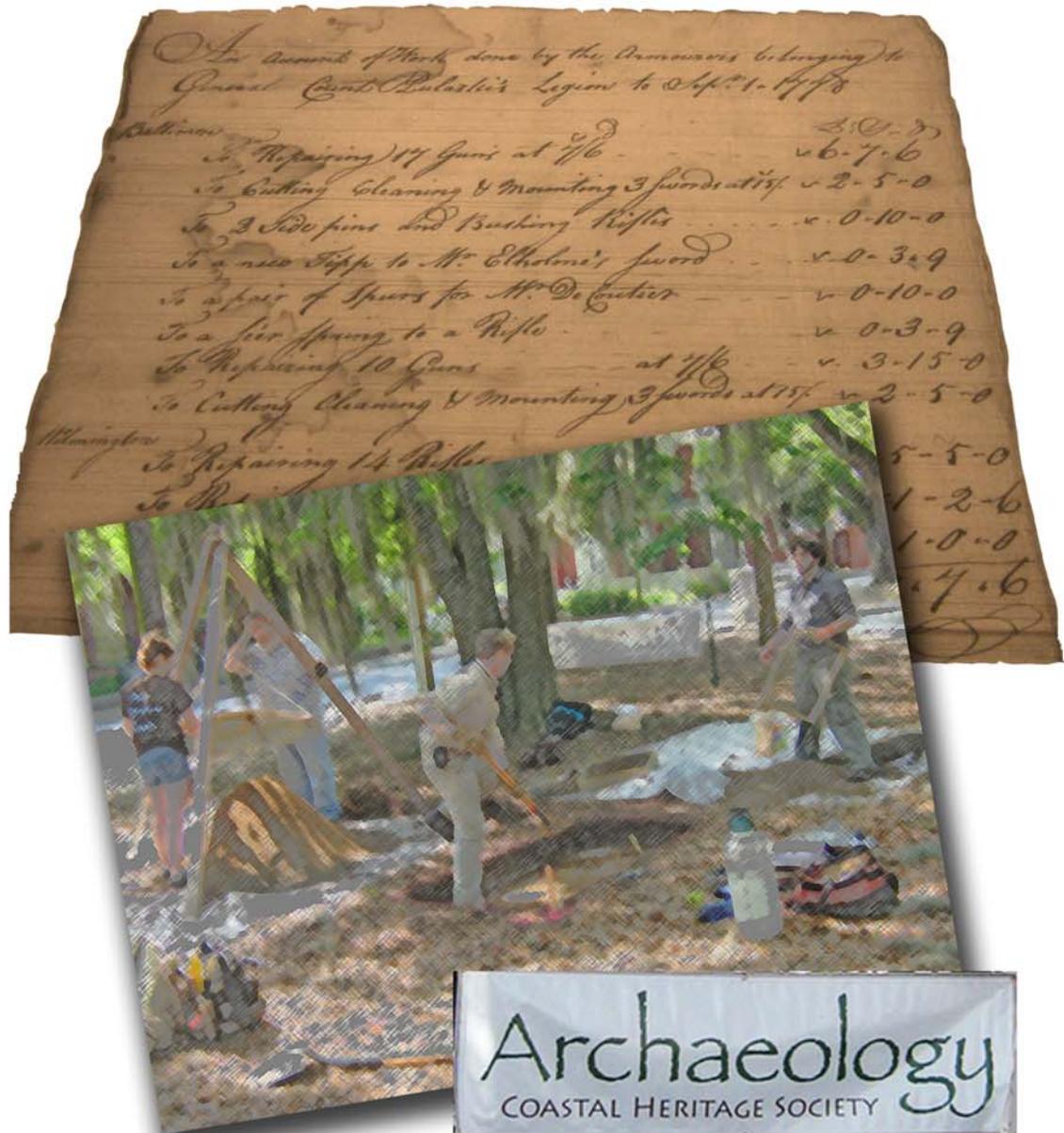


Savannah Under Fire, 1779:

Expanding the Boundaries



Savannah, Georgia 2011

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Abstract

Savannah Under Fire, 1779: Expanding the Boundaries represents the second phase (2009-2011) in the search for the Revolutionary War Battle of Savannah. The first phase, *Savannah Under Fire, 1779: Identifying Savannah's Revolutionary War Battlefield* was conducted between 2007-2009. Both projects were funded by the National Park Service American Battlefield Protection Program with grants awarded to Coastal Heritage Society, Savannah, Georgia. Each incorporated extensive primary document research, geographic information systems (GIS) mapping, shovel test excavation, ground penetrating radar (GPR), test unit excavation, and public outreach.

This report is an addendum to the first project report (Elliott and Elliott 2009) and the reader is referred to it for additional historical context and results from the first phase of work. The first project's success was rooted in major discoveries of intact battlefield features. The second project sought to locate additional tangible remains of the battle in order to expand the geographical boundary of the site and provide a foundation for its preservation. In addition, the second phase sought to expand other boundaries by working with constituencies interested in and/or able to protect the battlefield site and its many varied components.

The second phase project expanded the existing site boundary 400 yards farther south through the documentation of artifact collections made several years ago during construction in a key area held by French Reserve Corps. These artifacts, in tandem with the project's archeological study of the area, indicate that more portions of this part of the battlefield are likely to have survived at that location. This project also identified two key areas of buried A-horizons likely to represent the battlefield landscape. Investigation of twelve target areas in Savannah revealed promise for additional battlefield and period-related resources in two of those locations. The work also served to eliminate geographic areas of site potential, reducing the scope of future searches. The project also successfully shared information from both studies with the general public in a myriad of ways, and produced a 4th and 5th grade curriculum packet.

Both phases of the Savannah Under Fire projects have created an extensive body of information unknown previously. This historical and archeological information holds much promise; the promise of a new understanding of the southern colonies' role in the American Revolution; of this momentous global event unfolding in the everyday lives of those finding themselves in Savannah in 1779; of the revelation to many today that history survives in our everyday world - one just needs to pick up his feet. But the promise of that history can only be fulfilled if it is protected and if its story is retold in a thousand different media and venues to a thousand different audiences. We are pleased to have produced a compendium of information that can provide the content for such stories and urge the City of Savannah and its residents to protect the resources (both newly discovered and those that await discovery) that contribute to these stories. This should be just the beginning, not the end.

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Thanks go to those who attended the public stakeholder meeting. Your interest, concern, and support are truly appreciated. May your efforts be steadfast and increasingly successful in moving the area closer to real preservation—preservation that includes non-renewable archeological resources such as the Battle of Savannah Revolutionary War sites.

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Any errors in this report are the sole responsibility of the first author.

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Chapter 1. Introduction

Background and Previous Phase I Work

In the summer of 2007, Coastal Heritage Society in Savannah, Georgia, was awarded a National Park Service American Battlefield Protection Program Grant (NPS ABPP). In 2007 and 2008 archeologists used this grant to locate and identify startling in situ evidence of the 1779 Battle of Savannah. Figure 1 shows the locations targeted for archeological investigation during that phase of work. The reader is referred to the report, “Savannah Under Fire: Identifying Savannah’s Revolutionary War Battlefield” for details about that project (Elliott and Elliott 2009). [That report is included as a PDF within the appendix of this 2010 digital report, and as a DVD in the 2010 hardcopy versions.]

This Phase I project proved that substantial battlefield features and artifacts have survived 265 years of urban impacts. In addition, the project indicated an overwhelming potential for the existence of additional battlefield resources beyond the initial areas of Phase I investigations. A complete preservation plan for the 1779 Battle of Savannah site cannot be made until the boundaries are refined further.

The Phase II project proposed to expand these boundaries based on solid archeological investigation, Phase I findings, and follow-up research. Particular focus was on the battlefield boundaries to the northwest, southwest, and southeast. The Phase II project used methods validated in Phase I for the successful location of battlefield components in the Savannah environment, meeting the Secretary of Interior’s Standards. These methods included geographic information systems (GIS), ground penetrating radar (GPR), controlled metal detector survey, shovel testing, and limited test unit excavation. Archeologists searched for the Carolina Redoubt, reserve and counter attack at the Jewish Cemetery, along with the French saps, American camps, and French camps. The substantial success of Phase I confirmed that the search for boundaries in other directions is a cogent and logical plan of attack. The identification of these would serve to reveal a larger, more comprehensive boundary, providing the information and resources planners need to preserve the site in perpetuity.

Some of the historical background and select other information in this document comes from the original Research Design from the Phase I project (Elliott 2007).

Additional historical details regarding the French and American camps; African, African American and Native American involvement; the effects of the battle on women and children; as well as specifics regarding the battle and the new target locations have been culled for this Phase II work from primary documents.

Project Goals and Strategies

- Goal-To Promote Battlefield Preservation
 1. Make recommendations based on project interpretations.
 2. Share findings and seek solutions to local battlefield site protection through three “Conversation Dates” with stakeholders and policy makers.
 3. Share information through public presentations in which public comment and brainstorming are invited.
 4. Create a social networking site to share project information with the public, especially targeting those under 30 years old.
 5. Distribute copies of report to partner organizations and other interested entities.
 6. Speak to partner organizations about community involvement and opportunities for synergy and invite them to the “Conversation Dates” meeting.
 7. Investigate, with partners, city government, chamber of commerce, and tourism officials, the feasibility of promoting and preserving the site as a walking tour opportunity.
 8. Investigate funding opportunities to put exhibit concept from Phase I into a reality after Phase II discoveries and interpretations are complete.
 9. Use media coverage and web sites to share information and promote preservation efforts among community organizations.

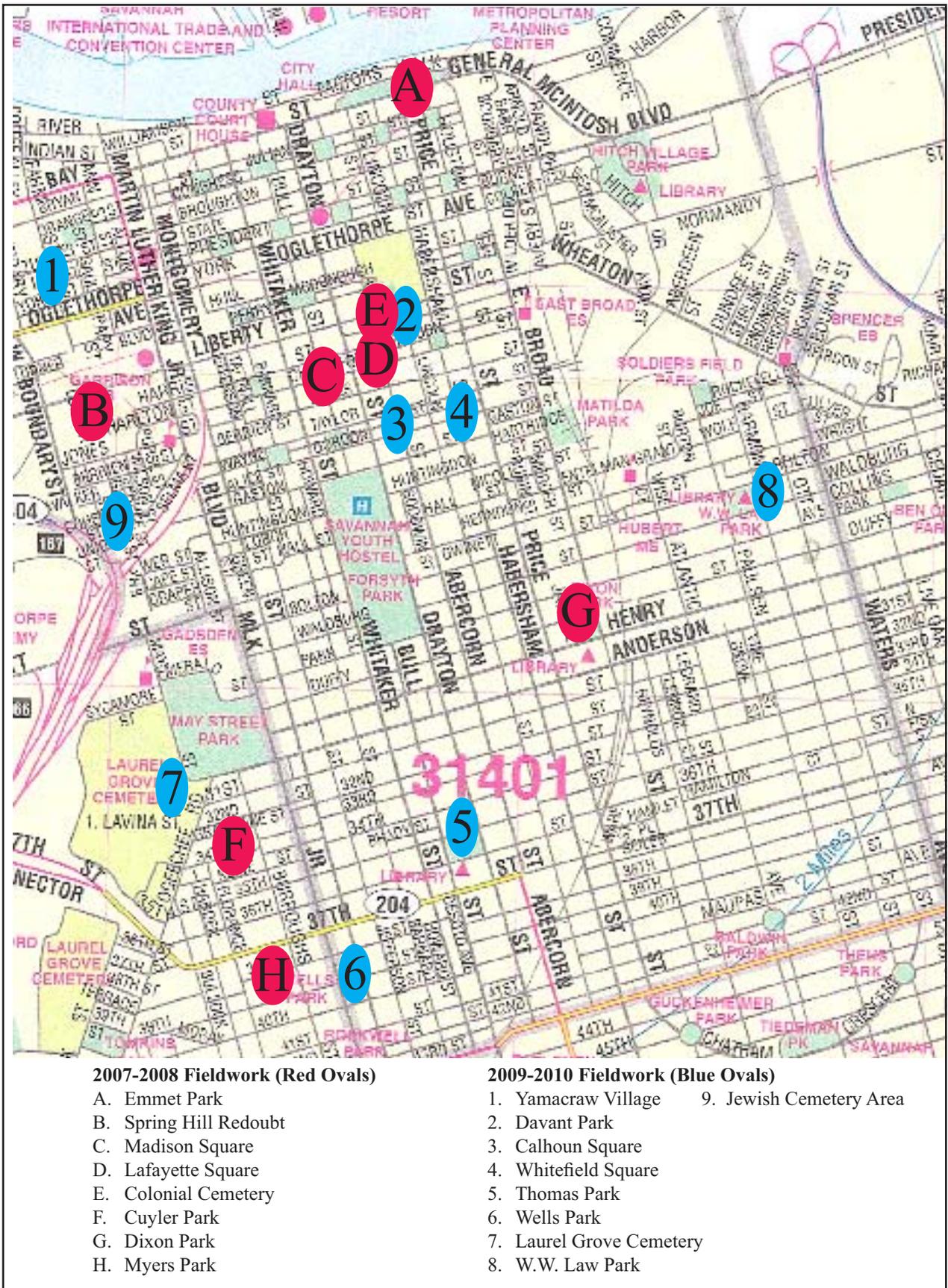


Figure 1. Fieldwork locations of previous and current ABPP Savannah Under Fire projects.

10. Make recommendations for ways to preserve the battlefield site based on best practices for archeological site preservation and stakeholder input derived during above process.

Research Design

- How do new discoveries (made in Phase I and in Phase II) change the GIS map overlays and do these changes contribute to the reinterpretation of past or current concepts of the battle?
- What battlefield components, either above or below the ground surface, have survived and why? Which have not survived, and why?
- What negative evidence for the battlefield was located and how does that contribute to locating or understanding various portions of the battlefield?
- How accurate are the published accounts of the battle?
- Which accounts were inaccurate, and why?
- Which of the other 13 redoubts, besides Spring Hill, saw battle activity, and to what degree?
- Can the Carolina Redoubt be located, and if so, what evidence is there for its reputed role in greatly assisting with the defense of the Spring Hill Redoubt?
- What features were identified, and how can they be interpreted in relation to standard fortification construction?
- What features of the landscape aided or hindered the opposing forces and which are visible in the modern landscape?
- What were reserve troops doing before, during, and after the battle?
- Is there any evidence for reserve troop activities, and if there is, does it support or refute the historical documentation?
- Were standard military procedures followed before, during, and after the battle? Why or why not and how did this affect battle operations?
- Were defensive works constructed following the military engineering standards of the day?
- What types of extant features survive archeologically and what do these tell us about the period immediately before, during, and immediately after the battle?
- Can evidence for the allied American and French camps be located and if so, does the evidence support or refute historical documentation?
- How did the environment, terrain, and military strategy at the time determine the location of the camps?
- How well were opposing forces supplied with food, ammunition, and other necessities of battle?
- What effect did the weather have on activities leading up to and during the battle?
- Did the multi-national nature of the allied forces affect their operations? If so, how?
- What efforts did British forces make to defend their position?
- Did the battle affect strategies used by America and Great Britain in the remainder of the war?
- Did the battle have significant impact on the American Revolution, and if so, how?

KOCSA Analysis

KOCSA is an acronym for the analysis of Key terrain, Observation and fields of fire, Cover and concealment, Obstacles (both natural and man-made), and avenues of Approach. This analysis technique, devised by the National Park Service, enables the study of battlefields from a strategic perspective. The examination of each of these natural and cultural conditions listed above allows the determination of what battlefield strategies of the day should or should not have been used for a particular battle. One can then study documentary, cartography, and archeological data to conclude whether the strategies employed were acceptable by period standards and whether they made sense given the conditions and specific battlefield situation. The fieldwork results section of this report includes KOCSA analysis for each of the target areas.

Chapter 2. Methodology

Archeological methods used for this project meet or exceed the recognized professional standards as set forth by the United States Secretary of the Interior in the Standards and Guidelines for Archeology and Historic Preservation (United States Secretary of the Interior 1983). Activities associated with this project were conducted in accordance with Section 110 of the National Historic Preservation Act of 1966, as amended, in consultation with other Federal, State and local agencies, and Indian tribes, as appropriate. In addition, specific ABPP grant requirements and guidelines were followed for various steps of this project (National Park Service 2000, 2006). Public outreach methods follow best practices as studied and outlined by The Society for American Archaeology (per the Public Education Committee, State Coordinators' Network, publications, and workshops).

Property Access

Access to properties in the project area owned by the City of Savannah was secured during the grant proposal-writing process of this project. This included properties under the jurisdiction of the city's Park and Trees (Jim Parker)/ Urban Forestry (Bill Haws), Building and Grounds (Jim Shirley), and Cemeteries (Jerry Flemming) departments. An initial meeting on December 9, 2009, with these and other relevant departments in the city and others provided the framework for an on-going cooperative relationship between archeologists and department heads and eliminated access issues that plagued the previous ABPP grant. In addition to the departments listed above, meeting attendees also included representatives from the city's Engineering/ Developmental Services (Marc Nelson), Housing (Martin Fretty), and Citizen Office (Tara Polli). The director of the Housing Authority of Savannah (Earline Davis), a federal entity, also attended. The meeting was called and facilitated by Bridget Lidy, Administrator, Tourism and Film Services Department, City of Savannah.

In addition to access to city property obtained during the proposal phase, archeologists continued to work hard to obtain access on private property in related areas. These efforts resulted in success on one large tract (Garrison Elementary School property) and three smaller tracts (Boykin/Morgan/Savannah Station property). These tracts are all located in and around the Jewish Cemetery area,

where the Haitian reserves were stationed on October 9, 1779, and where French and American troops were to retreat in case of defeat. Representatives of the Congregation of Mickve Israel also gave permission to do GPR survey within the larger Jewish Cemetery there, the Mordecai Sheftall Cemetery, although archeologists decided that non-excavation efforts here would not result in definitive evidence of the battle and did not investigate this area.

Access was denied to archeologists on one remaining tract (Oglethorpe Associates LLC property). This property is currently a vacant lot that may be in the vicinity of one of the redoubts near Spring Hill Redoubt; possibly the Carolina Redoubt. The Field Director had several positive conversations with company representatives and followed with a letter requesting access to the property for archeological investigations. The letter stated that archeological investigations would not impact or stop development of the property and that no funds were being requested from the property owner. The real estate/construction/development company of Bennett Hofford, apparently representing Oglethorpe Associates, replied with a written letter denying the request. The letter stated "We are under advisement that no digging of any kind should be done on this site at this time. I wish you luck with the Coastal Heritage Society" (Ray 2010). This property sits diagonal to related property containing a relatively new hotel, which also had no archeological investigations prior to major ground disturbance. It is believed that the property archeologists requested access to will also undergo construction for another hotel, with subsequent major ground disturbance (for foundations, pilings, and utilities) resulting in the permanent destruction of Revolutionary War or other archeological sites that may be there.

Historical/Archival Research

The bulk of historical research was conducted during the first ABPP Grant in 2007-2008 when archeologists visited repositories in New York, Pennsylvania, and Michigan. The reader is referred to the first report for a detailed description of this research (Elliott and Elliott 2009). Archeologists brought back thousands of copies of primary documents in the form of digital images.

This initial research included examining primary and secondary documents at the: New York Public Library, New York Historical Society, and Morgan Library, in New York, New York; Historical Society of Pennsylvania in Philadelphia; David Library of the American Revolution in Washington Crossing, Pennsylvania; and William L. Clements Library at the University of Michigan in Ann Arbor, Michigan. During this first grant, they also studied the holdings of the University of Georgia's Hargrett Rare Book and Manuscripts Library, and numerous internet sources. During the current ABPP grant, archeologists examined and/or re-examined many of these manuscript copies in greater detail. Archeologists continued to use the many copies of contemporary maps collected during the first grant project for the geographical information systems (GIS) overlays for the second project.

In addition, during the second grant they visited the South Caroliniana Library at the University of South Carolina and the South Carolina Department of Archives and History, both in Columbia, South Carolina (Figure 2).

Researchers also visited the Georgia Department of Archives and History, in Morrow, Georgia outside of Atlanta. During the second grant project, researchers also visited the City of Savannah Research Library and Municipal Archives and the Chatham County Metropolitan Planning Commission office.

Researchers visited the South Caroliniana Library and examined the Francis Marion Papers (Marion 1761-1794). Included in these papers was an over-size manuscript dated 1 Aug-1 Nov. 1779. It was the Pay Roll of Capt. Thomas Hall's Company, 2nd Regiment of the South Carolina Continentals (Marion 1779). The pay roll listed the name, rank, and casualty information, as well as specific details about pay dates and amounts. Two were listed as casualties of the October 9, 1779 battle. They were Private John Croford listed as missing on October 9th, and Private Thomas Crozer, listed as killed on that day (Marion 1779:1). Researchers also obtained a copy of British Engineer James Moncrief's "Siege of Charleston" journal (Moncrief 1780a). While it chronicles events in Charleston following the Battle of Savannah, the journal has details regarding Moncrief's techniques and methods as an engineer, which can prove pertinent to his designs

and construction of the earthworks, redoubts, ditches, and artillery placement in Savannah the previous year.

At the South Carolina Department of Archives and History (SCDAH), researchers examined "The Book of Negroes" in Sir Guy Carleton Papers (Carleton 1783). This document lists each African American embarking on British ships between April and November of 1783, to sail for ports in Nova Scotia, Canada. Many of these African Americans had been formerly enslaved in Savannah and the surrounding areas, and gained freedom by fleeing their masters and joining British troops. They moved with the troops and when the British evacuated South Carolina in December of 1782, these African Americans went with them to New York, where they were put on ships for passage to Canada. Researchers were aided in their examination of this document by using the searchable transcriptions of that book located on a CD Rom (Whitehead 2002). Researchers visiting the SCDAH also examined the Lyman Draper collection on microfilm. This collection contains documents citing specific soldiers involved in and/or killed

in the Battle of Savannah, and events relating to the siege and battle.

In Savannah, researchers examined hard-copy maps and select documents at the City of Savannah Research Library and Municipal Archives (Figure 3). Prior to their arrival, researchers searched the online catalog using key dates and key words associated with not only the Battle of Savannah, but also the individual parks, squares, and greenspaces to be investigated as part of this project. They also visited

Chatham County's GIS Analyst David Anderson, and studied select digital maps held by Chatham County.

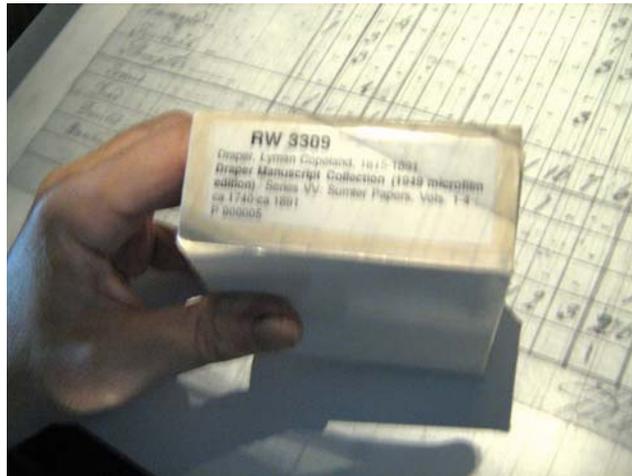


Figure 2. Archeologists gather information from microfilm in SC.

Collector Surveys

Savannah has an active relic collector community. Archeologists visited one of the local metal detector enthusiast clubs (Coastal Empire History Hunters Association) in an effort to speak with collectors interested in sharing information on the recovery of artifacts related to the Battle of Savannah. Several individuals at the club expressed an interest in the project, and archeologists visited two members who had collections that sounded relevant to this project. Archeologists took photographs of the



Figure 3. Researchers, (including the one standing on the ladder taking digital photos), examine a historic map at the Research Library and Municipal Archives, City of Savannah.

collections, made notes regarding artifact provenience, and in one case made measurements of gunflints (in the Wheless collection) (Figure 4, 5). In several of these cases, metal detecting was conducted on sites under construction that had seen no archeological investigations. This included projects that had no permitting, funding, or other mandates for archeology. In several cases metal detectorists followed dump trucks removing soil from the sites and used metal detectors on the spoil piles deposited far away from the original sites. In one case a metal detector enthusiast purchased removed soils and had them deposited on his property to be metal detected at his leisure. In the remaining cases dozens of collectors used metal detectors on the site undergoing construction or clearing.

Utilities Marking

The Field Director notified the Utilities Hotline “Call Before You Dig” by telephone to make ticket locate

request prior to conducting fieldwork in each area of the project. She then verified responses on the hotline’s website. Areas with utilities marked by paint or pin flags were avoided during field work. More than one dozen locate requests were called in for this project and many were renewed over the course of the work.

Fieldwork

Archeologists spent the first day of fieldwork, January 27, 2010, conducting a windshield survey of the various target areas. They visited each area to determine specific locations of work and the methods that would work best on each site. They used this information the following day to plan for fieldwork investigations in each area.

Archeologists conducted fieldwork in February and May of 2010. They used several methods, and/or combinations of methods, to try to locate additional components of the



Figure 4. Examining a relic collection from the battlefield.

1779 Battle of Savannah. These included shovel testing, ground penetrating radar survey (GPR), metal detector survey, and test unit excavation.

A continual pagination of bag/lot/FS numbers was used for all sites. This reduced the likelihood of confusion that would result from numerous “FS1”, “FS2”, etc. numbered bags had we started the lot list over at each site. In the same manner, shovel test and test unit numbers were continually paginated. This allowed for only one ST1 or one TU1 during the entire project. (None of these numbers are tied to numbers used in the first NPS ABPP grant.)

Shovel test, metal detector survey, feature, and test unit forms enabled the recording of field data. In a few instances, shovel test numbers were assigned but those shovel tests were not excavated, usually as a result of the information gathered from the shovel tests that were excavated. Shovel test numbers assigned but not excavated include 18-22, 27, 29,

30, 34-37, 40, 55, and 56. Archeologists drew plan maps and profile drawings of test units, and kept a daily field book log. They photographed test unit floors and walls, and took photographs of shovel testing, GPR survey, metal detector survey, volunteers, and site landscapes. They used a Sokkia laser total station to shoot shovel test locations, GPR survey grid corners, test unit corners, landscaping features, and extant cultural features such as streets, curb corners, and standing structures. Each site was given its own datum points tied to arbitrary Easting and Northing grid locations that were later geo-referenced to digital City of Savannah maps. Archeologists also used the transit data to make scaled maps of each site.

Laboratory Analysis

Many of the targeted areas of fieldwork were located where mid-to-late 20th century and early 21st century debris was common. Such modern “artifacts” and debris was noted but usually not recovered. All recovered artifacts were brought to the Archeology Lab in the Curatorial Department of the Coastal Heritage Society, in Savannah, Georgia (Figure 6). There, artifacts were washed, counted, analyzed, and relabeled and rebagged for permanent curation. Artifacts were analyzed by using a coding system based on broad functional categories generally aligned



Figure 5. Measuring gunflints from a battlefield relic collection.

with South's (1977) classification system and then tied to specific alphanumeric sequences. Examples of these broad categories include A=Architecture, C=Clothing, K=Kitchen, M=Miscellaneous, P=Personal, R=Arms, T=Tobacco, and Z=Activities. An example of the alphanumeric sequence for a brass button would be CM0220; the "C" stands for a clothing artifact and the "M" indicates it is metal. The number represents all brass buttons. Likewise KC1511 is the code for a piece of plain Delft, whereas KC1504 stands for blue hand-painted Delft. Comments and details specific to artifacts were recorded in separate columns in the database. Codes were then entered into a computerized database. The coding enabled archeologists to ask questions of the data easily. The Microsoft Access software allowed them to ask the questions in the form of queries.

The above system allowed archeologists to analyze artifacts by functional attributes as well as by other traits. These traits included method of manufacture, material, decoration, size, color, and other characteristics. Archeologists used these traits in conjunction with studies and published research by recognized experts in various fields. Examples of references consulted included: ceramics (Greer 1996; Hume 1983, South 1977), military button typologies (Albert 1976; Tice 1997, Troiani 2001), bottle manufacture (Fike 1967, 1987; Jones & Sullivan (1989); McKearin and Wilson 1978, SHA 2008), and general colonial artifacts (South 1977, Noel Hume 1983, and Neumann and Kravic 1989). They also used a variety of sources to identify arms artifacts, such as Flayderman (1980), Hamilton (1976), Moore (1967), Neumann (1967, 1991), and Sivilich (1996). See the bibliography of this report for additional sources.

Bottle glass color was noted during the analysis phase of laboratory work. Color was not used as a chronological marker to date specific strata or features for the reasons outlined below. For example, the presence of fragments of aqua or olive green glass did not result in archeologists assigning a specific date to an assemblage based solely on color. Other dating methods, however, were used. For example, the method of manufacture of the bottles was analyzed rather than the color, for dating purposes. The inability to use the color of bottles as age indicators is due to the number of variables involved in bottle production. Iron impurities in sand used in bottle manufacture produce uncontrolled results in terms of color. Lower levels of iron create "bluish to greenish aqua" whereas higher levels produce darker greens (SHA 2008). In addition minerals in the potash used and the amount of oxygen in the fire used to melt the glass affect the color.

Brick, mortar/plaster, and oyster shell were treated differently from other artifacts. When archeologists encountered



Figure 6. Washing, analyzing, and cataloging artifacts in the archeology lab.

small amounts of these materials, they counted them and saved a representative sample. When they uncovered large amounts, they weighed the material and discarded all but a representative sample. In many instances, therefore, a shovel test or test unit may reflect both a weight and a count. The count reflects those items recovered and saved as a sample.

Curation

Artifacts remain the property of the property owners. All artifacts, field forms, photographs, notes, and the final report are curated with the collections managed by the Coastal Heritage Society and currently housed in the Savannah History Museum in Savannah Georgia. Very long-term plans for the collection are to relocate it to a new, state-of-the-art curation facility to be owned by the City of Savannah and managed by the Coastal Heritage Society. This facility will be a new structure located in the Georgia State Railroad Museum complex across the street from the current museum. Meanwhile, the collection will remain with the other collections curated by the Coastal

Heritage Society. Select artifacts may be incorporated into future exhibits within the Savannah History Museum.

Geographic Information Systems (GIS)

To find potential locations of archeological resources, historic maps were compared to the modern landscape of Savannah. Using ArcView 9.2, scans or digital photographs of Revolutionary War-era maps were geo-referenced to GIS data from the City of Savannah. A minimum of three control points, or common points, were needed to align the maps. Previously, the only common geographic elements on both the historic and modern maps were streets. These were not the most desirable points, as streets and their widths and edges tend to vary through time. The archeological discovery of the southeastern corner and extending trenches of the Spring Hill Redoubt in 2005 allowed for an additional control point directly related to elements on most of the Revolutionary War maps. In addition, the discovery of a fortification trench during the previous ABPP project was incorporated into the GIS work. Unfortunately the latter was a linear stretch and not a “corner” trench that could be definitively aligned with a specific portion of the fortifications located in what is now Madison Square. While the 2005 and 2008 additions proved helpful, they did not resolve issues dealing with the level of accuracy of historic maps and the need for a uniform distribution across the project area of accurate control points.

This map depicts Savannah in 1770, just nine years before the battle (Figure 7). In 1779, Savannah was bounded by Bay and South Broad streets (the latter was renamed Oglethorpe Avenue) to the north and south, respectively, and Lincoln and Jefferson to the east and west, respectively. The four intersections of these streets, the center of town at the intersection of Bull and Broughton streets, and the corner of the Spring Hill Redoubt were the preferred control points in geo-referencing the historic and modern maps. In addition, the trench discovered at Madison Square was used experimentally along different portions of trenches on historic maps in an effort to use it effectively as a control point. The historic maps contained varying degrees of detail, therefore, archeologists used as many of these control points as possible. Occasionally, it was necessary to add less-accurate control points from the landscape (for example, at the intersection of a tributary and the Savannah River). These points allowed us to distribute our control points throughout the map, making the transformation more accurate overall, while sacrificing local accuracy.

Using these control points, new maps were created using first order polynomial (affine) and adjust transformations to align each historic map with the modern landscape. First order polynomial transformations only shift, scale, and rotate the historic map, but do not warp it. Adjust transformations use both the polynomial transformation and a triangulated irregular network to increase accuracy. Second order polynomial transformations were not used as they resulted in very large root mean square (RMS) errors and too much distortion in the historic maps. Archeologists then examined the new overlay maps to refine locations where the historic buildings, redoubts, camps, and other structures intersected with city green spaces, such as parks and “squares”.

Errors increase as distance from the control points increases. For our maps, this generally means any locations in downtown Savannah are fairly accurate; however, the error is much larger in the midtown districts, and continues to increase as one moves farther south and away from the old downtown. Another source of error is the inherent inaccuracy of much of eighteenth century mapping. In addition, the evolution and redevelopment of the city over the past 230 years has caused some shifting in the centerline and edges of streets since 1779, causing inaccuracy in matching the control points.

GPR

Ground Penetrating Radar, or GPR, uses high frequency electromagnetic waves, or microwaves, to acquire sub-surface data. The device uses a transmitter antenna and closely spaced receiver antenna to detect changes in electromagnetic properties beneath them. The antennas are suspended just above the ground surface, and the antennas are shielded to eliminate interference from sources other than directly beneath the device. The transmitting antenna emits a series of electromagnetic waves, which are distorted by differences in soil conductivity, dielectric permittivity, and magnetic permeability. The receiving antenna records the reflected waves for a specified length of time (in nanoseconds, or ns). The approximate depth of an object can be estimated with GPR, by adjusting for electromagnetic propagation conditions.

The GPR sample blocks in this study area were composed of a series of parallel transects, or traverses, which yielded a two-dimensional cross-section or profile of the radar data (Figure 8). These samples are termed radargrams. This two-dimensional image is constructed from a sequence of thousands of individual radar traces. A succession of radar traces bouncing off a large buried object will produce a hyperbola, when viewed graphically in profile. Multiple large



Figure 7. This close-up is a view of a twice-traced map originating in 1770. It depicts the size of the town at that time, along with its boundaries, lots, squares, and wharfs (Shrunder 1770).

objects that are in close proximity may produce multiple, overlapping hyperbolas, which are more difficult to interpret. For example, an isolated historic grave may produce a clear signal, represented by a well-defined hyperbola. A cluster of graves, however, may produce a more garbled signal that is less apparent.

The GPR signals that are captured by the receiving antenna are recorded as an array of numerals, which can be converted to gray scale (or color) pixel values. The radargrams are essentially a vertical map of the radar reflection off objects and other soil anomalies. It is not an actual map of the objects. The radargram is produced in real time and is viewable on a computer monitor, mounted on the GPR cart.

GPR has been successfully used for archeological and forensic anthropological applications to locate relatively shallow features, although the technique also can probe deeply into the ground (Conyers and Goodman 1997). The

machine is adjusted to best probe to the depth of interest by the use of different frequency range antennas. Higher frequency antennas are more useful at shallow depths, which is most often the case in archeology. Also, the longer period of time that the receiving antenna is set to receive GPR signals (measured in nanoseconds, or ns), the deeper the search.

The effectiveness of GPR in various environments on the North American continent is widely variable and depends on solid conductivity, metallic content, and other pedochemical factors. Generally, Georgia's coastal soils have moderately good properties for its application. The technology has been used previously in Savannah and coastal Georgia with favorable results (General Engineering Geophysics, LLC 2004; D.Elliott 2003a-c, 2007, 2008). GPR signals cannot penetrate large metal objects and the signals are also significantly affected by the presence of salt water. Although radar does not penetrate metal objects,



Figure 8. Archeologists begin 50 cm GPR transects in the Yamacraw Village Housing Development.

it does generate a distinctive signal that is usually recognizable, particularly for larger metal objects, such as a cast iron cannon or manhole cover. The signal beneath these objects is often canceled out, which results in a pattern of horizontal lines on the radargram. For smaller objects, such as a scatter of nails, the signal may ricochet from the objects and produce a confusing signal. Rebar-reinforced concrete, as another example, generates an unmistakable radar pattern of rippled lines on the radargram. Larry Conyers notes: “Ground-penetrating radar works best in sandy and silty soils and sediments that are not saturated with water. The method does not work at all in areas where soils are saturated with salt water because this media is electrically conductive and ‘conducts away’ the radar energy before it can be reflected in the ground”

A ground penetrating radar survey was conducted in multiple areas of the second *Savannah Under Fire* project. This survey coverage builds on previous GPR surveys, which focused most recently on Revolutionary War components in downtown Savannah for the first NPS ABPP project (Elliott and Elliott 2008). Two other related GPR studies include work on the Spring Hill Redoubt locality [General Engineering Geophysics, LLC (2004)] and the LAMAR Institute’s survey at the Marriott cottage location (Elliott 2008). Both of these studies were performed for the Coastal Heritage Society and both were done prior to the present study.

The methods employed for GPR survey were consistent with those previously described for the 2008 field season. Previously described GPR coverage from 2008 in the first ABPP battlefield study of the Siege of Savannah included several portions of the battlefield. Those 12 samples were designated GPR Blocks A through M (excluding I). The results from those samples were fully detailed in the previous report and need not be repeated here (Elliott and Elliott 2009).

Areas to be sampled were chosen through a process whereby suitable and accessible tracts within areas of battlefield interest overlapped. Targeted areas included the location of the American camps, the location of the French saps, the location of the Haitian reserve troop position, and the British defenses northwest of the Spring Hill Redoubt.

This second battery of GPR investigation was launched in 2010 as part of the present study. Radar data from GPR Blocks Q through BB was collected in January and February, 2010.

The equipment used was the MALA GeoScience USA, RAMAC X3M radar unit with XV Monitor, mounted on a wheeled cart. The GPR equipment settings and collection methods for these samples were consistent throughout the 2010 season.

These included:

- A 50 cm transect spacing was used throughout the project for all survey samples

- Radargrams collected in a single direction
- Data collection using GroundVision software (v. 1.4)
- 632 samples taken on each radar pulse
- Time window of 80.7 ns
- Sampling frequency of 7,462.13 MHz
- 500 MHz shielded antenna
- Post-processing using GroundVision, version 1.4 and GPR-Slice, version 7.0 software.

Except where noted, “north” and other directions in the following narrative refer to the town of Savannah’s grid north, which is east of Magnetic North.

GPR Block Q was located in a commons area of the Yamacraw Village housing project. In 1779 this area was

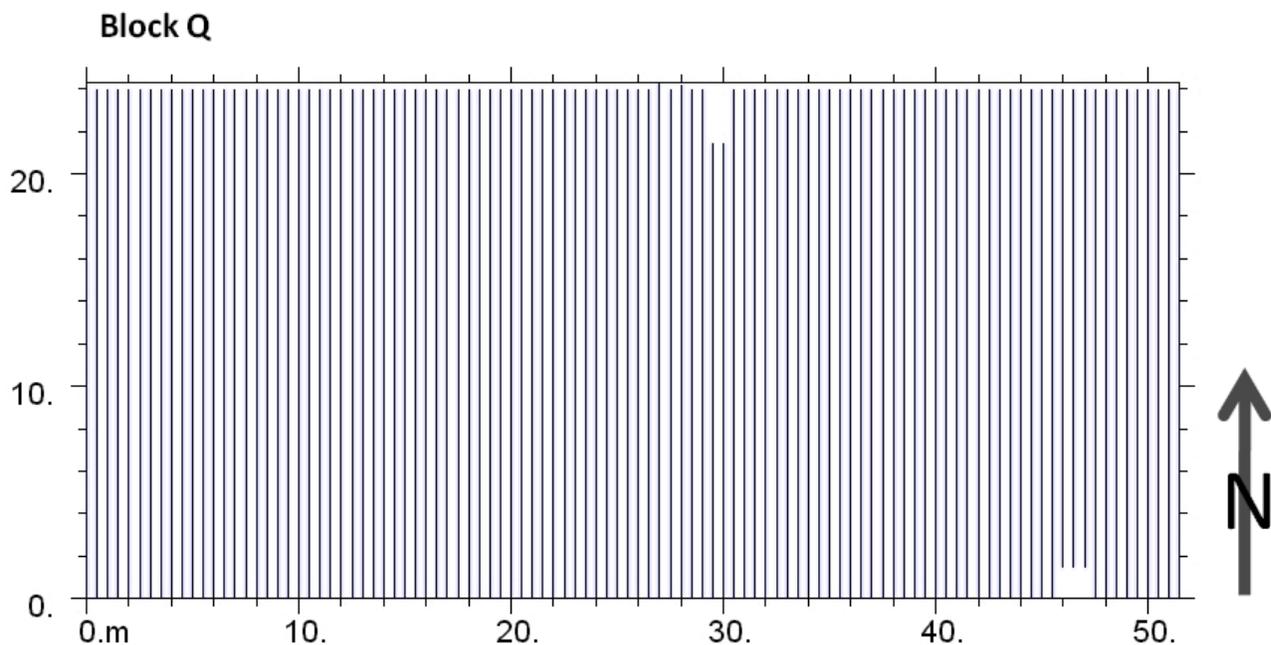


Figure 9. Block Q radargram.

west of the town of Savannah. Block Q consisted of 2,487 m of radar data from 104 radargrams that were collected within an area measuring 51.5 m east-west by a maximum of 24.3 m north-south. Block Q covered approximately 1,251 m² of Savannah’s cultural landscape. Figure 9 depicts the radargrams.

GPR Blocks R and S were linear samples that ran down the western slopes of Savannah through the Yamacraw Village housing project to the Musgrove Creek terrace. In

1779 this area was west of the town of Savannah. Block R consisted of a 220 m long east to west cross section and a return west to east radargram. Together these two radargrams form a polygon measuring 220 m by 1 m north-south. Block S consisted of a 338 m long east to west cross section that was collected in two sections and a return west to east radargram collected as a single line. Together these three radargrams form a polygon measuring 338 m by 1 m north-south.

GPR Blocks T and U were located on the west side of Savannah in the Cohen Street vicinity. In 1779 this area was southwest of the town of Savannah. Block T formed an irregular polygon whose maximum dimensions were 112 m east-west by 71 m north-south. The sample consisted of 5,903.75 m of radar data collected as 144 radargrams (Figure 10). Block U consisted of 3,046 m of radar data collected as 133 radargrams within an area measuring 65.5 m east-west by a maximum of 70 m north-south (same Figure 11). Blocks T and U combined covered approximately 4.475 m² of Savannah cultural landscape.

GPR Block V was a sample in Calhoun Square in Savannah’s southeast side. In 1779 this area was south of the town of Savannah. Calhoun Square is located on Abercorn St. between Taylor and Gordon streets. The square was established in 1851. It consisted of 3,158.5 m of radar data from 120 radargrams collected within an area measuring 51.5 m east-west by 24.3 m north-south (Figure 12). GPR encountered buried utilities throughout the greenspaces, such as these in Calhoun Square (Figure 13).

Block T

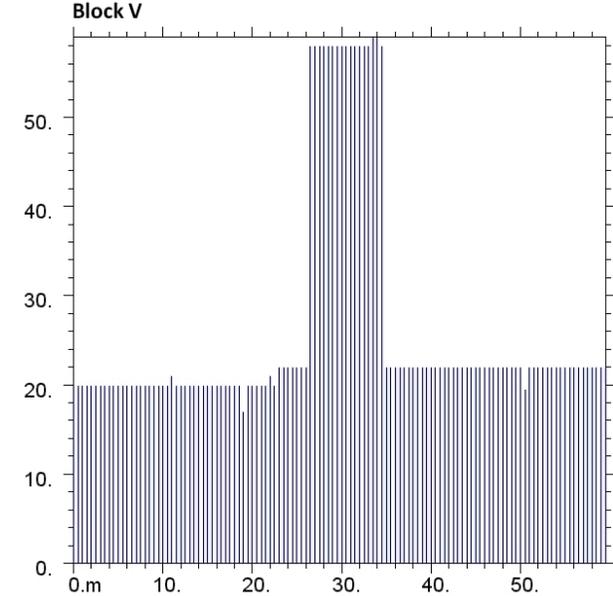
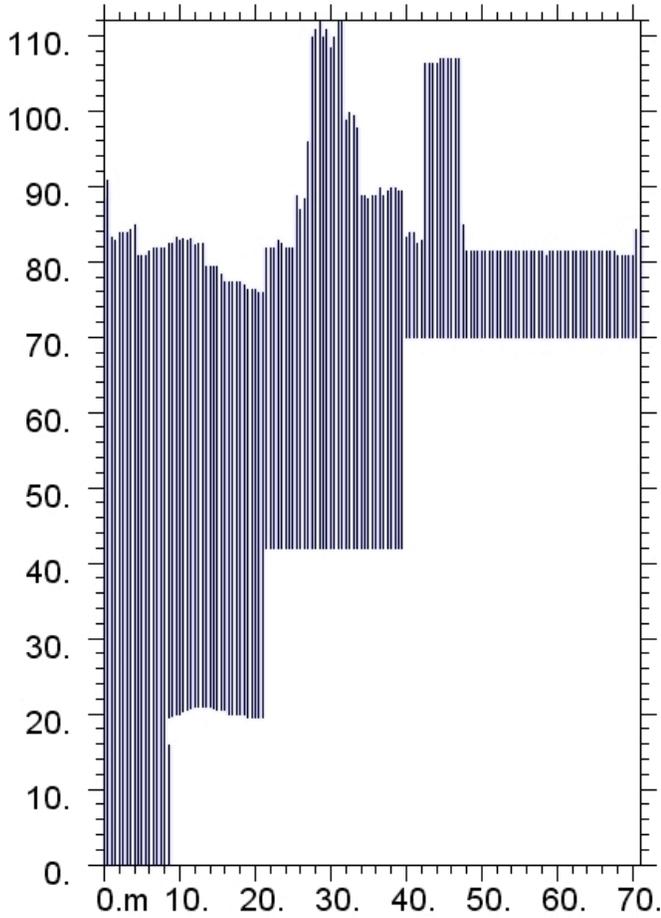


Figure 10 (left, top). Radargram of Block T.

Figure 11 (left, bottom). Radargram of Block U.

Figure 12 (above). Radargram of Block V.

Block U

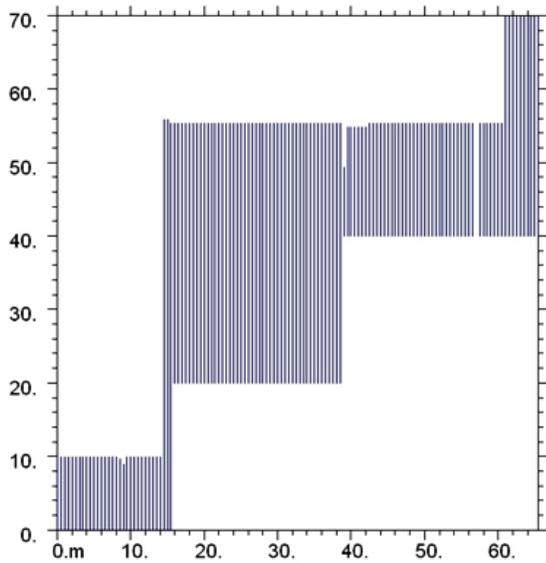


Figure 13 (below). Marked utilities is one example of the buried “noise” that GPR specialists must decipher in the radar data. Not all such underground intrusions are marked, as is this one in Calhoun Square.



GPR Blocks W and X were samples in Whitfield Square on Savannah's southeast side. In 1779 this area was southeast of the town of Savannah. Whitefield Square is located on Habersham St. between Gordon & Taylor streets. It

was established in 1851. Block W consisted of 879.75 m of radar data collected as 63 radargrams in an area measuring 31 m east-west by 14 m north-south (Figure 14). Block X consisted of 887.5 m of radar data collected as 70

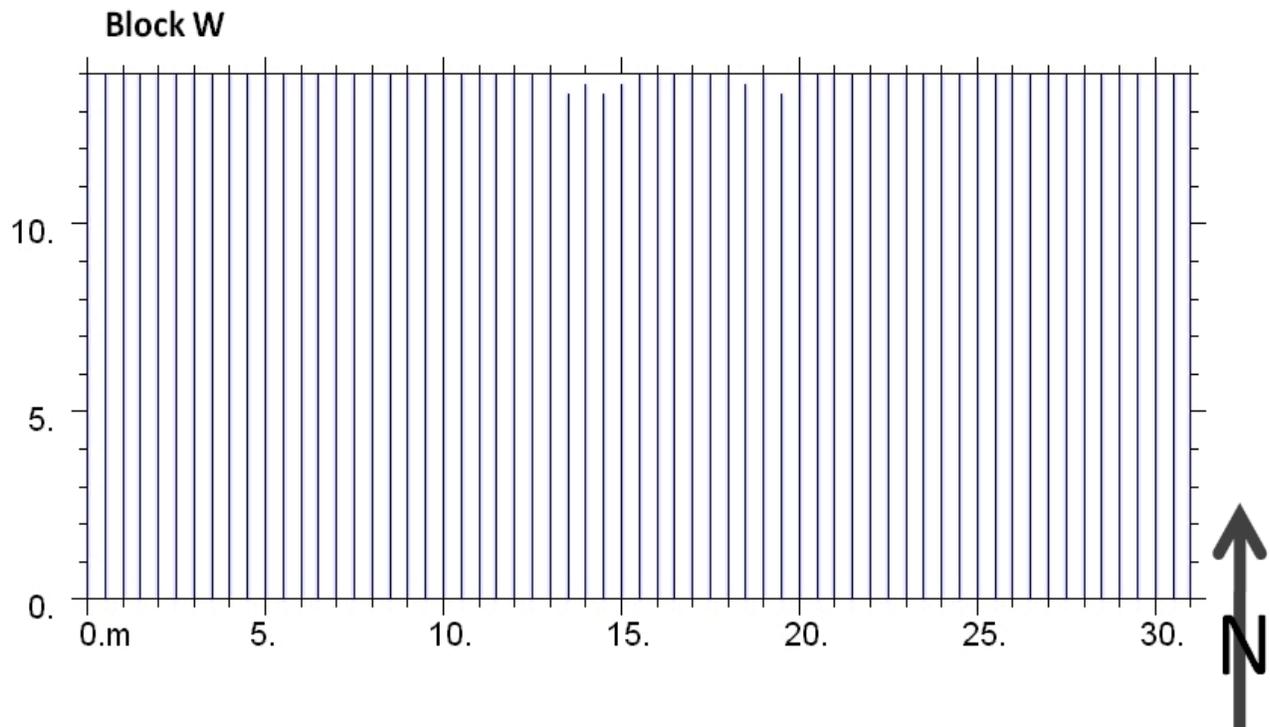


Figure 14. Radargrams for Block W.

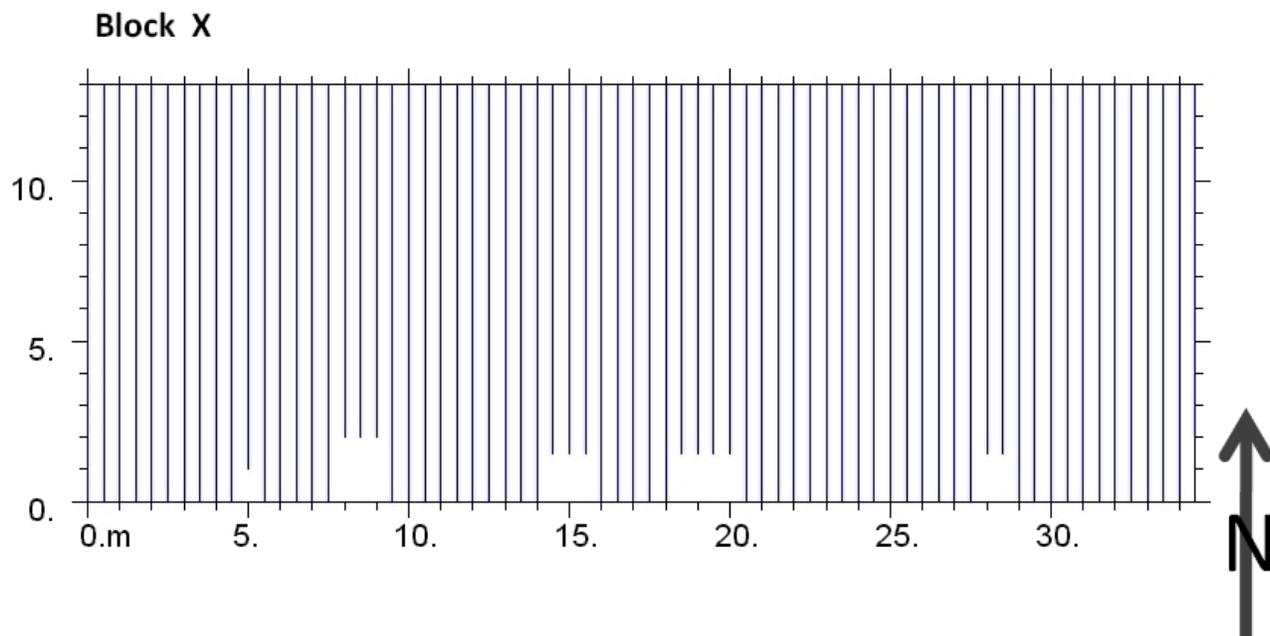


Figure 15. Radargram for Block X.

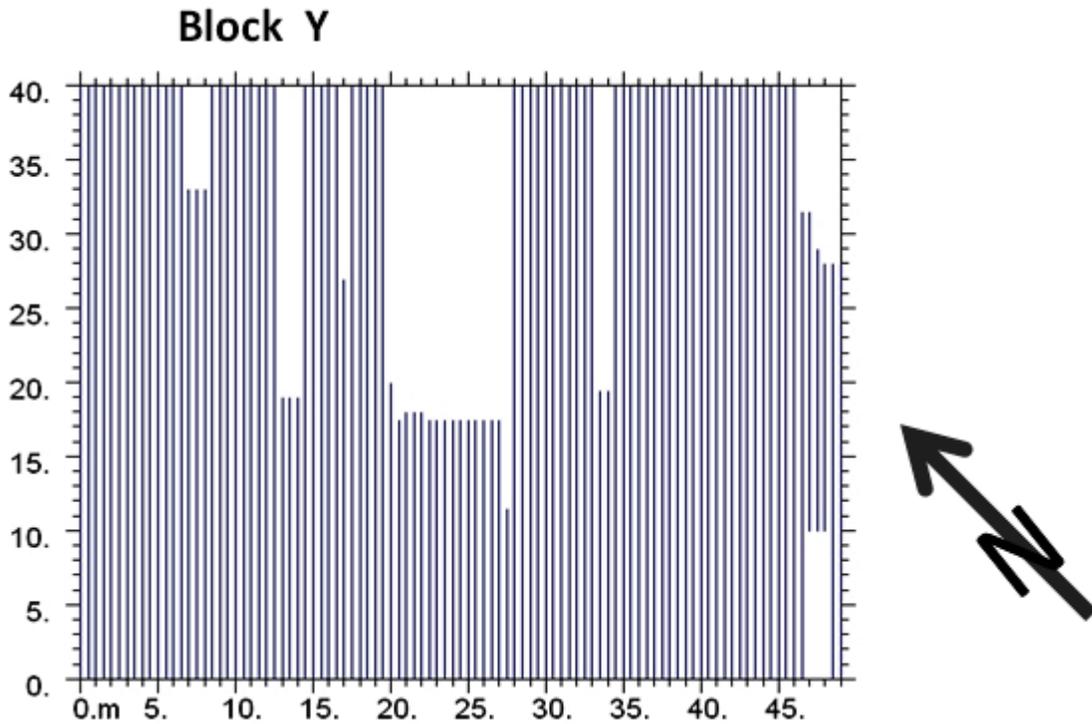


Figure 16. Radargram of Block Y.

radargrams within an area measuring 34.5 m east-west by 13 m north-south (Figure 15).

Blocks Y, Z and AA were GPR samples located in different areas of the Laurel Grove North Cemetery. Laurel Grove Cemetery was built on a portion of the Springfield Plantation, which was a large plantation southwest of Savannah. The cemetery was established in 1852. Block Y of 3,366 m of radar data collected as 99 radargrams in an area measuring 49 m east-west by 40 m north-south (Figure 16). Block Z consisted of 2,450 m of radar data collected as 35 radargrams in an area measuring 17 m east-west by 70 m north-south (Figure 17). Block AA consisted of 1682.5 m of radar data collected as 29 radargrams in an area measuring 12.5 m by 65 m (Figure 18).

GPR Block BB was a sample of the southeastern portion of Thomas Park. Thomas Park is bounded by Bull, Drayton, E. 35th, and E 36th streets. The surveyed area is bounded on the southwest by the Bull Street Branch of the Live Oak Library System. GPR Block BB consisted of 757.5 m of radar data collected as 41 radargrams in an area measuring 21 m by 18 m (Figure 19).

The GPR hardware used in the survey was a RAMAC X3M radar unit, 500 MHz shielded antenna, and MALÅ monitor. This equipment was mounted on a wheeled cart and powered by a Li-ION 12V battery pack.

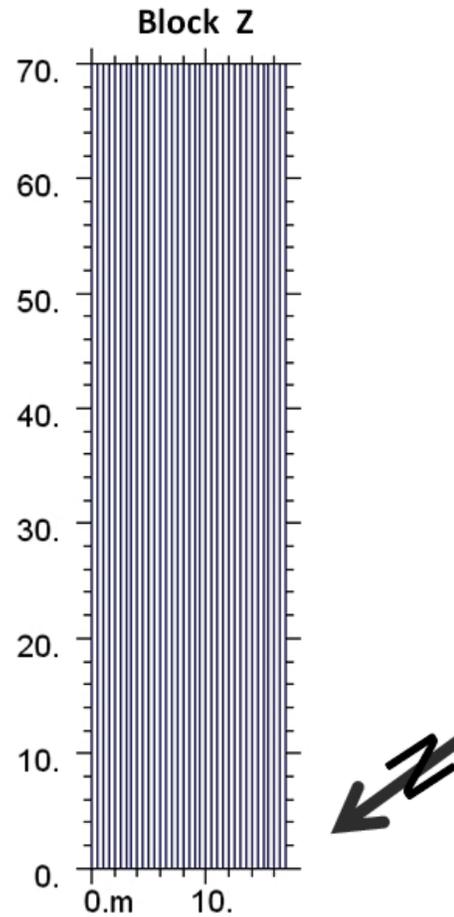
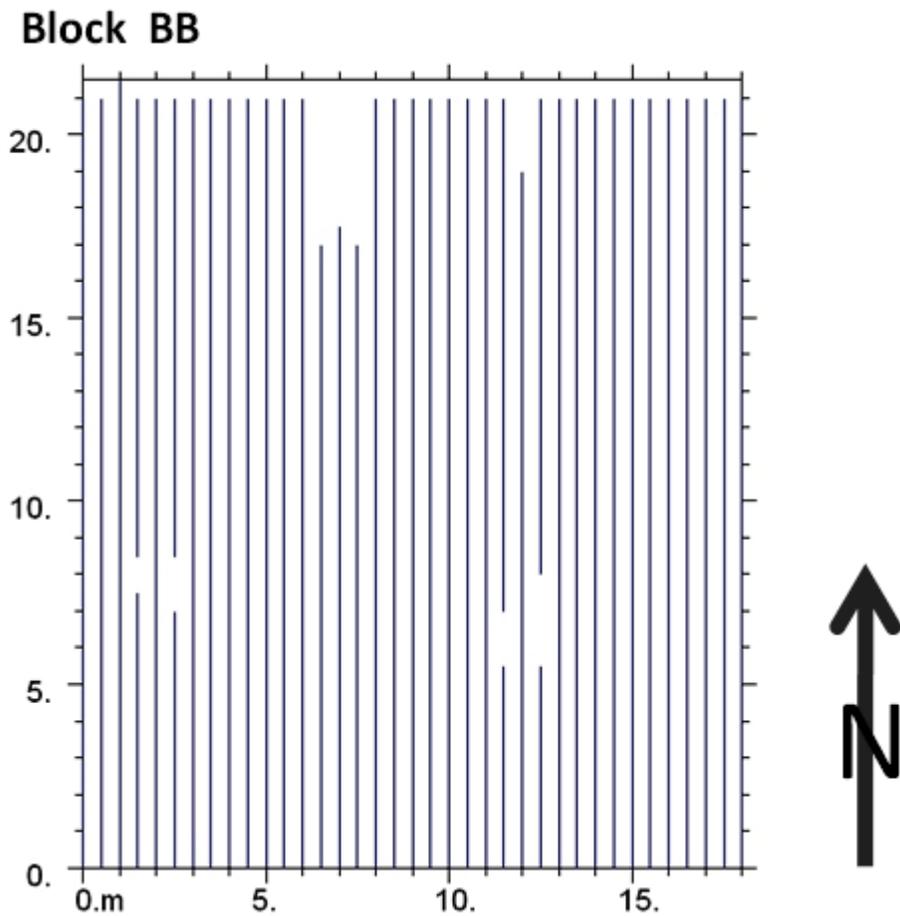
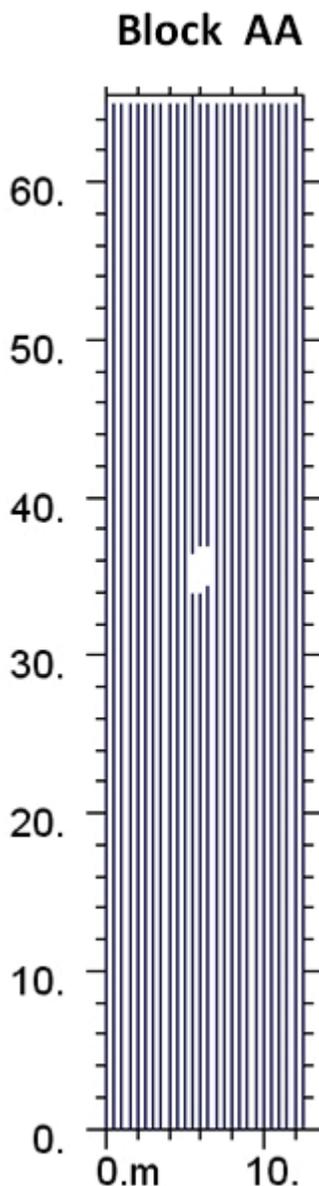


Figure 17. Radargram of Block Z.

Figure 18 (below).
Radargram of Block AA.

Figure 19 (right). Radargram
of Block BB.



The GPR data collected by the survey was post-processed using several software packages. These included: GroundVision, Easy3D, and GPR-Slice. A series of profiles and plan views was generated for each sample block. JPEG animations were created for each sample block, using GPR-Slice. These animations can be viewed by clicking on the GPR-Slice icon on the accompanying CD Rom disc. Selected images of survey output are included in the report discussion.

Public Outreach

The Public Outreach effort for this project consisted of six distinct endeavors. All were based on the goals of sharing information, increasing awareness, fostering appreciation, and engendering a desire and actions to preserve the Revolutionary War archeological resources in Savannah. These endeavors included a series of meetings, social media development and interaction, media interaction, field work interaction, curriculum development, and public presentations.

Meetings

One outreach effort involved a series of meetings. The project initially proposed to have three stakeholder meetings as warranted. The first would be an introduction meeting and orientation. The second would be a meeting in the field open to the public to showcase field discoveries, and the third would be a stakeholder preservation meeting. These proposed meeting was realigned to match the project more closely as it progressed. Meeting 3 benefitted from the project director's research of engaging communities. This research included reviewing the article mentioned by NPS ABPP staff, *Reaching Out, Reaching In: A Guide to Creating Effective Public Participation for State Historic Preservation Programs* (Lawson et al 2002). It also included email and telephone correspondence with archeologist Pam Cressy regarding her public engagement in the Alexandria Archeology Program.

Meeting 1

Meeting 1 was held December 9, 2009 in a conference room in City Hall in Savannah, Georgia. This first meeting was extremely productive and consisted of CHS project staff Laura Seifert and Rita Elliott meeting with officials whose jurisdiction included any part of the project area.

This included key City of Savannah departmental heads and staff, and with Housing Authority of Savannah personnel. Attendees from City of Savannah departments present included: Jerry Flemming (Cemeteries), Martin Fretty (Housing), Jim Parker (Park & Tree) Bill Haws (Urban Forestry), Bob Scanlon (Facilities Maintenance Bureau), Marc Nelson (Engineering/ Developmental Services), Bridget Lidy (Administrator, Tourism and Film Services Department), Jim Shirley (Buildings and Grounds), and Tara Polli (Citizen Office). Non-city representatives included Earline Davis (Housing Authority of Savannah). The meeting was instrumental in sharing background information between archeologists and staff about the project.

Elliott gave a brief PowerPoint presentation about the project background, including what had been discovered during the first NPS ABPP project and shared the goals, geographic targets, and rationale for the current project. This was followed by a discussion of target locations, scheduling, needs of staff, and logistical arrangements. City staff provided critical information to archeologists, including what departments had jurisdiction of which areas, where soil removal had taken place in the past and

other information about the target areas. The meeting also allowed archeologists to address any concerns city departments might have related to the execution of the project. It enabled departmental heads to realize that Revolutionary War archeological resources have already been documented in Savannah during the first NPS ABPP project, and that there was a strong likelihood that more such resources remain underground in areas of the city under their jurisdiction. This meeting created a much better relationship with city staff and resulted in fieldwork unencumbered by problems that faced the fieldwork of the first NPS ABPP project. This report Appendix contains the minutes from this meeting.

Meeting 2

This meeting was proposed to be held in the field during the advent of a major discovery (similar to the discovery of the 6 foot deep defensive trench in Madison Square during the last project). While many small discoveries were made during this project, no one overwhelmingly large discovery occurred that would have made a public meeting and media event warranted. For this reason, archeologists decided to merge Meetings 2 and 3.

Meeting 3

Meeting 3 was initially proposed to be a stakeholders meeting to engage the audience in considering initiatives to preserve the Revolutionary War battlefield sites in Savannah. This goal was combined with Meeting 2 goals to share information archeologists discovered from the project with the public. In addition archeologists researched ways cities and counties in the United States have implemented preservation tools in their areas. This information was included in the presentation as described below.

