

In 1999, I stumbled upon a small group of professionals dedicated to the study of a specialized type of warfare—fortifications, and specifically, for the most part, field fortifications constructed during the Civil War, 1861-65. Surprisingly, many of these fortifications, mostly devised from stone, dirt, and sand, still survive—if you know where to look. Unfortunately, many of these fortifications, which one might deem sacred ground, are being bulldozed to make way for condominiums and shopping centers.

I was fortunate enough that they allowed me, a mere enthusiast, to stumble along with them on some of their annual “meetings,” three or four days of intense Civil War study and hiking to some of the most esoteric places in the South. I managed to make four such trips (Middle Tennessee; Dalton, Marietta, and Savannah, Ga.) and take some interesting photographs. I went to places that I didn’t even know existed, and learned more in three days than I had managed in three years. For a brief moment in time, I ran with a bunch of rogues known as ...

THE TRENCH NERDS





It's a 1,000-foot climb up to Rocky Face Ridge in northwestern Georgia, where the Confederates built stone fortifications for defensive purposes against Sherman's advance in 1864. At some points, the dirt trail atop the ridge was about six feet wide. Quite a view of Interstate 75 from atop this ridge. On our hike down, we stumbled across the wreckage of a light airplane.





Many times the group would hike to locations above even the cell towers and transmission lines. Here I pose along the stone fortifications along the top of the ridge. I wore short pants that day. Bad decision. That evening, I discovered my legs bloody from a multitude of scratches and lacerations.



The nerds explored the railroad tunnel at Tunnel Hill, before it was opened to the public. The stone and brick 1,447-foot-long tunnel was built in 1850, before the Civil War.

Here, we document the spot where General John Bell Hood's amputated leg was buried after the battle at Chickamauga. That's our story and we're sticking with it.





Walking through the former railroad bed at Allatoona Pass, where Federal forces embedded in two small forts held off a determined Confederate assault in 1864. The small gorge is 65 feet deep.

At Allatoona Pass, we compare the historic Civil War scenic photographs of George Barnard with the modern landscape.



