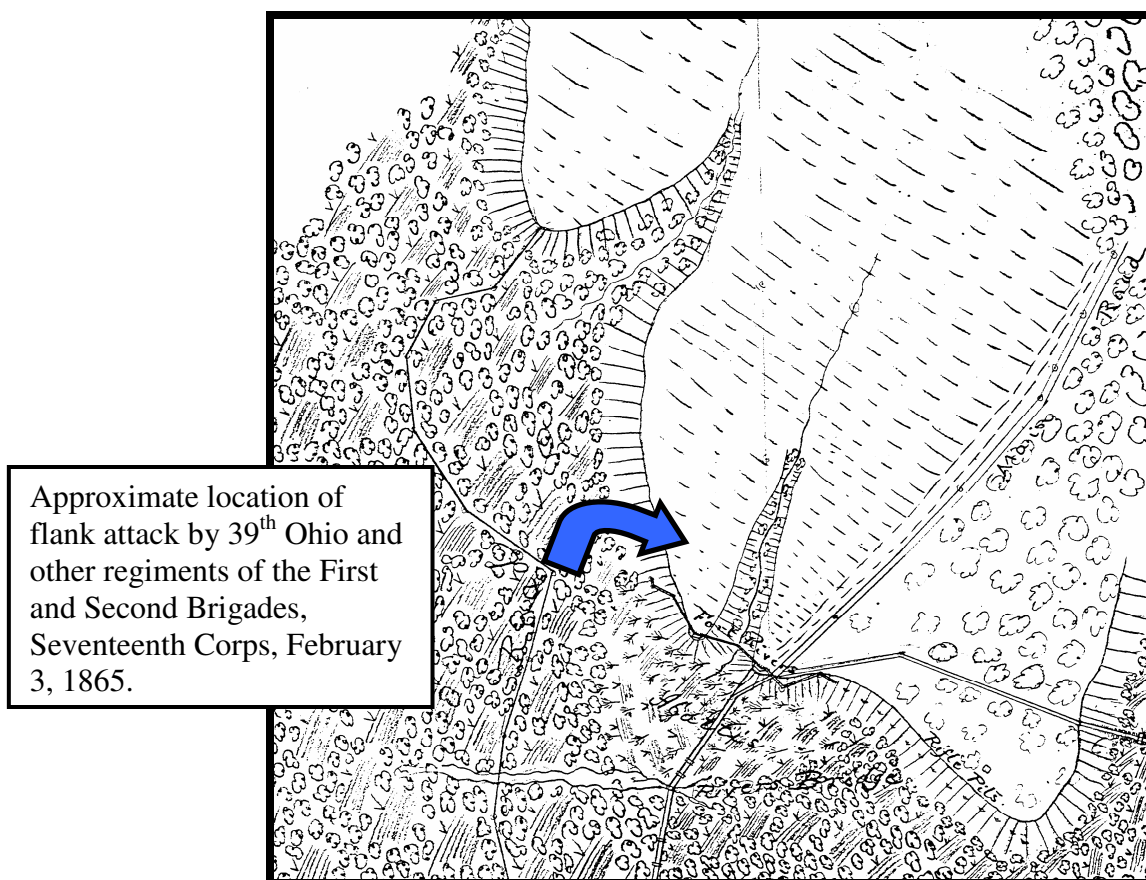
too far beyond the Confederate right to have engaged the Southerners in the manner described in the written accounts. The Union troops struck the Confederates near the right of their fortified line and drove them through the clearing or meadow behind the works. To do so, the Union troops had to emerge near the end of the Confederate fortifications, not on the second headland

where the corduroy road ends in the maps. A possible explanation is found in Brigadier General John Fuller's report on the action of his First Brigade. On the morning of February 3, Fuller had the 27th Ohio Infantry cutting trees in the swamp for the corduroy road. A squad of skirmishers covering the tree cutters crossed the main run of the river in the early afternoon and encountered a Confederate picket post. Fuller then ordered skirmishers to the breakthrough, and a detail of men from the 27th Ohio "felled some large trees across the stream to facilitate the passage of our troops."²⁷ It is very possible that Fuller's breakthrough came at the point where the corduroy road comes closest to the Confederate fortifications as shown on the maps. The corduroy road there was within rifle musket range of the Confederate works, only about 500 feet away. Moving through the swamp from this point would have put the Federals astride the Confederate right while avoiding the obstacles placed in front of the works.

Shortly afterward Fuller's brigade was ordered to assault the Confederate right. One of the regiments making the attack was the 39th Ohio. The regiment's commander wrote of jumping off the "plank road" into the swamp to flank the Confederate line; he probably meant that his troops got off the corduroy road at the point where it made the sharp bend to the northwest or left near the end of the Confederate works. Private Strickling and his comrades in the 39th jumped off the end of the roadway into the swamp to flank the Confederate line. Also, accounts from the 39th Ohio and other regiments that flanked the Confederate right make no mention of having to get through abatis or over fortifications. As Strickling recalled, "the Johnnies . . . were much surprised to see us come in that way."²⁸

²⁷ OR, Vol. XLVII, Part I, p. 393. This part of Fuller's report could be read as an effort to credit his brigade with establishing the critical bridgehead on the river's north bank, instead of conceding that honor solely to the 32nd Wisconsin of the Third Brigade.

²⁸ OR, Vol. XLVII, Part I, pp. 394, 396; Strickling reminiscences, p. 35.



Union attack on the Confederate right flank, February 3, 1865.

Still, nothing explains the completion of the corduroy road onto the adjoining headland. Mower's pioneers might have kept working on it while the flank attack was falling on the Confederate right, continuing the road far around the Confederate works despite the breakthrough being exploited closer in. Or the road might have been finished shortly after the fight simply to give Union forces another path across the Salkehatchie at Rivers Bridge.

Other critical points from the battle can be roughly established by combining the map with written accounts. The 32nd Wisconsin made its bridgehead on the north bank of the river just upstream of the causeway. The regiment had been sent into the swamp as skirmishers on February 3 with the 25th Indiana on the left side of the causeway; the 10th Illinois was on its right, on the right side of the causeway.²⁹ When part of the 32nd crossed the main branch of the river,

²⁹ Private Leiqvam reported that the 25th Indiana was on the left of the 32nd Wisconsin. Leiqvam Diaries, p. 23. Tillson's report suggests that the 25th Indiana was initially behind the 32nd Wisconsin in the swamp until he brought

Third Brigade commander Colonel John Tillson ordered the rest of the regiment across. Tillson later reported that this crossing of the main channel occurred “about 800 yards above,” presumably meaning 800 yards beyond Tillson’s post in the swamp.³⁰ Tillson then moved forward with the 25th Indiana in line of battle, making two advances of 100 yards each before being momentarily halted by General Fuller as he brought his First Brigade in line on the left to begin a wheeling attack on the Confederate flank. “Hearing that dry ground was in sight ahead,” Tillson moved forward, “clearing the skirts of the swamp” and then drove the Confederates “over a large open field,” which forced “the vacating of the works on the right.”³¹ These descriptions place the 32nd Wisconsin somewhere in the low ground in front of the Confederate right. Acting on its own initiative to make the breakthrough, the regiment suffered its heaviest combat casualties of the war.³²

Troops of the 10th Illinois also acted largely on their own downstream of the causeway. Their commander reported to Mower that he believed his men could take the Confederate fortification. Only two companies managed to cross the river on felled trees before being pinned down and locked in a fierce firefight, where one participant related that the Confederates attempted to flank their company “at the bend of the river.”³³ This breakthrough, like those of

them up to exploit the 32nd’s breakthrough. It is not clear from his report if he then placed the 25th Indiana on the right or left of the 32nd Wisconsin. OR, Vol. XLVII, Part I, pp. 400-401.

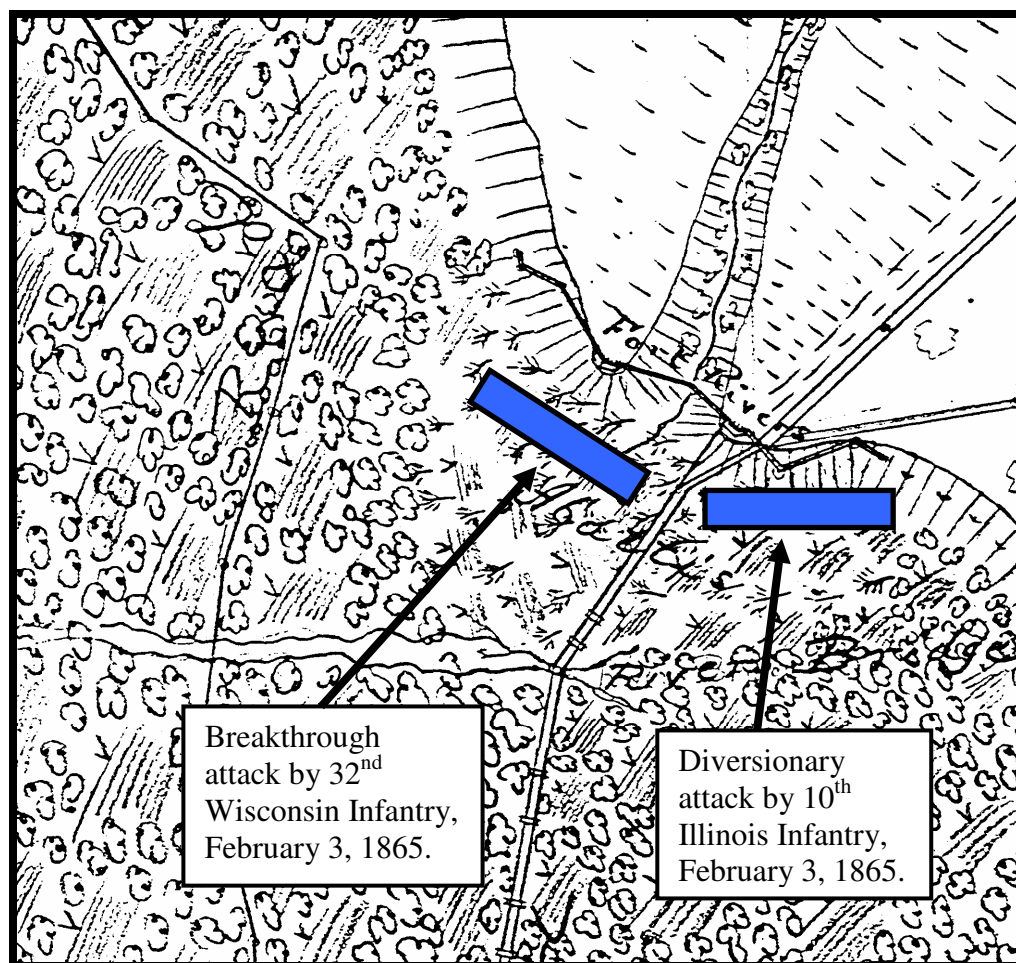
³⁰ Ibid., p. 400. Tillson’s reference had been mistakenly interpreted in the past to mean that the breakthrough of the 32nd took place 800 yards upstream of the main bridge. This would have put the regiment and the troops on their left too far upstream to have any effect on the Confederate line. Tillson was probably in the swamp near the head of the corduroy road or the bend in the causeway when he heard of the breakthrough. This latter placement is supported by scaled measurements from the battlefield maps.

³¹ Ibid., pp. 400-401. Mower felt that Fuller’s brief halt of the flank attack kept him from taking more of the Confederate force at Rivers Bridge. Ibid., p. 398; Power and Bell, *Visitor Guide*, p. 9.

³² The unit’s roster identifies twelve men killed or mortally wounded and another forty wounded at Rivers Bridge, more than any losses reported in any other battle. *Roster of Wisconsin Volunteers*, Vol. 2, pp. 471-500. Six men identified as killed outright in the battle are Thaddeus W. Gee, wagoner, and Privates Frelinghuysen Harvey (identified as Freeling Hyson Harvey on the Civil War Soldiers and Sailors System database) and Jason Smith of Company B, Captain Irvin Eckels of Company E, and Privates Albion R. Chipman and Samuel Thomas of Company G. Six wounded men died later; four of them are buried at Beaufort National Military Cemetery. Ole Leiqvam of Company K and Adelbert Bly of Company B both noted the 32nd lost fifty-three men killed and wounded at Rivers Bridge. Leiqvam Diaries, p. 24, and Adelbert Bly to Anna, March 29, 1865, Bly Correspondence. Captain Francis Guernsey of Company E wrote that the regiment had its toughest fight the following month at Bentonville but “lost less than at Salkehatchie.” Francis M. Guernsey to Fannie, March 27, 1865. Although the 32nd had been in service since 1862, the unit did not experience combat until 1864. See John M. Coski, “The ‘Bandbox Regiment’: The 32nd Wisconsin Volunteer Infantry,” *Civil War Regiments*, Vol. 2, No. 4, pp. 313-342.

³³ Ellison and Weitz, eds., *On to Atlanta*, p. 101. The “bend in the river” could be where Three Mile Creek flows into the Salkehatchie. For the fight of the 10th Illinois in this location, see also Jamison, *Recollections of Pioneer and Army Life*, pp. 300-301, and Mower’s after-action report, OR Vol. XLVII, Part I, p. 388. Ole Lieqvam of the

the 32nd Wisconsin and the 27th Ohio, was made by troops moving forward independently at the company and regimental levels.



Approximate locations of February 3 attacks on the Confederate line. NOTE: The blue blocks are meant only to indicate the general locations of these units. They are not drawn to scale. The number of men in each unit at the time is not currently known (and recall that only two companies of the 10th Illinois crossed the river). It is also not known if these units deployed in standard two-rank battle line or in some form of extended skirmish line.

It may also be possible to place the main Confederate infantry units on the battlefield. Those units were the 32nd and the 47th Georgia Infantry regiments. The 32nd might have occupied the right and center of the infantry works, with the 47th in the left of the works. As the most experienced Confederate unit on the field, the 47th might have been posted at that part of

32nd Wisconsin also reported Confederate counterattacks, writing that “the Rebs stormed upon us and wanted to chase us out into the river,” but were driven back five times. Lieqvam Diaries, p. 24.

the works considered most critical to the Confederate defense—the road crossing.³⁴ The 47th suffered most of its losses in missing and captured.³⁵ These men might have been isolated by the collapse of the line to their right. Captain Matthew Jamison of the 10th Illinois wrote of talking to a captured Confederate ordnance sergeant in the works after the battle, a man identified through subsequent research as a member of the 47th Georgia.³⁶ A veteran combat unit posted in the works here could certainly explain the stiff resistance encountered by the 10th Illinois. With less combat experience, the 32nd might have been sent to hold the part of the line deemed more secure, the right and center. The 32nd suffered the greatest Confederate loss in killed and wounded at Rivers Bridge, perhaps because the regiment was posted where the main Union breakthrough and flank attacks fell on February 3.³⁷

This hypothetical scenario allots more space on the line to the 32nd Georgia because on the eve of the battle it had a greater strength, 324 effectives, than the 241 effectives counted by the 47th.³⁸ Scaled measurements from the manuscript battlefield maps reveal about 672 feet or 224 yards of infantry parapet from the Confederate right to the artillery emplacement closest to the causeway road. If they had been posted on this part of the line, the 324 effectives of the 32nd Georgia would have presented a manpower density of about 1.8 men per yard of parapet. A little over 437 feet or 146 yards of additional infantry parapet extend from the same artillery

³⁴ The 47th had fought at Secessionville, Jackson, Chickamauga, and in the Chattanooga and Atlanta campaigns prior to the Carolinas Campaign. They also participated in the battle of Honey Hill fought in South Carolina a few months before Rivers Bridge. Joseph H. Crute, Units of the Confederate States Army (Midlothian, Virginia: Derwent Books, 1987), p. 110; Sifakis, Compendium of the Confederate Armies, South Carolina and Georgia, pp. 260-261.

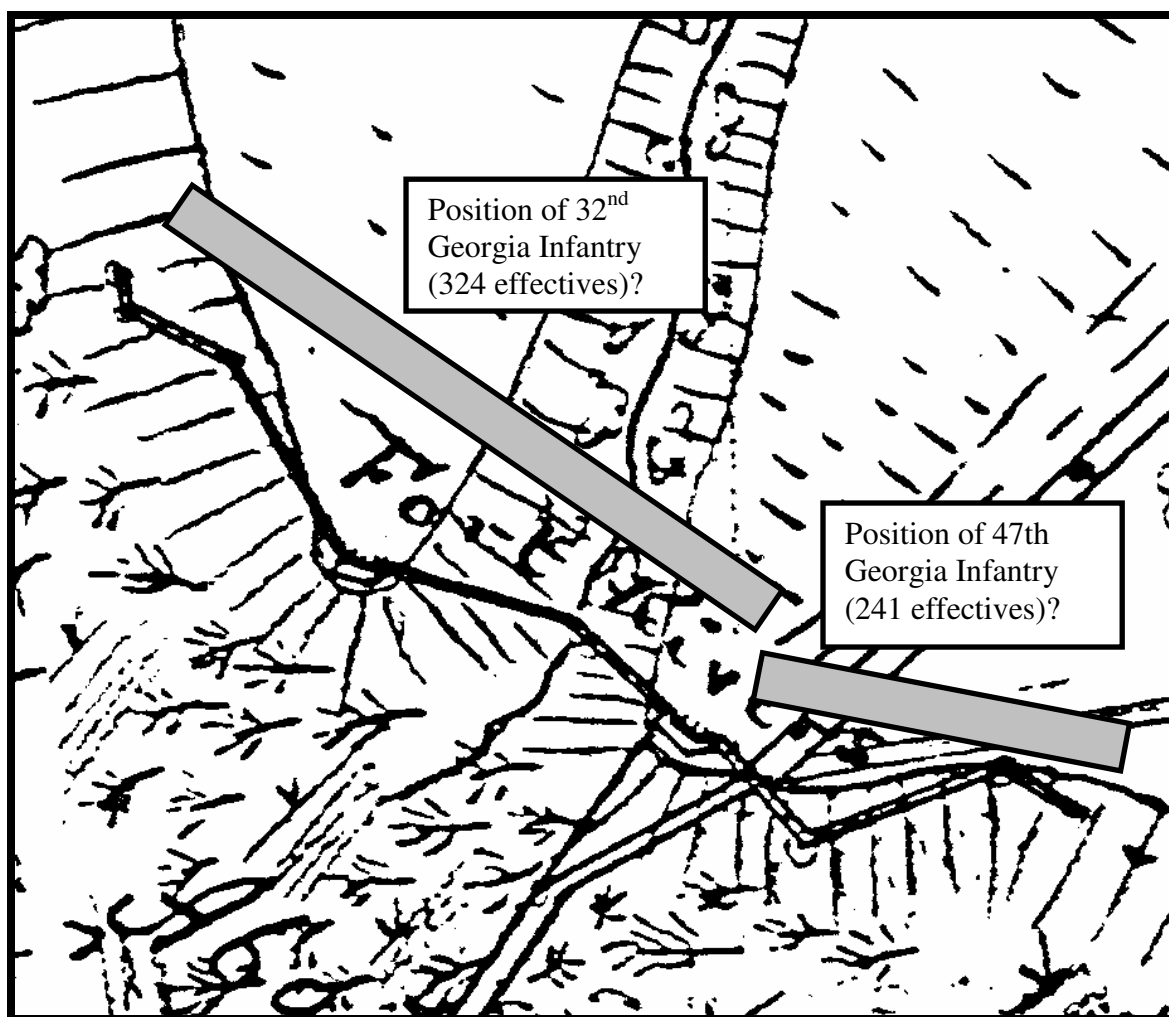
³⁵ Brigade commander George P. Harrison, Jr., reported that the 47th lost one killed, eight wounded, and thirty-four missing. OR, Vol. XLVII, Part I, p. 1076. Ongoing research has identified two men from the 47th wounded in the fight and another fifteen captured at or near Rivers Bridge. Rivers Bridge Casualties research file.

³⁶ Jamison identified the captured Southerner only by his rank and his hometown of Savannah. Jamison, Recollections of Pioneer and Army Life, p. 301. The only ordnance sergeant listed as captured at Rivers Bridge was one H. Gerber or August Gerber of Company A, 47th Georgia. The company was raised in Chatham County, Georgia, of which Savannah is the county seat. Report of Prisoners of War captured by the 1st Division, 17th Army Corps in the Engagement at River's Bridge, February 3d, 1865, War Department Collection of Confederate Records, RG 109, National Archives and Records Administration, Washington, DC. Regimental rosters from "47th Regiment Georgia Volunteer Infantry, Army of Tennessee, C.S.A.," online at <http://www.cviog.uga.edu/Projects/gainfo/47th-rgt.htm>.

³⁷ The 32nd Georgia had served most of the war in South Carolina and had fought at Battery Wagner and at Olustee in Florida. The unit reported losses of five killed, twenty-seven wounded, and ten missing at Rivers Bridge. Research by the South Carolina State Park Service has identified seven killed, nine wounded, and five captured. Crute, Units of the Confederate States Army, pp. 104-105; Sifakis, Compendium of the Confederate Armies, South Carolina and Georgia, pp. 242-243; OR, Vol. XLVII, Part I, p. 1076; Rivers Bridge Casualties research file.

³⁸ OR, Vol. XLVII, Part II, p. 1053.

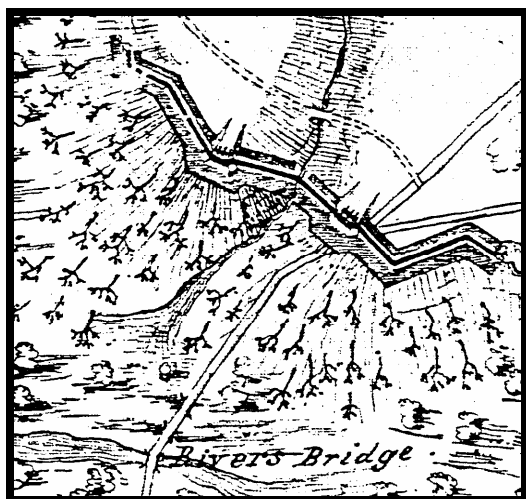
emplacement to the Confederate rifle pits. The 47th Georgia, if they had manned this part of the works, would have presented a density of almost 1.7 men per yard of parapet. The recommended number of men to sufficiently defend a parapet was two per yard.³⁹ The causeway road where it continues in the rear of the Confederate works would have made a convenient dividing line between these two regiments.



Possible locations of Confederate infantry positions at Rivers Bridge. For this illustration the hypothetical troop positions are shown as large blocks behind the works. In reality, the infantrymen would have been within the fortifications.

³⁹ Mahan, *Treatise on Field Fortification*, p. 100; Scott, *Military Dictionary*, p. 294. Both of these works also advised posting a reserve force proportional to the importance of the fortification. The 5th Georgia Reserves, sent to Rivers Bridge on the 3rd, could have constituted such a reserve. Power and Bell, *Visitors Guide*, p. 8. See also Griffith, *Battle Tactics of the Civil War*, pp. 129-130, for a brief discussion of wartime estimates on the number of men needed to hold field fortifications.

A feature shown prominently on the maps but not mentioned in any of the written accounts is the creek bed that bisects the headland and the Confederate works. The creek bed and the gully around it would seem to be a natural funnel into which Union troops would flow after crossing the main run of the Salkehatchie and getting onto the river's north bank. Massed troops in the gully would be cut up by converging fire from the artillery and rifle muskets of the Confederates in their fortifications. A killing zone in front of the center of the works appears to have been a conscious design. The center of the Confederate infantry works is at a reentering angle in the creek bed, providing overlapping fields of gunfire into the gully. The two artillery emplacements on the crests of the high ground to either side of the gully appear to have been sited to fire across the low ground beyond the gully and converge on the bridge at the main run of the river. Fortunately for the Union troops, most of their assaults fell on other points of the Confederate line—the diversionary attack by the 10th Illinois on the Confederate left, the aborted diversionary attack down the causeway, and the main flanking attack on the Confederate right that exploited the breakthroughs that took place there. No accounts from the 32nd Wisconsin mention the gully, but the heavy casualties the regiment suffered might indicate that the unit was under fire in or near this area.



Left: The gully in front of the Confederate infantry fortification at Rivers Bridge as shown on the finished map. Right: A close-up of the same view showing the apparent break in the ditch behind the parapet, possibly to indicate a drain.

Not evident from either of the manuscript battlefield maps is how the Confederates allowed water in the creek bed to drain through their fortification. A break in the parapet would

be a weak point in the line. Both maps show the works at the reentering angle in the creek as continuous line. A drain of some sort would have been necessary. The creek bed was probably flowing at the time of the battle. Accounts from the campaign mention heavy rainfalls in the days that preceded the fighting, and several participants in the battle agree that rain began to fall during the night of February 2 and continued through the following day.⁴⁰ The Confederates must have had some sort of outlet in their works to allow the water from this drainage to escape.⁴¹ Close views of the works in the finished map seem to show a break in the parapet that could indicate a drain; these views also appear to show a break in the ditch behind the parapet, implying that the creek bed kept the Confederates from having a continuous line of defenders in the works at this point.

Not shown on any of the three versions of the map are the breastworks built by the victorious Union troops after they carried the Confederate position. Perhaps these temporary field fortifications had become so commonplace and so temporary that they were not deemed significant enough for inclusion on the map.

The maps also do not indicate any fences that might have separated fields or lined roads. It is assumed that any fences in front of the Confederate works were taken down to maintain a clear field of fire. The Confederates might also have used nearby fence rails in the fortifications as revetments, head logs, or head log supports, or simply burned them as firewood.⁴² It is similarly assumed that the Union troops did the same with any rail fences they encountered on both sides of the swamp. There apparently was a rail fence of some sort to the rear of the of the

⁴⁰ Majors Henry Hitchcock and George Ward Nichols of Sherman's staff wrote that rain fell off and on throughout the day on February 3, and Private Franklin Lesh of the 63rd Ohio laconically noted in his diary on February 3, "It rained some last night." Captain Matthew Jamison of the 10th Illinois was even briefer. "Raining—deep mud," he wrote in his entry for the 3rd. Howe, ed., Marching with Sherman, p. 247; Nichols, Story of the Great March, p. 135; Lesh diary; Jamison, Recollections of Pioneer and Army Life, p. 300.

⁴¹ Mahan recommended that drains be built into fortifications to allow water to run from the interior. He offered no examples of such drains, though, mentioning only a board gutter to keep water from running down the scarp, or ditch in front of a parapet. Mahan, Treatise on Field Fortification, p. 34.

⁴² Revetments acted as retaining walls to support the inside, or interior slope, of a field fortification's parapet. Mahan specified a variety of materials that could be used as revetments, including wooden planks. Mahan, Treatise on Field Fortification, pp. 36, 40.

Confederate works, where the 39th Ohio halted briefly on February 3 and formed a barricade of rails before turning to face north and digging in for the night.⁴³

⁴³ OR, Vol. XLVII, Part I, p. 396.

CHAPTER 5

After the Battle – Alteration and Preservation of the Battlefield

After the Battle – Stabilization of the Site, 1865 to 1939

Union troops of the Seventeenth Corps remained at Rivers Bridge until February 6. Before they left, they buried their dead and, presumably, buried the Confederate dead who had been left on the field. In the spring of 1876 a group of local men, most of them Confederate veterans, reburied the Confederate dead in a single grave at the site of the Confederate field hospital.¹ The mass grave became the focus of annual commemorations of the battle and its Confederate dead. The local men formed the Rivers Bridge Monumental and Memorial Association to ensure that the battle, the Confederate dead, and their cause would not be forgotten. From its creation in 1876 onward, the Memorial Association focused much of its efforts on the burial site and the annual commemoration service. The site came to be called the “Memorial Grounds,” a name that remains in use today. What had once been the site of the Confederate field hospital was transformed into a planned commemorative landscape with monuments and decorative plantings. Here veterans and later generations sought to find meaning in the battle and the sacrifice of the Confederate casualties, adding tremendously to the interest and significance of the site. This commemorative use changed only a small part of the battlefield. It effectively limited commemorative features and monuments to the Memorial Grounds. The ground where the fighting took place remained untouched by monuments. In the course of remembering the battle at the Memorial Grounds, the Memorial Association eventually preserved much of the rest of the battlefield.²

¹ The number of dead reinterred in the single grave is uncertain—it ranges from sixteen to twenty-eight, according to different accounts—and the location of their original burial sites is unknown. See the author’s “The Glory of the Vanquished: Commemorating the Lost Cause at Rivers Bridge,” 1997, unpublished manuscript on file, South Carolina State Park Service. Ten Confederates have been identified so far as having been killed or mortally wounded at Rivers Bridge. Except for Lieutenant Kirby of Earle’s Battery, all are presumed to have been left on the field. Known dead from the 32nd Georgia are Privates Mack Bowie and S. G. Godbee of Company C; Private Zach McCord of Company H; and Privates James Abercrombie, Jerry Luttrell, J. Thomas Minter, and Jeremiah Moore of Company I. The others are Lieutenant James P. Roland, Co. G, 3rd Arkansas Cavalry, and Private John B. Woods, Company C, 3rd South Carolina Cavalry. Lilian Henderson, Roster of the Confederate Soldiers of Georgia, 6 vols., (Harpeville, Georgia: Longino & Porter, Inc., 1959-1964), Vol. 3, pp. 689, 691, 737, 743, 749, 750, 751; “Our Fallen Defenders,” Charleston News & Courier, May 1, 1878; “A Sacred Saturday,” The People (Barnwell, SC), May 13, 1886; “Fallen, Not Forgotten,” The Barnwell People, April 30, 1891; “A Glance at the Long Ago,” Bamberg Herald, April 20, 1905.

² The role of the Memorial Association in commemorating the battle is treated briefly by Daniel J. Bell in



The mass Confederate grave in the Rivers Bridge Memorial Grounds. The large monument was erected over the gravesite in 1878.

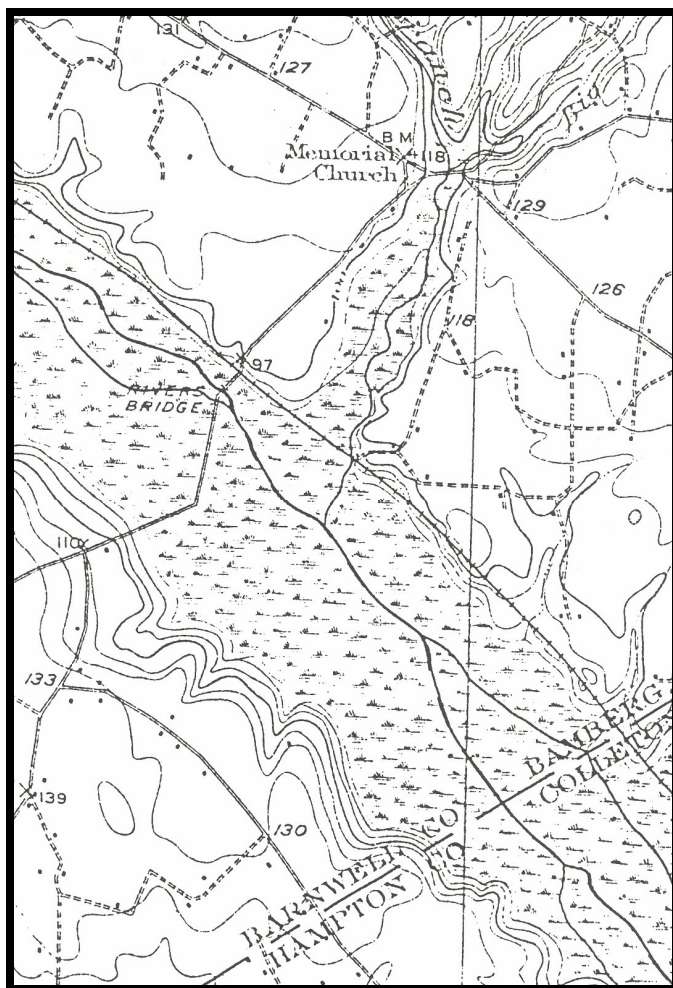
“Epilogue - Our Confederate Dead,” on pages 13 through 16 of the Visitors Guide. A more extensive examination of the role of the annual memorials at Rivers Bridge is found in the “The Glory of the Vanquished.” For a brief discussion of the meaning and use of “commemorative layers” on battlefields, see the Vimy Declaration for the Conservation of Historic Battlefield Terrain, Draft #5, December 18, 2001, pp. 2, 5. The Memorial Grounds are outside the bounds of the present study but will be treated in a future research report on the origins and features of the area. The significance of the commemorations at Rivers Bridge has been recognized in one of the interpretive theme statements for the site. See Appendix III: Mission Statement and Interpretive Themes, Rivers Bridge State Historic Site.



Confederate memorial service at Rivers Bridge, 1950. The large monument in the foreground was erected in 1948 in honor of local men killed in World War II. Seven World War II casualties and veterans are buried at the site.

The Confederate field fortifications apparently came to be preserved through a combination of natural and historical processes. The battlefield maps show that the flat high ground behind the works had been cultivated in 1865. Local lore has it that the area around the earthworks quickly came to be viewed as hallowed ground, sanctified by the blood of the Confederate dead, and was never again farmed. That explanation is certainly plausible, given the devotion shown by local communities to the preservation of the battle's memory at the Memorial Grounds. Practical considerations might also have played a role in the preservation of the works. It probably was not possible to plow over the works, since they had been built just below the crest of a bluff. If the flat ground behind the works ever was farmed after the war, the earthworks might have formed a convenient boundary—an earthen fence—for a cultivated field. However the land around the Confederate fortifications was used, trees must have grown nearby to cover the works with leaf litter and thus keep them from eroding down the bluff.

In the early 1900s the swamp was logged by J. H. and R. W. Schofield, owners and operators of the Salkehatchie Lumber Company. The Schofields bought 7200 acres of swampland on both sides of the river in four adjacent counties and laid a narrow-gauge railroad line parallel to the river, with logging spurs running into the swamp at 600-foot intervals. Their company cut cypress from the swamps, skidded the logs out onto logging cars, and hauled the timber to a mill several miles north of the battle site. Salkehatchie Timber was still in operation in 1917, and its logging railroad appeared on a 1919 topographic map of the region.³



The logging railroad of the Salkehatchie Timber Company, as shown in this 1919 topographic map, runs just below the bluff line that contains the Confederate earthworks.

³ Thomas Feters, Logging Railroads of South Carolina (Forest Park, Illinois: Heimburger House Publishing Company, 1990), pp. 159-160. I am grateful to Jason Zettler, forester for the Kearsse Land and Timber Company, for bringing this valuable reference to my attention. U.S. Department of the Interior Geological Survey, War Department, Corps of Engineers, U.S. Army, South Carolina, Olar Quadrangle, 1919, 1:62,500 (15 minute series).

Preservation of the Battlefield – John D. Jenny Park, 1939 to 1945

During much of the late 1800s and early 1900s, the land that included most of the Confederate earthworks belonged to local farmer John D. Jenny. At age fifteen he had witnessed the battle of Rivers Bridge and was briefly held by Federal forces. Later he became a prominent landowner and well-known supporter of the Rivers Bridge Memorial Association.⁴ In 1939 John D. Jenny gave the Memorial Association eight acres that included remains of the Confederates' field fortifications. The section Jenny donated was on the northwest side of the causeway road. It included most of the infantry breastworks and one of the artillery emplacements. The Memorial Association promptly conveyed the tract to Bamberg County, stipulating that the Association would manage and control it.⁵

The Memorial Association worked to open the tract to the public. A local account of the 1939 memorial service noted that the battle was not fought at the memorial grounds, "as many people have an idea," but on the land adjacent to the Salkehatchie recently donated by John D. Jenny. "It was partially cleared and a road built from the highway to the old breastworks before the exercises Friday," the article continued. "Mute evidence is still seen of the struggle of the Confederates to prevent Sherman's army from crossing the Salkehatchie, trenches and gun mountings being almost as they were in 1865."⁶ That the area had to be partially cleared implies that this portion of the battlefield, at least, had been allowed to revert to forest for some time.

In 1940 heavy rains unearthed two skeletons at the Memorial Association's tract on the battlefield. "Continuous rainfall" had washed the skeletons from the fortifications, "where they

⁴ Brief biographical sketches of John D. Jenny are found in "Capt. Jenny Outlives His Life Expectancy," Bamberg Herald, May 10, 1945, and "John Daniel Jenny, Oldest S.C. Mason, Dies Near Fairfax," Charleston News & Courier, Jan. 12, 1946. For a glowing description of Jenny's farm, see "Our Trip to Rivers' Bridges," The Barnwell People, May 12, 1898. The stories of Jenny watching the battle from a tree and being captured by Union troops while grazing his mother's cow appear frequently in newspaper reports of the memorial services at Rivers Bridge from the 1930s and 1940s. Representative accounts are found in "Veterans, Witness at Yesterday's River's Bridge Celebration," Charleston News & Courier, May 1, 1937, and "Oldest at Memorial," Bamberg Herald, May 15, 1941.

⁵ John D. Jenny to Trustees of Rivers Bridge Monumental and Memorial Association, Feb. 16, 1939, Bamberg County Clerk of Court's Office, Bamberg, South Carolina (hereafter cited as Bamberg County Deeds), Deed Book Y, p. 230; Trustees of Rivers Bridge Monumental and Memorial Association to Bamberg County, Feb. 1939 (no date given), *ibid.*, Deed Book Y, p. 237.