The one-hour presentation was divided in thirds. The first 20 minutes consisted of a PowerPoint presentation overview of the Savannah Under Fire Revolutionary War projects conducted by Coastal Heritage Society through National Park Service, American Battlefield Protection Program Grants. The second 20 minute portion of the PowerPoint presentation was an overview of how preservation of archeological sites such as these has economically and culturally benefitted other cities and counties across the U.S. It included five case studies. The third portion of the meeting consisted of opening the floor to the audience for comments and discussion on the project, the presentation, and how these archeological sites in Savannah and Chatham County can be preserved (Figure 20). This portion of the meeting was slated for 20 minutes but remained on-going until the audience had no more comments. This

portion, therefore, was approximately 35-40 minutes. A link to the PowerPoint presentation and text notes was posted on the project's "Savannah Under Fire" Facebook site and other locations on the internet, and is included in the materials submitted to the NPS along with the report. This report Appendix contains the minutes for Meeting 3.

The meeting was advertised in several ways. The project director created a targeted list of 117 individuals personally selected because they met one or more of the following criteria: has an interest in the project, history, the American Revolution, and/or archeology; is a city or county staff member in a position to impact archeological resources; is employed in the preservation, history, archives, libraries, or archeology field; is an avocational archeologist; is a volunteer in a parallel organizations (area museums, related non-profit, garden clubs, historic houses; historical societies, archeological societies); is involved in city tourism (Savannah Chamber and Convention & Visitors Bureau, trolley tours, walking tours); is a member of the state tourism staff; is on area state park staff; is a member of the Georgia historic preservation staff (state archeologist; state underwater archeologist); is on Savannah public housing staff (director); employed by area U.S. Army Corps of Engineers (archeologists); is directly involved with the project (volunteers, landowners, neighbors, visitors to excavations); is an area residents and/or business owners;

is involved with one of three local colleges or universities (professors, department heads, students); local government (mayor, city council members, acting city manager); is a relic collector who shared information with archeologists; is a county planning commission members; is employed in city economic development entities (renewal authority, economic development authority); is a member of the ports staff; is a public school official; is involved in state regional government (department of community affairs); and/or owns large tracts in the surrounding areas. The Public Relations/Marketing Director of CHS, Kiki Guerrero, sent these 117 individuals a personalized digital invitation through Constant Contact. Another approximate 300 individuals from an existing CHS list of individuals were sent this invitation, as well.

The project director sent press releases about the meeting to print and television media sources. She also notified newspapers, including the Savannah Morning News, Connect Savannah, and The Savannah Tribune (the oldest African-American owned and operated publication in America). Elliott posted announcements in several on-line news calendars including WTOC, WSAV, and WJCL. She sent press releases for TV and radio announcements to WTOC and WSVH/WWIO (National Public Radio). Elliott also sent press releases to the Historic Preservation Division of the Georgia Department of Natural Resources



Figure 20. An attentive audience at meeting #3, the Stakeholders Meeting.

for posting on its electronic newsletter, as well as to the Georgia Trust.

Information about the presentation and meeting was posted on numerous social media outlets including Facebook, blogs, and electronic newsletters. Announcements were made on the Savannah Under Fire Facebook page, as well as personal Facebook pages and blogs of project staff. Local archeological societies in Savannah and nearby Charleston redistributed the announcements through their email chains and electronic newsletters.

The project director sent Constant Contact invitations to specific entities. This included a newspaper reporter who has covered the NPS projects and other archeology repeatedly in the past, and a television reporter who routinely covers CHS events. African American audiences were targeted specifically through a press release sent to the Savannah Tribune and an invitation sent to a young reporter who had visited one of the field excavations and was from Haywood's Seaport Magazine.

The date for the meeting was selected, in part, on a time when few other events were scheduled in the city. In fact, it was the only date that virtually no recreational, educational, tourism or residential functions were underway. The forecast for no rain held. Fifty people attended this meeting, with many asking questions and making comments during the last segment of the meeting. Since many attendees did not sign it, we cannot say for sure who was present. It appears, however, that no city council members attended, and it is believed that only one city staff employee and one county employee attended. No attendees are thought to have been present representing the Savannah tourism or development upper echelons, nor the major historical organizations, in spite of personal email invitations. (The director of the Savannah Visitors Bureau emailed in advance saying he could not attend.) While the audience was enthusiastic and supportive, it was extremely discouraging to see the overall lack of interest on the part of numerous city and county individuals and entities.

Social Media

A second public outreach effort of the entire project involved social media. Archeologists established a Facebook site, Blog, and YouTube site for "Savannah Under Fire". They provided background information, access to a download of the first ABPP project report, resources, and photographs. They also posted the project schedule, allowing visitors and volunteers to find us throughout our fieldwork downtown. Archeologists updated the schedule and frequently posted new comments, photographs, and related information on these sites throughout 2010 and 2011.

Traditional Media

A third outreach effort included notifying the media throughout the year about the project. This was done initially with the assistance of the former CHS Public Relations staff person, Michael Jordan. As a result of his efforts, two newspapers wrote three articles about the project. The newspaper articles were well done. A third media outlet, a multicultural urban teen web magazine, accidentally stumbled on the excavations as the reporter was going to the library. He talked with archeologists and photographed some of his associates while they screening soil. It is not known if the reporter wrote an article about it, although no articles were found in February on-line edition of the magazine.

Fieldwork Tours

The fourth way archeologists incorporated public outreach was by engaging the public and volunteers during fieldwork at seven different areas around town (Figure 21-22). During fieldwork archeologists made a concerted effort to get the attention of the public by erecting a large "Archeology" banner, posting a sturdy "sandwich board" with relevant project information, text, graphics, and maps on both sides, handing out organizational brochures and slips of paper containing the social media addresses, and talking to passers-by and other visitors (Figures 23-26). Archeologists took advantage of the Thomas Park location adjacent to the Bull Street Library by leaving fliers about the project with the Library Director to post inside the library announcing the nearby work.

Curriculum

Archeologists created a fifth outreach effort that consisted of a preservation educational component for fourth and fifth graders using the battlefield to teach about preservation and archeology. The multi-disciplinary curriculum is designed to attract educators with its fit to the Georgia Performance Standards and will engage children with its fun and thought-provoking activities.

The content was discussed and then improved with significant advice from Ellen Provenzano, a professional educator who specializes in running The Archaeological Education Program in Glynn County. This program operates through Glynn County's Partners in Education Program and the National Park Service's



Figure 21. Visitors and volunteer crew screen for artifacts at Thomas Park.



Figure 22. Girls on a fieldtrip with their teacher see the archeology signs and stop by Davant Park.

Figure 23 (right). The banner follows the crew to each location of fieldwork.



Figure 24 (left). Relevant text and graphics are placed on both sides of the “sandwich board” at each new location.

Figure 25 (right). Interested passers-by, including these sanitation workers, are given papers with the “Savannah Under Fire” facebook and blog information.





Figure 26. Segway visitors stop to learn about Savannah's battlefield archeology.

Parks As Classrooms Program. Provenzano has been the Archaeology Education Coordinator of the Glynn County program for over 15 years, and reaches all the fourth graders in the Glynn County School System. She recently helped redesign the program so that the school system would continue to offer it, while keeping its core preservation and archeological values. Provenzano's input resulted in a curriculum that was more user-friendly for teachers and students.

Public archeological education best practices were used in the creation of the curriculum, as supported by the Society for American Archaeology. This curriculum is being placed on the internet, minimally on the Savannah Under Fire Facebook and Savannah Under Fire Blog, and will be submitted to the CHS web site for posting, as well as the SAA Public Education portion of its website). DVD copies are being freely distributed to 22 elementary and 9 elementary specialty program schools in Chatham County, as well as 10 public libraries and one educational resource center. DVD Copies of the curriculum also will be included in the final hard-copy project reports.

In addition to the curriculum packet, we attempted to develop educational outreach opportunities with Garrison Elementary School, which sits on and adjacent to one of our target areas of interest. Archeologists hoped to have a small hands-on event for students at the school. Archeologists were in repeated contact with several staff at the school, including the principal and academic coach, as well as initial contacts with the public relations person

of the school board. The staff was amenable; however, the available timing coincided with preparation for the Criterion-Referenced Competency Tests (CRCT), so was deferred by the teachers. Archeologists will give the school administrators a copy of the DVD curriculum, although in the interim the school has now become a visual and performing arts magnet school rather than its former traditional elementary school.

Public Presentations

The sixth public outreach effort involved public presentations. Archeologists gave

PowerPoint presentations to many organizations. These included a program for area high school students, a local men's church group, a college class, a garden club council consisting of representatives from 12 area garden club, a consortium of area museums and historic sites, and a local chapter of the Sons of the American Revolution. These and additional outreach efforts are detailed below.

Presentations also included a talk to all area high school students attending career Megagenesis Day at Johnson High School in February, 2010. Archeologists incorporated images of high school and college volunteers during the Savannah ABPP project fieldwork, and of archeologists conducting research, into the presentation. The images of the ABPP project used the battle sites as a focus for a career in archeology and the relationship to site research and preservation.

In April, 2010 archeologists gave a presentation to the First Presbyterian Church men's club in Savannah. The group consisted of a variety of individuals and community leaders. Prior to the talk, none were familiar with the project or aware of archeological resources in Savannah or the surrounding area.

A talk was given in 2010 to 40 students in an Introduction to Anthropology class at Armstrong Atlantic State University in Savannah. The professor, Barbara Bruno, had her class follow the project on its social media sites and write a report on specific components of it. The

presentation in April was a follow-up to this activity. Project archeologists asked for and received copies of many of these reports. This enabled them to evaluate the effectiveness of their social media postings, and to modify content that may have been unclear.

Archeologists presented a PowerPoint talk to the Savannah Area Council of Garden Clubs at its annual meeting in May, 2010. While this talk was not funded by the ABPP grant, the outreach is very relevant in that it presented a detailed overview of the project. Two of the councils represented expressed a desire for the talk to be presented at their local garden club meetings.

Another presentation in May incorporated some information from the ABPP project as an example of the significant archeological resources that lie unseen, underground in Savannah. This presentation was given to the Coastal Museums Association. Members include museum professionals from multiple counties in and around the Savannah area. Many of these professionals are employed at museums, historic houses, and historic sites and include venues owned by the city, state, and federal governments, as well as by private organizations and non-profit entities. In November, 2010 the field director gave a presentation to the Edward Telfair Chapter of the Sons of the American Revolution. This presentation was in Savannah. It was an overview of the NPS project and results, with emphasis on preservation of the sites and how that might be accomplished.

On a related note, project archeologists organized a Revolutionary War symposium, *Revolutionary Steps: Marching Towards Discovery and Preservation* at The Society for Historical Archaeology conference in Amelia Island, Florida in January, 2010. The symposium included their own paper, *The Third Battle of Savannah: An Archaeological Struggle for Identification, Preservation, and Interpretation* on the past and current ABPP projects they did in Savannah, as well as 11 other papers about ABPP and other projects conducted by other individuals and entities along the east coast of the U.S. Two discussants rounded out the symposium. This symposium was not funded by the current NPS ABPP grant; however, it is mentioned because it was an effective outreach tool in sharing the Savannah project information with archeologists and other scholars, while allowing Savannah project archeologists to learn about relevant information on other Revolutionary War projects in the country. The symposium can be considered an additional matching contribution to the project beyond those outlined in the grant proposal.

Project archeologists also staffed a table at the Savannah History Museum in February, 2010 during “Super Museum Sunday”, a day which allows people to visit virtually all

the museums and historic sites in the city at no charge. The table had a hands-on activity to attract interest, while displaying last season’s report. An archeologist then spoke to visitors as they approached the table about the current project and gave them paper slips with the name and address of the social media sites to visit for more information. Several interested persons’ names and contact information emerged from this event, including people who wanted to preserve sites and had a background in preservation prior to moving to Savannah. Later, these individuals were sent email invitations to the Stakeholders meeting. While the Super Museum Sunday effort was not funded by the NPS ABPP project, the outreach was an additional contribution to the project not required by the grant.

Final Curation

Recovered artifacts were washed and analyzed, and are curated at the Savannah History Museum. The museum is operated by the non-profit Coastal Heritage Society for the City of Savannah. CHS meets or exceeds archeological lab procedures and curates artifacts in a profession manner. All associated field notes, resources, data, photographs, and other documents associated with the project has been curated along the with artifact collection. Copies of the final report will be curated with the project materials, as well.

Chapter 3. History

A detailed history of the Battle of Savannah, placed in a larger historical context, can be found in the report written for the first NPS ABPP project, *Savannah Under Fire: Identifying Savannah's Revolutionary War Battlefield* (Elliott and Elliott 2009). A brief overview of these details is provided below.

Overview

Savannah was established in 1733 in Georgia, the 13th British colony in America (Figure 27). Savannah is

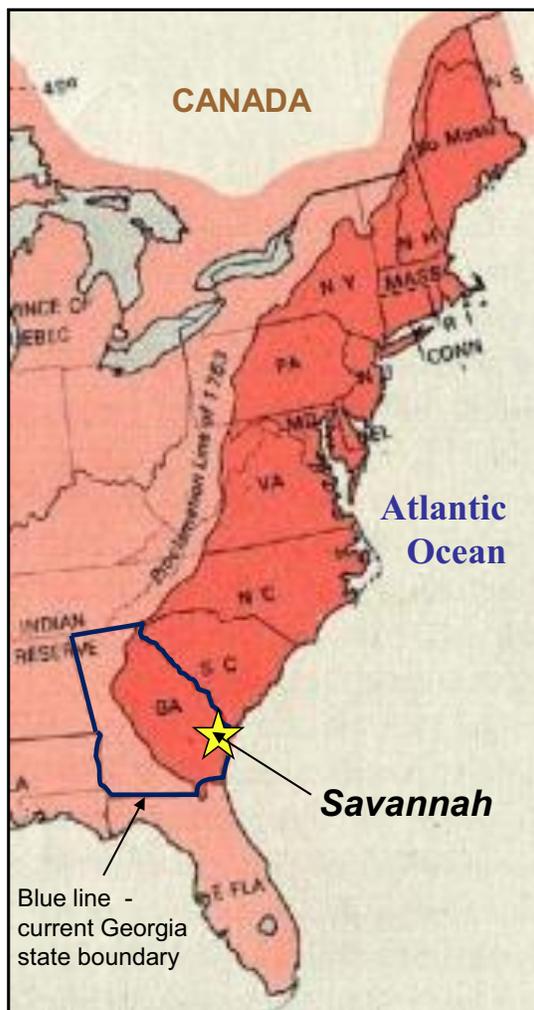


Figure 27. Location of Savannah, Georgia, on colonial and modern map. (Dark areas are original 13 colonies.)

located on a high bluff overlooking the Savannah River, approximately 18 miles from the Atlantic Ocean. The city is located in Chatham County.

Savannah was a major colonial southern port. The British easily captured the city in 1778. Even as the British occupied Savannah, America and her allies were making plans to retake the city. A successful capture would strengthen the American position in the southern theater of the American Revolution. British General Henry Clinton feared the recapture of Savannah by the Americans and claimed, "Should Georgia be lost I shall have little hope of recovering that Province and also of reducing and arming South Carolina" (Lawrence 1979:69).

While plans were being made to recapture Savannah, it was almost a year after the British took the city before American forces undertook this challenge. The attempt began in September of 1779 and was a joint effort on the part of American and French forces. This would mark the first time that French and American troops actually participated together in combat. The allied attempt to recapture the city was led by American Major General Benjamin Lincoln with General Lachlan McIntosh and the Georgia militia, and by French Admiral Comte Charles-Henri d'Estaing (aka Count d'Estaing) and his land and naval forces, General Casimir Pulaski's Polish legion combined with the American cavalry, volunteers in the Chasseurs de San Domingue/Santo Domingo (now Haiti). The allies were plagued with problems throughout the campaign. The initial plan was to besiege the city until the British surrendered. Manipulative diplomatic efforts by the British during the siege allowed them an opportunity to strengthen the defenses surrounding the city. This defensive strengthening, in addition to poor planning, coastal storms, lack of an allied supply line, and petty squabbling among the allies rendered the siege unsuccessful and resulted in an allied attack of the city on October 9, 1779, known as the Battle of Savannah. (For details related to the above, see Elliott and Elliott 2009).

The NPS ranks Spring Hill as a Class A battlefield. This redoubt was one of 14 surrounding Savannah in 1779 (Figure 28). All played a pivotal role in defending the British occupiers of the city from an allied French, American, Polish, and Haitian attack during the Battle of Savannah. The most intensive fighting occurred at Spring Hill and the redoubts flanking it. The 14 redoubts encircling Savannah were associated with artillery positions,

approximately 400 men (Wilson 2005:147). The Georgia militia consisted of three companies under General Lachlan McIntosh's control. They traveled from Augusta, Georgia. In addition, officers who lost most or all of their Georgia Continental troops at the previous battles of Savannah and Brier Creek headed to Savannah, as did troops from Virginia (Lawrence 1979:15).

South Carolina Continental Regulars

South Carolina Continental Regulars included the Corps of Light Infantry and Grenadier Company of the Charlestown Militia, under command of Lieutenant Colonel John Laurens. Colonel Francis Marion led the 2nd South Carolina Continental Regiment and Colonel William Thompson commanded the 3rd South Carolina Regiment (Wilson 2005:177). The 1st Battalion of the Charlestown Militia was led by Colonel Maurice Simons. These troops, along with the 1st Virginia Continental Levies (commanded by Colonel Richard Parker) constituted the right column of attack during the 1779 battle (Wilson 2005:177).

During the Battle of Savannah Brigadier General Lachlan McIntosh led the left column. This included three South Carolina Regiments. The 1st South Carolina Continental Regiment was commanded by Colonel Charles Pinckney. The 5th South Carolina Regiment fell under Lieutenant Colonel Alexander McIntosh. Lieutenant Colonel William Henderson commanded the 6th South Carolina Regiment (Wilson 2005:177).

Georgia and South Carolina Militia

Brigadier General Isaac Huger's column contained the bulk of the militia. His Georgia militia was led by Colonels William Few, John Dooly, John Twiggs, Robert Middleton, and Leonard Marbury. His Colonels William Skirving and William Harden and Lieutenant Colonel Benjamin Garden commanded his South Carolina Militia. Brigadier General Andrew Williamson's Brigade of South Carolina Militia included Independent Companies and units commanded by the following Colonels: Hammond, Thomas, Williams, Reed, and Brandon. The 2nd Battalion of the Charlestown Militia fought in this column, as well (Wilson 2005:178).

Reserve Troops were led by Major General Benjamin Lincoln. This was an artillery reserve consisting of the 4th South Carolina Regiment of Continental Artillery led by Colonel Barnard Beekman. A total of 10 cannons was in the reserve unit (Wilson 2005:178).

French Troops

The largest body of other nationals on the allied side consisted of French troops. Serving under French command were French, Irish, and Caribbean troops. Both the French army and navy were represented. The French allies were under the command of Vice Admiral D'Estaing (Admiral and General Le Comte d'Estaing), who brought an armada of 22 ships to the coast of Georgia in September, 1779. This included the following: "... twenty-two ships of the line, nine frigates, and several dozen transports..." (Wilson 2005:135). French troops included mainland soldiers as well as colonial troops from Caribbean islands.

The Avant-Garde of the Army

The Avant-Garde consisted of grenadiers and chasseurs. Three Volunteer Grenadier Companies were commanded by Captains Aubery, Herneville, and DeVeone. Other troops included the: Grenadier Company of Armagnac, Chasseur Company of Armagnac, Grenadier Company of Agenois, and the Chasseur Company of Gatinois (Wilson 2005:178).

Fusiliers

A Swede named Baron De Steding commanded the left column of the French army. It consisted of two regiments of Fusiliers. One regiment included fusilier companies of: Armagnac, Auxerrois, Foix, Dillon, and Walsh. The other regiment consisted of fusilier companies of: Cambresis, Haynault, Le Cap, Guadeloupe, and Port au Prince. The Dragoons of Conde and of Belzunce [dismounted] fought within this group as well.

Reserve Column

French General Le Vicomte Louis Marie de Noailles commanded the Corps de reserve. These reserve soldiers were taken from the Right and Left Columns. The reserve also included artillerymen and fieldpieces (Wilson 2005:179).

Troops in Batteries

By October 9, the French had constructed numerous batteries. They armed the Right Battery with the Royal Corps of Marines and multiple cannons. Volunteer Chasseurs of San Domingo manned the Left Battery, along with cannons. The Bombardiers of the Navy and additional Volunteer Chasseurs of San Domingo remained in the Mortar Battery, along with mortars (Wilson 2005:180).

Haitian and Entrenched Troops

The country now called Haiti was a French colony in 1779 known as San Domingo (one of several variant spellings). The Volunteers of San Domingo constituted the first free black regiment in the French army. Both the Volunteer Chasseurs of San Domingo and the Volunteer Grenadiers of San Domingo were listed as “entrenched troops” during the battle. The grenadiers were commanded by Major Des Francais. The French officers of the free black San Domingo troops were white.

Major Jean-Claude-Louis de Sablieres commanded the entrenched troops. Other entrenched troops included the Royal Corps of Marines, Chasseur Company of Martinique, the Fusilier Company of Martinique, the Dragoons of Conde and of Belzunce, and Gunners and Cannoneers. The dragoons were commanded by M. Dejean (Wilson 2005:179).

Irish

French ranks also were swelled by “...hundreds of Irish expatriates” who served under command of Arthur Dillon (Wilson 2005:137). On the day of the battle, Dillon would lead “...elite grenadier and light infantry companies drawn from the army’s best regiments” (Wilson 2005:158). Dillon led the right column. This included the Volunteer Grenadier Company in the Avant Garde commanded by Captain Moedermotte. It also included the Battalion of Grenadiers (Grenadier Company of Auxerrois, Grenadier Company of Foix, Grenadier Company of Dillon, Grenadier Company of Guadeloupe, and Chasseur Company of Guadeloupe). Other troops in the right column consisted of the Battalion of Grenadiers and Chasseurs, made up of the Grenadier Company of Cambresis, Grenadier Company of Haynault, Chasseur Company of Champagne, Chasseur Company of Le Cap, Chasseur Company of Port au Prince, and the Dragoons of Conde and of Belzunce [dismounted] (Wilson 2005:178-179).

Polish

Polish General Count Casimir Pulaski and his Polish and other European officers led his legion, which included the American cavalry. American troops within Pulaski’s Legion included, the American South Carolina Light Dragoons who were commanded by Lt. Colonel Daniel Horry, while the 1st Regiment of Virginia Light Dragoons was under the command of Major John Jameson (Wilson 2005:159; 177). Historians report that Pulaski’s Legion also contained German and British deserters (Wilson 2005:137).

British Troops

British troops consisted of Regular army, in addition to South Carolina Royalists and militia “...from North Carolina, New Jersey and New York” (Wilson 2005:137). British troops included renowned 71st Scottish Highlanders, as well as German Hessian soldiers. African-Americans constituted much of the engineering muscle as they built and strengthened various earthworks. The list below is taken from Wilson (2005: 180-181).

The British occupying Savannah were under the command of Major General Augustin Prevost. Lieutenant Colonel/Major John Maitland was in command of 1,000 men. He moved his troops from nearby Beaufort, South Carolina to Savannah when ordered to do so by Major General Prevost. Prevost also recalled the garrisons at Ebenezer and Sunbury, Georgia.

71st Scottish Highlanders

These Scottish soldiers were led by Lieutenant Colonel John Maitland. It consisted of a 1st and 2nd Battalion. The Highlanders were known for the distinctive sound of bagpipes before battle followed by fierce fighting.

Light Corps

The Light Corps was led by Major Colin Graham. It included the 16th Regiment and the Light Infantry. The Light Infantry included the 16th, 60th, and 71st (Wilson 2005:180).

Royal Artillery & Royal Marines

The Royal Artillery included multiple cannons of various sizes. Approximately 40 soldiers participated in the Battle of Savannah as members of the Royal Marines.

British Legion

A total of 24 troops was listed in the British Legion.

Hessians

This general category includes the Grenadier Regiment von Trumbach and the Garrison Regiment von Wiessenbach. Lieutenant Colonel Friedrich von Porbeck commanded over 500 men under the latter.

Colonial Troops

The New York Volunteers were commanded by Major Sheridan. DeLancey's Regiment consisted of a 1st Battalion under command of Lt. Col. John Cruger and a 2nd battalion commanded by Lt. Col. DeLancey. A 3rd Battalion was Cortland Skinner's New Jersey Volunteers under command of Lt. Col. Isaac Allen. Southern colonies also contributed troops. Lt. Col. Thomas Brown led the King's Florida Rangers. The South Carolina Royalists were led by Col. Alexander Innes and also called Innes's Carolina Loyalists. The Royalists had a 1st and 2nd Battalion. Other troops included the South Carolina Volunteers, the North Carolina Volunteers (under command of Lieutenant Col. John Hamilton), the Georgia Loyalists and Volunteers (under Maj. Wright), the Georgia Loyal Militia, and the City of Savannah Loyal Militia. The 60th Regiment (Royal Americans) consisted of loyalists from Florida. The regiment contained three battalions. This included the 2nd, 3rd, and 4th.

Others

Historians estimate that 400-500 enslaved African Americans were pressed into service to work on reinforcing the four original redoubts around the city and constructing additional redoubts (Lawrence 1979:28). Georgia's Royal Governor supplied many of these workers from his 11 plantations. The redoubts were surrounded by a cedar and pine abatis. Areas between the redoubts were supplemented with "horse-shoe batteries in embrasure" (Lawrence 1979:28). Rearward of these were epaulments and traverses. Various troops and workers included Volunteer Negroes, Black Pioneers, Seamen and other miscellaneous troops (Wilson 2005:181)

Account of Siege and Battle

The siege began September 4, 1779 with the sighting of the French fleet off the coast of Georgia. The flurry of activity on both the attacking American allied forces and defending British troops are outlined below. The siege culminated on October 9, in the Battle of Savannah. The battle occurred after dawn on October 9, 1779. A feint on the central redoubt of the city failed and the actual attack at Spring Hill Redoubt was met with the relocation of large amounts of British forces and armament. Confusion among allied officers and in the ranks, as well as the presence of key terrain features such as a nearby swamp, contributed to the total disarray of attacking allied forces. In spite of a few fleeting minutes in which allied colors were held overhead on the Spring Hill Redoubt, the allies were soundly defeated. The 55 minute battle saw approximately two dozen British forces wounded or killed contrasted with an estimated 800 dead or wounded on the allied side. It is

likely that additional primary research and archeological investigation may refine and expand the current Account of Battle outlined below. Some of the account is taken from (Lawrence 1979), but most heavily from Wilson (2005), with many additions from the account Major General Augustin Prevost penned on November 1, 1779 (Prevost 1779a) and a sprinkling of other primary source documents. Pertinent events during the siege and battle are outlined below. Figure 29 is a period map depicting some of the locations mentioned below (Doolittle 1796).

September 4 and 6

French ships arrive off the coast of Georgia.

September 6

Engineer Moncrief and 100 men sent to Tybee to reinforce the post and battery. Prevost sends express messages to Colonel Maitland for reinforcements, and warnings about the French fleet to St. Augustine, New York, and the West Indies (Prevost 1779a).

September 7 and 8,

Prevost sends express messages to all Savannah's outposts, "...to join Beaufort, Ebenezer, Cherokee Hill, Ogeechee, and Sunbury" (Prevost 1779a).

September 9-11 and 13-15

D'Estaing begins landing troops in bad weather at Beaulieu plantation. He brought 1,600 troops from Saint Domingue and 1,600 from Guadeloupe (Dull 1975:161)

September 9

Prevost orders repairs to strengthen the abbatiss at Savannah. The 20 gun British ships, the Fowey and Rose, along with the Keppel and the Germain armed vessels were "...obliged to retire towards Town [Savannah]" (Prevost 1779a). Prevost ordered the battery on Tybee destroyed and the guns spiked. He had his men retrieve the howitzer and stores/supplies.

September 10

On the 10th Lieutenant Cruger's Sunbury forces are joined by men from the other outposts, but more than 100 of Cruger's force (mostly wounded men) was captured before reaching Savannah. Moncrief supervises the construction of new redoubts and batteries, and continues to strengthen the abbatiss (Prevost 1779a).

September 11

Moncrief has men making fascines for the defensive works. Prevost works with naval captains and privateers to land cannon from the vessels to Savannah's batteries. French taking soundings of river, bars, and sounds in Wassaw, Ossabaw and Beaulieu areas (Prevost 1779a).



Figure 29. Coastal map of Georgia showing some of the colonial cities, counties, and islands associated with Battle of Savannah events (Doolittle 1796). [Square boxes added].

September 12

French land at Beaulieu and rapidly advance three miles to the Orphan House (Bethesda), a mere 13 miles from Savannah (Prevost 1779a). Engineers frantically working on Savannah's defenses.

September 13

Captain Henry (HMS Fowey), Captain Brown (Rose) and Fisher disembark and offer their men and guns to Major General Prevost for the defense of Savannah (Prevost 1779a). Some Masters of Transports and a Privateer volunteer their services. Prevost defends the batteries with the seamen and assigns the marines to join the 60th Grenadiers (Prevost 1779a). [Prevost would later commend Lieutenants Lock and Crawford, from the above named vessels, for their zealous defense of the batteries.] General Casimir Pulaski meets French troops. Lincoln transports his 1,500 troops across the Savannah River and bivouacks at Ebenezer, 40 miles north of Savannah. Here he meets up with the 1st Battalion of Virginia Continental Levies (Colonel Richard Parker) and the 1st Regiment of Virginia Light Dragoons (Major John Jameson) (Wilson 2005:147).

September 15

Lincoln marches his troops from the Ebenezer area (Zubly's Ferry) to Cherokee Hill, seven miles north of Savannah (Wilson 2005:147). Prevost reports that, "Some French and Polaski's Light Horse appears in front force in a subalterns piquet of which 6 are taken, they are forced to retire in turn with some killed..." (Prevost 1779a).

September 16

Admiral d'Estaing calls on Prevost to surrender to the "Arms of France" (Prevost 1779a). Lincoln arrives at Miller's plantation, the camp of General Lachlan McIntosh, three miles from Savannah. General Lachlan McIntosh also meets at this time with Admiral d'Estaing. Lincoln and Colonel Francis Marion learn of the truce between Prevost and d'Estaing. Colonel Maitland arrives in Savannah from Beaufort, SC, with his first division of troops amounting to 400 men (Prevost 1779a). They slipped through the allied blockade of the city by coming through the marshes around Daufuskie Island and dragging their boats through a cut into the Savannah River north of enemy lines (Prevost 1779a).

September 17

The remainder of Maitland's troops arrives in Savannah where they take their posts (Prevost 1779a).

September 18

Allied forces get two frigates and three galleys above the cut, keeping British boats from unloading the Vigilant or communicating with it except via the marsh. British troops

continue "work hard" on the redoubts, batteries, and abatis (Prevost 1779a).

September 20

Allies put a frigate and galley at four mile point. Capt. Moncrief makes fire rafts and sinks the Rose and Savannah in the river channel (Prevost 1779a).

September 21

Moncrief has, "a new work for seven 6 & 9 Pounders begun in front of the Barracks". Meanwhile, the British make a boom across the river to stop fire rafts made by the Rebels. (Prevost 1779a). British troops burned nearby barns and houses on their flanks that were "...unfortunately property of friends".

September 22

French and American forces appear "...all along our front, in readiness to fight", yet British troops continue fortifying the city (Prevost 1779a). "A few days afterwards the French and Rebels begun to throw up Batteries upon the Hills on the left of Tatnall's being within about four hundred yards of our Lines..." (Prevost 1779b). Reportedly, the French say Moncrief's batteries around Savannah "rose upon upon them from day to day like Mushrooms" ..."(Prevost 1779c)

September 22-23

French begin digging siege trenches and opening saps as close as 300 yards from the abatis, left of the British central redoubts. The French grenadiers and chasseurs protected the sappers, who dug under cover of night. A British account describe the French soldiers "working like Devils every Night" to construct the saps (Prevost 1779c).

September 24

The British immediately strike a surprise ambush on the French in the nearby trenches. The sortie resulted in 104 soldiers killed or wounded, four officers killed and nine wounded on the French side. The British lost "...one subaltern, two sergeants, and three rank and file killed", with another 15 soldiers wounded (Wilson 2005:151).

September 25

The British fire cannon and cohorns to disrupt French sap construction (Prevost 1779a). The first of the guns (two 18-pounders) from French vessels arrived at the French battery after being unloaded and transported overland from Beaulieu. French fire the guns, but had to soon quit. Four French galleys advance, forcing British vessels to retire under the river battery. The British placed 100 marksmen "without" the abatis, to impede French progress on the saps (Prevost 1779a).

September 26,
Additional guns (six 18 pounders and six 12- pounders) were brought to the batteries from the supply depot in the settlement of Thunderbolt, southeast of Savannah (Wilson 2005:152). At some point, reports to St. Augustine say that the French and American forces have "...Thirty Pieces of heavy Cannon, and Ten Mortars" in their batteries ..." (Prevost 1779b).

September 27
Moncrief has men "...work on Lines to cover the Troops of the reserve from the exposed Cannonade" and at the same time, troops, "...begin to unroof the Barracks" (Prevost 1779a).

September 27-28
Prevost orders a regiment of the Scottish Highlanders to another sortie onto French trenches at night. The British suffered three casualties and the French none until they fired on their own work parties later in the dark. This resulted in the wounding or death of 17 of their men (Wilson 2005:153). Prevost says the allies acknowledged losing over fifty men (Prevost 1779a).

A French frigate (La Truite) establishes itself near Savannah's North Channel and shot some cannonballs into the city.

The British continue to "...strengthen the River Battery and add the 8 inch howitzer" (Prevost 1779a).

September 28-October 1
Both sides worked on enhancing their earthworks and trenches. By September 28 Moncrief had, "The Barracks leveled the back wall to the ground, the front to a good parapet height from the floor converted into a very respectable Work in Our Centre" (Prevost 1779a).

October 2
Savannah is bombarded from the Savannah River by the French La Truite and two American galleys. This supplied the British with ammunition that they could now use in their formerly abandoned twelve pounder guns. Prevost reports that these guns were mounted on the Water Battery. He also details construction of "a new Battery for 15 Guns to the left of the Barracks & strengthening Our Works to the left where it is probable the French may assault" (Prevost 1779a).

October 3
British complete 15-gun battery left of the barracks ruin-turned redoubt. British firing from new battery did not stop the French from completing the placement of their siege battery guns (Wilson 2005:152). Prevost reports that they deepened all the ditches, "particularly on the right &

left" (Prevost 1779a). The completion of gun placement allowed the French to begin the bombardment of Savannah in earnest on the night of October 3, 1779, continuing through October 8.

By this time the French had the following artillery:
Left Battery - 6 eighteen-pounders, 6 twelve-pounders
Right Battery – 5 eighteen-pounders, 11-twelve pounders
Mortar Battery – 9 six to nine inch guns.

The American Battery consisted of 4 four-pounders meant to protect the French mortar battery.
The guns of the French and American batteries, in addition to those 16 guns on French frigates and American galleys, totaled 57 (Wilson 2005:153). This excluded other field pieces of four to six-pounders that were not mounted in a battery.

October 5
During bombardment, Prevost sends a request to d'Estaing to allow women and children safe passage out of town on board a ship under French protection (Prevost 1779a). This request was denied.

October 8
Troops form at French camp one mile away from Savannah and began marching toward the city (Lawrence 1979:69-70). Major Pierre Charles L'Enfant, of John Lauren's Corps of Light Infantry, led five American soldiers in the mission to burn part of the abatis to aid in the allies' attack. The mission was unsuccessful due to the greenness of the trees (Wilson 2005:157).

D'Estaing holds Council of War to discuss the following day's attack on Savannah.

October 9
Midnight-D'Estaing's rearrangement of troops into unfamiliar units and arguments among the French concerning troop movements and column composition delay their march by three hours.

2 a.m.-Americans impatiently await late arrival of French troops.

4 a.m.-Late French troops arrive at the American camp. Americans delay movement even further. Almost 5,000 men in the two allied armies begin the joint march (Wilson 2005:160-161). Column guides do not know the roads, terrain, or fortifications, slowing the march further (Lawrence 1979:69-70).

The front files begin reaching the edge of the woods at dawn. Column formation begins.

5 a.m.- The French reserve column, commanded by General Noailles, takes position on a slight rise just left of the Jewish Cemetery, approximately 400 yards beyond the British fortifications (Wilson 2005:161).

5:15-5:30 a.m.-The five troop columns are not yet in line, with many still marching toward the assembly area.

5:30-6:25 a.m.-The feint on the central redoubt begins, one and a half hours later than planned. The delayed attack allows sunrise to light allied columns as targets and enables successful British artillery fire. Hearing the feint, D’Estaing begins the attack on Spring Hill Redoubt with only the columns that had formed at this time. Leading the advance charge of 180 men are Major d’Erneville and Jean-Gaspard Vence “...of the Navy” (Lawrence 1979:71). Colonel de Béthisy and the remainder of the troops followed.

They are met by “...a few troops of the Sixtieth Regiment, North and South Carolina Loyalists, marines, sailors, and a handful of dismounted provincial cavalry” (Lawrence 1979:71). England later claims that only 417 men defended the lines at this point; French forces claim the British were “...heavily massed”. Documents indicate that Spring Hill is manned at this time by 110 British troops, including 54 South Carolina Royalists, 28 dismounted light dragoons (formerly 71st Regiment infantrymen), and 28 men of the 4th Battalion of the 60th Regiment (Wilson 2005:163).

D’Estaing leads the French vanguard column out of the tree line and rushes Spring Hill. The unified attack of columns becomes a piecemeal attack of small battalions. After a substantial gap, and an artillery and musket onslaught on the French, Dillon’s right column arrives to support D’Estaing’s troops. Dillon’s troops meet the same fate, as the allies are ordered not to fire until they take Spring Hill.

A company of Dillon’s Irish Regiment, led by Major Thomas Brown) breaks through Spring Hill redoubt. Meanwhile the French left column under Baron de Steding’s command advances through the swamp to come to the left, losing formation. As the column approaches Augusta Road, it is almost annihilated by British fire. In the interim the right column had drifted to the left away from British fire and became entangled with the left column. The mass confusion leads many of the French troops to break away from the fire into the nearby woods and swamp. Soldiers fail to obey the newly appointed officers commanding them only as of that morning (Wilson 2005:164).

The cavalry of Pulaski’s Legion advances and tries to break through the abatis. Pulaski was mortally wounded

and his legion, under command of Lt. Colonel Daniel Horry of the South Carolina Light Dragoons, was pushed off to the left by enemy fire. The entire legion breaks through the American column that had begun attacking Spring Hill Redoubt. This column was commanded by Lieutenant Colonel John Laurens, of South Carolina and consisted of approximately 670 men, including his Corps of Light Infantry, grenadier company and 1st Battalion of the Charlestown Militia, and Francis Marion’s 2nd South Carolina Continental Regiment. Laurens was assigned to attack Carolina Redoubt, northwest of Spring Hill. Instead he goes directly to the Spring Hill Redoubt when he sees the French being repulsed. His column experiences less artillery fire and reaches the redoubt ditch where the troops engage in bayonet fighting with the British, who are currently fighting the French in hand-to-hand combat (Wilson 2005:167).

Lieutenants in the 2nd South Carolina Regiment plant the colors on the Spring Hill Redoubt, where they are killed. The colors are replaced and the new bearers are killed in succession. In all, Lieutenants Bush, Hume, Gray, and Sergeant William Jasper die placing the flag on the redoubt.

Meanwhile Brigadier General Lachlan McIntosh, commander of the second American column, asks d’Estaing for new orders based on changes to the plan of attack. McIntosh is told to move his column left of the chaotic columns and towards Carolina Redoubt. He brings his column into the woods where troops become mired in the swamp while being fired on from both the Carolina and Spring Hill Redoubts. Retreat is called before McIntosh’s column can emerge from the swamp (Wilson 2005:169).

As d’Estaing fights to rally troops for another Spring Hill assault, he is wounded for a second time, more seriously. Dillon replaces d’Estaing’s second in command (Viscount de Fontanges) who was wounded and carried away. Dillon immediately calls a retreat that results in mass exodus from the battlefield into the swamp, with troops in total disarray. The British seize the opportunity to counterattack and follow the fleeing troops. Major General Viscount de Noailles orders his reserve troops to advance from the area near the cemetery to cover retreating allies. This discourages British troops from following retreating soldiers, but also causes Noaille’s troops to be fired upon and suffer casualties (Wilson 2005:169-170).

10 a.m.-French and Americans request a truce to collect wounded and dead. Prevost allows collection of soldiers “...who lay at a distance or out of sight of our lines” (Wilson 2005:170). An eyewitness account reported, “Upwards of Sixty Men were lying dead in the Ditch after the Action” (Prevost 1779c). “The Enemy’s Loss was

astonishing. I never saw such a dreadful Scene, as several Hundred laying dead in a Space of a few Hundred Yards and the Cries of many Hundred wounded was still more distressing..." (Prevost 1779c).

Noon- Allied soldiers continue to trickle into camps as they find their way out of the swamp and woods. The French carry their wounded to an ill-supplied hospital at Thunderbolt. Most that are wounded to any degree are abandoned or already dead (Wilson 2005:173).

October 10, 1779

The French dismantle their artillery batteries and take them to the Brewton Hill landing (Wilson 2005:173). D’Estaing decides to depart from Causton’s Bluff rather than Thunderbolt.

October 11-17

The French remove artillery and wounded to Tybee Island.

October 18

The Volunteers of San Domingo (French army rear guard) oversee the last of the departures from Causton’s Bluff (Wilson 2005:174).

October 19

Americans arrive in South Carolina.

October 20

The last of the French troops are shuttled to the waiting fleet at Tybee Island (via St. Augustine Creek and the Savannah River) (Wilson 2005:174).

New Primary Source Information

The discussion below is based on new information gleaned from the thousands of pages of primary source document copies gathered during the first NPS ABPP project. This second phase of work allowed for the closer scrutiny of these digital copies and the extraction of information pertinent to Phase II study areas as well as the overall project. The areas of focus in this report include a more detailed examination of the October 9th battle and the events, people, and geography associated with it. This includes an examination of documents in search of any details that might help archeologists better locate battlefield boundaries, and new information that might shed additional light on the interpretation of Phase II discoveries and negative evidence. Attention was also focused on any information pertaining to the French and American camps outside of town, which served as the embarkation point for troops marching into battle. Another focus includes closer

examination of the roles of Africans, African Americans, and Native Americans in the Savannah area before, during and after the 1779 Battle of Savannah. Archeologists also re-examined primary documents for a better understanding of the roles of women and children in the area during this period. The discussions below review new information pertaining to these areas of focus.

Additional Information about Precursors to the Battle of Savannah

Georgia’s involvement in the War did not begin with the 1779 battle, or even with the 1778 capture of Savannah. Continental troops formed in Georgia prior to this and by March of 1777 Patriot Jonathon Bryan advanced £1,400 of his own money for Continental troops in that colony. Bryan was captured in January 1779, after the first battle of Savannah in 1778. When Bryan was released from British prison on Long Island, he requested reimbursement from the American government. During the period from March 1777 to March 1778, however, the value of Continental dollars depreciated by almost 60 percent. Congress authorized his repayment at the original value of £1,400, rather than the new value of £800 (Motte 1780).

In spite of the overwhelming American defeat at the 1779 Battle of Savannah, the Georgia Campaign actually began with some forethought and planning. In January 1779, a committee was meeting to assist General George Washington in a potential 1779 Georgia and South Carolina campaign. Henry Laurens evaluated the situation in Georgia and South Carolina in tandem with his work on the committee. At this time Lauren made several assessments about these colonies. He concluded that,

All the Islands of Daufuskee, Hilton Head, St. Helena, Hunting Islands, Fenwicke’s, Edisto &c &c So Carolina abounding with horned Cattle, Horses, Rice, Indigo, Corn, Pease, Hogs, Sheep, Negroes &c &c all at their [British?] mercy/All the heavy Cannon & Military Stores in Georgia (Laurens 1779).

He stated that there was,

Indian Corn, Peas & Potatoes great abundance sufficient to feed their Troops & fleet 2 or 3 months. Pitch, Tar & Turpentine enough for present supply of their fleet. Pine, Cypress & Cedar, Scantlin Boards & Shingles, as much as the enemy can find (Laurens 1779).

Laurens also noted an abundance of horses. Clearly, the Patriots would face a challenge in carrying out a successful Georgia campaign under these circumstances.

American and French Defenses

On September 23, General Lincoln wrote, “This evening the French troops, being furnished with all the intrenching tools, broke ground on the enemy’s left, within 153 toises of ye Barracks without being much annoyed”, although he wrote the next day, “In the morning the enemy made a sortie on the French troops—both parties suffered considerably but the former were repulsed and driven into their lines”, and by that night, Lincoln reported, “a Barbette Battery was made and two eighteen pounders mounted on it” (Lincoln 1779 [Library of Congress]).

On September 25, Lincoln wrote, “This night the American troops were to break ground on the right—but upon an inquiry the French could not spare the tools we lent them”, so General Lincoln had his men assist the French in the lines they had begun (Lincoln 1779 [Library of Congress]).

On September 28, General Lincoln wrote, “a Bomb battery is throwing up”, and he added the following day, “The Bomb battery is nearly completed and 7 mortars are mounted”, and on September 30 he noted, “The Bomb battery completed, and nine mortars mounted—One battery for 4 six pounders begun on the left of the Bomb battery” (Lincoln 1779 [Library of Congress]).

General Lincoln’s journal for October 2, 3 and 4 was condensed when he wrote that his men were, “employed in completing the Batteries, and arranging matters for a cannonade and bombardment which commenced in the morning of the 5th from 33 pieces of cannon and 9 mortars, and was continued with intervals until the 8th without effecting the desired purpose that of capitulation & surrender, notwithstanding the works and the Town were much damaged and several house burn’t” (Lincoln 1779 [Library of Congress]).

British Defenses

Benjamin Lincoln wrote on September 18, “I went in the morning to reconnoiter the Enemy in front—found five works on the right of the Barracks with an abatis before them and that the ground was on a level with the Town—after I went to reconnoiter them on the right where we found four works but no abatis—their sight being covered by some ships on the river, a rice field and a deep creek” (Lincoln 1779 [Library of Congress]).

Lincoln wrote on September 19, “The Enemy blew up two of their vessels in the Savannah one of their Gallies appearing in sight” ((Lincoln 1779 [Library of Congress]). On September 27, General Lincoln wrote, “The enemy are taking down the barracks in front of the Town”, and the following day he added, “The enemy continue taking down the barracks, and seem disposed to make a battery there” (Lincoln 1779 [Library of Congress]).

In 1869, Savannah historians Lee and Agnew wrote,

By the sixteenth, a chain of redoubts thirteen in number, mounting seventy-six guns and mortars, a number of which had been taken from the vessels, were thrown up. These redoubts extended from the river at a point a little east of what is now East Broad street to the New barracks, near what is now the corner of Liberty and Bull, thence diverged to what is now South Broad street, thence to where the Central Railroad depot and workshops now stand. This point was then known as Spring Hill, and was the best fortified position on the lines, and commanded the road to Ebenezer and Augusta. The Musgrove creek and swamp on the west side of the city were almost impassable, and therefore only two small redoubts were thrown up on that side of the town (Lee and Agnew 1869:52).

To this they added these comments about the burial of British soldiers killed in the October 9th attack on the Spring Hill redoubt,

The enemy buried their dead inside of the redoubt. In 1837 it was cut down to fill up a place where the Central Railroad depot now stands. A number of articles of warfare were dug up and are now in the possession of citizens (Lee and Agnew 1869:62).

Additional Information about the Battle Itself

There were numerous contemporary battle summaries published throughout the world. Several American newspapers published accounts. This includes an article in a Connecticut newspaper of the account given by Major Matthew Clarkson, an Aide to Major General Lincoln, including this description of the October 9th action:

The Cannonade and Bombardment of the Town of Savannah (though many Buildings therein were burnt and destroyed) not producing the desired Effect, and the Count d’Estaing being unable, for certain important Reasons, to stay long enough to finish the Siege, by regular Approaches, came to the Resolution, in Concert with General Lincoln, of making a

vigorous Assault on the Town. In Consequence of this Resolution, the Allied Army, consisting of about 3200 French, and 2400 Americans, were formed in two Columns for the Attack; two Detachments to make two Feints at certain Places fixed on, and a Corps of Reserve; the Remainder were stationed as Guards to the Artillery, Baggage, & c. This Disposition being made, on Saturday Morning, the 9th of last Month, just at Dawn of Day, the two Columns, destined for the Assault, advanced in the most gallant Manner; the Right, consisting of about 2000 French, led on by the intrepid Count d'Estaing, and the Left, composed of 12,00 Americans, headed by the brave Gen. Lincoln. The Design was to force into the Town, if possible, without firing a Gun, there to form, and commence their further Operations.---The Garrison, amounting to 2600, including Col. Maitland's Detachment, which escaped from Beaufort, and threw themselves into the Town, being too well prepared to receive them, the Town being completely environ'd by strong Redoubts and Abattis, a most tremendous Discharge of Artillery and Musquetry now began from the Enemy's Works on the advancing Columns. ---Notwithstanding which, they marched forward with the greatest Rapidity and Resolution, and Part of them entered the Enemy's Abattis. After an arduous bloody Conflict, of one Hour and six Minutes, during which the Count d'Estaing was wounded (slightly) in his Leg and Arm, General Pulaski mortally wounded, Majors Motte and Sifef[?] of Carolina, killed, with several other Officers, of both Columns, and about 500 Privates killed and wounded, this little Army, this noble Band of Brothers, were forced to abandon their hardy Enterprise, and retire to their Works, 150 Yards distant, which they did with a Regularity that would have done Honour to the best Troops of Prussia, the Enemy making but a very feeble Pursuit. After remaining four Days before the Town, the Enemy not daring to commence an Attack, the Generals judged it prudent to raise the Siege (Connecticut Journal 1779:3).

Major Clarkson is a veritable primary source and he would have had a unique and advantageous perspective during battle while serving in Lincoln's staff. His perspective has particular value, since Lincoln opted not to elaborate on the details of the battle and its embarrassing outcome. John Jay assigned Major Matthew Clarkson (1758-1825) to Major General Lincoln as an aide in early April, 1779 (Jay 1833). Prior to that Clarkson, a New Yorker served as Benedict Arnold's aide. Clarkson's account includes many interesting clues about the battle. He notes that Dillon assumed command on the battlefield after D'Estaing and his second in command were wounded. In doing so, Clarkson diverted blame for questionable command decisions from his boss (Lincoln) to the allied command (Dillon). This is an important point, as he notes that Dillon was the officer

who issued the orders to retreat, thus sealing the American defeat at Savannah.

The Cork Remembrancer, published in Ireland, offered this brief summary of the losses sustained by the British,

October 9th, Major-General Prevost defeats the united armies of France and America, at Savannah, in the Province of Georgia, under the command of Count d'Estaing and General Lincoln. British loss, 1 captain, 3 lieutenants, 1 ensign, 4 serjeants, 32 rank and file killed. 2 captains, 2 lieutenants, 2 serjeants, 1 drummer, 56 rank and file wounded. 2 drummers, 2 rank and file missing. 5 serjeants, 2 drummers, 41 rank and file deserted (Fitzgerald 1783:120).

A Massachusetts newspaper reported in January, 1782,

Col. Clarke, commander at Savannah; where the fortifications were daily improving by the constant labour of 800 negroes, and a reinforcement of veteran troops that landed there from Charleston; they were amply supplied with provisions; by recent arrivals, Mr. Greene, had been collecting provisions in the upper parts of Georgia, but had not appeared within thirty miles of the capital (Salem Gazette 1782:3).

Other contemporary accounts of the battle can be found in personal letters of the day. A published letter extract, dated November 8, 1779 by Captain Henry, of the HMS Fowey, contained this description of the October 9th attack,

The French having now made regular approaches, and finished their batteries of mortars and cannon near enough to our works, on the 3d of October at midnight, opened their bomb-battery of nine large mortars: at day break they also opened with 37 pieces of heavy cannon, landed from the fleet, and fired on our lines and batteries with great fury. This lasted day and night until the morning of the 9th, when finding little notice taken of their shot or shells, at day-break stormed, with their whole force, the Count D'Estaing at their head. This attempt proved most fatal to them, for they met with so very severe a repulse from only 300 men, assisted by the grape-shot from the batteries, that from this day they worked with indefatigable labour to carry off their cannon and mortars, and descended to a degree of civility we had hitherto been strangers to. Their loss was very great, most of their best officers and soldiers were killed and wounded; the Count D'Estaing among the latter (Kimber and Kimber 1779:574).

Captain John Henry had a unique perspective of the events on October 9. He had left his command post on the HMS Fowey weeks earlier to assist Major General Prevost in

establishing Savannah's defenses. Captain Henry was the ranking British naval officer in Savannah during the siege, following the departure of Commodore Hyde Parker (Beatson 1804:491). Beatson (1804:518) noted,

Upon the first alarm of the enemy being on the coast, General Prevost exerted himself to the utmost, to increase and strengthen the fortifications of the town of Savannah; and was most ably seconded in his operations, by Captain James Moncrieffe of the engineers, and Captain Henry of the navy.

The *Fowey* was an aging 24 gun frigate. In January, 1778, Commodore Hotham ordered the *Fowey* surveyed, which revealed open seams in her decking and a sprung main mast. The surveyors concluded that "the Ship might be fit to keep the Sea in the Summer-Season," after some repairs (Long 2009:26).

The *Fowey* arrived in Savannah in late 1778, as part of the fleet accompanying Lieutenant Colonel Archibald Campbell. The *Fowey* remained in Savannah until April 1, 1780, when she participated in the Siege of Charleston. The ship later participated in the action at Yorktown before she was scuttled on October 13, 1781.

Anthony Stokes, Loyalist Chief Justice in Savannah, provided a description of Savannah under siege, which was published. The Stokes' account was previously discussed by Elliott and Elliott (2009). Stokes also authored a legal book, which was published shortly after the war ended. In it, he mentioned the Siege of Savannah and the October 9th battle. He noted,

On the 4th of March 1779, the King's Civil Government was re-established in Georgia, by proclamation; and matters bore a promising appearance until the 12th of September following, when the Count D'Estaing landed there, and on the 16th summoned the Town of Savannah to surrender to the arms of France. On the 9th of October following the besiegers, consisting of about 4500 French, and 2500 Americans, were repulsed with considerable loss— On the 19th of October, the enemy quitted the lines before Savannah, and on the 21st the French embarked, and the Americans marched off to South Carolina.

During the siege of Savannah, the enemy plundered the country of most of the moveable property; and the Town of Savannah was greatly injured by a heavy fire of cannon and mortars, for several days: but notwithstanding the reduced state of the country, and the frequent incursions of the enemy by sea and land, the inhabitants began to plant their lands; and the King's loyal subjects scattered themselves that a few years would restore the Province to the

flourishing state it was in before the civil war, until the melancholy news of Lord Cornwallis's capitulation at York Town reached Savannah, on the 9th of November 1781, and reduced the inhabitants almost to a state of despair (Stokes 1783:116-117).

Other sources of battle information include early historical recounts of events. These tended to be written in the 1790s through the 1830s. Other histories were published at later dates, but these were often written by individuals who weren't alive during the battle.

Charles Stedman, Lord Cornwallis' Commissary General, wrote from the British historical perspective about the siege:

The morning of the ninth of October was fixed upon for making the assault; and two feigned attacks by the militia were to draw the attention of the besieged to their centre and left, whilst a strong body of chosen troops from the combined armies should advance on the right of the British lines, and in two columns make the real attack. The principal of these columns was commanded by the count d'Estaing in person, assisted by general Lincoln, and was destined to attack the Springhill redoubt in front, whilst the other column, commanded by count Dillon, should silently move along the edge of the swamp, pass the redoubts and batteries, and get into the rear of the British lines. The troops which composed these two columns consisted of three thousand five hundred French, six hundred provincial regulars, and three hundred and fifty of the Charlestown militia, a number more than double that of the whole British garrison, and were in motion long before daylight. Fortunately the column commanded by count Dillon mistook its way, from the darkness of the morning, and was entangled in the swamp, from which it was unable to extricate itself until broad daylight appeared, and exposed it to the view of the garrison and the fire from the British batteries. This was so hot, and so well directed, that it was never able even to form, and far less, by penetrating into the rear of the British lines, to accomplish its original object. In the mean time the column led by the count d'Estaing advanced against the Springhill redoubt, just as daylight appeared. And such was the darkness of the morning, that it had approached very near before it was discernible. But, as soon as it was discovered, it became exposed to a continued blaze of musquetry from the redoubt, and to a destructive cross fire from the adjoining batteries, which mowed down whole ranks of the allies as they advanced. From the numbers which fell, the head of the column was several times thrown into confusion; but their places being instantly supplied by others, it still moved on until it reached the redoubt, where the contest became more fierce and desperate. The brave captain Tawse fell in defending the gate of his redoubt with his sword

plunged in the body of the third enemy he had slain with his own hand, and a French and American standard were for an instant planted upon the parapet. The conflict for the possession of the redoubt nevertheless continued to be obstinately maintained on both sides, and the event remained in suspense; when lieutenant-colonel Maitland, seizing the critical moment, ordered the grenadiers of the sixtieth regiment, with the marines, to move forward and charge the enemy's column, already staggering under the obstinate resistance it had met with at the redoubt, the slaughter which had been made by the artillery from the different batteries, and now also from the Germaine armed brig. This well timed movement decided the fate of the attack. The assailants were repulsed, driven out of the ditch of the redoubt, and routed with considerable loss redoubled slaughter, leaving behind them, in killed and wounded, six hundred and thirty-seven of the French troops, and two hundred and sixty-four of the Americans. No pursuit was ordered, because the besiegers, although they had suffered greatly in the assault, were still three times more numerous than the garrison; but in their flight, in advancing, they were exposed to a heavy fire from the British artillery, which was well served under the direction of captain Charlton. In this assault count Pulaski, who commanded an American corps, received a mortal wound; and the count d'Estaing, who was seen by the garrison to behave with great gallantry, was wounded in two places, but in neither of them dangerously (Stedman 1794:130).

Blanchard (1825:116) gave a brief summary of the October 9th battle in his *American Military Biography*. In it he stated that, "a column led by Count Dillon missed their route in the darkness, and failed of the intended cooperation". Another early secondary account of Dillon's performance on the battlefield was published in a 1788 magazine:

Not less heroic than this was the conduct of the Irish Brigade at the siege of Savannah, which, when Comte D'Estaing madly proposed to take by a coup de main, Comte Dillon, anxious to signalize his regiment, proposed a reward of two guineas to the first of his grenadiers that planted a fassine in the Fosse which was exposed to the whole fire of the garrison—but no one offered to advance.—Comte Dillon in a rage began to upbraid them with cowardice, to which the Serjeant-Major replied, Monsieur le Comte, had you not held out a sum of money as the temptation, your grenadiers would have one and all presented themselves.—They did so instantly, and out of 194, of which the company consisted, only 90 returned alive (The Country Magazine 1788:315).

These citations portray Colonel Count Arthur Dillon and his performance on the battlefield at Spring Hill in a bad light. The role of the Irish Brigade at Savannah

has received minimal scholarship (Onahan 1881:99-102; Murphy 1954; Marmion 1998). Dillon was born in England in 1750 and he died by the guillotine in Paris in April, 1794. The Regiment of Dillon was in the French service. In April, 1779, Dillon's regiment (1,400 men) joined Estaing's squadron and they participated in the capture of Granada. At Savannah, Dillon commanded approximately 2,300 men. An account by Dillon was originally published in French in 1792 and translated into English in 1890 (Leonard 1890).

Major General Augustin Prevost's daughter, Mary, provided the text for her father's epitaph on his grave in the church cemetery at East Barnet, England. It mentions the Battle of Savannah in this inscription,

Sacred to the memory of Augustin Prevost, Esq. Major General in his Majesty's army, Colonel of the second battalion of the 60th regiment of foot, &c. &c. By birth a native and citizen of Geneva. He entered into the service of Great Britain in 1756, in the rank of Major; and uniformly distinguishing himself with the zeal and honour of a true soldier, he merited, and, on repeated occasions, received the thanks, both public and private, of the Generals under whom he served. He finished his more active military career with the memorable defence of Savannah in Georgia in 1779, where he commanded, and in a post, entrenched merely on the spur of the occasion, sustained a formal siege against the combined armies of France and America, commanded by the Count D'Estaing, of about three times his own number, supported by a powerful fleet, and furnished with a numerous and well-served artillery: he repulsed them in a general and well-maintained assault, and finally compelled them to raise the siege, thirty three days from its being closely invested, twenty-six of open trenches, and fifteen of open batteries. As a man he was mild, unassuming, and modest, perhaps, approaching to a fault; as a soldier, manly, firm, determined; possessing himself equally in the hour of danger as in that of the calmest retirement: his solicitude on every occasion of public import was solely directed to the honourable discharge of his duty to the king and country he had chosen for his.—A kind husband, a tender father, a sincere friend, a humane man.—He was also eminent in all the virtues and duties of private life. This monument is erected by the companion of some of his most trying scenes, now his afflicted widow, in pious and affectionate testimony of her gratitude to him who was the best of husbands and the best of men. Ob. May 4, 1786. æt. 63. (Lysons 1796).

Pension Records

Pension applications, which are housed at the National Archives and Records Administration, continue to provide a source of new information about the Siege of Savannah. Just a few years ago, these thousands of papers were not readily searched but now, thanks to diligent researchers, thousands of these documents have now been transcribed and placed online where they can be searched by keywords. This pension transcription project is an ongoing research effort by many researchers and their labors provided fruits for the Siege of Savannah study. In the Phase I report, the body of transcribed and uploaded pension applications was searched for keywords that might link them to the action at Savannah (SCAR 2008). In the meantime hundreds more pensions were added to the database. In 2010, the database was again searched for keywords and CHS archeologists identified another 80 potentially relevant pension files. These applications were reviewed and 15 yielded important information about the battle and these are discussed below.

Pension records often noted battle wounds. The ones below are no exception, with shot from lead balls and bayonet wounds common. These injuries killed many, but it is surprising that some troops survived their wounds, which were often very serious. Major General Augustin Prevost is a good example. While he was not wounded at the Battle of Savannah, he carried evidence of a former musket ball wound to his head (Figure 30). The concave portion reflects the trepanation doctors performed on his skull to remove the shot and shattered bone. Prevost survived and continued in the military. Amputations also were common and some soldiers were able to survive these procedures and the consequences of infection. It is mostly the survivors' tales we read of in the pension records, although occasionally a widow is claiming a pension, or a soldier includes a description of a comrade killed.

Private John Looney, South Carolina Continentals, attested in 1803 that his superior officer, Lieutenant Thomas Farrar, served under Captain Field Farrar's, South Carolina Regiment from 1777

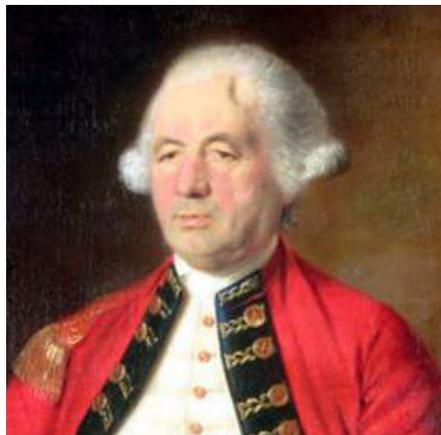


Figure 30. Note the wound on Prevost's forehead.

until, "the 9th day of October 1779 at which time he [John Looney] got wounded in the battle of Savannah and became a cripple", and in 1833, Looney further testified that he, "marched to Savannah and in the Siege there was wounded in the ankle which disabled him for service", and that "his wound old serrated—suffered for forty-four years when to save his life his leg was cut off and he now goes on a wooden leg". In 1842, Looney attested that, "he received one musket ball in his neck which was extracted and the wound cured. The other musket ball passed through the ankle of his left leg" (SCAR 2011:BLWT70-300, S1553).

1st Lieutenant Louis de Saussure, 3rd South Carolina Regiment, was mortally wounded at Savannah. Henry W. DeSaussure attested in 1829 that his uncle,

Lieutenant Louis DeSaussure led a company of his Regiment to the attack on that disastrous day & was wounded. He & the other wounded officers were immediately put on board a transport ship, & sent round to Charleston; But he died on the passage of tetanus or lockjaw [sic, lockjaw] produced by the wound" (SCAR 2011:BLWT 1585-200).

Captain Samuel Warren, 5th South Carolina Regiment, attested in 1832 that he served under Colonel Isaac Huger and that he, "was twice wounded and taken Prisoner at the Siege of Savannah (where from my wounds I lost my right leg)" (SCAR 2011:BLWT1859-300).

George Jones was an acquaintance of 1st Lieutenant Edward Lloyd, 4th South Carolina Artillery. Jones made this testimony in 1833 about Lloyd, "he lost his right arm in the unsuccessful attempt of the American and French Troops to take Savannah by Storm during the war of the Revolution" (SCAR 2011:BLWT2007-200; Heitman 1914:355).

Private William Moore, Virginia Continentals, stated in 1820 that he joined the, "continental regiment commanded by Richard Parker in the Company commanded Alexander Parker, and he was wounded, "at the siege of Savannah, when he received a severe Bayonet wound in the thigh, and shot wound in the shouldier [sic, shoulder]" (SCAR 2011:S36166).

Peter Horry, 2nd South Carolina Regiment, attested in 1813 for the pension application of Charles Motte's descendants,

that by the order of General Lincoln he was attached to the Light Corps commanded by Colonel Laurens that when the attack was made on the lines of Savannah this Corps was broken shortly after the

attack commenced, that this Deponent in endeavoring to rally the Corps which was broken came to the spot where Major Charles Motte lay slain before the Abettes [sic, abattis] (SCAR 2011:BLWT629-400).

Philip Martin Frey, a Drummer in Captain Peter Horry's Company, 2nd South Carolina Regiment, attested in 1818 that he participated in the Siege, "where he received a ball through his left thigh" (SCAR 2011:W9435).

John Bird, a Sergeant in Captain Turner's Company, 1st South Carolina Regiment, during the Siege of Savannah, attested in 1818 that, "received three gunshot wounds in the Siege of Charleston and Savannah" (SCAR 2011:S39196).

Private William Rogers (Rodgers) was in Captain Huger's Company of Moultrie's South Carolina Regiment. Rodgers attested in 1818 that he, "was wounded & maimed in the attempt to storm Savannah" (SCAR 2011:S36276).