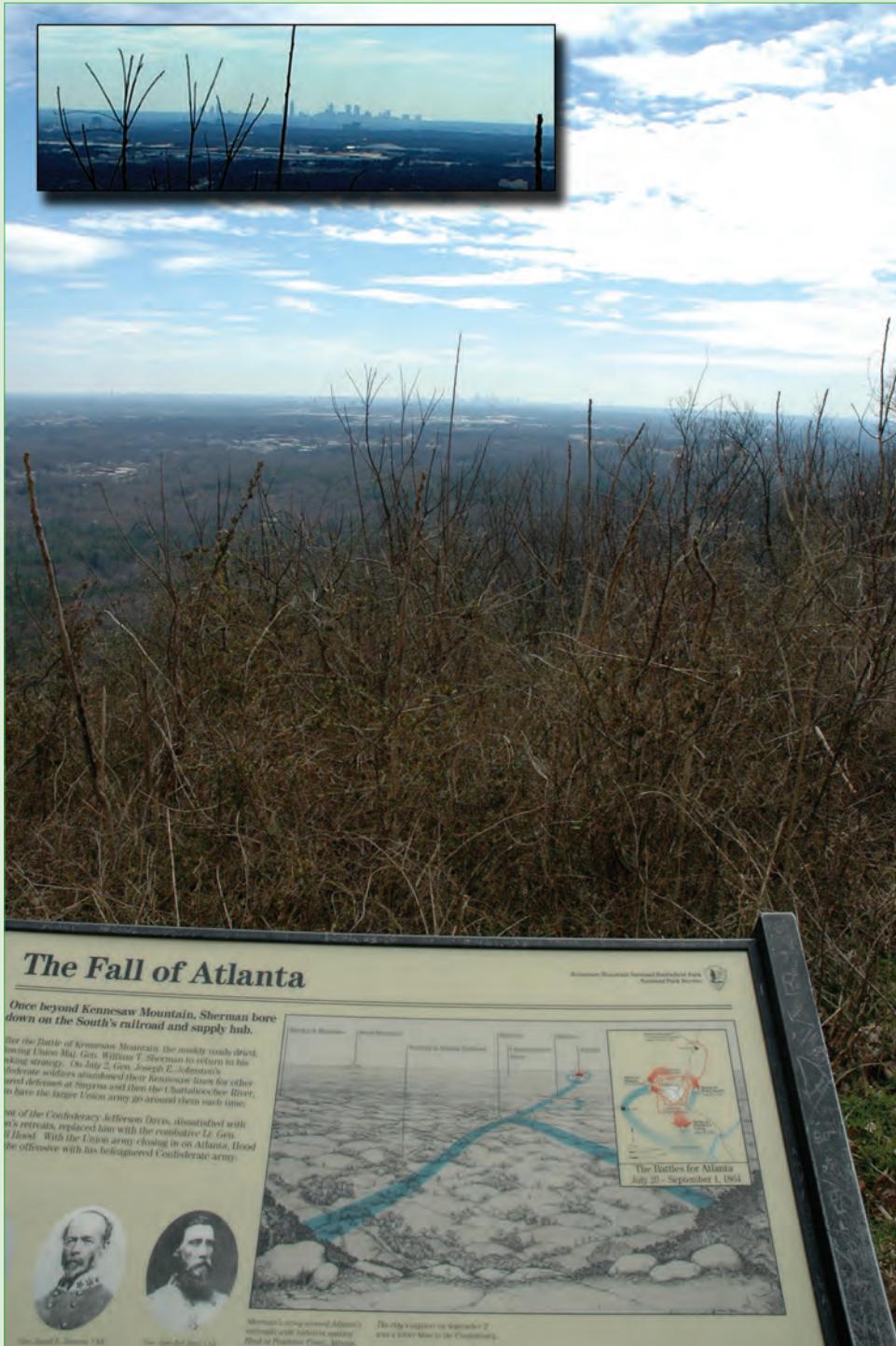


Moccasin Bend and Chattanooga from atop Lookout Mountain, almost 2,400 feet high. The entrance to the 10-acre Point Park reservation atop the mountain. The Chattanooga area was well fortified during the war.





An artillery position atop Kennesaw Mountain, near Marietta, Georgia.



The skyline of Atlanta is barely visible on the horizon in this view from Kennesaw Mountain, site of Sherman's worst defeat during his advance upon the city.

The Fall of Atlanta

Once beyond Kennesaw Mountain, Sherman bore down on the South's railroad and supply hub.

After the Battle of Kennesaw Mountain, the muddy roads dried, leaving Union Maj. Gen. William T. Sherman to return to his thinking strategy. On July 2, Gen. Joseph E. Johnston's soldiers abandoned their Kennesaw lines for other defences at Smyrna and then the Chattahoochee River, to have the larger Union army go around them each time.

out of the Confederacy-Jefferson Davis, discredited with his retreats, replaced him with the combative Lt. Gen. Ulysses S. Grant. With the Union army closing in on Atlanta, Grant had to offensive with his beleaguered Confederate army.





Not all mounds are Civil War fortifications. Here, we examine the prehistoric Native-American mounds at Etowah, Georgia.

We're not lost. We just don't know where we are. Both modern road and topo maps and historic battle maps are consulted before we explore the vicinity of Snake Creek Gap. At times, we tromp on private property, but always after obtaining the landowner's permission.





“Hey, guys, I’ll be right back.” Famous last words, right? Keeping trench nerds organized is like herding cats. There’s always an interesting spot that needs to be explored. Seriously, no trench nerd has even been lost on an excursion, although several went missing for awhile.



Some very well delineated earthworks. Normally, earthworks are extremely difficult to photograph. Usually, you need a lot of contrast and a person in the picture to add scale. Earthworks are very fragile and should not be walked upon, as the warning sign denotes.





The terrain in South Carolina is much different than that in Georgia, as seen here at the Battle of Rivers Bridge site.



An historic structure in the swamps near Savannah, Georgia. No, it was not functional.



A big gun at Fort James Jackson along the Savannah River, a brick fort built around 1810 to protect the city of Savannah. In addition to many fascinating exhibits and sights, Fort Jackson is home to millions of mosquitoes.





Here we board carts very early in the morning at the historic Savannah Golf Club (1794) and round a large sand trap in order to explore the historic site of an artillery battery not far from the river.

The Savannah Golf Club and golf course we know today was incorporated on Dec. 29, 1899 in Chatham County. At the time, there existed a complete line of Confederate fortifications, which extended across the entire property. To celebrate the Civil War and Georgia history it was decided that the course should be laid out to utilize these fortifications and although changes and alterations have been made to the golf course over the years, these fortifications are still present today and play an integral part in the design of the course.