⁶ "Folks and Things," Bamberg Herald, May 11, 1939.

were buried immediately after the battle,” according to contemporary news reports.⁷ Another article stated that the skeletons had been found on the battlefield “by workers engaged in clearing and cleaning the grounds.”⁸ The skeletons were presumed to be the remains of Confederate dead. They were placed on display for a period of visitation in a brick building at the Memorial Grounds appropriately called the relic room. At that year’s memorial service the bones lay in a single casket covered with a Confederate battle flag and then were buried with military honors in the enclosure around the mass grave of the Confederate dead.⁹ While details about the discovery of the remains may be unknown, it is apparent from these accounts that vegetation was being cleared from the Confederate earthworks in this area, subjecting the works to erosion from rainfall.

On April 6, 1941, the eight-acre site was opened to the public as John D. Jenny Park. The Confederate earthworks were the central feature of the park, which was in the process of being “beautified” under the direction of local home demonstration agent Dora Dee Walker.¹⁰ By the following year Mrs. Walker’s work had resulted in the “embankment”—apparently the face of the bluff, the Confederate works, or both—being covered with “lovely Dorothy Perkin roses.” Other additions to the battlefield by 1942 included a “covered bandstand, around which are many lovely rustic benches.” There were also more permanent alterations. “Driveways encircle the park, permitting one to see the waters of the Salkehatchie on the one side and the battleground on the other.” The driveways apparently were unpaved. A flight of cement steps was built into the face of the bluff “to enable one to view in detail the breastworks” and was said to contain the footprints of John D. Jenny and Dora Dee Walker.¹¹

⁷ “Rivers’ Bridge Program Slated,” Bamberg Herald, May 2, 1940; “Bamberg Rivers’ Program Slated,” Charleston News & Courier, May 21, 1940.

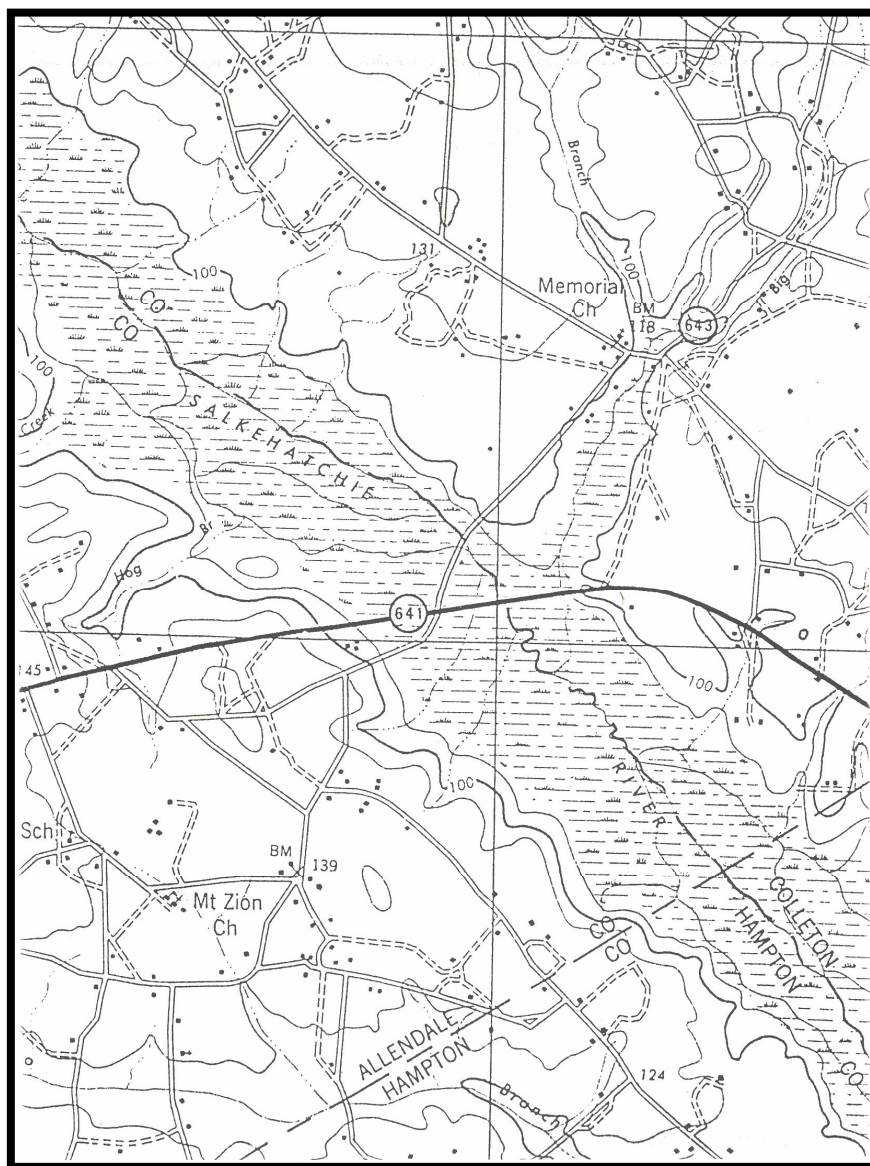
⁸ “Folks and Things,” Bamberg Herald, May 9, 1940.

⁹ “Annual Memorial Is Set for Friday,” Bamberg Herald, May 9, 1940; “3,000 Attend Rivers’ Bridge Exercises,” *ibid.*, May 16, 1940. If anyone ever suggested that the remains might have been of Union soldiers, no mention of it has yet been found.

¹⁰ “To Dedicate Park At Rivers Bridge,” Bamberg Herald, March 27, 1941; “John D. Jenny Park Dedicated Sunday,” *ibid.*, April 10, 1941.

¹¹ “Rivers Bridge, A Shrine of Old South,” Charleston News & Courier, May 3, 1942.

Also some time around 1941 present-day South Carolina Highway 641 was built across the Salkehatchie near Rivers Bridge.¹² This paved two-lane highway ran east-west across the swamp and cut directly across the old earthen causeway road that figured so prominently in the battle.



Rivers Bridge after the construction Highway 641. Note how the new paved road bisected the old causeway just north of the dogleg bend. U.S. Department of the Interior Geological Survey, War Department, Corps of Engineers, U.S. Army, South Carolina, Olar Quadrangle, 1943, 1:62,500 (15 minute series).

Speaking at the dedication of John D. Jenny Park, state senator J. Carl Kearse remarked how the state had appropriated \$1000 for the site the previous year and intended to provide the

¹² The Highway 641 bridge across the swamp was erected in 1941. Lee Floyd, South Carolina Department of Transportation, personal communication, March 23, 1998.

same amount that year. Kears expressed the hope that one day the site would become a national or state park.¹³ That hope became a reality four years later. Between 1940 and 1944 the Memorial Association acquired several additional tracts of land. In June of 1941 John D. Jenny donated 137 acres on the northwest side of the old main road, a parcel bounding on the river and Jenny Park.¹⁴ Three years later the Association purchased the 133 acres that lay between the 137-acre Jenny tract and the Memorial Grounds.¹⁵ Together with John D. Jenny Park and the Memorial Grounds, these acquisitions brought the Association's total landholdings at Rivers Bridge to 286 acres.¹⁶ In 1945 the Association transferred this property to the South Carolina State Forestry Commission "to become the first historical state park in South Carolina."¹⁷

The Division of State Parks, then a part of the Forestry Commission, clearly intended to manage Rivers Bridge as a recreational area rather than a historic site. In his speech accepting the land, state forester Charles H. Flory "gave a tentative outline for the conversion of the place into a park including a play field, facilities for picnickers and possibly a swimming pool."¹⁸ The annual report of the state Forestry Commission for 1945 mentioned a master plan for Rivers Bridge, "contemplating a complete re-grouping as well as an expansion of facilities, the provision of water, power and sewage systems, construction of a superintendent's house with

¹³ "John D. Jenny Park Dedicated Sunday," Bamberg Herald, April 10, 1941.

¹⁴ John D. Jenny to Rivers Bridge Monumental and Memorial Association, June 18, 1941, Bamberg County Deeds, Book Z, p. 93. Jenny later conveyed his life estate in the property to the Association for \$200.00. John D. Jenny to Trustees of Rivers Bridge Monumental and Memorial Association, Feb. 13, 1945, *ibid.*, Book No. 1, p. 384.

¹⁵ J. F. Coleman et al. to Trustees of Rivers Bridge Confederate Memorial Association, April 27, 1944, *ibid.*, Book Z, p. 681. This tract was conveyed by the heirs of Addie J. Coleman, who had received it from her father, John D. Jenny in 1925, *ibid.*

¹⁶ The Association acquired four acres containing the Confederate burial site sometime between 1891, when a committee of three was appointed to obtain a deed to the site, and 1936, when the Association conveyed the property to Bamberg County, reserving the right to manage and control it. In 1940 the Association obtained a 2-acre parcel adjacent to the Memorial Grounds from three of John D. Jenny's grandchildren. "Fallen, Not Forgotten," The Barnwell People, April 30, 1891; Trustees of Rivers Bridge Memorial Association to Bamberg County, July 20, 1936, Bamberg County Deeds, Book W, p. 454; Zenith C. Hartz et al. to Trustees of Rivers Bridge Memorial Association, March 1, 1940, *ibid.*, Book Y, p. 349; Trustees of Rivers Bridge Monumental and Memorial Association to Bamberg County, April 3, 1940, *ibid.*, Book Y, p. 440.

¹⁷ Trustees of Rivers Bridge Memorial Association to South Carolina State Forestry Commission, May 11, 1945, Bamberg County Deeds, Book No. 1, p. 477; "Rivers Bridge Land Given for State Historical Park, Charleston News & Courier, May 12, 1945.

¹⁸ "Rivers Bridge Land Given for State Historical Park," Charleston News & Courier, May 12, 1945.

service adjunct, restoration and preservation of the historic section, and other requisites for the ultimate development of a complete recreational and historic park.”¹⁹

Preservation of the Battlefield – Rivers Bridge State Park, 1945 to 1997

The state acquired a 105-acre tract of land in 1945 adjacent to the John D. Jenny Park land and the 137-acre parcel conveyed by Jenny to the Memorial Association. This tract lay to the southeast of the old causeway road and contained additional remnants of the Confederate earthworks running from the road to the left of the Southern line.²⁰

All the improvements envisioned by State Forester Flory for the now 390-acre park were implemented in the following decades. As Rivers Bridge State Park, the site included a swimming pool, community building, playground, picnic shelter, campground, restrooms, two staff houses, and a shop. Most of these recreational amenities and support structures were built at locations away from where the combat occurred. The shop and one residence were built near where the Union pursuit of the retreating Confederates halted, though, and the campground and pool were located adjacent to the historic main road over which the Confederates withdrew.

Additional landscape changes came in the form of fire lanes and roads. Fire lanes, roadways plowed through trees to contain forest fires, were a reflection of the primary mission of the Forestry Commission, the parent agency of the South Carolina State Park Service until 1967. Numerous fire lanes can be seen in successive aerial photographs of Rivers Bridge dating from 1948. Also noticeable on successive aerials is the spread of forest cover over areas that had once been cleared.

¹⁹ Report of the State Commission of Forestry for the Year July 1, 1944 to June 30, 1945 (Columbia, S.C.: Joint Committee on Printing, General Assembly of South Carolina, 1945), p. 77.

²⁰ S. W. Copeland to South Carolina Forestry Commission, Aug. 31, 1945, title and abstracts on file, South Carolina State Park Service.



The Rivers Bridge battlefield as seen from a 1948 aerial photo. SC Highway 641 runs along a roughly east-west course in the bottom third of the photo, bisecting the clearly visible causeway that runs northward into the park. The two roadways shaped like inverted Us on the northwest side of the causeway road (in the upper left quarter of the photo) are the driveways built for John D. Jenny Park. The larger of the two encircles the Confederate earthworks on that side of the road. Note the fire lanes in the state park property. The road in the middle top of the photo, seen running to the northwest from the main road, connects to a park residence. Farming furrows are visible in the cleared fields southeast of the causeway on land that the state purchased from the heirs of Addie J. Coleman in 1945. South Carolina, Bamberg County, 4-25-48-OT-2E-51, RG 145, Cartographic Records (General), Records of the Agricultural Stabilization and Conservation Service (ASCS), 1:20,000, National Archives.



Rivers Bridge from the air, 1952. Note the fire lanes that parallel the main road from the center to upper right of the photo. Note also the second road built to the park residence and the gradual reforestation, particularly to the southeast of the causeway road, since the previous aerial from 1948. The faint penciled arc that curves to SC Highway 641 was drawn by an unknown hand to show the route that State Park Road would take. South Carolina, Bamberg County, 3-7-52-OT-6K-5, U.S. Department of Agriculture, Commodity Stabilization Service, 1:20,000, South Carolina Department of Parks, Recreation and Tourism.

State Park Road, a paved two-lane highway built through the park in 1954-55, connected State Secondary Road 31 at the north end of the park to State Highway 641 just beyond its southeastern corner. State Park Road curved across the old causeway road. The portion of the

causeway road that spanned the swamp during the battle was closed at about this same time. State Park Road and State Highway 641 altered the historic transportation pattern of the area, but their construction probably prevented the earlier historic routes from being paved over had they continued in use.



Rivers Bridge after the construction of State Park Road from a 1963 aerial photo. Despite the grease crayon notations that mar this image, the photo clearly shows how State Park Road changed the traffic flow through the park. The gradual reforestation of the property is also apparent, as are the curving roadways built through the Memorial Grounds, site of the Confederate field hospital, in the upper right corner of the aerial. Circled in blue in the lower right corner is a dike to impound Three-Mile Creek. Not visible in the previous aerials, this dike appears to have been reconstructed at about the same site as the one depicted on the 1865 battlefield maps. South Carolina, Bamberg County, 3-23-63-PD-5DD-225, U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service, 1:20,000, Map Collection, Thomas Cooper Library, University of South Carolina.



Rivers Bridge in a 1968 aerial photo. The causeway is barely visible, and the state-purchase tract to the southeast of the causeway road is almost completely reforested. Note also that the extreme right of the photo shows Three Mile Creek once again dammed as it was in 1865. South Carolina, Bamberg County, 2-26-68, OT-5JJ-160, U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service, 1:20,000, South Carolina Department of Parks, Recreation and Tourism.



Rivers Bridge in 1973. The causeway is more visible in this aerial photo, but the John D. Jenny Park section and the tract across the causeway road from the old Jenny Park have come under thicker tree cover. South Carolina, Bamberg County, A-40 3-13-73 45009 173-228, U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service, 1:40,000, Map Collection, Thomas Cooper Library, University of South Carolina.



Rivers Bridge in 1981. The part of the battlefield containing the Confederate fortifications has become heavily forested. Landscape features easily traced in earlier aerials have become obscured by the tree cover. South Carolina, Bamberg County, 5-3-81 45009 278-60, U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service, 1:20,000, Map Collection, Thomas Cooper Library, University of South Carolina.

In 1972 the entire 390-acre site was listed on the National Register of Historic Places, and plans for intense historical and archeological studies of Rivers Bridge were announced.²¹ Little was actually done, though. For most of this period the state's management of Rivers Bridge State Park could best be characterized as caretaker or custodial management, with most attention directed to grounds and building maintenance. Trash dumps were dug on a part of the park not

²¹ "Rivers' Bridge Battle Site Study Planned," Charleston News & Courier, Dec. 6, 1970.

considered significant, and a variety of discarded materials were thrown into wooded areas not open to the public.²² Rivers Bridge was a disjointed site, with a battlefield, long identified simply as “Confederate breastworks,” at one end; a commemorative area, the Memorial Grounds, at the other; and a recreational park in between. Rivers Bridge was specifically cited in an entry on battlefields in the *Encyclopedia of Southern Culture*. After describing Rivers Bridge as a typical example of a state-owned battlefield park that had evolved from a burial ground, the author then pointed out how recreation took precedence over history at such sites:

In southern state parks history certainly takes a back seat to fishing, boating, hiking, or just about anything else. The parks are there and the Civil War themes are loudly proclaimed, but for the most part there does not seem to be a great deal of interest in preserving Civil War battle sites.²³

The article’s author attributed the lack of interest in preserving these state sites to the fact that so many were scenes of Southern defeat.²⁴ The emphasis on recreation at Rivers Bridge was probably due more to the nature of the agency that managed it, not to the fact that it was the site of a Confederate defeat.

The State Park Service did make efforts to interpret the portion of the park containing the earthworks. In the early 1970s an interpretive sign was installed on the grounds to tell the story of the battle, but besides being inaccurate it was placed in a location that required readers to walk over the remains of the parapet. It was replaced by two signs in the early 1990s. These new signs were better situated on the field, but they still did not tell the story of the battle in a complete or coherent manner, and they failed to direct visitors over the field in a way that would help preserve the battlefield remnants. Most visitors learned of the battle of Rivers Bridge through an encampment of Civil War reenactors. First held in 1988, the annual encampment drew hundreds of participants and spectators, with most coming for a reenactment of the battle

²² Old building materials and other trash can be found scattered between the Confederate defenses and the line of Union breastworks and east of the Union works in the woods around the park shop. The large trash burial site is on the headland east of the causeway road and less than half a mile to the rear of the Confederate works. The mounds created by the digging prompted a Boy Scout leader to assume they were Civil War earthworks. A large borrow pit of unknown origins is off the old causeway road southwest of the present campground.

²³ Walter Edgar, “Battlefields,” in Charles Reagan Wilson and William Ferris, eds., *Encyclopedia of Southern Culture* (Chapel Hill: University of North Carolina Press, 1989), p. 599.

²⁴ *Ibid.* Speeches given at the annual commemorations so frequently celebrated the gallant Confederate defense of Rivers Bridge that they virtually negated the Confederate defeat. Bell, “The Glory of the Vanquished.”

that took place on the grounds and in the works. Despite careful attempts by reenactors and State Park Service Staff to limit damage by controlling access to the earthworks, visible damage occasionally occurred. Repeated vehicle trips over the unpaved bed of the historic causeway road left the road rutted and subject to erosion.²⁵

Preservation of the Battlefield – Rivers Bridge State Historic Site, 1997 to the Present

Custodial management of the site directly affected the remains of the earthworks. Anecdotal evidence tells of artifact hunters with metal detectors picking the site clean.²⁶ Visitors were allowed to drive all the way to the edge of the Salkehatchie River. Without controls on parking and access, historic roads at the battlefield were subject to wear and erosion, and the remains of the Confederate works were sometimes damaged by people driving over the parapets and trenches. A few stopgap measures to preserve the earthworks were implemented by State Park Service staff. Railroad ties were laid at the base of the bluff leading to the earthworks and two pairs of upright posts were sunk into the parapet at selected locations to keep four-wheel-drive vehicles off the works. In a project to control erosion launched in 1992, the agency cut down several trees in the Jenny Park section of the battlefield to provide increased sunlight to the works and then hydroseeded the area with native grasses. The effort failed.²⁷ Little was accomplished until the State Park Service made a renewed institutional commitment to this site and all its properties.

In 1997 the State Park Service formally redefined its mission to focus on strategic management of its resources. Stewardship of the resources under its control became one of the major emphases of the agency. The Park Service classified a number of its properties as special

²⁵ A battle reenactment was also held in and around the original works in 1965 during the Civil War Centennial. Nothing has been found to indicate that the site was altered in any way by this event, which is said to have attracted 5000 spectators. "Rivers Bridge Battle To Be 'Fought' May 7," Charleston News & Courier, April 20, 1965; "Rivers Issues Challenge At Battle Re-Enactment," *ibid.*, May 8, 1965; Program Commemorating Three Battles of South Carolina History (Aiken, S.C.: Tidwell Printing, 1965), pp. 2, 6; personal communication, Mr. Herman Boland, Aiken, South Carolina, October 30, 2003.

²⁶ This evidence was supported by the preliminary findings of a metal detector survey of the battlefield that the State Park Service sponsored in 2000. A final report from this survey had not been prepared as of the writing of this document.

²⁷ Records of the project detailing the number and location of trees cut, the seed mixture used, and costs, have not been found. This work apparently was prompted by selective reading or misreading of the 1987 Earthworks Landscape Management Manual. Andropogon Associates, Ltd., Earthworks Landscape Management Manual (Philadelphia: Mid-Atlantic Regional Office, National Park Service, 1987).

resource parks, where the primary management consideration would be the preservation of the sites' natural and cultural features with a strong emphasis on sustainable management practices. Eight special resource parks were designated as historic sites. One of these was Rivers Bridge. Long known as Rivers Bridge State Park—and, significantly, to many local residents as Rivers Bridge Confederate Memorial State Park—the site is now officially Rivers Bridge State Historic Site. The site's mission statement and interpretive themes now formally declare that Rivers Bridge is significant for its particular historical associations and will be managed and interpreted accordingly.²⁸

The change in focus and management prompted a number of changes to the physical landscape at Rivers Bridge. The bandstand built in front of the Confederate works when the site was opened as John D. Jenny Park was removed as an inappropriate visual intrusion in 1999. The encampment and reenactment held at Rivers Bridge since the late 1980s ended in 2001 after State Park Service staff and local reenactors agreed that the site could no longer bear the event without doing irreparable damage to the earthworks and other historic resources. The swimming pool, an inconsistent recreational use that was also a drain of money and resources, was removed in the summer of 2002. A battlefield interpretive trail, with eleven waysides telling the story of the battle in chronological order, was opened in 2003 in the portion of the battlefield that was once John D. Jenny Park. To minimize physical impact on the site, the trail followed already existing roadbeds and did not cross the earthworks at any point. Access to the battlefield is now much more controlled and parking is limited to an area well to the rear of the breastworks. At the time of the writing of this report, the campground was scheduled to close on November 29, 2004.

²⁸ South Carolina State Park Service, "The Vision for the 21st Century," 1997. See also Appendix III: Mission Statement and Interpretive Themes, Rivers Bridge State Historic Site, and Daniel J. Bell and Bryan Scott Enter, "Giving Voice to a Little Known Battlefield: South Carolina's Rivers Bridge State Historic Site," *CRM* Vol. 25, No. 4 (2002), pp. 42-43.

CHAPTER 6

The Battlefield Landscape Today

The land under study for this project can be best understood when broken down into several distinct yet connected component areas. All but one of these component areas are within the southern end of Rivers Bridge State Historic Site. Two are in the part of the site designated as the Rivers Bridge Battlefield, which is entered through a gate off of paved State Park Road. For simplicity's sake, this latter part of Rivers Bridge State Historic Site will hereafter be referred to as the “Battlefield” with a capital B. The dirt bed of the old causeway road serves as the driveway into the Battlefield. Beyond a parking area the roadbed continues to the Salkehatchie River.



The “Battlefield” at Rivers Bridge State Historic Site. The paved road curving to the left is State Park Road. Entrance to the battlefield is over the dirt road behind the gates.

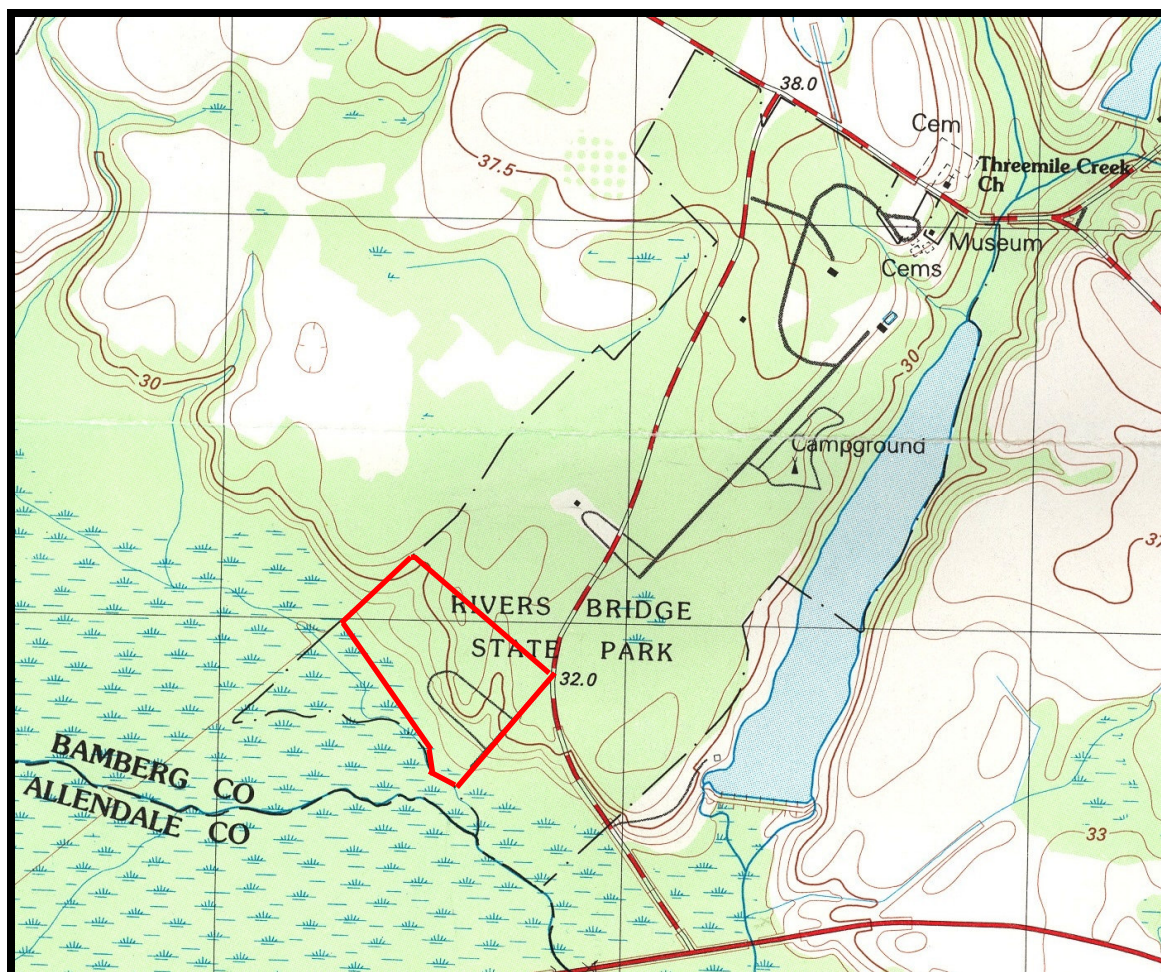


The causeway road going through the Battlefield, looking southwest toward the swamp. The old John D. Jenny Park section is to the right. Waysides from the site's interpretive trail are visible along the road.



The end of the causeway road at the Salkehatchie swamp in the Battlefield at Rivers Bridge State Historic Site. Remains of one of the bridges are visible at the edge of the water. Another portion of the causeway can be seen across the water.

Component Area 1: Rivers Bridge State Historic Site, Battlefield, Jenny Park Section



First component area of the project: the former John D. Jenny Park section of the Battlefield at Rivers Bridge State Historic Site. Rough component area boundaries on this and subsequent maps are shown in red.

The portion of the Battlefield on the northwest side of the causeway road includes the area once known as John D. Jenny Park and part of the 137-acre tract donated to the Memorial Association in 1941. The Confederate earthworks are most visible and most accessible here. They are very legible, too, meaning that their form and function can be easily discerned and interpreted. They are in generally good condition. They sit on a low bluff overlooking low ground at the heavily wooded edge of the Salkehatchie swamp. The works consist of an indented line of infantry breastworks characterized by a parapet with a ditch in the rear. An artillery emplacement made up of a parapet with a ditch in front is contiguous with the infantry works and occupies the highest part of the bluff. (This emplacement will hereafter be referred to

as “artillery emplacement 1.”) Cover for the works is provided by hardwoods and a few pines. There is little or no underbrush.



Portion of the well-preserved Confederate infantry parapet and ditch in the John D. Jenny Park section of the Battlefield. Looking northwest from artillery emplacement 1.



Front of the Confederate infantry parapet in the Jenny Park section, looking southeast toward artillery emplacement 1.



Artillery emplacement 1, showing the parapet and ditch in front, looking east.

The creek bed seen on the battlefield maps cuts through the headland and bisects the parapet and trench of the works in this section. This feature creates a break of about 22 feet between the works on either side. Water does not constantly flow through the feature; it stays dry during periods of scarce rain or drought. The creek bed drains a wooded depression known as a “gum pond” that is northeast of the park shop and just west of State Park Road. Behind the works, the narrow creek bed sits in a shallow gully. In front of the works, the creek bed runs through gently undulating ground that gradually flattens out closer to the river. This is not the deep gully suggested by the battlefield maps.



The creek bed where it bisects the Confederate works, looking southeast.



The creek bed in front of the works looking north.

A low elongated mound in front of and perpendicular to the works is just to the northeast of the causeway road. Until this study, this particular feature was not understood. Behind the works is a largely open field that extends to a narrow dirt lane that parallels the works. Beyond the lane to the northeast is a wooded area.



Looking north toward the Confederate fortifications in the old Jenny Park section of the Battlefield. The long, low mound perpendicular to the works is barely visible at the base of the trees in the middle distance of the photograph running from left to center.

This area that was once John D. Jenny Park is the most open, intensely managed, and publicly accessible part of the Battlefield. It contains the site's battlefield trail, the only part of the Battlefield that is currently interpreted to the public on a regular basis. The trail follows the historic causeway road and the paths and roadways that had been developed for John D. Jenny Park. Running to the northwest into the swamp beyond one part of the trail is the earthen bed of the narrow gauge railroad from the Schofield brothers' logging operation.



The head of the battlefield interpretive trail at Rivers Bridge State Historic Site, looking southwest down the causeway road toward the swamp. This is the first of eleven waysides in the trail.



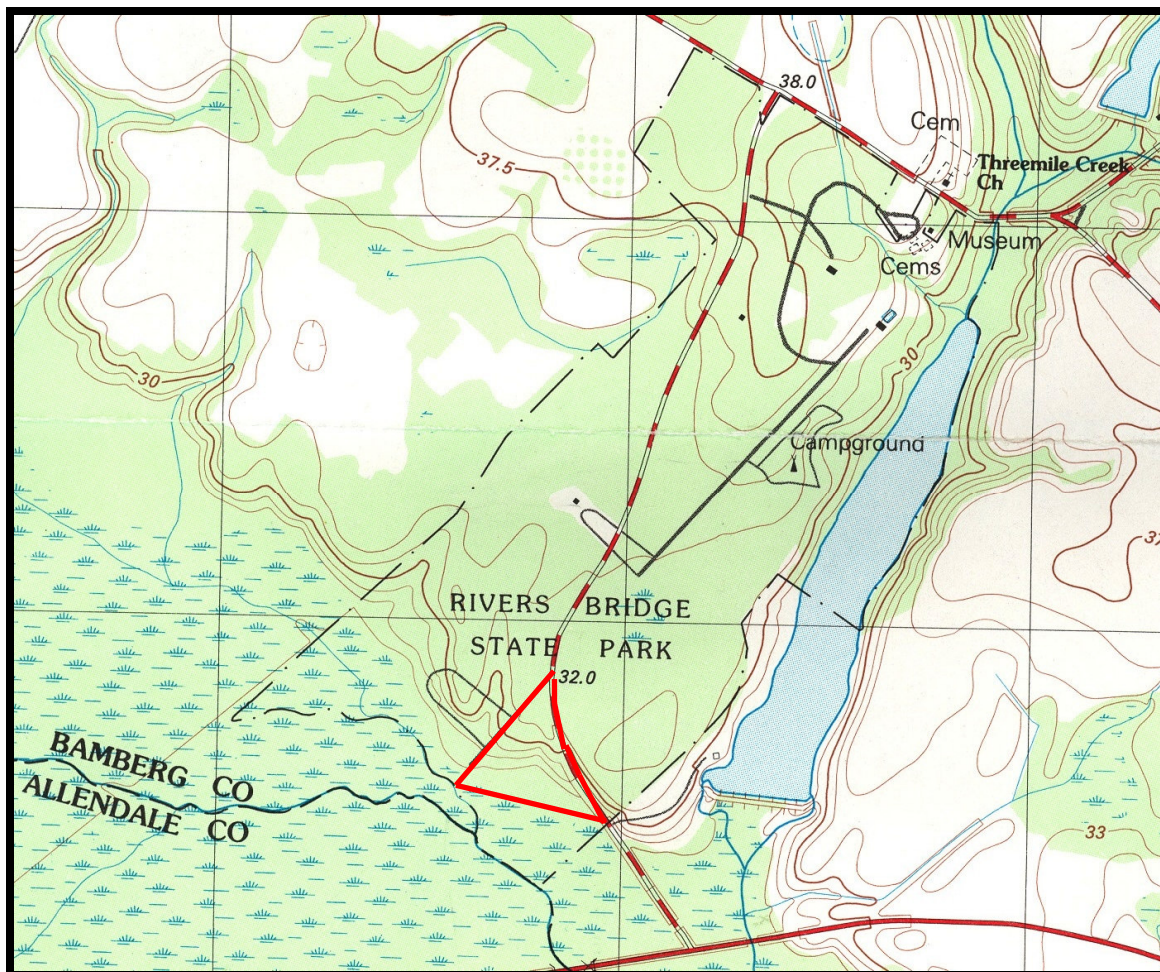
Part of the battlefield interpretive trail at Rivers Bridge State Historic Site at one of the driveways built for John D. Jenny Park. The driveway, just beyond the sign, runs in front of the base of the bluff where the Confederate fortifications sit. The concrete steps built for Jenny Park are seen ascending the bluff in the left background.

The concrete steps built into the face of the high ground for Jenny Park still remain but are no longer used; John D. Jenny's footprints are visible in the top step. No steps containing Dora Dee Walker's footprints, mentioned in a 1942 account of the park, have been found.



John D. Jenny's footprints in the top step of the flight of stairs up the bluff.

Component Area 2: Rivers Bridge State Historic Site, Battlefield, 1945 State Purchase



Second component area of the project: part of the Battlefield tract purchased by the State Forestry Commission in 1945.

The land on the southeast side of the causeway road in the Battlefield is part of the property the State Forestry Commission purchased in 1945. It is bound by the causeway road, the swamp, and State Park Road. This section is not accessible to the public. It includes portions of the Confederate earthworks. Thicker woods and underbrush make the works less accessible and not immediately apparent to the public. Once one is in the area, though, the works are visible and fairly well-defined. Most of the infantry breastworks here are very legible and in good condition. They consist of a parapet with ditch in rear running along an indented line. They peter out near where State Park Road curves to the southeast to its juncture with State Highway 641.



Rear of the Confederate infantry fortifications in component area 2, looking southeast, showing the ditch and parapet and heavier vegetation.



Extreme left flank of the Confederate infantry fortifications, component area 2, looking northwest at the end of the ditch and parapet.

The artillery emplacement shown on the battlefield maps near the road (hereafter referred to as “artillery emplacement 2”) was not positively identified until the field mapping for this study was underway. The earthworks immediately adjacent to the road are a confusing jumble of mounds and depressions. One mound lines up with the infantry trench on the other side of the causeway road. In front of it is a low depression, followed by another roughly triangular-shaped mound that gradually descends alongside the road toward the swamp. An apparent road trace coming off the causeway road runs in front of this last mound. Until this study, the trace was thought to be the secondary road that appears behind the works on the battlefield maps. Attempts to follow this road trace past the fortifications have been perplexing and ultimately unsuccessful. It will be recalled that the battlefield maps show this secondary road running in an easterly direction across a dike impounding some sort of pond. The owner of the adjoining property has a dammed pond at about the same location, and these features appear in several of the aerial photos. This area has always been the most puzzling part of the Battlefield.