The widow of Private Thomas Godfrey, who served in Captain Toomer's Charleston Artillery Company, testified in 1838 that her deceased husband was "slightly wounded" in the assault upon Savannah in 1779 (SCAR W9456). Elizabeth Gilmore attested in 1842 that her deceased husband, Joseph Gilmore had been a private in the South Carolina militia and that he was, "wounded in the right hand" in the battle of Savannah (SCAR 2011:W355).

John Sullivan, a soldier detached under General Moultrie's command, marched to Savannah and,

Arrived the [sic, there] in the beginning of the last week in September 1779, continued as part of the besieging Army until the morning of the 9th October. Deponent and Company to which he belonged then under command of Captain Peter Boquitt [sic, Peter Bocquet], formed a part of the forlorn hope, under command of Colonel John Laurens, Peter Horry Major Colonel Laurens in front and Major Horry brought up the rear. Deponent received a wound in his right leg in the calf from a musket ball, when making the second attack on the lines of the British, at the storming of Savannah as called (SCAR 2011:S22002).

Private Samuel Burton was in Captain Tarlton Payne's Company of Colonel Richard Parker's Virginia Continental Regiment. He stated in 1827, "that he was severely wounded in the thigh by a musket ball at Savannah Georgia in October 1779" (SCAR 2011:S39254).

Private Isaac Herin, 2nd South Carolina Regiment, stated in 1818 that, "he was in the Battle of Savannah & was there wounded & taken a prisoner" (SCAR 2011:W10098). Information provided in 1858 by James Love, son of

John Love, a Surgeon's Mate, 1st Georgia Continental Regiment, attested that John Love, "was wounded in the knee, and after having received said wound, was taken prisoner by the enemy and conveyed on board of a British vessel then lying near Savannah" (SCAR 2011:R21476).

Private George Watts, in Captain William Davis' Company, Colonel [James] Williams' Regiment, South Carolina militia, stated in his 1832 pension application that the, "Applicant [Watts] was in the whole of the action and Captain Davis whilst standing by his side was mortally wounded by a grape shot and fell against him" (SCAR 2011:W1009).

Private Michael Nash, a North Carolina soldier attached to Captain Vanderhorst's Company, 2nd South Carolina Regiment, attested in 1832 that he was in Savannah in October, 1779,

where he was in the Battle, where Pulaski was wounded -- & this applicant was one of the party that carried him off the field. After the Battle he was marched back to the encampment -- thence the Army retreated to Charleston. At the siege of Savannah Major Motte [Charles Motte] of the second [Regiment] was killed -- and Major Wise [Samuel Wise] of the third, Thompson's Rangers, was also killed -- and the Captain of my company, Vanderhorst was promoted to Major of the second Regiment (SCAR 2011:W4042).

Private Thomas Boon, South Carolina militia, provided this unique account of the attack on the Spring Hill Redoubt in his 1832 pension application,

At about half way from Augusta to Savannah we were joined by Colonel Parker with a small body of Virginia Regulars. We reached Savannah and encamped within a short distance of the Town, immediately on the West of the French forces, under Count d'Estaing. At Savannah we found Count Pulaski. I do not remember the precise date of the Siege of Savannah. But to the best of my recollection it was early in the month of October in the year 1779. I well know, however, that on the night before the attack was to be commenced we were ordered to be ready at a moment's warning -- On that night we were joined by two hundred men, called the Charleston Grenadiers but where they were last from, or on what business they had been, I do not know -- About an hour before day on the morning

on which the attack was made, we were ordered to parade. We were marched to the attack before day break in the morning. A small Detachment was ordered to dislodge a party of British who build a Fort in a small Dutch settlement called Yamacraw [sic, Yamacraw] Settlement a little short distance from the Main Town of Savannah but precisely the distance I cannot tell. The Expedition against Yamacraw was commanded by Colonel Laurens [John Laurens] and Lieutenant Colonel O'Rea [sic, Peter Horry] -- I well remember that I and John Moore under whom I enlisted, together with one Joseph Reed and his son, Isaac Reed had just mounted the parapet at the very moment that a retreat was ordered by General Lincoln, the two Reeds on one side of me and my Captain, Moore, on the other and at that moment the two Reeds were shot and fell dead from the parapet, the son following first and the father on the top and across the son. In this engagement Count Pulaski was shot with a grape shot through the Breast just under the Shoulders. I helped to lay Count Pulaski on a litter which was made of a Blanket, some pine poles, some pine boughs, upon which he was carried to the Hospital. He, Count Pulaski, lived that day (that of the Battle) the next day and on the next day he died. I was never at the Hospital but I understood it to be about three miles North South of Savannah. (SCAR 2011:W23656).

Private Lewis Roux, a soldier in Captain John Hammond's Company, Colonel Leroy Hammond's Regiment, Williamson's South Carolina militia, stated in his 1832 pension application that,

during the siege of said place, that on the 9th October he was with the Militia troops that marched to the left of the British lines, intended to make a [indecipherable word, possibly "point"] in that quarter -- that after the repulse of our Troops, and during the truce agreed upon to bury the dead, he went and assisted to carry off of the field his brother Captain Albert Roux of the 2nd South Carolina Regiment who was severely wounded (who is since dead) (SCAR 2011:S21952).

The pension application of James Gabriel, a volunteer in Captain James Sim's Company, 1st North Carolina Volunteer Regiment, contains a "strike out" section of text in his 1832 statement, which read, "He, the said James Gabriel, also took part in the Siege of Savannah and was employed in cutting down the pickets to admit count Pulaski saw him enter & saw him brought back mortally wounded" (SCAR 2011:S2571).

Private John Swords, in Captain Varley's [or Warley's] Company, 6th South Carolina Regiment, stated in his pension application,

having nine weeks at the Seige [sic] of Savannah [Fall, 1779] under the command of Captain Boyce who was in[sic] slain in the Battle, this deponent was assisting one of his fellow soldiers to carry off his Captain was taken prisoner by the British & kept two weeks in Savannah and would have starved But for the charity of some Americans who divided their provisions with him -- The British gave him no victuals while he was a prisoner about Two weeks --He made his escape from them, and made his way up towards Augusta & thence home (SCAR 2011:W8773).

Private Solomon Legare was attached to a volunteer battalion of the Charleston Militia, "composed of six Companies viz., one Grenadier, one light Infantry, one Company called "True Blues", one "German Fusiliers" one called "volunteers" and one the "Foresters" commanded by Major John Huger." Private Legare was in the "True Blues". In his 1832 pension application he stated, "this Battalion was at Savannah Georgia, in 1779 where they were placed in a line with the regular troops when the attack was made. There several men and officers in this Battalion were killed" Legare also noted that Captain Sheppard, Fusiliers Corps, was killed at the siege of Savannah (SCAR 2011:S21860).

Jim Capers, 4th South Carolina Artillery Regiment, served as a Drum Major in the 1779 Siege of Savannah. Capers, when he filed for a pension at aged 107, was described in 1849 as "a man of color" (SCAR 2011:R1669).

A large number of American commissioned officers were killed in the action at Savannah. This included Major Charles Motte, 1st Lieutenant James Gray, 2nd Lieutenants Henry Gray and Cornelius Van Vleiland, Lieutenants Alexander Hume and John Wickham, and Ensign John Wickom of the 2nd South Carolina Regiment. Also killed were Captain Shepherd, Charleston Regiment; Captain Samuel Wise, 3rd South Carolina Regiment; and 1st Lieutenant William Donnom, 4th South Carolina Regiment; and Major Thomas Broune. Lieutenant Charles Price, Georgia militia, died on October 22 of wounds he received on October 9. 1st Lieutenant Lewis de Saussure, 3rd South Carolina Regiment, was mortally wounded on October 9. Captain Alexander Boyce, 3rd South Carolina Regiment, died in November, 1779 from wounds he received on October 9 (Heitman 1914:114, 195, 200, 257-258, 308, 405, 452, 493, 558, 590, 601, 646; Moss 2009:990).

The great number of wounded from the battle included officers. Captain Rogowski, Pulaski's Legion; Captain Josiah Warren, Georgia militia; Captain Thomas Giles, South Carolina Dragoons; Captains Alexander Petrie

and Albert Roux and Lieutenant John Bush, 2nd South Carolina Regiment; 1st Lieutenant Field Farrar and Lieutenant Robert Gaston, 3rd South Carolina Regiment; 1st Lieutenants Harman Davis and Edward Lloyd, 4th South Carolina Artillery; Captain Thomas Hutson and Lieutenant William Wilkie, South Carolina militia; Captains John Bowie and Hogan and Lieutenant Parsons, 5th South Carolina Regiment; Captain Thomas Gill, South Carolina Light Dragoons; Captain Francis Kinloch, South Carolina regiments; Lieutenants George Wade, Wardell and Bonneau, South Carolina militia; 2nd Lieutenant David Walker, 10th Virginia Regiment; Lieutenant John Grafton, Virginia regiment, and Captain Pierre Charles L'Enfant, Corps of Engineers were among the wounded commissioned officers at Savannah on October 9. Lieutenant Lloyd lost his arm as a result of his wound (Johnson 1851:245; Heitman 1914:100, 112, 187, 229, 248, 312, 334, 347, 355, 427, 473, 562, 565, 570, 592; Moss 2009:110, 136, 222, 255, 294, 475, 568, 768; United States Congress 1857).

Colonel John White, 4th Georgia Regiment; Lieutenant Thomas Parker, 2nd Virginia Regiment; Lieutenant John Shick, Georgia militia, were wounded and taken prisoner at Savannah on October 9th (Heitman 1914:426, 495, 586). Lieutenant Shick lost his arm as a result of this wound.

1st Lieutenant John Bailey, 3rd Maryland Regiment, and 2nd Lieutenant John Smith, 2nd Maryland Battalion of the Flying Camp, both were wounded at Savannah (Heitman 1914:81, 504). The participation of Maryland Continental troops at Savannah was not previously recognized in histories of the battle. The above information indicates that at least two regiments from that state were engaged in action.

Major General Viscount de Fontanges was seriously wounded at Savannah. He commanded a legion composed of "mulattos and free negroes of St. Domingo", who "saved the army at Savannah by bravely covering its retreat" (Heitman 1914:654-655). Heitman's description of Major General Fontanges position on the battlefield is relevant to the present study, since it demonstrates the heated action in the reserve lines following the failure to take the Spring Hill Redoubt.

Captain Erasmus Gill, 4th Continental Dragoons; Lieutenant Louis I de Beaulieu, 1st Cavalry Pulaski's Legion; Lieutenant James Bryan, 4th Georgia Regiment; were taken prisoner on October 9 (Heitman 1914:95, 128, 258)

Casualty Descriptions from Other Sources

The Irish Brigade was in the deadly zone on the Spring Hill Battlefield and its losses were great. At Savannah Dillon's regiment lost 63 grenadiers and several officers. In one grenadier company of the Regiment of Dillon who charged against Spring Hill (194 men), only 90 returned alive" (*The Country Magazine* 1788:315). Captain D'Imbart Barry was wounded by a musket ball in his left arm; Captain Commandant Alexander O'Neil received a gun shot wound in the chest; Lieutenant O'Farrell was wounded in the leg; Captain James Shee died from gunshot wounds in his chest; Captain Bernard O'Neill received a gunshot wound at Savannah from which he died the following year. Lieutenant Georges Taaffe, Major Browne, and Colonel Browne, Aide-de-Camp to d'Estaing and an Irish Brigade officer, all were killed in the siege of Savannah (Marmion 1998; Gardiner 1905:51-55; Griffin 191:83). These limited data sample hints that most of the Irish officer's casualties were gunshot wounds.

French casualties at Savannah included many high ranking officers. Captain Jacquest-Philippe D'Arly was killed. Captains Jean-Jarlan de Sireuil; M. Boulland, who commanded a grenadier company, Mathew Louis Claude de Paylery de Saint-Sauveur, Army of Saint-Simon, a native of Martinique; and D'Lambert du Barry, Regiment D'Agenois, were wounded at Savannah (Gardiner 1905:51-55; Hayes 1945:259-270; Keim 1907:577).

American Military Command Reacts to the Battle of Savannah

General George Washington was impatient to learn the outcome of the cooperative effort between Count D'Estaing and the allied forces at Savannah, but it was well over a month before he received any word. Washington received first news of the outcome of the October 9, 1779 engagement at Savannah until November 15, 1779. The information that he received was sketchy at best and the source of his information has not been determined. Possibly he received the news from Henry Laurens, although any letter containing the news has not been identified in any of Washington's or Laurens' correspondence. The day after receiving the news Washington wrote from his headquarters at West Point, New York to Governor Jonathan Trumbull on November 16, informing the governor in a private letter:

It would appear that there was a necessity for the Counts returning to the West Indies, which made it impracticable to spend that time before the works of Savannah, requisite to carry them by regular approach. This induced the allied arms to hazard the reduction of the place by assault. It was undertaken accordingly on the 9th of October, when we were repulsed. I do not learn the particulars of our loss. The Count was slightly wounded in the leg and arm; and General Pulaski died a few days after of his wounds. The allied officers and men behaved with great bravery and spirit. This repulse comprehends the whole of our misfortune, as we met with no hindrance in removing our stores or baggage (Fitzpatrick 1931-1944, Vol. 17:108).

That same day (November 16) General Washington also informed Governor George Clinton, noting,

It seems the Seige [sic] of Savannah, where the Enemy had secured themselves by strong fortifications, required more time than was expected and there being no certainty of reducing the place by regular approaches, in the course of a few days; It was agreed to attempt to effect it by Storm. The attack was accordingly made on the morning of the 9th. Ulto. By the Allied Troops who suffered a Repulse (Fitzpatrick 1931-1944, Vol. 17:190).

Other letters written by Washington on November 16 to several of his generals repeated this message. The following day (November 17) Washington wrote to Major General Anthony Wayne with a slightly more positive spin on the message, noting,

The failure of our attempt to the Southward is by no means as disagreeable as represented. Altho' we were repulsed in the storm of the works at Savannah, we met with no opposition afterwards in removing our stores and baggage (Fitzpatrick 1931-1944, Vol. 17:120-121).

Following the brief flurry of correspondence in November, 1779, General Washington had little to say concerning the failed Siege of Savannah or the allied losses suffered on October 9th. The loss at Savannah was a costly and embarrassing loss that questioned the alliance between the Americans and France. Clearly, the less said about the defeat, the better. The alliance was later redeemed by the Patriot and Allied victory at Yorktown in October, 1781.

New Information Regarding the Battle's Aftermath

In the weeks and months following the October 9, 1779 battle, the outcome of the war was still unclear. The British held a lingering and substantial fear that American and allied forces would try to regain Savannah. Major General Augustin Prevost reflected this unease four months after the battle when writing to Sir Henry Clinton in February 1780,

...I found that Captain MonCrieffe had taken away every carpenter—one excepted—all the intrenching tools and others that could be of any use—all the wagons with our best horses. That our large cannons have been taken off the batteries and our best artillery men taken with them. In short, little or nothing remains in any of our publick stores that cou'd be of service in the diffence of this place [Savannah] or to assist in fiting out the expedition under Genl Patterson. I do not imagine there is any immediate apprehension in this quarter—but shou'd your Excellency propose pushing forward—I think it incumbent on me to lay before your Excellency the exact and actual state of both St. Augustine and Savannah for your Excellency's consideration (Historical Manuscripts Commission 1972:89).

Prevost wrote again three weeks later,

...In compliance with the orders through Captain MonCrieffe to the Depy Quartr Mr Genl-and further at the desire of Br Gl Patterson, they have taken the remaining part of the Field Artillery that was left here, with it what was in store for their Service-as also all the musquet cartridges we had. Your Excellency will observe that by rendering this place [Savannah] undefencible-that the troops in it will be in the greatest danger-for want of ammunition artillery engineers &c... (Historical Manuscripts Commission 1972:96).

Finally, by March 26, 1780, Prevost reported, “Lt. Durnford arrived and the works begun” to strengthen Savannah’s defenses that had been weakened by the October 1779 battle (Historical Manuscripts Commission 1972:106). It is likely that Durnford began working along the Savannah River, as Prevost told Clinton on March 19, “...If an engineer arrives he shall set to work to contract the works and form something like a citadel at the Bluff” (Historical Manuscripts Commission 1972:104). This “citadel at the Bluff” was named Fort Prevost, in honor of General Augustin Prevost, who, along with his family, left

Savannah for England in May, 1780. Brigadier General Paterson had taken not only the remaining Field Artillery from Savannah, but also 1,500 of Prevost's troops. This reduced the Savannah garrison to 1,000 of which none were artillery troops (Historical Manuscripts Commission 1972:88).

Augustin Prevost was not the only one concerned about another attack from American and allied forces. The Georgia royalists had been nervous even after the victory at Savannah. Two months after the October 9th battle that was brought to shore by an overwhelming French fleet, Royal Governor of Georgia, Sir James Wright wrote to General Clinton, "We are now anxiously looking out for your arrival here and I must request in the most earnest manner you will not lose a single day...Report from South Carolina by a Negro, that a Spanish fleet of 52 sail is off Charlestown Bar". (Historical Manuscripts Commission 1972:77). The mere rumor of enemy ships from any country was enough to raise fears. Wright realized what a precarious hold he had on the colony and sought repeatedly to get military protection. In March of 1780 he also wrote Clinton, penning,

...It is with the utmost concern that I have learnt your Excellency has altered your plan with respect to the route & operations of the troops in this Province, & that instead of going to Augusta, they are to cross this River & proceed towards Charlestown, and I can only lament that this Province will be exposed to the utmost danger, and the Rebels I presume command the whole country within twenty miles or less of Savannah... (Historical Manuscripts Commission 1972:104).

Governor Wright's fears materialized, particularly in the back country and rural areas away from Savannah's protection and the British soldiers there. While the Americans were dealt a severe blow by the October 9th defeat, British control over the Savannah hinterlands remained tenuous, as seen by this letter. An anonymous Loyalist drafted this letter in 1780 which mentioned security concerns that existed in the Savannah vicinity following the October, 1779 defeat. Speaking on behalf of Savannah's loyalists he wrote,

It gives us infinite concern to reflect that after the Rebels had in a great measure been driven from this Province by the Gallantry of his Majesty's Troops under Colonel Campbell and the town afterward defended against the combined forces of France & America, yet excepting where the military Posts are actually established, the whole country is open to the depredations of a rebel Banditti, who are lately become as daring as to infest our publick roads and plunder at noon day within Six miles of

the lines of this Town. We therefore sincerely wish a corps of Light Dragoons was employed by His Ex. the Commander in Chief, as the most effectual means to secure this Prov. against the incursions of plunderer, and we doubt not but your Excellency will again take the earliest opportunity of recommending this measure (Anonymous ca. 1780:1-2).

Even those Loyalists residing in Savannah did not feel safe, as there was a chronic fear of a new attack on Savannah by American forces throughout 1780, 1781, and as late as January of 1782. One year after the October 1779 battle, engineer Major Moncrief wrote Lord Cornwallis, "The Fort ordered by Genl. Prevost at Savannah was on great forwardness on my arrival. Col. Clark and I thought it best to let it go on" (Moncrief 1780b).

In late November, 1781, Lieutenant General Leslie thought General Greene's forces would attack Savannah. Lieutenant Colonel Clarke reported from Savannah that his number of troops was inadequate and Royal Governor Wright, also in Savannah, penned that the province would fall unless they were reinforced (Historical Manuscripts Commission 1906:366). As late as January 29, 1782, the British continued to worry about defending Savannah. At that time, Lieutenant General Leslie sent Colonel Moncrief back to Savannah to "...put the works there in the best possible state of defence..." as General Wayne was heading to Georgia with cavalry and infantry troops (Historical Manuscripts Commission 1906:389).

In addition to concerns about a renewed attack on Savannah, there were issues with the soldiers. One month after the Battle of Savannah, Prevost, "in compensation for the work of the soldiers on the late occasion has ordered them a shirt a piece or other articles not exceeding two dollars per man" (Historical Manuscripts Commission 1972:59). He reported to Clinton that he had to draw bills on his Excellency, "by real emergency of service, in particular to pay the Hessians..." (Historical Manuscripts Commission 1972:59). Prevost was obliged to write Clinton in February, 1780, "...The Deputy Quarter Master General has objected to paying the officers of the 60th regt. The 200 days' bat and forage money..."(Historical Manuscripts Commission 1972:91).

Low or no pay was one of many problems soldiers faced on both sides leading to desertion. These problems were increasing with the duration of the war. By March of 1782 Brigadier General Alured Clarke reported a decrease in the Savannah garrison by 50 men, with additional nine or ten desertions in the first two weeks of April. He reported that four of the deserters were Hessians and five or six were members of Ranger Thomas Brown's corps (Historical Manuscripts Commission 1906:447). Clarke mentioned

that one corps should be relocated as the men were making too many contacts in the country and able to desert more easily. It is likely that he was referring to the Hessian troops, who communicated with the German speaking settlers at New Ebenezer. One of the deserters, Henry Pumphrey (Humphrey?) wrote to his “brother soldiers” in Savannah, urging them to desert. In March General Leslie reported that Colonel Clarke sent dragoons after five Hessians who had deserted and the dragoons killed them all (Historical Manuscripts Commission 1906:417).

Americans encouraged desertions. On February 20, 1782, Patriot Governor John Martin issued proclamations from Ebenezer offering to reward deserters from the British forces with 200 acres, two swine, and a cow. The proclamations were especially targeting the Hessian troops at Savannah and elsewhere (Historical Manuscripts Commission 1906:401).

French sailors and soldiers who did not disembark for the siege of Savannah in 1779 undoubtedly wished to desert, as they suffered considerably onboard their vessels. They lacked clean water, food, and clothing. An officer reported,

We could not relieve our poor sailors, wanting coats, destitute of linen, without shoes, and absolutely naked...The bread...was so much decayed and worm-eaten...that even the domestic animals on board would not eat it (Jones 1874).

Scurvy was epidemic on board, and the officer went on to state they averaged sending 35 bodies a day overboard as a result of disease.

Soldiers on land were overcome with disease as well, before, during, and after the Battle of Savannah. Major General Prevost documented yet another sweltering, disease-ridden summer in the southern colonies only three months before the battle. He wrote,

The Sickness that prevailed to a great degree amongst the Troops left for the defenses of Georgia and the excessive heat of the Weather, having put a stop to the Active Operation of the army...the Corps that came from Florida, Weissenbacks Regiment of Hessians, second Battalion Delanceys, New York Volunteers, are in and about Savannah (Prevost 1779e).

Prevost, himself suffered serious bouts of illness which were not helped by the oppressive heat and humidity of Savannah summers and the resulting illness of a swampy environment. He made multiple pleas to Sir Henry Clinton to be sent back to England, in part due to “...frequent

attacks of the Gout, former wounds & infirmities”, and “a Constitution much impaired” (Prevost 1779e). One of his former wounds involved his head, mentioned earlier in this report. He recovered in spite of the hole surgeons cut in his skull.

No group among the British military suffered more from disease and illness than the Hessian mercenaries. Colonel Porbeck commented about the unhealthy conditions in Savannah on several occasions in letters to his commander, Lieutenant General von Jungkenn. On February 2, he wrote,

Of the recruits, 19 died at sea or in New York. When they arrived here 30 had to be taken to the hospital with scurvy and rashes. Your Excellency will hopefully not be displeased that I enclose a losses list from this battalion, part of which occurred in this province. This clearly shows there is no hope that Europeans will be accustomed to this climate and the foul drinking water. Further proof of this is that the 2nd Battalion of Delancy's and one battalion of Georgia Loyalists had so many deaths they were placed in two other battalions (Porbeck 1782).

He continued to outline the poor conditions in a letter he wrote March 28-31, “Most people have to be satisfied drinking the foul water. Among the inhabitants illness and death have increased so that we are surrounded by graves on all sides of the city” (Porbeck 1782). On June 1 he wrote, “Right now three to five inhabitants die every day of dysentery, hot fevers, cramps, and in the last few days epilepsy (Porbeck 1782).

Sick and wounded soldiers were tended to in camps, makeshift military hospitals, or often put on ships and brought to other locations. One example of the latter is listed in a 1779 newspaper article detailing the arrival of the vessel *Pendant* (or *Fendant*) in Hampton, Virginia, having on board “...200 invalids, consisting partly of sick, and partly of those who were wounded at Savannah” (New Jersey Gazette 1779). Captured soldiers put on prison ships in the Savannah harbor fared even worse than French sailors or American or French soldiers. At best, one might get drafted into the enemy army. In one case, Major James Wright, Jr. reported to Lord Cornwallis in August, 1780,

In June...several of my officers pressed me for permission to enlist from the Prison Ships at Cockspur, which for a time I objected to but on seeing other corps admit them I made application to Col. Prevost for such prisoners as were Inhabitants of the Province of Georgia, and in consequence...recruited 50 of which number 15 have since deserted, 20

died, 5 were killed during the Siege and 10 are at present with me being the whole mount of Prisoners now in my Corps, and whose Behaviour has been irreproachable for 15 (?) months past (Wright 1780).

Hessian Colonel Friedrich von Porbeck wrote from Savannah to Lieutenant General von Jungkenn on February 2, 1782 stating,

The British Lieutenant Colonel [John] Moncrief has laid out strong redouts, both in the city and outside. There is no shortage of artillery and ammunition”, but Porbeck added, “The Rebels ride patrols to within one mile of the city (Porbeck 1782).

It wasn't until early April of 1782 that royalist in Savannah saw strong evidence that they would not have to worry about defending the city much longer or keeping troops from deserting. At that time Sir Henry Clinton ordered Lieutenant General Leslie to reduce the garrisons at Savannah (Historical Manuscripts Commission 1906:445). Leslie reported to General Sir Guy Carleton that by late June, 1782, Brigadier General Clarke had Savannah in a state of readiness for British evacuation. This included preparing the stores (supplies) for embarkation and ensuring that most of the inhabitants proposing to leave had gone to Tybee Island with their possessions (Historical Manuscripts Commission 1906:546).

Likewise, American forces were ready to swiftly follow behind evacuating British troops. General Nathanael Greene wrote to Major General Anthony Wayne on June 18, 1782,

I have this moment received information by an officer from Ebenezer that the enemy evacuated Savannah on Sunday last. Should it be the case, I must beg you will order all of the troops except those belonging to the State of Georgia to join this army as soon as possible. The works in the neighborhood of Savannah you will order to be erased as soon as possible (Greene 1782a).

Three days later Greene wrote again to Wayne saying,

...It is my advice to the people of Georgia to have all the fortifications in and about Savannah leveled except one or two batteries just sufficient to protect the town from insult from single vessels of force, or small parties. Unless we had a regular force to garrison the town, fortifications can be of no use but on the contrary will serve to enable the enemy to repossess themselves of it with more safety and with a less

force and less loss than if they were leveled. This may appear to be a paradox, but it is true, for militia will not defend works but would annoy the enemy greatly while they were constructing them...(Greene 1782b).

Clearly, the American leadership was not completely convinced that the British were evacuating with no hidden agenda or military strategy.

Post-Revolutionary War Military Activity in Savannah

Savannah's defenses were not a static entity but continued to evolve as the city expanded. In some locations around the town the areas that had been defended in the American Revolution continued to be defensive places in the decades following the war. Some of these areas were strategic military locations even as late as the American Civil War. These post-Revolutionary War changes to the military landscape of Savannah are an important factor to consider in studying the October 9, 1779 landscape. Many of the changes that took place in the late 18th and early 19th centuries are not well known. Other areas of the military landscape, such as Fort Prevost/Fort Wayne, are slightly better known. Cartography provides many clues to the military landscape in these decades. This section addresses the topic of later fortifications and ditchwork in Savannah, particularly as it may have impacted the Revolutionary War era battlefield resources.

Newspapers provide an important source of information about Savannah's defenses in the late 18th and early 19th centuries. A November 19, 1787 New York newspaper article gave a brief description of Savannah's defense in the post-war years:

We learn from Georgia, that Martial Law is proclaimed throughout the State---that the town of Savannah is strongly fortified by several redoubts and other works thrown up round it—and that small parties of Indians have committed depredations within 36 miles of Savannah (American Herald 1787:3).

A Baltimore newspaper described Savannah's defenses circa April 8, 1794:

The force intended for the defense of the city and harbor of Savannah, is to consist of batteries mounting 24 pieces of heavy artillery, a magazine, a blockhouse or barracks, a redoubt, &c.—For the ordinary protection of which there will be

stationed here one captain-lieutenant, two serjeants, two corporals, two musicians, and twenty four privates (Baltimore Daily Intelligencer 1794:2).

The U.S. Congress displayed concern for Savannah's defenses in the late 18th century. In 1794, the U.S. House of Representatives received a committee report that recommended these defenses be constructed at Savannah:

Twenty-four pieces.

Batteries, embrasures, & platforms	1,727.58	
Redoubt with embrasures	810	
A magazine		200
Block-house or barracks	500	
		[§] 3,737.58

(Daily Advertiser 1794:2).

In 1808, the U.S. Army built Fort Jackson at Five Fathoms Hole, which was located several miles downstream from the town's center. Fort Jackson became the primary river defense for the city after that period. A New York newspaper cited a Savannah source regarding Savannah's defenses in 1808:

Twelve pieces of Ordinance, (eighteen and twenty-four pounders) arrived here on Saturday evening last, in the sloop Hannah, captain Hawes, from Charleston, for the defence of this place. Mr. McRae, the engineer for supervising the fortifications of Savannah, arrived in the stage last evening" (Oracle 1808:2).

The U.S. Congress authorized substantial funds for strengthening Savannah's defenses in the War of 1812 (American State Papers 1975-1997). Thomas Pinckney wrote from Savannah to James Monroe on November 9, 1814 in an effort to obtain cannon for the fortifications at Savannah (RG 107, Letters Received by the Secretary of War).

Several maps of Savannah that were drafted shortly after the War of 1812 depict "fortifications thrown up in 1815", which was a crenulated defensive perimeter line that surrounded the city on its interior side (Figure 31). In some places the 1815 defenses may overlap with those built in the American Revolution. To date, however, no archeological footprint of the 1814-1815 defensive perimeter has been identified. The War of 1812 ended in December, 1814, but the threat to Savannah from British military attack dates shortly afterwards in January and February, 1815. After burning Washington, British Admiral Cockburn sailed his fleet south to the Georgia-Florida border, where troops disembarked and began a coastal campaign. The immediate military targets were Fort Point Peter, St. Marys, Amelia Island, and the surrounding plantations. Savannah was likely in their sights as

well, and would no doubt have been attacked had not the Admiral received belated news of the peace declaration at Ghent. When Georgia's shores were invaded in early 1815, Savannah's military leaders became alarmed about its defense:

The Brigadier General commanding the troops at this station, earnestly recommends to the citizens of Savannah, the necessity of exertion to complete the fortifications around the city. It is hoped that private interest will on so important an occasion yield to public duty, and that every man possessed of American feelings will repair to the lines, and by united efforts render themselves secure against an attack from the enemy who will avail himself of neglect. Citizens of Savannah! Let your stores and shops be shut until the defences of the city are completed.

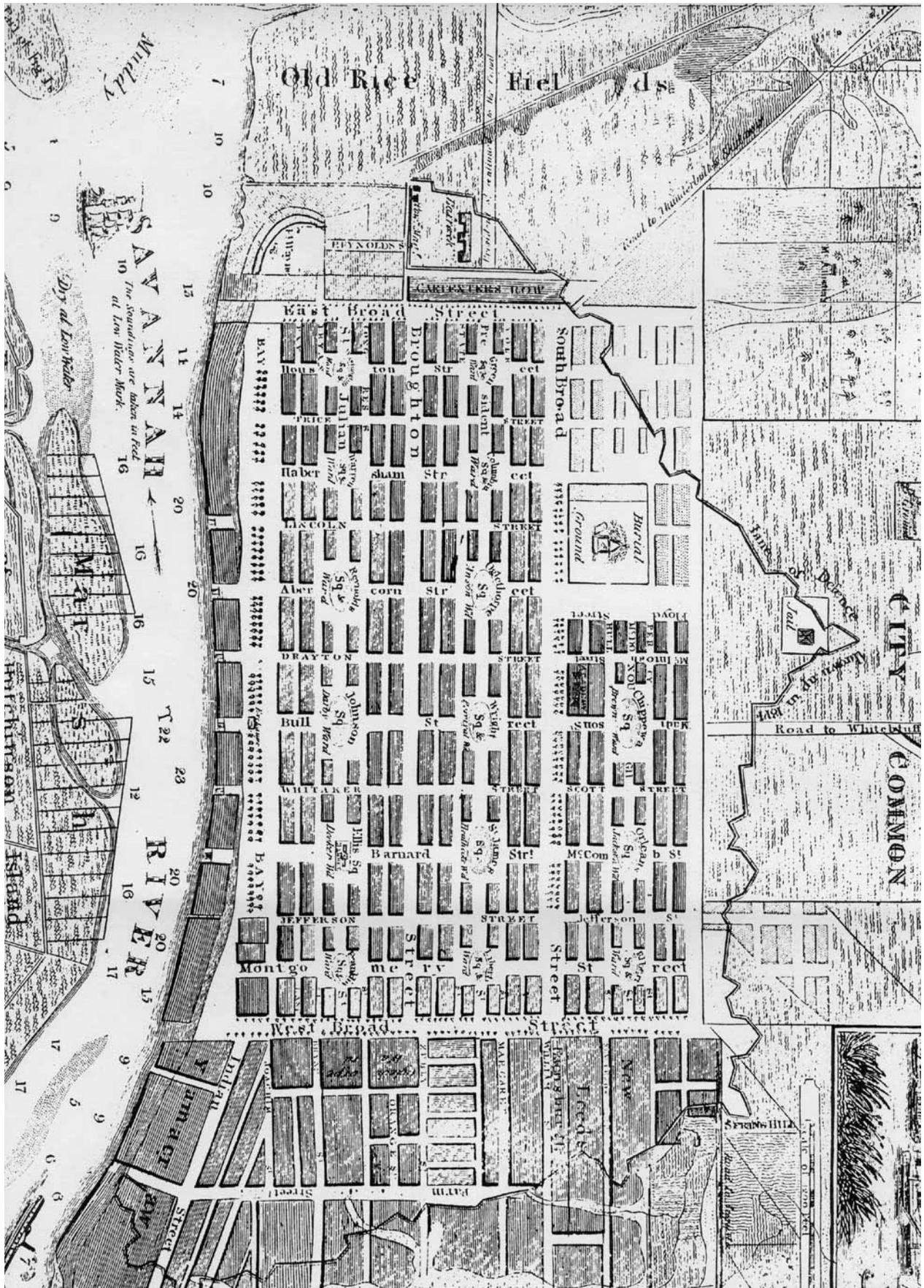
Georgians!—Your state is invaded—the capital of it (Savannah) is threatened—your sires were gallant—you will do everything in your power to repel the merciless enemy who carries the sword in one hand and the torch in the other—An enemy who wars on the widows and the distressed—whose deeds have been as bad as the savage of the American woods or the plundering Arab of the Desert. Remember, the eyes of the world are upon you—Georgia expects every man to do his duty.—To Arms, then, Georgians to Arms! (National Aegis 1815:3).

News from Savannah and coastal Georgia in late January, 1815 was extracted and reprinted in several northern newspapers in early February, including these reports from Savannah, dated January 22:

Here we are, under martial law; not knowing the hour when the British forces may pay us a visit. We have no positive accounts from the southward, however, to warrant a positive conclusion that they are coming this way. We believe the forces at Cumberland and St. Mary's to be about 6000 men", and, "Martial law was declared today. Governor Early has arrived at the lines with 2000 men- --Strong reinforcements are on their way. Our fortifications progress rapidly, and are able, at present, to sustain and repel the attack of all the British forces said to have arrived" (Republican Farmer 1815:2, Connecticut Journal 1815:3).

It is certainly possible that the military activity in Savannah in 1814-1815 may have had an impact on the Revolutionary War battlefield resources. Earthworks and ditches may have occupied some of the same ground as the earlier defenses and "field of fire" zones were almost certainly impacted. This situation is suggested on Savannah

Figure 31. This 1818 map by an unknown cartographer shows the defensive works expanded south of the Revolutionary defenses in some areas (Waring 1886).



maps for the Madison Square and Spring Hill vicinities (Stouf 1818).

In the American Civil War Savannah was fortified by both Confederate and Union forces. The Confederate defenses, prior to 1864, were mostly focused on the river forts downstream from Savannah and on the “Interior Line” that defended Savannah’s perimeter. The Interior Line was located well to the east of town and did not occupy the same ground as any of the October 9th defensive works. The Confederate defensive line was also on a different footprint from the War of 1812 defenses with the former being much farther away from the city as depicted in Figure 32. When the threat became apparent of an interior attack by Major General Sherman’s forces, the Confederates quickly shifted their resources and energy to building defenses on Savannah’s west side. For the most part, however, these defenses were located well outside of town and did not occupy the same ground as the October 9, 1779 defenses.

Once General Sherman and his men occupied Savannah, however, the defensive strategy was modified substantially. Sherman had his engineers tighten the perimeter to the core area of the city. These defenses were quickly established between December 20, 1864 and mid-January 1865. By the war’s end in April, 1865, the need for this defensive perimeter had passed. The plan of the December, 1864-April 1865 defensive perimeter is illustrated on military maps of the day (Suter 1864; Poe 1865). Figure 33 is a copy of the Suter map. The archeological footprint of this defensive line remains to be located. Quite possibly portions of Sherman’s defensive perimeter may have impacted archeological resources associated with the October 9, 1779 battlefield. This is particularly true on Savannah’s west side.

Lee and Agnew (1860:74) provided this brief description of the defenses built in Savannah from the War of 1812 through Civil War era,

During the war of 1812, between the United States and England. Savannah was not attacked, but its proximity to the sea made it liable to assault by the enemy’s fleets at almost any hour; and thus the people were kept constantly upon the alert until peace was restored in 1815. Fort Wayne was still fortified. Another fort was erected about two and a half miles below the city and named Fort Jackson, after Governor James Jackson. A line of defences was thrown up, extending from the marsh on the east at the foot of Broughton street to the west side of Lafayette square, where the residence of Andrew Low now stands, thence diverging to what is now Liberty Street lane, thence crossing Bull street to Spring hill, where the Central Railroad depot is now, thence along the high

ground east of the Ogeechee canal, and terminating at what is now the foot of Farm [sic, Fahm] street.

New Information About the Revolutionary War French and American Camps Outside Savannah

Major General Benjamin Lincoln and most of his troops arrived in the Savannah vicinity on September 15. General Lincoln wrote on September 15, 1779, “having arranged our little army, moved the troops to Cherokee hill, 8 miles from Savannah” (Library of Congress). There they encamped for the night, and early the next morning General Lincoln rode, “with an escort of Horse to confer with the Count”, which he did after some delay. The rest of Lincoln’s army traveled to join up with the French forces, as Lincoln noted later that day (September 16), “Our troops arrived and took post for the night in the rear of the French troops and formed a second line. This was meant as a temporary encampment” (Lincoln 1779 [Library of Congress]).

Lincoln wrote on September 18, “General Huger took post on the left near the Augusta road”, and on September 19, he noted, “Colonel Laurens with the Light Troops moved to the left of Genl. Huger” (Library of Congress). On September 22, Lincoln wrote, “This morning the Chas Town militia under Col. Simons arrived in Camp, and joined the 2d brigade (Huger’s)” (Lincoln 1779 [Library of Congress]).

On September 24, Lincoln wrote, “We shifted our ground. Genl. Huger took the ground on the left of the 1st brigade, and Col. Laurens covered his left—Col. Simons took post near the Augusta road, two miles from Spring hill—he was joined by Capt. Elliott and Capt. Snipes” and, “300 from the first brigade”. These men performed fatigue duty and relieved the French who had been digging trenches. Lincoln added that, “the remainder of the Brigade covered the left of the Fatigue” (Lincoln 1779 [Library of Congress]).

New Details about the Roles of Africans and African-Americans

The role of Africans and African Americans in the Revolutionary War is complex and often obscure. While they were often pawns in a larger military strategy, Africans and African Americans also played an active role in the revolution. This included everything from providing



Figure 32. Portion of a ca 1865 map showing the outer Civil War fortifications to the south (right on this page) and the inner War of 1812 fortifications to the north (by this time overtaken city expansion) (Hoffman ca 1865).

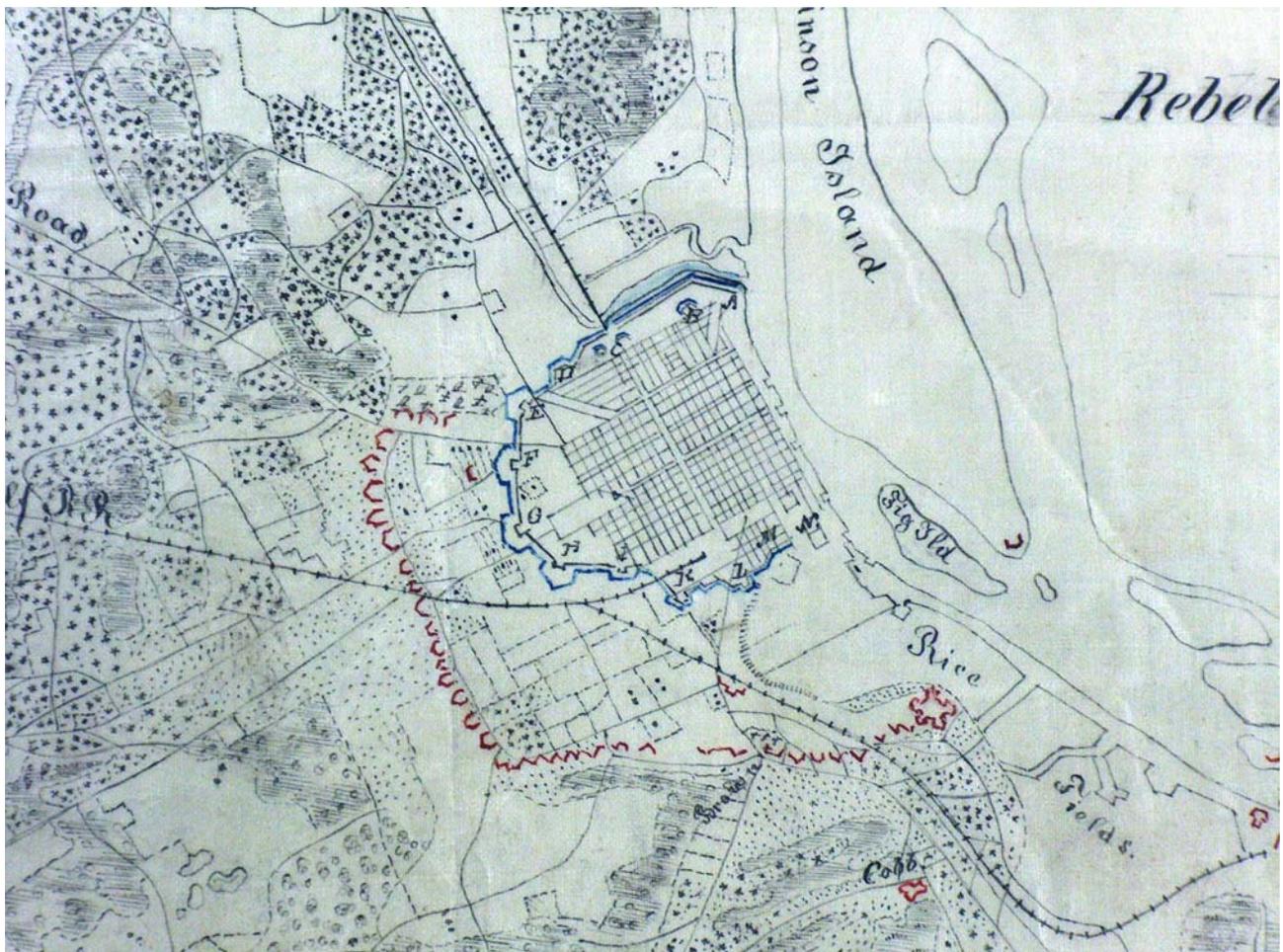


Figure 33. Suter's 1865 "Map of the Union and Rebel Intrenchments in Savannah".

manual labor in fort construction, to providing military intelligence as spies, to being drummers and soldiers in the rank and file. While both sides of the war used the labor of African and African American men, women, and sometimes children, they were likely under-credited for their contributions.

Black's roles in the American Revolution, however, are often obscure due to a variety of factors. Most were illiterate and therefore did not write about their experiences. Many military records did not note the ethnicity of soldiers. Many blacks were transient during the war, some following the British army as it moved across the colonies, including Georgia. Lieutenant Colonel James M. Prevost (aka Mark Prevost, General Augustin Prevost's brother) wrote to a Londoner on November 27, 1779 that, "Many Negroes followed army to Georgia" and he issued a proclamation "...forbidding sale of slaves without legal title" and forbidding the "Export of slaves without licence [sic]..." (Davies 1977:226).

Enslaved Africans and African Americans were often pawns in military strategies on both sides. Their interests,

regardless of the outcomes, were seldom the catalyst for action. On April, 20, 1780, in Savannah, Governor Sir James Wright lamented to Lt. Governor John Graham, that they were

again pestered with plundering parties of rebels. All John Fox's negroes reported taken and the negro houses burnt. The same who burnt his own barns are said to be coming down again to burn destroy and lay waste the whole country...The grand objects are negroes and to destroy all our provisions, and pray what is to hinder them?" My opinion is still the same that nothing can save this Province, but a post at Augusta and a strong corps of horse (Historical Manuscripts Commission 1972:114).

Major General Prevost recounts a similar event in his February 11, 1780 letter to Sir Henry Clinton stating,

I have just now received intelligence of four boats, pretty large, having landed a party of Rebels at the White Bluff and the Islands and carry'd off near one hundred and forty negroes. I have sent

immediate notice to Capt. Gayton that some measures may be taken if possible to intercept their return (Historical Manuscripts Commission 1972:88).

Many blacks were focused on war-time survival, as were virtually all the residents of the colony. Black residents, whether they were the few freed men and women of the day, those who stayed with their masters, or those who tried to escape bondage, faced even more difficult challenges. Blacks living in Savannah as freed people or enslaved were wounded and killed during the siege and battle. Such casualties were reported in The Georgia Royal Gazette. For example, on October 5 the French bombardment of the city commenced again, killing a mulatto man and three Negroes who were in the Lieutenant Governor's cellar (Georgia Royal Gazette 1780: 5). Apparently, the Lieutenant Governor and Governor knew the risk of staying in town was great, and had the luxury to be able to relocate to the camps where they pitched a tent adjacent to Colonel Maitland's tent. Another cellar, this one under the Office of the Commissioners of Claims, received an incoming shell which wounded one Negro and killed another. (Georgia Royal Gazette 1780:6).

Africans and African Americans often felt their best chance of survival lay with attaching themselves to the British army. Those who were most successful in the short term were those whose labor was needed by the army. This labor was most often in the form of manual work. Blacks provided manual labor for the British engineering department. Labor included digging defensive ditches and constructing redoubts; hauling supplies, equipment, and artillery; and/or ancillary support, such as working in military hospitals and kitchens, and providing laundry services. There were 10 Negroes working in the Barrack Master General's Department, one in the Inspector General's Department, two "in service of Government", and 14 in the Cattle Department in Savannah in October, 1779 (Clinton Papers Vol. 72:10). Immediately prior to, and during the 1779 siege and Battle of Savannah, there were 54 negroes employed in the British redoubts around Savannah and another 41 working in the Engineers' department (Clinton Papers Vol. 72:10). Deserters fleeing Savannah to the French lines in 1779 reported that there were 1,000 Negro laborers in Savannah immediately prior to the October 9, 1779 battle (Stevens 1970).

Much of the labor was on the backs of enslaved individuals loaned to the British army by local Tories. This included Georgia's royal Governor Wright. In November, 1779, Major General Augustin Prevost wrote,

The works go on but not so briskly as I wish; since the news of the raising the siege of Savannah: most

of the planters have retaken their negroes; and I am sorry to tell your Excellency that the Governor's negroes were the very first who went away: I sent an officer to acquaint him with it; his answer was that he knew nothing of it, and that he would order them back, but he has not done it yet: The Lieutenant Governor and the Attorney General retook theirs also (Historical Manuscripts Commission 1972:64).

The role of the African-American soldier in the American Revolution has received some scholarship but the subject is far from exhausted. Pioneering research by Quarles (1961) has been followed by more recent studies (Foner 1976; Hoffman 1981; Jones 1982; Kaplan and Kaplan 1989; Lanning 2005). African-Americans were enlisted by the Hessians as musicians, laborers, and soldiers (Hoffman 1981). Lanning (2005) notes that of 131 blacks serving under the Hessians in a 1787 list, 94 were listed as drummers and the rest as infantrymen. Jones (1982:287) presented examples among the Hessians garrisoned in Savannah, based on his study of original German muster lists. He cites as an example, Bossum (Possum) listed in Porbeck's Hessians, who was recruited at Ogeechee. Jones reasonably concluded that Bossum was black, although it is not stated specifically in the document.

On February 22, 1782, Colonel Porbeck wrote,

For every returned deserter the Negroes are paid two Guineas by the commandant. The Rebels have threatened the Negroes with hanging. This has scared them and they hide in the woods, there are no military police patrols, as previously seen.

Porbeck also indicates, in a letter on March 2, that captured rebel Negroes were treated as booty by the King's troops, and he noted that his officers and enlisted men were eager to get their share.

British engineer Lieutenant Colonel James Moncrief noted the advantage of the labor provided by the enslaved. By the end of the war, when Moncrief was in Charleston, he noted, "The number of slaves who have attached themselves to the Engineer Department since my arrival...and who look up to me for protection has been for some time past a matter of serious concern" (Historical Manuscripts Commission 1906:419). Moncrief went on to write Sir Henry Clinton about what he should do regarding the Negroes before he departed Charleston. Moncrief recommended embodying a brigade of Negroes (Historical Manuscripts Commission 1906:419).

Black contributions were not limited to manual military labor, however, as both sides had black troops. Patriot forces had limited black enrollment contrasted with

British forces. Northern colonies and their slave owners were more receptive to the concept. Historians estimate that minimally, 5,000 black soldiers were enrolled with the Patriot forces, out of a total enslaved population of 450,000 in the original 13 colonies (NPS 2010). Black participation in the British military was accepted more readily.

Patriots, particularly those in the southern colonies, hesitated to use blacks in the military for fear of slave revolts. The threat of losing the war and the inability of colonies to meet congressional troop quotas led Congress to allow the enlistment of both free and enslaved blacks into the military in 1777. Two years later a desperate Congress offered \$1,000 to owners for each slave they allowed to enter the army. Neither fear nor incentives could sway Georgia or South Carolina to participate (NPS 2010).

Just two weeks after the overwhelming defeat at Savannah, General Benjamin Lincoln wrote of South Carolina's refusal to participate in raising black troops. He penned,

I hope therefore that they [Congress] will insist that the number of men, which they require from the neighboring states be fully supplied, with punctuality and dispatch-I am sorry to inform you that little maybe expected from this State, unless they rescind their late resolutions-for after Solemn debate in the Assembly, it was resolved that the militia should not be draught to fill up the Continental battalions; that the black regiments, recommended by Congress, should not be raised [emphasis added]; and that the militia while in the field, should not be subject to Continental articles of War (Lincoln 1779a).

The presence of blacks in the Patriot forces is confirmed periodically in primary source documents. In January of 1779 Henry Laurens wrote notes about a potential Georgia Campaign for General Washington. He noted that there were 10,500 Rebel Negroes (Laurens 1779). This number appears to represent those in the Georgia and Carolina colonies, although this is unclear from Lauren's notes. Also, it is likely that these were potential black forces for the patriots and were at that time probably unarmed and still enslaved. Laurens also noted that among those British troops embarking on a vessel in the New York harbor in January 1779 were, "6,200 Negroes sufficient for Pioneers, servants & all fatigue duty by land and water" and estimated that the number of "Negroes who may be armed" at 800 (Laurens 1779).

While black troops were not raised initially in South Carolina and Georgia, blacks did serve in the ranks of troops raised elsewhere, as well as among British forces. The December 1, 1779 Savannah Muster Roll of Col. Alexander Innes' Company of the South Carolina

Royalists lists one drummer named "Black Sanchs", who was possibly an African or African American, as might have been another drummer in the company simply listed as "Cyrus" (Ward-Chipman 1779a). The "Abstract of the Number of Men, Women, and Children, Negroes and Prisoners Victualled at the Commissary General's Stores at Savannah" form October 11-20, 1779, lists a total of 620 negroes allied with British forces in Savannah at the time of the siege and battle (Clinton Papers Vol. 72:10). Table 1 enumerates the Negroes pulled from this list. A total of 182 of the 620 was listed among the ranks of soldiers (Clinton Papers Vol. 72:10). Deserters claimed the number of armed Negroes in Savannah, however, was closer to 200 (Stevens 1970). This included a variety of battalion and regiments ranging from British regiments, to Georgia militia, to Hessian troops and included rangers, light dragoons, and artillery. In addition, 36 Negroes served as sailors, seamen, or in other capacities on British vessels (Clinton Papers Vol. 72:10). Another two individuals were in the Brigade commanded by Major Skelly, which appears by the order on the list to be associated with the marines. An account in The Georgia Royal Gazette detailed a skirmish between "some Negroes and a party of Rebels" on October 16, well after the battle. The skirmish occurred on McGillivray's plantation, as allied forces continued to evacuate the area. The newspaper reported that the Rebels, "...were several times driven from the buildings on the plantation into the woods. Want of ammunition, however, obliged the Blacks to retreat in the evening with the loss of one killed, and three or four wounded" (The Georgia Royal Gazette 1780:7).

The Black Pioneer Companies were comprised of Africans and African-Americans that performed manual labor for the military, such as constructing redoubts and digging fortification trenches. Black Pioneers are discussed briefly in the previous NPS ABPP report and the reader is referred to it for additional information (Elliott and Elliott 2009:58). Maj. On November 22, 1779 Major General Prevost in Savannah. "...directed the Black Pioneer Companies to be employed in preparing material for erection of batteries, &c.." (Historical Manuscripts Commission 1972:64). During the siege and Battle of Savannah, there were 59 Black Pioneers stationed in the city with the British forces. A total of 218 blacks was listed under "Volunteer Negroes" (Clinton Papers Vol. 72:10). They are enumerated on the list between "Negroes employed in Redoubts" and "Black Pioneers". The Georgia Royal Gazette reported that the "French Mulatto and black Brigade had marched to Col. Mullryne's to embark" on October 17, 1779 (Georgia Royal Gazette 1780:7).

The most well-known Savannah example of black participation on the American side of the Revolution involves the Volunteer Chasseurs of San Domingo, a military force

of free blacks from what is now Haiti. The Chasseurs were in the French military as paid, non-drafted soldiers. The Chasseurs held the Franco-American allied reserve at the Jewish Cemetery location during the 1779 Battle of Savannah, and actively covered retreating forces. Other blacks also were present among the French forces. A French sailor named Pechot documented 200 mulattos included under the command of Colonel M. de Rouvray (Stevens 1970). These were part of the French forces disembarking at Beaulieu and marching to Savannah in September, 1779.

Africans and African Americans also served as guides and spies for both sides of the war. Accounts of such activity were frequent in the Savannah area; however many accounts, especially those repeated in secondary sources cannot be verified and others are contradicted by primary documents. A few examples of unverifiable guide stories are described here. In 1778 an enslaved man, Quamino Dolly, reportedly came upon British Lieutenant Colonel Archibald Campbell and his troops in the woods. Dolly agreed to be hired as their guide, and led the troops through a swamp path to Savannah, allowing them to bypass American forces guarding the main road into town (Russell 2000:101). In September, 1779 an African guide played another key role in the 1779 Battle of Savannah. At that time British Colonel Maitland was desperate to get his troop of reinforcements from Beaufort, South Carolina to Savannah. During the journey, and after his arrival on Daufuskee Island, Maitland realized that French warships in the Savannah River were blocking his path to Savannah. At that time it is reported that a Gullah fisherman described an alternate path to Maitland that involved taking Wall's Cut, a narrow marsh passage running behind Daufuskee Island into Skull Creek, and thence into the Savannah River (Russell 2000:116). While the shallow, narrow marsh was not ideal and required the troops to drag their boats through the mud, it did allow Maitland to reach Savannah with the critical number of troops that Prevost needed to defend the city.

African and African American spies also delivered information after battles, regarding outcomes. This was often the first news on either side of victory or defeat. Lieutenant Colonel L.V. Fuser, in St. Augustine, wrote about getting information about the Battle of Savannah from "the Report of the Express who was at Savannah during the whole time; and tho' he is a Mulatto appears to me to be a very intelligent Man" (Prevost 1779b; Fuser 1779:670-671).

Much of what we do know about the roles of blacks during the Revolutionary War period comes from the lists kept by British forces, known as the "Book of Negroes". These lists were generated by three of Sir Guy Carleton's men and three other men appointed by Congress (SCDAH

Unit/Entity	Number of Negroes
16th Regiment	6
3d Batt. ditto	1
4th Batt. ditto	9
1st Batt. 71st Regiment	1
2d Battn ditto	7
Royal Artillery	27
1st Troop Light Dragoons	5
2d Troop ditto	5
New York Volunteers	10
2d Batt. ditto	18
3d Batt. New Jersey Volunteers	18
Volunteers of Ireland	1
British Legion	1
King's Rangers	11
1st Batt. South Carolina Royalists	13
2d Batt. ditto	12
Georgia Loyalists	10
Georgia Volunteers	2
Georgia Militia	2
General de Trumbach's Regiment	3
General de Wissenbach's Battn	20
Commissary General's Department	1
Barrack Master General's ditto	10
Inspector General's ditto	1
Engineers ditto	41
Cattle Department	14
Negroes employed in Redoubts	54
Volunteer Negroes	218
Black Pioneers	59
Negroes in service of Government	2
King's Boat	6
HMS Rose	15
Seamen	15
Brigade Major Skelly	2
Total	620

Table 1. Negroes enumerated by the Commissary General's Store at Savannah, October 11-20, 1779 (William L. Clements Library 1779).

2010). The lists documented black Loyalists who had worked with and/or fled with British troops, and who were boarding ships in the spring and fall of 1783 in New York, bound for Canada. These rolls contained specific information about the passengers, including the names of their former masters, where they once lived, their age, when they left their masters, the vessel they boarded, and their expected port. Sometimes the lists included the roles of the passengers in the British service and a brief description of their appearance and health.

An interesting picture of enslaved Africans and African Americans in Savannah emerges from newspaper advertisements in nearby Charleston, South Carolina, newspapers. These include ads prior to, during, and after the Revolution, such as those dating from 1756-1764 in the South-Carolina Gazette, and advertisements in the South Carolina and American General Gazette (formerly known as the South-Carolina Weekly Gazette (1764-1781). Other ads for runaway slaves came from the Royal Gazette during the period from March 1781-1782. The numbers of runaways likely increased after Britain's success in the 1779 Battle of Savannah, and as British troops maintained a hold on the area for the ensuing three years. Many enslaved fled to British lines before, during, and after the battle in hopes of securing freedom. In some cases, British officers owned slaves. One example was a man named Blackwall who, "was formerly the property of Lieut. Hook of the [Royal] Artillery" (Whitead 2002). Blackwall escaped with his friend, Scipio, who "was formerly the property of Capt. Simmons" and carried his own militia musket (Whitead 2002). (It is unknown whether Capt. Simmons was a civilian ship captain or a military captain.) All the newspaper ads help paint a vivid picture of many individuals who often remain elusive in history.

Archeologists searched the compilation of these ads for individuals relevant to Savannah to provide a better understanding of those in the area that would have been involved in the battle, whether through military-related activities or as a civilian. Table 2 summarizes these individuals. An evocative image emerges. Many of these individuals were born in Africa. Native countries included Ebo/Ibo and Guinea/Pappa. Several of the Africans physically reflected their cultural heritage. This was visible in ritual scarification, such as two to three deep scratches on their cheeks and filed front teeth. One individual even retained his African name of Arrow. This was in marked contrast to the names given slaves, such as Caesar, Prince, Scipio, or simply "Tom" or other first name. Interestingly one man had a first and last name, Bob Lindsay. The list suggests that many enslaved in or nearby Savannah were skilled in one or more professions. Caesar exemplifies this. He was an excellent oarsman, a jobbing carpenter, and a plain cook. Others included another carpenter, a "waiting man",

and cowboys. Many of the Africans in Georgia and South Carolina were bilingual. All spoke their native African languages and many learned English to varying degrees of proficiency and/or a Pidgin English. Suba was a 5'3" man with filed front teeth that spoke "high Dutch or German" and escaped from bondage in South Carolina (Whitead 2002). Mick, who was born enslaved in the French West Indies, and brought to the southern colonies, spoke French and English.

Various fates befell Africans and African Americans in the Savannah area at the close of the American Revolution. British Lieutenant General Alexander Leslie in Charleston, South Carolina wrote to General Sir Guy Carleton the following:

If this town is to be evacuated, what will be done with the sequestered negroes now under charge of Mr. Cruden, and employed in the different departments...There are many negroes who have been very useful, both at the Siege of Savannah and here; some of them have been guides, and from their loyalty been promised there freedom...I apprehend many of the inhabitants will wish to go to Jamaica with their negroes; therefore a convoy ought to be ordered to take them in case such as request is made (Historical Manuscripts Commission 1906:544).

Lieutenant General Alexander Leslie sympathized with

the unfortunate loyalists of Georgia" but not with their enslaved, as he wrote that relocating Georgia loyalists would "...afford them a convenient refuge whither the most valuable of their property may be without much difficulty transported, and in a country where their negroes may continue to be useful to them... (Historical Manuscripts Commission 1906:546).

Leslie felt that many Loyalists slave owners "...would wish them sent to Jamaica...St. Augustine, or St. Johns, Florida" (Historical Manuscripts Commission 1906:543). Many African-Americans who had assisted the British in the Siege and Battle of Savannah were sent to eastern Canada at the war's end.

Additional Details about Native Americans Involved

The British and the Patriots constantly negotiated with Native Americans to join their side during the American Revolution. Native American groups did form alliances with both, however, these alliances proved to be difficult

Name	Location of Birth	Age	Height Weight	Other Details	Master	Location of Master	Reward	Charleston Newspaper
Scrub	Africa		4'7"; "fat"	Ritual Scarification (two or three scratches down his cheeks "his country marks"; speaks good English	Nathaniel Hall	Savannah	5 Guineas, additional 20 Guineas if white harbourer convicted	Royal Gazette Nov. 14, 1781
Bob		10		Wearing a brown colored light infantry jacket, red cape, brown trousers	Mr. Cunningham (formerly)	4 Bay St, Savannah	\$10	Royal Gazette Feb. 9, 1782
Caesar	Ibo, Africa		Very tall	Knock-kneed; artful, "speaks sensible, plain English"; excellent oarsman, a jobbing carpenter, plain cook; very handy. Ran away 15 months ago	Mr. Necliff (?) of Savannah (formerly); now Thmas Forbes, East Florida	Savannah (formerly); now East Florida	2 Guineas	Royal Gazette Sept. 28, 1782
Stephen	SC		5'9"; stout	"Might almost pass for a mulatto." artful; sensible. Has a suite of scarlet (?) turned up with blue, with sundry other cloths. Ran away "September last"	Dr. James Cuthbert, deceased (formerly); Nathanel Hall	Cuthbert-plantation on Savannah River; Hall-Morton-hall	£5 sterling; £20 sterling if white harbourer convicted	SC and American General Gazette Dec 30, 1774
Bob Lindsay			"stout Mulatto Fello"	Artful, sometimes changes his name. "Served his time to the carpenter's trade" in Charleston. Worked at Savannah; passes for a free fellow. Ran away 10 months ago.	Mr. Bourgett & Mr. Poyas		Fifty pounds currency, and all reasonable charges.	SC and American General Gazette November 21, 1776
Jack				Ran away from Savannah; mulatto; "sensible fellow"; "as been in England, and may pretend to be free"	James Simpson		\$4	SC and American General Gazette, ca 1764-1781

Table 2. Select enslaved Africans and African-Americans in the Savannah area during the American Revolution (Whitehead 2002).

Name	Location of Birth	Age	Height Weight	Other Details	Master	Location of Master	Reward	Charleston Newspaper
Tom	Ibo, Africa		5'5"	Formerly was a "waiting man to Mr. Nathaniel Hall, Merchant, at Savannah"; Wife on one of John M'Queen's plantations; he ran away about 15 months ago	Nathaniel Hall, Merchant (formerly); Price, Hest & Head	Hall-Savannah; Price, Hest, & Head-?	20 pounds & reasonable charges; 50 pounds to white person if white harboured convicted; 20 pounds to Negro if white harboured convicted	SC and American General Gazette, Aug. 14, 1769
Titus	"this country"		Slim	Artful, may endeavour to pass as free.	William Gibbon	Savannah	Reward	SC and American General Gazette, Nov. 11, 1771
Prince			6'	Talks plain English; no marks. Run away from Savannah	Samuel Price	Savannah	14 pounds	SC and American General Gazette, Oct. 19, 1772
Joseph			Short	Lost some of his fore teeth; brought up on James Island	Samuel Price	Savannah	14 pounds	SC and American General Gazette, Oct. 19, 1772
July	Guinea, Africa		almost 6'	"Country marks on his cheeks"; supposed harboured at Mr. Brisban's plantation on Wright's Neck, where they were once before taken; posted Oct. 8, 1773	John Channing, Esq.	plantation near Savannah	20 shillings	SC and American General Gazette, Dec, 1773

Table 2. Select enslaved Africans and African-Americans in the Savannah area during the American Revolution (Whitehead 2002), Continued.

Name	Location of Birth	Age	Height Weight	Other Details	Master	Location of Master	Reward	Charleston Newspaper
Luke	Fullah, Africa?		5'8"	"Well-buit Fellow";supposedly harboured at Mr. Brisban'es plantation on Wright's Neck, where they were once before taken; posted Oct. 8, 1773	John Channing, Esq.	plantation near Savannah	20 shillings	SC and American General Gazette, Dec. 24, 1773
Will	Guinea, Africa		6'	"Country marks on his cheeks and a blemish in one eye"; supposed harboured at Mr. Brisban'es plantation on Wright's Neck, where they were once before taken; posted Oct. 8, 1773	John Channing, Esq.	plantation near Savannah	20 shillings	SC and American General Gazette, Dec. 24, 1773
Charles	"country born"		6'	"Supposed they are about Mr. Izard's plantation at Indian Land, fromwhence they were removed". posted Oct. 8, 1773	Collin Campbell	plantation near Savannah	40 shillings sterling	SC and American General Gazette, Dec. 24, 1773
Isaac	"country born"		5'5"	"Long bushy head of hair"; "Supposed they are about Mr. Izard's plantation at Indian Land, fromwhence they were removed". posted Oct. 8, 1773	Collin Campbell	plantation near Savannah	40 shillings sterling	SC and American General Gazette, Dec. 24, 1773
Scipio	"country born"		6'	"Also with long hair"; "Supposed they are about Mr. Izard's plantation at Indian Land, fromwhence they were removed". posted Oct. 8, 1773	Collin Campbell	plantation near Savannah	40 shillings sterling	SC and American General Gazette, Dec. 24, 1773

Table 2. Select enslaved Africans and African-Americans in the Savannah area during the American Revolution (Whitehead 2002), Continued.