—Savannah Golf Club website





The South Carolina landscape can sometimes appear foreboding.
Trips are usually made in February or March when trees are bare and ground clutter is at a minimum.



NOBLE JONES' "WORMSLOW" 1736 ~ 1775

This 1-1/2 mile oak avenue leads to the tabby ruins of Noble Jones' colonial fortified plantation. Jones and his family were original settlers in Georgia, arriving in Savannah with founder James E. Oglethorpe on February 1, 1733. As a middle-class carpenter from England, Jones would perform a variety of roles in the new colony of Georgia including: constable, physician, surveyor, Indian agent, soldier, member of the royal council, treasurer, and senior justice of the province. In 1736, Jones leased 500 acres from the Trustees of Georgia and in 1745, finished construction of the fortified home he named "Wormsloe". From this outpost, Jones commanded a company of marines charged with patrolling the inland water route and alerting Savannah of any Spanish attack. Wormsloe was also well known for its horticultural efforts. Indigo, rice and silk were all cultivated here by Jones, his indentured servants, and later slaves. Following generations of the Jones family lived at Wormsloe for over two centuries. The building on their ancestor's prominent role in Georgia history. The tabby ruins of the original "Wormsloe" home survive as the last architectural remnant of Savannah from the Oglethorpe era (1733 - 1743).

025-100

GEORGIA HISTORIC MARKER

1992

SOUTH

CAROLINA

BATTLE OF HONEY HILL

On Nov. 30, 1864, Union troops under Brig. Gen. John P. Hatch were marching to Grahamville to cut the nearby Charleston-to-Savannah rail line when they met Col. Charles J. Colcock's smaller Confederate force posted in a redoubt located about 1 mi. N. of here. In the ensuing battle, Union troops were repelled, owing to their lack of ammunition and strong Confederate positions.

JASPER COUNTY HISTORICAL COMMISSION
1978



The moat at Fort Pulaski at the mouth of the Savannah River.



The artillery casements in the interior of Fort Pulaski.



Heavy rifled Federal guns pounded Fort Pulaski from across the river during the Civil War and nearly reduced it to rubble, thereby discrediting the functionality of fixed stonework or brick fortifications.





Old graveyards, cemeteries, and churches are part of the picturesque scenery of the Low Country. At left is a children's tomb at a private graveyard. Below are the remains of Old Sheldon Church (1745-53), the first conscious attempt in America to replicate a Greek temple. Below left is a monument among the moss-covered trees of Bonaventure Cemetery in Savannah.



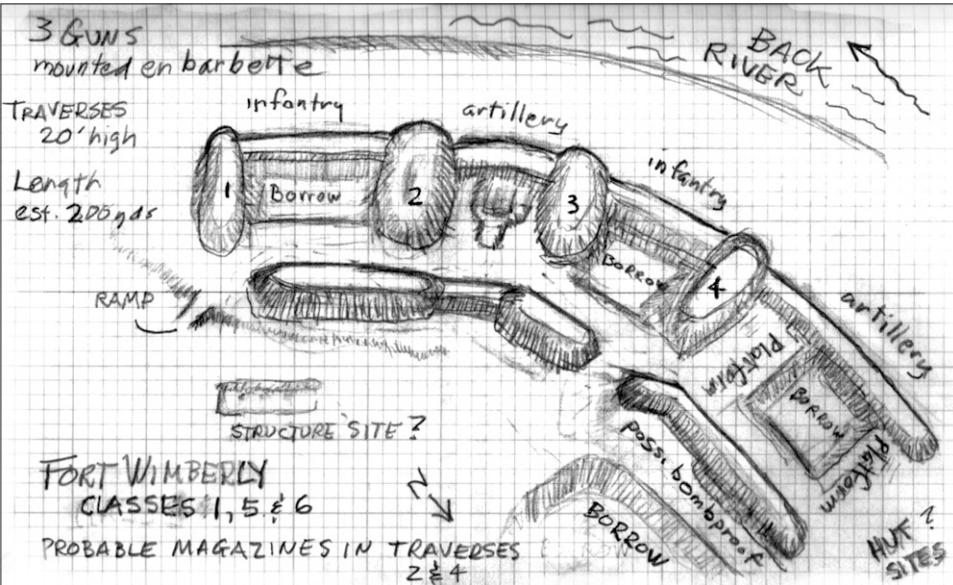
The fortifications at Fort McAllister, south of Savannah, were built of sand rather than brick or stone. Federal gunboats would shell the fort by day, and by the next day the Confederates had been able to rebuild the “sandworks.” The fort eventually fell to a land attack by the Federals.