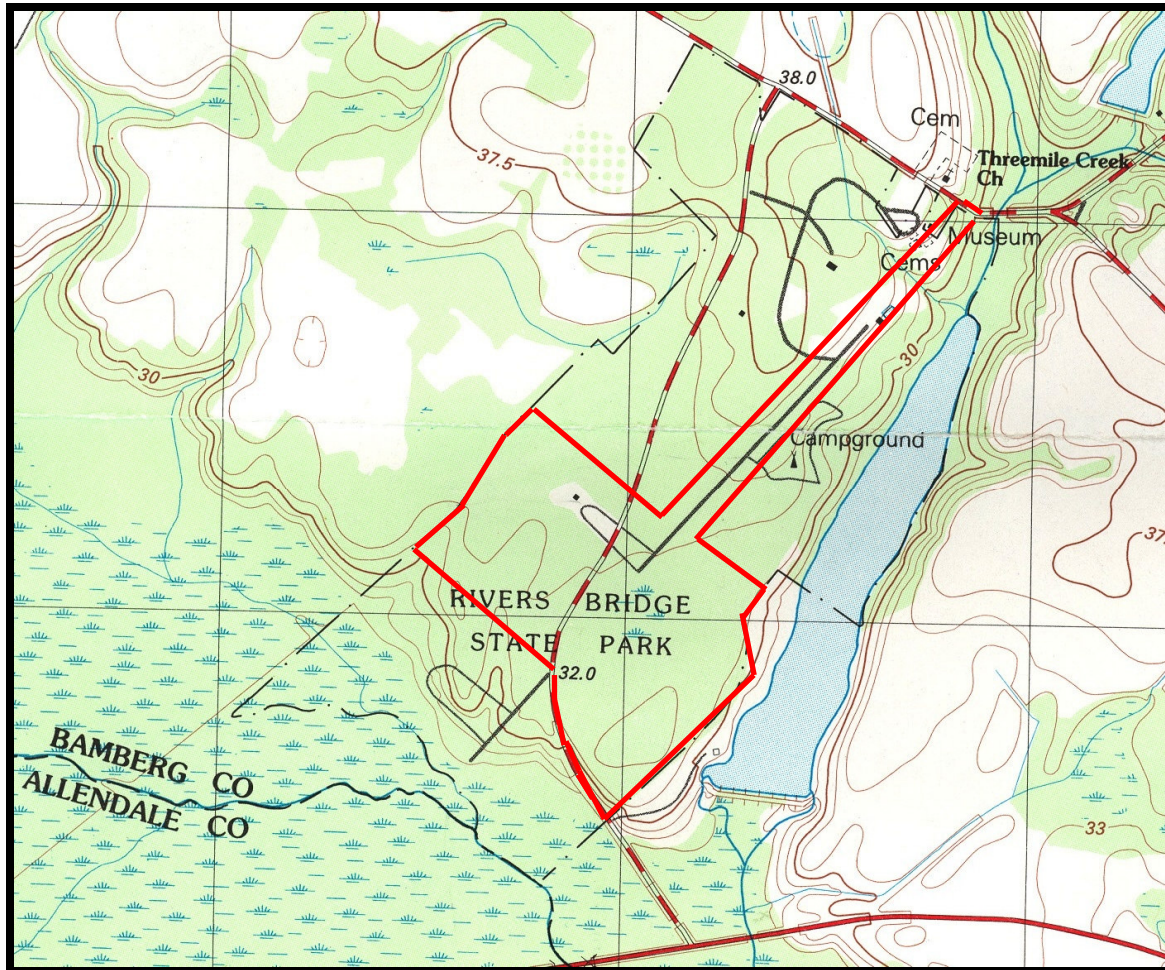
Confederate fortification remains to the southeast of the causeway road at Rivers Bridge State Historic Site, looking northeast. The causeway road is in the foreground. The low, roughly-triangular shaped mound mentioned in the text is in the center of the photograph. The apparent road trace running into the works is to the right of the mound. Another depression is barely visible to the left of the mound; beyond it is another mound, which lines up with the infantry works across the causeway road.



The remains of the Confederate fortifications southeast of the causeway road. In this view, looking northwest, the apparent road trace runs diagonally from the left center to the bottom right of the picture. The rough triangular mound is in the center middle distance. To the right of it is the depression in front of the other mound. The latter feature, seen at the extreme right of the photo, lines up with the infantry works on the other side of the causeway road. The causeway road appears as a light line in the background.

The rifle pits that extended the left of the Confederate fortifications in this part of the Battlefield have not been found. State Park Service staff have searched site property in vain for evidence of rifle pits beyond the end of the infantry works and on both sides of State Park Road.

Component Area 3: Rivers Bridge State Historic Site, Battlefield, Confederate Rear



Third component area of the project: land to the rear of the Confederate fortifications and the causeway road leading to the site of the Confederate field hospital at the present-day Memorial Grounds.

The area in the rear of the Confederate line is part of Rivers Bridge State Historic Site but not part of the specifically designated Battlefield. This area was also examined for the mapping project. It is a largely wooded area that extends northeast from the Battlefield on both sides of State Park Road. On the west side of State Park Road are the Union field fortifications. The Union works are about a quarter of a mile from the dirt lane behind the Confederate works. These works are not accessible to the public and are not currently interpreted. They can be reached by following an old fire lane from the Confederate works or by walking a short distance into the woods from the rear of the park shop area. Although covered with woods and underbrush, the Union works are readily visible, legible, and well preserved. They are composed

of a single straight parapet with ditches apparently on both sides. The Union works begin at the western property boundary of Rivers Bridge State Historic Site and end in the woods behind the park shop area. The creek that drains the headland and bisects the Confederate fortifications flows near the eastern edge of the Union works. No additional works or continuation of this line can be seen on the private property adjoining the Site, nor have any additional works been found on state park property. This area contains old Forestry Commission fire lanes and scattered trash sites used in the past by the State Park Service. The rail fence suggested in the after-action report of the 39th Ohio Infantry presumably would have been somewhere to the southwest of these works.



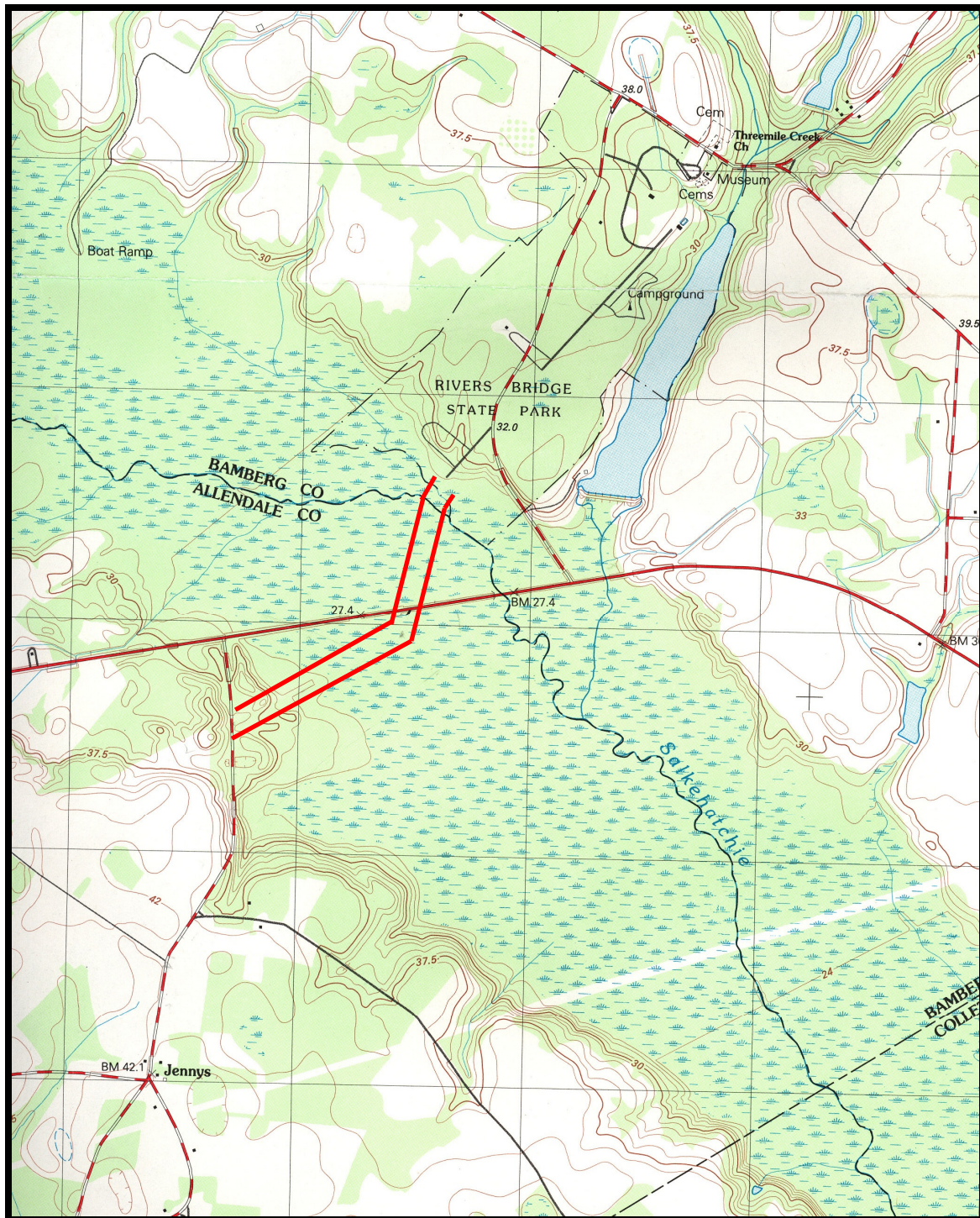
Union fortifications at Rivers Bridge, looking west along the face of the works.

The east side of State Park Road behind the Battlefield is also wooded. It contains the remains of the old causeway road, used today by State Park staff as a service road. The mapping

target in this part of the project area was the causeway road. Here it runs as a dirt roadbed through the park campground. Beyond the campground it continues as a well-defined trace past the site of the park swimming pool and along one edge of the Memorial Grounds. The causeway road finally terminates where it meets State Secondary Road 31. Closer to the Battlefield, this part of the project area also has a number of old Forestry Commission fire lanes, some running parallel to the historic causeway road, and furrows from earlier watermelon farming.¹ The furrows are also visible in the 1948 aerial photo of the site.

¹ Park Technician Timmy Hiers pointed out these watermelon “hills” during a search for additional earthworks on December 1, 2003.

Component Area 4: The Salkehatchie Swamp Causeway (private property)



Fourth and final component area of the project: the remains of the causeway through the Salkehatchie swamp.

To the southwest of Rivers Bridge State Historic Site are the Salkehatchie River and swamp. The swamp is the last component of the project area, containing the remains of the

causeway that Union troops charged over in 1865 and the site of their corduroy road. The swamp is heavily wooded, but the causeway remains visible even in modern aerial photographs, and portions of it can be seen from State Highway 641. The causeway road enters the swamp from Jenny Road, a paved secondary road off of Highway 641, about a mile from the Confederate earthworks at Rivers Bridge State Historic Site. Prior to this project, the causeway and swamp had not been examined in detail.



The causeway road as it enters the Salkehatchie swamp from Jenny Road in Allendale County. The site pictured above is just under a mile southwest of Rivers Bridge State Historic Site.



The remains of the causeway road as seen from State Highway 641, looking north-northeast toward Rivers Bridge State Historic Site.



The causeway remains from State Highway 641, looking southwest away from Rivers Bridge State Historic Site.

PREVIOUS STUDIES

Civil War Sites Advisory Commission Survey - 1992

Rivers Bridge was surveyed in 1992 as part of the national study of remaining Civil War battlefields conducted by the Civil War Sites Advisory Commission (CWSAC). The Commission's survey ranked sites' historical significance, assessed their integrity and the threats to their continued preservation, and prioritized them according to their preservation needs. Four significance rankings from A to D were based on assessments of the battles' effects on the outcome of the war or the campaigns in which they took place. Class A battles had a decisive influence on their campaigns and a direct impact on the outcome of the war. Class B battles exercised direct and decisive influence on their campaigns. Class C battles had an observable influence on the course of their campaigns. Class D battles had a limited effect on their campaigns but were notable for achieving important local objectives. Rivers Bridge was assigned a Class D significance ranking. The site was assessed as having good integrity and a low threat level. The CWSAC 1992 survey established priority levels to address the preservation needs of the battle sites. Highest priority level, Priority I, was given to Class A and B sites facing critical and immediate preservation needs. Battlefields of all significance rankings that exhibited opportunities for comprehensive preservation were assigned Priority II status. Priority III sites were those believed to be in need of some additional protection. Priority IV sites were fragmented battlefields that had lost their integrity or had only poor integrity. Considered to be in need of additional protection, Rivers Bridge was classified as a Preservation Priority III site.²

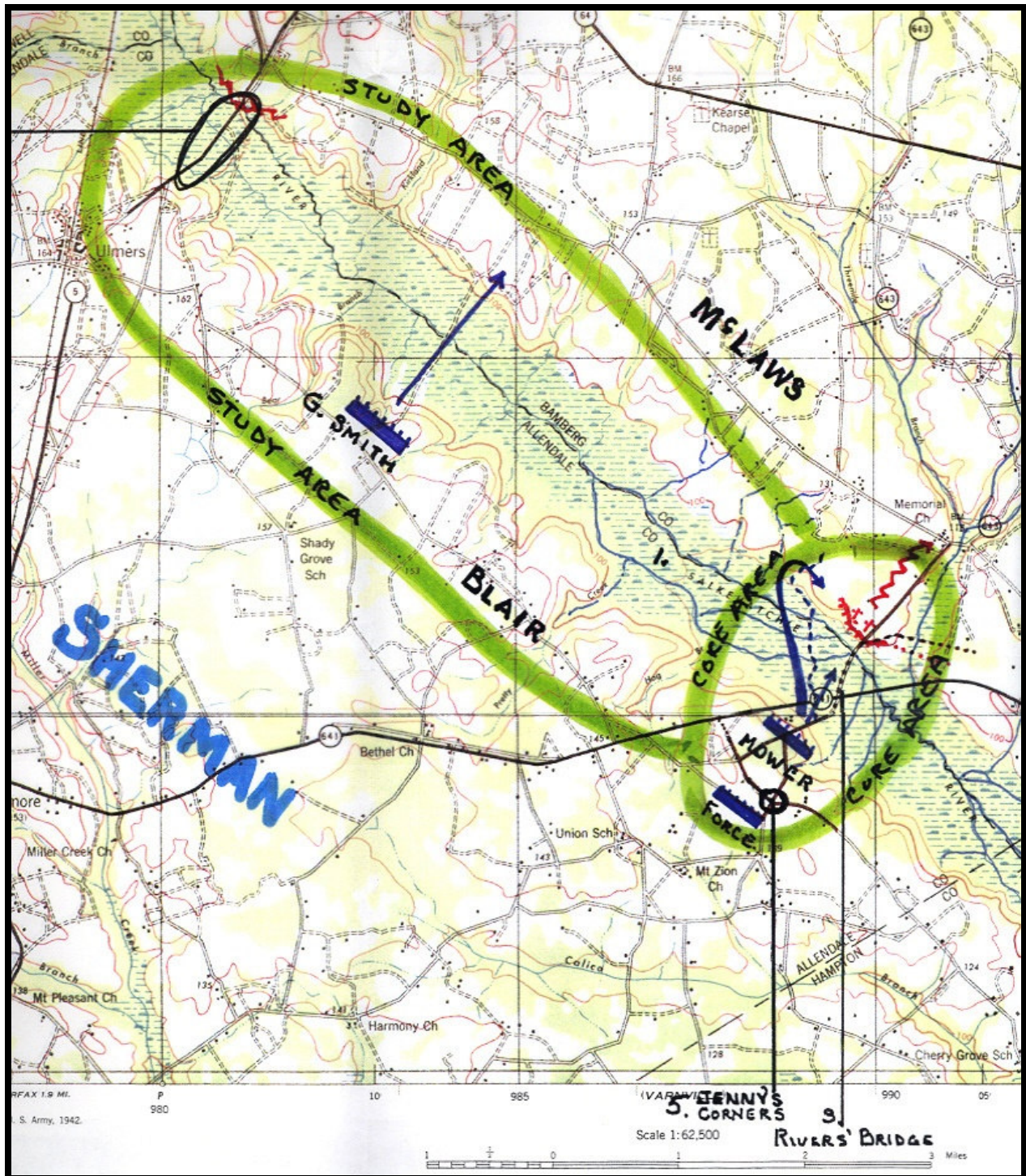
The nature and goals of the Civil War Sites Advisory Commission study precluded a detailed examination of the Rivers Bridge battlefield. The CWSAC survey provided Rivers Bridge some needed recognition but made several errors. All but one of the alternative names for the battle were inaccurate, and the description of the combat had Union troops crossing the Salkehatchie downstream of the site to flank the Confederate right.³ The map prepared during the field survey identified the Rivers Bridge "core area" (the area in which combat occurred)

² Civil War Sites Advisory Commission Report on the Nation's Civil War Battlefields (Washington, DC: National Park Service, 1993), pp. 16-17, 49-53.

³ Civil War Sites Advisory Commission Report on the Nation's Civil War Battlefields, Technical Volume II: Battle Summaries, rev. ed. (Washington, DC: National Park Service, 1998), p. 105. Of the alternative names, only Salkehatchie River can be considered correct. The others—Hickory Hill, Owen's Crossroads, Lawtonville, and Duck Creek—denote sites south and southwest of Rivers Bridge. The location of these sites relative to Rivers Bridge can be seen on Plates LXXIX (79), LXXX (80), and LXXXVI (86), in the OR Atlas.

reasonably well. But the map extended the “study area” (the total area under consideration for the survey) upstream to Buford’s Bridge, the northernmost Salkehatchie River crossing, and misidentified it as Broxton’s Bridge, which is actually downstream from Rivers Bridge. The crossing made by Major General Giles Smith’s Fourth Division of the Seventeenth Corps was thus incorrectly located on the map as being upstream of Rivers Bridge. Jenny’s Corners was also located incorrectly on the map, sited about a half-mile north of its actual location. The position of the Third Division of the Seventeenth Corps, under Brigadier General Manning Force, was placed on the map just south of Rivers Bridge. Force’s division had been about eight miles west of Rivers Bridge on February 2. It did not arrive on the south bank of the Salkehatchie below Rivers Bridge until the 3rd and then did not take part in the battle.⁴

⁴ 1943 Olar quadrangle map, 15 minute series, with hand-drawn notations included in field survey materials for Rivers Bridge, copies provided by the American Battlefield Protection Program. OR, XLVII, Part I, pp. 97, 100, 405-406; Part II, p. 208.

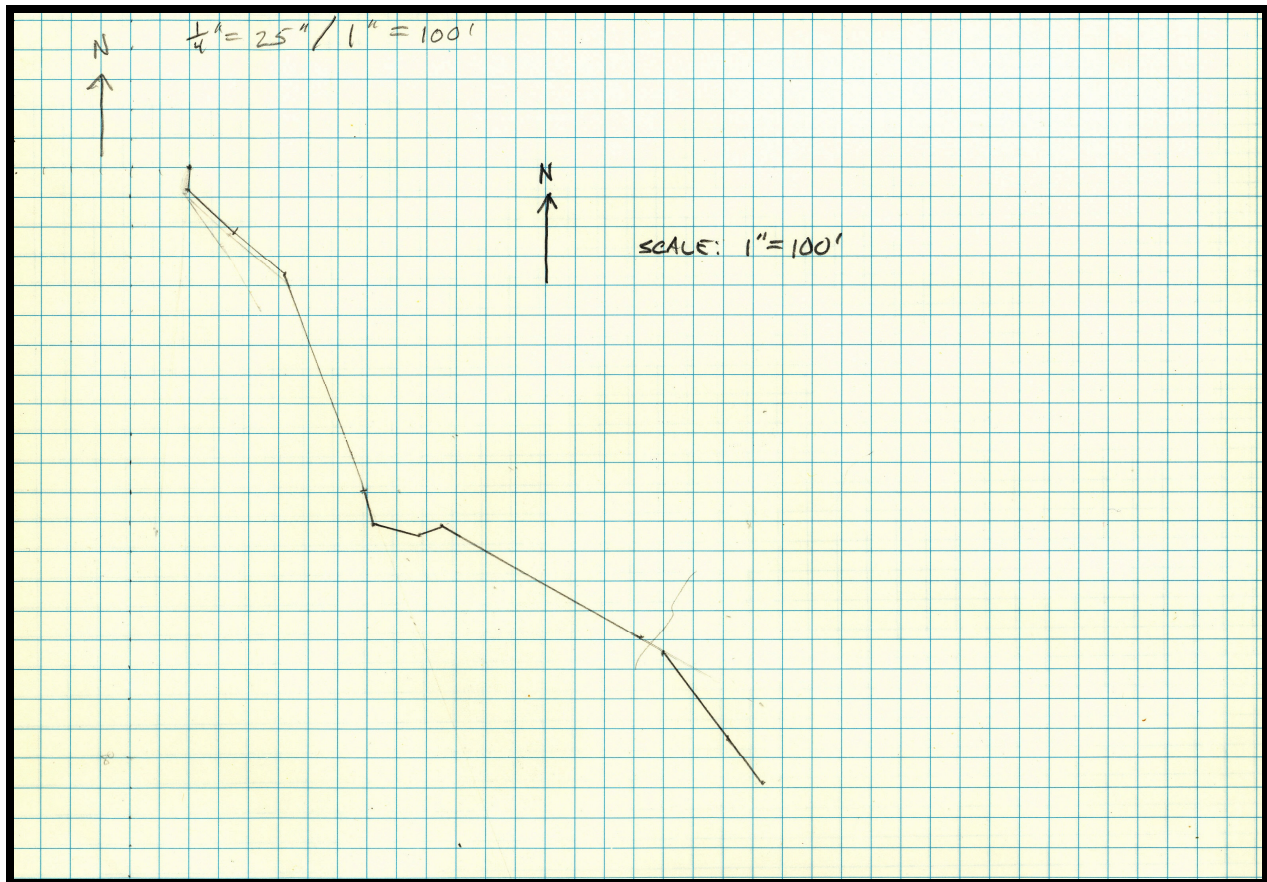


Rough delineation of the core area and study area for the battle of Rivers Bridge, sketched on a 15-minute topographic map, from the 1992 Civil War Sites Advisory Commission survey. The study area outlined here includes Buford's Bridge (circled at the upper left and incorrectly identified as Broxton's Bridge). Note the incorrect location of Jenny's Corner's (actually located at the road juncture east of the site identified as Mt. Zion Church) and the misplacement of the crossing of Smith's Fourth Division.

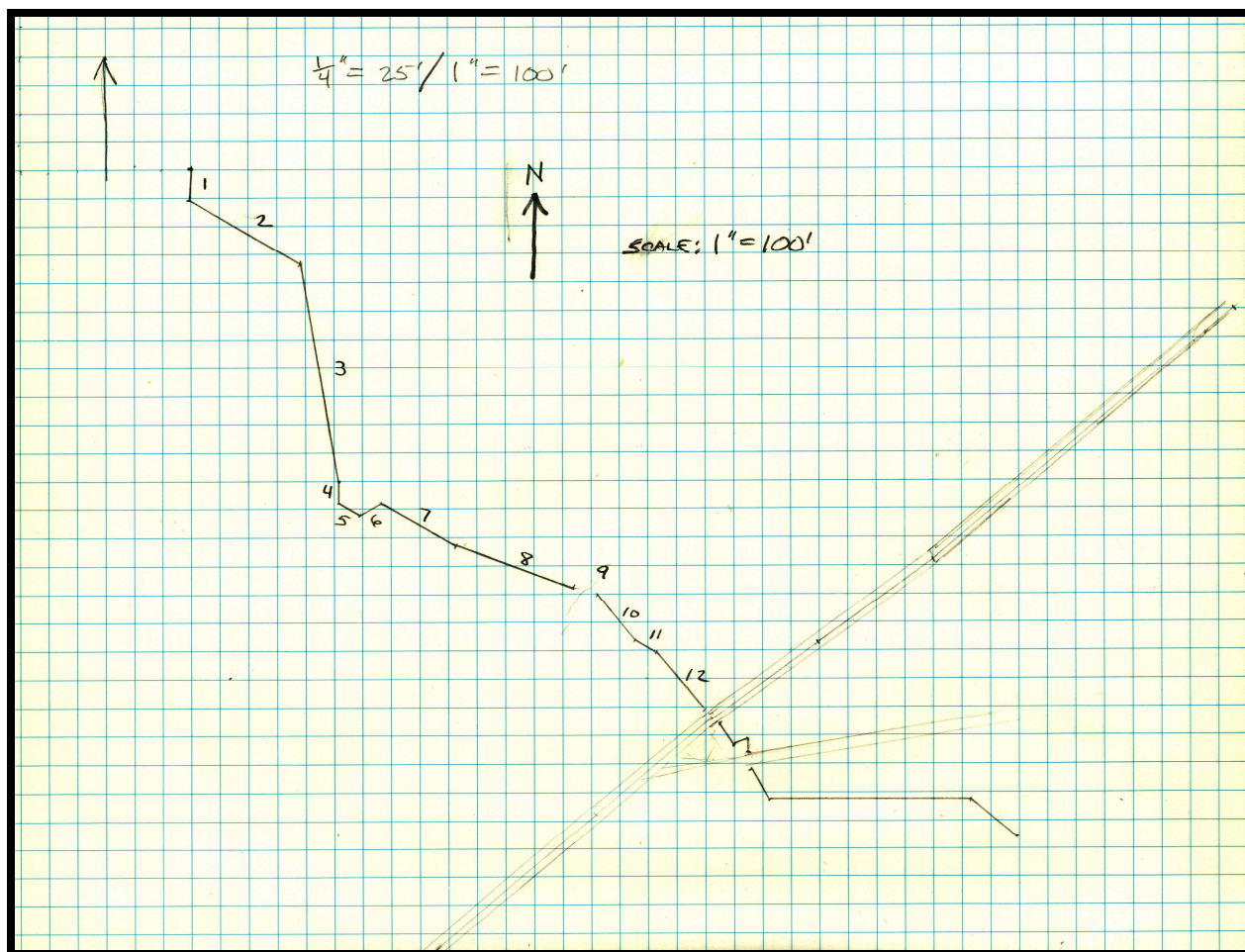
Field Studies – 1990 to 2003

South Carolina State Park Service staff made several efforts to identify and gauge the extent and condition of the remaining earthworks at Rivers Bridge. The earliest of these efforts, conducted in 1990, used the crude but simple technique of pacing to estimate the total length of the works. Measuring with three-foot paces provided a very rough figure of 663 feet of Confederate works in the Jenny Park area of the Battlefield and another 408 feet of works in the portion of the Battlefield southeast of the old road. Pacing gave a total length about 684 feet to the Union works. Simply taking a compass bearing off the Union works the next year showed that they faced north. This observation, combined with the after-action reports from the *War of the Rebellion*, provided proof that these earthworks were indeed Union fortifications and not a second Confederate line of defense as previously supposed.

In 2002 the Confederate infantry fortifications in the Jenny Park section were traced using pacing and compass headings. Later that year the artillery emplacement that held the long-range guns of Earle's Battery, positively identified by the large ditches in front of its three sides, was traced with a small measuring wheel and compass. All the Confederate fortifications on both sides of the old road were followed with compass headings and measured with a small wheel in 2003. Measurements were taken from the back edge of the ditch for the infantry works and the back edge of the parapet for artillery emplacement 1. These rough measurements allowed scale drawings to be made that showed the outlines of the remaining Confederate works. These crude tracings indicated that the remnants on the site conformed fairly well to both the shape and extent of the works as they were depicted on the 1865 battlefield maps. As rough graphic representations of the Confederate fortifications, they appeared to show that most of the infantry trench line remained.



Rough scaled map of trace of Confederate earthworks in Jenny Park section, taken from compass bearings and measurements of artillery emplacement 1 made June 14, 2002, with a small measuring wheel and from bearings and paced measurements of the infantry works made November 1, 2002. Mapped on quarter-inch grid graph paper. Not reproduced at original scale.



Rough tracing of the Confederate works on both sides of the causeway road made from compass bearings and measuring wheel measurements taken July 3, 2003. The numbers next to the works in the Jenny Park section correspond to sections of the works identified in an attempt to classify them and estimate their relief and width. Mapped on quarter-inch grid graph paper. Not reproduced at original scale.

The 2003 field study included an attempt to classify the works in the old Jenny Park section, assess their condition, and estimate their average width and relief. Classification was based upon the model adopted by the Civil War Fortifications Study Group in 1999.⁵ The works were classified as Class Three (Rapid Artillery Entrenchments) and Class Four (Rapid Infantry Entrenchments). As already noted, the profiles of these fortifications were fairly simple. The infantry works featured a parapet with a ditch in rear. No traces of a banquette or firing step

⁵ These classification standards are available online at the Civil War Fortifications Study Group's website at <http://www.cwfs.org/> or at the National Park Service's Cultural Resources Geographic Information Systems' webpage at <http://www2.cr.nps.gov/gis/battlefield/earthworks.htm>.

were visible in the ditch.⁶ Artillery emplacement 1, the only emplacement identified at the time and shown on the maps to the west of the creek bed, featured a parapet of three sides with a ditch in front. The emplacement was aligned to face almost due south. The top of the south-facing parapet contained what appeared to be the faint impressions of two embrasures about ten to twelve feet apart. Behind the emplacement were the apparent remains of a gun platform measuring about twenty feet wide.⁷ Another feature, thought at the time to be the remains of a ramp, strangely continued about 140 feet to the southeast behind the adjoining infantry breastworks.



Rear of artillery emplacement 1, looking south. The apparent traces of two embrasures are visible along the crest of the parapet.

⁶ Mahan advised that the banquette be four feet three inches below the top of the parapet and two feet wide if used by a single rank of soldiers and four feet wide if used by two or more ranks. Mahan, Treatise on Field Fortification, pp. 21-22. Scott defined breastworks as a fortification hastily erected by troops in the field, usually without a banquette. Scott, Military Dictionary, p. 110. A recent student of Civil War field fortifications asserted that troops in the Western theater made a practical application of Mahan's principles by dispensing with the banquette and simply firing from within the ditch. Wright, "Civil War Field Fortifications," pp. 183-184.

⁷ Mahan recommended that field guns be supported on timber platforms measuring nine feet wide by fifteen feet long. Mahan, Treatise on Field Fortification, pp. 56-57.



Rear of artillery emplacement 1, looking west. The apparent remains of a gun platform are visible behind the parapet in the right middle distance of the photograph.



The unidentified "ramp" feature beginning behind artillery emplacement 1 and running behind the adjacent infantry works to the southeast.

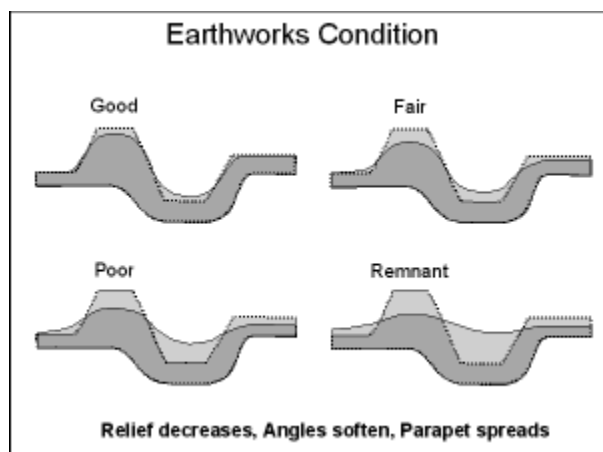
Standards for measurement were taken from the National Park Service's *GPS Mapping Methodology for Earthworks Management and Evaluation*.⁸ Very crude measurements of the works were made at selected points that appeared to represent an average. Estimated relief of the infantry parapet, its height from the bottom of the ditch, ranged from two feet to four feet. Estimated width of the infantry parapet varied from eighteen to twenty-three feet. Believing that these width figures were probably very inaccurate—they were made without benefit of a plumb bob or level line, using only a tape measure, carpenter's rule, and "eyeball" guesses—they were adjusted downward by five feet, providing estimated widths of thirteen to eighteen feet. Estimated relief of the parapet at artillery emplacement 1 varied from four feet to seven feet. Estimated width of the emplacement's parapet varied from twenty-four to thirty-nine feet; these figures were similarly adjusted downward by five feet to a range of nineteen to thirty-four feet.⁹

The condition of the works was easier to assess by eyeball. They were assessed by visual examination of their profiles, following the guidelines established in *GPS Mapping Methodology for Earthworks Management and Evaluation*. In these guidelines four condition categories provide a broad, relative register of the effects of erosion and other damage to earthworks. Works in good condition have eroded the least. They exhibit steep parapets, high relief, and well-defined angles. Works in fair condition remain well defined but have been subject to moderate erosion and therefore display a slightly lower profile; their parapets have decreased in height and their ditches have become shallower. Works in poor condition have eroded to a greater degree and thus show an even lower profile, with slumped parapets and partially filled ditches; they also exhibit other forms of damage. Earthworks in the worst condition are rated as remnants. Remnant works are heavily eroded and their parapets and ditches are barely discernible. An illustration of this earthworks condition scale showing the progression from minimal to heavy erosion was used as a guide to the visual assessment of the Rivers Bridge

⁸ David Lowe, *GPS Mapping Methodology for Earthworks Management and Evaluation*, Cultural Resource Geographic Information Systems Technical Support Topic Three, pp. 5-6, available online at <http://www2.cr.nps.gov/gis/reports/datadict/toc.htm>.

⁹ A defensive parapet had to be high enough to protect its defenders from gunfire and present a sufficient obstacle to attackers. The minimum height, according to Mahan, was six and a half feet; the maximum, based on the height that soldiers could throw soil with only shovels and picks, was set at twelve feet. Thickness of the parapet was governed by the type of projectiles it was expected to absorb and the materials with which it was to be built. Mahan, *Treatise on Field Fortification*, pp. 18-20. Scott simply noted that parapets in field works could generally be eleven feet thick and four to six feet high. Scott, *Military Dictionary*, p. 285.

works.¹⁰ Admittedly imprecise and somewhat subjective, this visual method of assessing the condition of earthworks nevertheless provides an easily understood measure of their relative condition.



The condition of earthworks, depicted as a visual scale of their relative degree of erosion, from the National Park Service's *GPS Mapping Methodology for Earthworks Management and Evaluation*. This visual scale provided the guide for evaluating the condition of the Confederate earthworks in the old Jenny Park section of the battlefield in July of 2003.

The condition of the Confederate works in the old Jenny Park section of the battlefield ranged from good to fair, with the best conditions noted in the infantry works on the extreme right flank. The worst conditions were found in the infantry works on either side of the creek bed and adjacent to the old causeway road.

¹⁰ Lowe, *GPS Mapping Methodology*, pp. 5-6. The illustration depicting the progressive scale of erosion damage is shown on page 5.



The extreme right flank of the Confederate infantry works at Rivers Bridge. The works from here to artillery emplacement 1 exhibit the highest state of preservation and least degree of erosion. The parapets here have the highest relief.



The Confederate infantry works looking northwest across the creek bed. The parapets on either side of the creek bed are the most eroded and have the lowest profiles on the Battlefield.



Looking southeast across the creek bed at the Confederate infantry works. The parapet here exhibits the lowest profile of the works on the Battlefield.

CHAPTER 7

Mapping the Rivers Bridge Battlefield

Initial Investigation of the Battlefield Maps

The main goal of this project was to map the features on the Rivers Bridge battlefield using Global Positioning Systems (GPS) technology. Before GPS mapping began, however, the 1865 battlefield maps were subjected to an initial study of their accuracy. The maps were scanned at a high resolution (1200 dpi) to create digital images of them saved as TIFF files. They were then scaled to be overlaid on modern topographic maps and aerial photos. Rather than radically adjust the 1865 maps to force them to fit the modern landscape, they were overlaid with as little distortion as possible.¹ Eight points or general features were selected that were known or believed to be in the same location in 1865 and the present. These sites were identified on the 1865 maps and the modern 7.5-inch topographic quad sheet to serve as control points for georeferencing the battlefield maps. The common points and features were the Confederate earthworks on the northwest side of the old causeway road, the creek bed running through the works, the point where the causeway emerges from the swamp, the headlands on the north side of the swamp, the headland on the south side where the causeway road enters the swamp, and Jenny's Corners. The overlays were made by GIS specialists in the South Carolina Department of Commerce, in a service provided through an information technology sharing agreement between the Department of Commerce and the Department of Parks, Recreation and Tourism.²

Six maps were created, overlaying each of the three versions of the battlefield map (the draft manuscript map, the finished manuscript map, and the lithographed map published in the *OR Atlas*) on a modern topographic map and on infrared aerial photos. A slightly different overlay was also prepared to better place the earthworks on the draft 1865 map in their location within the large inverted U-shaped driveway shown on the topographic map. The latter feature is the driveway built around the earthworks when the site was John D. Jenny Park. All overlays on

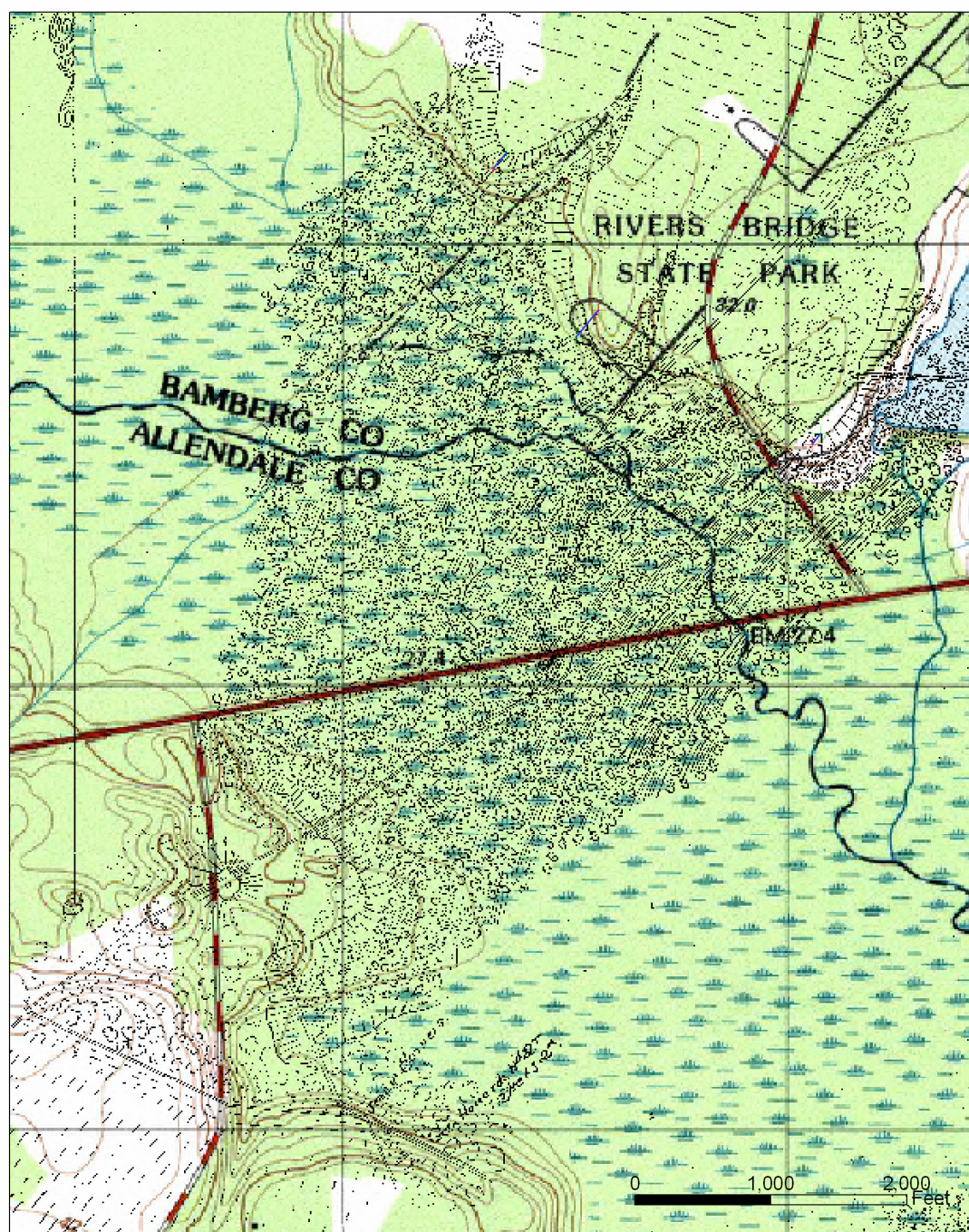
¹ David Lowe of the National Park Service suggested this course, recommending that the integrity of the 1865 maps be retained as much as possible so they could be questioned as any other historical document. Personal communication, September 25, 2003.