Name	Location of Birth	Age	Height Weight	Other Details	Master	Location of Master	Reward	Charleston Newspaper
Philander	Augusta, GA	25	"pretty tall"	Eldest brother of Paul; expert in riding, used to a cowpen; likely gone to "the back settlements"	Lachlan M'Gillivray	plantation near Savannah	20 pounds currency & all reasonable charges; 30 pounds currency upon conviction of the harborer	SC Gazette, April 17, 1762
Paul	Augusta, GA	20		Younger brother of Philander; expert in riding, used to a cowpen; likely gone to "the back settlements"	Lachlan M'Gillivray	plantation near Savannah	20 pounds currency & all reasonable charges; 30 pounds currency upon conviction of the harborer	SC Gazette, April 17, 1762
Simon		40		likely gone to "the back settlements"	Lachlan M'Gillivray	plantation near Savannah	20 pounds currency & all reasonable charges; 30 pounds currency upon conviction of the harborer	SC Gazette, April 17, 1762
Arrow	Pappa, (new Guinea?), Africa			Ran away "Two days after he was bought out of a Guinea ship, a well grown negro lad of the Pappa country, his country name Arrow, and is perhaps the same advertised to be in Savannah goal. Ran away three yrs ago	William Williamson (St. Paul's parish) may be formerly? James Parson appears to be new owner	Parson's plantation as Ashepoo	10 pounds and all legal charges; 20 pistoles to white harborers upon conviction	SC Gazette. Jan. 28, 1764

Table 2. Select enslaved Africans and African-Americans in the Savannah area during the American Revolution (Whitehead 2002), Continued.

for both the British and Patriot leadership to manage. Atrocities on all sides were common and included scalplings, burning settlers' houses, burning Indian villages, and wounding and deaths among women and children.

Both the British and the Patriots tried to control Native American behavior and warrior movements through proclamations, meetings, and gifts, but with only limited success. A few examples of this can be seen in Savannah. On August 2, 1779, Maj. Gen. Prevost met with the Principal Headmen and Warriors of the Upper and Lower Creek Nation, at the request of British Deputy Superintendents for the Creek Nation, Major David Taitt and McIntosh (Prevost 1779d). When questioned at the meeting, the Creeks denied any wavering loyalty and insisted that they always tell their people not to listen to any offers made them by the Rebels. On August 7, 1779, Charles Shaw wrote that a few days earlier 120 Creeks arrived in Savannah from their different villages and the General was going to, "order them up immediately to Southern Country between this and Augusta, and to make incursions into Carolina to alarm the Enemy" (Prevost 1779d). Indians returning from service with the Army in Carolina were "in high good humour, loaded with presents by order of the General in return for their services" (Prevost 1779d). The list of these presents included things like brass kettles, shirts, trunks, mirrors, vermilion, silverware, smoking pipes, tin ware, hatchets, axes, lead bars, gunflints, and gunpowder (Prevost 1779d). They were shipped from New York on April 28, 1779 on the vessels *Polly* and *Belrey*, and arrived in Savannah on August 7, 1779.

Major General Prevost felt the money spent on buying Indian services and loyalty too great, and wrote as much to Sir Henry Clinton, saying,

I have to take every measure to send them home pleased, but I must confess that their Services are not proportional to the large Sums expended on their Account, and that our Influence over them, notwithstanding the bountiful Provision made for them, is far short of what it ought to be (Prevost 1779d).

Prevost stated his disaffection with Native American soldiers again to Clinton in November of 1779, "...heard nothing as yet of the Indians, their services always mercenary and precarious" (Historical Manuscripts Commission 1972:59).

Like any soldiers, the Native Americans also required food and supplies. When South Carolina Royalist Captain Black surrendered at New Ebenezer he reported that he "had the conduct of the Indian agency under Col. Brown for some time". He state that at the St. Marys River

...he left a considerable Quantity of foods for the use of the Chocktaws, Creeks, & Chickasaws, also a Considerable number of horses & between three & four hundred head of Cattle, under the care of a few traders & about forty wounded and Invalid Indians, where there is also a quantity of Provision; collected for the use of the Savages & the Dragoons from Savannah (Wayne 1782).

The Native Americans required a great deal of administrative effort and communication, in addition to gifts. Even these measures; however, were not always effective in ensuring that the Indians groups would do as the military hierarchy desired. Sir Henry Clinton wrote to Colonel Innes on February 19, 1780,

...By the inclosed letter to Genl Prevost you will see that I wish all the troops that can be spared may join us, as soon as possible; tis the opinion of all here particularly of Capt. Montcrief that the shortest way will be by land...For God's sake keep your troops under regulation during the march, particularly the Creeks, what think you of bringing an old sac hem and Creek young warriors with you, I wish them to see our army, and operations; reconcile Col. Brown to remaining behind with the Indians; the instant Charlestown is ours he shall have my orders respecting them, in the meantime, as I told him, I would do everything to keep them in good humour... You will of course bring with you all the cattle you can get, but for God's sake no irregularities. Col. Brown will in proper time explain to the Indians the reason of our changing our plans (Historical Manuscripts Commission 1972:92-93).

Some, like Georgia Governor James Wright were of the opinion that even if the Native Americans weren't effective soldiers, it was worth winning them over to avoid having them as an enemy. Wright wrote to Clinton from Savannah in March 18, 1780,

...and with respect to the Indians, the Cherokees, Sir, you may depend will not stay here, & I wish may not go away in disgust, and the Creeks being stop't and sent home again, most like may be disgusted also, and however these people may be thought useless in the field-your Excellency will be pleased to recollect that I had the honor to mention to you here my opinion of the consequence of Indians, and that if they were against us they would harass the King's Troops in any march, & receive the Rebels amongst them, and I feared we could never subdue the rebellion (Historical Manuscripts Commission 1972:104).

In spite of deprecatory remarks about the effectiveness of using Indian warriors, Native Americans waged conflict frequently enough to inflict real casualties and damage on both sides, spreading abject terror among rural colonial settlers. In January of 1779 Patriot Henry Laurens reported that there were, “7,000 Creek Indians actually at war with Georgia & So Carolina” and of these apparently were “5,000 Gun Men” (Laurens 1779). He went on to report that the British also had available for fighting in Georgia and South Carolina, 1,000 Choctaws “for the field in their irregular mode of fighting” and “1,000 Cherokees who will make War when they can with an appearance of safety” (Laurens 1779). Native Americans, themselves became casualties in these conflicts as reflected in Royalist Captain Brown’s statement that, “...about forty wounded and Invalid Indians” were with traders on the St. Marys River near the Georgia/Florida boundary (Wayne 1782).

Native American groups were constantly on the move and it was difficult for either side to determine when or where or if their allies would appear. On October 30, 1779, Florida Governor Patrick Tonyn wrote to Lord George Germain that following the successful October 9th British victory in Savannah, “Indians have begun moving towards Savannah” (Davies 1977:202). Tonyn also issued a proclamation “...requiring all loyal subjects to use influence to bring Indians to Georgia to act with King’s troops” (Davies 1977:202).

The problems with the transient nature of the Native Americans at this time combined with the problems of major epidemics among them. Major General Augustin Prevost in Savannah wrote to Commander in Chief [General Sir Henry Clinton] in early March of 1780,

...The Indians being in great dread of the small pox-which at present rages in all the lower part of this Province are desirous of going away which it will be difficult for me to prevent-if we wish them to remain our friends-they are not people to be employed In the diffence of a place; they cannot suffer the appearance of being shut up... (Historical Manuscripts Commission 1972:96).

New Details on the Roles of Women and Children

Twenty-first century warfare in highly technical societies usually precludes the presence of civilian families following their soldier-spouses or parent(s) into war zones. This was not the case during the 18th and 19th centuries, however, when wives, children, and other relatives

often traveled with the troops from camp to camp during the American Revolution and the American Civil War. Many of these appear to have been supplied by military commissaries.

Savannah’s civilian population included women and children throughout its period of British control. This population of women and children already living in Savannah increased with the presence of British forces following the successful British attack and takeover in 1778. By 1779 there were 256 women and 174 children attached to British-controlled troops in Savannah. The safety of this population became a concern with the 1779 siege and battle of Savannah. During the siege and bombardment, Major General Prevost requested that the French and American forces allow women and children (including his own family) safe passage out of the city, but allied forces refused. Multiple injuries and deaths among women and children were documented. On October 4, allied fire from batteries containing 18, 12, and 6 pounders killed Mrs. Thompson’s daughter. On the night of October 5, “...another shell fell through Mr. Lawrie’s house in Broughton Street, which killed two women and two children who were under it” (Georgia Royal Gazette 1780:5).

Major General Prevost’s wife, Anne, suffered the same fears and dangers as the other women in town while under siege and later attack. In that situation she wrote to family in Europe, “...with the noise of the gun, [with] a trembling hand that I trace these lines...” Anne writes of how her infant is unaccustomed to the noise of the guns and bombs of the siege and how she worries when she hears them that “...perhaps one of these fatal blows has reached my husband, before the frightening sound reaches me...” She goes on to describe how one bomb set ablaze the house, and she had to flee, with the help of a Captain “who partook my son in his arms” while she took her daughter. “We avoid the danger of fire thus, but our escape exposes us ... to the guns and bombardment of the enemies flashes overhead and on all sides” They finally reached the relative safety of a makeshift rampart along the edge of the river, where she lay down “...exhausted of tiredness, deprived of faculty to think...” and “wrapped in a wool blanket a sailor had charity to lend me...” (Lysons 1796:15-16).

Table 3 reflects the associations with various regiments and brigades of the 430 women and children attached to the British military in Savannah. Interestingly, the largest numbers of women were associated with units farthest from Savannah, such as the New York Volunteers and the 3rd Battalion of the New Jersey Volunteers. The 1st Battalion of the 71st Regiment consisted of Scottish Highlanders. They listed 32 women and 20 children attached to their regiment. The greater numbers of women and children among units farthest from home may,

Associated With	Women	Children
16th Regiment	10	
2d Battalion 60 Regiment	7	7
1st Batt. 71st Regiment	32	20
2d Battn ditto	5	6
Royal Artillery	8	14
Light Infantry	12	
1st Troop Light Dragoons	3	
2d Troop ditto	3	
New York Volunteers	50	35
1st Batt. General De Lancey's	11	5
2d Batt. ditto	17	20
3d Batt. New Jersey Volunteers	48	48
King's Rangers	6	2
1st Batt. Royal North Carolina Volunteers	10	4
Georgia Loyalists	10	3
General de Trumbach's Regiment	2	
General de Wissenbach's Battn	20	10
Refugees	2	
Total	256	174

Table 3. Women and children receiving food from the British commissary in Savannah during the 1779 siege and battle (Clinton Papers Vol. 72:10).

however, reflect larger numbers of men in these units. The 3rd Battalion of the New Jersey Volunteers also had the largest number of children attached to them, totaling 48. This was followed by 35 children with the New York Volunteers. More local troops, such as the Georgia Loyalists documented only 10 women. Women and children appear to have been present among all types of units, including artillery, light dragoons, rangers, and militia. It is likely that many of these women and children were families of officers and possibly rank and file soldiers. Interestingly, Hessian troops in Savannah recorded 22 women present within a one regiment and one battalion. These may represent wives Hessians married before or after coming to North America. At least some of these women and some of those listed among the other troops, however, were also likely to be "camp followers" that were employed as laundresses and cooks. There is a long history of prostitutes following military forces and staying within their camps, and it is likely that the American Revolution was no exception.

Women and children also were affected by the war, even if they didn't follow military relatives from camp to camp. Many women and children were impacted directly by attacks on the homes, communities and/or towns in which they lived. Others were impacted indirectly by the pillaging of their possessions, livestock, agricultural fields, and merchandise that would have been available for purchase from area merchants. These women and children often became refugees in search of food, clothing, shelter and safety. Henry Laurens noted that in January of 1779 "refugees & Tories from Georgia and South Carolina" numbered 1,000 and other "disaffected persons from So Carolina & No Carolina" also embarking on vessels in the New York harbor totaled at least 1,500 (Laurens 1779). Patriot refugees were common, as well.

Petitions from many women living in Savannah in 1778 and 1779 testify to the economic damage they and their families suffered at the hands of the war, at a time when no social nets were in place to help them. Many of these petitions reflect damage caused directly by soldiers and the lack of rent payments for the use of houses and other buildings by the military. Most petitioners submitted signed statements by witnesses supporting their claims. The blind, destitute widow Sarah Gay is one example

and her petition follows:

To Lieutenant Colonel Clarke Commanding his Majesty's troops in Georgia, The humble Petition of Sarah Gay Widow of Aberham Gay deceased humbly showeth that she has a house at the trustees Gardens near the New fort which has been made use of by the Kings Troops some times as Baracks & some times as an Hospital & has been from the month of June 1779 To January 178(1)? Rest from her by some means or other & she never has been able to get any Rent or Allowance whatsoever for the same & that she is informed The said house is in the Way of the Kings Works & Lyable To be Guted down at any time when it may be Thought Necessary that the Said house has been very Much Damaged by the Soldiers being their so Long And the shed Guted down & Would cost her seventy Pounds to Put it in habitable repair & is Rendered Totally useless to her for the Reasons aforesaid.

That the Said house used to Rent for forty Pounds a year & in the Ruinous Condition it now is Has been

Valued at £200 by Masr _lyming & Allman Two Master builders that your Petitioner is Blind And in Very Destroyed Circumstances & thinks she has An Equitable Claim to some Recompence for the Damage done as aforesaid therefore she humbly Prays you Will be Pleased to Recommend her case So that She may obtain some Relief...Sarah Gay (Gay 1781).

Sarah's claim was further substantiated by the British Barrack Master in Savannah on April 4 1781. He stated,

The House within mentioned has been employed as Barracks & as a Hospital for the accommodation of his Majestys Troops in the Garrison from the month of June 1779 to the month of January 1781-Thomas Will Moore, Barrack Master (Moore 1781a).

Additional papers with the petition indicate that the papers were forwarded to high command, as "the whole to be very true & that the Poor woman is a Real object of Charity-[signature illegible] April 1781".

The thousands of troops quartered in Savannah resulted in numerous claims for compensation. Another petition for payment for barracks for soldiers came from the widow Martha Young. Her house,

...was made Barracks of for the Royal Artillery Soldiers for a long Space of time; to wit, Seventeen Months and upwards which, for, she received a Certificate from Genl. Prevost and Captain Thomas William Moor Barracks Master and never received any payments for the said Certificate. Your Memorialist is a Widow Woman and has a family to maintain... --Martha Young [March 20, 1781] (Young 1781).

Widows and other women suffered greatly from economic losses during the war; however, men were not exempt from similar hardships. Loyalist merchant and Savannah resident Samuel Jenkins outlined his grievances in a petition to Colonel Alured Clarke, the Command of Great Britain's troops in Georgia and East Florida. Jenkins' petition stated,

That your Memorialist with two Others/one of Them at all times in said Allegance to His Majesty is joint Proprietor of certain large Stores in Savannah situate on the Bluff which Stores by Order of the Barrack Master ---of the British Army in Georgia were occupied by Robert McCulloch Esq & were by him employed on the Service of the Kings Army & Navy as well as for a Customs House for more than Sixteen Months viz from the first of Jan 1779 to 18 May 1780 That Mr. McCulloch hath refused to Pay any Rent for said Stores, saying that an Act of Parliament Twentieth of the Reign Indemni-frees him

from all such charges That the legal Demand of your Memorialist upon Government is ascertained on the back of this Memorial & the Amount thereof when received will be immediately Remitted to England in Payment of Debts contracted before the Rebellion. That on account of the Rebellion your Memorialist embarked from Georgia early in 1776 on the same day with His Excellency Sir James Wright Baronet Governor & Commander in Chief of said Province whereby he abandoned all his Property & Interest in America Amt to Eighteen Thousand Pounds Sterling. That from repeated Captures, Imprisonments total loss & Destruction of Property your Memorialist hath reason to estimate his Sufferings as proportional to those of any other Loyalist in America. At same time he hath been always uniform in his Conduct & zealous for the dignity & support of His Majesty's Government. From these Circumstances your Memorialist lays no ..., claim of merit nor Indulgence,-he only wishes to set forth that he hath faithfully discharged his Duty as a Subject and with entire Confidence in Public Justice he conceives the Act of Parliament was not intended to affect Persons under his description, ... therefore, with all the difference he now submits his Case to the Commander in Chief of His Majesty's Troops in Georgia & East Florida & Prays for Redress. Samuel Hunt Jenkins Savannah Georgia 3d Jany 1781"(Jenkins 1781).

Jenkins' petition was supported by other merchants who stated,

We the Subscribers Merchants in Savannah have at the request of Mr. S.H. Jenkins examined the Wharf & Stores mentioned in the within Memorial, & having fully acquainted Ourselves of the Rents Paid for Houses & Stores in Savannah during this Period within mention'd being for Sixteen Months & a half from the first day of Jany 1779 to the fifteenth day of May 1780 are of Opinion that Two Hundred & Thirty Pounds Sterling per Annum is a just, fair, & equitable Rent for the said Stores and that the Proprietors thereof are legally entitled to the same. In testimony of this our opinion we have set our hands to three writings of this tenor dated in Savannah the thirty first day of Jany 1781.-Thomas Tallemach[?], John Woo[d]s?, John Starr[?] [total rents for all years equaled £316 and 5 pence[?]] (Tallemach et al. 1781).

In yet another barracks claim, the Barracks Master Thomas Moore acknowledges the use of private property and the lack of rents paid. He wrote,

...I took possession of a House, Stores & Yard situated in Johnson's Square in the town of Savanna & the property of Mr. Charles Ogilvie of London, Merchant a good and Loyal Subject of his Majesty which

Premises have continued in my Possession for the term of Two Years & been used as a Barrack Yard & for other purposes in the Barrack Master General's Department, and that no Rent has been paid nor any kind of satisfaction made to the said Proprietor for the use of the same. I further certify that it appears by a lease this day exhibited same that the above mentioned Premises were let in the year 1774 to good and responsible Tennants at the yearly Rent of Seventy Five Pounds Sterling...Thomas Willm Moore, Barracks Master" [January 11, 1781]" (Moore 1781b) .

According to related correspondence, the property owner Charles Ogilvie, "...was a merchant in London when the Rebellion broke out" (Clarke 1781). Ogilvie was also the Deputy Commissioner for the Seizure & Management of Sequestered Estate in the Province of South Carolina & --"(Clarke 1781) Ogilvie wrote to Alured Clarke that, "... the said premises have been much injured during the said two years & are now delivered up in very bad Condition" and ask for the back rent due and "...the Premises to be put in decent repair" (Ogilvie 1781).

It is unclear how many petitions resulted in restitution by the British government. Some payment in money or property may have been made at the expense of patriots. Lord George Germain wrote Governor Wright in January of 1780, that making

...examples of notoriously disloyal persons is proper... you may assent to bill for confiscating rebel estates, out of which compensation may be made to loyalists ... Compensation may also be allowed to persons suffering by measures of King's troops" (Davies 1977:251).

Military and high ranking officials also suffered property damage and economic loss during the siege and Battle of Savannah. Edward Cooper, town adjutant of Savannah petitioned General Clinton in 1780 for redress. He stated, "that while on duty his baggage and furniture in his quarters were destroyed by the bursting of a shell (during the siege) and that his loss amounts to £100 sterling, for which he asks relief." (Historical Manuscripts Commission 1972:87). If Cooper was a militia soldier, it is unlikely that he received compensation, as Lord Germain told Governor Wright that, "Rations, but not pay, may be given to militia" (Davies 1977:251).

Even Governor Wright was not excluded from war damage. His was, ironically, at the hands of his own militia and government. He petitioned General Clinton in the summer of 1780,

In November last I took the liberty to inform Lord George Germain that during the siege it was

thought necessary and for his Majesty's service, that my barn, rice machine, overseer's house, and other buildings on my plantation, adjoining the town common, should be pulled down, and that they were so, and the materials used for making platforms, &c, &c., and I mentioned that I conceived I had reasonable claim on Government to have satisfaction or a recompence for the same... (Historical Manuscripts Commission 1972:133).

Clearly African-Americans, Native Americans, women, and children played a much more substantive role in the Battle of Savannah than most secondary sources indicate. Likewise, they were more impacted by the siege, battle, and the results of both. The primary sources cited above provide a better glimpse of their roles, but is in no way exhaustive. Additional research during this second APBB Savannah Under Fire project also provided more information on the French and American camps and more details regarding the people and events of the battle. An interesting contrast; however, is that more research did not uncover additional details on one particular aspect of this project – the actions of the Haitian reserve corps at the Jewish Cemetery covering retreating American allied forces. The startlingly few details about this important part of the battle remain historically elusive, although this project revealed that the details can be provided archeologically.

Chapter 4. Project Results and Interpretations

Fieldwork Targets, Results, and Interpretations

GPR coverage in 2008 of portions of the Savannah battlefield during the first ABPP Battle of Savannah study has been described previously. That work included 12 survey sample areas with the designations GPR Blocks A through M (excluding I). The results from those samples are fully detailed in the previous project report and, therefore, are not repeated here (Elliott and Elliott 2009). In summary, the most significant discoveries in the previous project, which were enabled by the GPR survey data, were in Rossiter/Centennial Park (just east of Emmett Park) and Madison Square.

During fieldwork for the second NPS ABPP project archeologists examined 12 discrete tracts in search of nine specific battlefield targets. They investigated the following modern geographical locations: Yamacraw Village, Wells Park, Thomas Park, W.W. Law Park (aka Kelly Grayson Park), Calhoun Square, Whitefield Square, Davant Park, Laurel Grove Cemetery, Jewish Cemeteries, Savannah Station Tract, the Morgan and Boykin Tracts, and the Garrison Elementary School Tract (See Figure 1).

Archeologists also did a reconnaissance of Mother Matilda Beasley Park, on Broad Street, at the beginning and end of the project. The park sits several feet below the elevation of the adjacent street and city staff thought it was graded previously to remove toxic soils. A walkover of the park revealed no period artifacts. For these two reasons archeologists decided to focus on other potential areas of the project in lieu of this location. In early spring 2011, a playground was installed in the southern half of the park. A revisit to this area to examine disturbed soils for this installation revealed no period artifacts. In addition, the items found by the landscaping crew were not related to the battle.

The historical components targeted in each of the 12 areas listed above are described below, along with other fieldwork details.

Yamacraw Village

Target: Redoubt Number 14 (on Faden map) (present day Yamacraw Village). Historical maps differ on the fortifications in this area and on the numbers assigned to particular redoubts.

KOCSA Analysis

Redoubts 12, 13, and 14 (as numbered on the Faden map) were the three western-most redoubts encircling the city of Savannah. They were located amid several gun batteries, all north of Spring Hill Redoubt. Figure 34 depicts

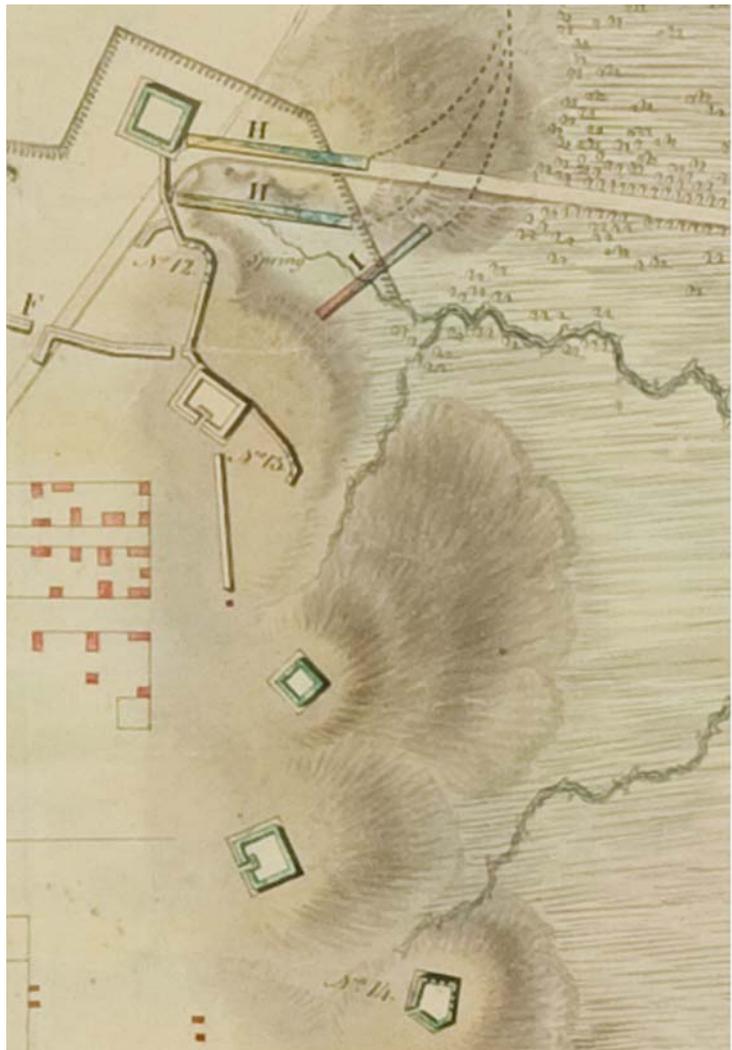


Figure 34. This map enlargement labels a gun battery “No. 12”, just north northwest of Spring Hill Redoubt (at the top of this image). (Wilson 1779).

the environment of the areas around these redoubts (Wilson 1779).

A KOCO analysis suggests that these positions were more easily defended than attacked. Both redoubts sat at the top of bluffs, where they had a somewhat more commanding view in an otherwise relatively flat coastline. The terrain gave the defenders the advantage, as attackers had to run up the bluff while being fired upon. Period maps indicate that the field of fire immediately around and below these redoubts was clear of trees, as one would expect the defenders to have ensured. Beyond the bluffs, however, woods provided some element of cover to the attackers. The trees and shrubs there were likely cypress, gum, and other water-loving varieties and therefore, may have been thinner woods than a mixed hardwood and pine forest. The tree varieties there were the result of a natural obstacle – a swamp. The Musgrove Creek swamp lay along the western side of both redoubts, and encircled portions of their southwestern and southern sides. This natural obstacle was a boon to the British defenses.

An attack on redoubts 13 and 14 meant that the enemy would have to wade through a boggy swamp, while trying to maintain their column order and avoid losing their shoes and equipment in the mud – all the while being fired on by small arms and by cannons from the redoubts, a nearby gun battery, and on ships in the Savannah River. No other avenues of approach from outside the city, except through the swamp, existed for American and French troops. It is likely that these harsh conditions were responsible for the patriots selecting other more hospitable areas to attempt to break through the British perimeter. Redoubts 12, 13, and 14 played a significant role in the 1779 Battle of Savannah, however, in providing fire support for the Spring Hill Redoubt, which was the main target of attack.

Archeological Results and Interpretation

Yamacraw Village is a government housing project located on the west

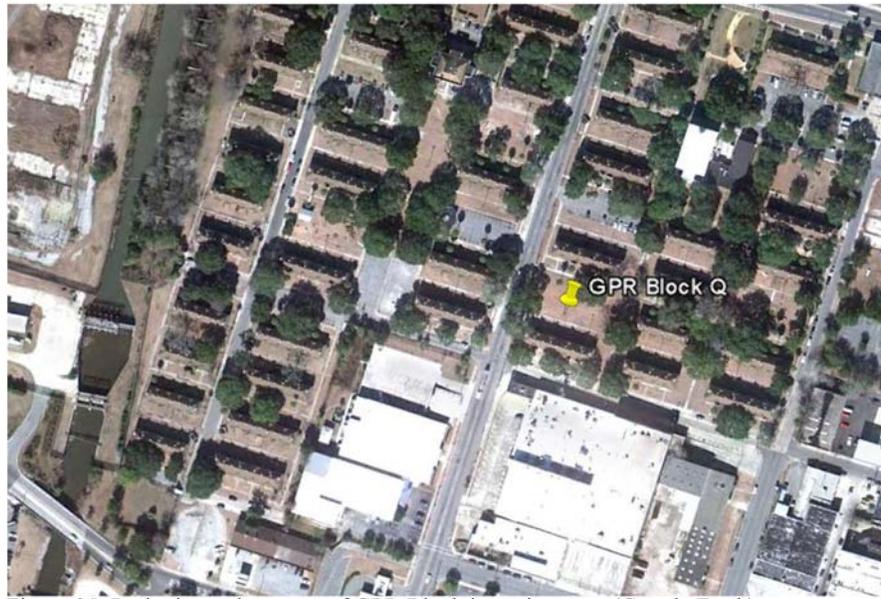


Figure 35. Push pin marks center of GPR Block in project area (Google Earth).

side of historic downtown Savannah. It is bounded by West Bay Street on the north, Ann Street on the east, Zubley Street on the south, and a canal on the west (Figure 35). Yamacraw Village is a multi-block housing project administered by the Housing Authority of Savannah (HAS). The Authority was organized in 1938 in accordance with the Georgia State Housing Authority law of 1937, as established by the U.S. Housing Act of the same year. The Executive Director of the HAS, Earline Woods Davis, attended our first administrative project meeting and had been heavily involved in discussions with the Field Director about investigations within Yamacraw Village. HAS posted an announcement on its web site (Figure 36).



The Housing Authority of Savannah and the Revolutionary War

The Housing Authority of Savannah is working with the Coastal Heritage Society in an archaeological search to document the Revolutionary War battle which took place in Savannah, Georgia on **October 9, 1779**.

Residents of the second oldest neighborhood in public housing, **Yamacraw Village**, live in the heart of an **American Revolution** battlefield. Non-invasive Ground Penetrating radar will be conducted in the area of Zubly and Fahm streets in search of evidence of the battle. The work will not impact residents or disturb the ground.

The Housing Authority of Savannah is very excited about the prospect that artifacts and evidence of another fort from the Battle of Savannah might be found. We will keep you updated as the work continues.

Figure 36. The HAS advertised the project on its web site.

The GPR project approved by Ms. Davis revealed an anomaly of interest. Follow-up emails between the Field Director and Ms. Davis worked out details for a few small 1 by 2 m test unit excavations on the anomaly to discover if it was associated with the Revolutionary War battle. In addition, archeologists planned a public outreach day at Yamacraw Village for residents there, focusing especially on families and school children. The outreach was slated to include tours and explanations of the test unit excavations and artifacts as archeologists worked, hand-outs, table-top hands-on activities, and the use of The Society for Georgia Archaeology's *ArcheoBus*. A flyer was designed for distribution (Figure 37).

Unfortunately, a few days before excavations were to begin, the HAS relayed issues of property ownership by the Federal Government and a HUD requirement that any recovered artifacts be kept by HAS, which would mean scattered in various rooms in HAS offices or buildings throughout Savannah, rather than the approved curatorial facility required by the NPS ABPP grant. (Previous to this communication, archeologists had been under the impression that the property was city owned, but administered by the HAS.) While it is possible that this issue could have been addressed, given a great deal of attention, bureaucracy, and paperwork, the timing of just several days between being notified of the problem and when fieldwork was to take place was insufficient to begin going through the federal channels. No testing of the GPR anomaly, therefore, was conducted. Details of the fieldwork that was conducted are outlined below.

The GIS overlays suggested this area as the possible location of Redoubt Number 14 (Figure 38). This Wilson map dates to 1779. The map is oriented with north to the bottom of the page. This redoubt was the one located nearest the Savannah River (off the bottom of the page) on the city's western defenses. Redoubt 14 was positioned north of Spring Hill Redoubt (Number 11-off the top of the page), with two other redoubts and a horseshoe battery between them. Figure 39 is a copy of part of the Faden (1784) map made in 1784. It is oriented in the same direction as the Wilson map. The variation between the two maps in terms of the number and types of redoubts and batteries, and in how they are numbered. For example, the Wilson map labels the battery between Spring Hill and the adjacent redoubt "No. 12", whereas the Faden map labels the first redoubt (not battery) northwest of Spring Hill as Redoubt No. 12. In addition, the Wilson map shows three redoubts between Spring Hill and Redoubt No. 14 (two unnumbered and No. 13), whereas Faden depicts only two (No. 12 and 13). In spite of these variations, this area offered potential for containing at least one of these four redoubts, given the margin of error presented by the GIS

overlays, the small number of GIS control points, and the myriad versions of historical maps. Research suggested that either Redoubts 13 or 14 had the greatest likelihood to be located here.

During the initial visit to Yamacraw on January 27, 2010, archeologists came across an extensive backhoe excavation area in the middle of West Boundary Street. Large, deep trenches were being dug to lay 6'-7' diameter (or greater) concrete pipe (Figure 40). Archeologists took the opportunity to trowel the wall of the hole and found numerous artifacts in the profile. What was most startling was the presence of mid-19th century ceramic sherds at a depth of approximately 2 meters below the current ground surface (Figure 41). The area of the construction trench lies one block west northwest of the presumed location of Redoubt 14. The construction hole is less than a half block from the edge of what was a swamp during the 1779 battle. It is expected that the ground surface would have originally sloped down to the swamp edge.

Later during our field work, Robert Bruce, the Facilities Inspector with the Housing Authority of Savannah (HAS) said he thought the new pipes were being laid in the footprint of the old culvert (Personal Communication to Rita Elliott, February 3, 2010). The trench profile, however, revealed stratified layers of soil deposition for a depth of at least six feet. The soils in the profile of the construction trench, therefore, undoubtedly represent fill deposited to raise the ground surface to suitable elevations for structures as the city expanded westward. (Incidentally, the soil did not appear to be the fill from a previous pipe trench.) One would expect the thickness of the fill, therefore, to decrease as one heads east away from the swamp and towards the original town. To test this theory and find areas where Revolutionary deposits might be less deeply buried, archeologists ran a series of GPR transects east to west, from the Redoubt 14 area to West Boundary Street. These GPR transects were in addition to the rectangular survey area sampled in search of Redoubt 14. Determining the location, depth, and extent of such fill zones would be important in knowing what methods of investigation could be used in search of Redoubt 14 (i.e. shovel or backhoe, metal detector), and how deep to look with the GPR antennae and with metal detectors.

GPR Survey

Archeologists returned to Yamacraw Village on February 3 and conducted a GPR survey of the greenspace area at the northeastern corner of the Fahm and Zubly streets intersection (See pushpin location in Figure 5). GPR Block Q was located in the greenspace between two apartment buildings (Figure 42). In addition, archeologists ran two GPR lines, one (GPR R-1) was along the sidewalk flanking the northern side of that greenspace, heading west to West



You Are Invited!

What: Public Archaeology Day at Yamacraw Village

When: Thursday, April 29, 2010 (10 a.m.-4:30 p.m.)

Where: Intersection of Fahm and Zubley streets
(Grounds at NE corner)

Special Sessions: 10 a.m., 2 p.m., and 4 p.m.

**Come learn about the history beneath
Yamacraw Village!**

Try out the hands-on activities!

Talk with archaeologists!

Go inside the ArchaeoBus!

Sponsored by The Coastal Heritage Society, with assistance from The Society for Georgia Archaeology, the Housing Authority of Savannah, and the National Park Service.



This material is based upon work assisted by a grant from the Department of the Interior, National Park Service. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Department of the Interior.

Figure 37. The flyer for the planned public outreach event, along with the ABPP disclaimer.

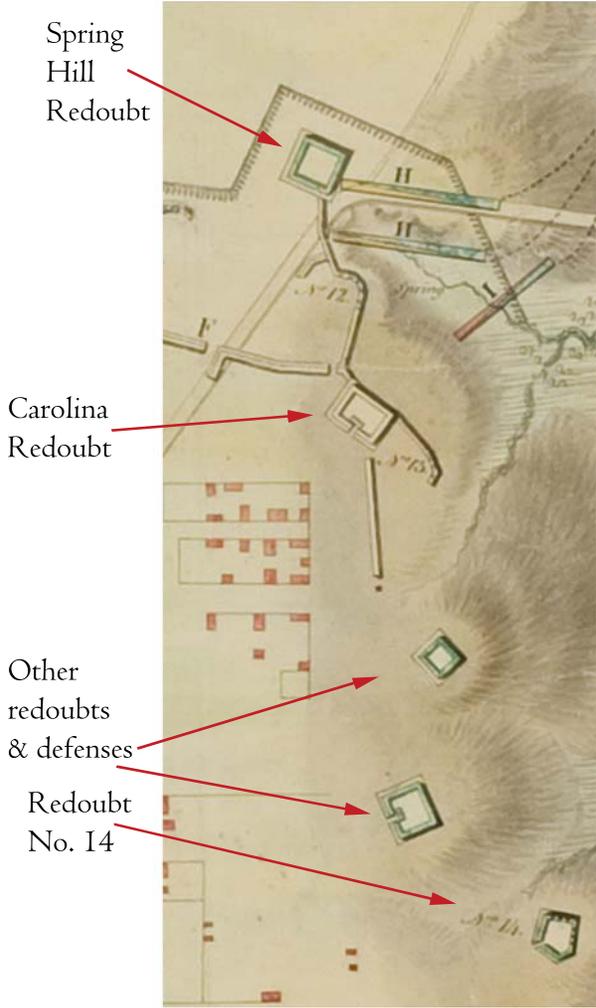


Figure 38. Wilson map (1779) puts Redoubt No. 14



Figure 39. The Faden 1784 map in a GIS overlay with a modern Savannah map. Note the contrast to the Wilson map.



Figure 40. Construction workers dig a massive ditch to accommodate these pipes.



Figure 41. Standing in the trench for the new pipes. Note the stratigraphy, with artifacts the entire depth.

Boundary Street. The other GPR line (GPR 5) ran along the sidewalk from the west side of Papy Street west to West Boundary Street. A second GPR 5 line was run back from west to east. The GPR 5 line is located on the first sidewalk north of the GPR R-1 sidewalk, and on the north side of the apartment building from GPR R-1.

GPR Block Q

In GPR Block Q archeologists sought to locate buried evidence of the British defenses on the west side of Savannah. GIS study of historical maps suggested that one of the British redoubts was in the approximate vicinity of Block Q. Redoubts were connected to each other by ditches and/or an abatis line. Archeologists surveyed Block Q to try to locate the redoubt and/or associated ditches.

The Block Q sample was a rectangular area located east of Fahm Street and situated in a common area between two rows of public housing in the Yamacraw Village Housing Project. This sample consisted of 2,487 m of radar data from 104 radargrams that were collected within an area measuring 51.5 m east-west by a maximum of 24.3 m north-south. Most of this area consisted of grass or denuded areas. A minor segment of concrete sidewalk was included along the northern margin of the block.

Figure 43 shows a sequence of aerial GPR views of Block Q at increasing depths. Figure 44 shows an overlay plan map of Block Q.

The Block Q sample contains 11 prominent linear radar anomalies. These are most likely utility lines and utility trenches from 19th and 20th century Savannah. These anomalies are well distributed across Block Q with various orientations. Eight of these conform to the town grid while the other three are nearly diagonal to the grid. These radar reflections obscure any older buried features that may be associated with the 18th century. The GPR sample from Block Q demonstrates that this area is heavily riddled with utility trenches. In Figure 45 the network of utility ditches is outlined in green.

Figure 46 shows a plan view of Block Q at 52-56 ns time depth. In this view two large anomalies (A and B) are evident. The most obvious is a large area (A) in the north-eastern quadrant of the sample block. It is intruded by five or



Figure 42. Collecting GPR data in the greenspace between Yamacraw Village apartments.

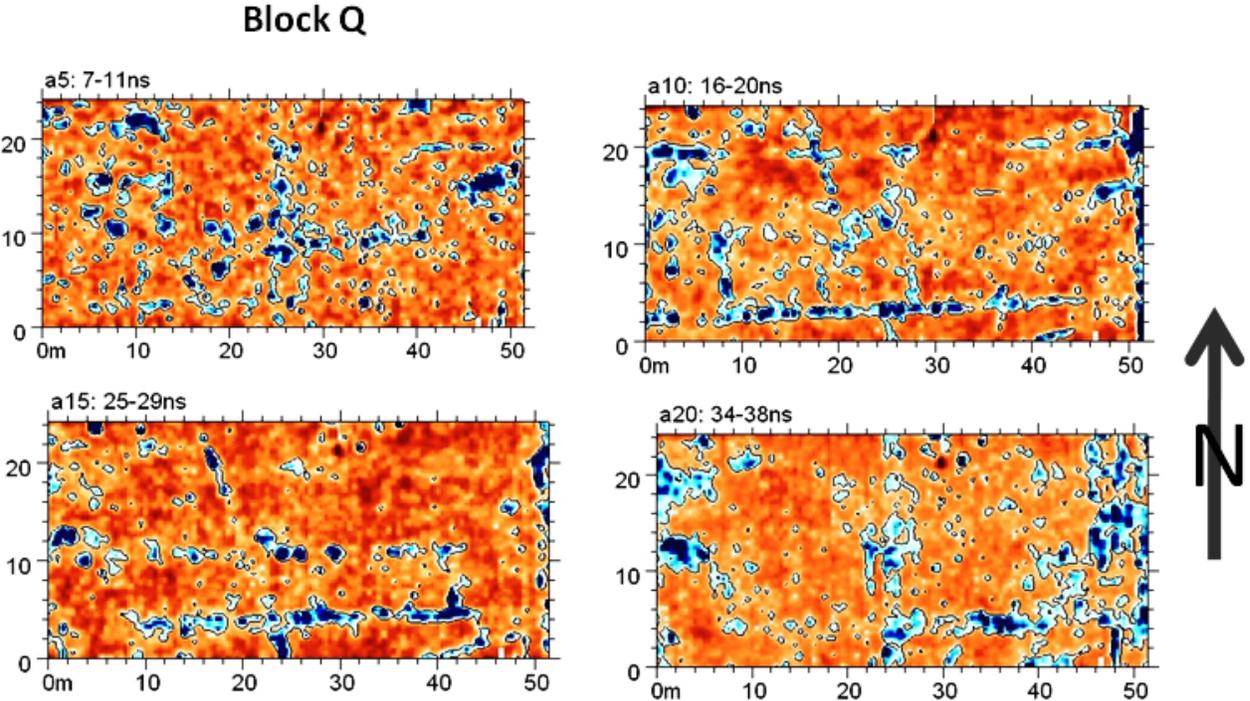


Figure 43. Serial GPR plan views of Block Q at increasing depths.

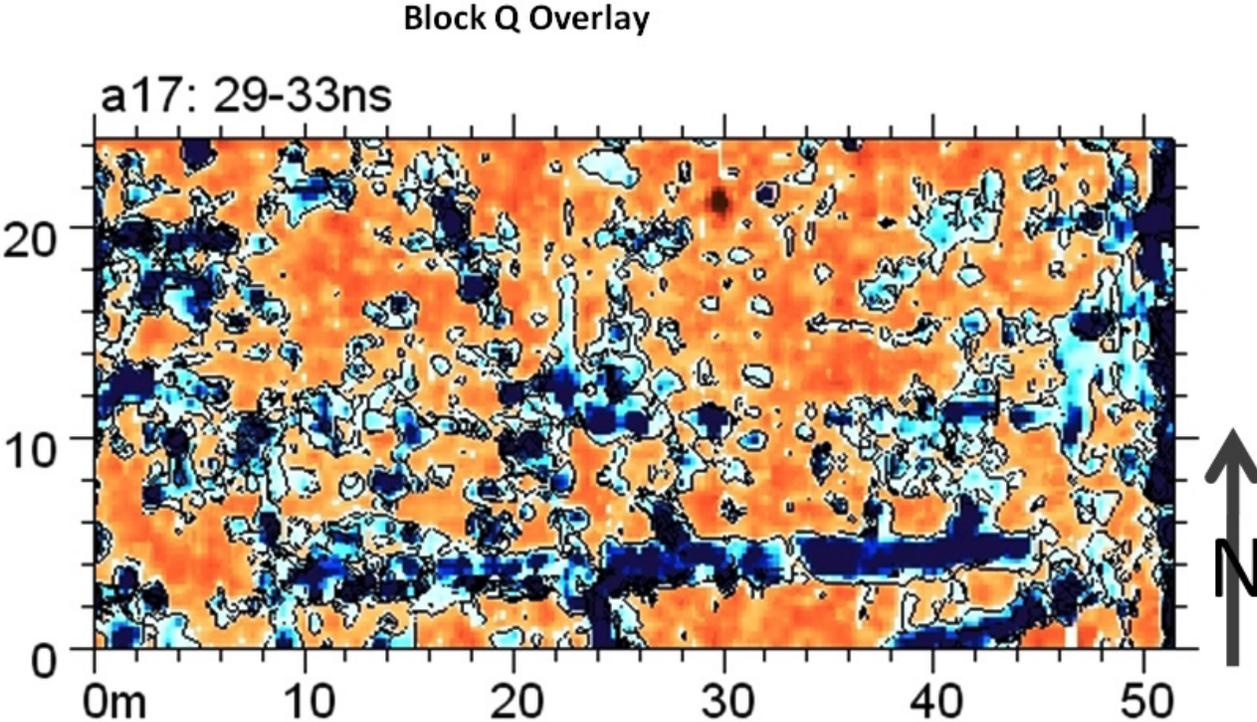


Figure 44. Overlay plan view of Block Q.

Block Q, Utilities Shown in Green

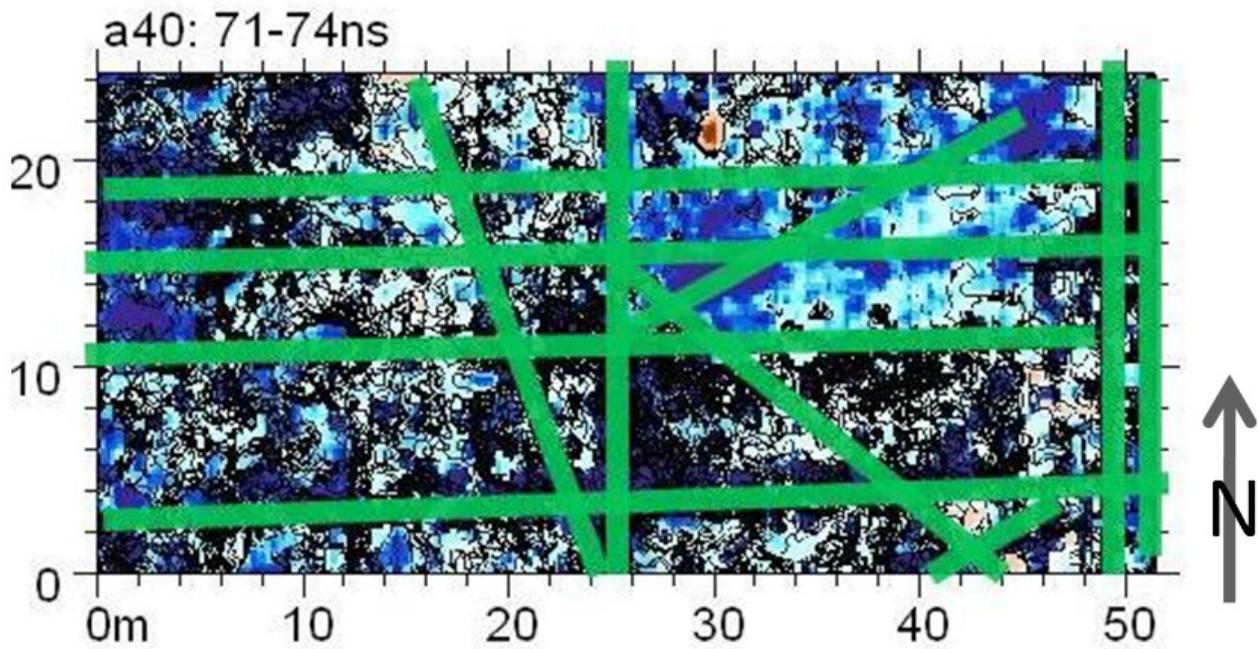


Figure 45. Utility lines are displayed in green.

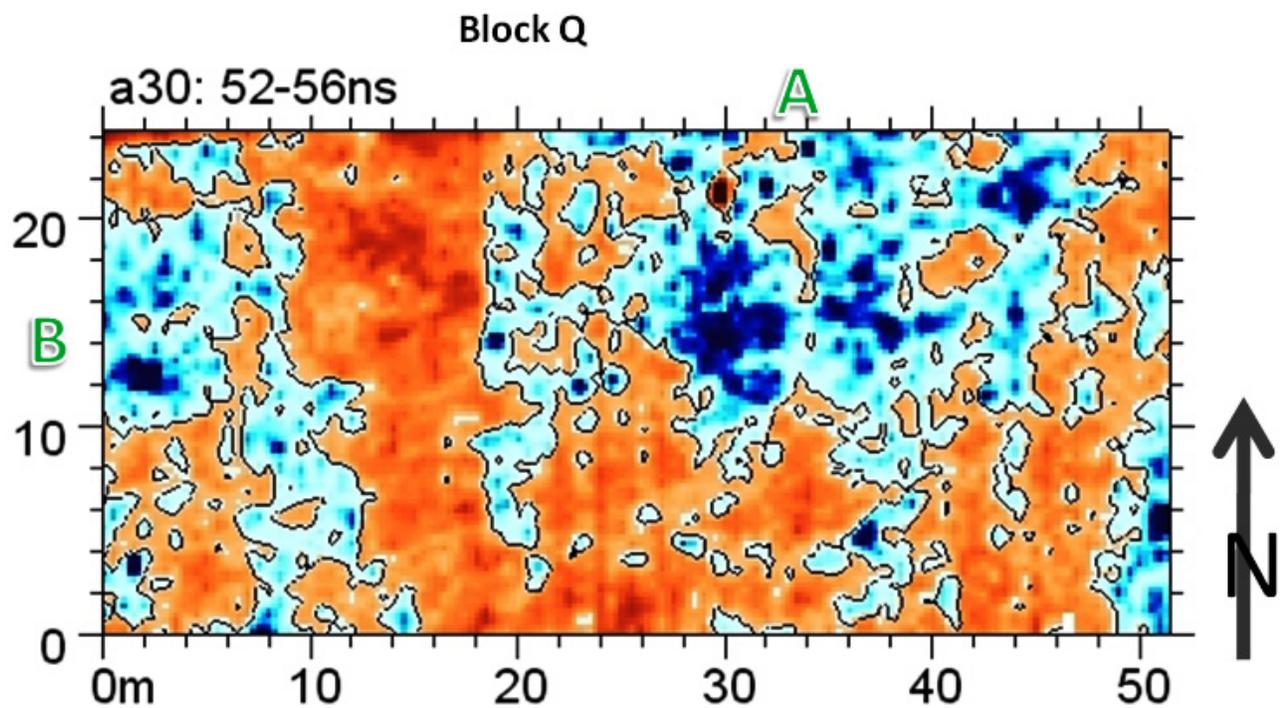


Figure 46. Anomalies A and B (in blue) in Block Q.

more utility ditches. A smaller area (B) is located along the west-central edge of the block. That area is intruded by two to three utility ditches. The age and function of these deeper anomalies are unclear. They may result from differential pooling of groundwater. Such pooling may result from water collecting within deep features, such as cellars, or it may have a natural, geological cause. Although the archeological potential of Block Q was not explored by any excavation, the GPR survey results indicate that no formal fortification structures are preserved in this vicinity. The search for evidence of a British redoubt at this specific spot proved negative, as reflected in the GPR data and lack of any potentially relevant anomalies.

GPR Blocks R and S

These GPR blocks examined the buried topographic profile on the western side of Savannah. The selection of these areas for survey was inspired by the survey team's observation of an open utility excavation trench, mentioned above. That large open pit revealed the stratigraphic character at one location, just above the Musgrove Creek floodplain. At that location the fill deposits were quite thick and artifacts from the mid-19th century were observed more than 2 meters below the current ground surface. If this situation were indicative of the general area, then any 18th century deposits could be buried 3 m or more below ground. This revelation is quite significant for it demonstrates that the Revolutionary War battlefield landscape in this vicinity lies well below the zone typically examined by traditional archeological survey and, fortunately, well

below the zone of other cultural ground disturbances. The GPR cross sections afforded by Blocks R and S were an attempt to follow the stratigraphic trend towards the east and upslope. Figure 47 shows the location of Block Q (the aqua rectangle), Block R (the magenta line north of Block Q and running east-west) and Block S (the longest magenta line north of the other blocks).

The Block R sample was a narrow transect extending from the northeast corner of GPR Block Q, north of Fahm Street to West Boundary Street. It was also within the Yamacraw Village Housing Project. This sample consisted of a 220 m long east to west cross section and a return west to east radargram. Together these two radargrams form a polygon measuring 220 m by 1 m north-south. This sample followed along the southern side of a sidewalk on most of its route. The purpose of this sample was to map a cross-section of the buried landscape on this portion of the battlefield.

The GPR Block S sample was a narrow transect extending from Papy Street to West Boundary Street. It was also within the Yamacraw Village Housing Project. This sample consisted of a 338 m long east to west cross section that was collected in two sections, with a returning west to east radargram collected as a single line. Together these three radargrams form a polygon measuring 338 m by 1 m north-south. This sample was located north of GPR Block R and it followed along the southern side of a sidewalk on most of its route. The purpose of this sample was to map



Figure 47. Linear GPR Blocks R and S, and rectangular GPR Block Q.

another cross-section of the buried landscape on this portion of the battlefield. Block S examined a longer cross section than Block R.

GPR Blocks Q, R and S were placed in hopes of identifying traces of British defenses on the area northwest of the Springhill Redoubt. Contemporary battlefield maps indicate a series of redoubts and defensive lines in this general vicinity. The survey was significantly hampered, however, by the limited availability of suitable real estate tracts. One large area of greenspace was located within the Yamacraw Village Housing Project and permission was secured from the Housing Authority of Savannah to conduct research in this area. The GPR survey was completed and the field team intended to follow up with survey (and possibly test unit) excavations. Before this was done, however, the project director learned that this property was actually owned by the United States Department of Housing and Urban Development and not by the Housing Authority of Savannah. Therefore, additional permissions (and possibly ARPA permits) were required for any excavation. Consequently, the project team abandoned plans for ground-truthing excavations in this vicinity.

The GPR samples from Blocks R and S present a useful cross-section of this landform. The western ends of these samples intersected the deepest deposition (near the open utility pipe trench). The great depth of relatively recent sediment and artifacts, as revealed by the open utility trench noted above, surprised archeologists. This indicates that the Revolutionary War era deposits, at least in this specific vicinity shadowing the Musgrove Creek drainage, are buried 3 meters or more below the current ground surface. At that great depth the archeological resources may be well preserved and safe from most urban development, except piling construction, underground storage tanks, basements, and similar deep impacts. This great depth also serves to inhibit their extensive exploration by archeologists since an excavation to this depth would be a large and expensive undertaking.

The stratigraphic record in this utility ditch begs the question, "How did these deposits accumulate?" This area is on a terrace of Musgrove Creek, so some of the deposition may be alluvial. It is also an area at the lower slope of a natural plateau, so some colluvial deposition from erosion also may be represented. The upper 1-1.5 meters of fill may be associated with the original excavation of the Yamacraw Village project, which occurred in the 1930s.

Wells Park

Target: Major General Benjamin Lincoln's Headquarters and/or part of the American Camps (central portion). (Present day Wells Park)

KOCSA Analysis

Lincoln made critical command decisions from his headquarters, including determining the plan of battle that he and D'Estaing would carry out on October 9. The camp locations are important for the role they played in the initiation of the battle as a command and control post, as well as from a historical, archeological, and material culture study. American and French soldiers marched from their respective camps to the battlefield. American troops waited until 4 a.m. on October 9 for the overdue arrival of French soldiers marching from their camps to the west. When the French arrived at the American Camps, they joined American troops to march to the appointed place of battle.

Cartographic sources provided some KOCSA evidence. Much of the Pierre Ozanne map is skewed, including the city itself and the location and angles of the roads outside the city. Ozanne was trained in naval engineering and technical drawing. It is likely, therefore that the errors are not from poor map making skills, but from the inability of the cartographer to safely approach certain areas between the camps and the city defenses. This resulted in some conjecture in the map. The areas of allied camps, and the relation of the French and American camps to each other, however, is likely more accurate, as it would have reflected a first-person study by Ozanne.

The 1779 Ozanne map shows the line of American Camps north of Lincoln's headquarters and north of the American Camps was a smaller line (in red) occupied by Pulaski's troops (Figure 48). The area is bare of trees, most likely as a result of intentional deforestation by American troops. Cutting down trees and clearing the underbrush would enable soldiers to have wood needed for the establishment of camp and firewood for cooking and warmth. In addition, the cleared area would have provided room for the tents and would enable soldiers a field of observation to guard against the approach of British soldiers, snipers, or spies. The larger area around the camp clearing retained its wooded character. This undoubtedly provided the American and French, in their respective camps, cover and concealment from the British. This would have been especially important as the troops began what they hoped would be a surprise march to the battlefield.



Figure 48. Portion of the line of American Camps and location of General Benjamin Lincoln's headquarters (Ozanne 1779).

The American Camp line extended to what is labeled St. Augustine Road, which is likely Bull Street. (The GIS overlay, however, has the line of camps ending at what is now Drayton Street.) The camps were near the intersection



Figure 49. GIS overlay of Ozanne and modern Savannah maps. Wells Park is the green square above the rectangular box marked "Quartier".

of this major road, a smaller unnamed road that veers off into two smaller paths immediately south of the intersection. These two smaller paths wrap around what appears to be a large spring. The spring probably played a significant role in determining the location of the camps as a source of fresh water would have been critical to the survival of the large number of allied forces. Numerous other small roads traversed the area north and east of the American Camps. The map indicates that the small road running into the north side of camp served as the avenue of approach for the American and French soldiers marching to the battle.

The 1779 Ozanne map depicts Major General Lincoln's headquarters, "Quartier General du General Lincoln". The GIS overlay places his headquarters adjacent to the southern edge of modern Wells Park (Figure 49). Also, the GIS overlays indicates that the long line of American camps "Camp des Américains" illustrated on the Ozanne map, lay just to the north of the headquarters (less than two modern city blocks north). Given the margin of error of the GIS overlays, particularly on points this far south of the control points, we felt optimistic that portions of the head-

quarters might lie within the park. Likewise, a margin of error in the opposite direction might result in the camps falling within the park. Wells Park offered the only significant greenspace in this area of multiple houses sitting on very small, narrow lots. Archeologists felt, therefore, that this would be the best available location to target Major General Benjamin Lincoln's headquarters, and/or possibly a portion of the American camps.

Archeological Results and Interpretation

The area is located far south, southwest of the original boundaries of 1779 Savannah. The 20th century park is bounded by West 38th Street on the north, Montgomery Street on the east, West 39th Street on the south, and Martin Luther King Jr. Blvd. (formerly West Broad Street) on the west (Figure 1). Today, Wells Park is one of many neighborhood parks in the city and contains a basketball court, benches, playground equipment, lawn, and a picnic shelter. Neighborhood residents are regular visitors to the park (Figure 50).

Shovel Testing

Archeologists conducted preliminary investigations at Wells Park on February 17, 2010. During this time they excavated nine shovel tests (ST 52- 54 and 57-62). Shovel tests numbers 55 and 56 were not used. Shovel tests 52, 53, and 61 contained no historic artifacts. Shovel tests were laid out at 10 meter intervals, along two arbitrary lines 10 meters apart. The lines were established in the greenspace near the center of the park, between the basketball court and an area of picnic tables, shelters, and benches (Figure 51, 52). Benches, walkways, shrubs, trees, and flowerbeds prohibited the excavation of shovel tests in other areas of the park. Wells Park was amazingly “clean” of artifacts-- even 20th century items were relatively

few. Modern articles that were present tended to be in the upper 40 cm of soil. Modern objects such as plastic, pop-tops, bottle glass, and plastic were noted but not collected. Archeologists excavated shovel tests to a depth of one meter or more in most cases, in an attempt to locate any historic strata that might be deeply buried (Figure 53). Table 4 details shovel test soils and artifacts. No colonial period or Revolutionary War artifacts were recovered in Wells Park; therefore, archeologists conducted no further investigations there.

No GPR survey was conducted at the Wells Park location, since the target contained no redoubts, military trenches or other similar deep and extensive features that would have been anomalies fairly recognizable as military-related.



Figure 50. Locals examine the sign board and watch.



Figure 52. Greenspace between the basketball court and picnic tables.

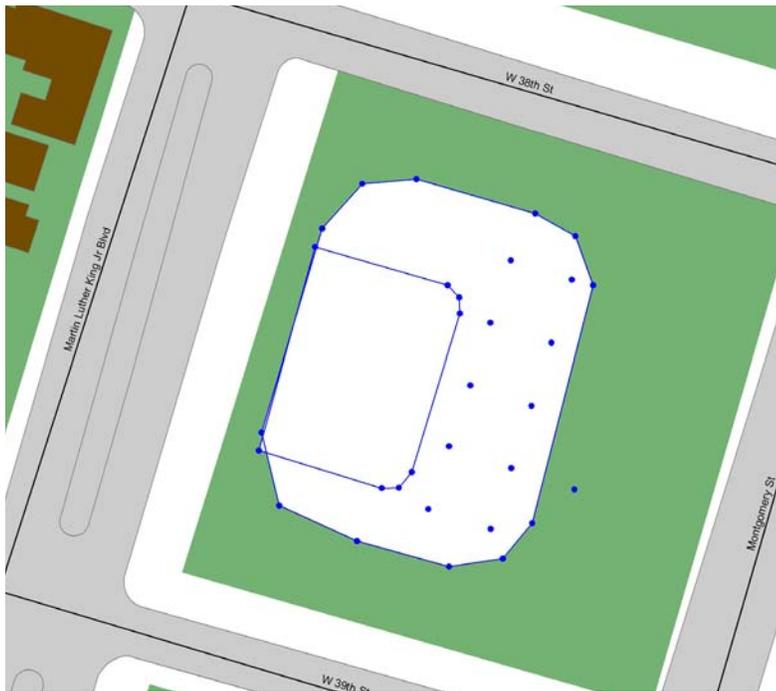


Figure 51. The blue outline depicts the basketball court and singular blue dots are shovel test.



Figure 53. Long-handled shovel extending out of the shovel test.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
Wells Park ST 54	Level 1 0-14 cmbs 10YR3/2 Very Dark Brown silty sand	0	N/A	Modern debris; not recovered			
	Level 2 14-18 cmbs 10YR2/1 Black compact sand		0N/A	Sterile			
ST 54	Level 3 18-32 cmbs 10YR5/3 Brown sand Lot #132	Levels 3-4 (18-48 cmbs) Artifacts. Lot #132					
		8	AC0199	Brick, unspecified			
	1	AG0301	Window glass, sized	1804			
	Level 4 32-48 cmbs 10YR4/3 Brown sand Lot #132	1	AR0104	Concrete			
	9	AR0108	Mortar				
	1	KF0104	Shell, oyster				
	1	KG0301	Bottle, colorless bottle glass	1870			
2	ZR0302	Slate, unidentified					
ST 57	Level 1 0-50 cmbs 10YR4/2 Dark Grayish Brown sand Lot #130	1	KG0300	Bottle, light aqua bottle glass	1800		1920
		1	KG0306	Bottle, amber bottle glass			
	Level 2 50-105 cmbs 10YR5/3 Brown sand	0	N/A	Sterile			
	Level 3 105-115 cmbs 10YR7/2 Light Gray sand	0	N/A	Sterile			
ST 58	Level 1 0-45 cmbs 10YR4/2 Dark Grayish Brown sand Lot #114	1	AG0301	Window glass, sized	1804		
		1	KG0301	Bottle, colorless bottle glass	1870		
		1	MM9901	Iron fragment, unidentified			
	Level 2 45-95 cmbs 10YR6/2 sand	0	N/A	Sterile			
ST 59	Level 1 0-35 cmbs 10YR4/2 Dark Grayish Brown sand Lot # 125	1	AC0199	Brick, unspecified			
		1	KC0105	Porcelain, plain			
	Level 2 35-70 cmbs 10YR5/2 Grayish Brown sand		0N/A	Sterile			

Table 4. Wells Park shovel tests (continued on next page).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
ST 60	Level 1 0-10 cmbs 10YR3/1 Very Dark Gray sandy loam Lot #144	Levels 1-3 (0-40 cmbs) Artifacts. Lot #144					
	Level 2 10-15 cmbs 10YR7/1 Light Gray sand. Lot #144	0	N/A	Modern debris not recovered, except:			
	Level 3 15-40 cmbs 10YR4/2 Dark Grayish Brown sand Lot #144	1	KG0306	Bottle, amber bottle glass			
	Level 4 40-90 cmbs 10YR6/2 Light Brownish Gray sand	0	N/A	Sterile			
	Level 5 90-110 cmbs 10YR7/2 Light Gray sand	0	N/A	Sterile			
ST 62	Level 1 0-23 cmbs 10YR3/1 Very Dark Gray sandy loam Lot #120	Levels 1-2 (0-35 cmbs) Artifacts. Lot #120					
	Level 2 23-35 cmbs 10YR4/4 Dark Yellowish Brown sand Lot #120	1	AC0121	Brick, machine made			
		1	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0303	Bottle, light green bottle glass			
		1	KG0306	Bottle, amber bottle glass			
	Level 3 35-53 cmbs 10YR4/3 Brown sandy loam	0	N/A	Sterile			
	Level 4 53-70 cmbs 10YR5/6 Yellowish Brown fine sand mottled w/7.5YR5/8 Strong Brown clayey sand	0	N/A	Sterile			

Table 4. Wells Park shovel tests (continued from previous page).

GPR in a camp area would be expected to reveal trash pits, posts and similar smaller features and would be useful on a known camp site. It would be less useful in a survey situation in an urban area such as Wells Park, where small anomalies unrelated to a military camp would be expected and where no colonial or Revolutionary War period artifacts were located in shovel tests. Such anomalies would have to be ground-truthed to know if they were related to the Battle of Savannah or to other activities occurring in the ensuing 230 years.