An old South Carolina plantation road lined with very old live oak trees.



Trench nerd David Lowe of the National Park Service sketches one of his many pencil drawings during a visit to field fortifications. A variety of his drawings are displayed on the expanded next page.



FORT WIMBERLY ▲

Wormslow State Historic Site

Class One river battery with communications features and internal works (Classes Five and Six).

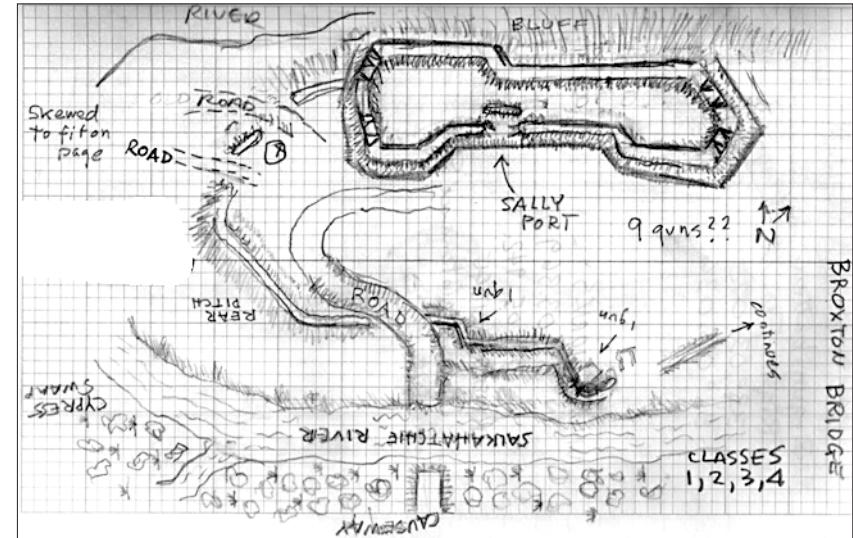
Two or three guns—I had originally thought 3 but now have doubts about the platform on the far right. The fort was sited on a navigable braid of Back River at a river bend to prevent the U.S. Navy from penetrating the southern approaches to Savannah. There was likely a landing for the plantation here or very nearby.

In structure the fort forms an arc 120-140 yards long, anchored on its left (downriver side) by a large traverse (1) of 20 ft. relief. A 25-yard segment of infantry parapet (with a discernible firing step) connects to another massive traverse (2), beyond which is a platform for a heavy field gun (20- 30-pounder?). Beyond this ramp and platform, another traverse (3), a segment of assumed infantry parapet, and a fourth traverse (4) protecting a large platform for a seacoast gun at the right of the fort.

The work was excavated from the inside, leaving very deep borrow pits between traverses 1 & 2 and 3 & 4. After viewing the construction at Fort McAllister, it seems probable that traverses 2 & 4 have internal magazines. The battery proper is covered in the rear by two massive traverses (16-20 feet high). One or both of these traverses likely harbored bombproofs.

The right traverse is of uniform height; the left has a low spot in the middle directly behind the gun platform. Considering that none of the traverses showed evidence of surface subsidence, it is possible that interior rooms remain intact—a job for an archeologist with a probe! The ground is much disturbed in the vicinity—evidence of structures, possibly winter huts or some such.

In January 1865, 100 men from the 63rd Illinois Infantry were detailed to "dismantle" Wimberly. As the fort is very much intact, this likely meant dismantling the seacoast guns and possibly filling the magazines with dirt. (Is the low spot in the rear traverse where they got the dirt to fill the magazines?) The Illinois boys were detailed on January 11 and returned to their camps on January 17. All seacoast guns from the various outlying forts were moved to Fort Pulaski. (OR Vol. 44: 749, 808; vol. 47, 1: 330.) I found no Confederate mentions of the fort in the OR.



BROXTON'S BRIDGE ▲

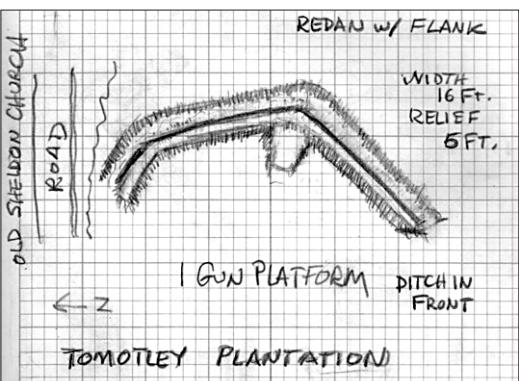
A complex line of fortifications defending a causeway across Salkahatchie River and swamp. My sketch is skewed so that I could fit everything onto the page. The causeway defenses and the redoubt are in different scales.