² David Elwart of Parks, Recreation and Tourism secured the assistance of the Commerce Department for this project. Amanda Drenning in Commerce and her assistants, Bridget Beesley and Corry Bennett, prepared the GIS overlays.

the topographic map are reproduced here. The battlefield maps were printed as negatives on the infrared aerial to make them more legible. These latter overlays are difficult to read in a small scale, so only one is reproduced in this report as an example.³ Except for one specific location and the network of roads approaching the south side of the swamp, these overlays suggest that the battlefield maps are remarkably accurate depictions of the natural and manmade features of the Rivers Bridge battlefield.

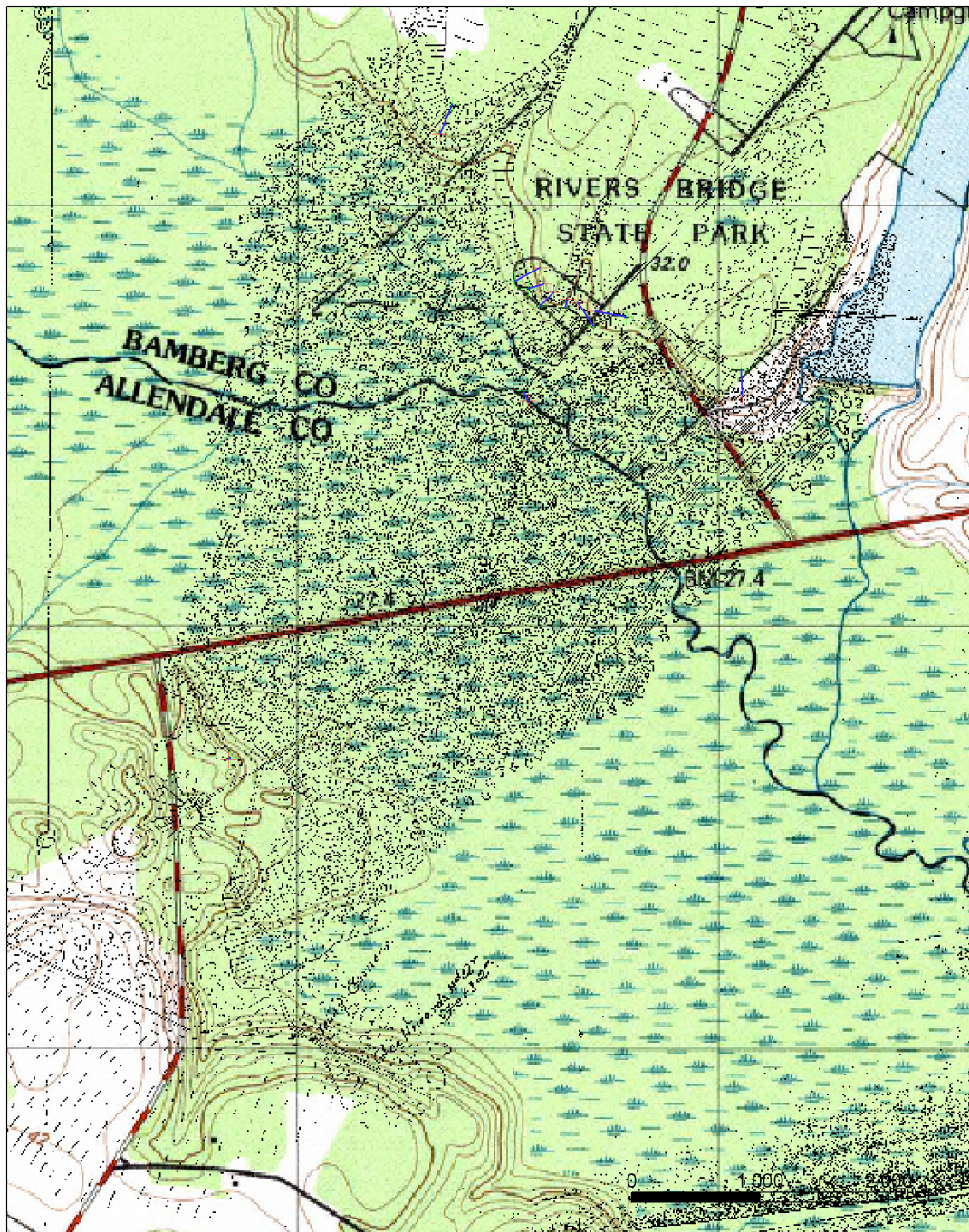
³ Uncompressed digital copies of all the overlays were submitted to the National Park Service with the GPS data gathered in the mapping.

Rivers Bridge Battlefield
Manuscript Map 1
Georeferenced to Topographic Map



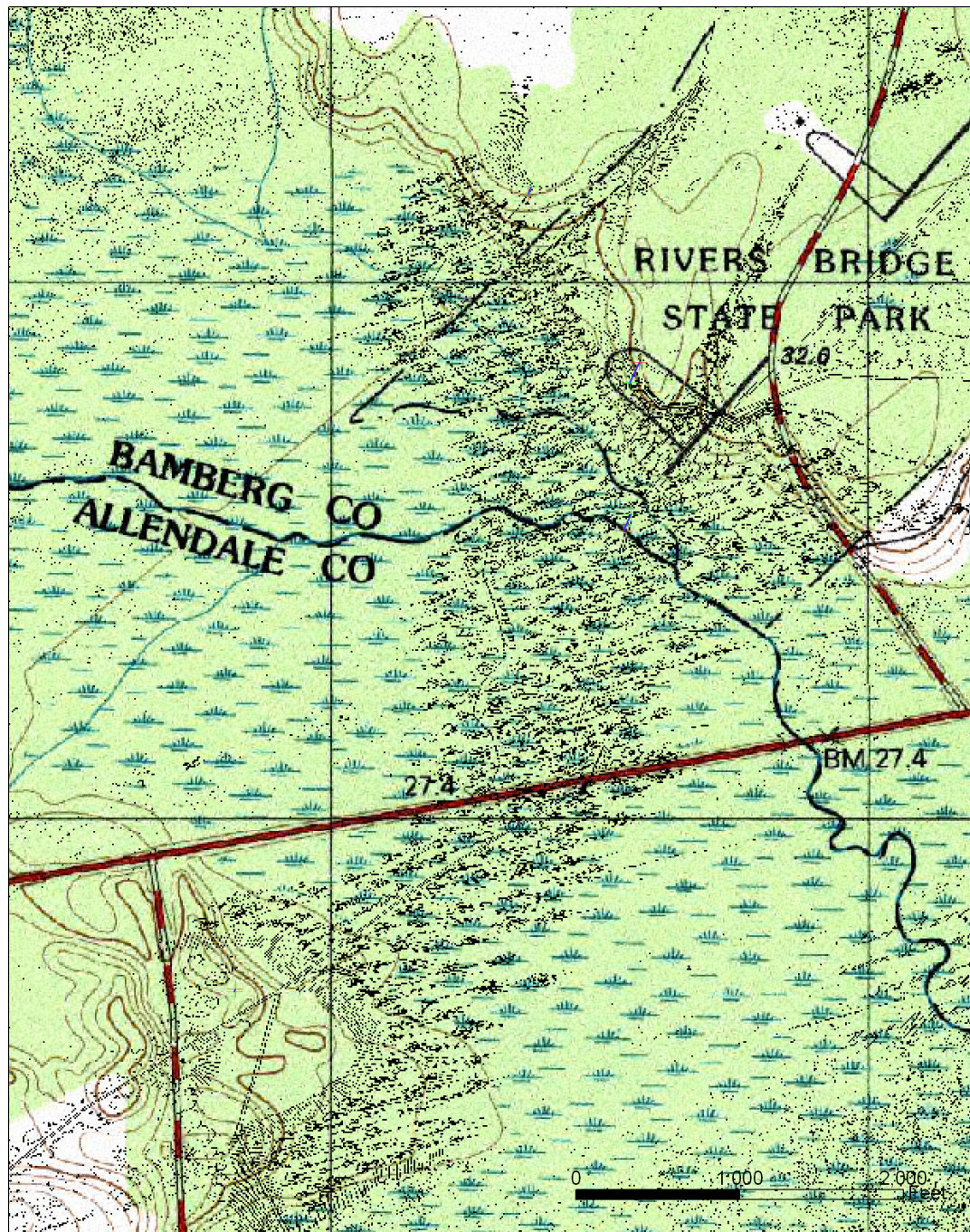
First overlay of the draft battlefield map on the modern topographic map.

Rivers Bridge Battlefield
Manuscript Map 1
Georeferenced to Topographic Map



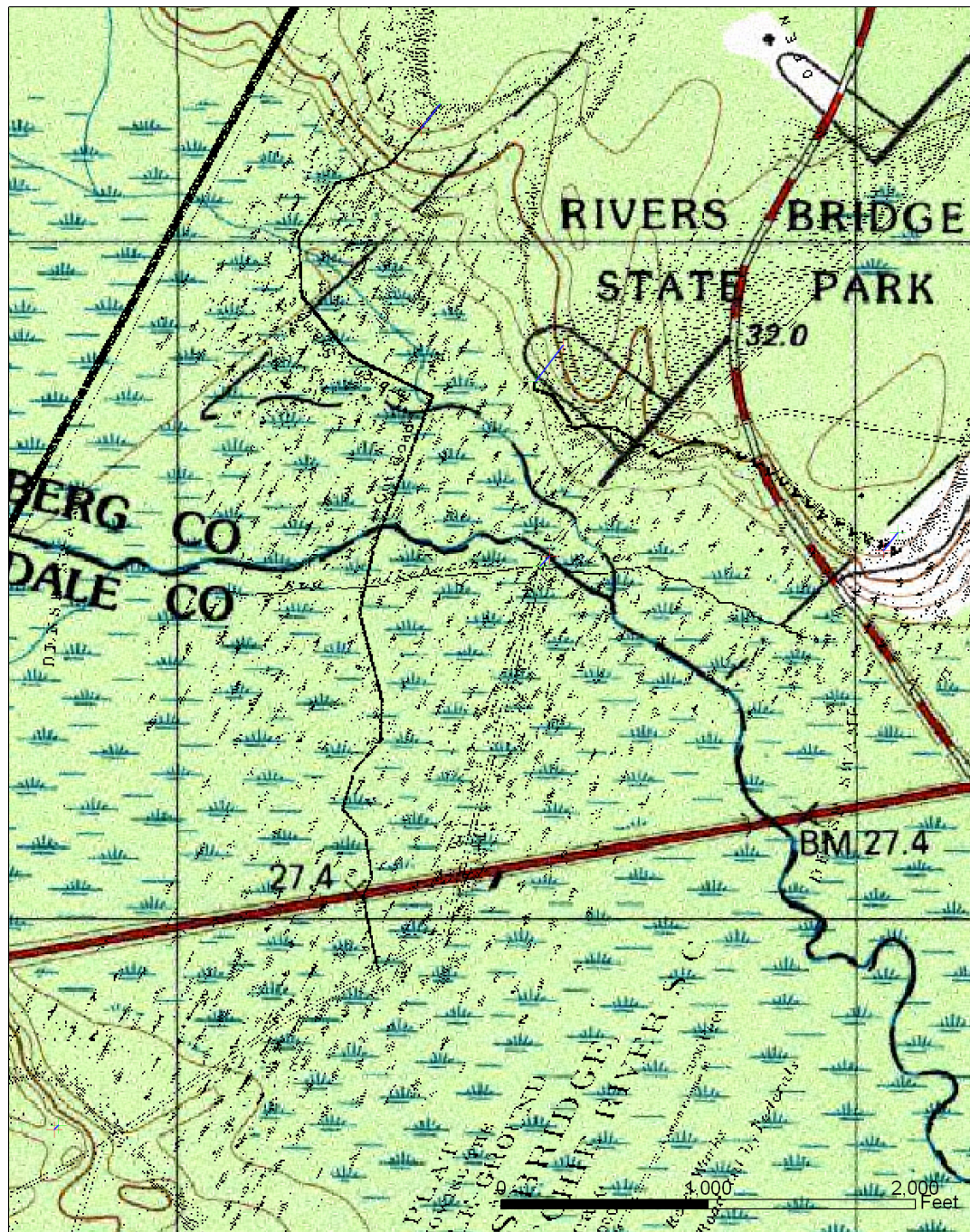
Second overlay of the draft battlefield map on the modern topographic map, which better places the Confederate works within the large Jenny Park driveway.

Rivers Bridge Battlefield
Manuscript Map 2
Georeferenced to Topographic Map



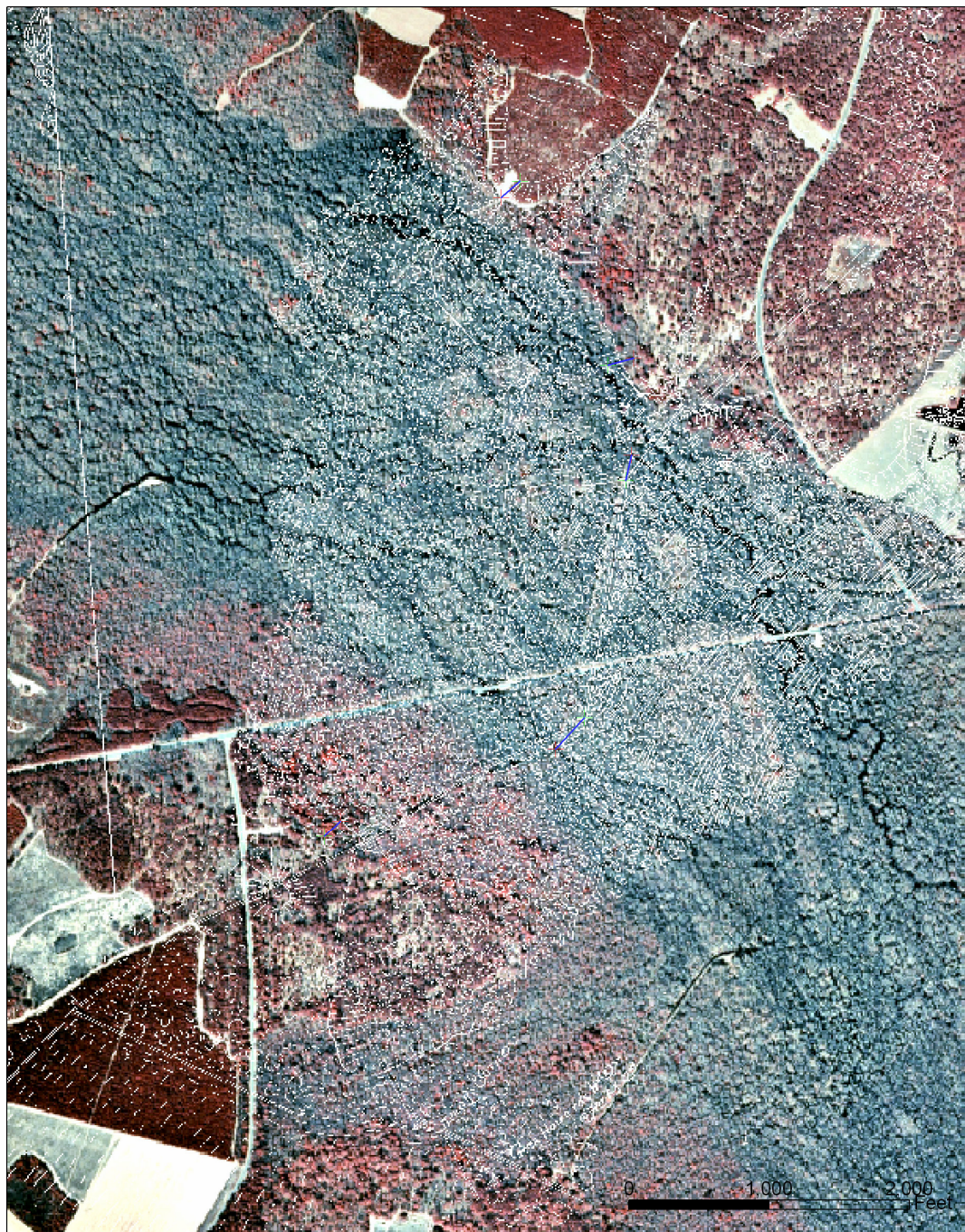
Finished version of the battlefield map overlaid on the modern topographic map.

Rivers Bridge Battlefield
 OR Map (published version)
 Georeferenced to Topographic Map



Printed version of the battlefield map from the *OR Atlas* overlaid on the modern topographic map.

Rivers Bridge Battlefield
Manuscript Map 1
Georeferenced to Aerial Photo



Draft battlefield map overlaid on a modern infrared aerial photograph. GIS technicians with the South Carolina Department of Commerce overlaid the battlefield map as a negative to make its features more visible on the aerial photo. NOTE: The overlay in this image is of the first version of the georeferenced draft map.

Four of the control points—the Confederate works, the spot where the causeway emerges from the swamp, the headland on the north side of the river where the Union corduroy road terminated, and the headland on the south bank where the causeway road goes into the swamp—were found to be consistent on the overlays. Other points were used in georeferencing only if they kept distortion of the original maps to a minimum. The one point identified by name on the 1865 and the modern maps, Jenny’s Corners, could not be matched in the overlays without distorting the earlier maps to the point of illegibility. Scaled measurements from the 1865 maps show Jenny’s Corners to be about 3100 feet southeast of where the causeway road enters the swamp. The site in Allendale County long known as Jenny’s Corners is about one mile almost due south of where the causeway road enters the swamp at present-day Jenny Road. This indicated either that the Union engineers misidentified Jenny’s Corners in 1865 or that they miscalculated the distance from Jenny’s Corners to the causeway. Because Union engineers tended to be very careful in mapping roads, the former seems the likeliest explanation.⁴ A scenario supporting that explanation will be presented later.

The overlays suggested several major interpretations of the battlefield landscape: First, they offer a possible explanation for the lack of physical evidence of the rifle pits on the Confederate left: the rifle pits might have been destroyed by the construction of State Park Road. Second, the terminus of the Union corduroy road on the north bank of the Salkehatchie is outside the boundaries of Rivers Bridge State Historic Site. It is located on private property next to the Site that was not included in the present study. Third, the overlays support the idea that the turn in the corduroy was associated with the breakthrough on the Confederate right. In the overlays the corduroy road makes its abrupt turn to the west after crossing a channel of the river beyond its main run and close to the Confederate fortified line. Finally, the lane shown behind the Confederate fortifications on the finished battlefield map appears to line up, at least in part, with the back side of the driveway that was built around the works for John D. Jenny Park. Perhaps the lane or part of it was incorporated into the driveway.

⁴ David Lowe, personal communication, September 25, 2003.

Mapping the Battlefield with GPS

As part of its grant application to the American Battlefield Protection Program, the South Carolina State Park Service specified that the proposed GPS mapping at Rivers Bridge be conducted by staff of the South Carolina Institute of Archaeology and Anthropology (SCIAA) at the University of South Carolina. This was to ensure that the mapping would be done by experienced surveyors who could recognize the remains of earthen field fortifications and record data on the remains using standardized procedures, format, and terminology. SCIAA archaeologists have been trained in GPS mapping of earthworks using the National Park Service's earthworks data dictionary. It was also hoped that the surveyors' knowledge of Civil War sites and earthworks would enable them to make sense of some of the more confusing features on the Rivers Bridge battlefield. The surveying was done by Steven D. Smith and James B. Legg, archaeologists with extensive experience in Civil War history and archaeology. After a reconnaissance survey of the project area on December 12, 2003, site mapping was scheduled for early March of the following year. This would allow the mapping to take place before spring growth emerged on the trees and underbrush, which could limit the satellite signal and obscure visibility of earthen remains. It would also give the surveyors a safe time frame to operate in the swamp between the end of deer hunting season and the beginning of turkey hunting season. Before the field mapping took place, the State Park Service familiarized the surveyors with Rivers Bridge and its history by providing them with historical records and documents, copies of battlefield maps and old topographic maps, and the results of State Park Service field surveys of the Confederate works.

Field mapping took place on March 4, 5, 11, and 12, 2004. To record locations the surveyors used a Trimble GeoExplorer 3, a hand-held GPS recorder. Data was downloaded in SCIAA offices in Columbia the week after field mapping was completed. Smith returned to Rivers Bridge on March 18 to rerecord data on some parts of the Confederate earthworks because the original data did not appear to make sense. Satellite reception varied greatly during the field work. Survey work halted several times, once for more than an hour, as the team waited for sufficient satellite reception. Smith and Legg returned to the site again on June 24 to search for several features that had not been found previously. State Park Service staff received the data

from the mapping to begin the process of creating overlays in Geographic Information Systems (GIS) and met with Smith on August 13 to review and assess the GPS data from the battlefield.



Steve Smith of the South Carolina Institute of Archaeology and Anthropology waits for GPS satellite data to record the logging railroad bed in the swamp west of the Confederate earthworks, March 3, 2004. The site was mapped in late winter to avoid hunting seasons and to take advantage of the greater visibility offered by the lack of tree and shrub cover. Despite the fact that features were readily discernible, insufficient satellite reception often halted the mapping.

Features from the time of the battle were the main targets of the mapping project. These included the Confederate and Union earthworks, the creek through the Confederate works, and roads believed to be in existence in 1865 (the causeway road, the apparent road trace running off the causeway road and through the Confederate works, and the dirt lane behind the works). Other physical features that post-dated the battle, representing alterations and additions to the battlefield, were also mapped. These features included the roadbed of the Schofield brothers' logging railroad, the driveways around the battlefield and the steps up the bluff in front of the Confederate works from the old John D. Jenny Park, and the path of the State Park Service's recently opened interpretive trail. In the field, the survey team also decided to map other features once they were identified and their apparent significance became clear.

The Confederate earthworks were mapped along the top of the parapet and the back of the trench to provide a graphic depiction of the width of these features. This included the Confederate infantry breastworks and the artillery emplacement that held the long-range guns of Earle's Battery (artillery emplacement 1). The value of having the site mapped by surveyors

experienced with Civil War earthworks and history became evident very early in the survey. Smith and Legg quickly noted the apparent embrasures in the face of artillery emplacement 1. The steps from John D. Jenny Park lead up the face of the bluff and terminate before the emplacement. Over the years numerous visitors have walked from the top of the steps across the front of the emplacement, creating a trail that has partially filled in the ditch and eroded the parapet. It was suggested that the features thought to be embrasures might actually be visitor paths. Smith's response was that the embrasures likely provided ready-made openings for visitors to cross the parapet.



The top of the parapet at the face of artillery emplacement 1 looking south toward the swamp. The handrail of the steps up the face of the bluff is visible in the right middle distance. Visitors walking up the steps have worn a path over the parapet here, apparently though the embrasures in the face of the emplacement.



The fill in the ditch in front of artillery emplacement 1, apparently caused by visitor traffic. Looking east.

The surveyors who mapped Rivers Bridge are also skilled archaeologists, accustomed to discerning natural grades from those altered by human action. Their experience in looking at the physical evidence of a site proved extremely helpful throughout this project. The large “ramp” that extended more than forty yards from artillery emplacement 1 along the rear of the infantry works to the southeast was not a ramp at all, nor was it a built-up man-made feature. It was the original grade behind the works. The lower area behind this grade was a large borrowed area, from which soil had been dug for use elsewhere. Similarly, the surveyors identified the low ridge in front of the works just to the northwest of the causeway road as the original surface grade. The low areas surrounding the ridge were determined to be borrowed areas from which soil had been dug. These borrowed areas may be evidence of the construction of John D. Jenny Park. It is possible that the soil was used to build up parts of the driveway that encircled the Confederate earthworks for the park.



The large borrowed area behind the Confederate fortifications is evident between the points of the arrows in this long view. This feature had been misinterpreted as a ramp until the surveyors pointed out that it appeared to be the original grade of the surface behind the works.



The extent of the borrow in the rear of the Confederate fortifications is clear in this photograph, looking east.

The surveyors made sense of the jumbled mounds and ditches in the Confederate earthworks just to the southeast of the old road and identified the remains of artillery emplacement 2, the emplacement that held the two 12-pound howitzers of Earle's Battery. The battlefield maps show this emplacement near the causeway road and sited to fire in a southwesterly direction down the short stretch of road where it emerged from the swamp. The left flank and a portion of the face of this emplacement remain immediately adjacent to the road, indicating that the rest of the emplacement had stood in the middle of the road. The physical remnants of this part of the works, combined with evidence from the maps and their examination of other parts of the site, convinced the surveyors that the path of the causeway road had been shifted to the northwest. The battlefield maps show the causeway road turning slightly to the right in front of artillery emplacement 2. The trace that leads off the existing roadway—what had been considered as possibly the bed of the secondary road—was actually the trace of the original main road where it made the right turn in front of the works. The mound in front of the works and in between the current road and the trace had long been discounted as being a part of the Confederate works, but what it actually was remained a mystery. Legg suggested that the mound was what remained of the original grade in front of artillery emplacement 2, and that the low area between it and the works was the ditch in front of the emplacement, from which soil had been excavated to build the parapet.



The original path of the causeway road branches off the present road bed and runs into the Confederate fortifications. During field mapping Steve Smith recognized this trace as the route of the causeway road shown on the battlefield maps. The present path of the causeway road runs across the foreground of the photo. The low mound between the two road beds was interpreted by Jim Legg as the remains of the original grade in front of artillery emplacement 2. Photograph is shown looking east.



Looking west down the road trace through the Confederate works. Steve Smith stands in the bed of the causeway road as it existed at the time of the battle.



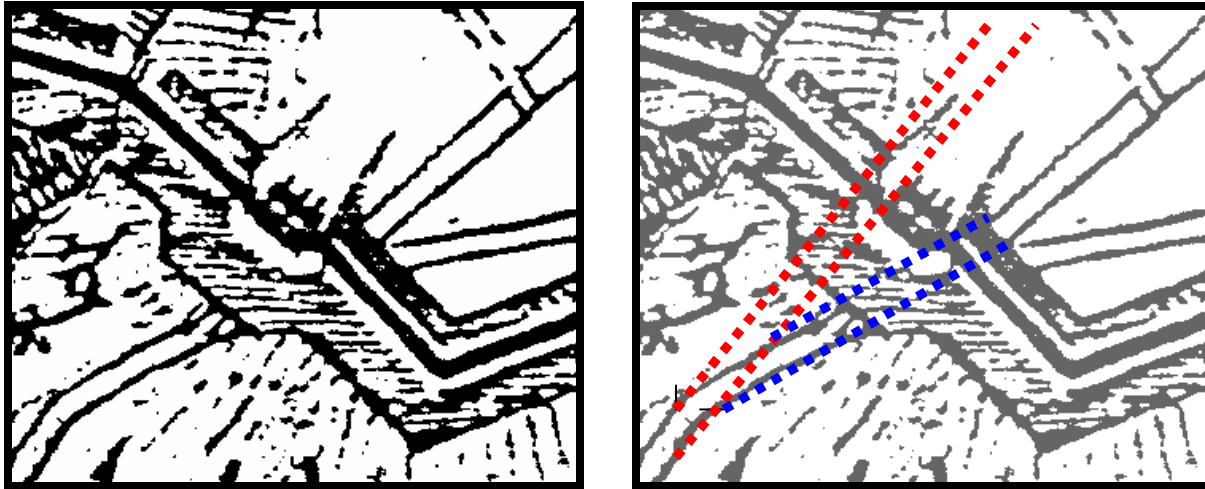
The trace of the causeway road as it ran during the battle, looking west from the Confederate works toward the present road and the Salkehatchie swamp.



The depression between the remains of artillery emplacement 2, on the right, and the roughly triangular-shaped mound to its front, on the left, looking southwest. Jim Legg suggested that the height of the mound on the left represented the original grade, and that the depression was the ditch that provided the soil for the emplacement's parapet.

This artillery emplacement might have been modified shortly after the battle by Union troops. One of their first priorities must have been reopening the main road that had been blocked by the Confederate fortifications. It had already been suggested that Union troops knocked down part of the Confederate works, most likely by working from atop the parapet and shoveling the soil down (reasoning that it is easier to throw soil downhill instead of up), filling in ditches, and leveling the roadway. It is possible that they began to reopen the road from the artillery ramp in this emplacement, leveling the face of the parapet down into the ditch in its front to allow troops and wagons to pass. Leveling the emplacement from the gun ramp provides a plausible explanation for the shift of the road. The present path of the road certainly seems to support this notion. The ground that runs parallel to the road from the back of what's left of artillery emplacement 2 might be the remains of the emplacement's gun ramp. Union troops

might have reopened the causeway road along its original bed, too, accounting for the trace seen where it branches off the current road.



Left: Artillery emplacement 2 as shown on the finished battlefield map. Right: The same site with the dashed red lines representing how Union troops might have leveled the parapet to reopen the road along the artillery ramp. Blue dashed lines indicate the trace of the original roadbed through the works that is still visible at the site.



Looking south toward the rear of what is left of artillery emplacement 2, taken from the present road. The higher ground beside the road, visible in the right center of the photograph, might be the remains of the gun ramp behind artillery emplacement 2.

It is also possible that the road was shifted after the war, gradually or quickly, as civilian traffic across the Salkehatchie resumed. The shift in the course of the road might have been prompted later by a perceived need for improvements to accommodate motor vehicles, for example.

Farther to the southeast of artillery emplacement 2, toward the left of the Confederate infantry works, the parapet and ditch were easily traced and continuous until a break in the line, where the works became jumbled and illegible. Behind the works in this area were low mounds that contained chunks of asphalt. It appeared that bulldozers had scraped debris into this part of the Confederate line, perhaps when State Park Road was being built.



Disturbed section of earthworks near the left of the Confederate infantry fortifications, looking west.

Searches to locate the remnants of the rifle pits that extended the Confederate left flank were made during the reconnaissance survey in December and again during the field mapping in March. These searches began from the east end of the Confederate infantry works and extended

to State Park Road. The searches resumed in the higher ground across the road. No rifle pits were found. During field work on March 5, Legg dug a small forty to fifty centimeter test trench about twenty feet beyond the end of the visible infantry fortifications on the Confederate left. He found undisturbed subsoil. This indicated that the extreme left end of the Confederate infantry works was still intact and that no additional infantry works had been destroyed. It did not provide any indication of rifle pits tied into that line of works. The only visible feature north of State Park Road was the trace of a fire lane following the crest of the high ground. The initial overlay of the battlefield maps on the modern topographic maps suggested that the rifle pits had most likely been obliterated by the construction of State Park Road in the 1950s, and the fruitless search for traces of the rifle pits seemed to bear this out. Scaled measurements of the rifle pits taken from the battlefield maps and then applied to the topographic map indicated that some rifle pits from the extreme left of the Confederate line might still exist on adjoining property which was not included in the present project. An initial examination of this area on October 26, 2004, revealed features that may indeed be rifle pits from the far end of the Confederate line.



State Park Road looking northwest toward the entrance to the Battlefield. The Confederate infantry fortifications end near the dark brown wooden sign visible on the left. The Confederate rifle pits probably followed the same curving path the paved road now takes.



An irregular depression, perhaps the remains of Confederate rifle pits on the extreme left flank of the Confederate line, runs below the crest of the headland on adjoining private property. This feature is only a few yards northwest of State Park Road. The possibility of finding some of the rifle pits presented itself after scaled measurements from the battlefield maps were applied to a modern topographic map, suggesting that some of the fortifications might have survived the construction of State Park Road.

The surveyors noted alterations to the 1865 landscape while mapping the bed of the logging railroad built by the Schofield brothers and the driveway built around the works for John D. Jenny Park. The railroad bed is visible and easily traced in front of the works on either side of the causeway road. On the northwest side of the road, the railroad bed runs into the swamp from one end of the driveway around the earthworks. Legg noticed that the driveway in front of the works lined up with the railroad bed on both sides of the causeway road. The designers of Jenny Park clearly had incorporated the logging railroad into their plan by laying part of the driveway around the face of the works on the old railroad bed. Smith and Legg also noticed that the slope of the bluff around the steps appeared unnatural. The front of the headland had been cut away, most likely to create the bed of the Schofield logging railroad at that part of the line.



The bed of the Schofield brothers' narrow-gauge logging railroad, looking northwest. This stretch of the railroad bed extends from one end of the driveway that was built around part of the Confederate works for John D. Jenny Park.



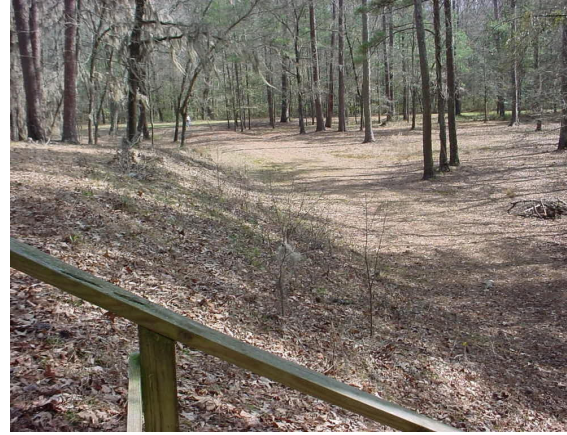
The driveway in front of the Confederate works built for John D. Jenny Park is seen running from the lower right corner of the photo to the center left. The driveway lines up with the remnants of the logging railroad bed in both directions, indicating that it was once part of the logging railroad before being incorporated into the driveway. Looking north.



The steep cut made in the headland of the bluff is evident in this photo, looking northwest.



The cut in the headland looking southeast toward the steps built into the bluff for John D. Jenny Park.



The steepness and extent of the cut in the headland is apparent in these views, taken from the top of the steps. The photograph to the left is looking to the northwest; the photo to the right looks to the southeast.

Mapping the causeway road through the swamp was especially revealing. From present-day Jenny Road on the Allendale County side of the Salkehatchie, the road descends through woods and enters the swamp. From Jenny Road the causeway is open and easy to travel on foot, obviously reflecting its continued use by the landowners on either side. It is a major piece of construction, approximately twenty-four feet wide and in some places built up about five to six feet above the level of the surrounding swamp. The causeway continues to the dogleg bend in the road mentioned in Union accounts of the February 2 attack. The bend is still a very prominent feature. Just beyond the bend to the north is a large break in the causeway. This corresponds to the point where the first bridge appears on the causeway in the battlefield maps. During the battle at least one and possibly both Confederate gun emplacements were visible from this point in the causeway. And this part of the road was visible to the Confederates in the works, at least to the gunners manning the Parrott and Napoleon in artillery emplacement 1. This clear line of sight is no longer available from either the causeway or the fortifications; the trees now present an impenetrable visual barrier.⁵

⁵ Smith and Legg both asked why the Union attackers did not send artillery into the road to engage the Confederates in the works. The question prompted a reexamination of the interpretation put forth by several Federal participants, that the thick swamp kept them from employing their cannons. The width of the road would certainly have accommodated a section of guns, and it is possible that the Union sharpshooters near the Confederate works might have provided enough covering fire to allow one or two Federal guns to move into position and fire on the first emplacement. It is equally possible that Confederate cannon fire might have disabled any Union guns wheeled into the causeway. On February 2 Brigadier General Manning Force of Mower's Third Division used two guns with good effect on Confederates holding the bridge on the far side of Whippy Swamp at Barker's Mill a few miles from Rivers Bridge. Force engaged only a small body of Confederates troops, though, and they apparently were not in fortifications and did not enjoy the same terrain advantages as their comrades at Rivers Bridge. OR, Vol. XLVII, Part I, pp. 405-406.



The causeway road looking east before its descent into the Salkehatchie swamp.



Jim Legg and Steve Smith at the dogleg bend in the causeway, looking northeast toward Rivers Bridge State Historic Site. Just beyond the two surveyors is the first break in the causeway.