Thomas Park (aka Thomas Square)

Target: American Camps (East End)
(Thomas Park)

KOCOA Analysis

The KOCOA analysis for the area that is now Thomas Park is the same as the analysis for Wells Park. Both areas contained the line of American Camps in similar non-swampy terrain and woods. Both areas were located near main and secondary roads, although the eastern end of the camps, near what is now Thomas Park, lay immediately adjacent to the “Road to Augusta” on the Ozanne map. Also, this end of the camps was much closer to the large spring, which separated the American Camp line from the French Camp line. Both the French and American camps were directly related to the Battle of Savannah, since the joint Franco-American forces marched from their respective camps to the battle.

Archeological Results and Interpretation

Thomas Park is bounded on the north by East 35th Street, on the east by Drayton Street, on the south by the Bull Street Library (formerly East 36th Street), and on the west by Bull Street (Figure 1). The park is located in the city today, but in an area that was far south of Savannah’s 1779 boundary. GIS overlays suggest that a portion of the long line of American Camps (the gray shadowy rectangle on the map) was established in the area that is now the park (the blank green rectangle south of East 35th Street) (Figure 54). Thomas Park is flanked by Bull Street, which was an early route that existed at the time of the 1779 siege and battle. The exact location of this particular segment of the road on the 18th century landscape; however, is unclear.



Figure 54. GIS overlay of Ozanne (1779) map and modern Savannah map. Note the gray bar representing American camps ends in the greenspace of Thomas Park.

Archeological investigations began at Thomas Park on February 18, 2010. Archeologists excavated shovel tests throughout the park. Due to the number and location of hardscapes (a fountain, sidewalks, benches, street lights, and underground utilities) and trees, shrubs, and flowerbeds, shovel tests could not be placed on any meaningful grid (Figure 55). Archeologists, therefore, excavated shovel tests at opportune locations throughout the park, including greenspaces and areas between trees and landscaped beds. Shovel tests are depicted as solitary blue dots (not on lines) in Figure 56. A total of 11 shovel tests (ST 63-73, inclusive) was excavated and the stratigraphy and artifacts of each are detailed in Table 5. All shovel tests were positive. Many had modern debris in the upper levels. Shovel tests 69 and 70 both contained tabby mortar. ST 70 contained a concentration of colonial period artifacts. This included creamware, redware, Rhenish stoneware, and a kaolin pipe fragment. ST 70 had a MCD of 1754.7, although from an extremely small sample size of four sherds.

Shovel Testing

Shovel testing suggests that the central and western parts of Thomas Park were severely disturbed in modern times and display poor potential for intact 18th century surfaces. Shovel tests on the eastern part; however, yielded some 18th century ceramics, corroded square nails, tabby, and handmade brick. These few artifacts were tantalizing clues, since this location was beyond the extent of the town of Savannah in the 18th and early 19th centuries. They suggested the former presence of an early historic occupation.



Figure 55. Park obstacles are visible in the background.

It was hoped that this represented part of the American military camp.

GPR Survey

This area, therefore, was explored by GPR Block BB. This radar block was located on the southeastern portion of the park, northeast of the Bull Street Live Oak Library.

GPR Block BB

This GPR block was a sample of Thomas Park consisting of 757.5 m of radar data from 41 radargrams that were collected within an area measuring 21 m by 18 m. This block is located in a wooded section of the park where the surface is covered with a thick layer of wood bark mulch. Sections of concrete and brick pavement are also contained within this block. GPR plan maps of Block BB reveal extensive radar anomalies (Figure 57). An overlay

map of Block BB is shown in Figure 58. The purpose of this sample was to search for evidence of the American camp on the eve of the battle. Block BB provided no indisputable evidence for any substantial historic structures or linear ditch work in this area. A large utility trench was located on the western margin of the GPR grid. That utility was located in one shovel test and it also appears on city utility maps (approximately located on that map). Overlay analysis of the GPR data in Block BB revealed some possible patterning in the northwestern quadrant of the sample area. Archeologists investigated the area southeast of this cluster of radar anomalies with two 2 by 1 m test units. The highlighted area may represent a historic structure area but additional study of this location is needed beyond these two small units to determine its function.

Late 18th century artifacts and a GPR anomaly in this area far-removed from the original colonial city of Savannah suggested one of two things; either we were uncovering items associated with an outlying plantation, or we were finding evidence of the American camps. The GIS map overlays supported the later hypothesis. In an effort to confirm or reject this hypothesis, archeologists excavated two 2 by 1 m test units (T.U. 2 and 3) in the southeastern quadrant of Thomas Park (Figure 59). The long axis of each test unit was aligned north-south. The northern wall of Test Unit 2 abutted the southern wall of Test Unit 3. After archeologists excavated Level 3 of T.U. 2, they started the excavation of T.U. 3, working on both units

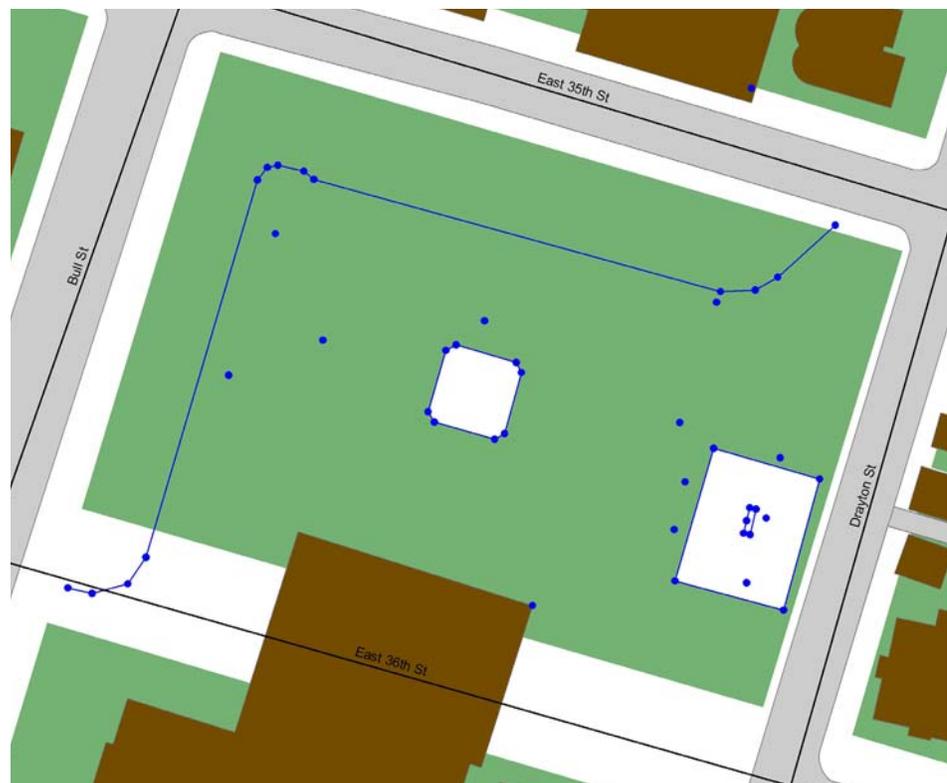


Figure 56. Singular blue dots denote shovel tests.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
Thomas Park							
ST 63	Level 1 0-12 cmbs 2.5YR2.5/1 Black mottled w/10YR6/1 Gray sandy loam	0	N/A	Sterile			
	Level 2 12-29 cmbs Mottled 10YR3/1 Very Dark Gray sandy loam and 10YR4/6 Dark Yellowish Brown loamy sand Lot #113	Levels 2-4 (15-40 cmbs) Artifacts. Lot #113					
	Level 3 29-33 cmbs 10YR5/1 Gray sand Lot #113	1	AR0108	Mortar			
	Level 4 33-49 cmbs 10YR3/1 Very Dark Gray sand Lot #113	1	KC0105	Porcelain, plain			
		1	KF0104	Shell, oyster			
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
	Level 5 49-69 cmbs 10YR3/2 Very Dark Grayish Brown sand	0	N/A	Sterile			
	Level 6 69-82 cmbs 10YR4/2 Dark Grayish Brown sand	0	N/A	Sterile			
ST 64	Level 1 0-10 cmbs 10YR6/1 Gray sand	0	N/A	Sterile			
	Level 2 10-25 cmbs 10YR5/1 Gray sand	0	N/A	Sterile			
	Level 3 25-40 cmbs 10YR4/1 Dark Gray sand Lot #115	4	AC0199	Brick, unspecified			
		1	KG0301	Bottle, colorless bottle glass	1870		
ST 65	Level 1 0-12 cmbs 10YR2/2 Very Dark Brown loam	0	N/A	Sterile			
	Level 2 12-15 cmbs 10YR8/2 Very Pale Brown sand	0	N/A	Sterile			
	Level 3 15-24 cmbs 10YR4/2 Dark Grayish Brown loamy sand Lot #103	1	AC0199	Brick, unspecified			
	Level 4 24-34 cmbs 10YR6/3 Pale Brown silty sand	0	N/A	Sterile			
	Level 5 34-86 cmbs 10YR2/2 Very Dark Brown loamy sand Lot #104	1	KG0300	Bottle, light aqua bottle glass	1800		1920
	Level 6 86-100 cmbs 10YR6/2 Light Brownish Gray sand	0	N/A	Sterile			

Table 5. Thomas Park shovel tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End	
ST 66	Level 1 0-12 cmbs 10YR4/1 Dark Gray sandy loam	0	N/A	Sterile				
	Level 2 12-35 cmbx Mottled layers of 10YR4/1 Dark Gray sandy loam and 10YR7/6 Yellow sandy clay	0	N/A	Sterile				
	Level 3 35-55 cmbs 10YR4/2 Dark Grayish Brown sand Lot #112	Levels 3-4 (25-65 cmbs) Artifacts. Lot #112						
		2	KG0300	Bottle, light aqua bottle glass	1800		1920	
		9	KG0301	Bottle, colorless bottle glass	1870			
	Level 4 55-65 cmbs 10YR3/1 Very Dark Gray loam Lot #112	1	KG0304	Bottle, aqua bottle glass	1800		1920	
		1	KG0306	Bottle, amber bottle glass				
		2	MF0101	Coal				
		1	MM9901	Iron fragment, unidentified				
		1	ZC0902	Porcelain insulator				
ST 67	Level 1 0-5 cmbs 10YR6/1 Gray sandy loam	0	N/A	Sterile				
	Level 2 5-18 cmbs 10YR4/1 Dark Gray sandy loam	0	N/A	Sterile				
	Level 3 18-30 cmbs Mottled 10YR4/1 Dark Gray sandy loam w/10YR7/6 Yellow sandy clay loam	0	N/A	Sterile				
	Level 4 30-55 cmbs (artifacts 30-50 cmbs) 10YR5/2 Grayish Brown sand Lot # 117	1	AC0199	Brick, unspecified				
		1	AG0301	Window glass, sized	1804			
		1	KG0501	Medicine bottle, clear curved glass frag.				
	Level 5 55-100 cmbs 10YR6/2 Light Brownish gray sand	0	N/A	Sterile				
Level 6 100-115 cmbs 10YR7/1 Light Gray sand	0	N/A	Sterile					
ST 68	Level 1 0-19 cmbs 10YR3/2 Very Dark Gray Brown silty sand	0	N/A	Sterile				
	Level 2 19-39 cmbs 10YR4/4 Dark Yellowish Brown sand Lot # 131	5	AC0121	Brick, machine made				
		2	AG0301	Window glass, sized	1804			
		1	AM1199	Nail, wire common, fragment	1890		2009	
		2	KF0104	Shell, oyster				
		1	KG0301	Bottle, colorless bottle glass	1870			
		1	MF0101	Coal				
		1	MM9901	Iron fragment, unidentified				
	Level 3 39-105 cmbs 10YR3/1 Very Dark Gray silty sand Lot #119	2	AC0121	Brick, machine made				
		1	AG0301	Window glass, sized	1804			
		1	AR0108	Mortar				
		1	KG0306	Bottle, amber bottle glass				
	Level 4 105-120 cmbs 10YR5/2 Grayish Brown fine sand	0	N/A	Sterile				

Table 5. Thomas Park shovel tests (continued).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
ST 69	Level 1 0-8 cmbs 10YR6/1 Gray sandy loam Lot #145	0	N/A	Modern debris in Levels 1-2 not recovered.			
	Level 2 8-28 cmbs 10YR7/6 Yellow sand mottled w/ layers of 10YR8/6 Yellow sand Lot #145	Levels 2-4 (25-55 cmbs) Artifacts. Lot #145					
	Level 3 28-35 cmbs 10YR5/2 Grayish Brown sand Lot #145	6	AC0199	Brick, unspecified			
		5	AR0108	Mortar (3 are tabby)			
		9	KF0104	Shell, oyster			
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	MM9901	Iron fragment, unidentified			
Level 4 35-52 cmbs 10YR3/2 Very Dark Grayish Brown sandy loam Lot #145	0	N/A	Sterile				
Level 5 52-80 cmbs 10YR3/1 Very Dark Gray sand	0	N/A	Sterile				
Level 6 80-85 cmbs 10YR5/1 Gray sand	0	N/A	Sterile				

ST 70	Level 1 0-13 cmbs 10YR4/1 Dark Gray sandy loam Lot #102	Levels 1-2 (0-30 cmbs) Recovered Artifacts. Lot #102					
		1	KC0604	Creamware, plain	1762	1791	1820
		1	KC0605	Creamware, molded	1762	1791	1820
	Level 2 13-32 cmbs 10YR7/6 Yellow Sand Lot #102	1	KG0301	Bottle, colorless bottle glass	1870		
	Level 3 32-40 cmbs 10YR4/1 Dark Gray sand	0	N/A				
	Level 4 40-63 cmbs 10YR5/1 Gray Sand Lot #146	9	AC0121	Brick, machine made			
		1	AG0301	Window glass, sized	1804		
		2	AM0699	Nail, cut, fragment	1790		1890
		1	KC1301	Redware, unglazed, coarse			
		1	KC1303	Redware, fine black glazed			
		1	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
		12	KF0104	Shell, oyster			
		2	KG0300	Bottle, light aqua bottle glass	1800		1920
		2	KG0501	Medicine bottle, clear curved glass frag			
		5	MF0101	Coal			
2	MM9903	Slag					
1	TC0103	Tobacco pipe bowl, kaolin, molded					

Table 5. Thomas Park shovel tests (continued).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
	Level 5 63-93 cmbs	1	FG0202	Mirror glass			
	10YR4/1 Dark Gray sand	1	KC0222	Rhenish blue and gray	1700	1738	1775
	Lot #133	1	MF0101	Coal			
		2	ZR0302	Slate, unidentified			
ST 71	Level 1 0-22 cmbs	0	N/A	Modern debris in Levels 1-4 not recovered.			
	10YR3/2 Very Dark Grayish Brown sand						
	Level 2 22-28 cmbs						
	10YR6/4 Light Yellowish Brown sand						
	Level 3 28-34 cmbs						
	10YR3/1 Very Dark Gray silty sand						
	Level 4 34-48 cmbs						
	10YR3/4 Dark Yellowish Brown sand w/cobbles						
	Level 5 48-116 cmbs	1	AC0199	Brick, unspecified			
	2.5YR3/1 Very Dark Gray silty sand	1	AG0558	Plate Glass (greater than 3.0 mm)	1800		
Lot #118	1	AM1505	Nail, cut or wrought, square				
	3	KF0104	Shell, oyster				
	1	MF0101	Coal				
ST 72	Level 1 0-12 cmbs	0	N/A	Sterile			
	10YR5/1 Gray sand						
	Level 2 12-22 cmbs	0	N/A	Sterile			
	10YR4/1 Dark Gray sand mottled w/10YR6/3 Pale Brown sand						
	Level 3 22-40 cmbs	Levels 3-4 (25-50 cmbs) Artifacts. Lot #101					
	10YR4/1 Dark Gray sand	1	AM1505	Nail, cut or wrought, square			
	Lot #101	3	KF0104	Shell, oyster			
	Level 4 40-60 cmbs	1	KG0306	Bottle, amber bottle glass			
	10YR5/1 Gray sand	1	MF0101	Coal			
	Lot #101	1	MM9901	Iron fragment, unidentified			
ST 73	Level 1 0-18 cmbs	Levels 1-2 (0-35 cmbs) Artifacts. Lot #123					
	10YR4/1 Dark Gray sandy loam	1	AC0121	Brick, machine made			
	Lot #123	1	KF0104	Shell, oyster			
	Level 2 18-20 cmbs	1	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
	10YR7/4 Very Pale Brown sand	1	KG0501	Tableware, probably, clear curved glass			
	Lot #123	1	RM0102	Brass/copper cartridge	1814		

Table 5. Thomas Park shovel tests (continued).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
	Level 3 20-46 cmbs	Levels 3-5 (35-85 cmbs) Artifacts. Lot #124					
	Lot #123	1	AC0121	Brick, machine made			
	10YR4/1 Dark Gray sand Lot #124	2	AM1507	Nail fragment, unidentified			
	Level 4 46-80 cmbs	23	AR0108	Mortar (including tabby)			
	10YR5/2 Grayish Brown sand w/scattered oysters	39	KF0104	Shell, oyster			
	Lot #124	1	KG0299	Bottle, amber/olive green glass			1900
		1	KG0302	Bottle, dark green bottle glass			
	Level 5 80-100 cmbs	1	KG0306	Bottle, amber bottle glass			
	10YR6/2 Light Brownish Gray sand	2	KG0501	Tableware, probably, clear curved glass			
	Lot #124	4	MF0101	Coal			
		1	RM0102	Brass/copper cartridge	1814		
		8	ZM1232	Sheet iron/steel			
		1	ZR0302	Slate, unidentified			

Table 5. Thomas Park shovel tests (continued from previous pages).

simultaneously. All soils were sifted through 0.25 inch hardware cloth.

Test Unit 2

Level 1 was a natural 13 cm level extending from 10 to 23 cmbd. Soil consisted of a very dark gray (10YR3/1) sandy loam. Soil at the base of the level transitioned into a brown (10YR5/3) sandy loam with mottles of brown (7.5YR4/4) sandy loam. Items in this first level were predominantly modern debris. These modern items were not recovered, and included a plastic button, can pop-top, roller skate wheel, cigar mouthpiece, one animal bone, bottle glass (clear, amber, painted, and bright green), six small to medium pieces of mortar/plaster, and five oyster shells. Table 6 details those objects that were recovered.

Level 2 was a natural stratum 15 cm thick. The level began at 23 cmbd and ended at 38 cmbd. The brown (7.5YR4/4) sandy loam mottles from the previous level became the predominant soil type, with mottles of brown (10YR5/3) sandy loam. Items in this level were modern and none were recovered. They included bottle glass (clear, aqua, and amber) and minor amounts of brick fragments, mortar/plaster, and oyster shell.

Level 3 was excavated as a natural level, approximately 20 cm thick. The top of the level was at 38 cmbd and extended to 59 cmbd. Soil was a very dark brown (10YR2/2) sandy loam mottled with a very dark grayish brown (10YR3/2) sandy loam. The base of the level contained small areas of yellowish brown (10YR5/4) sandy loam. Archeologists documented 4 lbs. of handmade brick fragments, 21 lbs.

of oyster shell and 11 pieces of mortar, including tabby. Ceramics and other artifacts from this level are listed in Table 7. Only six sherds were diagnostic, producing a MCD of 1795.1 (Table 7)

Level 4 was an arbitrary level that terminated when archeologists uncovered two zones 10 cm into the excavation of the level. The level began at 59 cmbd and terminated at 69 cmbd. Soil in the 10 cm was a black (10YR2/1) sandy silt loam. The base of the level revealed a 30 cm band of lighter soil running along the eastern side of the unit (Figure 60). Archeologists designated this Zone B, which was a very dark gray (10YR3/1) silty, sandy loam. The remainder of the unit contained a darker and more mottled soil consisting of very dark gray (10YR3/1) silty sandy loam mottled with gray (10YR5/1) silty sandy loam. This mottled soil was designated Zone A. Artifacts in Level 4 included ceramics, bottle glass, 2 lbs. of brick fragments, and 8 lbs. of oyster shell. Table 8 details these and other artifacts. A MCD of 1839 was produced by a statistically invalid sample of four diagnostic sherds in this level.

Level 5 excavations revealed that Zone A was a 9 cm thick layer overlying more of Zone B. Zone A, on the western side of the unit, began at an elevation of 69 cmbd and ended at 78 cmbd. Zone A was removed and archeologists excavated all of Zone B across the entire test unit. Zone B also began at 69 cmbd, but extended to 82 cmbd. Interestingly, brick and mortar densities decreased, with only three brick fragments, four oyster shells, and one piece of mortar/plaster were found in both zones. Table 9 lists the artifacts found in Zones A and B.

Level 6 was a very dark grayish brown (10YR3/2) loamy sand lens. It was excavated as a natural level. The lens was

Block BB

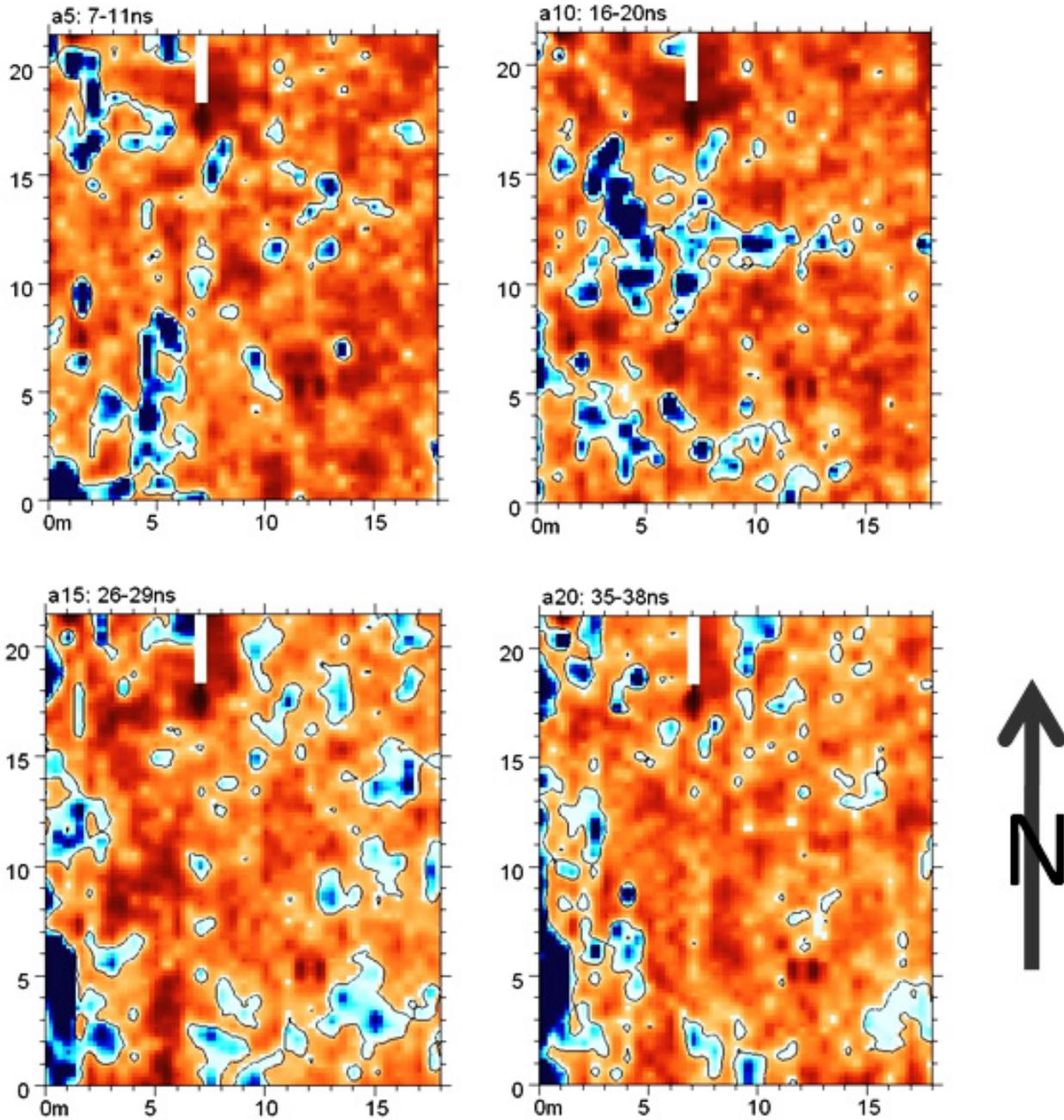


Figure 57. Anomalies in GPR Block BB.

very shallow on the eastern side of the unit, measuring only two centimeters. The western side of the level was seven centimeters thick. This lens mirrored the Level 6 soils in T.U. 3. This level was sterile except for two oyster shell fragments. No features were observed below this level.

Level 7 was a slightly darker stratum than Level 6. The former was a very dark gray (10YR3/1) loamy sand. Archeologists excavated it as a natural 10 cm level starting

between 82 and 85 cmbd and terminating at 92 cmbd. No artifacts were found in this level with the exception of a small fragment of charcoal and small piece of slag. These were not recovered. Test Unit 2 excavation terminated at the base of Level 7.

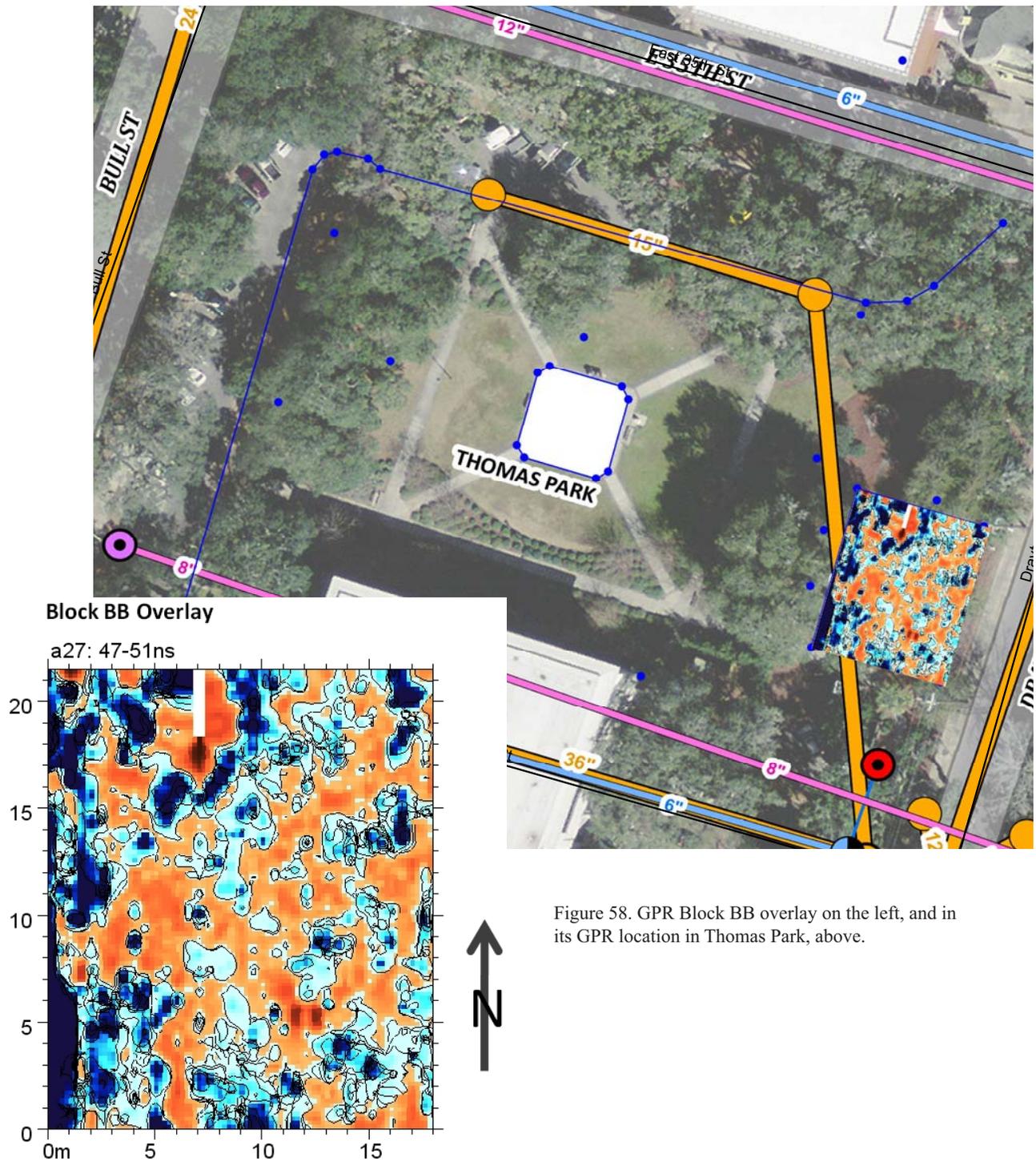


Figure 58. GPR Block BB overlay on the left, and in its GPR location in Thomas Park, above.

Test Unit 3

The first three levels of T.U. 2 provided stratigraphic information that allowed archeologists to excavate Test Unit 3 in more exact layers, matching excavation levels between the two units. This would allow the data between the same strata in each unit to be combined and produce more statistically valid samples for mean ceramic dates (MCD) and other dating techniques.

Levels 1 and 2 contained modern debris and none of these items was collected. The top of Level 1 varied from 7-10 cmbd and extended to 27cm. The soil was a very dark gray (10YR3/1) sandy loam. Beneath this a reddish yellow (7.5YR6/6) sandy was excavated to its bottom at 35-38 cmbd. Archeologists uncovered a stain at the base of Level 2. It extended 35 cm off of the northern wall and ran into



Figure 59. Beginning of Test Unit 2.

the east and west walls of the unit. This stain was later found to contain a PVC pipe. Archeologists left this stain (modern pipe trench) pedestalled for the remainder of the excavation.

Level 3 was a natural level measuring approximately 15 cm thick. It began at 35-38 cmbd and ended at 50-52 cmbd. Soil was a mottled very dark gray (10YR3/1) sandy loam with dark grayish brown (10YR4/2) sand and scattered oyster shell. This midden zone is thinner than the one in Test Unit 2. Examples of artifacts in Level 3 of Test Unit 3 included small ceramic sherds, bottle glass, unidentifiable square nail fragments, and a kaolin pipe bowl fragment (probably post-Revolutionary War style). Table 10 identifies these artifacts. Two sherds provide a statistically invalid MCD of 1817.5. Clear (colorless) bottle glass provided a TPQ of 1870. If the presence of this glass was the result of modern feature disturbance; however, the next TPQ date would be 1840 for stippled (non-blue) under-glazed transfer print ware. There were 3 lbs. of hand-made brick and 3 lbs. of oyster shell in this layer, which was not recovered. Another linear stain was uncovered, this time at the base of Level 3 in the southern half of the unit. It ran into the eastern and western walls. Archeologists designated this Feature 5 (Figure 61). Archeologists successfully used the tube corer in this feature to find the location of the presumed pipe in the trench.

Level 4 was a very thin lens extending generally from 50 to 53 cmbd. The yellowish brown (10YR5/4) sand was mixed with a dark grayish brown (10YR4/2) sand. Three artifacts were in this level. They included two carbon cores from a gas light and one plain whiteware fragment.

Brick fragments totaled 0.5 lbs. and shell amounted to 1.5 lbs.

Level 5 marked the top of a new soil stratum consisting of a very dark grayish brown (10YR3/2) sandy loam. Level 5 was approximately 15 cm thick. It was a natural level that began at 53 cmbd and terminated between 68-72 cmbd. Archeologists recovered one brass percussion cap, two unidentifiable square nails, one unidentifiable nail, one piece of slate, two pieces of coal, and one pound of oyster shell from this level. The TPQ for this level is 1814, based on the begin date of manufacture for the percussion cap.

Level 6 was a natural level measuring 10 cm (except in the southern part of the unit). Soil was a very dark grayish brown (10YR3/2) loamy sand beginning at 68-72 cm and extending to 82 cmbd. This level was sterile of artifacts (including brick and shell). Large roots in the base of Level 6 created an impasse that archeologists could not cut, in agreement with the city entities overseeing the parks, squares, playgrounds, trees, and greenspaces. Test Unit 3 was terminated at the base of Level 6 (Figure 62).

Feature 5 was another modern utility feature. It was located in the southern end of the unit. Feature 5 trench measured 60 cm wide at its widest and contained a terracotta sewer pipe. The top of the feature was located at 50 cmbd and its base was at 80 cmbd. The exposed portion of Feature 5 was one meter long and it extended into the eastern and western walls of the unit. Feature fill was a dark grayish brown (10YR4/2) sand. Archeologists excavated the feature and exposed the pipe (Figure 63). Artifacts included minor amounts of brick and mortar fragments, one small sherd, a kaolin pipestem, and items identified in Table 11, as well as 5 lbs. of oyster shell.

Interpretation of Test Units 2 and 3

Both test units in Thomas Park were transected by several utility trenches and pipes, as well as moderate sized tree roots (Figure 64). Figures 65-67 depict the stratigraphic of both test units. The modern features undoubtedly created some contamination, depositing modern artifacts such as clear bottle glass in older stratigraphic levels. Diagnostic sherds from Level 3 of both Test Units 2 and 3 produced a MCD of 1800.75. While this was based on a statistically invalid count of eight sherds, it is supported by dates from other artifact types in the units, such as kaolin pipes, square (likely wrought) nails, tabby mortar, and pearlware.

Level	Sum Of Count	Code	Description	Start	Mean	End
1	1	KF0101	Bone, unidentified			
1	2	KG0251	Bottle, applied color lable bottle	1935		
1	1	KG0300	Bottle, light aqua bottle glass	1800		1920
1	3	KG0301	Bottle, colorless bottle glass	1870		
1	1	KG0303	Bottle, light green bottle glass			
1	1	KG0306	Bottle, amber bottle glass			
1	1	KG0393	Bottle, olive green unidentified			1900
1	1	KM0304	Beer/Soda pull tab	1962		
1	7	MM9901	Iron fragment, unidentified			
1	1	ZM0622	Spark plug			
Total	19					

Table 6. Test Unit 2, Level 1, Thomas Park.

Level	Sum Of Count	Code	Description	Start	Mean	End
3	30	AC0120	Brick, handmade			
3	11	AM1505	Nail, cut or wrought, square			
3	11	AR0108	Mortar			
3	1	KC0105	Porcelain, plain			
3	1	KC0309	Salt glazed/alkaline glazed			
3	1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
3	1	KC0631	Pearlware, unidentified decorated	1774	1802	1830
3	2	KC0699	White-Bodied Ceramic, unidentified	1762		2009
3	1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
3	3	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
3	4	KF0101	Bone, unidentified			
3	1	KF0102	Animal teeth			
3	15	KF0104	Shell, oyster			
3	1	KG0300	Bottle, light aqua bottle glass	1800		1920
3	4	KG0301	Bottle, colorless bottle glass	1870		
3	1	KG0305	Bottle, cobalt blue bottle glass			
3	6	KG0393	Bottle, olive green unidentified			1900
3	1	KM0310	Bottle seal, metal			
3	10	MF0101	Coal			
3	10	MF0102	Charcoal			
3	11	MF0103	Cinder/clinker			
3	7	MM9901	Iron fragment, unidentified			

Table 7. Test Unit 2, Level 3, Thomas Park (continued on next page).

3	1	MM9902	Metal, non iron/steel, unidentified			
3	7	MM9903	Slag			
3	2	MR0122	Unmodified stone			
3	2	RR0133	Chert worked fragment, unidentified			
3	2	TC0103	Tobacco pipe bowl, kaolin, molded			
3	3	TC0210	Tobacco pipestem, kaolin, 5/64"			
3	1	ZM0405	Ferrule			
3	12	ZM1232	Sheet iron/steel			
3	3	ZR0302	Slate, unidentified			
Total	166					

Table 7. Test Unit 2, Level 3, Thomas Park. (continued from previous page).

Level	Sum Of Count	Code	Description	Start	Mean	End
4	9	AC0199	Brick, unspecified			
4	1	AM1507	Nail fragment, unidentified			
4	3	AR0108	Mortar			
4	3	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
4	3	KC0700	Whiteware, plain	1820		2009
4	1	KC2805	Yellowware, embossed/molded	1830	1885	1940
4	1	KG0299	Bottle, amber/olive green glass			1900
4	2	KG0305	Bottle, cobalt blue bottle glass			
4	1	KG0306	Bottle, amber bottle glass			
4	1	KG0393	Bottle, olive green unidentified			1900
4	2	MF0101	Coal			
4	6	MF0103	Cinder/clinker			
4	4	MM9901	Iron fragment, unidentified			
4	1	MM9903	Slag			
4	1	TC0209	Tobacco pipestem, kaolin, 4/64"			
4	1	ZR0302	Slate, unidentified			
Total	40					

Table 8. Test Unit 2, Level 4, Thomas Park.

Level	Sum Of Count	Code	Description	Start	Mean	End
5 ZA West	3	AC0199	Brick, unspecified			
5 ZA West	1	AG0301	Window glass, sized	1804		
5 ZA West	4	AM1507	Nail fragment, unidentified			
5 ZA West	2	MF0101	Coal			
5 ZA West	3	MF0103	Cinder/clinker			
5 ZA West	1	TC0199	Tobacco pipe bowl, unidentified clay			
5 ZA West	1	TC0212	Tobacco pipestem, kaolin, 7/64"			

Table 9. Test Unit 2, Level 5 Zones A West and B East, Thomas Park (continued on next page).

Level	Sum Of Count	Code	Description	Start	Mean	End
5 ZB East	1	AR0108	Mortar			
5 ZB East	1	KC0398	Lead glazed, unidentified			
5 ZB East	1	KC0700	Whiteware, plain	1820		2009
5 ZB East	4	KF0104	Shell, oyster			
5 ZB East	2	KG0393	Bottle, olive green unidentified			1900
5 ZB East	5	MF0101	Coal			
5 ZB East	2	MM9903	Slag			
Total	31					

Table 9. Test Unit 2, Level 5 Zones A West and B East, Thomas Park. (continued from previous page).

Level	Sum Of Count	Code	Description	Start	Mean	End
3	7	AG0301	Window glass, sized	1804		
3	5	AM1505	Nail, cut or wrought, square			
3	1	KC0701	Whiteware, indeterminate decoration	1820		2009
3	1	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
3	1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	1840	1855	1870
3	1	KF0104	Shell, oyster			
3	3	KG0301	Bottle, colorless bottle glass	1870		
3	2	KG0306	Bottle, amber bottle glass			
3	1	KG0393	Bottle, olive green unidentified			1900
3	1	TC0101	Tobacco pipe bowl, kaolin, plain			
3	3	ZM1211	Wire			
Total	26					

Table 10. Test Unit 3, Level 3, Thomas Park.

Feature	Sum Of Count	Code	Description	Start	Mean	End
5	6	AC0199	Brick, unspecified			
5	2	AM1505	Nail, cut or wrought, square			
5	4	AM1507	Nail fragment, unidentified			
5	2	AR0108	Mortar			
5	1	KC0699	White-Bodied Ceramic, unidentified	1762		2009
5	2	MF0101	Coal			
5	1	MM9903	Slag			
5	1	TC0210	Tobacco pipestem, kaolin, 5/64"			
5	1	ZM1206	Metal hooks			
5	1	ZM1232	Sheet iron/steel			
Total	21					

Table 11. Test Unit 3, Feature 5, Thomas Park.

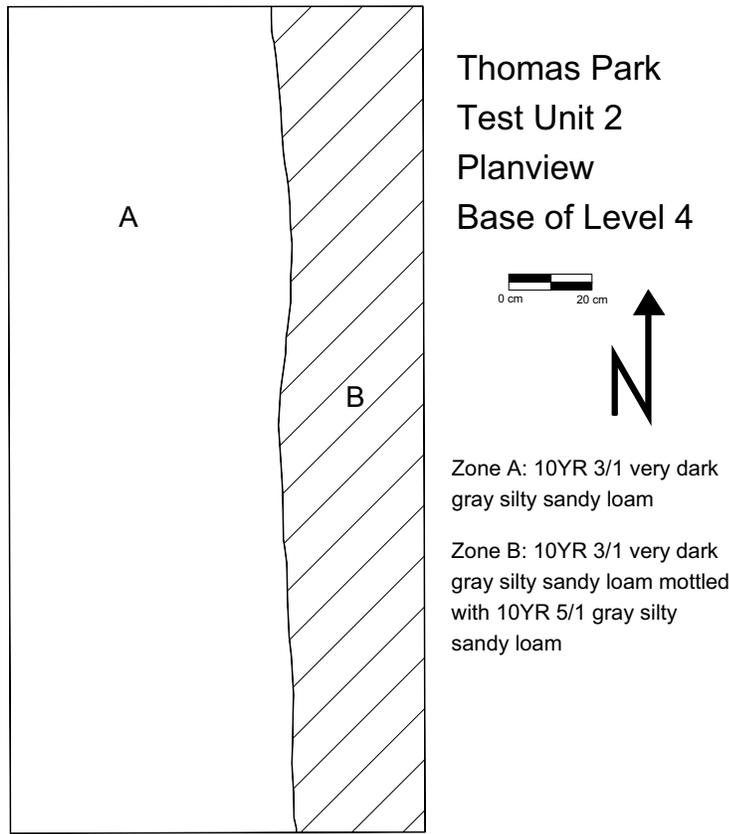


Figure 60. Plan view, Test Unit 2, Level 4.

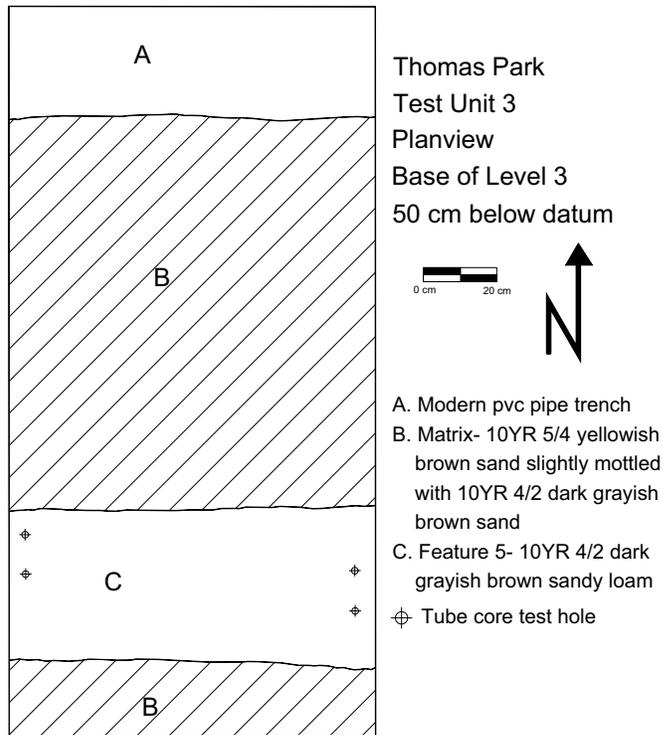


Figure 61. Plan view, Test Unit 3, Level 3..

Thomas Park
Test Unit 3
Planview
Base of Level 6

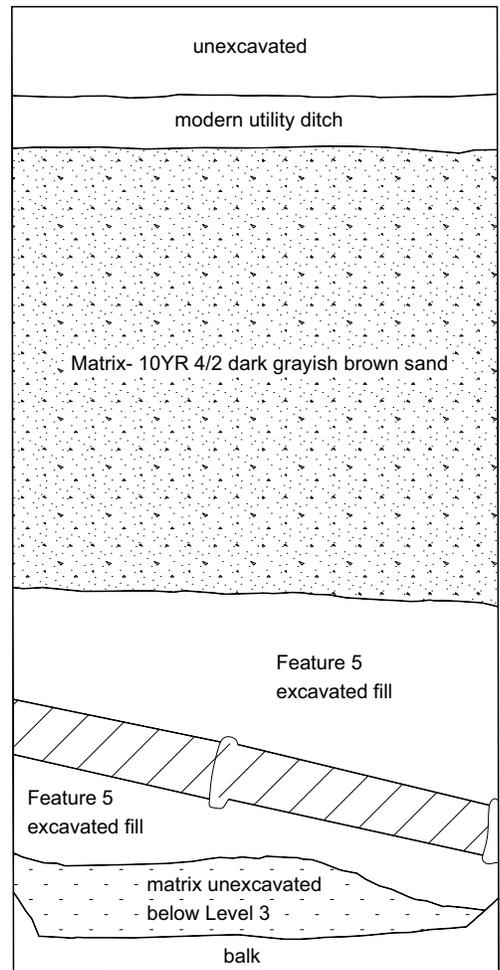
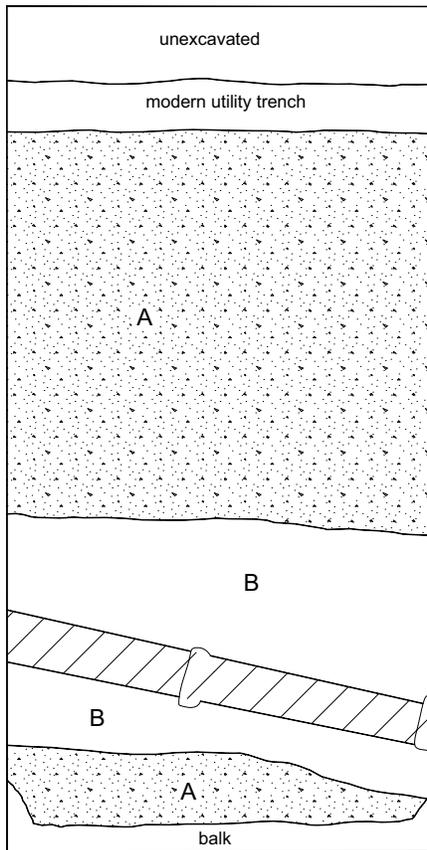


Figure 62. Plan view, Test Unit 3, Level 6.



Thomas Park
Test Unit 3
Planview of
Feature 5 post-excitation



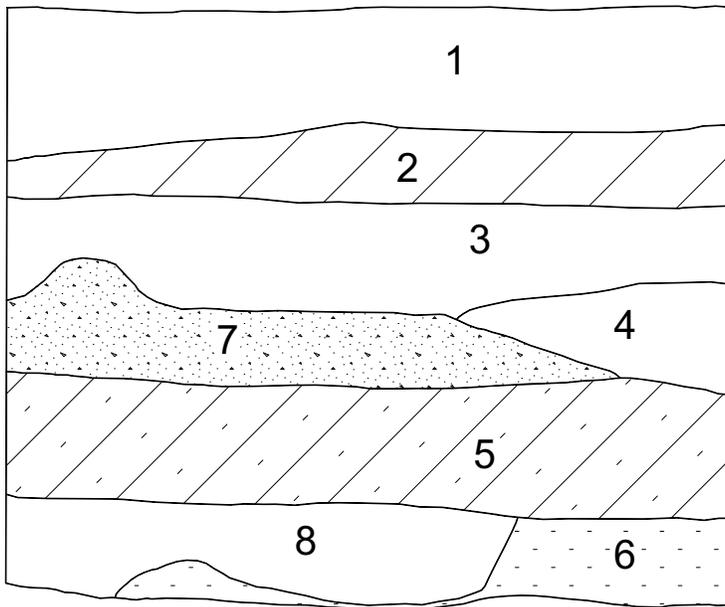
- A. Matrix- 10YR 5/4 yellowish brown sand and 10YR 4/2 dark grayish brown sand (50 cm below datum)
- B. Feature 5 excavated trench fill. 80 cm below datum



Figure 63. Plan view, Test Unit 3, F.5.



Figure 64. Test Unit 2, Base of Level 7, South Profile photograph.

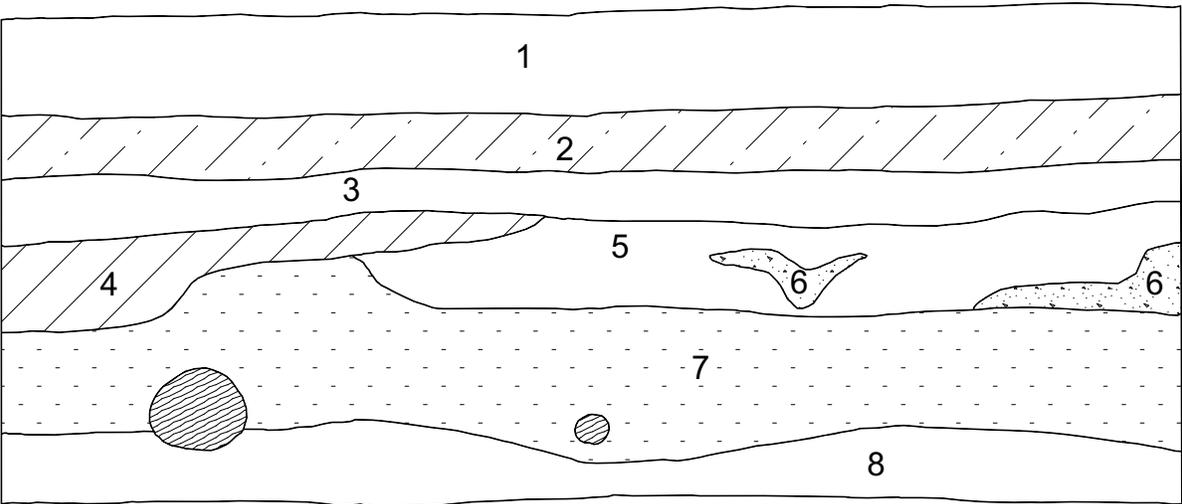


Thomas Park
Test Unit 2
South Wall Profile



1. 10YR 4/1 dark gray sand
2. 7.5 YR 5/6 strong brown very fine sand
3. 10YR 2/1 black sandy loam
4. 10YR 3/2 very dark grayish brown sandy loam
5. 10YR 2/1 black loam
6. 10YR 4/1 dark gray sand
7. 10YR 3/2 very dark grayish brown sandy loam mottled with 10YR 4/3 brown loamy sand and oyster shell
8. 10YR 2/1 black sand mottled with 10YR 3/2 very dark grayish brown sand

Figure 65. Test Unit 2, South Profile scaled drawing.

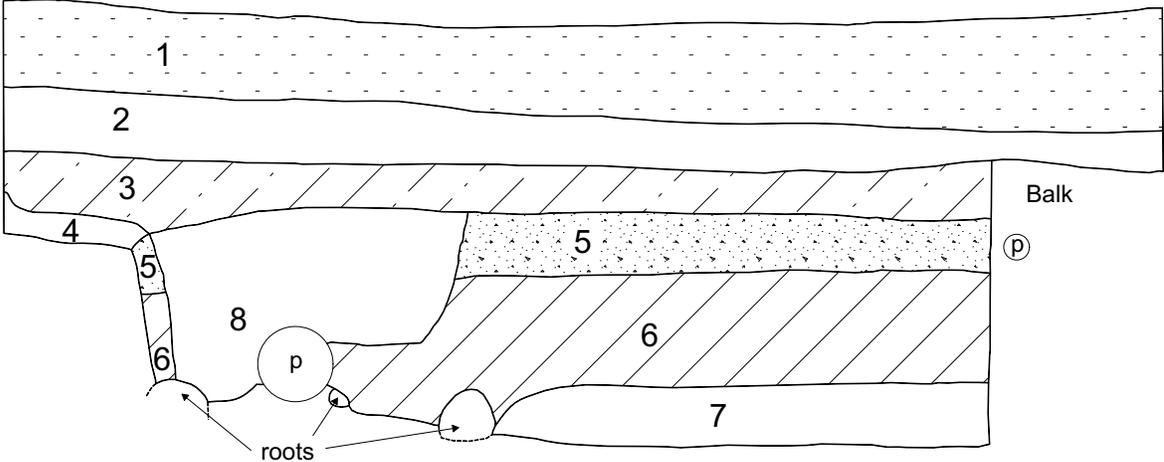


- 1. 10YR 4/1 dark gray sand
- 2. 7.5YR 5/6 strong brown very fine sand
- 3. 10YR 2/1 black sandy loam
- 4. 10YR 3/2 very dark grayish brown sandy loam
- 5. 10YR 3/3 dark brown loamy sand with oyster shell mottled with 10YR 4/2 dark grayish brown loamy sand
- 6. 10YR 5/4 yellowish brown fine sand mottled with 10YR 3/1 very dark gray sandy loam
- 7. 10YR 2/1 black loam
- 8. 10YR 4/1 dark gray sand

Thomas Park
Test Unit 2
West Wall Profile



Figure 66. Test Unit 2, West Profile scaled drawing.



- 1. 10YR 4/1 dark gray sand
- 2. 7.5YR 5/6 strong brown very fine sand
- 3. 10YR 2/1 black sandy loam
- 4. 10YR 3/3 dark brown loamy sand with oyster shell mottled with 10YR 4/2 dark grayish brown loamy sand
- 5. 10YR 5/4 yellowish brown fine sand mottled with 10YR 3/1 very dark gray sandy loam
- 6. 10YR 2/1 black loam
- 7. 10YR 4/1 dark gray sand
- 8. 10YR 5/4 yellowish brown fine sand mottled with 10YR 3/1 very dark gray sandy loam and 10YR 2/1 black loam with oyster shell

Thomas Park
Test Unit 3
West Wall Profile

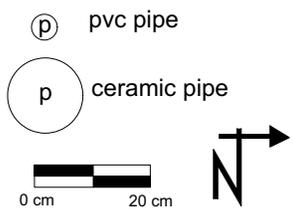


Figure 67. Test Unit 3, West Profile scaled drawing.

The number and distribution of the modern artifacts and debris somewhat masks what is almost certainly an older period site here. The black (10YR2/1) loam stratum is suggestive of a buried A horizon. This is visible in layer #6 on the Test Unit 3 West Profile and layer #7 on the Test Unit 2 West Profile. (They represent the same soil stratum and elevation, but were just numbered differently on the drawings.) The presence of tabby and handmade brick is a strong marker for an 18th-early 19th period site. The recovery of creamware and Rhenish stoneware from nearby shovel tests further attests to an 18th century habitation. Unfortunately, no definitive evidence of the American Revolution or military camps could be discerned from this presence. The discovery of an 18th century period site here does contribute potential information on the historical landscape during that period, particularly as it relates to a major road providing access and egress for Savannah in 1779 and throughout the American Revolution.

W.W. Law Park

Target: French Camps (W.W. Law Park a.k.a Kelly Grayson Park)

KOCSA Analysis

The French camp was divided into three sections. The western section was adjacent to a spring, and the closest to the American camp. The eastern end of the French camps appears to have been the least desirable part of camp, since it lay near a swampy area surrounding several small branches or creeks (Figure 68). The area had been cleared of trees and vegetation when the camp was constructed, for the reasons mentioned previously. A small road wrapped around the northwest and north portions of the camp. According to this map, the road intersected to others



Figure 68. Line of French camps (Ozanne 1779).

nearby, providing several avenues of approach to the city, including the one ultimately used by the French troops marching to war on October 9, 1779.

Archeological Results and Interpretation

W.W. Law Park is bounded on the north by East Bolton Street, on the east by Ott Street, on the south by East Waldburg Street and on the west by Harmon Street (Figure 1). It is located southeast of the area that was Savannah during the American Revolution. GIS overlays suggested this location might include portions of the French Camp, as depicted by the Ozanne map (Figure 69). The overlay shows the yellow rectangle of the camps clipping the southeastern corner of the park, at the modern intersection of Ott and East Waldburg streets. The GIS margin of error also meant that the park could intersect a larger area of the camp.



Figure 69. GIS overlay of Ozanne (1779) map on modern Savannah map.

The French camps outside of Savannah held more than French soldiers. Alexander McGillivray, at Little Tallassie in the Creek Nation, reported on "...the arrival of one of the Traders yesterday that escap'd from the French Camp before Savannah" (McGillivray 1779). Apparently the French were interested in holding prisoner any spy, including Indian traders. The trader had detailed information regarding Indian attacks on pro-British Indian allies.

Shovel Testing

Archeologists excavated seven shovel tests in W.W. Law Park on February 19, 2010. Six of these are detailed in Table 12. (Only modern debris was recorded in ST 78.) Shovel tests 74-80 were opportunistically placed throughout the park. Their locations were recorded with a transit and entered into a GIS layer (Figure 70). The presence of sidewalks, a playground, a swimming pool, a building, trees and a paved area precluded establishing the shovel

Level	Sum Of Count	Code	Description	Start	Mean	End
W.W. Law Park						
ST 74 Level 1 0-24 cmbs 10YR3/2 Very Dark Grayish Brown loam sand mottled with 10YR5/3 Brown sand Lot #122	10	AC0199	Brick, unspecified			
	1	AG0301	Window glass, sized	1804		
	1	AM1505	Nail, cut or wrought, square			
	3	KC0630	Pearlware, plain	1774	1802	1830
	1	KC0632	Pearlware, underglaze blue floral h.p.	1775	1803	1830
	1	KC0636	Pearlware, underglaze polychrome painted floral patterns	1795	1813	1830
	2	KC1302	Redware, clear glazed, plain			
	1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
	1	KF0101	Bone, unidentified			
	1	KF0104	Shell, oyster			
	3	KG0301	Bottle, colorless bottle glass	1870		
	3	KG0501	Tableware, probably, clear curved glass			
	6	MF0101	Coal			
	2	MM9901	Iron fragment, unidentified			
	1	TC0209	Tobacco pipestem, kaolin, 4/64"			
	3	ZM1211	Wire			
	Level 2 24-52 cmbs 2.5YR6/4 Light Yellowish Brown silty sand Lot #100	13	AC0199	Brick, unspecified		
2		KC0630	Pearlware, plain	1774	1802	1830
1		KC0631	Pearlware, unidentified decorated	1774	1802	1830
2		KG0301	Bottle, colorless bottle glass	1870		
1		MF0103	Cinder/clinker			
Level 3 52-82 cmbs 2.5Y7/4 Pale Yellow sand	0 N/A Sterile					
Level 4 82-97 cmbs 10YR6/8 Brownish Yellow clayey sand	0 N/A Sterile					
Level 5 97-118 cmbs 2.5Y8/2 Pale Yellow sand	0 N/A Sterile					
ST 75 Level 1 0-9 cmbs 10YR3/2 Very Dark Grayish Brown clayey sand Lot #109	2	AG0301	Window glass, sized	1804		
	11	AR0108	Mortar			
	1	KC0105	Porcelain, plain			
	1	KC0700	Whiteware, plain	1820		2009
	1	KC1504	Delftware, blue h.p.	1630	1710	1790

Table 12. W.W. Law Park shovel tests (continued on following pages).

Level	Sum Of Count	Code	Description	Start	Mean	End
	1	KG0301	Bottle, colorless bottle glass	1870		
	1	KG0306	Bottle, amber bottle glass			
	1	KM0301	Crown cap	1892		
	1	MF0101	Coal			
	1	MM9901	Iron fragment, unidentified			
	2	ZR0302	Slate, unidentified			
Level 2 9-61 cmbs 10YR6/3 Dark Yellowish Brown sand	1	AR0104	Concrete			
Level 3 61-99 cmbs 7.5YR4/6 Strong Brown extremely compact clay. Lot#108	0	N/A	Sterile			

ST 76	Level 1 0-15 cmbs 10YR3/2 Very Dark Grayish Brown silty sand mottled with 10YR5/3 Brown sand Lot #105	2	AC0199	Brick, unspecified			
		2	AG0301	Window glass, sized	1804		
		1	AM1507	Nail fragment, unidentified			
		1	AR0108	Mortar			
		1	KC0604	Creamware, plain	1762	1791	1820
		1	KC0630	Pearlware, plain	1774	1802	1830
		2	KC0632	Pearlware, underglaze blue floral h.p.	1775	1803	1830
		1	KC0636	Pearlware, underglaze polychrome painted floral patterns	1795	1813	1830
		1	KC1299	Coarse earthenware, unidentified			
		1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
		1	KG0304	Bottle, aqua bottle glass	1800		1920
		1	KG0306	Bottle, amber bottle glass			
		1	MF0101	Coal			
		1	MF0103	Cinder/clinker			
		2	ZR0302	Slate, unidentified			
		1	ZR2422	Flake, unspecialized 0% cortex			
		Level 2 15-49 cmbs 10YR7/4 Very Pale Brown sand Lot#110	4	AC0199	Brick, unspecified		
1	KC0231		Molded refined white salt glazed	1740	1753	1765	
1	KC3110		Plain ceramic				
1	MM9901		Iron fragment, unidentified				
Level 3 49-68 cmbs 10YR4/6 Dark Yellowish Brown sandy clay. Lg root obstruction	0	N/A	Sterile				

Table 12. W.W. Law Park shovel tests (continued on following pages).

	Level	Sum Of Count	Code	Description	Start	Mean	End
ST 77	Level 1 0-6 cmbs 10YR5/3 Brown clayey sand w/10YR3/1 Very Dark Gray and 10YR5/8 Yellowish Brown clayey sand mottles Lot #107	Levels 1-top of Level 3 (0-22 cmbs) Artifacts. Lot #77					
		1	AR0104	Concrete			
		1	AR0108	Mortar			
	Level 2 6-16 cmbs 10YR3/1 Very Dark Gray sandy loam Lot #107	1	KC1303	Redware, fine black glazed			
		4	KG0301	Bottle, colorless bottle glass	1870		
		1	MF0101	Coal			
	Level 3 16-40 cmbs 10YR5/4 sand w/ mottles of 10YR5/6 Yellowish Brown clayey sand. Iron pipe impass Lot #107	1	MM9903	Slag			
	ST 79	Level 1 0-22 cmbs 10YR3/1 Very Dark Gray silty sand Lot #99	1	AG0301	Window glass, sized	1804	
1			KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
1			KC2308	Transfer print, stippled, dark blue underglaze	1802	1824	1846
2			KC2800	Yellowware, decorated	1830		1940
3			KG0300	Bottle, light aqua bottle glass	1800		1920
5			KG0301	Bottle, colorless bottle glass	1870		
3			KG0303	Bottle, light green bottle glass			
1			KG0306	Bottle, amber bottle glass			
1			KG0501	Tableware, probably, clear curved glass			
1			MF0101	Coal			
2			MM9901	Iron fragment, unidentified			
1			MP9901	Plastic, unidentified			
Level 2 22-31 cmbs 10YR5/3 Brown silty sand mottled w/ 10YR5/6 Yellowish Brown clayey sand Lot #116			1	AM1507	Nail fragment, unidentified		
		1	KC0398	Lead glazed, unidentified			
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0306	Bottle, amber bottle glass			
		1	MM9901	Iron fragment, unidentified			
		1	MZ0101	Material, unidentified			

Table 12. W.W. Law Park shovel tests (continued on following pages).

Level	Sum Of Count	Code	Description	Start	Mean	End
Level 3 31-54 cmbs 10YR2/1 Black loamy sand w/ 10YR5/3 Brown silty sand and 10YR4/2 Dark Grayish Brown sand Lot #121	1	AC0121	Brick, machine made			
	2	AG0301	Window glass, sized	1804		
	1	KC1304	Redware, black glazed, unrefined			
	2	KF0104	Shell, oyster			
	2	KG0301	Bottle, colorless bottle glass	1870		
	1	MM9901	Iron fragment, unidentified			
	1	MM9903	Slag			
	2	ZR0302	Slate, unidentified			
Level 4 54-103 cmbs 10YR6/3 Pale Brown silty sand	0	N/A	Sterile			

ST 80	Level 1 0-9 cmbs 10YR3/3 Dark Brown sandy loam Lot #106	Levels 1-2 (0-18 cmbs) Artifacts. Lot #106					
	Level 2 9-18 cmbs 10YR3/2 Very Dark Grayish Brown sandy loam Lot #106	3	AC0199	Brick, unspecified			
		1	AM1505	Nail, cut or wrought, square			
		1	AR0108	Mortar			
		1	KC0636	Pearlware, underglaze polychrome painted floral patterns	1795	1813	1830
		1	KF0104	Shell, oyster			
		1	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
		1	KG0251	Bottle, applied color lable bottle	1935		
		1	KG0299	Bottle, amber/olive green glass			1900
		3	KG0300	Bottle, light aqua bottle glass	1800		1920
		20	KG0301	Bottle, colorless bottle glass	1870		
		6	KG0303	Bottle, light green bottle glass			
		1	KG0393	Bottle, olive green unidentified			1900
		1	KM0301	Crown cap	1892		
		1	MF0101	Coal			
		2	MM9901	Iron fragment, unidentified			
1	PM0120	Coin					

Table 12. W.W. Law Park shovel tests (continued on following pages).

tests on a grid (Figure 71). Archeologists mapped the locations of the shovel tests, modern landscaping, and above-ground cultural features with a laser transit. The artifacts in ST 77 were likely disturbed fill from a trench dug for an iron pipe that archeologists encountered at 40 cmbs. The most interesting result of the shovel tests were that five of the six contained low densities of extremely small fragments of colonial period artifacts. This included ceramics

such as delft, pearlware, redware, and refined saltglazed stoneware. Slate, dark green bottle glass, and unidentifiable square nails came from the shovel tests, as well as kaolin pipe fragments. No GPR survey was conducted in this vicinity.