Causeway Defenses

The old road cut winds its way down the bluff to the causeway. To the left of the road (east) an indented line, about 200 yards long, faces the river and brought two guns to bear on the causeway. Front-ditch, width 15-18 feet, relief 8-9 feet anchored on its left by an intact embrasure gun position with a hefty parapet. I believe a second gun was placed in the angle closest to the road because the portion of the parapet that survives resembled that of the left flank gun. The gun platform and much of the parapet here has been hauled away, and there is a borrow pit in front of the line. These are Class One and Two works. A Class Four rapid infantry trench extends off into the woods from the left flank. From the road, extending in the other direction, a rear ditch infantry trench (Class Four) wraps around the bluff. Relief about 3 feet. This line is pierced in two places by roads (postwar) leading down to the river.

Broxton's Fort

This was indeed a surprise. The infantry trench connects to a Class One enclosed redoubt with two demi-bastions in the rear and embrasures for eight or nine field guns. Quite elaborate. The fort commands any force debouching from the causeway to the south or approaching along the road from the north. Infantry fire is directed down the river bluff. The demi-bastions arranged for crossing fires to protect the sally port. Parapet width 15-17 feet, relief 6-8 feet. Length maybe 125 yards, width perhaps 40 yards. She's a beauty, boys. The suggestion that the cannons were hauled into the fort through a low place in the parapet (an eroded gun embrasure) is hokey. The internal traverse is right out of the textbook and most certainly was not a "magazine." From the strength of this position, it seems apparent why the Federal army moved on upstream to force a crossing at Rivers' Bridge.

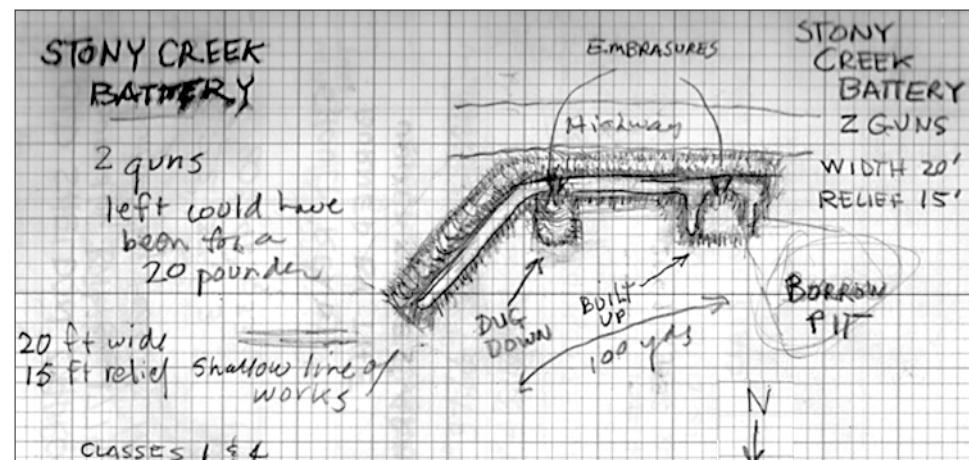


TOMOTLEY REDAN ▲

CLASS ONE: Prepared Redan for one-gun (2 faces and a short flank)

Front ditch, parapet width 16-17 feet, relief 5-6 feet, good condition. Gun ramp and platform in the salient angle. This redan covered a causeway (maybe the mill dam just north of the modern road?). I was impressed that the construction seemed so efficient and originally thought it late war, but looking at the map, it appears there was little danger from naval guns. It didn't need to be massive.

Location: Beaufort County, Old Sheldon Church Road.



STONY CREEK BATTERY ▲

CLASS ONE: Two-Gun Battery (right flank truncated)

Front ditch, parapet width 20 feet, relief 15 ft. Left gun pit large enough for a 20-pounder with embrasure. Right gun platform flanked by traverses with embrasure. Ditch abutting highway partially filled. A portion of the far right traverse and more of the battery borrowed. The land contours would suggest that a considerable portion (right half?) of the battery was destroyed. This may originally have been a work for four guns. A large borrow pit to right and rear of the work.