The dogleg bend in the causeway as pictured by William Waud in 1865 (left) and today (right). The bend is about six-tenths of a mile from artillery emplacement 1 at Rivers Bridge State Historic Site.

When comparing modern photos of the dogleg bend in the causeway to the William Waud battle sketch, it becomes apparent that Waud either drew the scene from a different perspective—from a higher and more distant vantage point, say, perhaps watching the action through field glasses—or that he employed artistic license to show the main features of the scene because available perspectives denied him the view of both the causeway and the Confederate line. In his comments on the draft version of this report, David Lowe of the National Park Service noted that sketch artists often began a drawing while viewing a scene from one position and then completed the drawing from another position. After visiting Rivers Bridge in March of 2005 and walking the causeway, Lowe suggested that Waud had climbed a tree to get his unique perspective of the battle.⁶

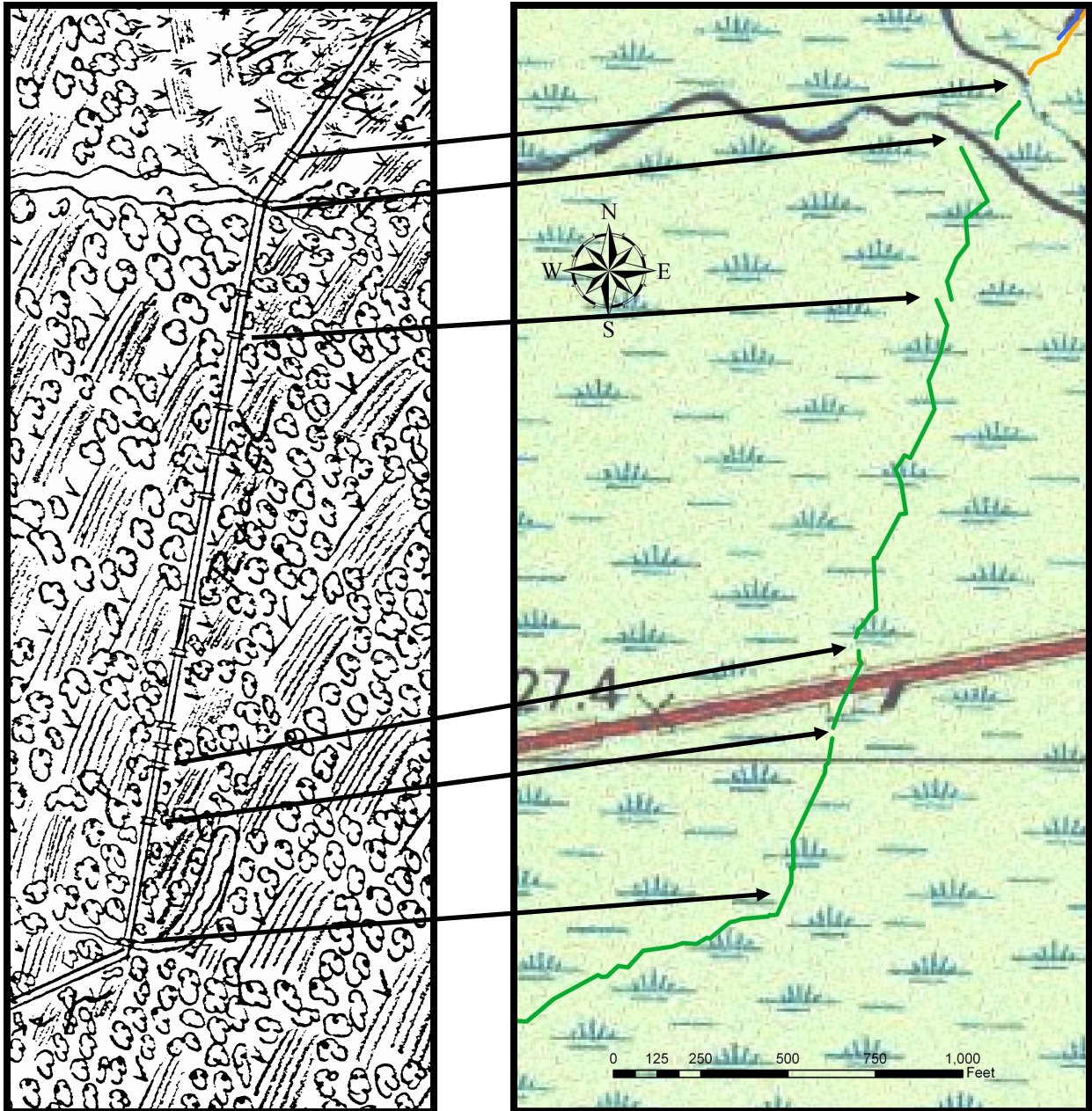
The remaining sections of the causeway are easily traversed on foot but are covered with trees and heavy underbrush, and to get from one section to another required that the survey team either wade sections of the swamp or cross in a canoe. A straight stretch of the causeway continues from the first break past the dogleg to another break just south of where present State Highway 641 crosses the swamp. This break corresponds roughly to the site of the second bridge shown on the battlefield maps. The swamp was easily forded here.

⁶ Lowe visited Rivers Bridge on March 4, 2005, with members of the Civil War Fortification Study Group. The insights gained from the Study Group's visit are described in the Epilogue.

Mapping the causeway north of Highway 641 was more difficult. The battlefield maps indicated there should be a total of thirteen breaks or bridge sites north of Highway 641 to the boundary of Rivers Bridge State Historic Site. The maps show eleven bridges, up to and including the bridge over the main run of the river. Beyond the main run the maps show two additional bridges. To map this part of the causeway, the survey team entered the swamp in a canoe from the end of the causeway road at Rivers Bridge State Historic Site and proceeded southward.⁷ The part of the causeway reached by canoe led in a gently curving arc first to one break and then to another, larger break. Beyond this latter break, the causeway continued in a long, straight path until it came to another large break within sight of Highway 641. During the battle, this part of the causeway had numerous openings spanned by small bridges. Now there are only four openings in the causeway north of Highway 641.

These breaks in the causeway north of Highway 641 appear to correspond to several bridge sites depicted on the battlefield maps. The first break north of the highway is at the site of the third bridge beyond the dogleg bend in the causeway. The large break at the northern end of the long straight stretch of causeway is at the site of one of the last bridges just before the main run of the Salkehatchie. The two breaks in the gently curving arc of causeway that continues to the edge of the park are at the site of the main bridge over the main run of the river and the site of the last bridge on the north side of the swamp. An extremely important physical feature of the battlefield, the main bridge, is outside the boundary of Rivers Bridge State Historic Site. This was not known until now. The part of the causeway in which Union troops came under the deadliest fire from the Confederate cannons is north of Highway 641, and is also outside the bounds of the State Historic Site.

⁷ Park Technician Timmy Hiers suggested this approach. He had reconnoitered the Salkehatchie earlier to determine if it would be feasible to wade the swamp at the time of the survey.

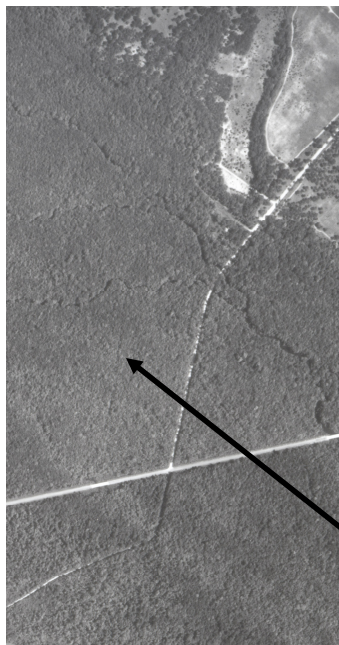


Left: The causeway through the swamp in 1865, with a total of fifteen bridges spanning the channels of the Salkehatchie. Right: The causeway today, as mapped with GPS, showing a total of six breaks. NOTE: The two map sections are not reproduced in the exact scale, and the first break in the causeway, identified by the lowest of the six arrows, was apparently not registered with the GPS and thus appears as a solid line through the swamp.

Because the causeway road continued in use until the 1950s, it is very likely that it was maintained and improved to accommodate motor vehicles of the twentieth century. It is also reasonable to assume that when the wooden bridges that spanned the channels of the Salkehatchie were damaged, they were repaired as quickly and efficiently as possible: by filling in the breaks with dump truck loads of soil rather than rebuilding the wooden spans. This

scenario could account for the fewer breaks in the causeway today, for such repairs would not have been as easy in the antebellum and immediate post-war eras when large loads of soil could only have been dropped by hand-barrows or wagons drawn by horse or mule.

Although it was not part of the original project proposal, the survey team tried to find remnants of the Union corduroy road in the swamp. The approximate starting point for the corduroy road was located by taking a scaled measurement off the battlefield map of the distance from the dogleg bend in the causeway back to the beginning of the corduroy road. Then, using distances and compass bearings of the corduroy road taken from the 1865 maps, the team waded



through the swamp, searching for evidence of the rough roadway cut by Union troops to flank the Confederate works at Rivers Bridge. No trace of the corduroy road was found. It was assumed that any remnant of it had been erased by logging. After this search, a copy of the earliest known aerial photograph of Rivers Bridge, from 1948, was obtained. A line that appears to follow the path of the corduroy road for part of its length is clearly visible in this photograph. It is possible that remnants of this battlefield feature were still visible in the swamp as late as the middle of the last century.

What might be part of the trace of the Federals' corduroy road appears in the 1948 aerial photo as a faint line left of and parallel to the causeway above State Highway 641.

During the reconnaissance survey in December, team members searched the edge of the swamp immediately below the Confederate works for traces of the rifle pits from which Federal marksmen tried to suppress the Confederate cannon fire. No rifle pit remnants were found here. Smith later reasoned that these hasty defenses probably had been built up with available materials, rather than dug into the swamp, and thus left no discernible traces above ground.⁸

⁸ Steven D. Smith, personal communication, December 16, 2003.

The breastworks erected by Union troops after they took Rivers Bridge were easily traced by the surveyors. Water from recent rains had filled the ditches on either side of the parapet and made them very visible. This suggested to Legg one reason why the works were ditched on both sides of the parapet. Legg proposed that wet ground and high water in 1865 forced the Union troops to excavate from both sides in order to get enough dry soil to build breastworks high enough to protect them. These works probably resembled similar field fortifications put up in January by Seventeenth Corps soldiers near Pocatigo: “These works were very quickly made—ditched on both sides, heavy pine logs and earth forming a parapet say four feet high and three or four feet thick . . . and with ‘head logs’ all along. . . . A division can hold these works against an army.”⁹



Union breastworks behind the Confederate fortifications, looking east about sixty feet from the boundary of Rivers Bridge State Historic Site. Note the rainwater standing in the ditches on either side of the parapet.

⁹ Howe, ed., Marching with Sherman, p. 233.

No additional works were seen to either the west or east of this existing line, leading to the assumption that they had been plowed over by subsequent farming or destroyed by alterations while the property was under state ownership. Another attempt to locate additional works on State Park property to the east of this Federal line was made on October 1, 2004. Prompted by a pending tree-thinning project to improve the health of the forest, this later search also proved fruitless.

The surveyors mapped about 700 feet of Union works, far less than one would have expected to find given that the better part of two Union brigades entrenched after carrying the field on the evening of February 3. These remaining works face north, and are probably the entrenchments described in the after-action report written by the commander of the 39th Ohio. Presumably the Confederates retreated to the northeast along the “Main Road” sketched on the battlefield map. One would expect to find more Union works facing to the northeast, in the direction of the retreating Confederates, and also perhaps to the southeast, to meet a potential threat from a Confederate force coming from the direction of Broxton’s Bridge. Other Union works were probably erected later to establish defensive perimeters on the north side of the river. After crossing the Salkehatchie between Rivers and Broxton’s Bridges, the Fourth Division of Blair’s corps marched to Rivers Bridge and entrenched on Mower’s right.¹⁰ Sherman’s chief engineer found that through “constant practice,” Union troops had become “tolerably good judges of what constitutes a good defensive line,” quickly building fortifications at numerous points along their march.¹¹ How one small section of Union earthworks was preserved while others were lost is not known. Perhaps the works that are left marked the boundary between two fields and were thus retained. Other Union field fortifications might have been placed in more open locations and later quickly eroded or were plowed over.

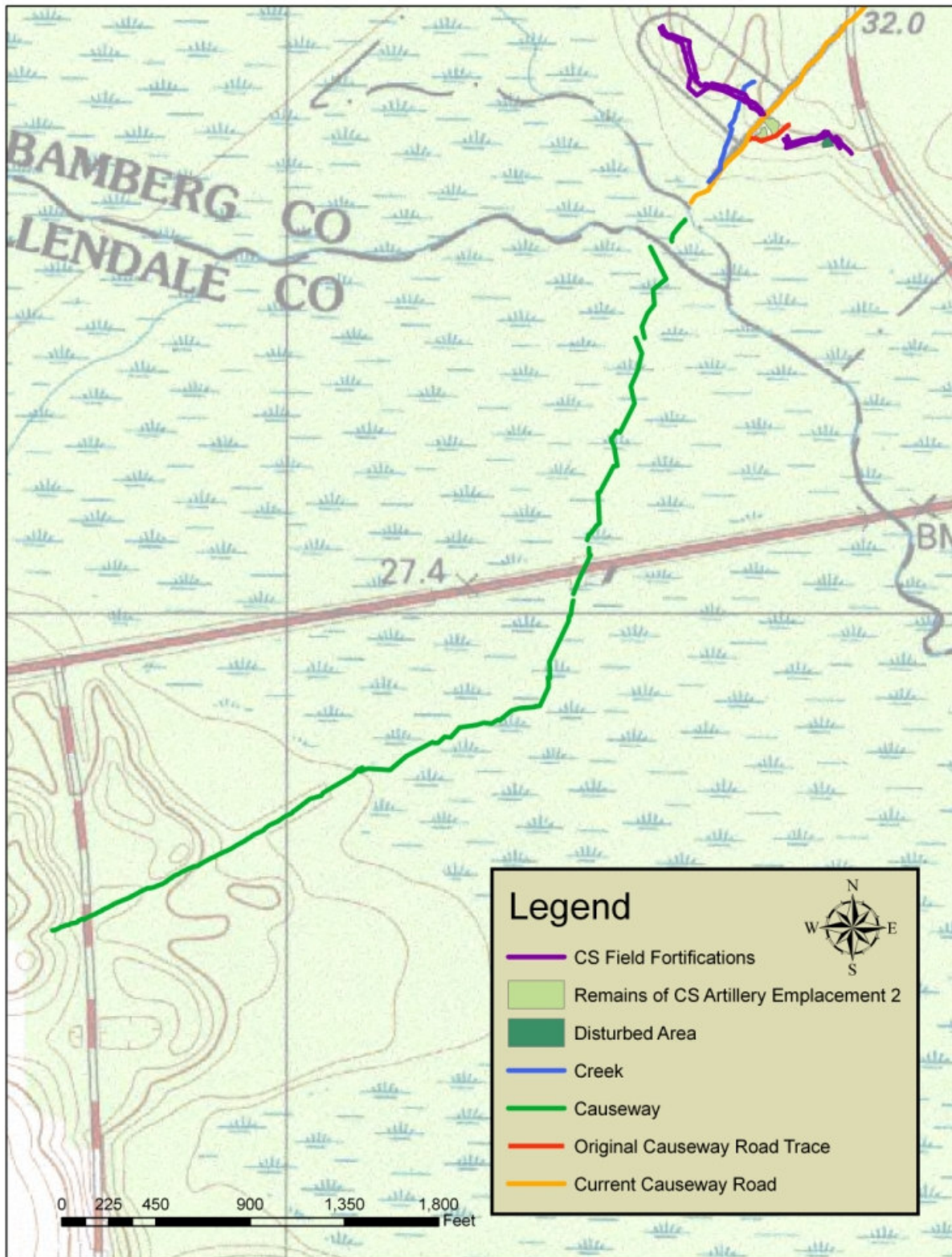
The following series of maps were created from the GPS battlefield survey data using the ESRI ArcGIS 9 program. Layered onto a modern topographic map of the site, they show the progression of changes to the Battlefield at Rivers Bridge State Historic from 1865 to the present. The parapet, ditch, and artillery emplacements of the Confederate line were recorded on

¹⁰ OR, Vol. XLVII, Part I, p. 412; diary entry for Feb. 4, 1865, manuscript volume October 29, 1864 – April 25, 1865, entry for February 4, 1865, Alonzo J. Pope Papers, South Caroliniana Library, University of South Carolina.

¹¹ OR, Vol. XLVII, Part I, p. 176.

the GPS data dictionary as separate elements. For the sake of clarity, however, most of these elements are pictured on the maps as a single feature—the Confederate field fortification.

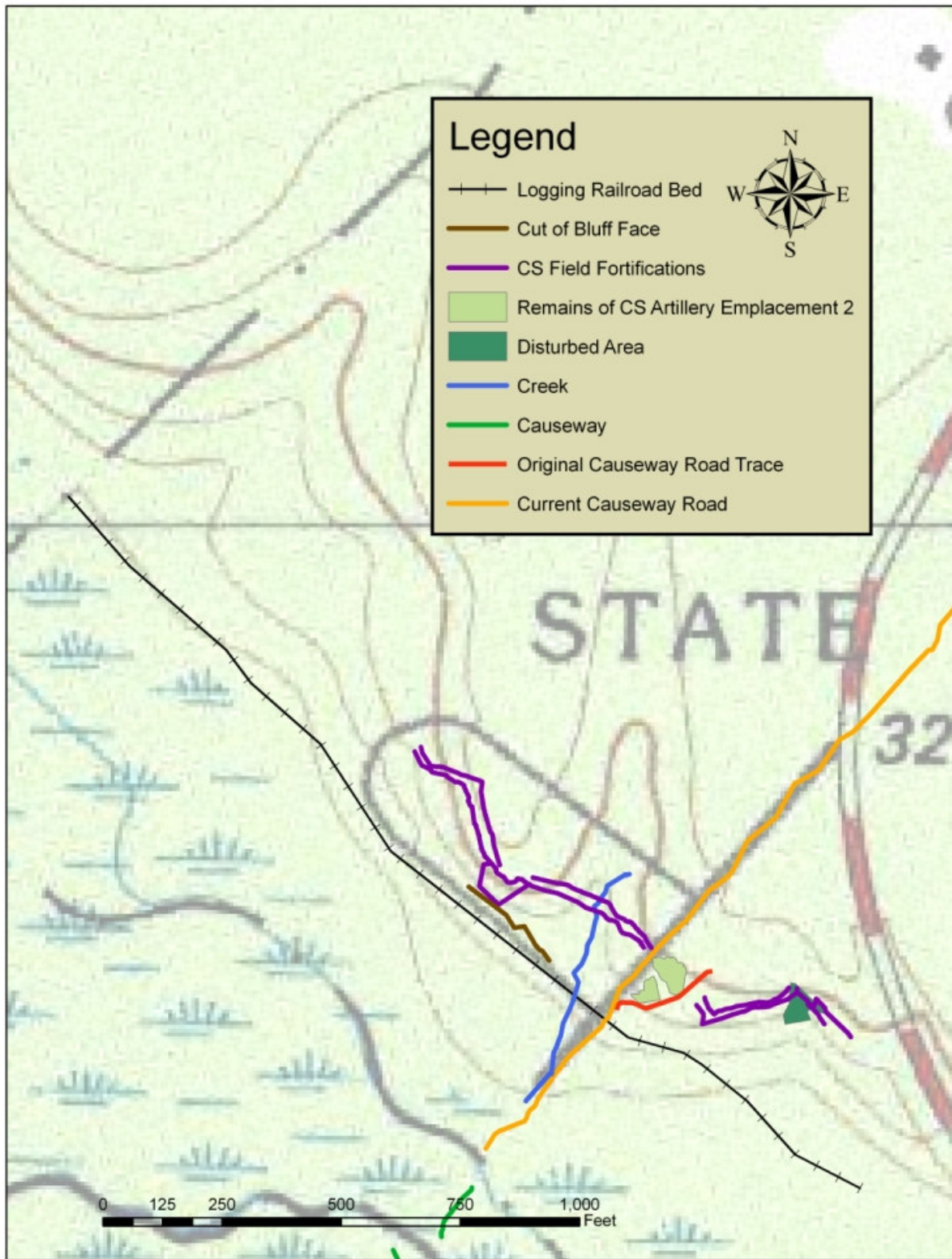
Artillery emplacement 2 is depicted as a separate feature, since this part of the fortification was disturbed some time after the battle and is now only a remnant.



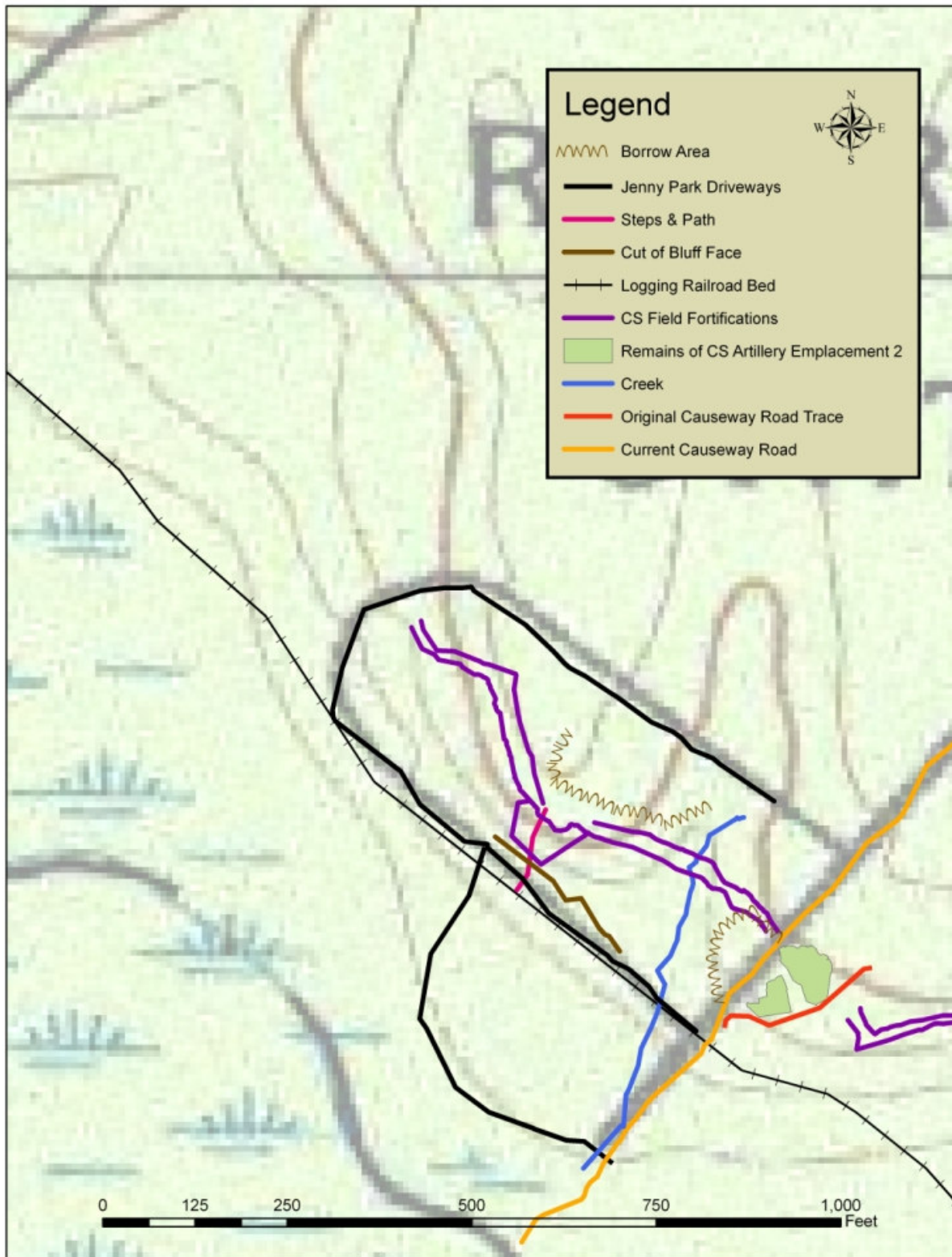
Features from the battle of Rivers Bridge identified in the GPS survey from the causeway to the Confederate works. Note the alignment of artillery emplacement 1 with the causeway. Note, too, that the break in the causeway just north of the dogleg bend was not recorded as such with the GPS, making the road appear as a continuous line there.



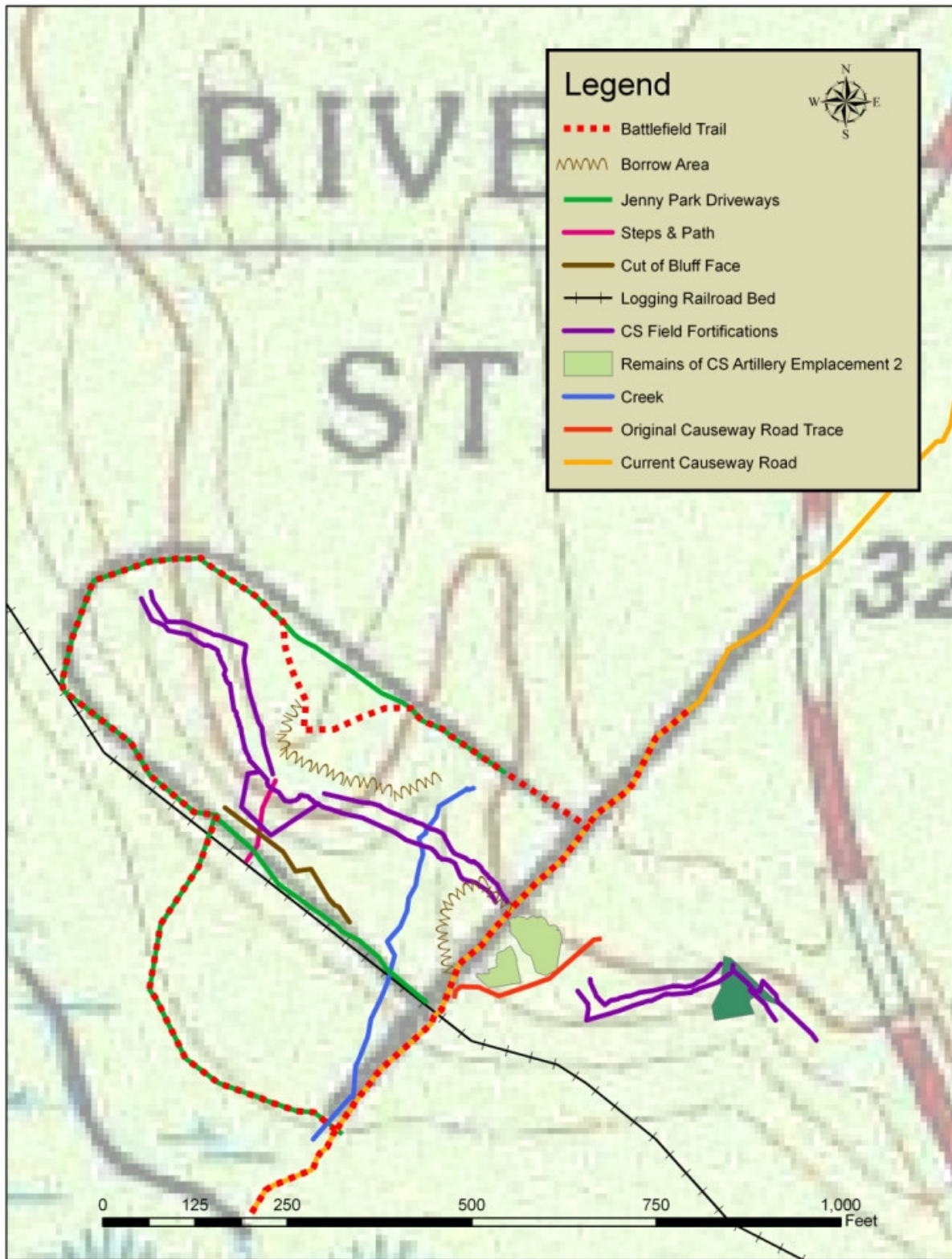
Landscape features from the 1865 battle remaining at Rivers Bridge State Historic Site, as identified using GPS. The face and sides of artillery emplacement 1 look overly large because they were mapped along the outer edges of the emplacement's ditch.



Alterations to the battlefield landscape caused by construction of the Salkehatchie Timber Company's logging railroad in the early 1900s. The section of the railroad bed immediately in front of the works was mapped by the surveyors as part of the road built for Jenny Park; it is included in this map as part of the logging railroad.

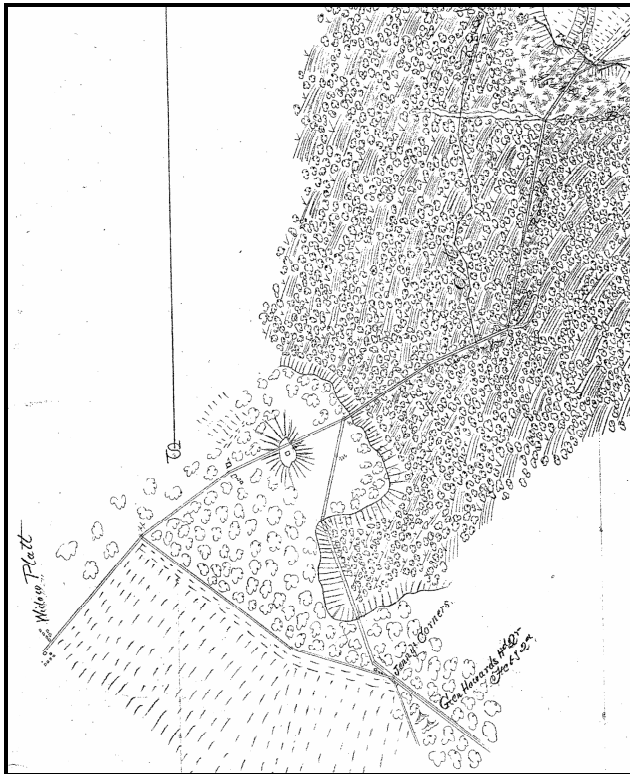


Alterations to the battlefield landscape known or assumed to have been caused by the creation of John D. Jenny Park in 1941. The borrow areas might have provided soil for the Jenny Park driveways. The driveway near the river was mapped by the surveyors as part of the park's battlefield interpretive trail; it is included here as a driveway.

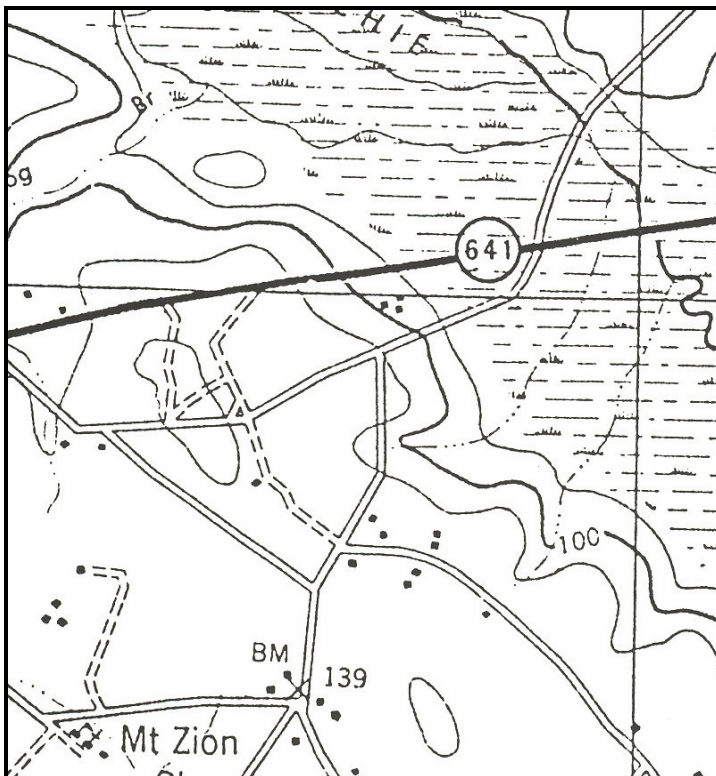
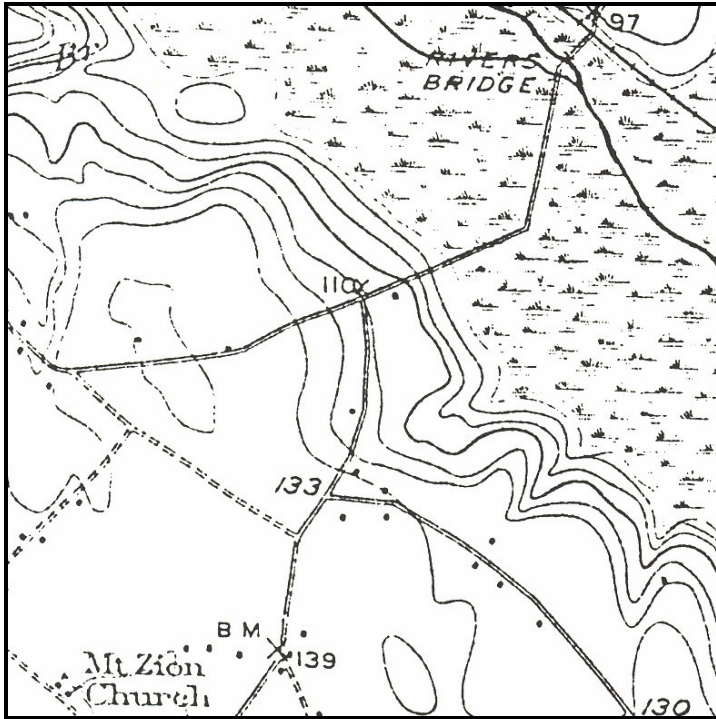


The battlefield in the Jenny Park section as it currently appears. The route of the battlefield interpretive trail where it loops into the borrow area behind artillery emplacement 1 was added during the creation of the map.

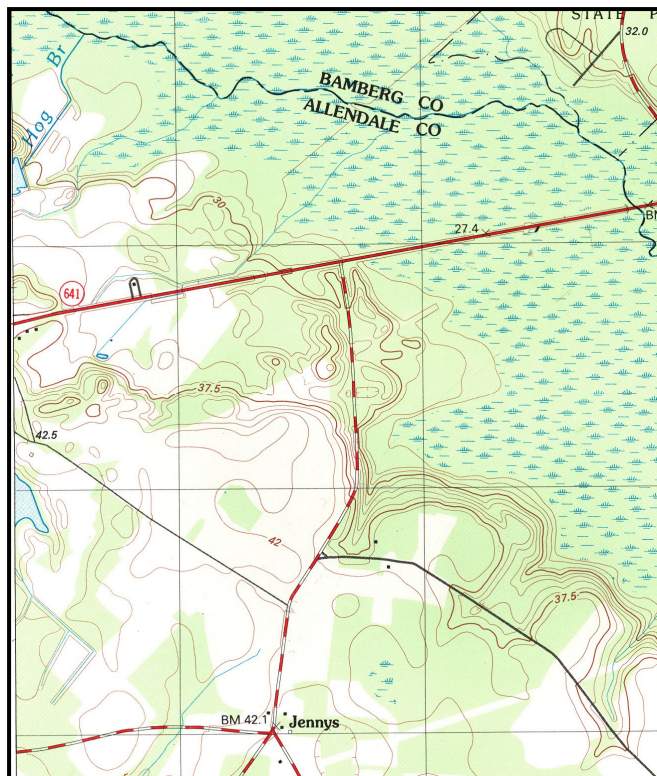
The road network on the south side of the Salkehatchie shown on the 1865 maps was not originally a part of this study. This was mainly because the project focused on the core area of the battlefield, but it was also partly due to a belief that the battlefield maps inaccurately depicted the road network in the area, showing Jenny's Corners in the wrong location. The surveyors and State Park Service staff continued to be interested in these roads, however, and attempted to identify the historic roads on the modern landscape by making them conform to present-day roads that somewhat resemble those shown on the 1865 maps. Once it was determined that the manuscript battlefield maps accurately portrayed the features on the north side of the swamp, it was easy to accept that the features on the south side were depicted with equal precision. Scaled measurements and compass bearings taken from the draft battlefield map and then applied to the modern topographic map indicated that the network of major roads leading to the causeway had changed since 1865. These changes were also evident after a closer comparison of topographic maps of the area.



The road network south of the Salkehatchie swamp, as depicted on the draft 1865 battlefield map. Compare the direction of the roads and the location of Jenny's Corners shown here to what is portrayed on the topographic maps on the following pages.



The road network south of the Salkehatchie swamp as shown in the 1919 topographic map (top) and the 1943 topographic map (bottom). In both maps Jenny's Corners is at the road juncture near bench mark 139. The maps show the causeway road running through the swamp as it did in 1865, but they also show that the road leading to it southwest of Rivers Bridge has shifted to follow a more east-west course on the high ground above the swamp. Note, too, the change caused by the construction of State Highway 641 in the 1943 topographic map.



The road network south of the Salkehatchie swamp, as shown on the 1982 topographic map. The road that leads to the causeway (present-day Jenny Road, depicted with red and white dashes) has been extended to State Highway 641. The causeway through the swamp and the east-west tending road leading to it off the high ground southwest of Rivers Bridge no longer appear on the map. Note the location of Jenny's Corners, more than half a mile southwest of where it was placed on the 1865 maps.