The presence of colonial period artifacts excited archeologists and lent support to the hypothesis that this might be

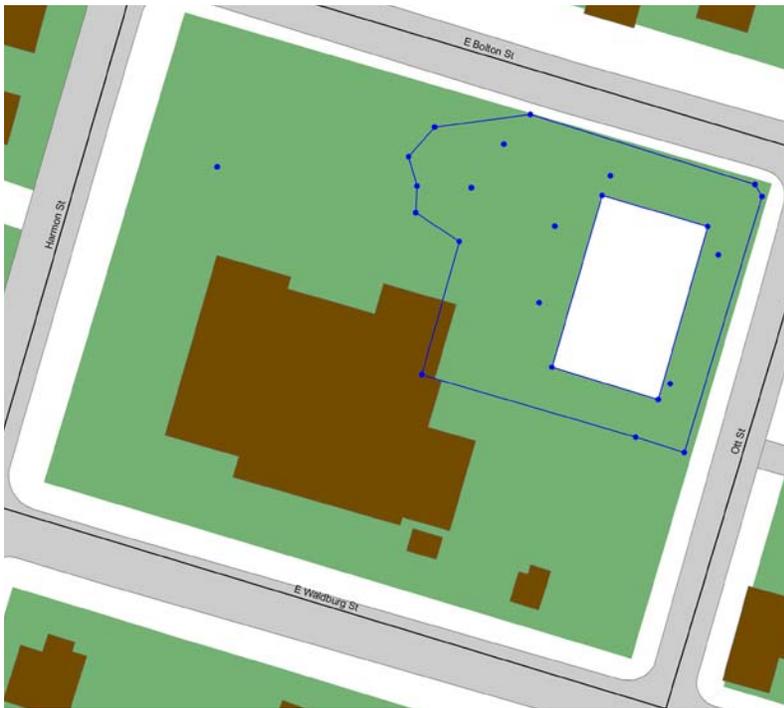


Figure 70. Singular blue dots represent shovel tests at W.W. Law Park..

part of the area originally outside of colonial Savannah that was used by the French as camps during the siege and battle. The problem was that these very small sherds were with modern items such as clear bottle glass and plastic, and were in soils suggestive of fill zones. This includes



Figure 71. Shovel testing between the pool and trees in the background and the build off to the right.

silty sands and clays, both as mottled strata and individually. It is possible that some of these occur naturally in this area that use to be swampier. The occasional presence of modern artifacts in the same levels as colonial artifacts (often in Level 1); however, suggests that at least some fill episodes were deposited on the property. The W.W. Law Center building was originally constructed in the late 1970s or early 1980s. It was renovated fairly recently. The City of Savannah's Buildings and Grounds Maintenance Administrator was unaware of any soil brought in during the recent renovation. He also thought that unless the soil was not suitable for construction, it was unlikely that significant amounts of soil were brought in during the original construction, judging from the elevation of the surrounding lots (Jim Shirley, personal communication, February 20, 2010). It is possible that fill soil was brought in during the initial construction, or at some point previously for unrelated construction or landscaping. It appears, whatever the source, that the colonial period artifacts on

this tract are in likely in redeposited fill zones. The small size of the artifacts; however, suggests that these may have originated in midden soils elsewhere.

Calhoun Square and Whitefield Square

Target: French saps (present-day Calhoun Square and Whitefield Square)

KOCOA Analysis

KOCOA analysis can be discussed for the areas now encompassed by Calhoun and Whitefield squares. The 1779 Ozanne and Wilson maps depict this area as being north of marshy low ground forming a semi-circle downhill (Figures 72-73). The higher ground would have made for much better digging conditions to construct saps trenches. They choose key terrain as close as they could get to the Central Redoubts without being annihilated by enemy fire, to begin digging their saps. The French sappers and soldiers took advantage of one of the smaller main roads leading into town. They may have begun their sap at this road. The Ozanne map suggests that minimal tree cover



Figure 72. The trenches between “A” and “B” are the French saps (Ozanne 1779). North is up on this map.

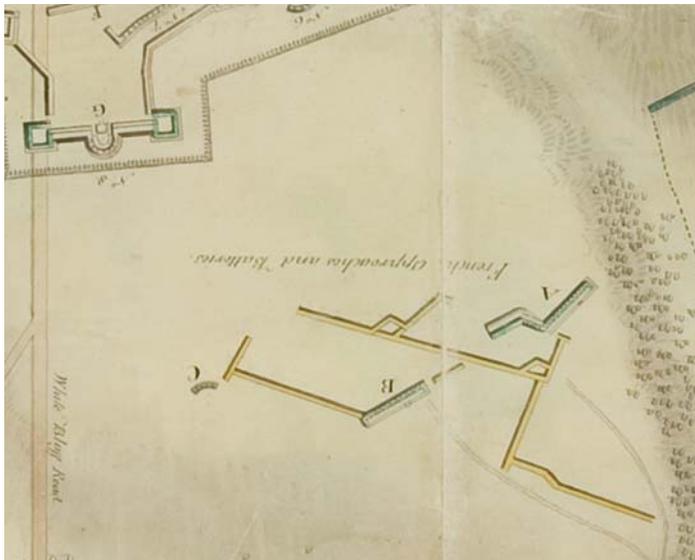


Figure 73. French saps in the bottom half of map enlargement (Wilson 1779). Image is rotated so that north is up.

existed in this area. The Wilson map depicts the tree cover as being predominantly along the eastern side of the saps, next to the marsh. There are fewer trees to the south and virtually none around the rest of the sap. Sappers tried to make their own cover and concealment by digging the saps at angles that would protect them from enfilading fire from the British redoubts and batteries. This fire was the biggest obstacle to the sap offensive prior to the battle and during sorties. The avenue of approach for the sappers was through the ever-encroaching saps and not through the more obvious road leading to town.

Archeological Results and Interpretation

Calhoun Square is bounded on the north by East Taylor Street, on the east by Abercorn Street, on the south by East Gordon Street, and on the west by Abercorn Street (Figure 1). It is located in an area that was south of the original city and southeast of the central redoubts. Figure 74 shows the GIS overlay map for Calhoun Square.

Whitefield Square is bounded by the same streets to the north and south as Calhoun Square. Whitefield is bordered on the east and west by Habersham Street. The two greenspaces are separated by two city blocks, with Whitefield Square lying east of Calhoun Square. The area that is now Whitefield Square would have been slightly more east-southeast of the central redoubts. Figure 75 is the GIS overlay of one map for Whitefield Square. While the map in this particular overlay depicts the saps as running near to, but on either side of the greenspace that is Whitefield Square, it was considered near enough to the square to be a target for this project. This is particularly true given the location of one sap adjacent to the northeastern corner of Whitefield Square and the margin of error in the GIS overlays for the other saps.

The GIS overlay map indicated that the greenspace area now containing Calhoun Square may hold two of the western most French saps. Saps were trenches of approach dug “...under the musketry-fire of the besieged”



Figure 74. GIS overlay of Faden 1784 map and modern Savannah map. Calhoun Square is the greenspace at the end of the yellow-colored sap.

(Stocqueler 1853:242). This was done by placing gabions (large cylindrical baskets that were filled with earth), "... one by one, along the intended line of parapet" (Stocqueler 1853:116). As the gabions were filled rapidly with soil dug out of the trench, they provided cover for the troops digging the trenches. A line of many gabions filled all at once was known as a flying sap (Stocqueler 1853:242). Soil



Figure 75. GIS overlay of Faden map (1784) and modern Savannah map of Whitefield Square (arrow).

removed from saps could also be thrown out of the ditch and onto the ground, making a three foot tall protective breastwork between the sap and the enemy's guns.

Period maps depict a series of almost a dozen saps that the French dug in an attempt to get artillery and troops closer to the defenses surrounding the city. The GIS overlay suggests that these saps ran east-west from the area in present day Calhoun Square, through modern Whitefield Square, and farther east just past today's East Broad Street. The north-south limits based on the overlay would be current East Jones Street and East Gaston Street. These saps were designed to approach the two central redoubts flanking the general area of Drayton Street, and the horseshoe gun battery between them. Period saps generally measured between 10-18 feet wide and three feet deep (Stocqueler 1853:254). The corresponding three feet of soil removed from the sap and thrown up as a breastwork resulted in a six foot protective zone for troops making and using the saps.

The angle of the saps was critical in the success of those laying siege. Saps needed to be dug at oblique angles to the defensive bastions and ravelins, otherwise enfilading artillery fire could hit the entire line of soldiers in a sap.

The French had serious difficulty in this effort during the Siege of Savannah.

It is likely that the initial sap on the period map is the one farthest to the south and east. If the French engineer followed the military strategy of the day, he would have begun the first trench approximately 600 yards from the defensive works, putting the sappers just out of firing range. The sappers would have then used gabions or breastworks made from trench soil to dig saps increasingly nearer and at oblique angles, to the defenses. When the saps got within approximately 300 yards of the covered way, engineers usually had a second parallel line of saps begun (Stocqueler 1853:254). This would allow those laying siege to communicate while using the parallel saps for multiple approaches.

A French sailor, Pechot, made detailed notes in his 1779 journal about the French sap construction. He noted that they began construction on September 23 at 7 p.m.

The opening of the trenches was made 150 fathoms [900 feet/300 yards] from the enemy's works, the grenadiers and chasseurs were placed in front lying down, having further small posts in front of

them to within thirty paces of the enemy's sentinels, who happily did not patrol in the night; a branch of the trench was run out 100 fathoms [600 feet/100 yards] and a parallel of 50 was commenced; a stronghold was begun on the left and could not be finished by the morning so as to put the troops there who entered the trenches at 5 o'clock, after the departure of the workmen (Stevens 1970).

Pechot went on to write,

At daylight the enemy, astonished that trenches had been opened so near and in so short a time, wished to see if the troops were within them and by whom they were defended. After a cannonade of half an hour, there came out 500 Scotch Highlanders, who taking the barracks in their course surprised the intrenchment. This corps was supported by another which did not debouch; M. de Rouvray commanding the trenches played into their hands by ordering out the six companies; scarcely had they got up than 20 pieces of cannon loaded with cartridges beat upon them. That commanding officer has given no order since. M. O'dune Lieut. Colonel of the intrenchment shouted "Forward" with all his might; the other had the retreat beaten; the chasseurs of Armagnac and Champagne, turning, fell like a foraging-party upon the Scotchmen, killed about 50 of them, followed them at the point of the bayonet as far as the barracks, and still had time to pick up the caps of the wounded. It is perhaps to this vigorous blow that we owe the tranquility of our workmen, who are no longer disturbed" (Stevens 1970).

Prevost wrote that on September 26,

five days after the French begun digging the sapps, they stopped their advance. The French turned attention to constructing batteries, strengthening their Lines & intending from[?] towards their rear to their left to communicate with works carried on by the Rebels—afterwards found to be a battery for nine mortars & another for four guns [?] (Prevost 1779a).

This reflects French soldier Pechot's journal entry on September 25,

In the night a branch of communication should have been continued and the Americans have cut a trench on our left, but the want of tools, and still more, of will, prevented. We were content with drawing a parallel as far as the depot of the trenches; a battery behind them was commenced, 2 eighteen pounders were mounted on the left battery (Stevens:1970).

Judging by period maps, it appears that the French and Americans were able to make two parallel lines of saps. The same maps suggest; however, that French sappers were not able to make the "short parallel trench half-way between the second parallel and the foot of the glacis" terminating in a battery that would have enabled them to place a howitzer there to enfilade the glacis of the covered way running ten yards off of the defensive works (Stocqueler 1853:254). Apparently the siege ended before the third and fourth parallel saps and associated ensuing strategies could be deployed.

In his journal, Pechot provides a detailed record of the guns in the saps. Allied forces placed two, eighteen-pounders on the left battery on September 25. The following day they placed 6 eighteen-pounders and 6 twelve-pounders on the left battery, where the French naval forces were to operate. On the same day the French artillery directed the construction of the right battery that would house 5 eighteen-pounders and 7 twelve-pounders. French sailors worked on construction of a battery on the left of the trenches that would house 9 mortars (Stevens 1970). Not only did the saps serve as the offensive during the siege, pummeling Savannah with mortar and cannon bombardments, but it was also the origin of one of the feints during the 1779 Battle of Savannah.

Archeologists conducted investigations in Calhoun Square on February 10, 2010 and in Whitefield Square on February 11 in search of the French saps. Investigations at both squares included a GPR survey and the excavation of limited shovel tests. GPR coverage of these two squares was done by surveying Block V in Calhoun Square, and surveying Blocks W and X in Whitefield Square (discussed in the following section). All three survey blocks generated excellent imagery of ground disturbances. Details relating to each square are separated below.

Calhoun Square Archeological Results and Interpretation

As with the other project areas, archeologists used a total station to map in natural and cultural features of the square and surrounding landscape, as well as the locations of GPR blocks and shovel tests (Figures 76, 77).

Shovel Testing

Archeologists excavated two shovel tests, both in the southeastern quadrant of the square to sample the stratigraphy. Table 13 details the depths, soils, and artifacts associated with Shovel Tests 14 and 15. (Figure 78) The soils in both were very similar, beginning with about 25 cm of



Figure 76. Transit work in Calhoun Square.

a rich black loam. This overlay a 25-45 cm thick layer of yellowish brown sand over a lighter yellowish brown soil (Figure 79). Shovel tests terminated at 98 and 116 cm below ground surface. Archeologists recovered artifacts from both shovel tests, as detailed in the table. There were no diagnostic artifacts with a TPO older than the nineteenth century and no military artifacts in these two shovel tests.

GPR Survey

GPR Block V

Archeologists undertook GPR survey to look for anomalies indicative of the saps. Figure 80 shows the location of the GPR survey in Calhoun Square. GPR Block V was a rectangular sample in Calhoun Square. This sample consisted of 3,158.5 m of radar data from 120 radargrams collected within an area measuring 51.5 m east-west by 24.3 m north-south. The block includes mostly grass with some sections of brick pavement and a few scattered trees. GPR plan maps of Block V reveal extensive radar anomalies (Figure 81). An overlay map of Block V is shown in Figure 82. The purpose of this sample was to search for evidence of the French saps that are shown on several

contemporary battlefield maps. The French saps were not identified within the Block V sample. Public utilities were the dominant linear subsurface anomaly in the GPR coverage of Block V. This conclusion is based on the alignment and orientation of the anomalies with the town grid. No ditch work with any different (non-town grid) orientation was observed in any of these three sample blocks. These data serve as tentative negative evidence for the location of the French ditch work at this spot

Whitefield Square Archeological Results and Interpretation

The location of the GPR survey and shovel tests in Whitefield Square have been depicted in Figure 83. This includes GPR Blocks W and X. These are detailed below.

GPR Survey

GPR Blocks W and X

These blocks examined major portions of Whitefield Square on Savannah's southeastern side. GPR Block W was a rectangular sample in the southern part of Whitefield Square. This sample consisted of 879.75 m of radar data from 63 radargrams collected within an area measuring 31 m east-west by 14 m north-south. The block includes



Figure 77. Shooting points for GIS overlays.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End	
Calhoun Square								
ST 14	Level 1 0-23 cmbs	1	AG0301	Window glass, sized	1804			
	2.5Y2.5/1 Black sandy silt	1	KF0104	Shell, oyster				
	Lot #31	3	MF0101	Coal				
		1	MF0103	Cinder/clinker				
		1	MM9901	Iron fragment, unidentified				
	Level 2 23-30 cmbs	1	KG0301	Bottle, colorless bottle glass	1870			
	10YR4/2 Dark Grayish Brown silty sand with 10YR5/3 Brown silty sand	3	MF0101	Coal				
	Lot #32							
	Level 3 30-78 cmbs	0	N/A	Coal and charcoal; not recovered				
	10YR5/4 Yellowish Brown silty sand with charcoal flecks							
Level 4 78-116 cmbs	0	N/A	Sterile					
10YR5/6 Yellowish Brown sand								
ST 15	Level 1 0-25 cmbs	2	AC0199	Brick, unspecified				
	10YR2/1 Black sandy silt	1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930	
	Lot #33	1	KF0104	Shell, oyster				
		1	KG0301	Bottle, colorless bottle glass	1870			
		4	MF0101	Coal				
		1	MF0103	Cinder/clinker				
		8	MP9901	Plastic, unidentified				
		Level 2 25-37 cmbs						
	10YR3/2 Very Dark Grayish Brown loamy sand w/charcoal flecks	Levels 2-5 (25-80 cmbs) Artifacts. Lot #34						
	Lot #34							
	Level 3 37-46 cmbs	1	AC0120	Brick, handmade				
	10YR4/2 Dark Grayish Brown sand w/ 10YR6/6 Brownish Yellow sand	4	AM1507	Nail fragment, unidentified				
	Lot #34	2	KC0105	Porcelain, plain				
Level 4 46-50 cmbs	3	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930		
10YR3/2 Very Dark Grayish Brown silty sand	1	MF0103	Cinder/clinker					
Lot #34								

Table 13. Calhoun Square shovel tests (continued on next page).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
	Level 5 50-98 cmbs 10YR5/4 and 5/6 Yellowish Brown sand with charcoal flecks Lot #34						

Table 13. Calhoun Square shovel tests (continued from previous page).



Figure 78. Shovel testing in Calhoun Square as a tourist trolley drives by.



Figure 79. Typical shovel test strata.

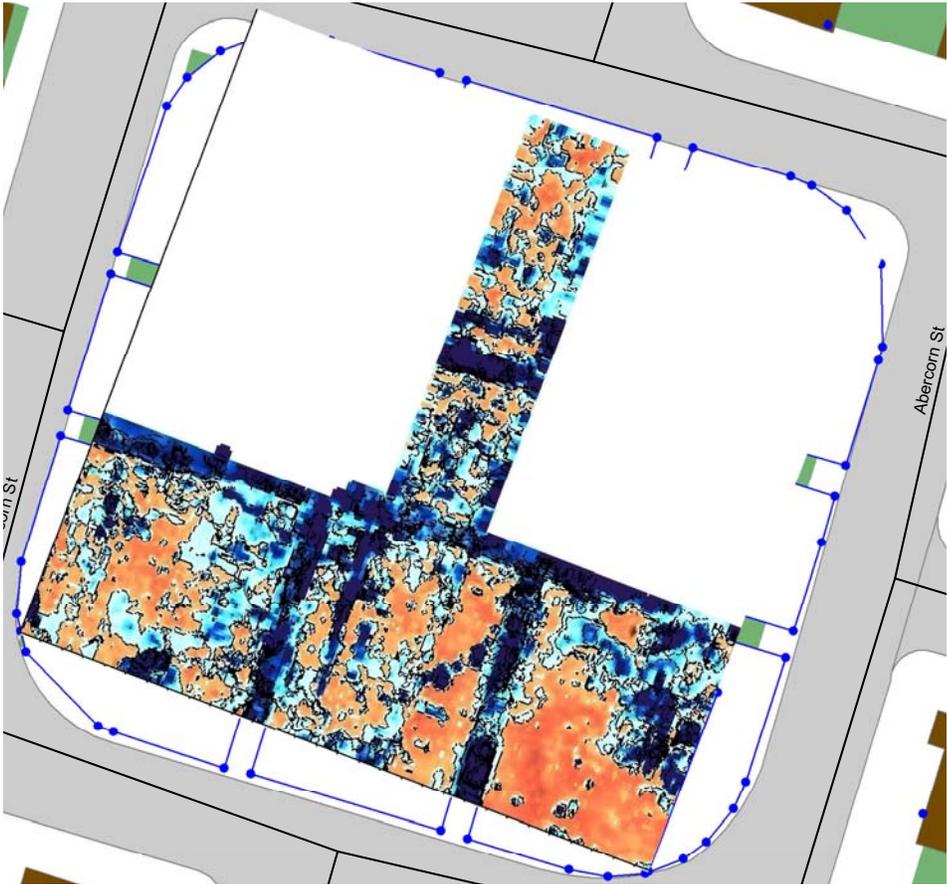


Figure 80. Plan view overlay of GPR survey in Calhoun Square.

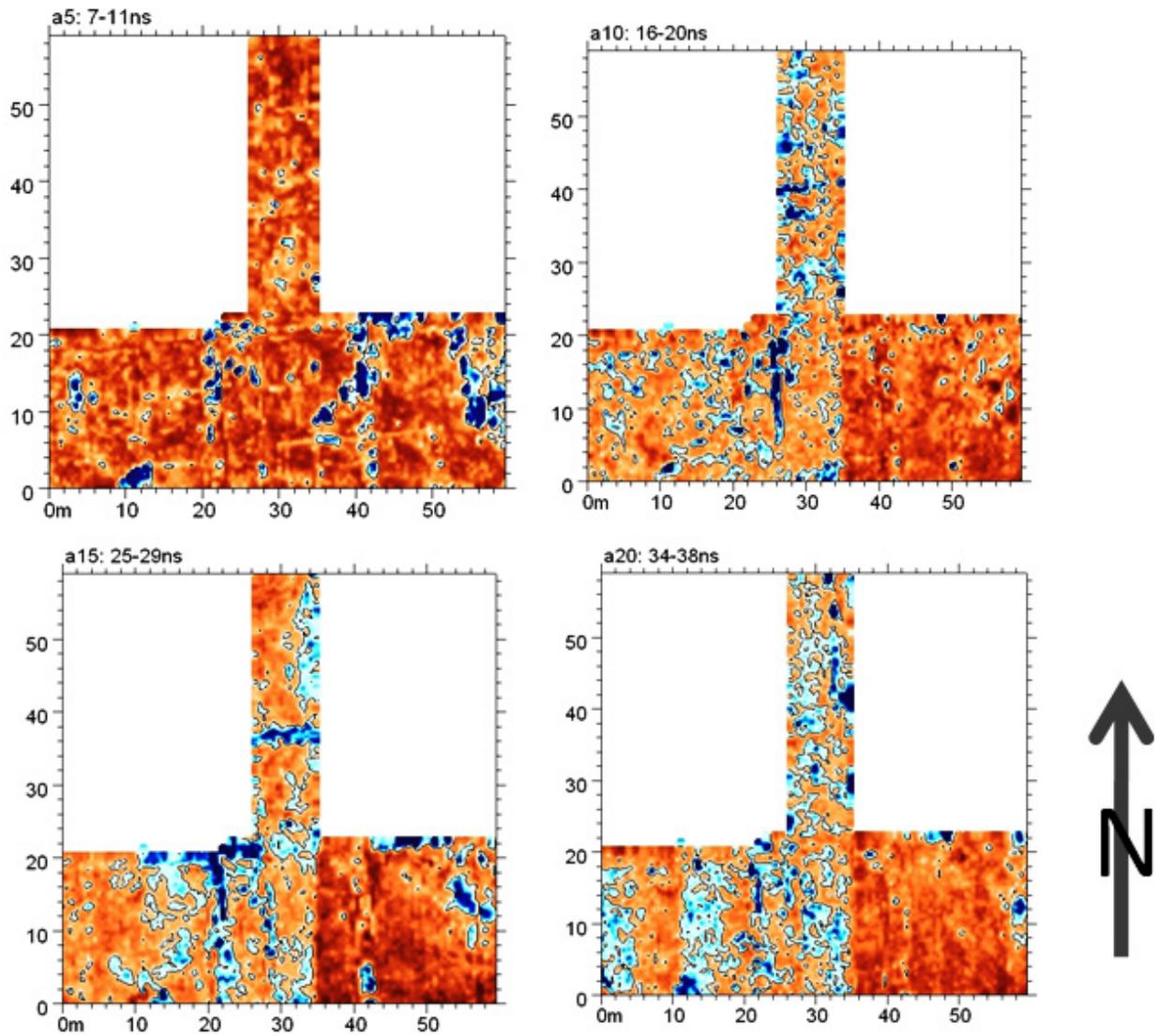
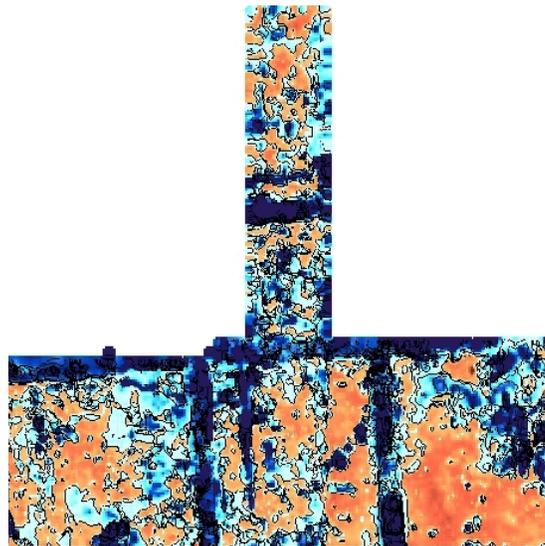


Figure 81. GPR Block V plan view (above) at increasing depths, Calhoun Square.

Figure 82. GPR Block V overlay of multiple plan views in Calhoun Square (right).



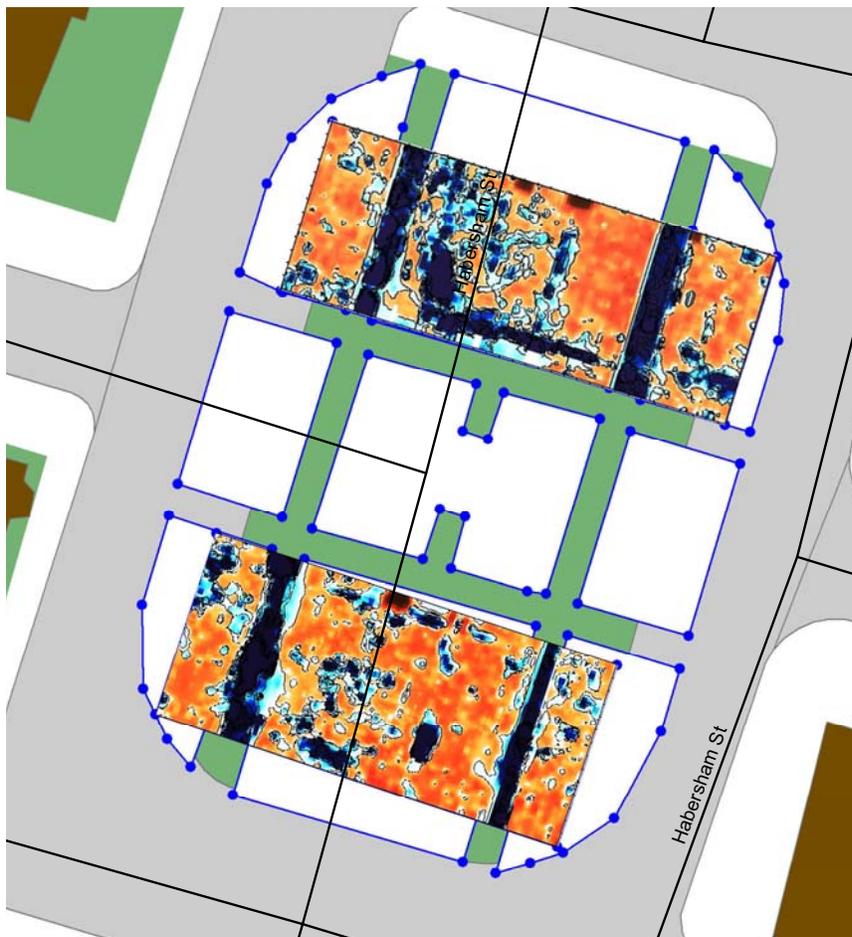


Figure 83. Location of GPR data in Whitefield Square.

mostly grass with some sections of brick pavement and a few scattered trees. GPR plan maps of Block W reveal extensive radar anomalies (Figure 84). Overlay maps of Blocks W and X are shown in Figure 85. The purpose of this sample was to search for evidence of the French saps. The French saps were not identified within the Block W sample. Public utilities were the dominant linear anomaly in the GPR plan maps from Block W.

GPR Block X was a rectangular sample in the northern part of Whitefield Square. It consisted of 887.5 m of radar data from 70 radargrams that were collected within an area measuring 34.5 m east-west by 13 m north-south. The block includes mostly grass with some sections of brick pavement and a few scattered trees. GPR plan maps of Block X reveal extensive radar anomalies (Figure 86). The purpose of this sample was to search for evidence of the French saps. The French saps were not identified within the Block X sample. Public utilities were the dominant linear anomaly in the GPR coverage of Block X.

Shovel Testing

Archeologists excavated Shovel Tests 16 and 17 here, as detailed in Table 14 (Figure 87). Soils were fairly consistent in both tests, ranging from dark brown to yellowish brown sands. Excavation terminated at 85 and 95 cm below ground surface. Both shovel tests contained artifacts, as detailed in the table. The artifacts generally date from the 19th-early 20th century. ST 17 had somewhat older artifacts, including pearlwares and a kaolin pipestem. Archeologists encountered an iron pipe in ST 17 at 43 cmbs. The pipe disturbance would account for the mix of older and modern materials in Level 1, including plastic and a carbon gas lamp core. The presence of the pearlware indicates that there is an older site here. It is not old enough, however, to be associated with the French soldiers digging and using the saps before and during the Battle of Savannah.

The French Saps that were excavated during the Siege of Savannah were an important part of the battlefield landscape on October 9th and were employed by the allied Patriot forces during one of the feints at the beginning of

the battle. Although the saps are depicted on several contemporary battle plan maps, their archeological footprint remains elusive. If these features were located on either Calhoun or Whitefield squares, they were not identified by the present level of effort.

Davant Park

Target: Fortification trench leading to Redoubt Number 6

KOCCOA Analysis

This British fortification trench extended off the southwestern corner of Redoubt Number 6. Figure 88 is an enlarged view of the Faden (1784) map showing Redoubt Number 6 and the trench under discussion, which is located to the top, right corner of the redoubt. (North is down on this map.) The trench ran generally to the northeast, which was diagonally to the city plan. This “L” shaped

Block W

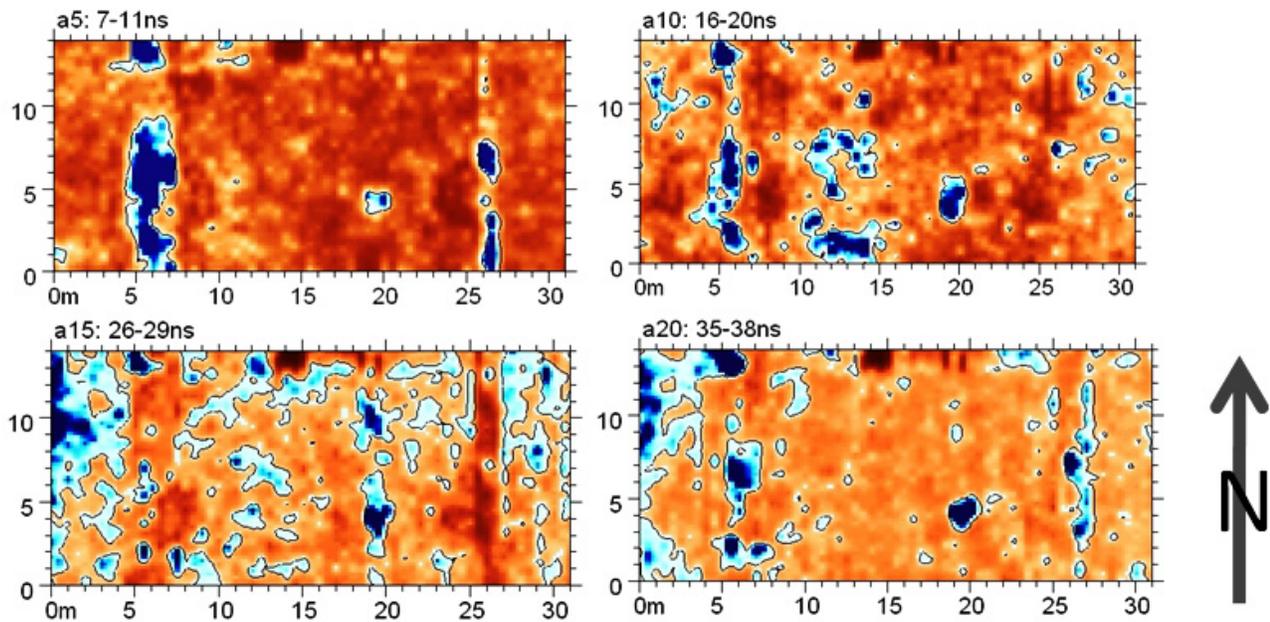


Figure 84. Plan of GPR Block W at increasing depths, Whitefield Square.

Blocks W and X Overlays

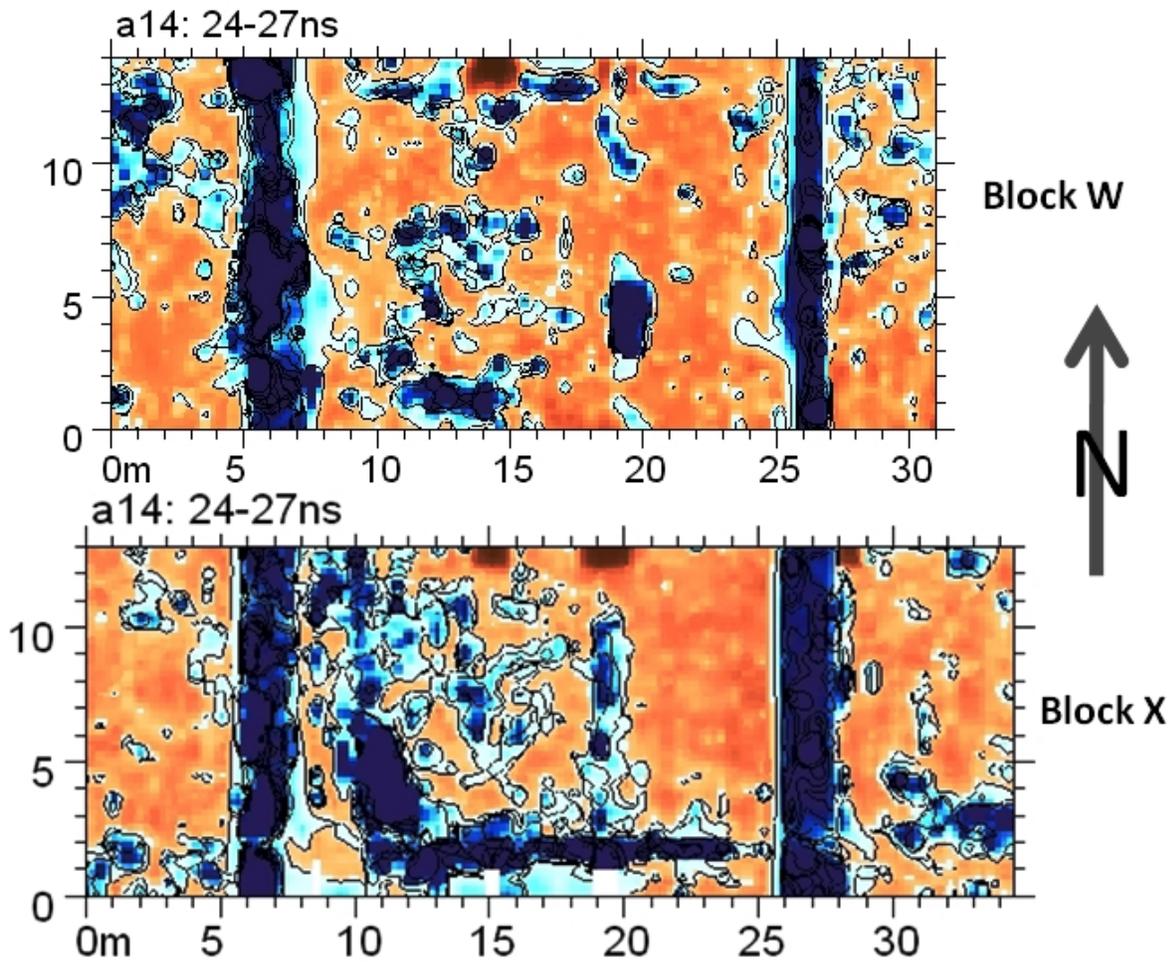


Figure 85. Overlays of GPR Blocks W and X, Whitefield Square.

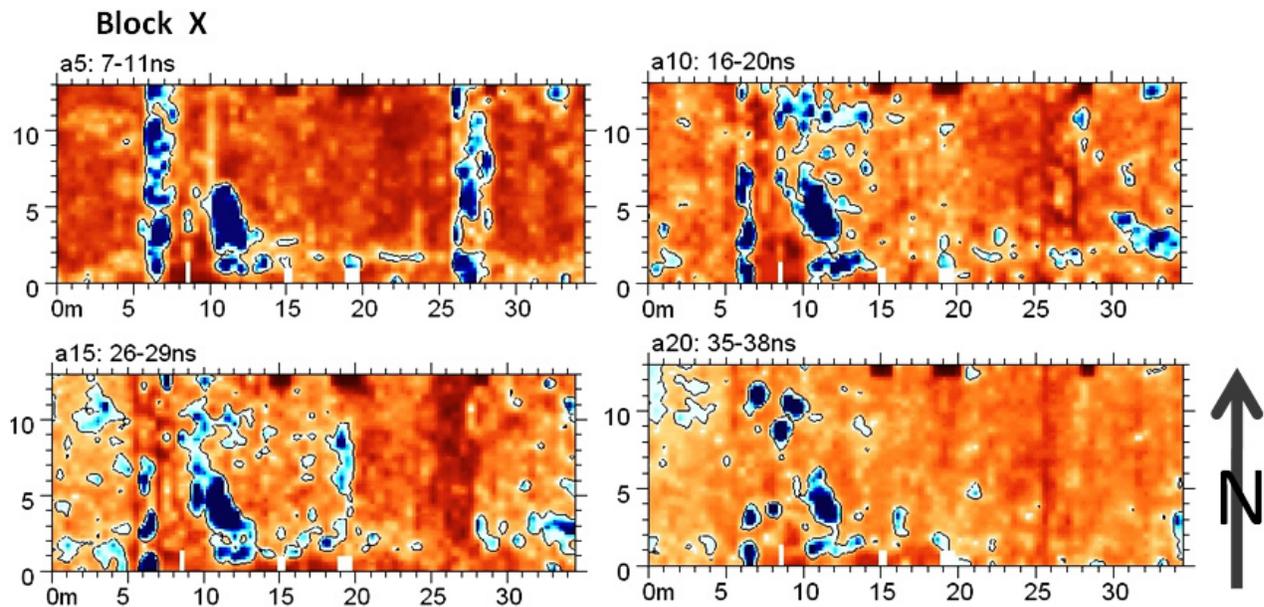


Figure 86. Plan view of GPR Block X.

trench was also located generally north of Gun Battery Number 4 and west northwest of Redoubt Number 5 and its associated trench. The targeted fortification was flanked to its northeast by another fortification trench which continued the diagonal line of defensive works. The targeted fortification was an important part of the fortification trenches in the southeastern defensive works and helped defend this area of the terrain. Some of its field of fire would have been obscured to the southwest and southeast by Redoubts 6 and 5, respectively; however, those redoubts would have been in greater need of clear fields of fire and observation for the gun crews located there. The target fortification trench was an excellent provider of cover and concealment. It provided this in two ways. First it offered troops a concealed way to travel to and from Redoubt Number 6, and indirectly to Redoubt Number 5 and Gun Battery Number 4. Second, the trench provided cover for the gun battery crews, should they need it during time of heavy bombardment. The targeted fortification would have been the final obstacle to enemy attacks from the southeast, once they made it through the abatis and passed the gun battery and redoubts. The only avenue of approach offered by the targeted fortification trench was an avenue for the British troops who dug it to approach other Redoubt Number 6 and other defenses in that area.

Davant Park is a narrow strip of greenspace bordered by East Perry Lane on the South, Abercorn on the west, the south fence of Colonial Park Cemetery on the north, and Habersham on the East. (Figure 1). The white rectangular line south of, and adjacent to, the lot marked “Cemetery” in Figure 89 is the tract that would be named Davant Park. The area is empty on this index sheet. The 1884 Sanborn

map does show the location of a Police Barracks fronting the west side of the cemetery and a portion of the north side of Davant Park. The 1888 Sanborn map contains a sheet representing the area that would become the park (Figure 90). The entire large rectangle (in red) that would become the park contains fifteen wooden frame structures. The lot is marked “CITY LOT”. Three of the structures are stables (marked by an “X”). Two smaller structures are dwellings (marked “D”). Two long sheds occupy some of the eastern part of the lot, along with two buildings marked “Storage”. A total of eight very small support structures (some possibly privies) dot the tract.

In 1896, eight years after this Sanborn map was made, the property was added to the Colonial Park tract when the City of Savannah passed an ordinance to that effect (MacDonnell 1907:295). At this time the parcel was known as the city pound lot and measured 67.9 ft on Abercorn Street, 492.5 ft along Perry Lane, and 57.4 ft along the eastern lot line adjoining the jail lot. The ordinance called for the tract to be “dedicated to park purposes, under the conditions and limitations in this ordinance contained” (MacDonnell 1907:295). None of the 15 structures depicted on the 1888 Sanborn maps appear on the 1898 map and no new structures are shown (Figure 91). Apparently all 15 buildings were razed sometime during the 10 years between mapmaking. The only building adjacent to the tract is located to the east. This was a large brick structure housing the Chatham County Jail that appeared on earlier maps. No structures appear on the 1916 Sanborn.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
Whitefield Square							
ST 16	Level 1 0-35 cm bs 10YR3/2 Very Dark Grayish Brown sandy loam Lot #37	2	AC0199	Brick, unspecified			
		1	KC0401	Ginger beer stoneware bottle	1835	1867	1900
		1	KF0104	Shell, oyster			
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0303	Bottle, light green bottle glass			
		1	MM9901	Iron fragment, unidentified			
		1	ZG0302	Marble, glass, machine made	1901		
		1	ZM0915	Battery carbon core			
	Level 2 35-95 cmbs 10YR6/4 Light Yellowish Brown sand	0	N/A	Sterile			
	ST 17	Level 1 0-20 cmbs 10YR2/2 Very Dark Brown sandy loam Lot #35	6	AC0199	Brick, unspecified		
2			AG0301	Window glass, sized	1804		
4			AM1507	Nail fragment, unidentified			
5			KC0630	Pearlware, plain	1774	1802	1830
1			KC0636	Pearlware, underglaze polychrome painted floral patterns	1795	1813	1830
1			KC1299	Coarse earthenware, unidentified			
1			KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
5			KF0104	Shell, oyster			
1			KG0251	Bottle, applied color lable bottle	1935		
11			KG0301	Bottle, colorless bottle glass	1870		
1			KG0303	Bottle, light green bottle glass			
4			KG0393	Bottle, olive green unidentified			1900
1			MP9901	Plastic, unidentified			
5			MZ0101	Material, unidentified			
1			TC0211	Tobacco pipestem, kaolin, 6/64"			
1			ZM0915	Battery carbon core			
2			ZR0302	Slate, unidentified			
Level 2 20-30 cmbs 10YR3/1 Very Dark Gray sandy loam Lot #36			3	AG0301	Window glass, sized	1804	
3		AM1505	Nail, cut or wrought, square				
1		KC2702	Refined earthenware, decal	1890			
2	KF0104	Shell, oyster					
5	KG0301	Bottle, colorless bottle glass	1870				
1	KG0393	Bottle, olive green unidentified			1900		
1	MF0101	Coal					
6	MM9901	Iron fragment, unidentified					

Table 14. Whitefield Square shovel tests (continued on next page).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		4	MZ0101	Material, unidentified			
		1	ZR0302	Slate, unidentified			
Level 3 10YR5/4 Yellowish Brown sand	30-59 cmbs	0	N/A	Coal and charcoal; not recovered			
Level 4 10YR5/6 Yellowish Brown sand	59-85 cmbs	0	N/A	Sterile			

Table 14. Whitefield Square shovel tests (continued from previous page).



Figure 87. Shovel testing in Whitefield Square.

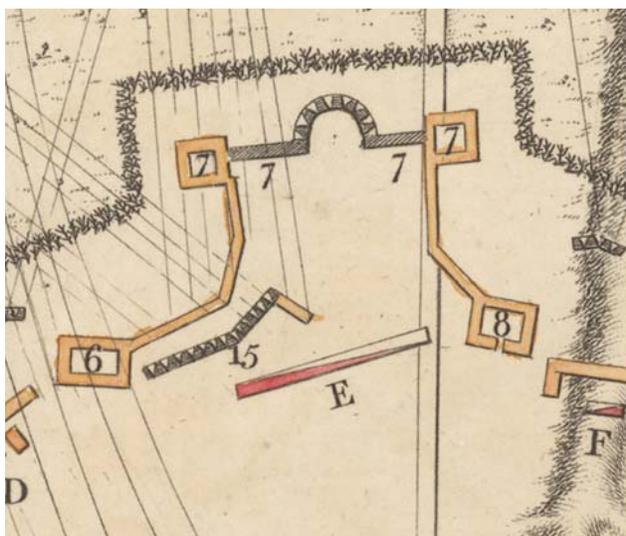


Figure 88. The “dog-leg” trench between redoubts 6 and 7 (Faden 1784)

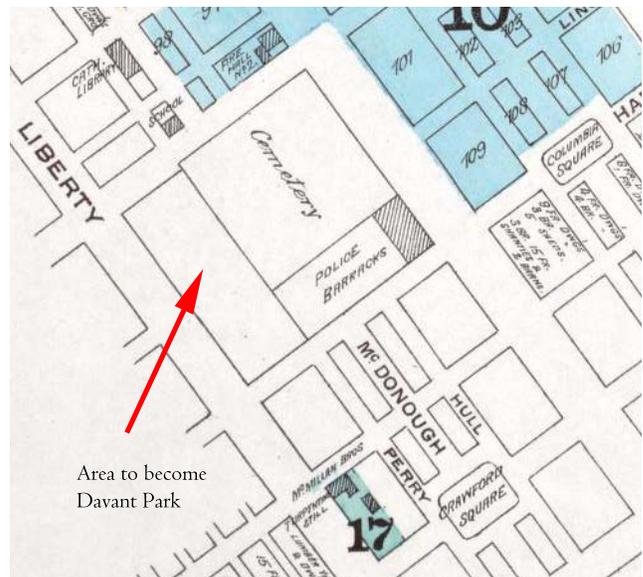


Figure 89. This 1884 Sanborn map shows a vacant lot adjacent to Colonial Park.

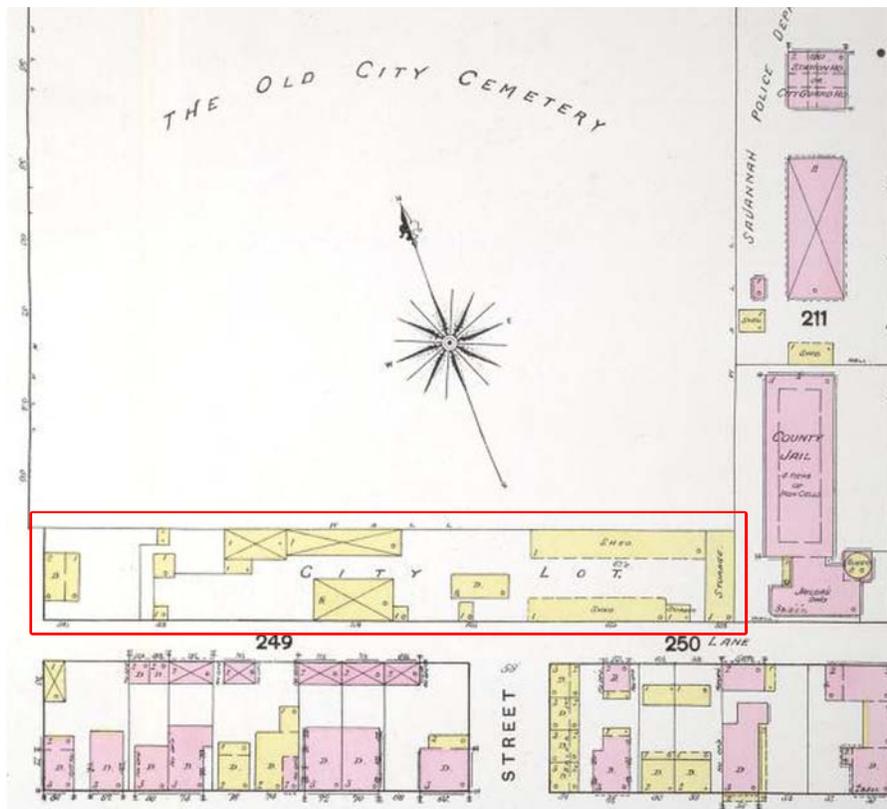


Figure 90. 1888 Sanborn map showing multiple structures (in yellow) in the area that would become Davant Park.

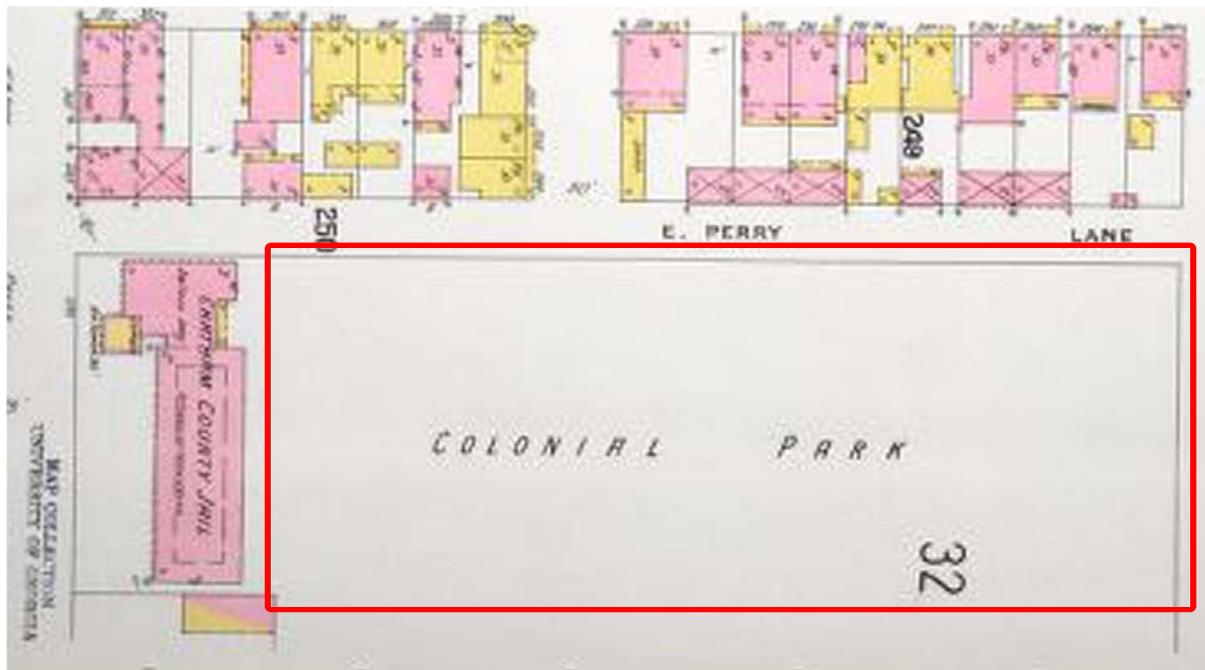


Figure 91. 1898 Sanborn map (north is down) showing no structures in what would become Davant Park.

It wasn't until 1915 that the park was named Davant Park in honor of Richard J. Davant, who was a former two-term mayor of Savannah. Davant was born in 1866 and died during his second term in office on October 9, 1915 (City of Savannah 2010). Today, the eastern side of the park contains a small playground with swings and slides. The western side of the park once was a basketball court and the pavement from it remains. Between the playground and former basketball court is an area of grass that was the focus of our investigations.

Archeological Results and Interpretation

During the first NPS ABPP project in 2008, archeologists discovered a large buried anomaly running through Colonial Park Cemetery and into the Davant Park greenspace south of the cemetery. This anomaly was discovered during a GPR survey of the southeastern quadrant of the cemetery (GPR Block L) and the grassy portion of Davant Park (GPR Block M). Both GPR Blocks L and M revealed a long, linear anomaly aligned on a diagonal, northeast-southwest course. This feature extended for at least 78 m (completely across both GPR blocks) and varied in width from 10-25 m. The anomaly has the same alignment in the same general location as fortifications on the historic battle maps. Figure 92 shows the GIS overlay of a historic map on the modern Savannah map, along with an outline of the location of the two GPR blocks. The interior black line in the GPR blocks shows the alignment of the anomalies. Figure 93 is a plan view of the GPR anomalies identified in the 2008 season, with north towards the top of the page. Note the anomaly in the northwestern corner (red) and the



Figure 92. GIS overlay of Faden (1784) map and modern Savannah map. The greenspace is Colonial Cemetery. The black outlines are boundaries of the two GPR survey blocks, L and M. The smaller block is located in Davant Park.

one I the eastern half of the block that trends northeast-southwest. This GPR anomaly shares many attributes with the deep fortification trench that was located in Madison Square, which was targeted for “ground truthing” by the 2010 survey team. Details about this work are found in Elliott and Elliott (2009).

The Davant Park area was revisited during the second NPS ABPP grant in order to investigate this anomaly and attempt to verify, through minimal excavation, if it was one of the Battle of Savannah fortification trenches. Since the anomaly in Block L fell within the cemetery, archeologists focused on excavating a test unit within Block M in Davant Park, outside the cemetery wall. The GPR survey suggested that this greenspace was devoid of burials and the area was accessible for archeological excavation.

Test Unit 1

Archeologists excavated Test Unit 1 in the northeastern section of the GPR block, hoping to catch part the intersection of the anomaly in the cemetery block (GPR Block L) with the anomaly in the Davant Park block (GPR Block M) (Figure 94). This test unit measured 2 m east-west by 1 m north-south. All soils were sifted through 0.25 inch hardware mesh. Brick fragments in this unit were generally handmade.

Level 1 of Test Unit 1 was an arbitrary 10 cm level extending from 7-11 cmbd at the top to 18-20 cmbd at the base. The soils were a dark gray (10YR4/1) sandy loam humus topsoil and some gravel directly beneath the sod. It was extremely compact. Artifact density was low, totaling only 13 in this level. Artifacts included nails, whiteware, and bottle glass, along with a piece of slate and a 1992 dime (Table 15). The terminus post quem (TPQ) for this level was the 1992 dime, followed by the 1865 wire nail date.

Level 2 began as an arbitrary 10 cm level of dark grayish brown (10YR4/2) silty sand. The level was terminated at a natural break in the soil when it changed to a brownish yellow (10YR6/6) coarse sand mottled with dark gray (10YR4/1) coarse sand and specks of yellowish brown (10YR5/8) coarse sand. Level 2 began at 18-20 cmbd and extended to between 26-31 cmbd. Only a 35 cm wide area of dark grayish brown (10YR4/2) silty sandy soil remained in the base of the unit, and it ran along the north wall from the center to the northeastern corner. Artifacts identified but not recovered included oyster shell, granite gravel, a copper rim-fired

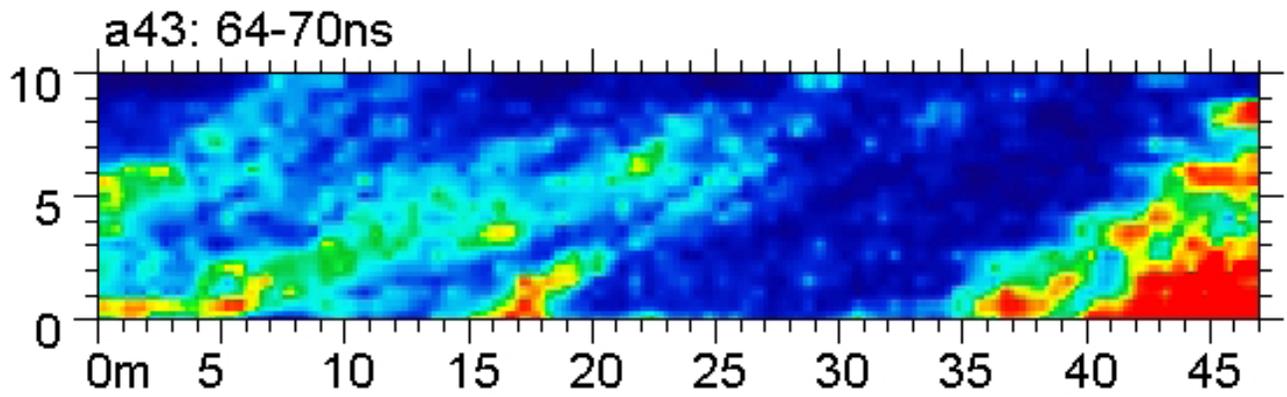


Figure 93. Plan view of GPR Block M in Davant Park from 2008 Savannah Under Fire project.



Figure 94. The arrow points to Test Unit 1, within the GPR Block M (outlined in black) in Davant Park. The large black box denote the boundaries of GPR Block L in Colonial Cemetery. The two black diagonal lines in each box show the alignment of GPR anomalies, which are much wider than the lines depicts (Google Earth 2011).

Level	Sum Of Count	Code	Description	Start	Mean	End
1	3	AM1507	Nail fragment, unidentified			
1	1	AR0108	Mortar			
1	1	KC0700	Whiteware, plain	1820		2009
1	1	KC0701	Whiteware, indeterminate decoration	1820		2009
1	1	KG0300	Bottle, light aqua bottle glass	1800		1920
1	1	KG0301	Bottle, colorless bottle glass	1870		
1	1	KG0306	Bottle, amber bottle glass			
1	1	PM0120	Coin			
1	1	ZR0302	Slate, unidentified			
Total	13					

Table 15. Test Unit 1, Level 1, Davant Park.

bullet casing embossed “P”, brick and mortar fragments, plastic, unidentifiable iron fragments, minor amounts of coal and slag, concrete, and asbestos fragments (possibly roof shingles).

Level 3 was a natural level beginning between 26-31 cmbd and extending to 38-54 cmbd. Soils were the same as Level 2, including the differentiation along the northern wall of the unit (Zone A). The grayish brown Zone A overlaid the brownish yellow Zone B. This latter zone was comprised mostly of rubble. During excavation archeologists observed that both Zones A and B contained rubble, although Zone B had more and was more compacted. It appears that both zones represent secondary fill deposition, therefore archeologists were selective about the artifacts recovered. They saved all ceramics, which consisted of 30 very small sherds ranging from porcelain to whiteware. They also collected unique artifacts, and a representative sample of nails (square and wire) and glass. One lead musket ball was recovered. Other artifacts in the level included modern coins (a 1972 penny and a 1970 dime), plastic, a NuGrape bottle, a brass tack, kaolin pipestem, slate, slag, mortar, bottle glass, glazed and unglazed brick, window glass, a knife blade, and styrofoam (in the upper portion of the level). Table 16 provides artifact counts and descriptions of the artifacts recovered in this level. Level 3 terminated at the top of a darker layer having much less rubble. The mean ceramic date (MCD) for Level 3 is 1814.6, based on a statistically invalid sample of 19 sherds (Table 17). The TPQ for the level is the 1972 penny.

Level 4 soils did not have the two zones noted in the previous levels. Level 4 consisted of a very dark grayish brown (10YR3/2) sand with minor mottles and streaks of grayish

brown (10YR5/2) coarse sand and light gray (10YR7/1) clay and red clay (2.5RY4/8) clay. Archeologists excavated this as a natural level beginning at 38-54 cmbd and extending to 60 cmbd. Artifacts consisted of a mixture of historic items and modern debris, so the same sampling strategy used in Level 3 was employed in Level 4. Items in Level 4 included slate, nails (cut and wire), brick, oyster shell, slag, asbestos tile, a copper-jacketed bullet, a barrel strap, plastic, a Bic pen, a plastic monkey, animal bone, 48 ceramics (13 varieties), bottle glass (amber, green, clear), two buttons (milk glass and wood), a pencil lead, kaolin pipestem and bowl fragments, a possible gunflint fragment, and Styrofoam. Table 18 details the artifacts recovered from Level 4 of Test Unit 1. Level 4 produced 35 diagnostic ceramics resulting in a MCD of 1801.83. This date is statistically invalid, however. Obviously the Styrofoam and plastic monkey date are the most recent objects in the level.

Level 5 was an arbitrary level extending from 60-73 cmbd. Soil was a brown (10YR5/3) sand with dark gray (10YR4/1) sand and smaller amounts of red (2.5YR5/8) sandy clay. By the base of Level 5, the brown (10YR5/3) sand contained noticeable parallel bands of very dark gray (10YR3/1) sand in the western half of the unit (Figure 95). The bands are most likely plowscars. Archeologists terminated this level when they uncovered four features at 73 cmbd (Figure 96). The mixture of historic artifacts and modern trash, albeit in lower densities than the previous levels, continued in Level 5. The sampling strategy was continued. Items in Level 5 included brick, oyster shell, animal bone, mortar/plaster, nails (some possibly square, but generally unidentifiable), slate, slag, bottle glass, 56 ceramic sherds, plastic, a porcelain button, coal,

Level	Sum Of Count	Code	Description	Start	Mean	End
3	2	AC0120	Brick, handmade			
3	1	AG0301	Window glass, sized	1804		
3	1	AM1101	Nail, wire common	1890		2009
3	2	AM1505	Nail, cut or wrought, square			
3	4	AM1507	Nail fragment, unidentified			
3	1	AM1511	Tack			
3	1	KC0102	Porcelain, blue underglaze h.p.			
3	4	KC0105	Porcelain, plain			
3	1	KC0399	Stoneware, unidentified			
3	9	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
3	1	KC0502	Ironstone, blue tinted stone china, decorated	1815	1822	1830
3	1	KC0630	Pearlware, plain	1774	1802	1830
3	4	KC0631	Pearlware, unidentified decorated	1774	1802	1830
3	1	KC0700	Whiteware, plain	1820		2009
3	1	KC0712	Edgeware, scalloped, unimpressed			
3	1	KC1299	Coarse earthenware, unidentified			
3	1	KC2202	Whiteware, hand painted	1820		2009
3	2	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
3	1	KC2307	Transfer print, stippled, blue underglaze	1795	1818	1840
3	1	KC2800	Yellowware, decorated	1830		1940
3	1	KC2801	Yellowware, plain	1830	1885	1940
3	1	KF0101	Bone, unidentified			
3	1	KF0104	Shell, oyster			
3	1	KF0105	Shell, clam			
3	1	KG0251	Bottle, applied color lable bottle	1935		
3	1	KG0253	Bottle, applied finish	1800	1842	1885
3	4	KG0300	Bottle, light aqua bottle glass	1800		1920
3	1	KG0301	Bottle, colorless bottle glass	1870		
3	2	KG0303	Bottle, light green bottle glass			
3	1	KG0304	Bottle, aqua bottle glass	1800		1920
3	3	KG0305	Bottle, cobalt blue bottle glass			
3	1	KG0306	Bottle, amber bottle glass			
3	7	KG0393	Bottle, olive green unidentified			1900
3	1	KM0304	Beer/Soda pull tab	1962		
3	3	MM9901	Iron fragment, unidentified			

Table 16. Test Unit 1, Level 3, Davant Park, Artifacts (continued on following page).

Level	Sum Of Count	Code	Description	Start	Mean	End
3	7	MP9901	Plastic, unidentified			
3	1	MR0122	Unmodified stone			
3	2	PM0120	Coin			
3	1	RM0106	Bullet, other			
3	1	RM0112	Lead ball			
3	1	TC0210	Tobacco pipestem, kaolin, 5/64"			
Total	82					

Table 16. Test Unit 1, Level 3, Davant Park, Artifacts (continued from previous page).

Count	Code	Description	Start	Mean	End	Product	MCD
9	KC0501	Ironstone, plain blue tinted stone china	1886	1842	1930	16578	
1	KC0502	Ironstone, blue tinted stone china, decorated	1822	1815	1830	1815	
1	KC0630	Pearlware, plain	1802	1774	1830	1774	
4	KC0631	Pearlware, unidentified decorated	1802	1774	1830	7096	
2	KC2303	Transfer print, linear, unidentified underglaze	1818	1795	1840	3590	
1	KC2307	Transfer print, stippled, blue underglaze	1818	1795	1840	1795	
1	KC2801	Yellowware, plain	1885	1830	1940	1830	
19						34478	1814.63

Table 17. Test Unit 1, Level 3, Davant Park, MCD.

Level	Sum Of Count	Code	Description	Start	Mean	End
4	5	AC0120	Brick, handmade			
4	4	AM1505	Nail, cut or wrought, square			
4	2	AM1507	Nail fragment, unidentified			
4	1	CC0101	Button, porcelain			
4	1	CF0303	Button, wooden			
4	1	CG0102	Button, glass			
4	3	KC0105	Porcelain, plain			
4	1	KC0398	Lead glazed, unidentified			
4	3	KC0399	Stoneware, unidentified			
4	8	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
4	7	KC0604	Creamware, plain	1762	1791	1820

Table 18. Test Unit 1, Level 4, Davant Park, Artifacts (continued on following page).

Level	Sum Of Count	Code	Description	Start	Mean	End
4	8	KC0630	Pearlware, plain	1774	1802	1830
4	1	KC0631	Pearlware, unidentified decorated	1774	1802	1830
4	4	KC0700	Whiteware, plain	1820		2009
4	2	KC0705	Edgeware, scalloped, rim impressed, straight	1809	1811	1831
4	1	KC0712	Edgeware, scalloped, unimpressed			
4	1	KC0903	Mocha on white body	1795	1818	1840
4	1	KC1301	Redware, unglazed, coarse			
4	2	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
4	1	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
4	1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	1840	1855	1870
4	2	KC2312	Transfer print, Japanese brown on ivory body	1870	1878	1885
4	2	KC2809	Earthenware, Rockingham glaze on buff paste	1850	1900	1950
4	11	KF0101	Bone, unidentified			
4	3	KF0104	Shell, oyster			
4	2	KG0252	Bottle, continuous thread finish, machine made	1910		
4	1	KG0257	Bottle, rolled rim			1870
4	1	KG0259	Bottle seal			
4	2	KG0300	Bottle, light aqua bottle glass	1800		1920
4	3	KG0301	Bottle, colorless bottle glass	1870		
4	1	KG0303	Bottle, light green bottle glass			
4	1	KG0306	Bottle, amber bottle glass			
4	8	KG0393	Bottle, olive green unidentified			1900
4	1	MF0101	Coal			
4	1	MM9903	Slag			
4	1	MP9901	Plastic, unidentified			
4	1	RM0113	Bullet			
4	1	RR0133	Chert worked fragment, unidentified			
4	1	TC0101	Tobacco pipe bowl, kaolin, plain			
4	1	TC0210	Tobacco pipestem, kaolin, 5/64"			
4	1	ZM1208	Iron flat strip			
4	1	ZR0302	Slate, unidentified			
4	1	ZR2452	Flake, fragment 0% cortex			
Total	105					

Table 18. Test Unit 1, Level 4, Davant Park, Artifacts (continued from previous page).



Figure 95. Test Unit 1, Base of Level 5 (right). Note the striations in the soil in the western half of the unit. The center and eastern half contains stains from features. An iron pipe runs along the northern wall of the unit. Several fill zones are visible in the western wall above this pipe and below the grass.