Location: Beaufort County, Highway 21N/Trask Parkway. Built on a tributary of Pocotaligo River. The battery could command a stretch of the Pocotaligo at a range of 1,800-2,000 yards.

ROSELAND PLANTATION (HUGUENIN WATER BATTERIES) ▲

Class One River Battery for three heavy guns.

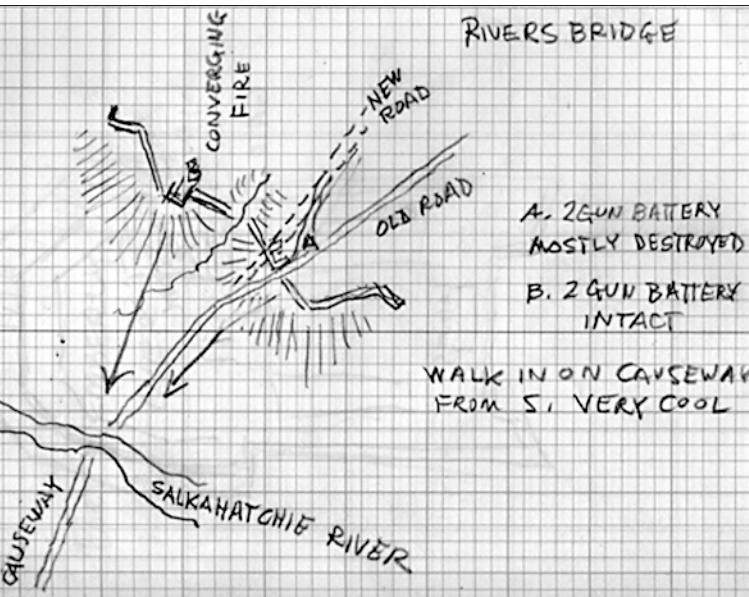
Lower Battery (1), front ditch, relief 15-18 feet, facing northeast. Platforms for two heavy guns, separated by a massive traverse with a magazine built into the rear end of it. Left gun bay has two embrasures, right gun bay only one. Magazine had two entrances and could be accessed from either gun bay. In good condition. Tree cover. Upper Battery (2), front ditch, relief 7-8 feet?, facing northeast. One embrasure. Moderate condition. Tree cover.

NEW RIVER BATTERY

Class One, two-part, enclosed battery, straddling the highway (route of the old causeway to New River). Work is in forest cover, facing east along the causeway looking out over old rice fields.

The old road likely passed between the two parts. Northern half is in very good condition. Front ditch with a relief of 8-10 feet. Faces 40-50 meters in length, total circumference about 200 meters. Ditch bordering the rice field has been dredged, evidently for irrigation? Parapet there undamaged. Intact gun platforms and ramps. Number of guns?

Embrasures? A very fine section of intact firing step on the north face. The southern half has been heavily impacted over the years or was, perhaps, never as complete as the northern half. Relief only 3-5 feet with borrow pits. A very fine outhouse.

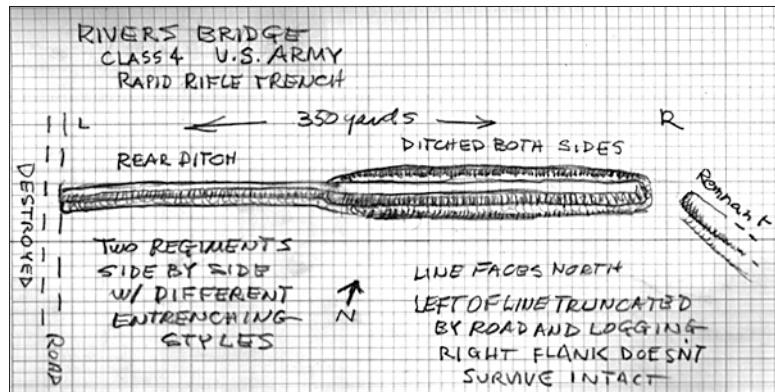
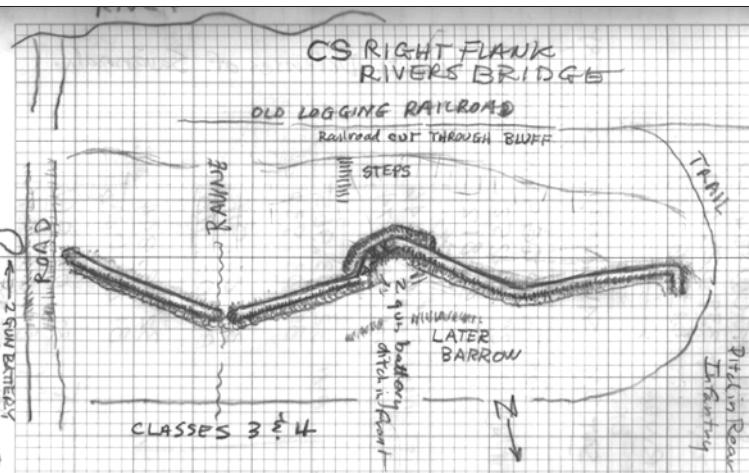