While the road network had obviously changed, the location of Jenny's Corners remained the same. So how to account for the woefully inaccurate depiction of Jenny's Corners, shown on the 1865 maps as being over half a mile northeast of its actual location? The most plausible answer is that the Union engineers simply misidentified the road juncture they found as Jenny's Corners. Vague and outdated maps and incorrect conclusions drawn after identifying local residents may be to blame.

Some historical documents reveal that Union troops had trouble identifying a nearby site shown on their maps. Major Henry Hitchcock of Sherman's staff wrote on February 4, 1865, "The point designated 'Anglesey's P.O.' on the map, is not known hereabouts."¹² The Third Division of Blair's Seventeenth Corps was ordered to the site that Hitchcock could not locate. Brigadier General Manning Force, commander of the Third Division, halted his troops on the night of February 2nd at what he assumed was his objective despite the fact that "no one in the country had heard of Anglesey's Post-Office, though the maps showed it to be near." Force was confused about his whereabouts until the next day. "An old negro told me this morning that

¹² Howe, ed., *Marching with Sherman*, p. 250.

Angle's Post-Office was discontinued thirty or forty years ago," Force reported, "and the name had been forgotten."¹³ Union commanders were probably carrying large-scale maps that showed only major roads and prominent locales, and some of the latter, as shown by Hitchcock's and Force's accounts, were identified with outdated names. Roads shown as straight lines in reality twisted and turned, and there were many more local roads in the country than the few shown on the maps.¹⁴ Also, Union troops did not have enough maps of South Carolina. Citing the "insufficient number of maps of the State of South Carolina," Howard on February 5 ordered all captured maps of the state turned over to division commanders and then forwarded to his chief engineer for later distribution.¹⁵

The Federals at Rivers Bridge were probably confronted with similar difficulties when they tried to pinpoint the location of the crossroads shown on their maps as Jenny's Corners. In the confusing tangle of dirt roads that led to the causeway over the Salkehatchie Union officers might have inquired about the names of local residents to try to figure out where they were. They were in an area long known as the Jenny section for the family that lived there.¹⁶ Perhaps the Federals heard the name Jenny associated with the area and then simply assumed that the road juncture where General Howard established his headquarters was Jenny's Corners. Further support for this interpretation came from local information on the Jenny family. On December 1, 2003, a descendant of John D. Jenny, F. B. McKerley of Williston, South Carolina, showed State Park Service staff the home John D. Jenny lived in after the war and the site where Mr. McKerley was told Jenny had been born and lived at the time of the Civil War. The approximate locations of these sites were sketched on a modern topographic map. These sites are remarkably close to where the measurements and bearings taken from the battlefield maps suggest Jenny's Corners should be located.¹⁷

¹³ OR, Vol. XLVII, Part I, pp. 405, 406. The editors of the journal of Major Thomas Osborn identify Angle's or Angsley's as modern-day Sycamore, South Carolina. Harwell and Racine, eds., The Fiery Trail, p. 98n.

¹⁴ McElfresh, Maps and Mapmakers of the Civil War, pp. 17, 21-22.

¹⁵ OR, Vol. XLVII, Part II, p. 307.

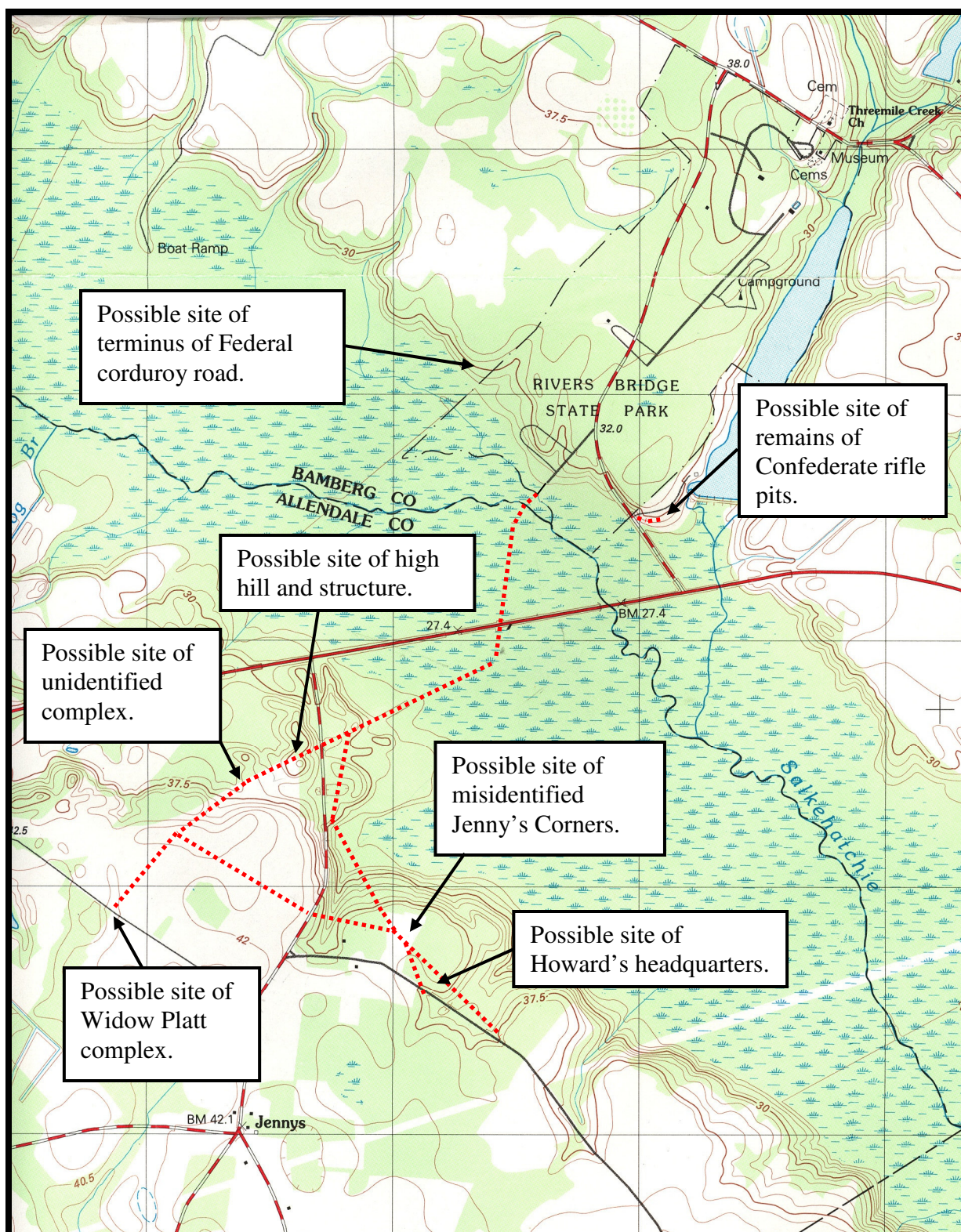
¹⁶ David Jenny, personal communication, November 6, 2003, and F. B. McKerley, personal communication, November 18, 2003. A brief reference to John D. Jenny in a newspaper account of the 1936 Rivers Bridge memorial service called him "the grand old man who lives in the Jenny section just across the Salkehatchie in Allendale county." [sic] "Memorial Sidelights," Bamberg Herald, May 14, 1936

¹⁷ When he saw the roads on the south side of the swamp as depicted on the battlefield maps traced onto a modern topographic map, site manager Casey Connell immediately noticed how they lined up with the Jenny house sites.

It will also be recalled that fifteen-year-old John D. Jenny witnessed the battle and was briefly held by Federal troops. Jenny could easily have seen the action from a safe distance if he had watched it from his home just across the river. And perhaps it was their contact with this young man that prompted the Union troops to think they were at Jenny's Corners when the actual site of Jenny's Corners was over half a mile away to the southwest.¹⁸

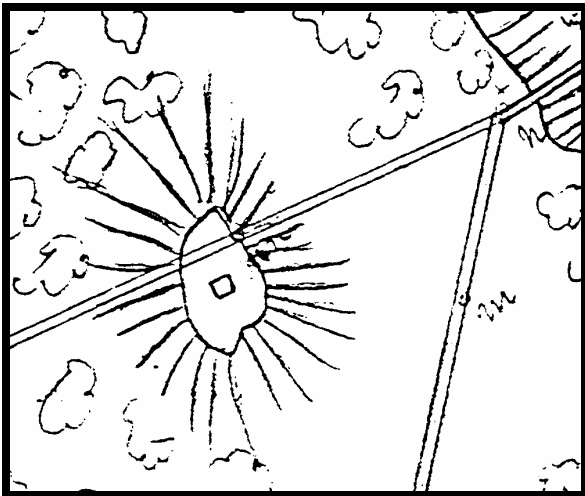
It is ironic that the Civil War Sites Advisory Commission incorrectly placed Jenny's Corners on the map in 1992 at about the same location where Union army cartographers mistakenly placed the crossroads in 1865.

¹⁸ Mrs. Jo Bessie Bickley, a great-granddaughter of John D. Jenny, and her husband, Joe Bickley, told of family lore stating that John D. Jenny was held because he had been harassing the Union troops. Joseph and Jo Bessie Bickley, personal communication, March 5, 2004.



Possible locations of sites from the battle of Rivers Bridge, from scaled measurements and compass bearings taken from the draft 1865 map, and superimposed on the 1982 topographic map.

Limited attempts were made to identify and pinpoint other features shown on the battlefield maps but outside the proposed survey area. The high hill on the south side of the swamp, where, according to the 1865 maps, a structure of some sort stood, was not located until late in the study. As already noted, scaled measurements from the 1865 maps showed the road network leading to the causeway had changed since the time of the battle. These scaled measurements also indicated that the high hill and structure shown on the battlefield maps should be only some sixty feet west of present Jenny Road. The old causeway road continues as a dirt road on the west side of Jenny Road, rising up a low hill not far from the modern paved road. Steve Smith reported seeing eighteenth and nineteenth century ceramics in the dirt road on top of this hill.¹⁹ Joseph and Jo Bessie Bickley pointed out the general location on the modern topographic map of the site of a house called the Platz house, which could be the same site as that marked on the 1865 maps as “Widow Platt.”²⁰ The location identified by the Bickleys is very near the spot where the scaled measurements from the 1865 map place the Widow Platt complex.



Left: The structure on a hill that is featured so prominently on the 1865 battlefield maps. Right: The trace of the causeway road where it runs west of Jenny Road away from Rivers Bridge State Historic Site rises to a small knob. The structure pictured on the battlefield maps probably sat atop this knob to the left of the road trace.

¹⁹ Steven D. Smith, personal communication, October 26, 2004. Another nearby hill was initially thought to be the hill shown on the battlefield maps, especially when it was thought that the battlefield maps did not accurately depict the roads around Jenny's Corner. This hill was shown to the author on March 5 by Jason Zettler, forester for the Kearsse Land and Timber Company. It is a high, prominent knob with brick remains from a structure and a well at the top. A dirt road encircles rather than ascends this hill. This knob is so steep that it appeared unlikely a road would have ever crested it, as shown in the 1865 map. This observation, provided by Terry Conway of the South Carolina State Park Service, prompted the reexamination of the battlefield map which led to the present conclusions about the road network on the south side of the swamp.

²⁰ Joseph and Jo Bessie Bickley, personal communication, March 5, 2004.

Battlefield Tree Survey

The present project to map the Rivers Bridge battlefield included a component mapping project to survey the trees around the remains of the earthen fortifications. The goal of this part of the study was to provide the State Park Service with data on the species, size, and location of trees in the immediate vicinity of the earthworks for use in managing the trees to help preserve the works. Specifically, trees are to be managed so a sufficient hardwood canopy remains to provide a layer of protective leaf litter on the works. This has been found to be the most effective and most sustainable management strategy to minimize erosion on earthworks.²¹ Also, trees are identified as potential hazards to the earthworks should they fall. Hazard trees are prioritized based on their potential for damaging the earthworks. These trees are to be targeted for eventual removal. Before they are removed, though, new native species trees will be planted nearby in non-hazardous locations and allowed to establish themselves so they can provide leaf litter cover after the hazard tree is removed. The tree survey was considered an especially important part of the mapping and physical study because a number of mature oaks on the Battlefield have died in the last several years, and successive droughts in recent years may have weakened other mature trees. This has been especially evident in the Jenny Park section of the Battlefield.²²

The tree survey at Rivers Bridge was limited to property owned by the South Carolina State Park Service and was not scheduled to begin until late spring or early summer so the trees would be in full leaf to facilitate species identification. Stan Hutto, State Park Service biologist, conducted the initial part of the tree survey on June 25, 2004. Using a Trimble Pro XL GPS unit Hutto mapped trees that were in, on, and immediately around the earthworks.²³ Trees considered immediate hazards to visitors and park staff (dead and badly damaged or diseased trees) were identified, as were trees considered potential hazards to the earthworks. The latter

²¹ For information on forest cover as the most effective and most low-maintenance regime for managing erosion of earthworks, see Guide to Sustainable Earthworks Management, pp. 27-36; W. M. Aust, A. Azola, and J. E. Johnson, "Management Effects on Erosion of Civil War Military Earthworks," Journal of Soil and Water Conservation, 58, 1 (Jan. 2003): 13-20; Anthony Azola, "The Effect of Management on Erosion of Civil War Battlefield Earthworks," M.A. thesis, Virginia Polytechnic Institute and State University, 2001; and "Sustainable Earthworks Management," information from the National Park Service's Historic Landscape Initiative online at <http://www2.cr.nps.gov/hli/currents/earthworks/index.htm>.

²² Park Technician Timmy Hiers, personal communication, January 30, 2003.

²³ Complete data from the tree survey was provided to the National Park Service in electronic format.

trees fell into the category of mature trees—trees measuring twelve inches in diameter at breast height (dbh) or larger—that could damage the earthworks if they should fall and their root mass tear out portions of the works. These trees were further categorized according to their locations on the works: they were identified as being on top of the parapet, or on the side slope (front or rear) of the parapet, on the toe slope (end or flank) of the parapet, or in the trench or ditch of the works. Trees not on the works but within several feet were also mapped as “adjacent” trees since it was believed that they could possibly damage the parapet either by falling across it or tearing out a portion of it with their root balls if the trees were uprooted. In addition to their location and hazard potential, trees were identified by species and their diameter at breast height was measured. Dead and damaged trees near the works were identified for immediate cutting. Their locations were also mapped. Hutto returned to Rivers Bridge on August 26 to measure the crown diameters of the trees previously mapped. This provided a visual representation of how well the tree canopy covers the earthworks. Openings in the canopy can be readily identified and targeted for in-fill tree planting to ensure that sufficient leaf litter will continue to cover the works.

Because of time limitations, trees were surveyed only in the area encompassed by the old John D. Jenny Park. This part of the site was identified as the first priority for the tree survey since it is the most publicly accessible part of the Battlefield and contains the site’s self-guided interpretive trail. Similar tree surveys will be conducted in the future around the remainder of the Confederate earthworks southeast of the causeway road and around the Union defensive earthworks to the northeast. The part of the Battlefield southeast of the causeway road was identified as the second priority for the tree survey. The Confederate works here are under full forest cover with some understory. They are partially visible from the old Jenny Park section of the Battlefield but are generally not accessible to the public. The Union works are in excellent preservation under full forest cover with understory growth. They are not visible to the public and are also generally inaccessible. For these reasons, the Union works were assigned third priority for the tree survey.

The Confederate earthworks in the former Jenny Park area are generally mature oaks and hickories with some pines and other species present. A few pines to the immediate northwest of

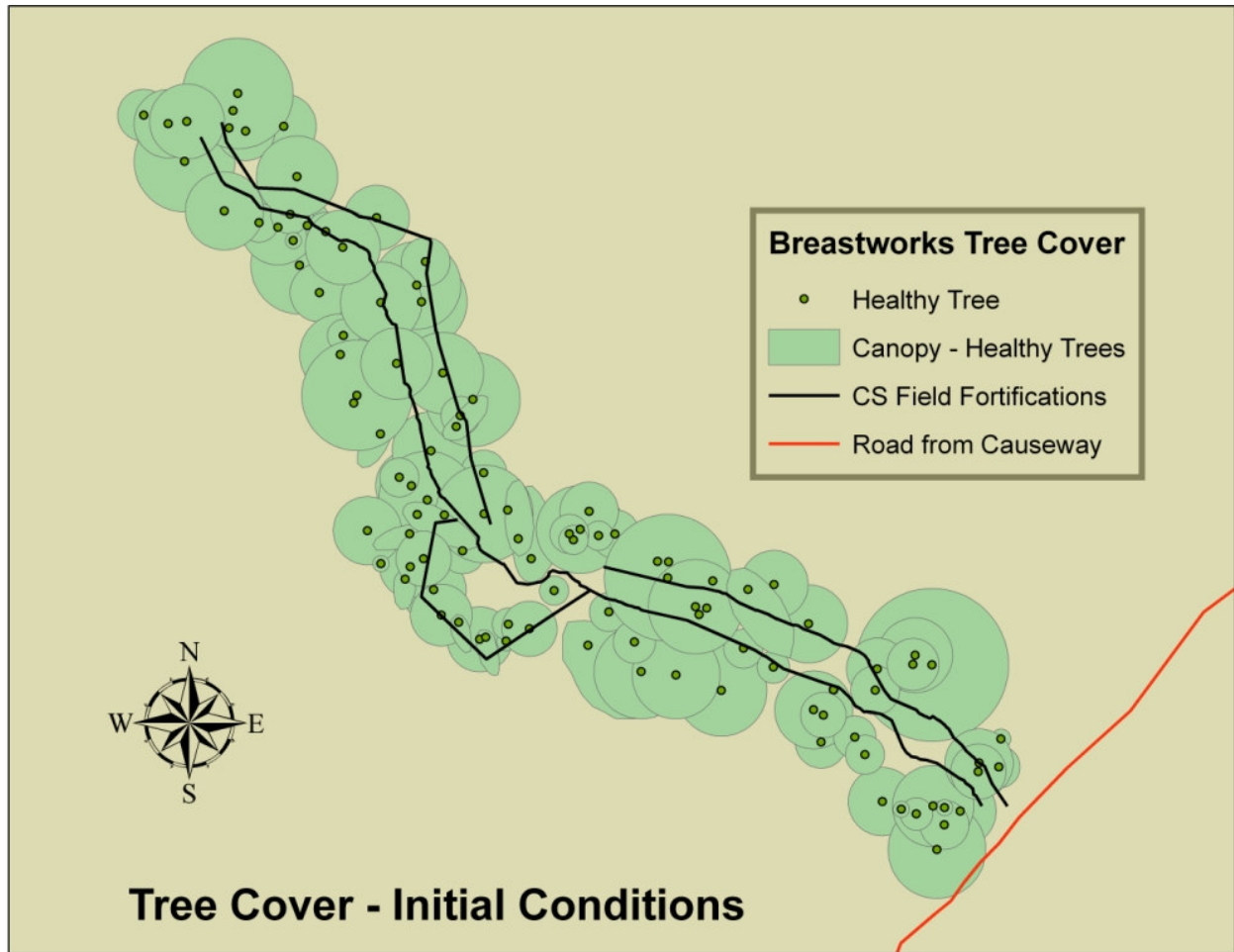
the causeway road were found to be infested with black turpentine beetles and slated for removal. For future tree management in this area, trees were assigned priorities for eventual removal. Highest priority was given to trees that posed a potential for injuring visitors and staff. Second priority for removal was assigned to trees of twelve inches dbh or greater on the works, adjacent to the works, or in the trench or ditch line of the works. These trees were also further prioritized as follows, starting from highest priority for removal:

- Trees of twelve inches dbh or greater on the toe slope of the parapet.
- Trees of twelve inches dbh or greater on the top of the parapet or on artillery platforms.
- Trees of twelve inches dbh or greater on the side slopes of parapets.
- Trees of twelve inches dbh or greater in the ditches of the works.
- Trees or twelve inches dbh or greater adjacent to any part of the works.

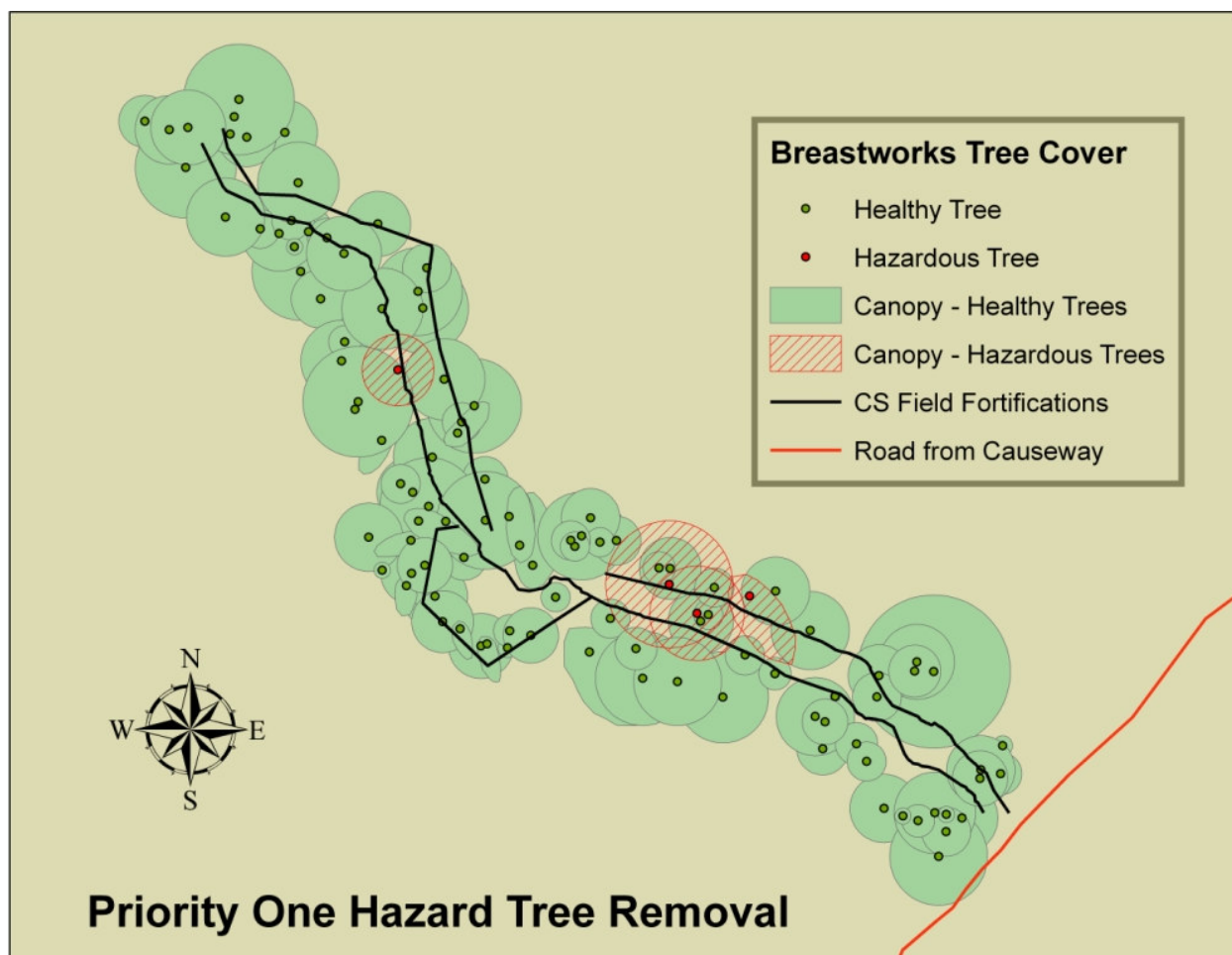
The results of the tree survey on this portion of the Battlefield and the crown diameter survey are shown in the following series of maps. They show existing tree cover and the cover as it would appear before and after the removal of the hazard trees as prioritized above. No trees of twelve inches dbh or greater were found in the ditches, so no maps were created for that priority. Trees smaller than twelve inches dbh that are in the ditches will not be removed immediately. It was felt that they could continue to provide protective leaf litter cover on the works while they remain small and pose little risk of toppling. The series of maps give a graphic depiction of where crown cover will be lost after hazard trees are removed, and thus they can be used as guides to planting new trees. New native species trees are to be planted in areas where they will not pose a threat to the earthworks and will be nurtured to establish themselves before the hazard trees are cut. Once established, then, the new trees will provide leaf litter cover to replace that lost when the hazard trees are cut.

The ground cover in the tree survey area was generally hardwood leaf litter. Shrubs, grasses, and vines growing in and around the works were not surveyed at this time. Hutto noted a variety of plants, including little bluestem (*Schizachyrium scoparium*), heartleaf ginger (*Hexastylus arifolia*), wax myrtle (*Myrica cerifera*), and dwarf greenbrier (*Smilax pumila*). These are beneficial native plants that require little management and provide additional soil

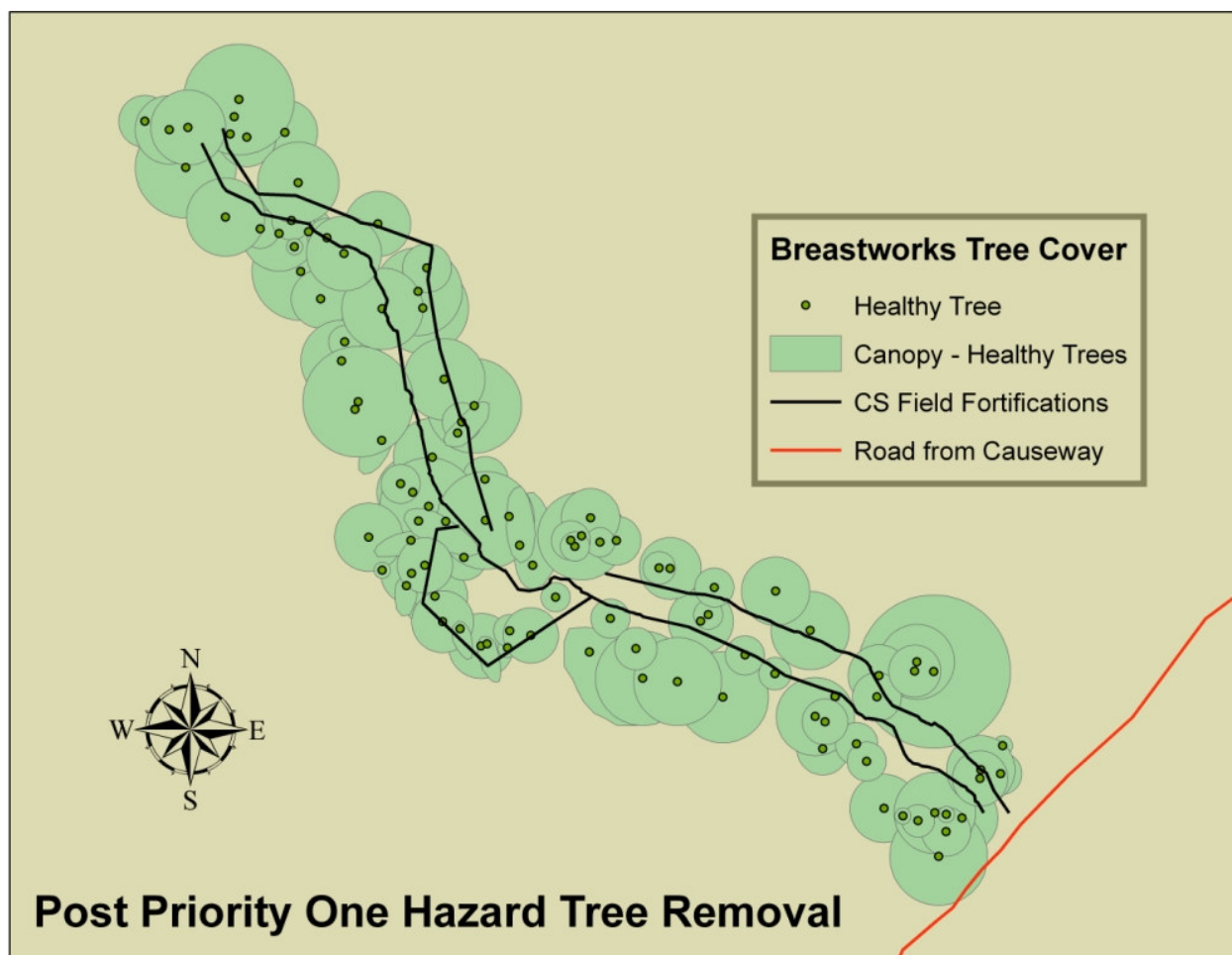
stabilization. The vines in the trench also have low growing habits, permitting easy visibility of the trench while discouraging visitors from entering this feature.



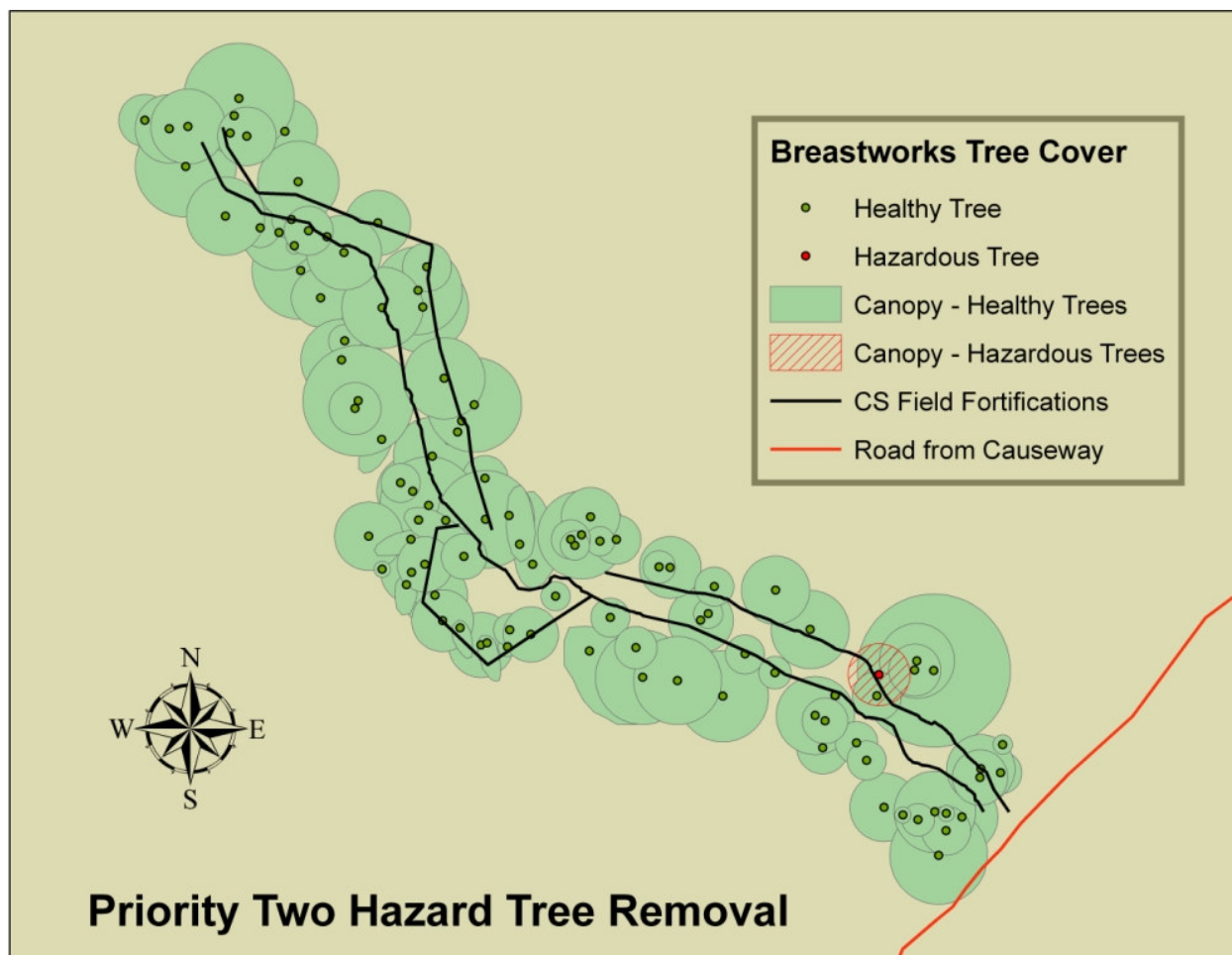
Existing tree cover around the earthworks in the John D. Jenny Park section of the Battlefield at Rivers Bridge State Historic Site. Only trees in, on, or immediately adjacent to the earthworks were surveyed for this study. On this and the following maps, the black lines represent the rear of the ditch line and the top of the parapet of the infantry works and the front of the ditch line of artillery emplacement 1 as determined by the SCIAA GPS survey. The brown diagonal line in the lower left corner of the maps is the current causeway road.



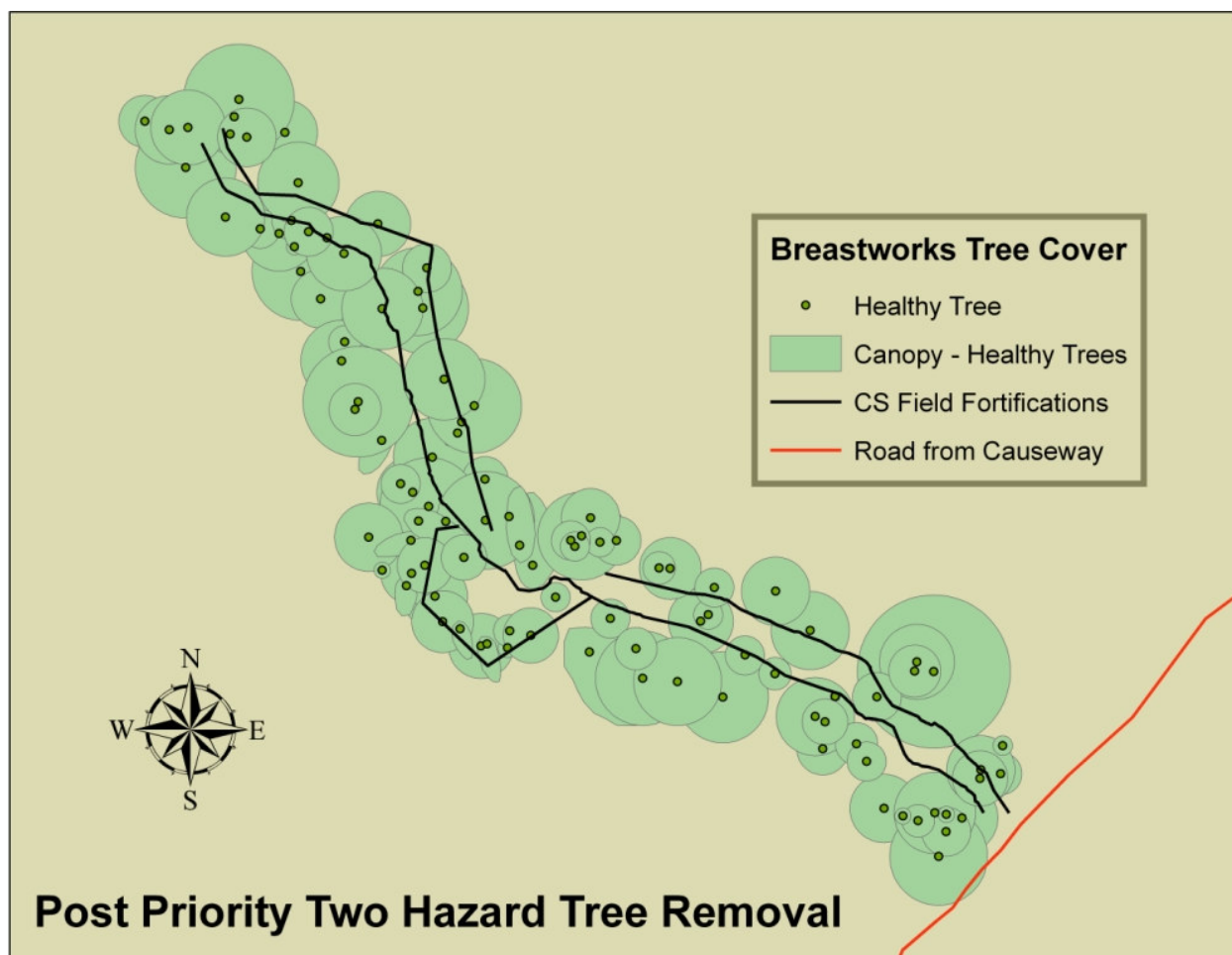
Identification of Priority One hazard trees—dead or damaged trees that pose a threat to visitors and staff.