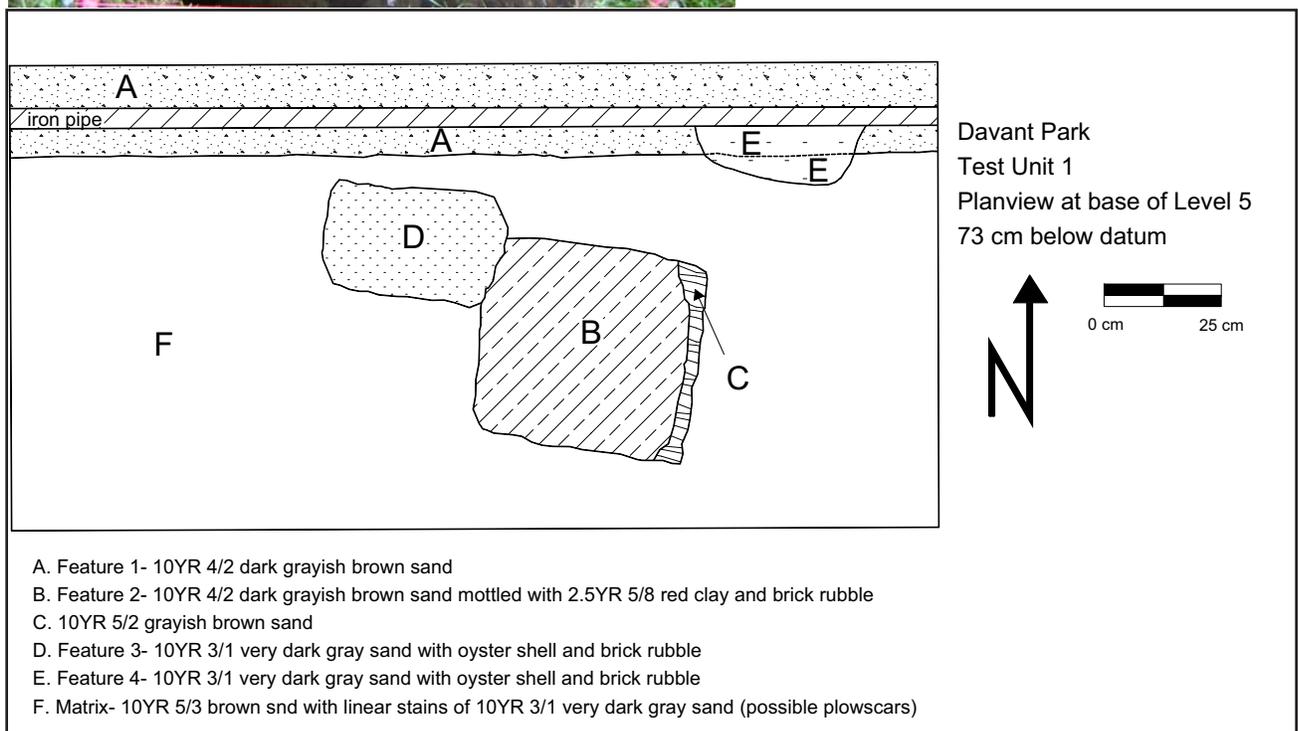


Figure 96. Test Unit 1, Plan View, Base of Level 5.

unidentifiable iron, pencil lead, a slate pencil, and a kaolin pipe stem and pipe bowl. Table 19 identifies the 13 varieties of ceramics recovered, including some early ones. A total of 46 diagnostic sherds produced a MCD of 1787 for Level 5 (Table 20). The TPQ for Level 5 was 1890, based on the presence of a decal-decorated piece of refined earthenware sherd.

The four features in Test Unit 1 first appeared at the base of Level 5, and included one modern feature (Feature 1) and three older features. Figure 96 illustrates them in plan view at the base of Level 5). Features 1-4 are detailed below

Following the completion of Level 5, archeologists excavated Feature 1, which they had pedestaled in the unit. Feature 1 was a linear feature running east-west the length of the test unit and continuing into the unit's east and west walls. It extended 20 cm south into the unit from the north wall. It had a flat base. This feature contained an iron pipe and an associated trench and trench fill. Feature 1 was not completely discernible until the base of Level 5 (73 cmbd) (Figure 97). In profile, however, the feature began at 50 cmbd. The base of Feature 1 extended slightly (1-3 cm) into Level 6 of the unit, to terminate at approximately 77 cmbd. The iron pipe was located at the very bottom of the trench.

The creation of this feature included the digging of the pipe trench, laying the pipe, and filling the trench. These actions resulted in the soil disturbance, redeposition, potential fill, and the intermixing of modern debris with historic artifacts. The presence of Feature 1 beginning at 50 cmbd indicates that all the layers sitting on top of it (A, B, C, in Figure 97) postdate the waterline trench. Likewise, the layers beneath the Feature 1 trench (E-I) predate it.

Archeologists then began excavating Feature 4, which had been truncated by the more recent Feature 1 pipe trench. Feature 4 was a deep feature extending below Feature 1 and into the northern wall of the unit. Archeologists temporarily stopped excavation of the feature when they could no longer reach the bottom of it. They placed a plastic liner in the partially-excavated feature to avoid contamination of the feature with surrounding soil matrices. Archeologists then resumed excavation of the test unit levels around Feature 4, through Level 9, at which time the base of the feature was within reach. Archeologists resumed excavation on Feature 4 at that time.

Feature 4 appeared to be a half circle or half rounded square that had been truncated by Feature 1. As a result of this truncation, archeologists bisected Feature 4 on a north-east-southwest axis. The exposed portion of the feature in the unit measured 31 cm east-west by 26 cm north south.

Feature fill was a very dark gray (10YR3/1) sand mottled with brick rubble and oyster shell. It was first observable at 73 cmbd, at the base of Level 5. The feature was excavated to a depth of 157 cmbd (Figure 98). The west wall of the feature was vertical. The opposing wall of the feature could not be studied as the feature extended into the north wall of Test Unit 1. The base of the feature angled slightly (3 cm) to the west. Feature 4 appears to be a post mold. Artifacts within the feature include 15 pounds of oyster shell, brick, slag, animal bone, nails, bottle glass, delft, creamware, pearlware, redware, edgware, transfer print, ironstone, iron, and charcoal. Table 21 lists the artifacts in greater detail. The MCD for Feature 4 was 1774.11, based on only nine sherds. Two pieces of clear bottle glass provides a TPQ of 1870.

Next, archeologists began excavating Feature 2, first observed at the base of Level 5 (73 cmbd). They temporarily halted its excavation in order to excavate Level 6 around it. This feature extended into Level 8 of the test unit. Feature 2 was a square stain measuring 53 cm north-south by 54 cm east-west. Fill consisted of a dark grayish brown (10YR4/2) sand mottled with 2.5YR5/8 Red clay and brick rubble. A thin lens of grayish brown (10YR5/2) sand frames the eastern edge of the feature. Almost immediately upon excavation soils changed to a grayish brown (10YR5/) sand for 20 cm. The deepest 10 cm consisted of a dark grayish brown (10YR4/2) sand. This feature appears to be a privy shaft. Given the appearance of the feature profile, the zone nearest the bottom may represent older deposits that were left when the privy was cleaned (Figure 99). The zone above it likely represents new deposits on top the old, after cleaning. Feature 2 was intruded near the top by the Feature 1 pipe and pipe trench. Archeologists encountered the flat base of the privy at 103 cmbd. Table 22 lists the artifacts from Feature 2. The MCD of Feature 2 is 1773 from a statistically invalid sample of 14 diagnostic sherds. If any of the seven pieces of clear bottle glass are machine made (there were no indications regarding manufacture), then the TPQ for the feature is 1870. This glass may have been introduced by the Feature 1 pipe trench disturbance. The next TPQ date would be 1842 based on one piece of plain blue-tinted ironstone followed by 1840 for one piece of stippled (non-blue) underglazed transfer print.

Feature 3 was first identified at the base of Level 5, 73 cmbd. The feature was an elongated rectangle in plan view and measured 27 cm north-south by 42 cm east-west. Feature fill was a very dark gray (10YR3/1) Sand with shell and brick. This feature is a post mold. The feature had a rounded base, which was located at 106 cmbd (Figure 99). Archeologists excavated below this another 20 cm to make sure they really were at the base of the feature. This additional 20 cm and tube coring another 10 cm to a total depth of 133 cmbd revealed that they were, as

Level	Sum Of Count	Code	Description	Start	Mean	End
5	2	AC0199	Brick, unspecified			
5	6	AG0301	Window glass, sized	1804		
5	7	AM1507	Nail fragment, unidentified			
5	1	AR0104	Concrete			
5	4	AR0108	Mortar			
5	1	CC0101	Button, porcelain			
5	1	KC0102	Porcelain, blue underglaze h.p.			
5	1	KC0250	Black basalt	1750	1800	1850
5	6	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
5	9	KC0604	Creamware, plain	1762	1791	1820
5	9	KC0630	Pearlware, plain	1774	1802	1830
5	6	KC0631	Pearlware, unidentified decorated	1774	1802	1830
5	1	KC0632	Pearlware, underglaze blue floral h.p.	1775	1803	1830
5	1	KC0634	Pearlware, underglaze blue non-Chinese motifs h.p.	1779	1805	1830
5	2	KC0636	Pearlware, underglaze polychrome painted floral patterns	1795	1813	1830
5	3	KC0700	Whiteware, plain	1820		2009
5	1	KC0704	Edgeware, scalloped, rim impressed, curved	1802	1815	1832
5	1	KC0901	Dipped ware, tan, rust, brown, olive, or ochre	1790	1815	1840
5	1	KC1296	Coarse earthenware, lead glazed			
5	1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
5	2	KC2206	Polychrome painted, large floral	1830	1855	1880
5	2	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
5	4	KC2307	Transfer print, stippled, blue underglaze	1795	1818	1840
5	2	KC2401	Refined earthenware, molded			
5	3	KC2702	Refined earthenware, decal	1890		
5	7	KF0101	Bone, unidentified			
5	5	KF0104	Shell, oyster			
5	1	KF0105	Shell, clam			
5	1	KG0300	Bottle, light aqua bottle glass	1800		1920
5	4	KG0301	Bottle, colorless bottle glass	1870		
5	1	KG0302	Bottle, dark green bottle glass			
5	1	KG0305	Bottle, cobalt blue bottle glass			
5	15	KG0393	Bottle, olive green unidentified			1900
5	2	MF0101	Coal			
5	2	MM9901	Iron fragment, unidentified			
5	1	MM9902	Metal, non iron/steel, unidentified			

Table 19. Test Unit 1, Level 5, Davant Park, Artifacts (continued on following page).

Level	Sum Of Count	Code	Description	Start	Mean	End
5	1	MM9903	Slag			
5	1	PF0201	Pencil, part			
5	1	PR0102	Slate pencil			
5	1	RR0133	Chert worked fragment, unidentified			
5	1	TC0101	Tobacco pipe bowl, kaolin, plain			
5	1	TC0210	Tobacco pipestem, kaolin, 5/64"			
5	4	ZR0302	Slate, unidentified			
Total	127					

Table 19. Test Unit 1, Level 5, Davant Park, Artifacts (continued from previous page).

Count	Code	Description	Start	Mean	End	Product	MCD
1	KC0250	Black basalt	1800	1750	1850	1750	
6	KC0501	Ironstone, plain blue tinted stone china	1886	1842	1930	11052	
9	KC0604	Creamware, plain	1791	1762	1820	15858	
9	KC0630	Pearlware, plain	1802	1774	1830	15966	
6	KC0631	Pearlware, unidentified decorated	1802	1774	1830	10644	
1	KC0632	Pearlware, underglaze blue floral h.p.	1803	1775	1830	1775	
1	KC0634	Pearlware, underglaze blue non-Chinese motifs h.p.	1805	1779	1830	1779	
2	KC0636	Pearlware, underglaze polychrome painted floral patterns	1813	1795	1830	3590	
1	KC0704	Edgeware, scalloped, rim impressed, curved	1815	1802	1832	1802	
1	KC0901	Dipped ware, tan, rust, brown, olive, or ochre	1815	1790	1840	1790	
1	KC2103	Line wares, brown or blue over and underglazed	1798	1770	1825	1770	
2	KC2206	Polychrome painted, large floral	1855	1830	1880	3660	
2	KC2303	Transfer print, linear, unidentified underglaze	1818	1795	1840	3590	
4	KC2307	Transfer print, stippled, blue underglaze	1818	1795	1840	7180	
46						82206	1787.087

Table 20. Test Unit 1, Level 5, Davant Park, MCD.

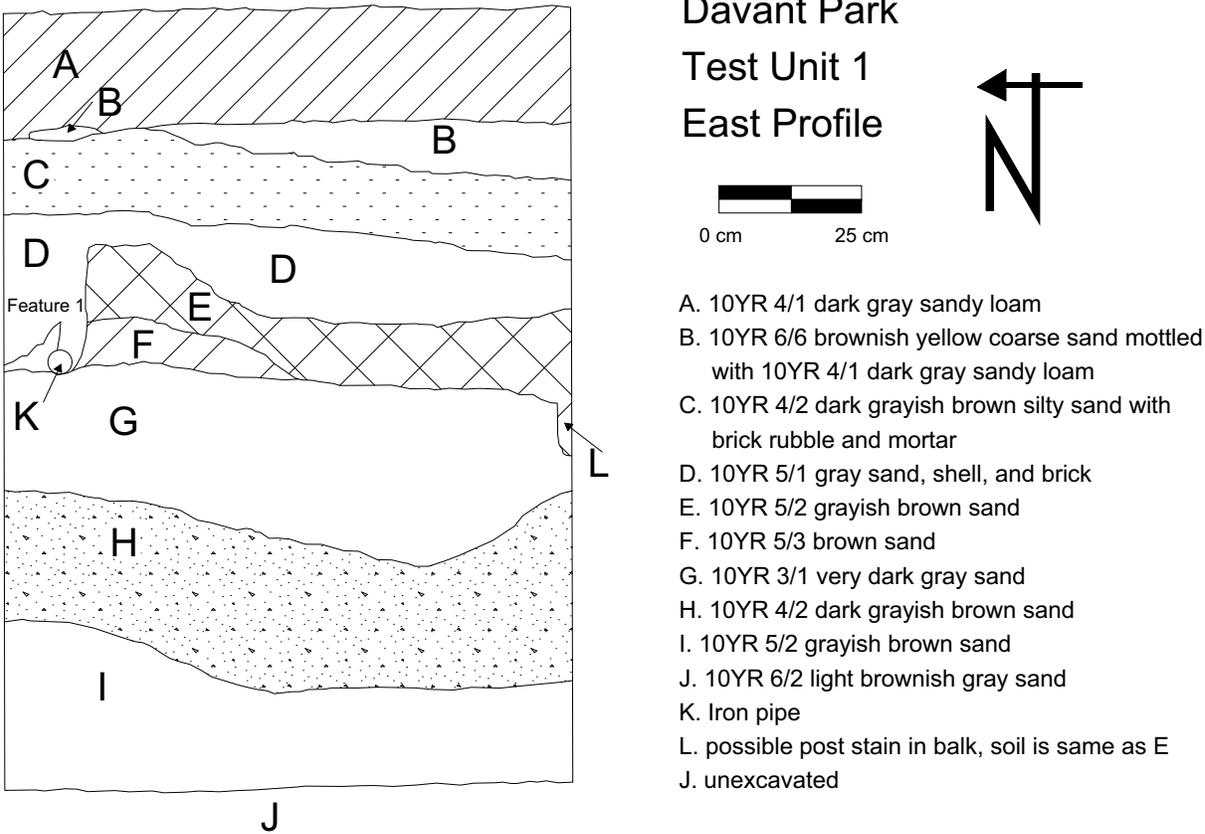
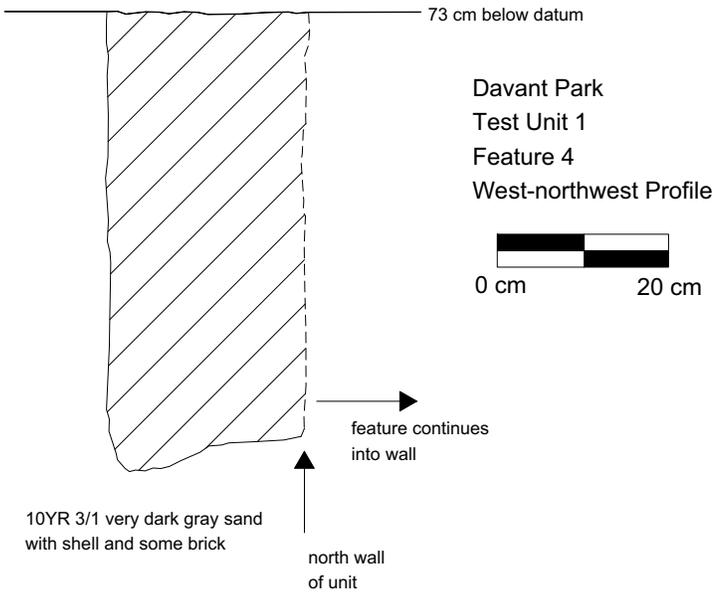


Figure 97. Test Unit 1, East Profile.

Figure 98. Feature 4, West-Northwest Profile (right).



Feature	Sum Of Count	Code	Description	Start	Mean	End
4	35	AC0199	Brick, unspecified			
4	12	AG0301	Window glass, sized	1804		
4	4	AM1507	Nail fragment, unidentified			
4	4	KC0105	Porcelain, plain			
4	1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
4	1	KC0604	Creamware, plain	1762	1791	1820
4	1	KC0630	Pearlware, plain	1774	1802	1830
4	1	KC0631	Pearlware, unidentified decorated	1774	1802	1830
4	1	KC0636	Pearlware, underglaze polychrome painted floral patterns	1795	1813	1830
4	1	KC0704	Edgeware, scalloped, rim impressed, curved	1802	1815	1832
4	2	KC1301	Redware, unglazed, coarse			
4	1	KC1511	Delftware, plain	1628	1711	1793
4	1	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840
4	1	KC2307	Transfer print, stippled, blue underglaze	1795	1818	1840
4	12	KF0101	Bone, unidentified			
4	36	KF0104	Shell, oyster			
4	1	KF0105	Shell, clam			
4	1	KG0299	Bottle, amber/olive green glass			1900
4	5	KG0300	Bottle, light aqua bottle glass	1800		1920
4	2	KG0301	Bottle, colorless bottle glass	1870		
4	5	KG0393	Bottle, olive green unidentified			1900
4	45	MF0101	Coal			
4	1	MF0102	Charcoal			
4	7	MF0103	Cinder/clinker			
4	14	MM9901	Iron fragment, unidentified			
4	2	MM9903	Slag			
4	7	MZ0101	Material, unidentified			
4	5	ZR0302	Slate, unidentified			
Total	209					

Table 21. Feature 4, Artifacts.

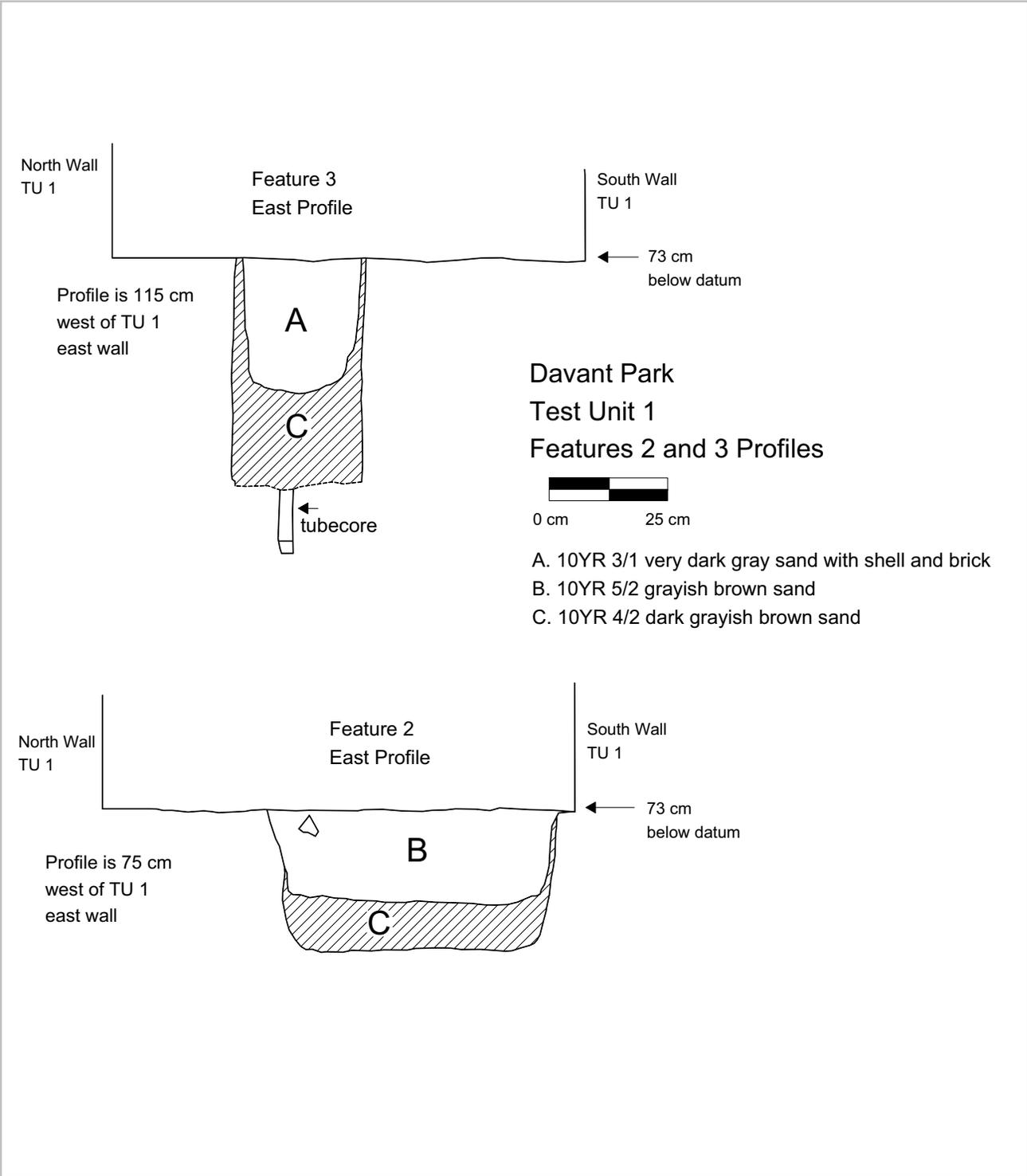


Figure 99. Features 3 and 2, East Profiles.

Feature	Sum Of Count	Code	Description	Start	Mean	End
2	1	AC0121	Brick, machine made			
2	19	AC0199	Brick, unspecified			
2	4	AG0301	Window glass, sized	1804		
2	6	AM1507	Nail fragment, unidentified			
2	2	AR0104	Concrete			
2	4	AR0108	Mortar			
2	3	KC0399	Stoneware, unidentified			
2	1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
2	4	KC0604	Creamware, plain	1762	1791	1820
2	1	KC0609	Creamware, overglazed transfer printed	1756	1770	1783
2	2	KC0630	Pearlware, plain	1774	1802	1830
2	1	KC0631	Pearlware, unidentified decorated	1774	1802	1830
2	1	KC0634	Pearlware, underglaze blue non-Chinese motifs h.p.	1779	1805	1830
2	1	KC1102	Slipware, combed clear glaze	1670	1733	1795
2	1	KC1309	Redware, brown glazed, unrefined			
2	1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
2	1	KC2307	Transfer print, stippled, blue underglaze	1795	1818	1840
2	1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	1840	1855	1870
2	23	KF0101	Bone, unidentified			
2	10	KF0104	Shell, oyster			
2	5	KG0300	Bottle, light aqua bottle glass	1800		1920
2	7	KG0301	Bottle, colorless bottle glass	1870		
2	13	KG0393	Bottle, olive green unidentified			1900
2	5	MF0101	Coal			
2	3	MF0103	Cinder/clinker			
2	27	MM9901	Iron fragment, unidentified			
2	10	MM9902	Metal, non iron/steel, unidentified			
2	5	MM9903	Slag			
2	1	MR0122	Unmodified stone			
2	7	MZ0101	Material, unidentified			
2	1	RM0102	Brass/copper cartridge	1814		
2	2	RP0103	Miscellaneous gun parts, plastic			
2	1	ZG1203	Bottle glass flake			
2	11	ZR0302	Slate, unidentified			
Total	185					

Table 22. Feature 2, Artifacts.

these soils were the same as the matrix soils in the adjacent Levels 8 and below. Artifacts in the post mold included five lbs. of oyster shell, 5.75 lbs. of brick, slag, animal bone, mortar/plaster, bottle glass, window glass, two unidentifiable decorated pearlware sherds, and one polychrome hand-painted large floral earthenware. Additional ceramics and other artifact types are detailed in Table 23. The statistically invalid MCD for the three diagnostic sherds was 1792.6. Five pieces of clear, bottle glass, if ma-

Level 6 soils were the same as Level 5. Level 6 was an 11 cm arbitrary level extending from 73-84 cmbs. The abundance of brick fragments led archeologists to discard any that were smaller than the size of a quarter. The remaining 77 brick fragments were recovered, as were the following artifacts: animal bone, nails, bottle glass, 16 ceramics (6 varieties), a lead ball, bottle glass, shell, coal, and slate. Table 24 provides more detail. Archeologists discovered

Feature	Sum Of Count	Code	Description	Start	Mean	End
3	12	AC0199	Brick, unspecified			
3	5	AG0301	Window glass, sized	1804		
3	4	AM1507	Nail fragment, unidentified			
3	9	AR0108	Mortar			
3	1	KC0309	Salt glazed/alkaline glazed			
3	1	KC0399	Stoneware, unidentified			
3	2	KC0631	Pearlware, unidentified decorated	1774	1802	1830
3	1	KC2206	Polychrome painted, large floral	1830	1855	1880
3	8	KF0101	Bone, unidentified			
3	3	KF0104	Shell, oyster			
3	5	KG0301	Bottle, colorless bottle glass	1870		
3	6	KG0393	Bottle, olive green unidentified			1900
3	12	MF0101	Coal			
3	3	MF0103	Cinder/clinker			
3	25	MM9901	Iron fragment, unidentified			
3	16	MM9903	Slag			
3	1	RR0133	Chert worked fragment, unidentified			
3	43	ZM1232	Sheet iron/steel			
3	4	ZR0302	Slate, unidentified			
Total	161					

Table 23. Feature 3, Artifacts.

chine made, produced a TPQ of 1870.

Two posts (Features 3 and 4) were probably part of the privy building constructed over and around the privy shaft (Feature 2). The privy does not align to any privies on the 1888 Sanborn map. The privy stain falls within a large stable on this map. The other extant Sanborn maps from 1898 and 1916 depict no structures for this area. This suggests that the privy predates 1888. The MCDs (as statistically invalid as they are), TPQs and general artifact date ranges suggest a 1790s-1840s/1870s date for these features.

that Feature 1 did not extend more than two centimeters into Level 6. A MCD of 1769.3 resulted from 11 sherds. Bottle glass produced later dates. Artifacts from this level included two aqua bottle fragments with a begin date of 1800 and three clear or "colorless" glass bottle fragments with a begin date of 1870.

Level 7 was a relatively homogeneous very dark grayish brown (10YR3/2) sandy loam. This arbitrary 15 cm level extended from 84-100 cmbd. This level contained a very low density of artifacts (n=21), all of which were

Level	Sum Of Count	Code	Description	Start	Mean	End
6	77	AC0199	Brick, unspecified			
6	1	AC0200	Tile, ceramic			
6	1	AG0301	Window glass, sized	1804		
6	7	AM1507	Nail fragment, unidentified			
6	1	AR0108	Mortar			
6	1	KC0102	Porcelain, blue underglaze h.p.			
6	1	KC0105	Porcelain, plain			
6	1	KC0309	Salt glazed/alkaline glazed			
6	1	KC0399	Stoneware, unidentified			
6	6	KC0604	Creamware, plain	1762	1791	1820
6	2	KC0630	Pearlware, plain	1774	1802	1830
6	2	KC0631	Pearlware, unidentified decorated	1774	1802	1830
6	1	KC1301	Redware, unglazed, coarse			
6	1	KC2307	Transfer print, stippled, blue underglaze	1795	1818	1840
6	22	KF0101	Bone, unidentified			
6	42	KF0104	Shell, oyster			
6	3	KG0301	Bottle, colorless bottle glass	1870		
6	2	KG0304	Bottle, aqua bottle glass	1800		1920
6	7	KG0393	Bottle, olive green unidentified			1900
6	9	MF0101	Coal			
6	15	MF0102	Charcoal			
6	5	MM9901	Iron fragment, unidentified			
6	1	RM0112	Lead ball			
6	5	ZR0302	Slate, unidentified			
Total	214					

Table 24. Test Unit 1, Level 6, Davant Park, Artifacts.

recovered. Artifacts included nail fragments, 2 creamware sherds, and small amounts of animal bone, brick fragments, oyster shell, and charcoal fragments. Table 25 lists these items. The begin date for creamware of 1762 offers the only diagnostic in this level.

Level 8 soil was a dark gray (10YR4/1) sandy loam. This natural 10-12 cm level was begun at 100 cmbd and was terminated at 110-112 cmbd. Level 8 was sterile except for one extremely small brick fragment and two oyster shell fragments. Archeologists observed that Feature 2 did not extend below the base of Level 8.

Level 9 consisted of a dark grayish brown (10YR4/2) sand. Archeologists excavated it in an arbitrary 20 cm level

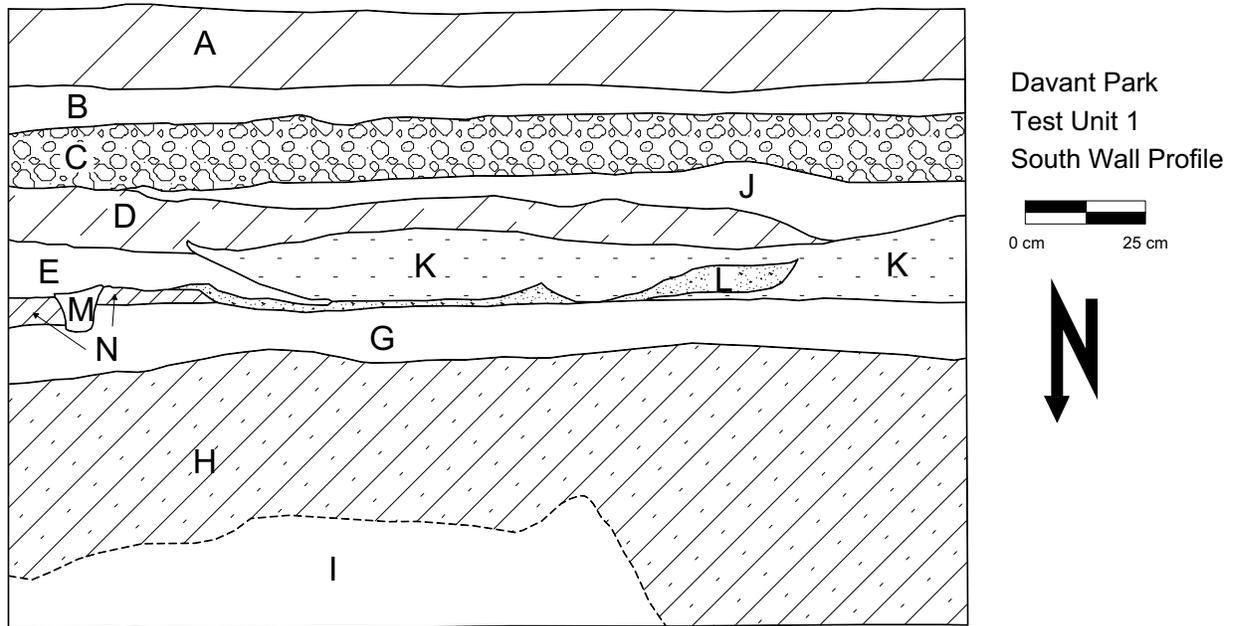
beginning at 110-115 cmbd and ending at 129-131 cmbd. Soils were similar to Level 8 soils, with some slight leaching of organics from above. Level 9 was sterile except for the presence of one thin pharmaceutical bottle glass fragment. Soils at the base of the level transitioned to a more yellowish brown sand. The base of Feature 3 was in this level.

Level 10 was an arbitrary 10 cm level starting at 129-131 cmbd and extending to 139-141 cmbd. The grayish brown (10YR5/2) sand was sterile. Archeologists used a tube corer to sample at the base of Level 10. Soils the length of the core (approximately 60 cm) graded into a slightly lighter soil than the 10YR5/2 and appeared to be a natural transition to subsoil. Test Unit 1 was terminated at 131 cmbd.

Level	Sum Of Count	Code	Description	Start	Mean	End
7	2	AC0199	Brick, unspecified			
7	4	AM1507	Nail fragment, unidentified			
7	2	KC0604	Creamware, plain	1762	1791	1820
7	1	KC0699	White-Bodied Ceramic, unidentified	1762		2009
7	1	KF0101	Bone, unidentified			
7	9	KF0104	Shell, oyster			
7	1	MF0101	Coal			
7	1	MF0102	Charcoal			
Total	21					

Table 25. Test Unit 1, Level 7, Davant Park, Artifacts.

Figures 97 and 100 depict the stratigraphic sequence in the Eastern and Southern profiles of the test unit and can



- | | |
|--|---|
| <p>A. 10YR 4/1 dark gray sandy loam</p> <p>B. 10YR 6/6 brownish yellow coarse sand mottled with 10YR 4/1 dark gray sandy loam</p> <p>C. 10YR 4/2 dark grayish brown silty sand with brick and mortar</p> <p>D. 10YR 5/1 gray sand with shell and brick</p> <p>E. 10YR 5/2 grayish brown sand</p> <p>F. 10YR 5/3 brown sand</p> <p>G. 10YR 3/1 very dark gray sand</p> <p>H. 10YR 4/2 dark grayish brown sand</p> <p>I. 10YR 5/2 grayish brown sand</p> | <p>J. 10YR 4/2 dark grayish brown sand with minor brick</p> <p>K. 10YR 5/4 yellowish brown sand mottled with 10YR 3/2 very dark grayish brown loamy sand and 10YR 2/1 black sandy loam</p> <p>L. 10YR 4/4 dark yellowish brown sand and 10YR 4/3 brown sand</p> <p>M. 10YR 5/3 brown sand mottled with 10YR 3/2 very dark grayish brown loamy sand</p> <p>N. 10YR 3/2 very dark grayish brown loamy sand mottled with 10YR 5/3 brown sand</p> |
|--|---|

Figure 100. Test Unit 1, South Profile.



Figure 101. Test Unit 1, Davant Park, South Profile.



Figure 102. Test Unit 1, Davant Park, Closeup of Stratigraphy.

be used, along with photographs of the strata (Figures 101-102) to interpret past events in this little one meter by two meter area. Layer A is the dark brown humus zone beneath the grass. Underlying this is very yellow sand at an unnaturally high elevation. Below this sand is a layer of dense brick, mortar, and shell rubble. Below this is a layer of soil from which the pipe trench was dug and infilled. All the strata from Layer D (the pipe trench Layer) and above were deposited after the pipe trench was dug for the water line, most likely in the twentieth century, but possibly during the late nineteenth century. The older artifacts in these layers have been redeposited from an unknown location. It is unlikely that the brick rubble came from structures adjacent to the test unit area. It appears that the rubble zone may have been brought in to raise the ground surface elevation at some unknown time after the iron pipe was laid. The yellow sand layer may have been put on top to cover the sharp edges and corners of the brick and debris. Topsoil was brought in sometime after this and sod planted in it.

While the upper strata contain artifacts from the 18th and 19th centuries, including two lead balls, they have been redeposited from an unknown origin. It is possible that they were in soils nearby, on the same block, or on adjacent blocks. It is the strata from Level 6 and below, and the features within those strata, that have the chance to offer pertinent information about the Davant Park area. Interestingly, while the MCDs for the levels are not statistically valid, they do trend older with depth, beginning with Level 3 (1814.6), Level 4 (1808.8); Level 5 (1787); Level 6 (1769); and Level 7 (1762). (There were no diagnostic sherds in Levels 8, 9, and 10.) This suggests an intact late 18th-early 19th century stratigraphic sequence.

The GPR anomaly identified in the first NPS ABPP work is of such magnitude and aligned at the same angle as fortification trenches on battle maps that it is almost certain that the trenches are in the general area of Davant Park and Colonial Cemetery. One 2 by 1 m test unit; however, is insufficient to locate them, or to identify the broad, sweeping angles of such large trenches. Several clusters of multiple test units may be more likely to encounter the trenches and allow archeologists to recognize them. Placing these units to the western edge of GPR Block M may very well encounter the GPR anomaly located there. This anomaly has great potential for being associated with the battle. Test Unit 1 did provide information on the battlefield landscape in this

vicinity, suggesting that it lies approximately 63-102 cm below the present ground surface. While Test Unit 1 did not uncover specific evidence of the battlefield trench fortifications, the stratigraphy and artifacts suggest that there is enormous potential for such battlefield evidence to be on this tract.

Laurel Grove Cemetery

Target: American Camps (Present day Laurel Grove Cemetery)

KOCHOA Analysis

Cartographic evidence on the 1784 Faden map indicates that the American Camps were located in an area bounded on the northwest, west, and southwest by the edge of a bluff (Figure 103). The top of the bluff was lightly wooded when the Americans established the western portion of their camps here in the fall of 1779. A major route, the Ogeechee Road, ran on a northeastern-southwestern axis along the east end of the camp towards Savannah. Another road skirted the bluff, beginning slightly south of the camp. A different road crossed Ogeechee Road at almost a right angle and headed generally east-west, trending to the northwest as it paralleled the camp. Another smaller road bisected the camp and narrowed into a path on the northern side of the camp. These latter three roads and paths served the American and French troops as their avenues of approach for the 1779 Battle of Savannah. The road hugging

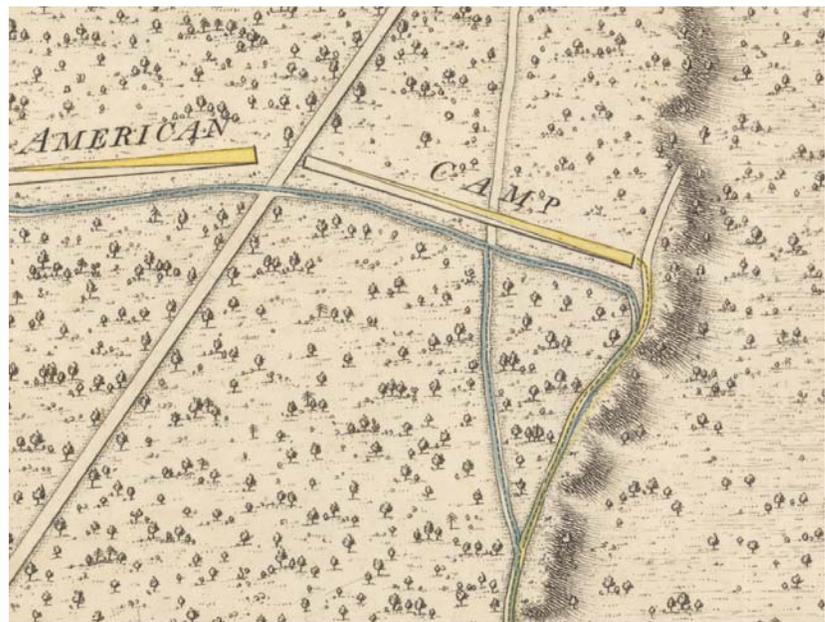


Figure 103. Portion of the line of American camps (Faden 1784).

the high ground of the bluff would have been dry and relatively easy to march. The maps indicate no obvious man-made or natural obstacles on these roads until encountering the swamps north of the troop reserve area by the Jewish Cemetery.

Archeologists' work here targeted the westernmost line of American Camps. Cartographic research indicated that the

shows the plantation and surrounding rice fields in relation to the city (Figure 105). The map is fascinating for the information it contains cartographically, as well as texturally. The engineer wrote that the map was a true representation regarding the Springfield Plantation and in regard also to, "...the situation of the Butcher pens, and where the filth of the City is generally deported".



Figure 104. GIS overlay of Faden (1784) and modern map. The greenspace that the American Camps fall in is what is now Laurel Grove Cemetery.

American camps and American lines, prior to the October 9 battle extended northwestward onto what is now Laurel Grove Cemetery (Figure 104). Laurel Grove is a municipal cemetery that is divided into a North and South section. This division is marked by a major thoroughfare.

During the American Revolution, this area was far south of the city of Savannah and did not become a city cemetery until the nineteenth century. Initially the property was part of the Springfield Plantation, which was one of the largest plantations on the outskirts of Savannah in the antebellum period. Springfield Plantation was established prior to 1760 by Lachlan McGillivray, a Scotsman engaged in the Indian trade. McGillivray, a Loyalist, left Georgia for Scotland in 1770. The property was confiscated and sold in 1782 to Joseph Clay. Joseph Stiles, Clay's son in law, purchased Springfield plantation in 1806. An 1825 map

He goes on to say,

...the Swamp of Musgrove Creek and its numerous branches is generally of a rich [?] clay soil, and extend for several miles in a southwest direction from the City, and in heavy rains, a great body of water must be discharged by this swamp into the River. The land east of the swamp is generally high pine Land, with the exception of a body of high rich [?] land and some Swamp about a mile wider & extending in a Southeasternly Direction for 7 or 8 Miles (McKinnon 1825).

The development of Laurel Grove Cemetery began in 1850 as other municipal cemeteries approached capacity. In 1850 the heirs of Joseph Stiles sold 960 acres of

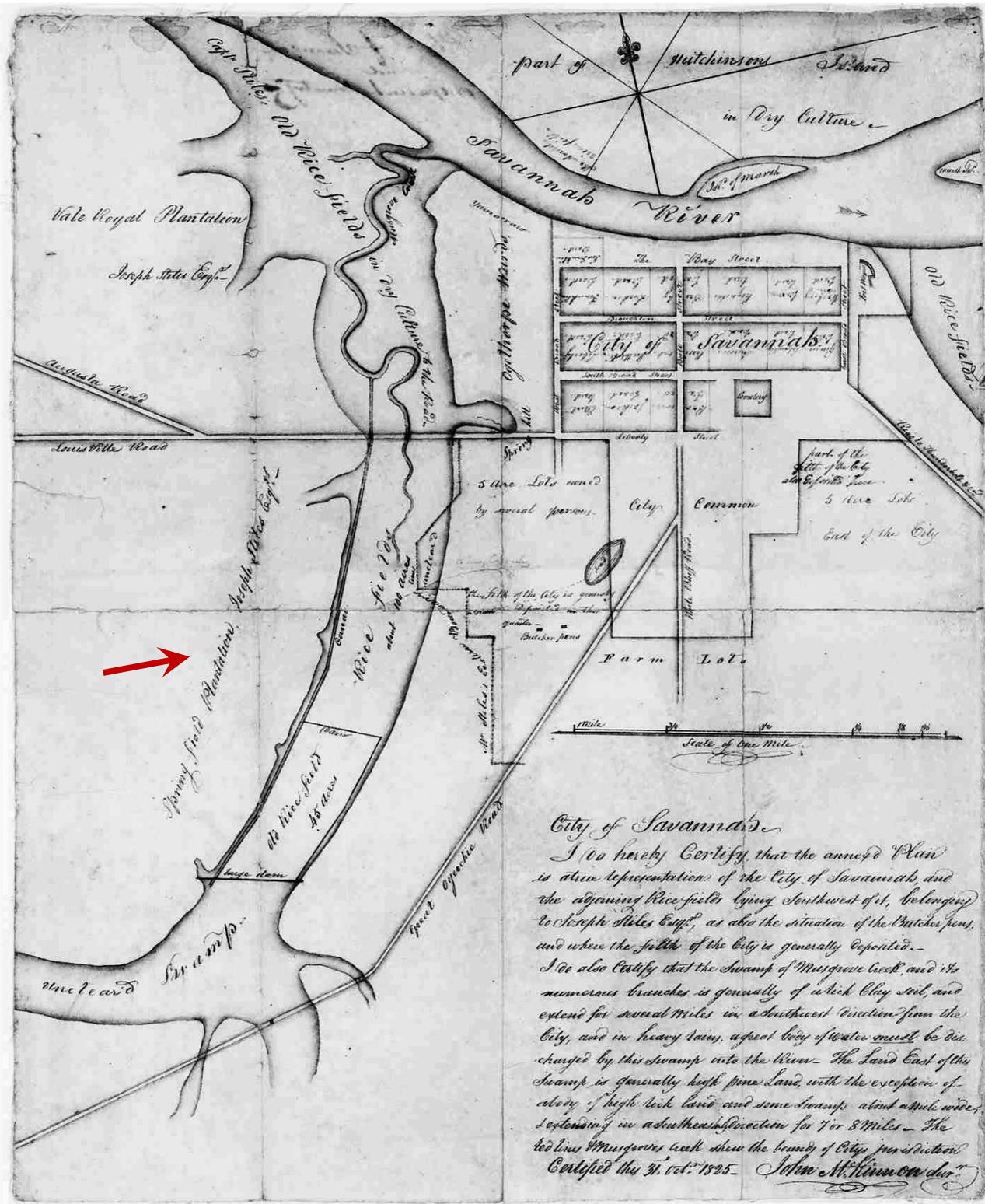


Figure 105. 1825 map showing “Springfield Plantation” (arrow) southwest of the Savannah city limits (McKinnon 1825).

the plantation to the Mayor and Aldermen of the City of Savannah, of which 100 acres was reserved for a new municipal cemetery (City of Savannah Department of Cemeteries 2010a). This purchase was documented when the Savannah City Council passed “An Ordinance to amend an Ordinance entitled an Ordinance, ‘...to purchase in behalf of the Mayor and Aldermen of the city of Savannah, and the Hamlets thereof, the Springfield plantation” (*Savannah Republican* 1850). The motion unanimously passed on the second reading. Laurel Grove Cemetery was dedicated two years later on June 3, 1852 as a public cemetery (Figure 106). This was to include the following boundaries:

The parcel of land beginning at the northern fence recently built, running across the land purchased from the heirs of Joseph Stiles; between the lands of Dr. Bulloch on the east, and the dam of the old rice field on the west, and running southwardly between said lands of Dr. Bulloch and lands of the heirs of Morel on the east and said dam on the west, to the corner of the bank on the land of the heirs of Morel on the eastern side; then from said corner westwardly, to within sixty feet of the fence now running from a point near said corner in a southwestwardly direction; and thence by said fence and a line in the direction thereof, on the eastern side, and by the said dam and a line in the direction thereof on the western side, to the southern line of the said lands purchased from



Figure 106. A view of one of the many sections of Laurel Grove Cemetery.

the heirs of Joseph Stiles. The space of sixty feet next to said fence and a line in the direction thereof, from said corner to the southern line of said purchase, shall be a public highway or street forever, and be called by the name of Kollock street (MacDonell 1907:298).

The cemetery was laid out in 1852 by James O. Morse. Its arrangement and location outside of town is visible on this 1855 map by Colton, in which north is to the right of the page (Figure 107). The cemetery expanded in 1871 and 1881. In 1882 the City of Savannah prohibited the legal burial of corpses in any other place within the city limits than Laurel Grove Cemetery or the “present Hebrew Cemetery”. (The latter is a reference to the Mordecai Sheftall Cemetery discussed in later sections of this report. While a portion of Laurel Grove was established in November 1853 exclusively for Savannah’s Hebrew Congregation, there were still sporadic burials in the older Mordecai Sheftall Cemetery.) The burial prohibition ordinance was placed into effect “from and after the day of publication of preparation of said Laurel Grove Cemetery...” A very stiff penalty, relative to the nineteenth century, of \$500 was enacted (MacDonell 1907:301). By 1890 fewer than 50 burial lots remained in Laurel Grove North Cemetery (City of Savannah Department of Cemeteries 2010b).

Archeological Results and Interpretation

Archeologists undertook investigations at Laurel Grove on February 12, 15, 16, and 17, 2010. Careful planning enabled them to work around some of the many thousands of burials, elaborate mortuary furniture, and tomb architecture. During this time they conducted a GPR survey and limited shovel testing on portions of the North section of the cemetery (Figure 108). (North is to the top right corner of the page on this map.) This included GPR and shovel testing in the circular greenspace across from the cemetery entrance (GPR Block Y) (Figures 109-110) and at the northwestern corner of the cemetery in the greenspace adjacent to Sycamore Street (GPR Block AA). Additional GPR survey (Block Z), but no shovel testing, was conducted in the “Gentile’s Section” where there are few grave markers (across from the Confederate Soldiers’ graves section).

GPR Survey

GPR Blocks Y, Z and AA

These three GPR blocks examined portions of the Laurel Grove North Cemetery. GPR Block Y was a sample within a circular area of greenspace in Laurel Grove North Cemetery. It consisted of 3,366 m of radar data from 99 radargrams that were collected within an area measuring 49 m east-west by 40 m north-south. This particular portion of the Laurel Grove Cemetery was considered by the City of Savannah and cemetery sexton to be devoid of human burials (Jerry Fleming, personal communication, February 1, 2010). GPR plan maps of Block Y reveal extensive radar anomalies (Figure 111). Overlay maps of

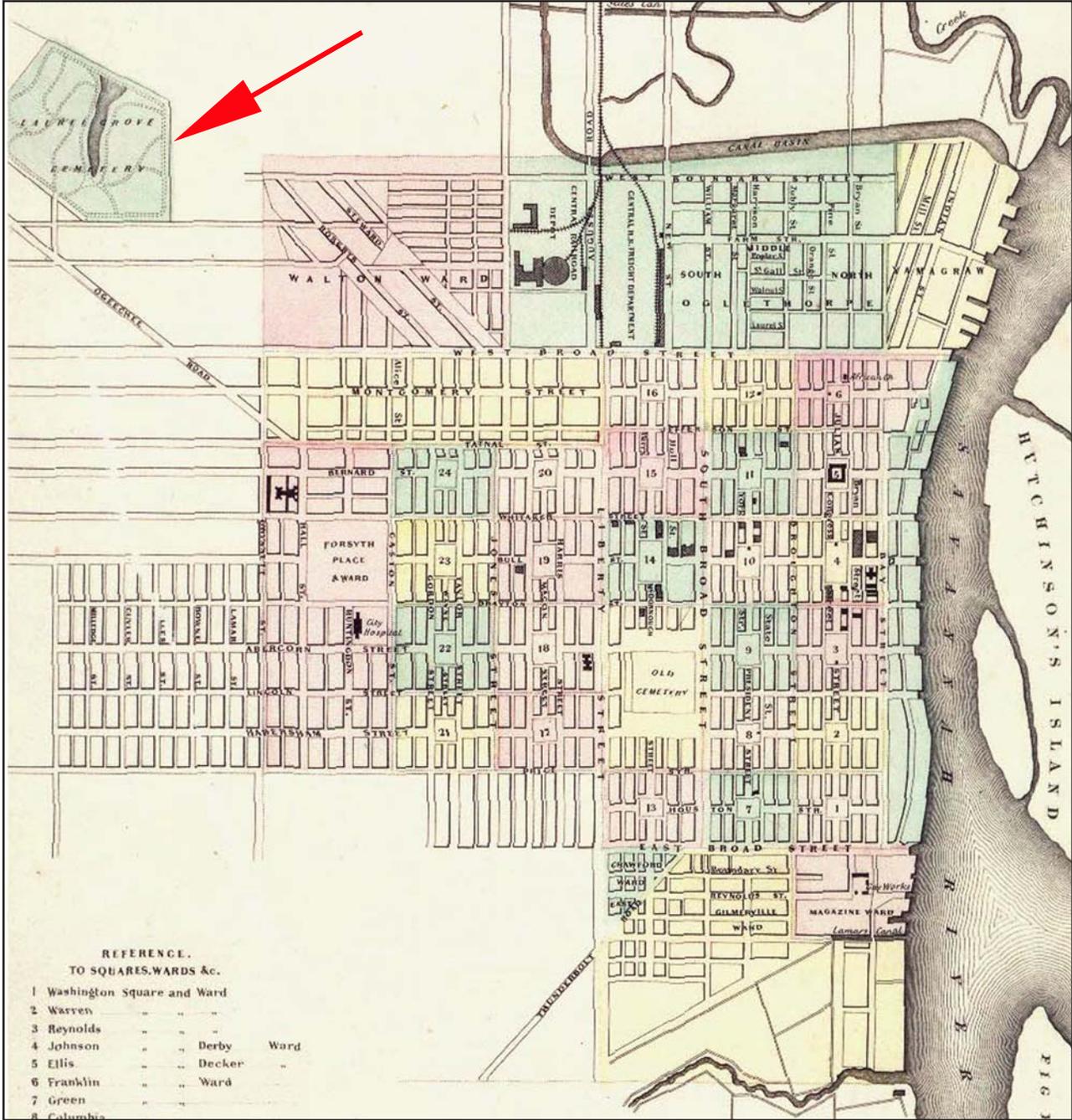


Figure 107. This 1855 map shows the three-year-old Laurel Grove Cemetery (arrow) outside of Savannah. North is to the right on this map (Colton 1855).

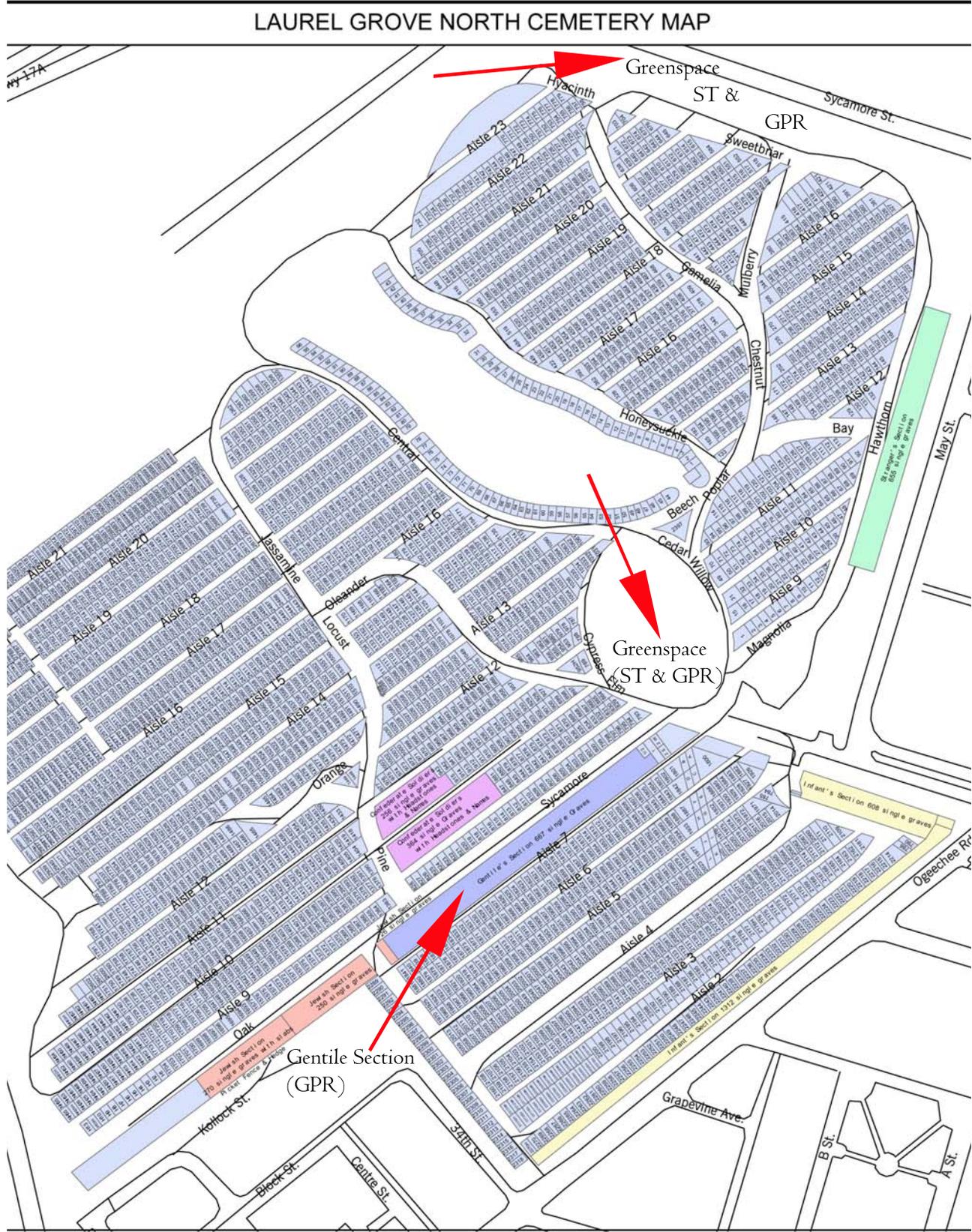


Figure 108. Modern map of Laurel Grove Cemetery. Arrows show areas of archeological investigation for this project (City of Savannah, Department of Cemeteries 2010c).



Figure 109 (above). GPR survey in the circular greenspace, where there are no tombstones.



Figure 110 (left). GPR survey and shovel testing in circular greenspace at Laurel Grove Cemetery.

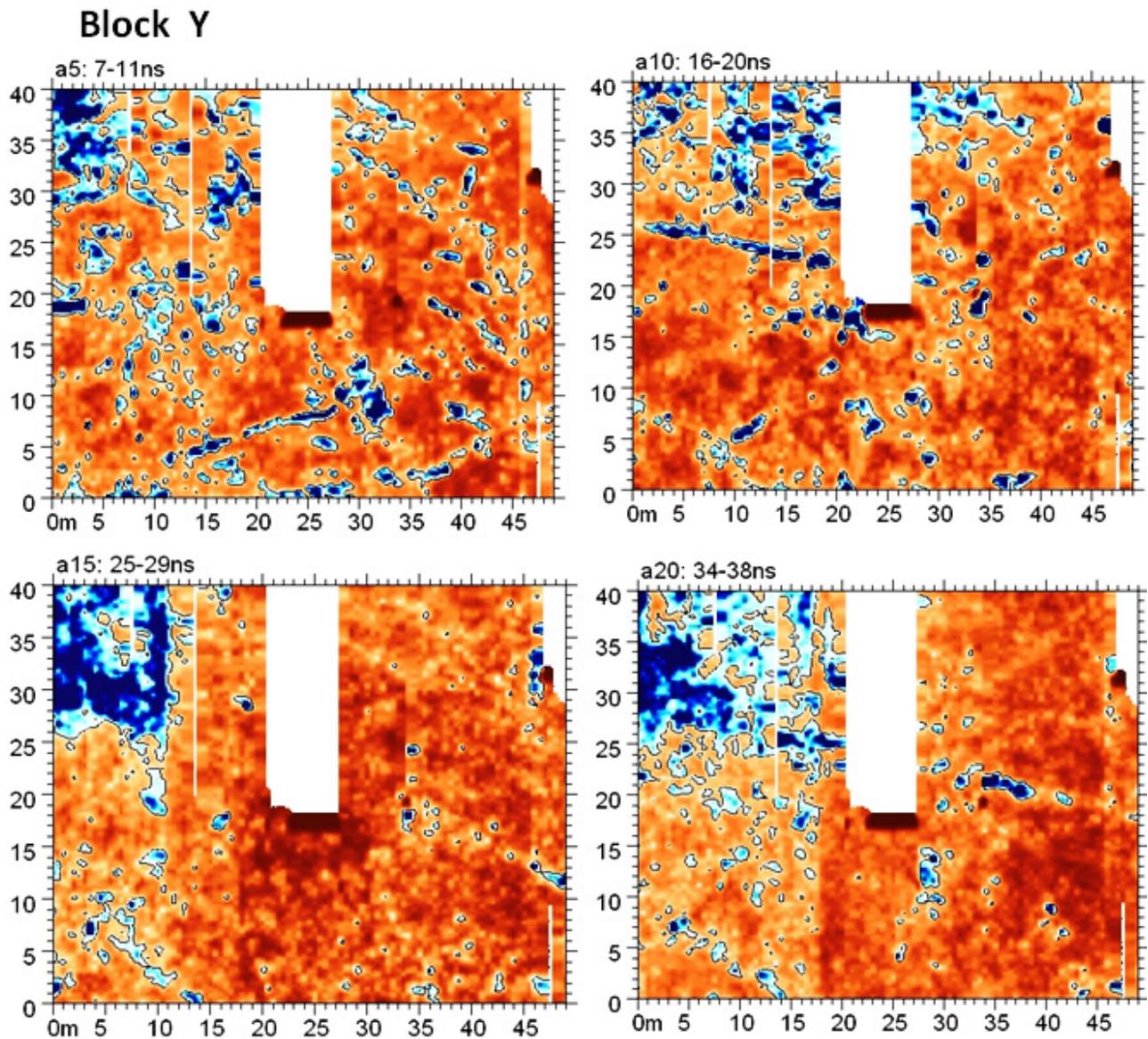


Figure 111. GPR Block Y plan views at increasing depths. North is on the diagonal, to the top left corner of the page.

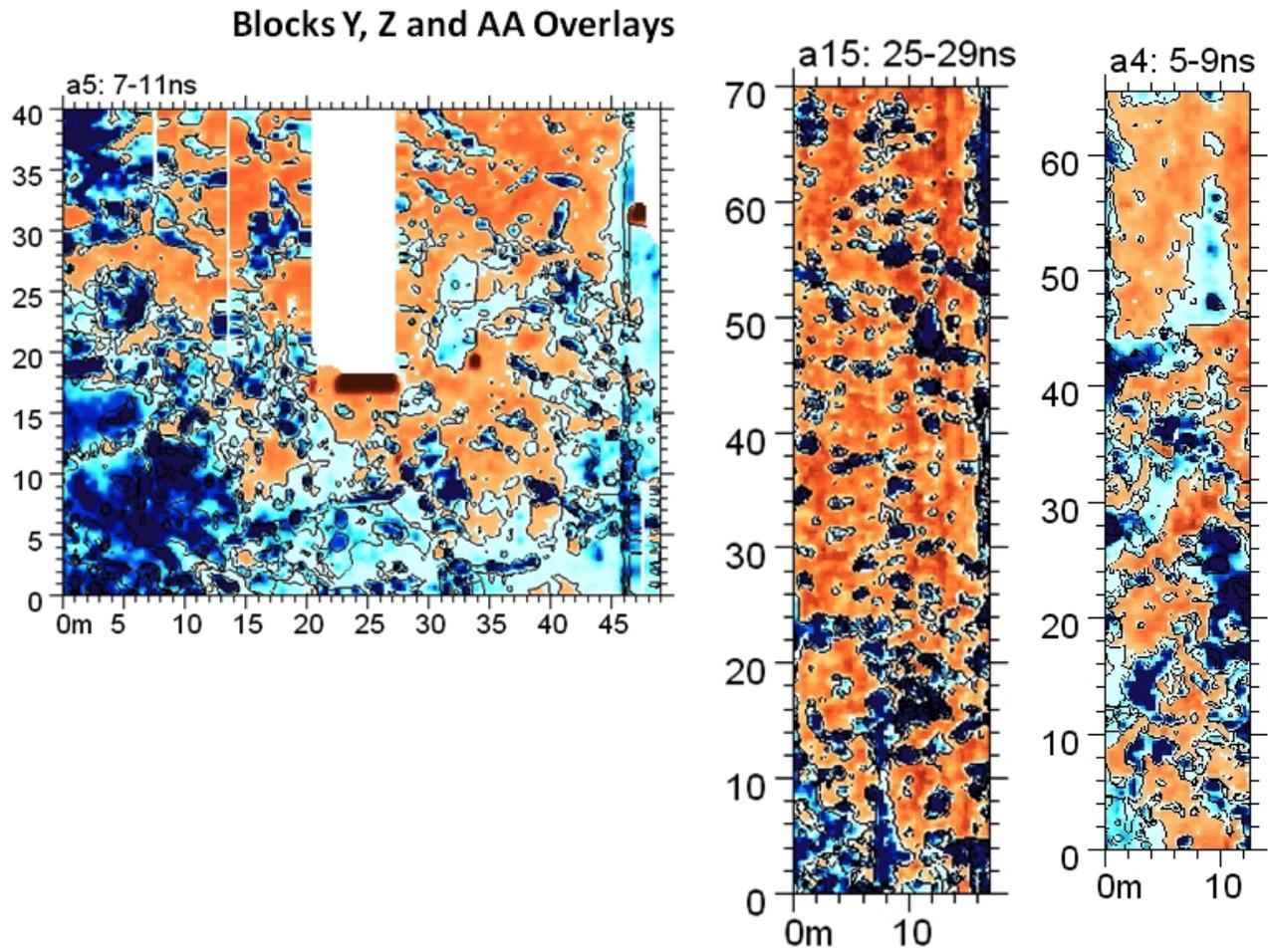


Figure 112. GPR plan view overlays of Blocks Y, Z, and AA.

Blocks Y, Z and AA are shown in Figure 112. The purpose of this sample was to search for evidence of the American camp on the eve of the battle. No evidence of any ditch work or features indicative of a military camp were noted in the GPR data from Block Y. The Block Y data revealed several cultural or landscape features that likely date to the 19th century. One of these was a large buried construction. The other was a sloping terrain feature that suggested substantial ground leveling and infilling took place on the western side of this block. That activity was likely associated with the cemetery landscaping of the 19th century.

GPR Block Z sampled a portion of Laurel Grove Cemetery known as the Gentile section. This area was located south-east of Block Y and was situated on a level, well drained landform. Cemetery sexton records indicated 667 graves are known to be within the Gentile section of Laurel Grove Cemetery (Laurel Grove Cemetery 2010). The GPR sample block covered only a portion of the Gentile section, so fewer graves were expected in the radar sample. This sample consisted of 2,450 m of radar data from 35 radar-grams collected within an area measuring 17 m east-west by 70 m north-south.

GPR plan maps of Block Z reveal extensive radar anomalies (Figure 113). The purpose of this sample was to search for evidence of the American camp on the eve of the battle. As expected, the GPR map of Block Z yielded extensive evidence of human burials associated with the Laurel Grove Cemetery. These were oriented consistent with the cemetery plan. No clear evidence of the American camp was identified within this study area. No long linear anomalies, which may indicate any defensive perimeter, were discerned in any of the GPR plan maps of Block Z.