◀ RIVERS BRIDGE ▶ ▼

Confederate River Line. The Confederate earthworks at Rivers Bridge were well designed but fairly rapidly constructed, so I would classify these as Class Three and Four. The line consisted of two two-gun batteries connected by two rear-ditched infantry faces about 75 yards long and slightly inclined to form a re-entrant angle. (There's a technical term for this that escapes me at the moment.) Average relief 2.5-3 feet. The right flank also consists of two inclined faces with a short section refused. As the battle played out, this section was not refused enough! The left flank of the line followed the brow of the bluff and provided protection for that flank. The present day road goes right through the left-hand battery and destroyed most of it. The historic road passed just to the left of the battery and its trace may still be seen. This battery was sited to fire directly down the road to the river. The right-hand battery, front-ditched and in decent condition, was sited along the causeway which takes a jog toward the east beyond the river. Evidently both batteries were embrasured. The left-hand battery, two smooth-bores for anti-personnel work. The right-hand battery, rifled guns for longer range fire. The field of fire in front of this line was recontoured for an old logging railroad so there was likely less defilade in front than as it currently appears.

Union Line

A Class Four rapid infantry trench about 300 yards long, facing north. The right half of the line is double ditched, parapet about 15 feet thick with 3-4 feet relief. This joins directly into the left half which is rear-ditched, parapet about 12 feet thick, relief about 2 feet. The line is abruptly truncated at a logging road on the left and beyond there is the typical Craters of the Moon landscape left by mechanical logging. A shame. We rarely find an intact flank, where deployments tend to get interesting, as at Snake Creek Gap. What we have here are two regiments dug in side by side with entirely different entrenching styles, perhaps from different brigades? A shallow remnant continues for a ways from the right flank, disappears beneath a lawn, and does not reappear in the woods beyond the house.



CWFSG Earthworks Classification System

Class One: Prepared Artillery Fortifications
Forts, redoubts, bastions, lunettes, redans, batteries, blockhouses

Class Two: Prepared Infantry Fortifications
Seigeworks, main lines, parallels, connecting curtains, blockhouses

Class Three: Rapid Artillery Fortifications
Breastworks, minor artillery lunettes or demi-lunes

Class Four: Rapid Infantry Fortifications
Breastworks, rifle trenches

Class Five: Communication and Supply
Communication trenches, covered ways, entrenched military roads

Class Six: Internal Works
Magazines, bombproofs, bunkers, traverses, associated with enclosed or semi-enclosed artillery fortifications

Class Seven: Personal Field Shelter
Discrete fox holes, picket or skirmish holes, command holes, slit trenches, rifle pits

Class Eight: Defenses of Convenience
Stone walls, piled stone breastworks, sunken roads, railroad cuts/fills, often enhanced by digging

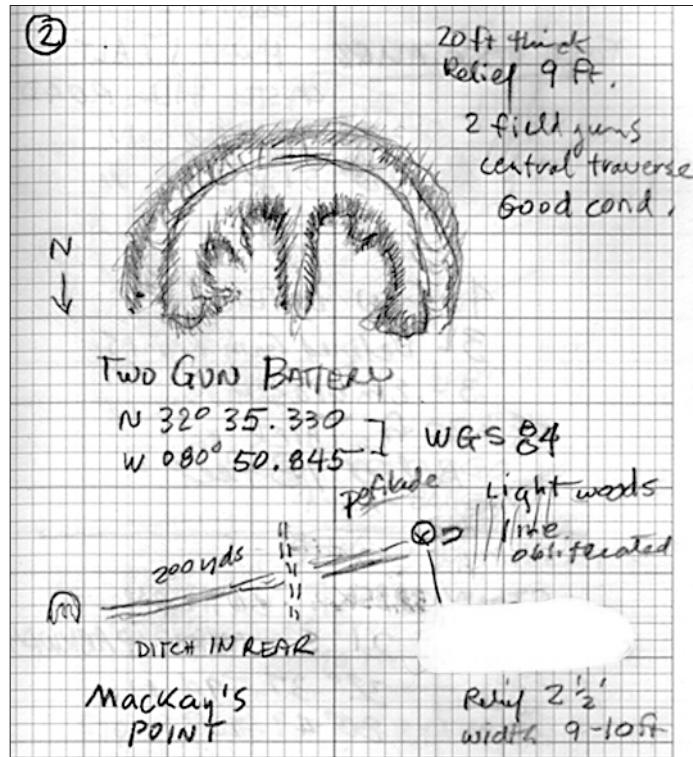
Illustrations and Text:
David W. Lowe
Historian
Cultural Resources GIS
National Park Service