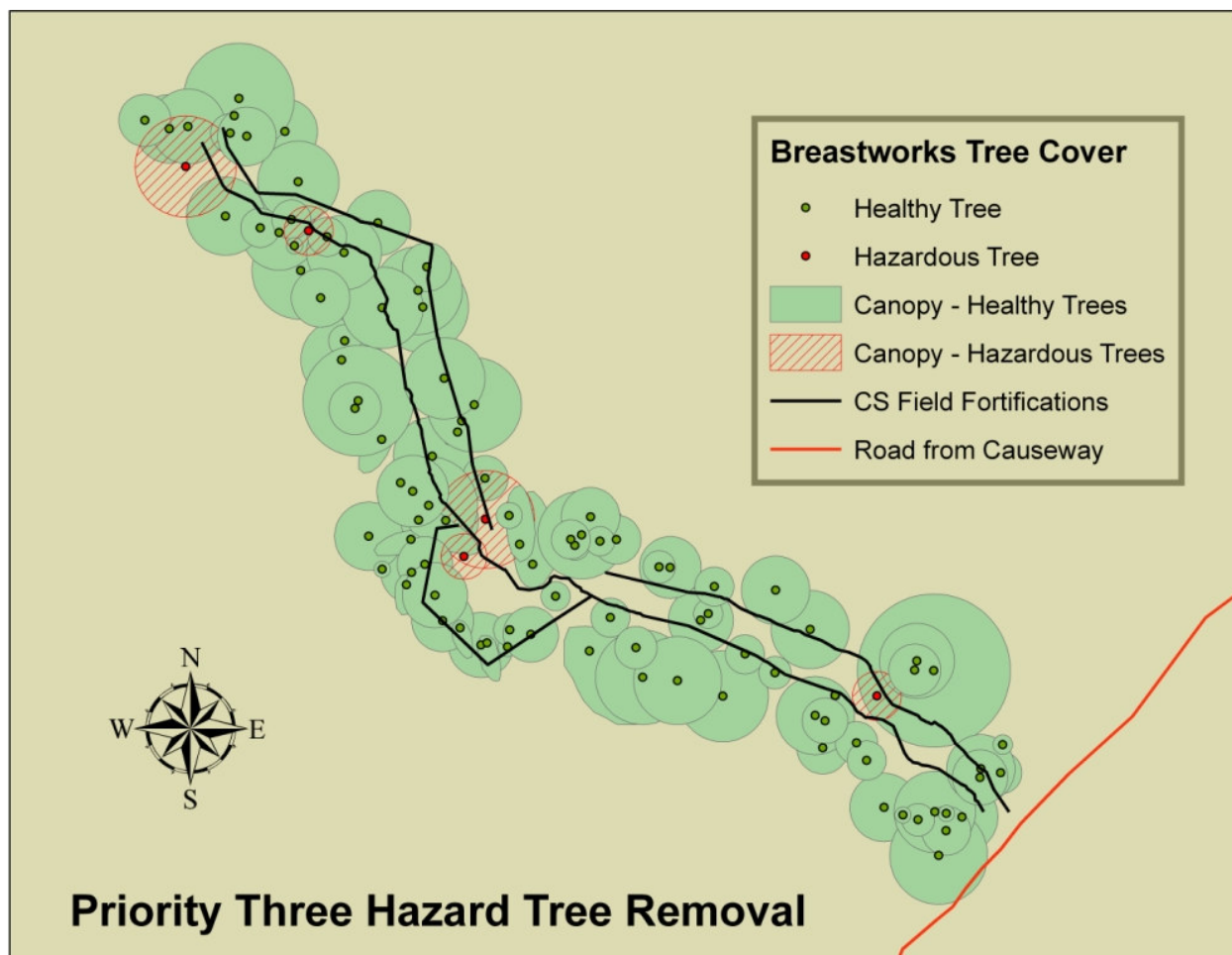
The effect on the tree canopy after the removal of Priority One hazard trees.



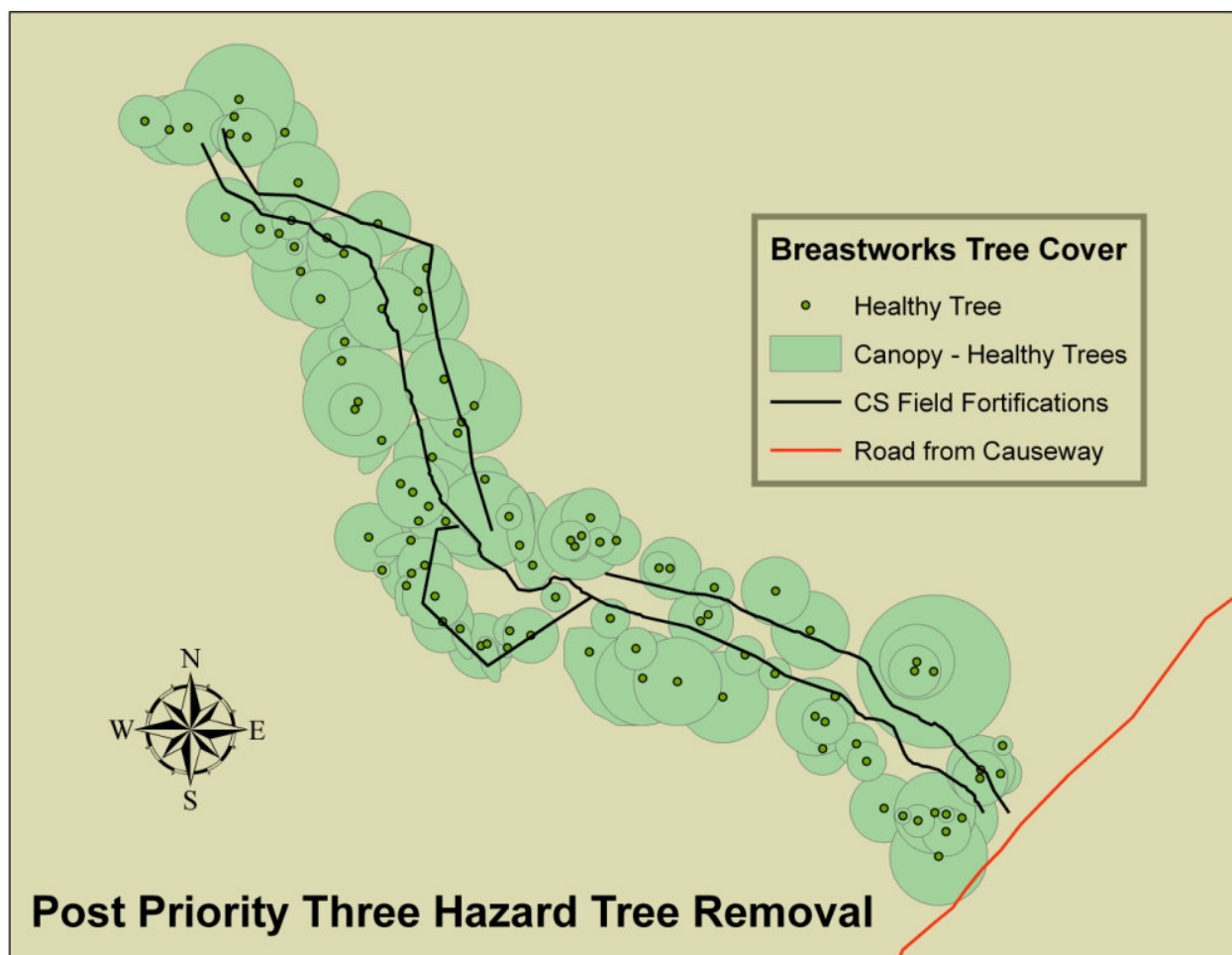
Identification of Priority Two hazard trees—trees of twelve inches dbh or greater on the toe slope of the parapet. The single tree identified in this map is on a toe slope created by the creek bed, not pictured on the maps, that cuts through the works.



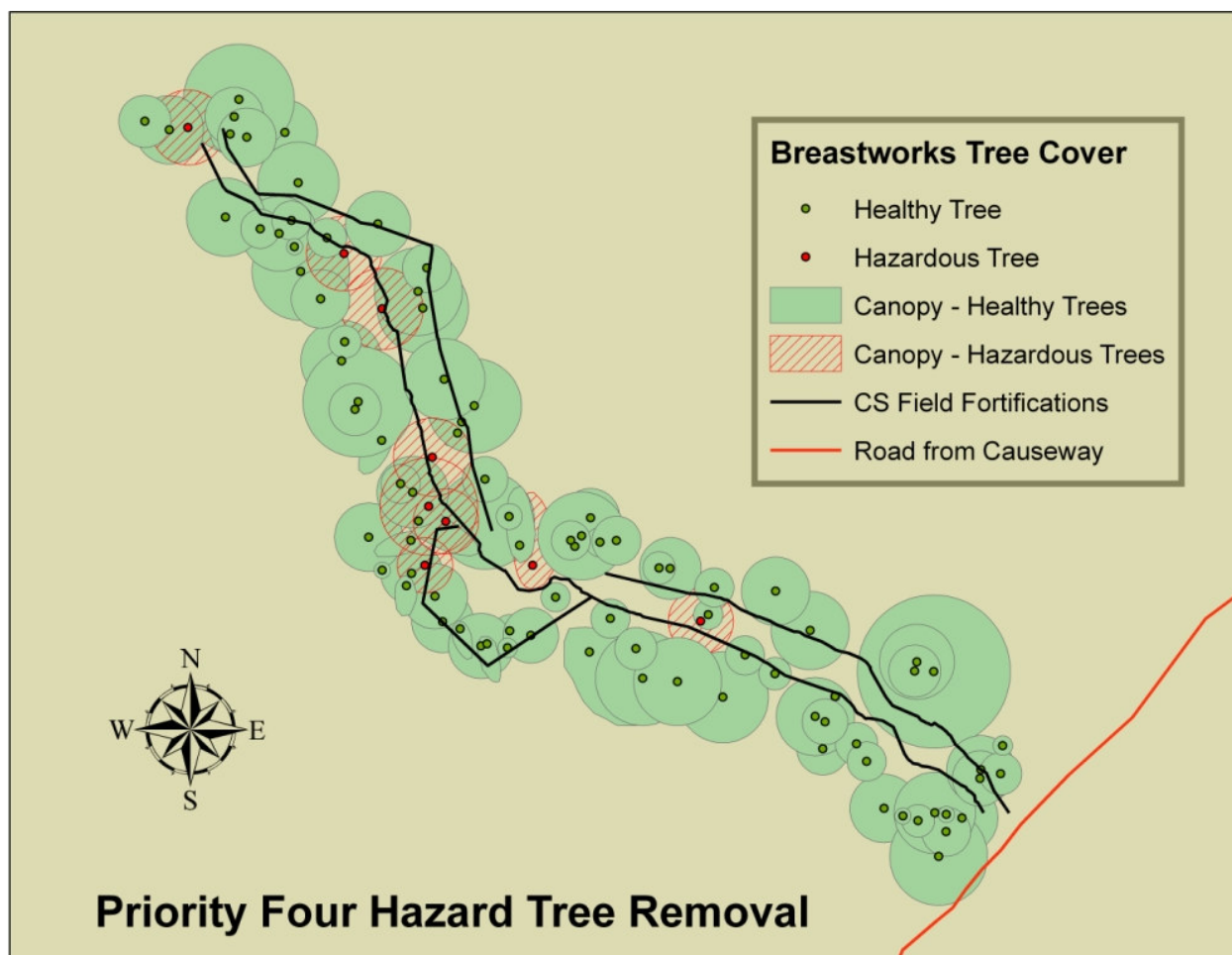
Effect on the tree canopy after the removal of Priority Two hazard trees.



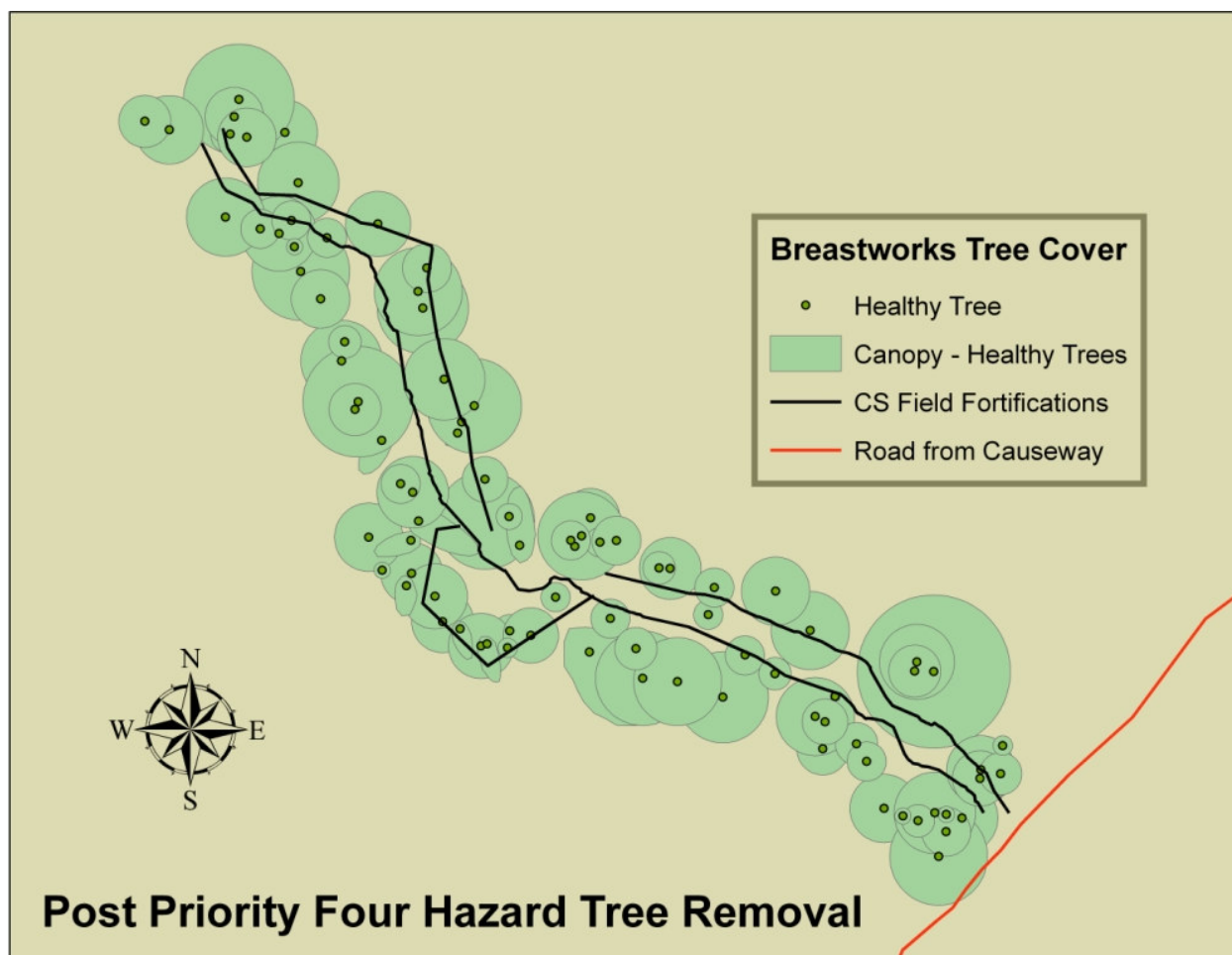
Identification of Priority Three hazard trees—trees of twelve inches or greater dbh on the top of the parapet.



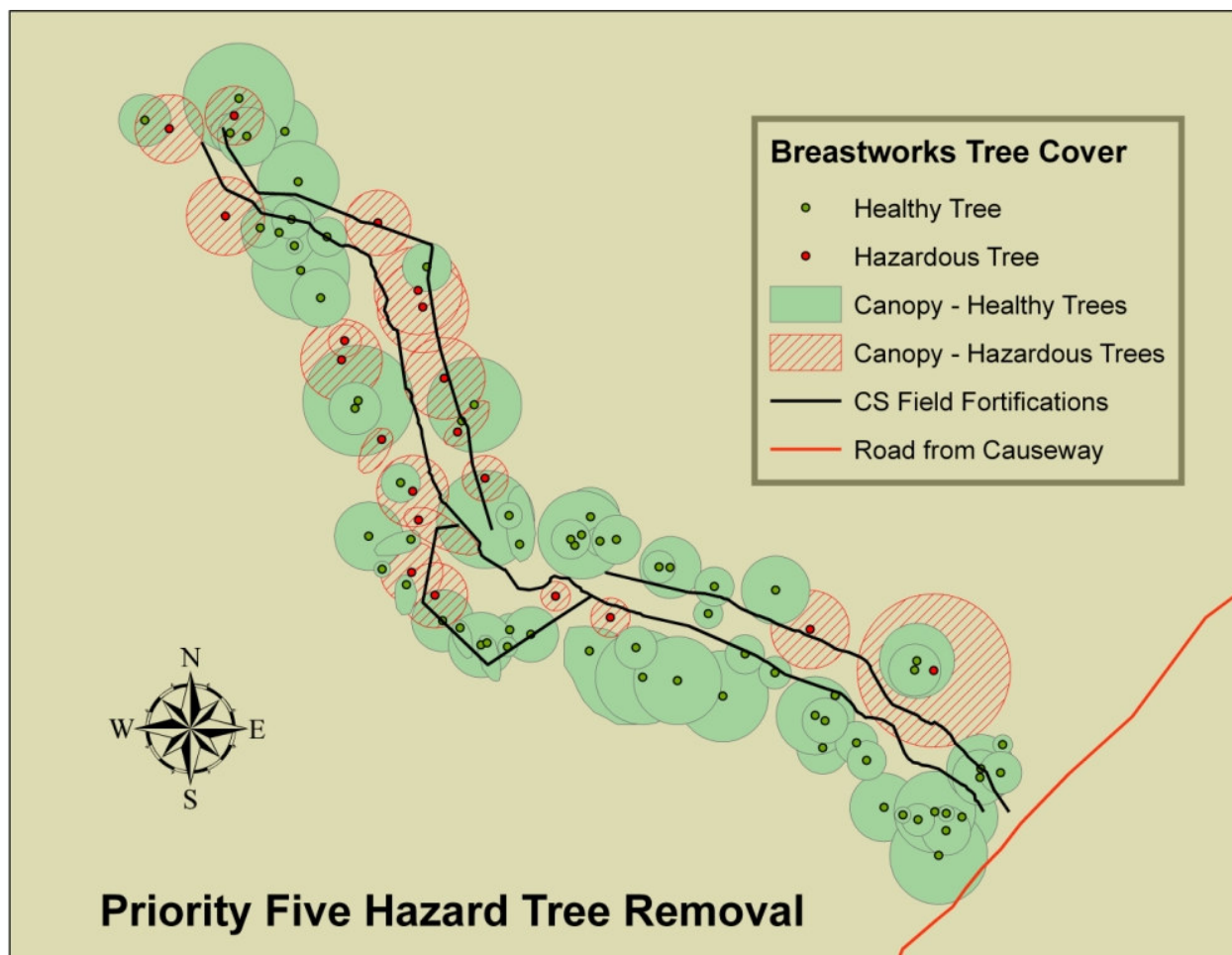
Effect on the tree canopy after the removal of Priority Three hazard trees.



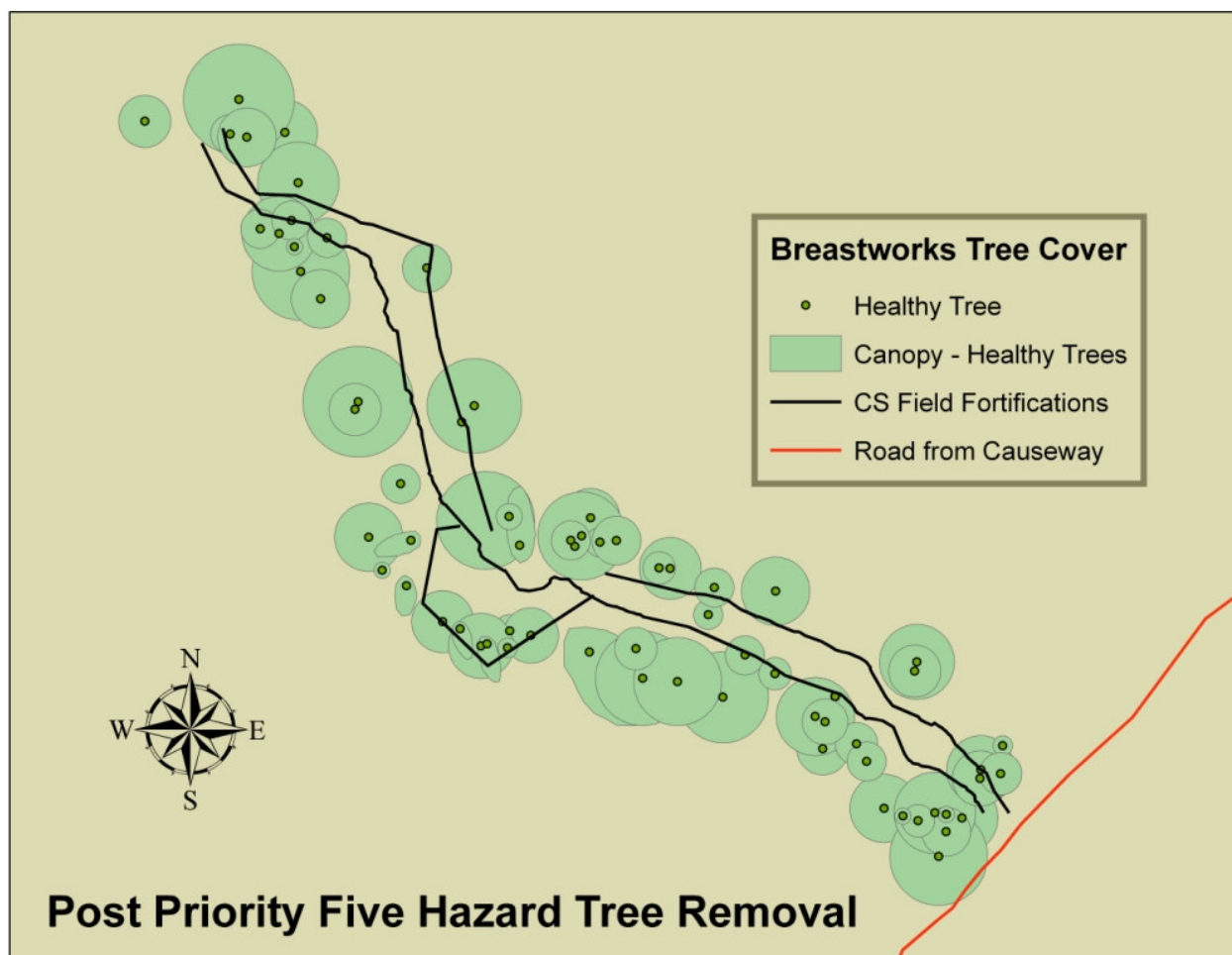
Identification of Priority Four hazard trees—trees of twelve inches or greater dbh on the side slopes of the parapet.



Effect on the tree canopy after the removal of Priority Four hazard trees.



Identification of Priority Five hazard trees—trees of twelve inches dbh or greater adjacent to any part of the works. These are trees that are close enough to the works that they could damage the parapet or ditch if they were to be uprooted; their root masses could tear out sections of the works or their trunks could fall across the works.



Effect on the tree canopy after the removal of Priority Five hazard trees.

CHAPTER 8

The Battlefield Landscape in the Future

The battle of Rivers Bridge was a small action fought in the last year of the Civil War. It is a little known engagement. Still, it is significant for a number of reasons. It was the only major resistance mounted by the Confederates in the face of Sherman's march through South Carolina. The Union victory forced the Confederates to abandon their line of defense along the Salkehatchie and led to the cutting of the South Carolina Railroad linking Augusta and Charleston. After Rivers Bridge, Confederate forces fell back to another line of defense behind the Edisto River, and then continued to fall back as Sherman's army advanced through the state. Confederate troops were not able to concentrate against Federal forces until both armies were in North Carolina.

In a campaign characterized more by hard marching than fighting, the battle of Rivers Bridge stands as an unusual example of static combat. The fighting at Rivers Bridge was not unusual, though. It was typical of the combat fought by veteran troops late in the war, and it exemplified the tactics these veteran soldiers adopted after several years of warfare. Troops on both sides used the terrain and man-made features of the battlefield to their advantage and to the disadvantage of their enemy. Confederates and Federals alike dug in to protect their positions, using temporary earthen field fortifications to maximize enemy losses while minimizing their own. Rather than take heavy casualties in frontal assaults on a strong position, Union forces flanked the Confederates out of their fortified line, displaying the maneuvering and corduroying for which Sherman's forces were famous. In many ways the battle of Rivers Bridge was a soldier's battle, one in which decisive actions were prompted by the initiative of privates in squads and captains at the head of companies. Because it was a small-scale action, fought on brigade and regimental levels within a limited physical area, the battle of Rivers Bridge can be easily understood.

Conclusions

The mapping and site study of the Rivers Bridge battlefield produced the conclusions that follow. They are evidence of a successful and fruitful project.

Available documentation provides detailed information on the battle of Rivers Bridge. The battlefield maps in particular are remarkably accurate depictions of the natural and man-made physical features of the battlefield. When used together, the maps, the written and visual records, and the remains of the 1865 landscape paint a fairly clear picture of the battle and the key components of the ground on which it was fought.

Much of that ground remains well-preserved, with the distinctive features that shaped the action still visible and legible. At Rivers Bridge State Historic Site, most of these features remain despite several alterations to the landscape. Features from the battle that are preserved on state property are

- Remains of the Confederate field fortifications and associated terrain,
- Critical breakthrough points and scenes of intense combat from the second day's fighting
- Remains of Union field works erected after the Federals took the position,
- Traces of the main road used as the Confederate avenue of retreat,
- Site of the Confederate field hospital, and
- Bivouac sites for both Confederate and Union troops.

Several of these features have been identified and their extent and condition now determined; others remain to be discovered. These latter features include

- Additional Union earthworks,
- The secondary road that branched off the main road in the immediate rear of the Confederate works,
- A structure behind the Confederate rifle pits (if such a structure did indeed exist), and
- Union and perhaps Confederate burials on the north side of the swamp.

Some alteration of the Confederate fortifications probably occurred soon after the battle as Union pioneers tore down a portion of the Confederate parapet to reopen the causeway road, and the straightening of the causeway road may have occurred at this time or in the decades after the war. The remains of the Confederate fortifications were preserved, however, either out of a local sense of reverence for the hallowed nature of the ground or practical farming considerations

or both. The eventual reversion of this part of the site to forest cover ensured that the remains of the temporary earthen fortifications would stabilize naturally under the protection of leaf litter. Logging of the Salkehatchie swamp resulted in a significant change to the topography of the battlefield. The face of part of the headland the containing Confederate works was cut away to build the bed of the logging railroad that ran parallel to the river. But this alteration did not destroy the remains of the field fortifications, and the regenerated swamp forest that later grew up now provides vistas much as they might have appeared in 1865 when the Salkehatchie swamp seemed an impenetrable obstacle to Sherman's forces.

The Rivers Bridge Memorial Association made some changes to the battlefield when they opened a portion of it to the public in 1941 as John D. Jenny Park. The driveways along the edge of the swamp and around the earthworks still remain, and it is possible that soil from in front of and behind the works was borrowed to build parts of these roads, causing localized changes in topography. Clearing this part of the battlefield apparently exposed some areas to erosion and probably resulted in the loss of some archaeological evidence. The concrete steps up the face of the works created a visitor path across the ditch and through the parapet of one of the two artillery emplacements. Some of these changes, however, were made with minimal impact and admirable foresight. The driveways were never paved. Tree canopy covers most of the path next to the river, reducing its visibility. For the part of the driveway around the face of the earthworks, the Memorial Association used the bed of the already existing logging railroad. For part of the driveway behind the works, the Memorial Association apparently used the existing dirt lane shown on the finished battlefield map, further limiting impact to the site. Both of the driveways from Jenny Park have now been incorporated into the path of the site's new self-guided interpretive trail. The benefits of the Memorial Association's efforts far outweigh any of their alterations to the battlefield. The annual memorials to the Confederate dead preserved the memory of the battle and eventually led to the preservation of the battlefield, first as John D. Jenny Park and later as Rivers Bridge State Park and Rivers Bridge State Historic Site. Monuments and other commemorative features have been confined to the Memorial Grounds. There the annual memorial services reveal the continuing significance of the Civil War and the different meanings the war has held for successive generations. This adds immensely to our understanding and appreciation of the site.

The South Carolina State Park Service, first through the Forestry Commission and then the state Department of Parks, Recreation and Tourism, also altered the site, cutting fire lanes and digging trash dumps that are still visible throughout the site. Houses, driveways, and power and water lines were added to the site, along with the sort of recreational facilities generally thought necessary for a state park. Although most of these infrastructure and recreational facilities were built where combat did not take place, they had a significant impact on the perception and use of the site. The area containing the Confederate earthworks was preserved, but it was viewed as virtually separate from the recreational part of the park and the Memorial Grounds. The site was not presented as a coherent whole and, until recently, was poorly interpreted. Most of the recreational facilities inconsistent with a historic battlefield setting have been or are in the process of being removed, and efforts are being made to interpretively unite the different parts of the site.

The earthworks that remain are for the most part in good condition. The parapet and trench at the center of the Confederate infantry works on either side of the creek bed are the most heavily eroded and exhibit the lowest profiles. The damage here was most likely caused by a combination of factors, with the slope of the terrain and the draining of the headland through the creek bed as the major contributors. Water flowing through the creek bed must have naturally breached the works at some point after the battle; either that or someone later cut through the works here so the headland would again drain properly. Water now runs unimpeded through the fortifications. Runoff from the trenches on either side probably drains down into the creek bed. The natural processes that eroded the works here is probably ongoing. Also it was probably hastened by the removal of protective cover at different times, perhaps before the opening of John D. Jenny Park and again when the South Carolina State Park Service removed a number of trees in a failed attempt to establish warm-season grasses on the works. Reenactments on this fragile section of the earthworks, even when the movement of reenactors was carefully controlled and limited, possibly exacerbated conditions and might have caused additional erosion.

The greatest physical losses to the battlefield are the destruction of several elements of the field fortifications used by the troops of both sides. About two-thirds of one Confederate

artillery emplacement has been destroyed, along with some of the Confederate infantry parapet on the far left and most of the rifle pits which anchored that flank. Most of the temporary field fortifications erected by Union troops after they carried the Confederate position have also been lost. The loss of the Union works cannot be explained with the evidence available. They might have been plowed over by postwar farming or lost when the site was developed as Rivers Bridge State Park in the 1940s. It is not even known how extensive these works were. The extent of the Confederate rifle pits is known. Most of them were almost certainly destroyed by the construction of State Park Road in the 1950s, if traces of them remained at all then. As already noted, a feature that could be a remnant of the line of rifle pits has been identified on adjoining land that was outside of the area studied under this project. Much of the Confederate artillery emplacement that held the howitzers of Earle's Battery was leveled to allow a straightened stretch of the causeway road to run through its face. If this alteration could be ascribed to the victorious Union troops, it, too, could be considered evidence of the battle.

Another important physical loss to the battlefield is the loss of the original grade in front of the Confederate works northwest of the causeway road, apparently caused by the construction of the logging railroad. Even though the Confederate field works on the higher ground were preserved, the slope in front of them was not, and that slope was a critical component of the defenses. This loss poses interpretive problems by presenting a misleading image of the terrain. Visitors on the site's battlefield trail see a steep bluff here that makes the Confederate position look very formidable and resistant to attack. The Confederate position was indeed strong, but not because the bluff was so high and steep at this point. The high ground originally made a more gradual descent to the low area on the north bank of the swamp, giving the Confederates a continuous field of fire across their front all the way to the edge of the swamp. The modern terrain here would have been a disadvantage to the Confederates. It would have deprived them of a continuous field of fire. The base of the bluff would have been a dead zone, an area not swept by gunfire, where Union attackers could mass under cover before making a final rush on the works. The ground now violates the very principles of field fortification that guided the design of the Confederate position.



A wayside from the battlefield interpretive trail at the base of the bluff. The present-day terrain in front of the Confederate fortifications presents an inaccurate image of how such fortifications were designed.

The project identified many prominent features and locales from the battle that remain but are not preserved within the boundaries of Rivers Bridge State Historic Site. These are

- The Salkehatchie swamp,
- The remains of the causeway through the swamp, and
- The site of the main bridge over the main run of the Salkehatchie.

A number of battlefield features outside state property have not been precisely located and it is unknown whether any traces of them remain and if any of those traces are preserved. These features include

- Traces of the Union corduroy road through the swamp,
- The terminal point of the Union corduroy road,
- The site of the headquarters of the Union Right Wing (Army of the Tennessee),
- Federal bivouac sites on the south side of the swamp from before and after the battle,
- Union field hospital site,

- Possibly several Union burial sites (in the swamp and on the high ground south of the swamp),
- Roads used as approaches by federal troops, and
- Sites and structures associated with the battle identified on the battlefield maps.

The modern paved roads through the battlefield, State Park Road and State Highway 641, have significantly altered the historic transportation patterns of the area and thus limit our understanding of how the contending armies maneuvered and clashed at Rivers Bridge. While these changes may pose challenges to interpreting the battle, it is possible that they helped preserve the original roads. When these modern roads were constructed, the old causeway through the swamp was taken out of service, and where it continued on the north side of the river its use was limited to a service road for Rivers Bridge State Historic Site. The causeway remains intact in the Salkehatchie swamp, unpaved and untouched by modern development. The causeway road also remains preserved in Rivers Bridge State Historic Site, partly as a dirt road and partly as a trace.

The swamp, the central physical feature of the Rivers Bridge battlefield, also remains preserved. Although it has been logged, it is currently heavily wooded and appears much as it must have in 1865. The parts of the swamp adjacent to the park are owned by people with long family ties to the land and a deep appreciation for its history.

Global positioning system (GPS) technology was a critical tool for mapping the remains of the battlefield today. Although simple, low-tech efforts were very useful and successful in identifying elements of the battlefield and tracing their changes over time, they did not establish the present physical location of battlefield components as did the GPS. The GPS data dictionaries provided standardized formats for recording details of battlefield features, giving the South Carolina State Park Service critical baseline data to be used in interpreting and managing these resources.

Equally important was the surveyors' knowledge of Civil War history and their experience mapping Civil War sites. The trained archaeologists who conducted the survey for

this project contributed some of its most important interpretations and conclusions on the battlefield and its remnants. The GPS mapping could have been done by professional land surveyors, but it is doubtful that they would have furthered our knowledge of the site as much.

Finally, by necessitating the assistance of local landowners, the project brought the South Carolina State Park Service into closer contact with its neighbors at Rivers Bridge. The State Park Service became better acquainted with the adjoining property owners, and they in turn became better aware of the agency's goals and objectives for preserving Rivers Bridge. The good relations engendered by the project will serve as the groundwork for future cooperation.

Recommendations

This project to map the remains of the Rivers Bridge battlefield and conduct a detailed examination of the landscape and its documentation proved very successful, but it should be considered only the start of a long-term effort to identify, assess, preserve, and interpret the battlefield's resources. The following recommendations are offered to direct the current study toward that long-term process.

- **Use the GPS mapping data as baseline information to inform ongoing management of the battlefield resources at Rivers Bridge State Historic Site.** One of the stated goals of this project was to incorporate GPS data into a Specific Management Plan (SMP) being prepared for the Rivers Bridge battlefield. The tree survey conducted in the old Jenny Park section of the battlefield will be repeated in the other sectors of the battlefield, providing detailed data and maps to guide ongoing tree management around the earthworks to ensure that a protective layer of leaf litter covers the works. As new trees are planted and hazard trees are removed, their locations on the site should be identified with GPS. Maintaining a tree canopy and protective layer of duff will be especially critical for the Confederate works on either side of the creek bed, where the remains are most fragile and most vulnerable. GPS mapping of the site should continue to create additional layers of geographic information on other cultural resources (the commemorative and landscape features of the Memorial Grounds), disturbed areas (fire lanes, dump sites, borrow pits, the site of the swimming pool complex, and the

campground), and areas affected by the planned tree thinning and similar management activities. GPS mapping of the Memorial Grounds will inform the SMP being developed for that area of the park.

In particular, the concrete steps built into the face of the bluff for John D. Jenny Park need to be addressed. The steps lead to the face of artillery emplacement 1, where visitors have worn a path across the parapet and partly filled in the ditch. To prevent further damage, the steps have been closed, but they remain as a visible intrusion on the battlefield. State Park Service Staff have discussed several options for dealing with the steps, including removal or intentional burial. The steps are important reminders of how the battlefield was preserved, though, and they contain the footprints of John D. Jenny, the land's donor. Jenny descendants still live in the area, and they might be offended at the thought of removing or covering this feature. One possible solution would be to remove the top step for eventual display in an exhibit on the preservation of the battlefield and remove or bury the rest of the steps.

- **Conduct more detailed mapping of selected historical features.** Ideally, mapping with total station survey equipment should be conducted in the old Jenny Park section at Rivers Bridge State Historic Site to provide more detailed maps of critical areas in this most publicly accessible part of the battlefield. Precise elevations can be made at sections of the Confederate fortifications, providing current condition baseline data for monitoring such features as the eroded ditch and parapet remains on either side of the creek bed. Detailed elevations showing the borrowed areas around the works and the cut made for the logging railroad could help approximate the original grade of the land at these points, which would be very useful for both management and interpretive purposes. If total station survey mapping cannot be done immediately, the width and height of the parapets and the depth of the ditches could be measured using simple, low-tech methods with plumb bobs and line levels at selected points along the works. These points should be located with GPS.

Additional measurements should also be taken outside the boundaries of Rivers Bridge State Historic Site. State Park personnel should secure land owner approval to enter the swamp again to measure the distances on the causeway between the existing breaches. Measurements taken on the causeway should then be compared to the scaled distances between the bridges on the causeway as shown on the battlefield maps.

- **Incorporate the findings of the study into the ongoing interpretation of the site.** This can be done in a number of ways through a variety of interpretive media. An overall interpretive goal should aim at unifying the presently disparate parts of the Site into a cohesive whole. An interpretive site brochure, for example, could picture the battlefield as it existed in 1865, showing the location of artillery emplacement 2 and the original paths of roads behind the Confederate works. It could also show the location of the Confederate field hospital and interpretively reunite the Memorial Grounds with the Battlefield.

Interpretive improvements could be made through site work, such as selective tree removal to establish lines of sight approximating those seen by Confederate gunners from artillery emplacement 1 or to create a vista looking into the Salkehatchie at the remains of the causeway from Rivers Bridge State Historic Site. A proposed project to reconfigure existing fence lines at the Site is another example. The fence lines as they exist now were arranged to provide an area for spectators to watch the battle reenactment. Reconfigured fence lines will define historic roads and guide visitors along the Site's battlefield trail. All interpretive improvements must be planned to complement resource management goals and must not lead to inadvertent damage or expose resources to vandalism.

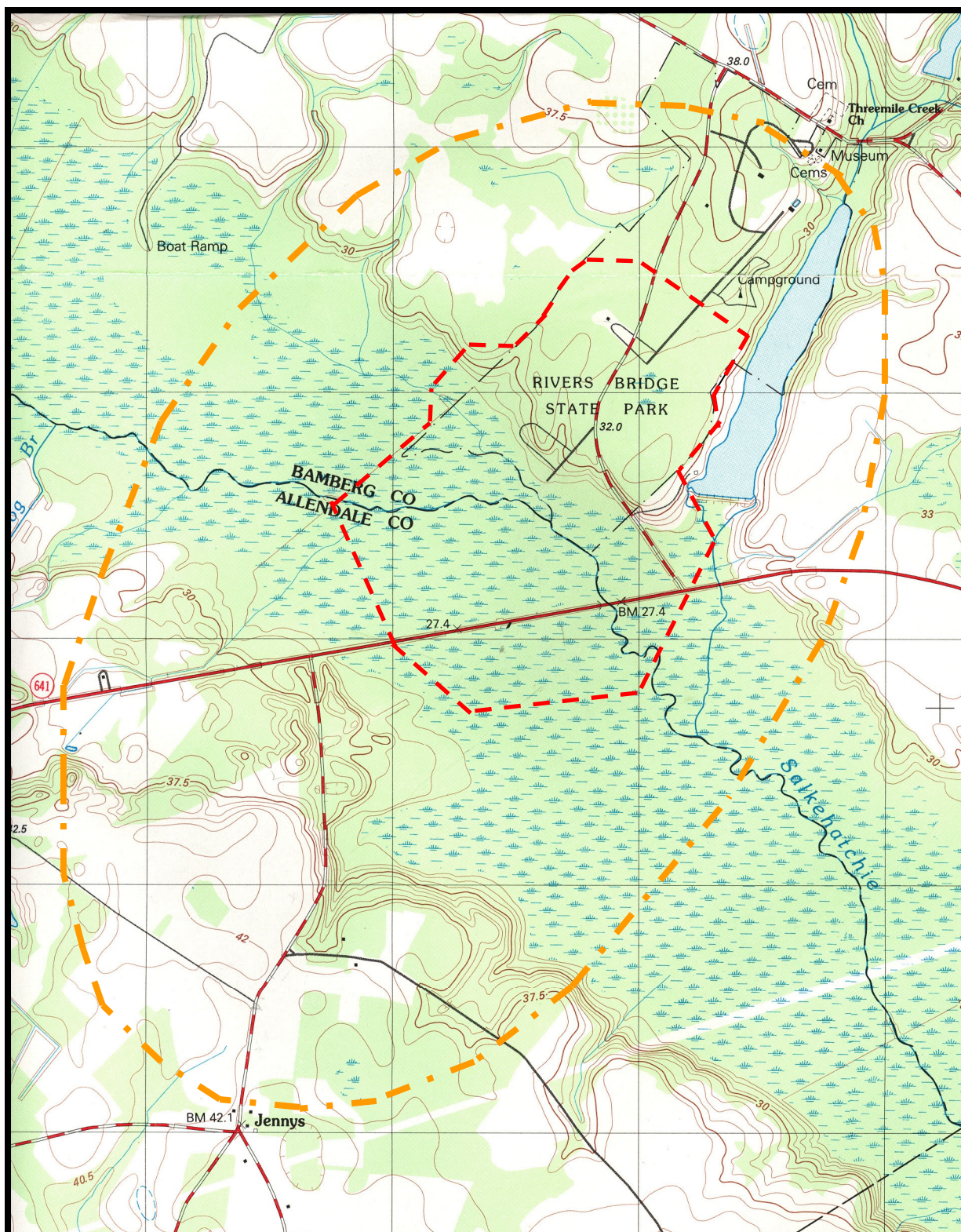
- **Use the battlefield maps as guides for locating additional historical resources on the site.** Such sites would include battlefield burials, the trace of the secondary road, and the possible structure behind the Confederate rifle pits.
- **Be aware of the potential for additional historical and archaeological resources that have not been discovered on the site.** Little is currently known of the area between the

battlefield and the Memorial Grounds, even those areas immediately adjacent to the historic causeway road. It is likely that Union troops bivouacked throughout much of this area, and there is potential for the discovery of other resources as well. This recommendation is especially important because of the pending elimination and removal of the site's campground. All newly discovered historical and archaeological resources should be mapped when they are found, and public identification and interpretation of those resources should proceed only when they can be properly protected from intentional or accidental damage.

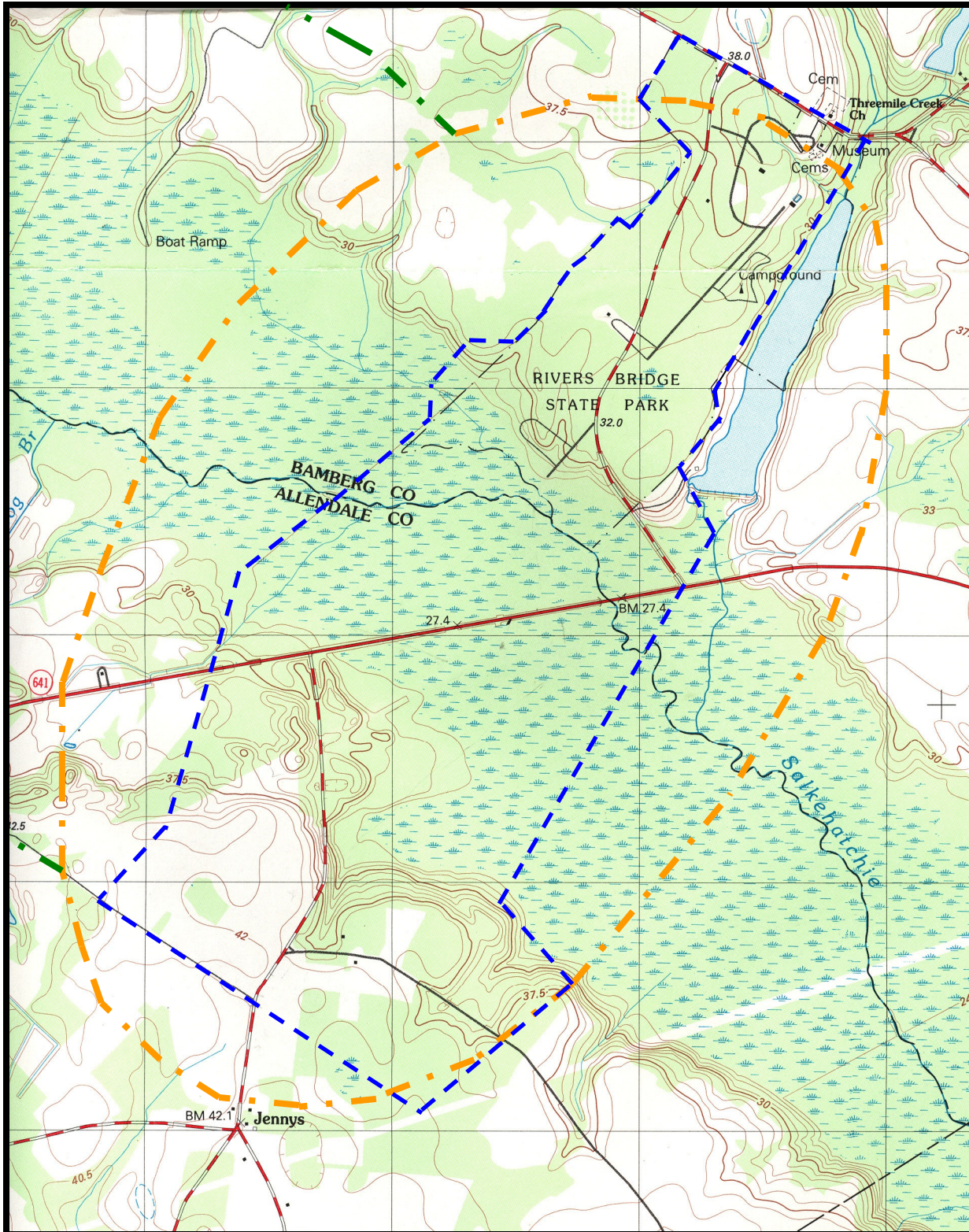
- **Conduct a survey of the ground cover on the earthworks.** A survey to identify the ground cover plants growing on the remains of the field fortifications will be useful to the management of these resources and should be incorporated into the SMP for the Battlefield. Such a survey may be done in phases in the same way as the tree inventory.
- **Conduct further historical research on the site.** Archival searches should be conducted to learn more about the prewar residents, land-use patterns, and transportation networks. Additional information can probably be found on postwar land-uses as well: the logging operation in the swamp, agricultural uses of the property, and the modern road development that altered the local transportation pattern.
- **Revise and update the battlefield survey conducted for the Civil War Sites Advisory Commission.** The "core area" of the battlefield, where combat occurred, should be expanded. The redefined core should include most of the causeway and much of the swamp on either side of it. This would take in the part of the causeway beyond the dogleg bend where the Union frontal assault from the first day's fighting and the diversionary attacks of the second day were halted by Confederate shell fire. It would incorporate the swamp to the west of the causeway to include the area where the corduroy road was built to flank the Confederate line and where Union troops broke through the Confederate right. The swamp to the east of the causeway, where Union troops deployed and attacked the Confederate left, would also be included. The northern

boundary of the redefined core should extend to the field fortifications constructed by the victorious Union troops after fighting ending on February 3.

The “study area” of the battlefield should also be expanded. Its bounds should include the land and features depicted on the battlefield map to the south of the swamp. This would take in the site of Howard’s headquarters; the misidentified site of Jenny’s Corners; the sites of other structures and landscape features, such as the Widow Platt complex and the large hill and structure on it at the causeway road; and the general location of Union bivouac, field hospital, and burial sites. The boundary of a revised study area should also be moved northeast to take in areas that are not on the battlefield maps. The site of the Confederate field hospital, now preserved as the Memorial Grounds, was an important part of the battlefield. It remains important as a commemorative area where the memory of the battle is still recalled and the meaning of the war continues to be interpreted. This would extend the study area to the present northeastern boundary of Rivers Bridge State Historic Site.



Rough boundaries of a possible redefined core area for the battle of Rivers Bridge, shown in red. The bounds of the core area defined by the 1992 Civil War Sites Advisory Commission survey are shown in orange.



Rough boundaries of a possible redefined study area for the battle of Rivers Bridge, shown in blue. The bounds of the core area defined by the 1992 Civil War Sites Advisory Commission survey are shown in orange; part of the bounds of the Civil War Sites Advisory Commission study area, which extended six and a half miles upstream to the northwest, are shown in green. See the original Advisory Commission survey map of Rivers Bridge on page 109.

- **Work with local landowners on strategies to protect resources from the battle.** It is especially important to preserve vistas of the Salkehatchie from Rivers Bridge State Historic Site that approximate the appearance of the swamp at the time of the battle. It is also important to preserve the battlefield features of the revised core area. Such strategies will most likely involve historic registration, the acquisition of conservation easements, or the establishment of compatible use agreements. This will require the South Carolina State Park Service to establish and maintain good relations with nearby landowners and keep them apprised of the agency's goals for preserving and interpreting Rivers Bridge State Historic Site.

- **Revise the boundary for the Rivers Bridge Battlefield as defined in the National Register of Historic Places.** The National Register boundary for Rivers Bridge follows the property lines of Rivers Bridge State Historic Site and thus fails to include those important parts of the battlefield that are in the swamp and south of it. This effort would involve the cooperation of the landowners who allowed us access to their property for this study and may involve others that were not included in the study. A revised National Register boundary could follow the bounds of the revised battlefield study area.

- **Conduct additional GPS mapping to precisely locate other sites from the battle.** In particular this would extend the GPS effort south of the swamp into the revised study area to pinpoint those important features shown on the battlefield maps. With the battlefield maps as guides, the assistance of local landowners, and additional documentary research, the remains of critical roads may be found and important sites such as Howard's headquarters and the Widow Platt complex may be firmly established. Mapping might also establish the location where the Fourth Division of the U.S. Seventeenth Corps crossed the Salkehatchie several miles downstream of Rivers Bridge. Expanded mapping would be crucial in assessing integrity and setting boundaries for a revised National Register listing.¹ Knowing the location of these sites will be necessary if the State Park Service is to work with local landowners on devising strategies for their

¹ See Patrick W. Andrus, Guidelines for Identifying, Evaluating, and Registering America's Historic Battlefields, National Register Bulletin 40 (Washington, DC: National Park Service, 1992), pp. 10-13.

protection. Finally, this information will be helpful for interpreting the battle and campaign on Rivers Bridge State Historic Site and for interpreting the war through a statewide interpretive and marketing program. The Civil War Sites Advisory Commission identified the Carolinas Campaign as one of six “nationally significant” campaigns not represented by a park in the National Park system.² The Carolinas Campaign has been overshadowed by the Savannah Campaign, or the “March to the Sea.” Sherman’s troops felt that the march through the Carolinas was more difficult, and Sherman himself believed it was more significant. “Were I to express my measure of the relative importance of the march to the sea, and of that from Savannah northward,” he wrote, “I would place the former at one, and the latter at ten, or the maximum.”³ At Rivers Bridge, South Carolina has the opportunity to tell the broad story of the Carolinas Campaign—its goals and outcomes, the conduct of the troops, and its effect on civilians, white and black. It can do so in conjunction with other sites, such as Fort Sumter National Monument, to effectively tell the story of the war’s beginning and its end.

- **Conduct additional GPS mapping to locate the remains and assess the integrity of other Confederate fortifications on the Salkehatchie River line.** Steve Smith suggested this during the course of field work for this study. Impressive earthworks remain at Broxton’s Bridge, and some of the works at Buford’s Bridge supposedly remain as well. Little is known of the remains and extent of any fortifications at the other crossings, though, and the locations of some of the crossings have not yet been established.

The battle of Rivers Bridge left a significant and visible imprint on the landscape. Much of that imprint remains today at Rivers Bridge State Historic Site and on neighboring properties. This project should be a first step toward the better preservation and interpretation of the battle and its imprint.

² *Report on the Nation’s Civil War Battlefields*, pp. 29, 32. At the writing of this report, the South Carolina Department of Parks, Recreation and Tourism had entered into a partnership with Georgia Civil War Heritage Trails to create three Civil War driving tours in South Carolina. One of the tours will focus on Sherman’s march through the state.

³ Sherman, *Memoirs*, p. 697.

Epilogue

This study was intended to be a tool to inform and guide ongoing management and investigation of the Rivers Bridge battlefield. That intention was borne out even before the final project report was completed.

Reexamining the documentary record led to a rethinking of several assumptions about the battle, which prompted almost immediate revisions to this document. The standard interpretation of the battle has been that Rivers Bridge became the primary objective for Blair's Seventeenth Corps after it was denied a crossing at Broxton's Bridge on February 2. While reviewing this report in its draft form, site manager Casey Connell suggested that the evidence did not support this interpretation. Indeed, it did not appear that Broxton's Bridge was consciously selected as a possible crossing point. Blair did make a reconnaissance in force to Broxton's, but it was a feint to divert the Confederates there and prevent them from reinforcing the Southern troops at Rivers Bridge. At best, Broxton's was a target of opportunity, a chance site to cross the Salkehatchie that presented itself to the First Division of the Seventeenth Corps as it advanced toward Rivers Bridge. General Howard had to point out the location of Broxton's Bridge as being "near Williams' (marked on the map)" in a February 2 message to Sherman, which implies that neither officer had been familiar with the crossing before then.¹ Major Osborn, Howard's chief of artillery, noted that the Confederates had expected an assault at Broxton's Bridge: "The bridge had been burned, the opposite side of the river fortified and the artillery entrenched and commanding the road through the swamp and the crossing of the river." While a token Federal force occupied the Confederate defenders at Broxton's, the main body of Union troops advanced under cover of the thick forest to Rivers Bridge, "where we intended to cross."² Rivers Bridge was the objective of the Seventeenth Corps, just as Buford's Bridge was the target of the Fifteenth Corps, probably because roads from those crossings led directly to the next objective, the line of the South Carolina Railroad between Augusta and Charleston.³

¹ OR, Vol. XLVII, Part II, p. 207.

² Howell and Racine, eds., *The Fiery Trail*, p. 94.

³ Orders directing Federal commanders to force a crossing at Rivers Bridge and Buford's Bridge are found in the OR, Vol. XLVII, Part II, pp. 195, 206, 207, and 287. The roads from Rivers Bridge and Buford's Bridge that led to the South Carolina Railroad are evident on Plate LXXIX (79), no. 3, section 1, in the OR Atlas, "Map Showing the March Routes of the Army of the Tennessee under the Command of Maj. Gen. O. O. Howard during the Winter Campaign in the Carolinas."

A review of the primary sources also called the fate of Broxton's Bridge into question. Most accounts credited the Confederate defenders with burning the bridge on February 2 to prevent the Federals from crossing. An overlooked report claimed that Union soldiers of the Fourth Division destroyed the bridge after the Confederate defensive line on the Salkehatchie River collapsed. Captain Henry Duncan of the 53rd Indiana Infantry wrote that his men destroyed Broxton's Bridge "in obedience to instructions" on the afternoon of February 4.⁴ It is possible that the bridge at Broxton's had been only partially destroyed, like some of the bridges on the causeway at Rivers Bridge, and that Duncan's regiment merely completed the process begun by the defenders.

The number of Union troops engaged in the battle had been estimated at 7,000 to 9,000 men.⁵ But this figure was clearly too large. The Seventeenth Corps mustered about 12,000 effectives at the beginning of the campaign.⁶ Even though Mower's was the largest of the three divisions in Blair's command, it is doubtful that the First Division alone accounted for up to three-fourths of the corps' total strength.⁷ The 7,000 to 9,000 estimate was certainly meant to include the troops in both Mower's First Division and Smith's Fourth Division, the two divisions that crossed the Salkehatchie at and near Rivers Bridge on February 3.⁸ The total number of men in Mower's division, the force actively engaged in combat at the site, was probably closer to 5,000.⁹

Research on the battle continued while the report was being reviewed and revised. The search for a speech given at a Rivers Bridge memorial service led to the chance discovery of a letter that described the reburial of the Confederate dead. Details in the letter squared remarkably well with information on known Confederate casualties and provided clues for future

⁴ OR, Vol. XLVII, Part I, p. 415.

⁵ Power and Bell, Visitors Guide, p. 6.

⁶ OR, Vol. XLVII, Part I, p. 42.

⁷ Mower's First Division consisted of eleven regiments organized into three brigades. Brigadier General Manning Force's Third Division had nine regiments in two brigades and another regiment assigned as corps provost guard. The Fourth Division under Major General Giles Smith also totaled nine regiments in two brigades. One unit in Smith's First Brigade was a consolidated battalion of two Illinois regiments, the 14th and 15th. OR, Vol. XLVII, Part I, pp. 49-50.

⁸ This likelihood was confirmed in a telephone conversation with J. Tracy Power on June 9, 2005.

⁹ The total number of effectives in Mower's division has not been determined. Until a firm figure can be established, it seems reasonable to base the estimated number of effectives in the division on a total of about 400 to 500 men per regiment.

identification of original Confederate burial sites and the Confederate field hospital.¹⁰ An initial search in the *National Tribune*, a weekly national newspaper for Union veterans, was especially fruitful. A single reel of microfilm with issues from 1914 through 1916 contained more than twenty previously unknown first hand-accounts of the crossing of the Salkehatchie River. These brief reminiscences by Union veterans, who were then in their seventies or eighties, vary in accuracy and detail. Most are entitled “Crossing the Salkehatchie” or something similar, with several offering competing claims to the distinction of being the first unit to cross the river. Some writers obviously confused rivers and the dates they were crossed, but others recalled minute details that have been corroborated by other sources. A few reveal additional information on the battle that had been unknown before or only assumed: Head logs topped the Confederate infantry parapet. The Confederates had destroyed or removed the planking on at least one of the bridges, leaving only the stringers. A barn somewhere south of the swamp served as a primary dressing station for Union wounded.¹¹ A former captain in the 10th Illinois Infantry implied that his unit was opposed on the field by the 47th Georgia, supporting this report’s scenario that placed the veteran Confederate regiment in the works southeast of the causeway road.¹² The recollection of a former private in the 32nd Wisconsin Infantry provided the precise alignment of his regiment’s companies on the afternoon of February 3. The four companies that he recalled being just to the left of the causeway road suffered the highest proportion of the regiment’s casualties: thirty-four of the fifty-two identified, including eleven of the twelve men who were killed or died of wounds.¹³ If the old soldier’s memory of his regiment’s company alignment was correct, the 32nd Wisconsin suffered most of its casualties in the area that the battlefield

¹⁰ “The Memorial Association,” *Bamberg Herald*, April 19, 1900. The writer stated that most of the Confederate dead had been recovered near the house of a Mr. Perry Kears, which had been used as the Southern field hospital. Another was found buried close to where the monument to the Confederate dead was later erected; a church was said to have been close by this site.

¹¹ Reel 23 of the microfilm edition of the *National Tribune* contains issues from October 8, 1914, through June 22, 1916. The details cited above are from “Crossing the Salkehatchie,” Jan. 28, 1915; “The 25th Wis. on the Salkehatchie,” Aug. 12, 1915; and “Crossing the Salkehatchie,” Sept. 9, 1915.

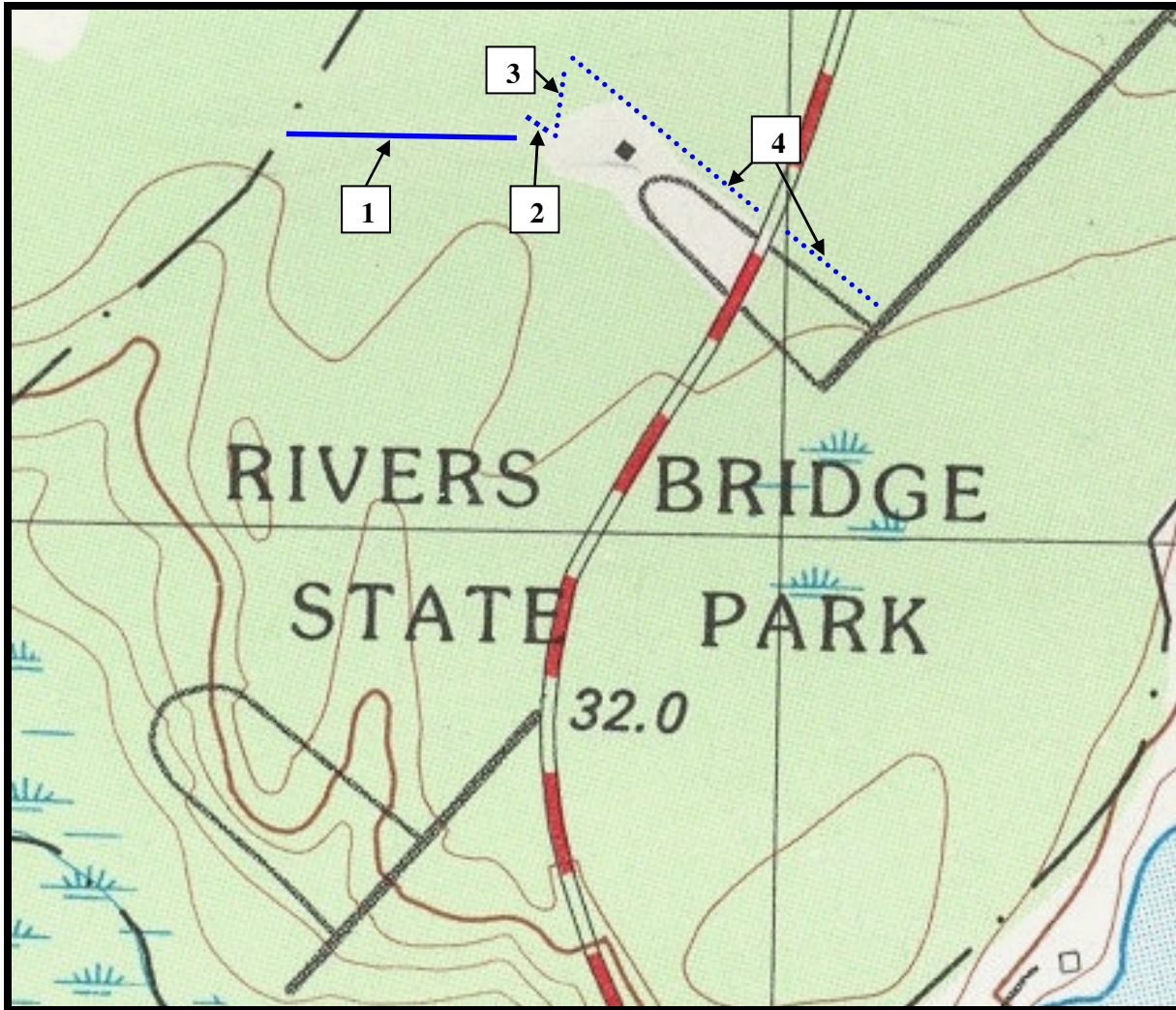
¹² “The Salkehatchie and Edisto,” *National Tribune*, June 3, 1915. The Confederate regiment was identified in the article as the 67th Georgia Infantry. This was clearly a misprint. The writer of the piece, E. H. Ellett, noted that his informant from the Georgia unit was Captain Benjamin S. Williams, identified earlier in this report as an officer in the 47th Georgia. Ellett was Williams’ guest at a Rivers Bridge Confederate memorial service. Power and Bell, *Visitors Guide*, p. 13.

¹³ “Crossing the Salkehatchie,” *National Tribune*, June 17, 1915. The author of this article was Ruel P. Russell. His recollection of the company alignment of the 32nd Wisconsin was compared to the regiment’s casualties identified in an examination of the *Roster of Wisconsin Volunteers*, Vol. 2, pp. 471-500.

maps suggest had been designed as a killing zone—the creek bed in front of reentering angles at the center of the Confederate works.

More details on the battle can probably be found in other issues of the *National Tribune*. More information might also be derived from an examination of some twenty additional manuscript sources that were identified after the completion of the first draft of this report.

Meanwhile, management and investigation of the site's resources continued. The self-described “trench nerds” of the Civil War Fortification Study Group visited Rivers Bridge on March 4, 2005. In the area near the park shop, where Union troops built defensive earthworks on the evening of February 3, Study Group members advised that we search for evidence of picket pits, small entrenchments dug in perhaps fifty to one hundred yards in advance of the main line. A reconnaissance of the area north of the Union works on March 9 revealed a number of features that may be the remains of these picket pits. Members of the Study Group also discovered a remnant earthwork just north of the Union defensive works. It was little more than a low wale and trough in the ground, but its deceptive appearance prompted a reexamination of the woods for additional Union works. State Park Service staff had assumed that there would have been more Union works to the right of the known Union entrenchments, and they assumed that these additional works would probably have faced northeast, in the direction of the retreating Confederates. Prior searches for additional Union earthworks had been fruitless, but State Park Service personnel had looked for large infantry parapets similar to those already identified, not for barely discernible remnants such as the one found by the Study Group. The ground beyond the right of the known Union works was reexamined on March 9. A linear feature that had been dismissed earlier as a probable drainage ditch for a park driveway looked very much like the remnant earthwork identified by the Study Group, and it now appeared to be too far away to be associated with the driveway. This feature, which faces northeast and extends across State Park Road, might be the remnant of a previously undiscovered Union defensive fortification. Although the original use of this feature remains unknown—it could still turn out to be a drainage ditch for a field, as suggested by park technician Timmy Heirs—its existence and possible importance were enough to establish a two-hundred foot buffer around it to protect it from potential damage during a planned tree-thinning at the site.



Approximate locations of known Union earthworks, remnant Union works, and possible remnant works, not to scale. Key: **1** – Known Union earthworks, facing north; **2** – Remnant Union earthworks, identified March 4, 2005, facing northeast; **3** – Possible remnant Union earthworks, identified March 9, 2005, facing west; **4** – Possible remnant Union earthworks, identified March 9, 2005, facing northeast. The identification of features 2, 3, and 4, prompted the establishment of a two-hundred foot buffer to the northeast and west of these features to protect any picket pits that might be associated with them. The buffer area will not be disturbed during the tree-thinning planned for the site. The tree-thinning will not affect the area around the known Union works or the Battlefield.

The campground at the site officially closed as planned on November 29, 2004, prompting very little opposition or outcry. Shortly afterward manager Casey Connell moved to a new post with the South Carolina State Park Service. His successor, Jim Steele, has already begun to look at the historic road through the former campground as the means to physically and interpretively reunite the battlefield and the Memorial Grounds.

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Appendix I

Order of Battle

Battle of Rivers Bridge, February 2-3, 1865

Adapted from “‘This Indescribably Ugly Salkehatchie’: The Battle of Rivers Bridge, 2-3 February, 1865,” by J. Tracy Power, *Rivers Bridge State Park Visitors Guide*, page 12.

Confederate States Army

DEPARTMENT OF SOUTH CAROLINA, GEORGIA, AND FLORIDA

Lieutenant General William J. Hardee

MCLAWS’ DIVISION, Major General Lafayette McLaws

HARRISON’S BRIGADE (detachment), Lieutenant Colonel Edwin H. Bacon, Jr.

32nd Georgia Infantry, Major Washington T. Holland

47th Georgia Infantry, Captain Joseph C. Thompson (wounded February 3),
Captain Elliott W. Hazzard

REINFORCEMENTS FROM OTHER BRIGADES, DIVISIONS, OR CORPS

Companies B, C, H, and I, 3rd South Carolina Cavalry

Earle’s Battery (Company A, Palmetto Battalion, South Carolina Light Artillery),

Captain William E. Earle

5th Georgia Reserves (February 3), Major Charles E. McGregor

3rd Arkansas Cavalry (February 3), Lieutenant Colonel Marzaimé Henderson (wounded),

Major William H. Blackwell (wounded)

4th (or 8th) Tennessee Cavalry (February 3), Lieutenant Colonel Paul F. Anderson

8th Texas Cavalry, “Terry’s Texas Rangers” (February 3), Lieutenant Colonel Gustave Cook

11th Texas Cavalry (February 3), Lieutenant Colonel Robert W. Hooks

Approximate total strength: 1,200

Approximate total casualties: 100 (ongoing research has identified 10 killed or mortally wounded, 16 wounded, 34 captured, and 1 missing)

United States Army

Major General William Tecumseh Sherman

RIGHT WING (Army of the Tennessee), Major General Oliver Otis Howard

SEVENTEENTH ARMY CORPS, Major General Frank P. Blair, Jr.

FIRST DIVISION, Major General Joseph A. Mower

FIRST BRIGADE, Brigadier General John W. Fuller

64th Illinois Infantry, Major Joseph S. Reynolds

18th Missouri Infantry, Colonel Charles S. Sheldon

27th Ohio Infantry, Major Isaac N. Gilruth

39th Ohio Infantry, Major Daniel Weber

SECOND BRIGADE, Colonel Milton Montgomery

35th New Jersey Infantry, Colonel John J. Cladeck

43rd Ohio Infantry, Colonel Wager Swayne (wounded February 2), Major Horace Park

63rd Ohio Infantry, Major Oscar L. Jackson

25th Wisconsin Infantry, Lieutenant Colonel Jeremiah Rusk

THIRD BRIGADE, Colonel John Tillson

10th Illinois Infantry, Captain David Gillespie

25th Indiana Infantry, Lieutenant Colonel James S. Wright

32nd Wisconsin Infantry, Lieutenant Colonel Joseph H. Carleton

Approximate total strength: 5,000

Approximate total casualties: 100 (ongoing research has identified 31 killed or mortally wounded, 62 wounded, and 1 captured)

Appendix II

Defining Features Battle of Rivers Bridge, February 2-3, 1865

Terrain and Topographic Features

FEATURE	LOCATION	STATUS	CONDITION
Salkehatchie River and swamp	Private property bordering southeastern boundary of Rivers Bridge State Historic Site	Present	Good. Woods have been altered by timbering but present growth approximates 1865 appearance.
Headlands south of swamp	Private property in Allendale County southwest of Site	Present	Good
Headlands north of swamp	Rivers Bridge State Historic Site and private property to west and east of Site	Present	Good. Headlands at Site altered by construction of logging railroad.
Creek bed/gully on headlands north of swamp	Rivers Bridge State Historic Site	Present	Good. Some alteration—channeled through culverts 1) adjacent to swamp, and 2) where lane behind Confederate works crosses creek.

Roads and Transportation Networks

FEATURE	LOCATION	STATUS	CONDITION
Swamp causeway and bridges	Private property Bamberg and Allendale Counties southwest of site	Causeway is present; no bridges remain	Excellent
Avenues of approach, Union troops	Private property, Allendale County, south and southwest of Site	Uncertain	N/A
Avenues of retreat, Confederate troops	Rivers Bridge State Historic Site	Mostly present	Good – fair. Original causeway road shifted through Confederate fortifications; part of trace of original road remains. Secondary road behind works not found.

Roads and Transportation Networks, continued

FEATURE	LOCATION	STATUS	CONDITION
Lane behind Confederate works	Rivers Bridge State Historic Site	Present, possibly altered	Good – present land assumed to be in same location as original

Fortifications

FEATURE	LOCATION	STATUS	CONDITION
Designed Confederate works for infantry & artillery	Rivers Bridge State Historic Site	Mostly present	Excellent – fair. One half to two-thirds of an artillery emplacement (emplacement 2) apparently obliterated by shifting of causeway road; parts of infantry parapet damaged or eroded.
Confederate rifle pits	Rivers Bridge State Historic Site (and private property to southeast?)	Gone – presumed destroyed by construction of State Park Road. Small remnants might be present on adjoining private property.	N/A
Rapid Union defensive fortifications	Rivers Bridge State Historic Site	Partially present—much more assumed destroyed	Remainder in excellent condition
Union rifle pits in swamp/causeway	Unknown	Assumed destroyed	N/A

Miscellaneous Features

FEATURE	LOCATION	STATUS	CONDITION
Confederate field hospital site	Rivers Bridge State Historic Site	Present but altered	Altered for commemorative use
Confederate burial site(s)	Rivers Bridge State Historic Site	Present but altered	Original site(s) unknown; present burial site in good condition
Confederate bivouac/camp sites	Rivers Bridge State Historic Site	Unknown	Unknown
Structure behind Confederate rifle pits	Unknown	Unknown	Unknown
Dike/impoundment at Three-Mile Creek	Private property on Site's southeastern boundary	Present – assumed to be in same location as in 1865	Presumed altered

Miscellaneous Features, continued

FEATURE	LOCATION	STATUS	CONDITION
Union field hospital site	Specific site uncertain. Private property southwest of Site.	Unknown	Unknown
Union burial site(s)	Unknown – some might be on Site, some on private property southwest of Site.	Unknown	Unknown
Union bivouac/camp sites	Specific sites unknown; some on Site, others on private property southwest of Site.	Unknown	Unknown
Headquarters, Army of the Tennessee (Gen. O. O. Howard)	Uncertain – on private property southwest of Site.	Unknown	Unknown
Jenny's Corners	Uncertain – site believed misidentified as Jenny's Corners on private property southwest of site	Unknown	Unknown
Hill with structure off causeway road	Private property southwest of Site	Hill remains; structure assumed destroyed.	Unknown
Widow Platt complex	Specific site uncertain – private property southwest of Site	Unknown	Unknown
Structures northwest of Widow Platt complex	Specific site uncertain – private property southwest of Site	Unknown	Unknown

Appendix III

Mission Statement and Interpretive Themes Rivers Bridge State Historic Site

Mission Statement

To protect, preserve, and interpret the rich cultural and natural resources of this significant Civil War site, and to provide activities designed to promote stewardship of the resources of Rivers Bridge State Historic Site.

Interpretive Themes

The Civil War battle of Rivers Bridge reflects the campaign strategy and battle tactics employed by Union and Confederate forces during Sherman's march through South Carolina, and the small scale of the combat shows the war and its human costs on an individual level.

Interpretation of the battle of Rivers Bridge permits explorations into wider contexts such as the causes of the war, Civil War military technology and tactics, Civil War medical treatment, the lives of average soldiers, and the effects of war on civilians.

The commemoration of the battle of Rivers Bridge reveals how the Civil War and the Lost Cause have held different meanings for different generations.