HARDEE CEMETERY

The enclosed earthwork that contains the neglected Hardee Cemetery is very large (est. about 10 acres), wooded, and very overgrown. It was built adjacent to the road and would have commanded it fully. Ditched front and rear with a relief of about ten feet (or more?). Width? Ditch (mysteriously) is deeper inside in places than outside as though these folks were more concerned with keeping something inside rather than keeping attackers out. Sally port formed in southern face by overlapping parapets. Too overgrown to explore for interior features. While constructed on the scale of a Class One artillery fortification, this may be an unprecedented Class Five Communication and Supply. It is located at the head of the Union Causeway, the principal northern land route out of Savannah. Speculation was that it may have served as a command/control/logistical base for the far-flung picket posts north of the Savannah River. Other hypotheses welcomed. The historic map (OR Atlas) shows this work and appears to show the Hardee House on the opposite side of the road rather than inside the redoubt as I was trying to imagine it. Brick cemetery wall in disrepair and numerous tombstones, many overthrown, some dating from 1830.

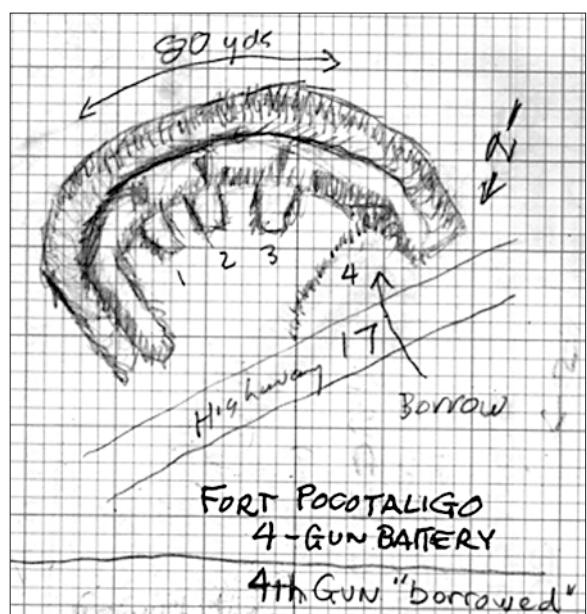
DELTA PLANTATION

The earthwork on Delta Plantation is a Class Two prepared infantry parapet with a relief of 6-7 feet? It is a simple straight parapet perhaps 100-120 meters? in length. Ditch presumably in front if assumed northerly facing is correct. Forest cover. Good condition. This parapet may have covered a camp, though there is little evidence to go on.



MACKEY'S POINT EARTHWORKS ▲

Class One Two-Gun Battery
Parapet 20 ft. thick, 9 ft. relief, good condition. Two gun platforms and ramps separated by a central traverse. The infantry line (Class Four) extended northeast and southwest of this battery, relief 2-3 feet. We followed the line toward the southwest 300 yards or so until it truncated in a marshy woodland after which we thrashed around in vain.



FORT POCOTALIGO ▲

Class One: Four-Gun Battery, about 80 yards end to end. Basically a lunette trace, front-ditch, parapet 20+ feet thick, relief 15-18 feet. Three intact gun platforms with ramps, embrasures. Fourth gun ramp and platform destroyed due to borrowing of earth. Infantry parapet extends for a distance from the work's left flank. This was part of a complex that extended from the Pocotaligo River to the northeast. The Smith map (3.1) show other fragments of the line surviving.

Location: East side of Castle Hill Road (21/17A), N. of Pocotaligo, Beaufort County, SC.