GPR Block AA was located in the extreme northwestern corner of Laurel Grove North Cemetery. According to sexton records no graves are documented in this part of the cemetery burials (Jerry Fleming personal communication February 1, 2010). This sample consisted of 1682.5 m of radar data from 29 radargrams that were collected within an area measuring 12.5 m by 65 m. This area is covered in grass, except where a large live oak tree is located. The southern margin of the sample skirted a paved asphalt road. GPR plan maps of Block AA reveal extensive radar anomalies (Figure 114). The purpose of this sample was to search for evidence of the American camp on the eve of the battle. No clear evidence of the American camp was identified within this study area. The GPR survey data and limited shovel tests suggest that this vicinity was used for human burials.

The GPR blocks and results are depicted in Figures 115 and 116. Figure 115 shows GPR Blocks Y (the circular

greenspace) and Z (the linear Gentile section). Figure 116 illustrates GPR Block AA, just south of Sycamore Street.

Shovel Testing

Archeologists excavated a total of 21 shovel tests in two Laurel Grove Cemetery greenspaces; the circular one by the cemetery entrance and the area in the northwestern corner of the cemetery (Figure 117). The blue dots are shovel tests locations (excluding the dots demarcating road edges and other boundaries). The shovel tests in the circular greenspace included ST 23-26, 28, 31-33, 38-39, and 41-47. Some shovel tests were laid out but not excavated due to obstacles at their location on the 10 meter grid, such as shrubbery, roots, or hardscapes. These included ST 27, 29, 30, 34-37, and 40. Most of the excavated shovel tests reached depths of over a meter. ST 26 was sterile. It had multiple lenses from 16-79 cmbs and may represent man-made fill or alluvium and colluvium from the nearby natural creek drainage. While the shovel tests in the circular area had a moderate number of artifacts, there were only seven diagnostic sherds that could be used for a MCD. These produced a statistically invalid date of MCD of 1828 and consisted of one each of the following: ginger beer stoneware, creamware, line ware, pearlware, polychrome painted large floral, and yellowware. Low densities of other artifacts such as unrefined redwares, unidentifiable square nails, cut nails, green bottle glass, and handmade brick support a late 18th to early-to-mid 19th century artifact assemblage that is probably associated with Springfield Plantation activities. A somewhat more recent assemblage is also present, as reflected in the whitewares and amethyst bottle glass. Table 26 details the shovel tests excavated in the circular space.

Shovel Tests 48-51 were placed in the greenspace adjacent to Sycamore Street, in the northwestern corner of the cemetery. The details of ST 48-50 are listed in Table 27. ST 48 represented disturbed fill throughout its entire depth of 98 cmbs. Burned whiteware and melted glass in Level 3 suggest possible burned trash discarded in this area. Artifacts from ST 51 were not recovered, as they consisted of modern debris (bottle glass, tin can, PVC pipe fragment, plastic bottle cap) in obvious disturbed gravel and mottled soil contexts. While ST 48 and 51 were disturbed throughout, some shovel tests such as ST 50 were only disturbed in Level 1 (the upper 30 cm), with the remaining soils from 31-115 cm fairly homogenous. Most of the items in this area are fairly modern debris or non-diagnostic materials such as oyster shell, coal, and slate. Two exceptions were a white-bodied unidentifiable sherd and a transfer print stippled underglazed sherd with a TPQ of 1840. The latter was recovered from Level 2 (31-115 cmbs) in ST 50. In general, very limited shovel testing suggests this northwestern area did not see much activity historically.

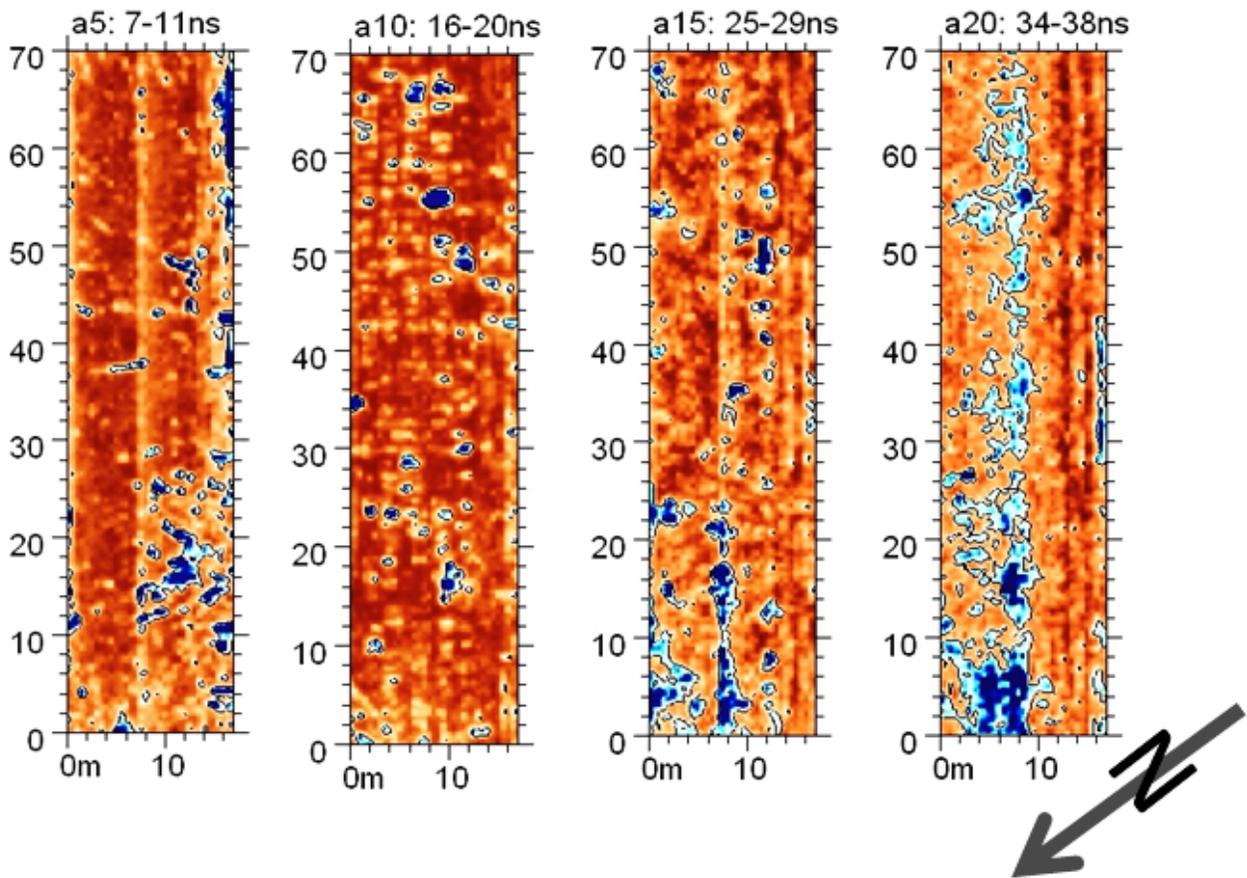


Figure 113. GPR Plan views of Block Z at increasing depths.

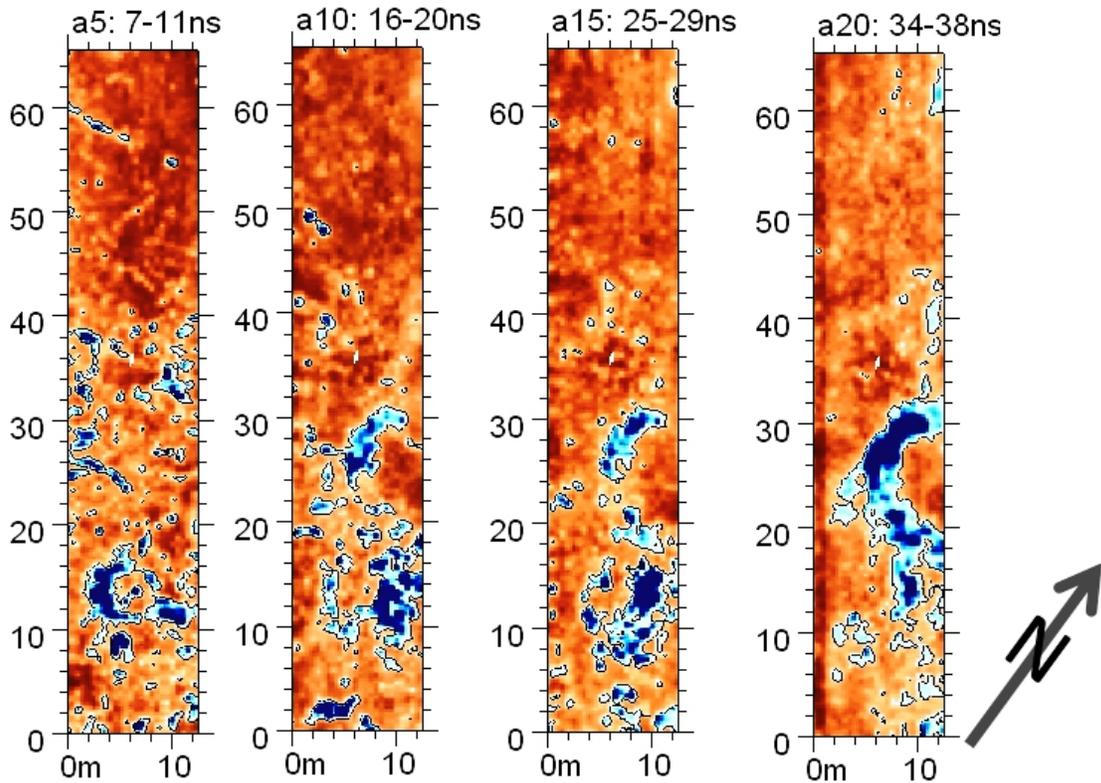


Figure 114. GPR Plan views of Block AA at increasing depths.



Figure 115. GPR Blocks Y and Z results and locations.



Figure 116. GPR Block AA results and location.

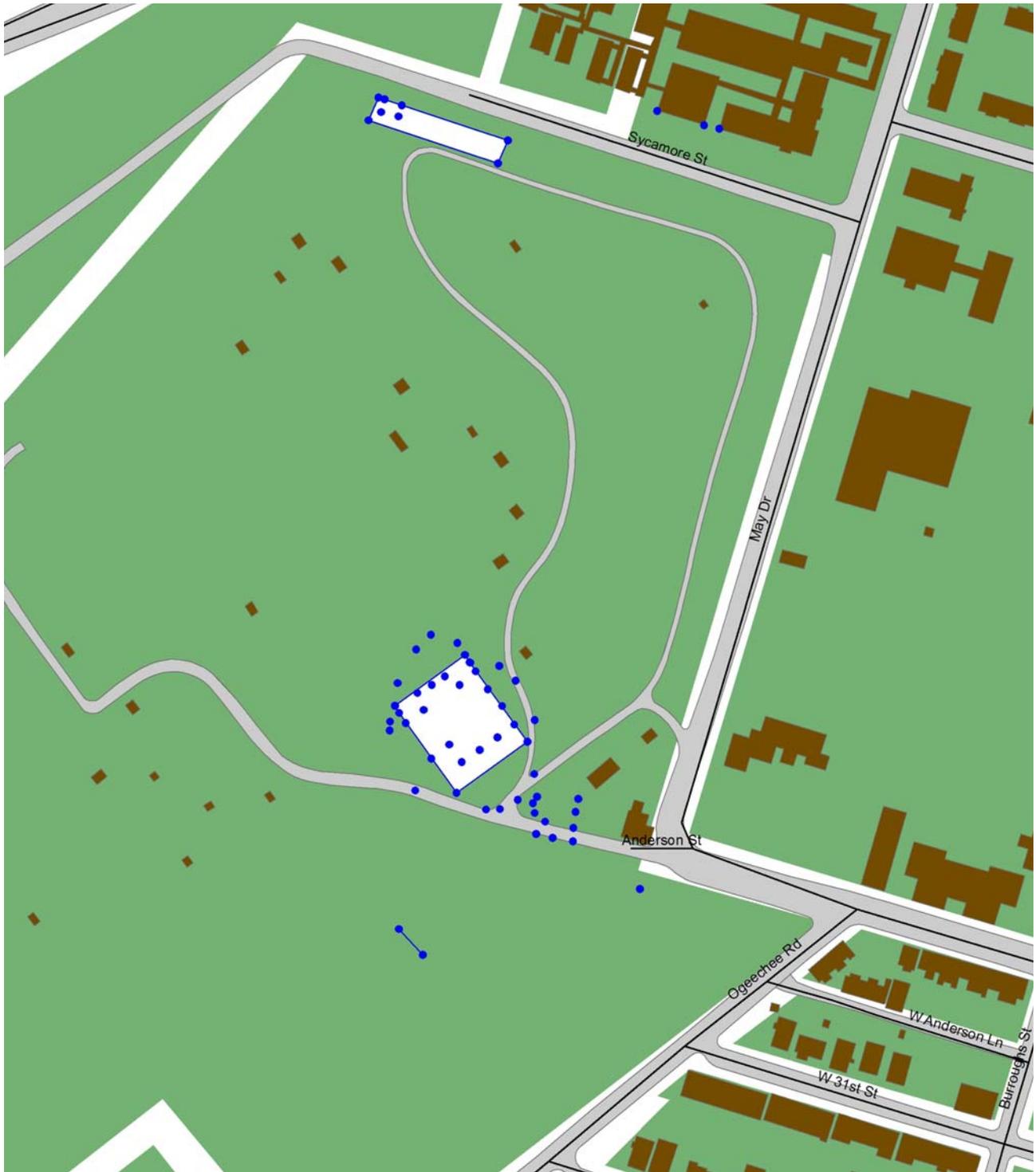


Figure 117. Singular blue dots show shovel test locations. White squares are GPR Blocks Y and Z.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
Laurel Grove Cemetery							
ST 23	Level 1 0-35 cmbs	2	AM1507	Nail fragment, unidentified			
	10YR3/2 Very Dark Grayish Brown sandy loam Lot #69	1	KC0401	Ginger beer stoneware bottle	1835	1867	1900
		1	KC0604	Creamware, plain	1762	1791	1820
		1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
		1	KG0512	Other glass vessel			
		2	MF0102	Charcoal			
		1	MR0122	Unmodified stone			
		Level 2 35-92 cmbs	0	N/A	Sterile		
	10YR5/4 Yellowish Brown sand						
	Level 3 92-107 cmbs	0	N/A	Sterile			
10YR5/4 Yellowish Brown sand w/ specks of 10YR5/8 Yellowish Brown clayey sand							
ST24	Level 1 0-13 cmbs	0	N/A	Sterile			
	10YR2/1 Black loamy sand w/ a lens of 10YR4/3 Brown silty sand						
	Level 2 13-29 cmbs	0	N/A	1 piece of coal; not recovered			
10YR3/2 Very Dark Grayish Brown loamy sand							
Level 3 29-100 cmbs	10YR5/3 Brown sand w/slight charcoal flecks Lot #63	14	AR0108	Mortar			
		1	MF0102	Charcoal			
ST25	Level 1 0-25 cmbs	1	AC0121	Brick, machine made			
	10YR3/1 Very Dark Gray loamy sand Lot #70	4	AC0199	Brick, unspecified			
		7	AG0301	Window glass, sized	1804		
		1	AM1199	Nail, wire common, fragment	1890		2009
		3	AM1507	Nail fragment, unidentified			
		1	KC0105	Porcelain, plain			
		1	KC0630	Pearlware, plain	1774	1802	1830
		1	KC0700	Whiteware, plain	1820		2009
		2	KC1301	Redware, unglazed, coarse			
		1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
		2	KF0104	Shell, oyster			
		1	KG0300	Bottle, light aqua bottle glass	1800		1920

Table 26. Laurel Grove Cemetery shovel tests in circular greenspace (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		2	KG0301	Bottle, colorless bottle glass	1870		
		3	KG0501	Tableware, probably, clear curved glass			
		2	MF0101	Coal			
		2	MM9901	Iron fragment, unidentified			
		1	MM9902	Metal, non iron/steel, unidentified			
		3	MM9903	Slag			
		1	ZC0302	Marble, ceramic			
		1	ZR0302	Slate, unidentified			
	Level 2 25-58 cmbs 10YR2/1 Black compact silty sand Lot #67	1	AM0601	Nail, cut	1790		1890
		1	KC0113	Porcelain, decal			
		1	KC0700	Whiteware, plain	1820		2009
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0501	Tableware, probably, clear curved glass			
ST 28	Level 1 0-12 cmbs 10YR3/1 Very Dark Gray loamy sand Lot #64	5	KF0104	Shell, oyster			
		1	KG0301	Bottle, colorless bottle glass	1870		
	Level 2 12-16 cmbs 7.5YR5/4 Brown sandy clay w/large amount of pebbles	0	N/A	Sterile			
	Level 3 16-32 cmbs 10YR3/3 Dark Brown silty sand Lot #71	1	AM1507	Nail fragment, unidentified			
		1	KF0104	Shell, oyster			
ST 31	Level 1 0-47 cmbs Mottled 10YR2/1 Black sandy loam w/some 10YR3/2 Very Dark Grayish Brown sandy loam and minor specks of 7.5YR5/8 Strong Brown clay Lot #66	Level 1-2 (0-57 cmbs) Artifacts. Lot #66					
		1	KC2206	Polychrome painted, large floral	1830	1855	1880
	Level 2 47-65 cmbs Disturbed lenses of Level 1 soils	2	MM9901	Iron fragment, unidentified			

Table 26. Laurel Grove Cemetery shovel tests in circular greenspace (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End	
	Lot #66							
	Level 3 65-121 cmbs 10YR4/2 Dark Grayish Brown sandy loam Lot #65 & 68	Level 3 top (67-86 cmbs) Artifacts. Lot #65						
		3	AC0120	Brick, handmade				
		1	AG0301	Window glass, sized	1804			
		1	AM1714	Hinge, iron, unidentified				
		1	KC2801	Yellowware, plain	1830	1885	1940	
		9	KF0105	Shell, clam				
		1	KG0393	Bottle, olive green unidentified			1900	
		3	MF0103	Cinder/clinker				
		1	MM9901	Iron fragment, unidentified				
		1	RM0102	Brass/copper cartridge	1814			
		3	ZR0302	Slate, unidentified				
		Level 3 bottom (86-121 cmbs) Artifacts. Lot #68						
		5	AC0120	Brick, handmade				
		3	AG0301	Window glass, sized	1804			
		5	AM1505	Nail, cut or wrought, square				
		2	AM1507	Nail fragment, unidentified				
		1	KC0700	Whiteware, plain	1820		2009	
		1	KC0701	Whiteware, indeterminate decoration	1820		2009	
		2	KF0101	Bone, unidentified				
		2	KF0105	Shell, clam				
		1	KG0301	Bottle, colorless bottle glass	1870			
		1	KG0393	Bottle, olive green unidentified			1900	
		3	MF0103	Cinder/clinker				
		2	ZR0302	Slate, unidentified				
ST32		Level 1 0-23 cmbs 10YR2/1 Black loamy clay Lot #72	1	AM1505	Nail, cut or wrought, square			
			1	KC1301	Redware, unglazed, coarse			
			1	KC1304	Redware, black glazed, unrefined			
		1	KG0501	Tableware, probably, clear curved glass				
	Level 2 23-48 cmbs 10YR2/2 Very Dark Brown loamy sand mottled with 10YR3/3 Dark Brown sand	0	N/A	Sterile				
	Level 3 48-88 cmbs 10YR2/1 Black compact sand	0	N/A	Sterile				
	Level 4 88-107 cmbs	0	N/A	Sterile				

Table 26. Laurel Grove Cemetery shovel tests in circular greenspace (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
	10YR4/2 Dark Grayish brown sand						
ST38	Level 1 0-18 cmbs 10YR3/2 Very Dark Grayish Brown loamy sand	0	N/A	Sterile			
	Level 2 18-31 cmbs 10YR4/3 Brown silty sand w/ charcoal flecks Lot #138	2	AC0199	Brick, unspecified			
		1	AR0108	Mortar			
		2	MM9903	Slag			
	Level 3 31-92 cmbs 2.5YR6/4 Light Yellowish Brown sand w/charcoal	0	N/A	Sterile			
Level 4 92-117 cmbs 2.5YR7/4 Pale Yellow sand w/ natural iron minerals	0	N/A	Sterile				
ST39	Level 1 0-10 cmbs 10YR2/1 Black silty sand	0	N/A	Sterile			
	Level 2 10-103 cmbs 10YR5/3 Brown sand w/charcoal flecks. Lot #140	3	AC0199	Brick, unspecified			
ST 41	Level 1 0-15 cmbs 10YR2/1 Black loamy sand. Lot #137	1	KC0105	Porcelain, plain			
		1	MM9903	Slag			
	Level 2 15-111 cmbs 10YR4/2 Dark Grayish Brown silty sand mottled w/10YR3/1 Very Dark Gray sand w/ charcoal flecks Lot #139	1	ZR2412	Flake, thinning 0% cortex			
ST 43	Level 1 0-27 cmbs 10YR4/2 Dark Grayish Brown silty sand. Lot #134	1	KG0393	Bottle, olive green unidentified			1900
		2	MM9901	Iron fragment, unidentified			
	Level 2 27-71 cmbs 2.5Y5/3 Light Olive Brown sand Lot #135	1	AG0301	Window glass, sized	1804		
		1	KC0700	Whiteware, plain	1820		2009
		1	KC3110	Plain ceramic			
1	MF0103	Cinder/clinker					

Table 26. Laurel Grove Cemetery shovel tests in circular greenspace (continued on following page).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		2	MM9903	Slag			
	Level 3 71-107 cmbs 2.5Y6/4 Light Yellowish Brown sand	0	N/A	Sterile			
ST 44	Level 1 0-19 cmbs 10YR2/1 Black sand	0	N/A	Sterile			
	Level 2 19-31 cmbs 10YR5/3 Brown sand w/ lenses of 10YR4/3 Brown sand	0	N/A	Sterile			
	Level 3 31-50 cmbs 10YR4/3 Brown sand w/ lenses of 10YR5/3 Brown sand. Lot #141	1	KG0512	Other glass vessel			
ST 45	Level 1 0-37 cmbs 10YR2/1 Black sandy loam Lot #143	2	AC0199	Brick, unspecified			
		1	AR0108	Mortar			
		2	KC0105	Porcelain, plain			
		1	KC0113	Porcelain, decal			
		1	KG0182	Milk Glass	1743		2009
		2	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	RM0103	Shotgun shell	1850		
		1	ZR0302	Slate, unidentified			
	Level 2 37-97 cmbs 10YR5/4 Yellowish Brown sand	0	N/A	Sterile			
ST 47	Level 1 0-20 cmbs 10YR2/1 Black sandy loam Lot #142	1	AC0121	Brick, machine made			
		1	AG0301	Window glass, sized	1804		
		3	AM1505	Nail, cut or wrought, square			
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
	Level 2 20-71 cmbs 10YR5/4 Yellowish Brown & 10YR5/3 Brown sand	0	N/A	Sterile			
	Level 3 71-87 cmbs 10YR6/3 Pale Brown sand	0	N/A	Sterile			

Table 26. Laurel Grove Cemetery shovel tests in circular greenspace (continued from previous pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
ST 48	Level 1 0-14 cmbs 10YR 3/2 Very Dark Grayish Brown sandy loam. Lot #127	Levels 1-2 (0-27 cmbs) Artifacts. Lot #127					
		2	AR0108	Mortar			
		3	KF0104	Shell, oyster			
	Level 2 14-27 cmbs 10YR5/6 Yellowish Brown sandy loam. Lot #127	1	KG0301	Bottle, colorless bottle glass		1870	
		1	KG0401	Bottle, machine made		1900	2009
		1	MM9901	Iron fragment, unidentified			
	Level 3 27-40 cmbs 10YR3/2 Very Dark Grayish Brown sandy loam. Lot #126	1	AC0120	Brick, handmade			
		1	AG0301	Window glass, sized		1804	
		1	AR0108	Mortar			
		1	KC0699	White-Bodied Ceramic, unidentified		1762	2009
		1	KC1301	Redware, unglazed, coarse			
		7	KG0301	Bottle, colorless bottle glass		1870	
		2	KG0501	Tableware, probably, clear curved glass			
		1	MM9903	Slag			
	Level 4 40-65 cmbs Mottled 10YR5/4 Yellowish Brown and 10YR6/3 Pale Brown sand Lot #128	2	AC0199	Brick, unspecified			
		2	KF0104	Shell, oyster			
		1	MF0101	Coal			
		1	MM9901	Iron fragment, unidentified			
		1	ZR0302	Slate, unidentified			
	Level 5 65-98 cmbs 10YR6/3 Pale Brown sand. Lot #129	1	KG0306	Bottle, amber bottle glass			
1		MZ0101	Material, unidentified				
ST 49	Level 1 0-12 cmbs 10YR3/2 Very Dark Grayish Brown sandy loam	0 N/A Sterile					
	Level 2 12-22 cmbs 10YR2/1 Black silty sand Lot #147	3	AC0121	Brick, machine made			
		1	AM1199	Nail, wire common, fragment		1890	2009
		2	AM1507	Nail fragment, unidentified			
		1	MP9901	Plastic, unidentified			
	Level 3 22-77 cmbs 2.5Y5/3 Light Olive Brown sand w/ some charcoal. Lot #148	3	AC0199	Brick, unspecified			
1		MM9901	Iron fragment, unidentified				
1		ZR0302	Slate, unidentified				
ST 50	Level 1 0-31 cmbs	0	N/A	Oyster shell; not recovered			

Table 27. Laurel Grove Cemetery shovel tests in greenspace along Sycamore Street (continued on following page).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
	10YR2/1 Black loamy sand mottled w/10YR4/2 Dark Grayish Brown and 10YR4/6 Dark Yellowish Brown silty sand						
Level 2	31-115 cmbs	4	AC0199	Brick, unspecified			
		2	AF0105	Asphalt			
	10YR6/4 Light Yellowish Brown sand mottled w/10YR3/2 Very Dark Grayish Brown loamy sand. Lot #136	1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	1840	1855	1870
		2	KF0104	Shell, oyster			
		1	KF0230	Seed, other			
		4	MF0101	Coal			
		1	MR0122	Unmodified stone			
		1	ZR0302	Slate, unidentified			

Table 27. Laurel Grove Cemetery shovel tests in greenspace along Sycamore Street (continued from previous page).

The GPR data from Laurel Grove Cemetery revealed some anomalies, including circular ones that may be trash pits. GPR also showed a very large number of burials in the Gentile’s Section, most of which have no corresponding grave marker. The few colonial period artifacts in the shovel tests excavated in the circular greenspace and the lack of any military artifacts; however, suggests that the sampled areas were not the location of the American Camps.

Jewish Cemetery Area

Target: Reserve Corps location. The Reserve Corps was under command of Major General Benjamin Lincoln. It consisted of Major General Viscount de Noailles French West India Troops (including the Volunteer Chasseurs of San Domingo), artillery and American militia forces (Hough 1866:164-170; Wilson 2005:169-170).

The target area for this project includes the extant 18th century Jewish Cemetery, along with 19th and 20th century development around it. The development includes the historic Savannah Station building and tract owned by Historic Inns and used as a reception facility. The area also includes the Morgan and Boykin tracts, and the Garrison Elementary School/Board of Education tract which contains Garrison Elementary School and playgrounds.

KOCSA Analysis

The Jewish Cemetery was extant during the Battle of Savannah. It occupied an area near the edge of a bluff. Like many historic cemeteries, this one (which was actually two separate cemeteries) was located on the bluff prominence, as depicted in an enlarged view of the Faden (1784) map (Figure 118). The high ground offered the best terrain available in a relatively flat coastal area for the reserve forces to watch the battle downhill and stand in readiness to offer cover fire. Historic maps suggest that the area between the cemetery and the Spring Hill Redoubt was relatively devoid of trees. It is unlikely that British troops undertook the clearing of prior to October 1779, given its distance from the redoubts. It was equally unlikely that much tree cutting and clearing was done by American and allied forces in the predawn hours prior to the battle, when they established the reserve corps there. It is most likely that this area of high ground merely did not support the somewhat denser tree growth of cypress and other varieties growing in the low and swampy areas surrounding the bluffs. In addition, hardwoods mixes growing on the bluff outside of town may have been cut over the years by town residents for domestic and industrial/commercial use. Certainly, the trees in the cemetery were cut to some degree to enable ease of burying people. The non-natural cleared boundaries on the Ozanne (1779) map in Figure 119 indicate that man-made clearing did occur. At any rate, the sparse trees in the area served the French reserve forces well in eliminating any cover that would reduce their observation of the battle or their field of fire on the enemy should the British pursue retreating allied forces. The main obstacles to any retreating allies or pursuing enemy was the swamps immediately to the west and northwest of the cemetery and running north to the western



Figure 118 (left). The Faden map does not show the cemetery, only the location of the French reserve troops who were stationed there (Faden 1784).

Figure 119 (below). The "L" shaped clearing marks the location of the Jewish cemeteries (Ozanne 1779).



redoubts. The mucky, swampy ground in this area clearly made it a poor avenue of approach for retreating forces trying to get to the safety of the reserve troops. The trees in the swamp, however, at least provided some cover and concealment. The area just east of this would have been an easier approach in that it contained firm ground, but it was devoid of tree cover and was blitzed by the intense firing from large guns and small arms.

Study Area in Relation to the Jewish Cemetery

For the purposes of this study, we define the “Jewish Cemetery Area” as all the ground between, in and around the two historic Jewish Cemeteries (Figure 120). This study area is outlined in red in the figure. The two Jewish cemeteries are shown in blue. The small one is the Levi Sheftall Cemetery and the larger one below it is the Mordecai Sheftall Cemetery. The Jewish Cemetery Area, as defined, includes the greenspace between the two cemeteries owned by Historic Inns of Savannah, which we call the “Savannah Station Tract”. It includes the two tracts of land that adjoin each other and are located southwest of the new Frogtown lofts and southeast of Garrison Elementary School. These are the “Morgan” and “Boykin” tracts. The “Jewish Cemetery Area” also includes the very large tract owned by the Board of Education. This contains Garrison Elementary School, the fenced yard behind it and on the west side, the playground to the south side of Cohen Street, and the greenspace in the front yard on the north side of the school. This is the “Garrison Elementary School Tract”.

The Role of the Jewish Cemetery and Surrounding Landscape in the Battle of Savannah

Major General Lincoln and Admiral d’Estaing selected the Jewish Cemetery (approximately 400 yards south of Spring Hill redoubt) and referenced it by name as the location to place reserve troops (Wilson 2005:161). The cemetery was located on the relatively high ground of a bluff bordered on the west by a swamp and woods. This relative prominence served as a good viewing platform for the battle and particularly for the main attack at the Spring Hill redoubt. The location would have allowed reserve troops to observe when they would be needed. While the Jewish Cemetery is a cultural feature, its location on a slight bluff provided a natural feature relevant to military terrain. Archeologists selected this area as a project target, given its importance to the battle and its location near the western boundary of the battle.

The French reserve column was under command of General Noailles and included Haitian troops and two, four-pound guns to help cover an allied troop retreat,

should it occur. The engineer for the French troops, Captain Antoine Francoise Terance O’Conner wrote an account describing what happened at 4:00 a.m. the morning of the battle, “The reserve Corps, commanded by M. le vicomte de Noailles, advanced as far as an old Jewish cemetery and we placed on its right and a little to the rear the four 4-pounders” (Levy 1978). A sailor named Pechot remarked in his journal about the reserve troops’ effectiveness during the 1779 Battle of Savannah. He wrote, “The reserve corps by its good behavior prevented the enemy pursuing the fugitives, the retreat began at seven o’clock, and at midday little groups of men who had lost their way in the swamp were still coming back into the camp (Stevens 1970).

History of the Jewish Cemetery

The Jewish Cemetery is referred to in primary documents as the place where reserve troops were stationed south of Spring Hill Redoubt and well outside of town. In actuality, there were (and still are), two cemeteries there, located less approximately 180 feet apart. A much later newspaper article attributes the partial destruction of the Benjamin Sheftall tombstone in the Levi Sheftall Cemetery as a result of “...most of it having been broken off by a shell in the bombardment of the city during the revolutionary war” (Savannah Morning News 1886). The story of the cemeteries involves two half-brothers, Levi and Mordecai Sheftall. They were the sons of Benjamin Sheftall. Benjamin’s first wife, and Mordecai’s mother, was Perla Sheftall. Levi was Mordecai’s younger brother (Proctor et al 1984:73). His mother was Hannah Solomons Sheftall. The Sheftall diaries, written initially by Benjamin Sheftall and continued by his son Levi, document vital records of Savannah’s Jewish community (Stern 1965).

Levi and Mordecai Sheftall were leading citizens in Savannah, in both the Jewish and non-Jewish communities. Mordecai was appointed Commissary-General of Issue by the rebel state of Georgia in July of 1778. In that role, Mordecai advanced more than \$27,000 of his own money to the army for the American cause. When the British took Savannah that year, he and his son were captured and he recounts being held prisoner in a “long and painful captivity” (Federalist Papers Vol.6:1789). Levi aided the Patriot cause as well. Levi and Mordecai each established cemeteries on part of their five acre garden lots. Figure 121 is an enlarged portion of the 1798 McKinnon map that shows the layout of some of the triangular garden lots and their relationship to each other and the town. The red arrow points to Mordecai’s Lot 22.



Figure 120 (above).Satellite view of the Jewish Cemetery area outlined in red, and the various tracts investigated (Google Earth 2011).

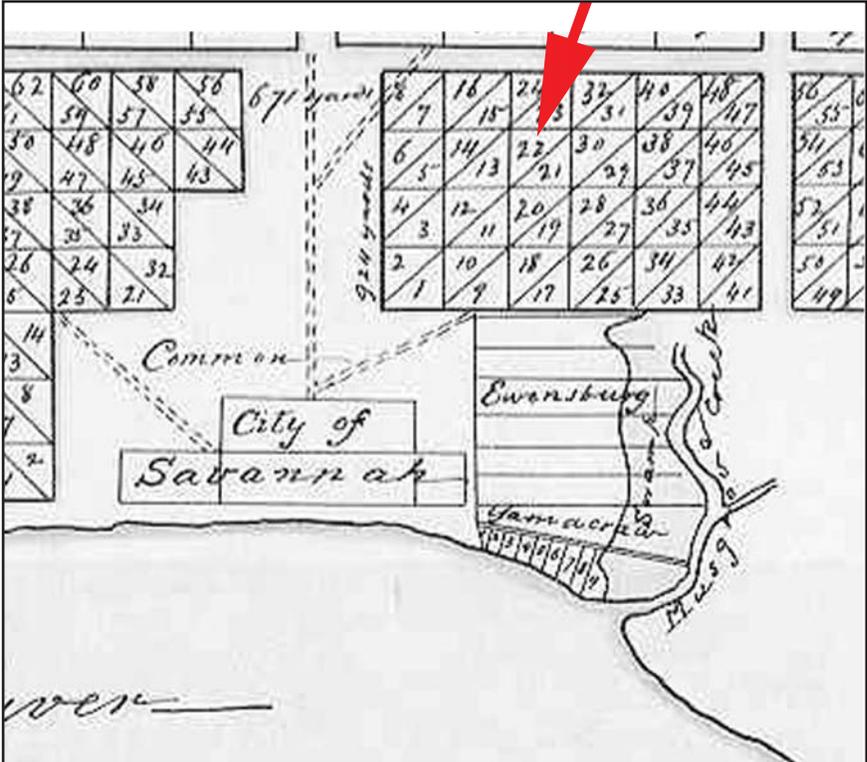


Figure 121 (right). The triangular garden lots outside the city. Lot 22 (arrow) holds the Mordecai Sheftall Cemetery (McKinnon 1798).

Levi Sheftall Cemetery

This cemetery was designated as a family burial ground for Levi's family, the family of Mordecai, and his wife's family the De LaMottas. Occasionally this cemetery has been referred to as the De Lyon or De LaMotta Cemetery, based on a misconception printed in 1950 and the fact that the extant tombstones are engraved with these names (Levy 1950). In actuality, however, the cemetery was established by Levi Sheftall in or prior to 1765 and the surviving stones represent his descendants. Levi and Mordecai buried their father, Benjamin Sheftall, in Levi's cemetery in 1765 (Levy 1983). By 1773 Levi formally put the cemetery lot in a trust (Levy 1983:92). The Sheftall diaries note the name of the Levi Sheftall cemetery and lists burials. For example, the 1790 entry states, "...departed this life Mrs. Sara Delamotta wife of Isaac Delamotta mother of Mrs. Sarah Sheftall aged 62 years and was buried on the 19th in Levi Sheftalls burial ground alongside of her granddaughter Rebecka Sheftall..." (Stern 1965). The 1773 trust deed states that there was a brick wall around the Levi Sheftall. In 1797 the City of Savannah paid Levi 50 Ds. (pence) "...in part for bricks for the Cemetery" (*Georgia Gazette* 1797). These may have been to repair the brick wall that already enclosed it.

Mordecai Sheftall Cemetery

Between 1762 and 1773, Mordecai established a cemetery, not only for his own family, but for all the Jews in Savannah (Proctor 1984:70). The location he selected was approximately 180 feet south of Levi's cemetery. Mordecai established this new cemetery on his own five acre lot (Garden Lot No. 22) that he received as a Crown grant in 1762. In the 1773 transaction he conveyed 1.5 acres of the lot to a newly formed cemetery trust (Harden 1913:50). The 1773 trust deed states that any Jewish person could be buried there as the "land shall be and forever remain to and for the use and purpose of a Place of Burial for all persons whatever professing the Jewish Religion" (Chatham County Superior Court 1803). The Sheftall diaries lists two entries with dates 16 years apart for the construction of a stone wall around the Mordecai Sheftall Cemetery. A 1771 entry states, "Minis Minis...was buried near Hetty Serzatos and Solomon Solomons (which place is now enclosed in a stone wall by the Congregation given for the purpose for a place of burial by Mordecai Sheftall)" (Stern 1965:250). On July 31, 1787,

The society called the Mischebe't Nefesh laid this day the foundation stones for a wall to be built round the piece of ground given by Mordecai Sheftall for a publick burial ground. Laying the first stone was given to Mordecai Sheftall the 2

stone to Levi Sheftall the 3 stone to Philip I. Cohen the 4 stone to Cushman Polock (Stern 1965:254).

It is possible that this reflects two different walls, or that one date is in error. Even if the date of 1771 is incorrect for the construction of the first wall around the cemetery, documents show that the cemetery was in use prior to the Battle of Savannah in 1779.

Interments continued but tapered off with the opening of the Hebrew section of Laurel Grove Cemetery. Except for an isolated example in 1916, the last known burial in the Mordecai Cemetery was 1881 (Levy 1978:3). As the surrounding area suffered economic neglect, the Mordecai Sheftall Cemetery remained intact (unlike the Levi Sheftall Cemetery). The former's survival was undoubtedly due to the walls that surrounded it in the past. The extant Belgian block wall around the Mordecai Cemetery was constructed by Mickve Israel in the 1930s when they gained possession of the property (John Sheftall, personal communication, February 23, 2011). Attention was refocused on the cemetery in 1976, with the nation's bicentennial founding on the forefront. At this time, some of the brick crypts were repointed and repaired, a water line was extended to the area, and the cemetery was landscaped (Green ca. 1976). The Mordecai Sheftall Cemetery occupies a larger footprint today than does the Levi Sheftall Cemetery. This was probably the case throughout most of its history, although the maximum size of the Levi cemetery will likely never be known. While GPR can ascertain unmarked burials, it cannot find burials that were taken away or otherwise destroyed during area construction.

Historical Land Use of the Area

In addition to the two Jewish Cemeteries, the study tract saw extensive land use and modification during the 19th and 20th centuries. An 1840 map of Savannah reveals that the area was still laid out in its original garden lot triangles at that time (Stephens 1840). These garden lots were given initially to colonists who owned a town lot, allowing them to raise their own produce in the garden lots outside of town. In March, 1849 the Savannah City Council passed a resolution, "That a select Committee be appointed to devise some mode of opening a street to the Cemetery, used by the Hebrew portion of our population" (*Savannah Republican* 1849a). In July the committee reported to the council that,

Mr. Hiram Roberts, owner of garden lot No. 13, West of the city, is willing to allow a way through his lot East of the Cemetery, provided two plain gates are constructed, so as to prevent injury to his property. This way would be open to the congregation until a

permanent street, as contemplated by Mr. Roberts, is opened by him. Lot No. 14, owned by Dr. Minis, not being enclosed, a way will thus be open to that portion of our fellow citizens, who contributing by taxation to the support of the city, are entitled to respectful consideration from this corporate body. The Committee, therefore, recommend that inasmuch [?] as Dr. Minis has expressed his assent to do whatever Mr. Roberts engages to do, this Board adopt the following resolution: Resolved, That the City Marshall be authorized to have forthwith two gates constructed on Lot 13, East and West, to front the street laid out East of West Broad Street on the plan of the city” (Savannah Republican 1849b). The report was adopted. In August of 1850 the Savannah City Council adopted a resolution directing the City Surveyor to “... lay out a street from West Broad Street, to the Hebrew Burial Ground...(Savannah Republican 1850).

With new road access by 1853, the triangular garden lots in the study area were being developed and more than half of the area was resurveyed into traditional rectangular lots between Jones Street and Mordecai Cemetery (Figure 122). The exception was the lots bordering the property owned by the Hebrew Congregation. The Congregation’s tract continued to be the triangular garden lot. The line extending from it and paralleling Steward Street reflects one of the original lines of the triangular garden lot divisions. The rectangular lots laid out off this line, therefore, form a right angle to the line, whereas the lots dominating the study area were laid at a 45 degree angle to those garden lines. Thus, an unusual angle was created between lots north of the Jewish Cemetery and those to the east and northeast, all relating to the city’s decision to establish rectangular lots along the original triangular garden lot lines. Interestingly, the small, Levi Cemetery located north of, and across the street from the large Mordecai Cemetery, is not depicted on the Vincent map.

Between the 1850s and the 1880s, intensive development came to the study area. Historians Lee and Agnew discussed the Hebrew cemetery and its role in the October 9th battle. In 1869 they mentioned, “This burying-ground is still to be seen. It is in Robertsville, about six hundred yards in a southwesterly direction from the Central Railroad shops. Most of the walls are torn down. Another cemetery has been established about twenty paces distant, in which the Hebrews now inter their dead” (Lee and Agnew 1869:60). Their comments about the dilapidated condition of the cemetery wall is important and shows that the development around the cemetery resulted in ensuing destruction of the cemetery walls and encroachment by as early as 1869 and perhaps even earlier. By 1886 a newspaper article described the Levi Sheftall Cemetery as “...a piece of ground about 25 by 40 feet inclosed by a high brick wall, over which it is almost impossible to see,

and which is fast crumbling to pieces” (Savannah Morning News 1886).

Both cemeteries appear as blue boxes on the 1888 Sanborn maps (Figure 123). By 1898 there is irrefutable evidence that the Levi cemetery had been encroached on by development of the area immediately around (Figure 124). Note the small blue box is now encroached on by wooden structures depicted by the yellow boxes.

Five years prior, in 1893 the trustee descendants of the Mordecai Cemetery thought it unlikely that a synagogue would be built on the remaining portion of Mordecai’s Garden Lot 22 (as he had originally visualized in his 1773 deed of trust for the tract). They successfully petitioned the courts to be allowed to sell the property (Levy 1978:5). In 1899 they sold the parcel for \$4,500 as detailed in a Chatham County deed (SCAD 1998). The property was developed after that. Railroad tracks and buildings, small business, wooden houses, and a caretaker’s house (just north of the Mordecai Cemetery) all would occupy the area from the late 19th to mid-20th centuries.

Sanborn Fire Insurance Maps from 1888 and 1898 document this extensive land use and modification. The 1888 map depicted structures on all but one block (the southwestern-most block) in the study area (Figure 123). Most were residences and ranged from one, to one and a half, to two stories frame structures. There was one corner store in the area. The roads were unpaved. Small structures likely representing privies are shown on some blocks, but not others. This mostly residential area sat in marked difference to a mill on the block bounded by Cohen Street on the north, Pig (later Garrard or Guerard) Street on the east, Stewart Street to the south, and Dog Street on the west.

A large mill building is identified on the 1888 Sanborn map as the Savannah Cotton Mill. The Savannah Cotton Mill was previously operated as the Arkwright Cotton Factory, which began operation around 1871. In 1871, the Arkwright factory was described as near the Hebrew Cemetery. Great Britain’s House of Commons provides this information on the demise of the Arkwright factory,

The Arkwright cotton factory was worked on full time six months of the past year, four months on three-quarters time, and then it was determined to close as it was impossible to pay expenses. The stoppage of this mill has caused much suffering and destitution in the southern and western part of this city, and it is hoped that it will be put into operation again at an early day (Great Britain, Parliament, House of Commons 1877:523).

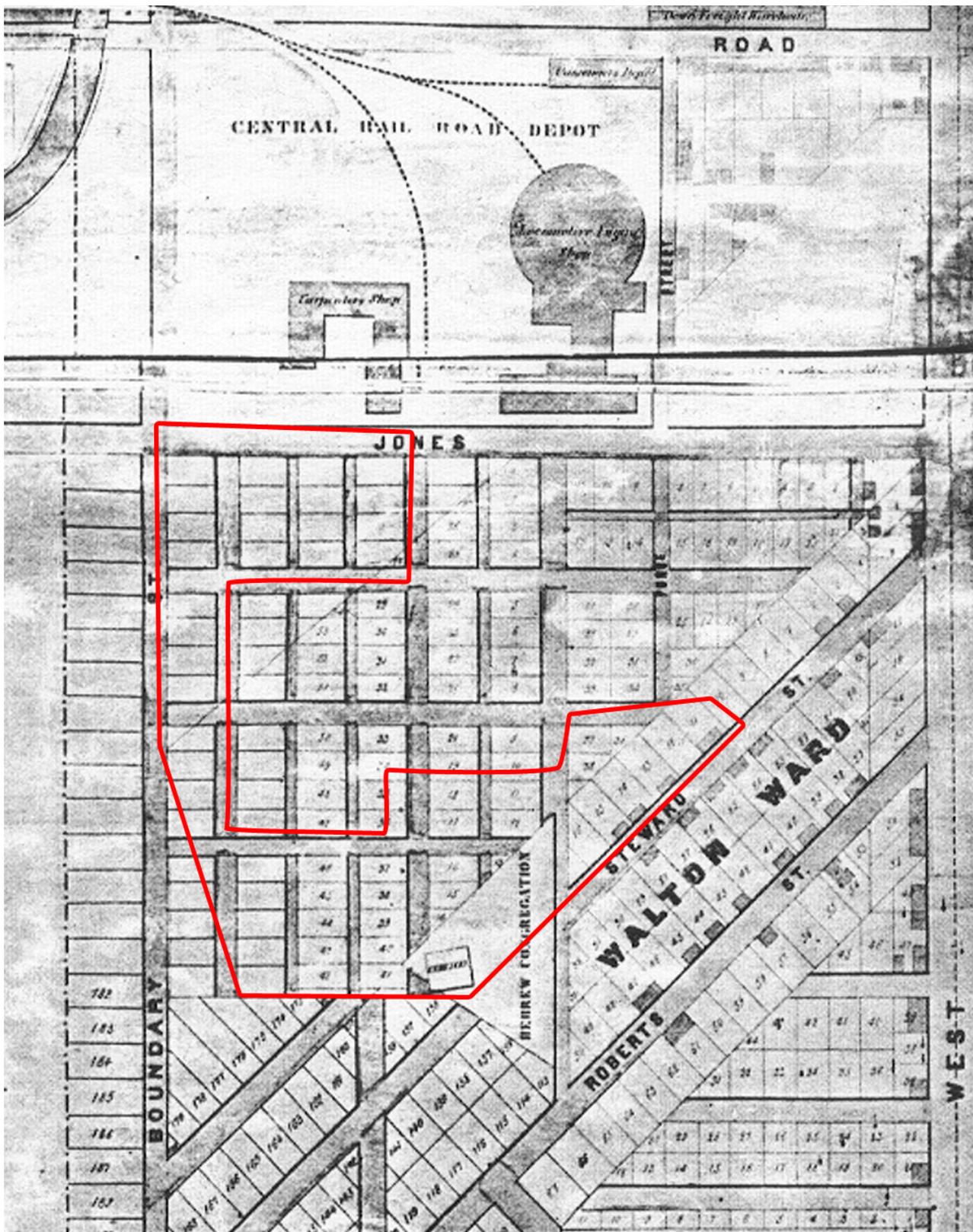


Figure 122. The original garden lot lines of the Jewish Cemetery property is visible on this 1853 map (Vincent). The area of investigation is outlined in red.

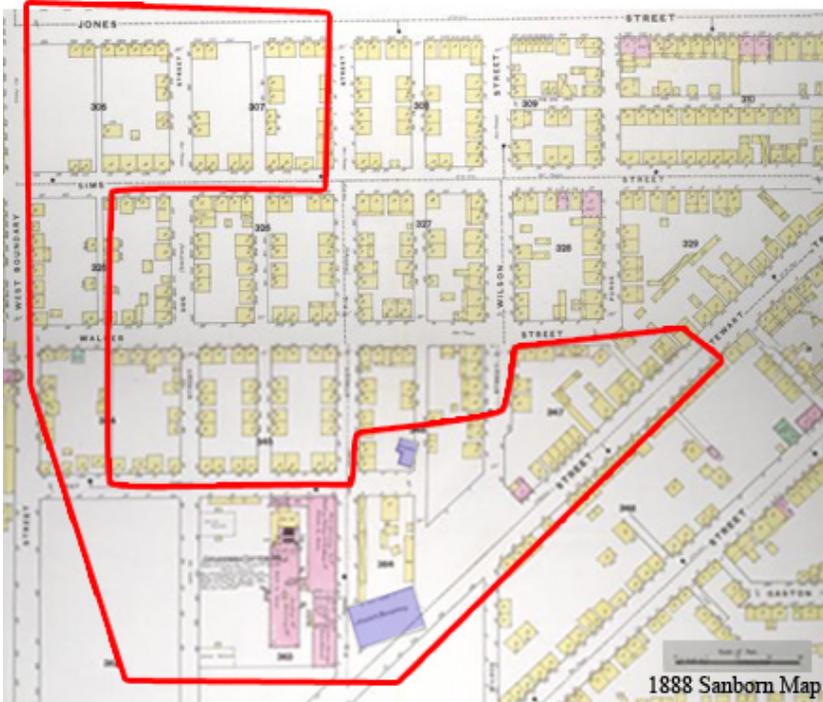


Figure 123. 1888 Sanborn map showing mill in pink and two Jewish cemeteries in blue (Sanborn 1888).



Figure 124. The mill is gone on the 1898 Sanborn map and the small cemetery (in blue) is encroached by structures (Sanborn 1898).

The Arkwright factory apparently rebounded, for the Sholes city directory for 1882 listed the Arkwright Cotton Factory at the south end of Guerard Street. In 1886, the Arkwright factory employed 85 workers (Rebarer 1879:14; Sholes 1882:101; J.M. Elstner and Company 1886:38).

By 1888, the Arkwright mill operated as the Savannah Cotton Mill and employed 100 workers. The mill workers were most likely women if it followed tradition of the day. Employees worked 12 hour days. It is likely that many of the modest houses surrounding the mill were occupied by mill workers who were boarding, renting, or perhaps in rarer cases, buying the houses. The mill had 10,500 spindles and contained buildings, rooms, and areas for carding, spinning, reeling, dying, baling and packing. It also had a forge and machine shop.

The location of a very large cotton mill complex, immediately west of the Hebrew cemetery undoubtedly had an adverse effect on the archeological resources directly beneath it. Some portions of the archeological deposits may have been protected by the building; however, including the zone containing battlefield debris. This is evident by the battle artifacts collected by metal detectorists and other relic hunters at the Garrison school playground, which sits on portions of the mill footprint.

The city block immediately west of the cotton mill was vacant of buildings, at least as represented by the Sanborn map. The 1888 map shows the Levi Sheftall Cemetery north of the Mordecai Sheftall Cemetery. By 1892 cemetery encroachment and vandalism had increased markedly. A member of the Mickve Israel Congregation wrote to its president to complain about the "...almost totally neglected condition of the Old Hebrew Cemetery...", the overgrowth of vegetation that "...made it almost impossible to pass over the ground..." and the fact that "unknown persons make it a receptacle for carcasses of dead animals" (Solomons 1882). He went on to say he could not keep cleaning the cemetery and requested that the area adjacent to it be used for construction of a house for a cemetery caretaker. Apparently the congregation agreed, as later Sanborn maps and newspaper articles reference a cemetery caretaker's house inhabited by an African American couple.

The 1898 Sanborn map shows no evidence of the Savannah Cotton Mill, so it is likely that it was torn down by that time (Figure 124). Another change in the ten years between map-making included a greater density of frame houses on the blocks. By this time, there were more houses in-filled between houses depicted on the 1888 map. By 1898 all the blocks north of Cohen Street had structures, and most were ringed by the maximum number of side-by-side buildings as space allowed. More stores dotted

the area, particularly on corner lots. The streets remained unpaved. The Levi Sheftall Cemetery walls were virtually gone and the graveyard had been encroached upon by at least two wooden structures. An undated photograph shows a view down Cohen Street facing east, at the intersection of Cohen and Spruce (Figure 125). The Levi Cemetery would be immediate behind the photographer. By the mid-20th century the neighborhood was referred to as a slum in newspaper articles. A 1936 survey by the WPA noted 12 extant graves; 4 marked and 8 unmarked.

Researchers encountered confusion caused by a plethora of changing street names in the vicinity of the Jewish cemetery. These street names involved Cohen, Dog, Garrard, Guerard, Lumber, Pig, and Spruce streets. Savannah city code for 1884 recorded the official naming of several streets in the vicinity,

That certain other street running east and west from the Hebrew Congregation/ lot to West Boundary street, next south of Walker street, in said city, which street is forty feet in width, shall be known as Cohen street. That certain other street running north and south from Jones street continued, to Garden Lot No. 4 of the tan yard tract, being the first street west of Wilson street, in said city, which street is thirty-five feet wide, shall be known as Spruce street. That certain other street running north and south from Jones street continued, to Garden Lot No. 4 of the tan yard tract, being the second street west of Wilson street, in said city, which street is forty feet in width, shall be known as Guerard street (MacDonnell 1907:340).

Nine years later, in 1893 Savannah's streets in the vicinity were renamed again,

That certain street in Choctaw Ward, of the city of Savannah, called in the published map of the city Spruce street, is hereby changed to Guerard street, and Guerard street, in the same ward, is hereby changed to the name of Lumber street. The street in the same ward, immediately east of what is called on the map Spruce street, and west of Wilson street, heretofore unnamed, shall be hereafter called Spruce street. The unnamed street in the same ward, immediately east of the street designated on the said map as Guerard street, shall be hereafter called Cann street, and the unnamed street immediately west of said Guerard street, shall be hereafter called Harmon street (MacDonnell 1907:340-341).

In 1935 a WPA project documented both cemeteries by making scaled maps of them (Figure 126). This included the remaining marked graves and some details about the surroundings outside the cemetery walls. This included



Figure 125. Facing east down Cohen Street, at intersection with Spruce Street. Small Levi Sheftall cemetery is to left of photographer, just outside of view (SCAD 1998).

the dwelling north of the Mordecai cemetery known to be the cemetery caretaker's house, as well as a water tower south of the cemetery. The map also showed the cemeteries in relation to the streets and railroad facilities, including the Union Station Passenger Train terminal and the adjacent Railway Express building (that would become the Savannah Station facilities).

Changes in the street names may reflect the spasms and paradoxical land use in this area through time. From wilderness to garden lots to cemeteries to a battlefield the land went on to provide a location for industry and crowded urban domestic and commercial use followed by dilapidation and decay. This was eventually changed again with the razing of structures and the establishment of an interstate, followed by development all over again. Obviously the residential, commercial, and industrial structures from the 19th and 20th century are not related to the 1779 Battle of Savannah. Their significance to the project, however, lies in the presence of their remains within the archeological

record. This presence was documented by archeologists in their deep shovel tests. The extensive 19th and 20th century deposits extended 4-5 feet as discussed below and served to effectively cap Revolutionary War deposits and mask them from this NPS metal detector survey project, as well as from metal detectorists looking for relics. Only when this thick cap of modern debris is removed are artifacts close enough to the ground surface to be located with metal detectors. This exact scenario occurred in the Garrison School playground situation discussed below. This situation also has important ramifications for future development, which is considered in the Recommendation section of this report. The nature of the 19th and 20th century deposits is described in more detail below.

Archeological Results and Interpretation

Previous archeology in the area focused on the Levi Sheftall Cemetery. This included mapping and "cleaning"

inside the walls, during which time approximately 10 cm (or ranging from 4-10 inches) of disturbed fill was removed (Larry Babits, personal communication, February 17, 2011; Leech and Babits 1990). A large amount of debris was documented, with most being modern bottle glass, wire nails, and other similar items. The amount of debris, along with the modern trash pits inside the cemetery show that it was severely encroached upon by the burgeoning population in that area. The work did uncover,

A large number of arms related artifacts...in the enclosure. These ranged in size from .75 caliber to .177 caliber. They included round balls typical of the Revolutionary War weaponry of American, British and French weaponry as well as more modern types such as the .45 caliber automatic. They represent virtually an entire history of small arms (Leech and Babits 1990:25).

The round lead balls, although in a disturbed context, are almost certainly associated with the Reserve Corps and the Battle of Savannah. Quantitative data for this “large number” of arms artifacts is not provided; however, in Leech and Babits’ report.

In 2008 a limited GPR survey was conducted in the small area (18’ x 62’) outside the eastern wall of the Levi Sheftall Cemetery by Robert Perry from New Hampshire (Perry 2008). The results from his one page report were

unclear, but the flags in his photographs suggest that one anomaly outside the cemetery wall may have been long enough to constitute a grave. Perry did not conduct GPR survey on the other three sides of the cemetery. The area covered by Perry’s 2008 GPR study was resurveyed in the present study.

The current *Savannah Under Fire* ABPP search for the Reserves Troops’ location on the battlefield focused around the two Jewish cemeteries. Archeologists used shovel testing, GPR, and metal detector survey to examine multiple tracts in the Jewish Cemetery area. GPR coverage of this area was accomplished with Blocks T and U. Block T covered the areas between the cemeteries and along Cohen and Coyle streets. Block U, located further east, examined the Morgan and Boykin properties north of Cohen Street. The shovel tests and GPR work is described within each tract section below. The metal detector survey is discussed at the end of this section, following the last tract description.

Savannah Station Tract

Archeologists conducted preliminary investigations at the Savannah Station Tract (Historic Inns Tract) on February 4, 5, and 8, 2010. During this time archeologists completed a GPR survey and excavated seven deep shovel tests (ST 1-7). Five of these (ST 1-4, 7) were positive. Archeologists



Figure 127. GPR survey on Morgan and Boykin tracts in the Jewish Cemetery area. Note the rubble pile in the background.

established an arbitrary grid with the laser transit, including several datum points. The grid was extended across the Morgan and Boykin Tracts, as well across the Garrison Elementary School Tract. This allowed all archeological investigations to be tied to the same grid at this locale, regardless of tract location. Figure 127 shows a portion of the grid where GPR was being conducted. In the background are the recently constructed Frogtown Lofts. To the left out of view, is Garrison Elementary School.

Shovel Testing

The shovel tests contained a large number of artifacts, but none dating to the colonial or Revolutionary War periods. Shovel tests on the Savannah Station tract, north of the Mordecai Cemetery and south of Cohen Street, revealed massive disturbances and fill. This was represented by numerous thin lenses of redeposited soil and mottle zones of multiple soil types. These disturbances are probably related to the domestic, commercial, and industrial activity in the area during the late 19th and early 20th centuries. This would have included the Mordecai Sheftall Cemetery caretaker's house that stood north of the cemetery. That structure is denoted on the 1916 Sanborn map as a yellow box attached to the large cemetery at the bottom of the map (Figure 128).

The majority of shovel tests here extended over a meter deep, with disturbed soils and 20th century bottle glass and other artifacts noted over much of this depth. ST 2 is a good example of dense 19th and 20th century artifacts and debris. It also contained medium and large ballast stone in Levels 1 and 2 that were not recovered. A few shovel tests (such as ST 4 and 5) encountered small, shallow trenches dug for the irrigation system. ST 3 encountered what appeared to be in situ articulated brick at 39 cmbs and may represent footings or a chimney foundation for one of the wooden frame structures across the street from the mill on the 1888 Sanborn map. Brick and slag were noted, but only representative samples saved from shovel tests. The source of slag and other coal by products could have been from the mill foundry and coal burning fireplaces. Table 28 details the stratigraphy and artifacts of ST 1-4, and 7. A map of the irrigation system provided by the land owners was helpful in showing how extensive the system was, although exact locations could not always be determined prior to digging. None of the PVC irrigation pipes; however, were impacted by shovel tests.

GPR Survey

GPR Block T

This was an irregularly shaped area on Savannah's west side located between two Jewish Cemeteries off of Cohen Street. Figure 129 shows a portion of the Block T location.

The Levi Sheftall Cemetery, surrounded by a gray stone wall, is in front of the archeologist. The red brick Garrison Elementary School is behind the cemetery. The Mordecai Sheftall Cemetery sits behind the archeologist, off the screen. GPR Block T included the Savannah Station tract, as well as the adjacent road and greenspace around the Levi Sheftall Cemetery. This sample formed an irregular polygon whose maximum dimensions were 112 m east-west by 71 m north-south. The sample consisted of 5,903.75 m of radar data that were collected in 144 radargrams. Ground conditions within this block included lawn and asphalt and concrete pavement. GPR plan maps of Block T reveal extensive radar anomalies (Figure 130). An overlay map of Block T is shown in Figure 131). Major disruptions of the soil associated with utilities are evident in this block. These include a large utility ditch along Coyle Street and smaller trenches along Cohen Street. This search yielded ambivalent results, due in large part to the heavy overburden of 19th and 20th century debris and utilities. The GPR plan maps for Block T confirm the existence of several major utility ditches in this area. The GPR mapping also confirmed the extensive deposit of urban debris that has built up in the 19th and 20th centuries in this part of Savannah.

Morgan and Boykin Tracts

Archeologists conducted preliminary archeological investigations on the Morgan and Boykin tracts on February 8 and 9, 2010. We excavated six shovel tests (ST 8-13) and completed a GPR survey.

Shovel Testing

All shovel tests contained artifacts. Figure 132 captures a portion of these tracts, with the school in the background and the elevated interstate highway (I-16) behind it. Note the extreme elevation difference between the slough, the hill, and the graded area where the school sits. Shovel tests were mapped with a laser transit. Table 29 details the soil and artifact information within the shovel tests. The shovel tests contained a large number of artifacts, but none dating to the colonial or Revolutionary War periods.

GPR Survey

GPR Block U

This was an eastern continuation of Block T. Block U was an irregularly-shaped sample of portions of lots owned by Henry Morgan and Noble Boykin in the area known as "Frogtown". This sample consisted of 3,046 m of radar data from 133 radargrams collected within an area measuring 65.5 m east-west by a maximum of 70 m north-south.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End	
Jewish								
ST 1	Level 1 0-23 cmbs 10YR3/2 Very Dark Grayish Brown loamy sand Lot #3	12	AC0120	Brick, handmade				
		1	AG0558	Plate Glass (greater than 3.0 mm)	1800			
		1	AM1507	Nail fragment, unidentified				
		1	AR0104	Concrete				
		1	AR0108	Mortar				
		1	KG0299	Bottle, amber/olive green glass			1900	
		7	KG0301	Bottle, colorless bottle glass	1870			
		2	KG0393	Bottle, olive green unidentified			1900	
		1	KM0311	Screw cap/top				
		2	MM9901	Iron fragment, unidentified				
		4	MM9903	Slag				
		1	MP9901	Plastic, unidentified				
		5	ZM1232	Sheet iron/steel				
		1	ZR0302	Slate, unidentified				
	Level 2 23-101 cmbs 10YR6/4 Light Yellowish Brown silty sand Lot #4	9	AC0199	Brick, unspecified				
		1	KF0104	Shell, oyster				
		1	KG0393	Bottle, olive green unidentified			1900	
		2	MM9901	Iron fragment, unidentified				
	ST 2	Level 1 0-25 cmbs 10YR3/2 Very Dark Grayish Brown sandy loam Lot # 5	66	AC0199	Brick, unspecified			
			96	AF0102	Asphalt, roofing	1917		
1			AG0301	Window glass, sized	1804			
9			AR0108	Mortar				
1			KF0104	Shell, oyster				
1			KG0207	Bottle, embossed letters				
1			KG0249	Bottle, embossed "Federal Law Forbids Sale..."	1935	1949	1964	
7			KG0301	Bottle, colorless bottle glass	1870			
1			KG0303	Bottle, light green bottle glass				
1			KG0306	Bottle, amber bottle glass				
1			KG0501	Tableware, probably, clear curved glass				
31			MF0101	Coal				
54			MF0103	Cinder/clinker				
24			MM9901	Iron fragment, unidentified				
39			MM9903	Slag				
5			ZR0302	Slate, unidentified				
Level 2 25-97 cmbs		2	AC0110	Water pipe, ceramic				

Table 28. Jewish Cemetery, Savannah Station Tract, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
Lot #6	Very thin lenses of 10YR5/4 Yellowish Brown sand, 10YR4/4 Dark Yellowish Brown Sand, and 10YR3/3 Dark Brown sand	53	AC0199	Brick, unspecified			
		6	AF0102	Asphalt, roofing	1917		
		18	AG0301	Window glass, sized	1804		
		1	AG0558	Plate Glass (greater than 3.0 mm)	1800		
		4	AM1199	Nail, wire common, fragment	1890		2009
		1	AM1505	Nail, cut or wrought, square			
		12	AR0108	Mortar			
		1	CM0303	Eyelet			
		2	KC0105	Porcelain, plain			
		1	KC0700	Whiteware, plain	1820		2009
		16	KF0101	Bone, unidentified			
		6	KF0104	Shell, oyster			
		2	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
		2	KG0249	Bottle, embossed "Federal Law Forbids Sale..."	1935	1949	1964
		1	KG0251	Bottle, applied color lable bottle	1935		
		3	KG0252	Bottle, continuous thread finish, machine made	1910		
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
		77	KG0301	Bottle, colorless bottle glass	1870		
		4	KG0303	Bottle, light green bottle glass			
		14	KG0306	Bottle, amber bottle glass			
		1	KG0393	Bottle, olive green unidentified			1900
		1	KG0401	Bottle, machine made	1900		2009
		10	KG0501	Tableware, probably, clear curved glass			
		1	KG0516	Other glass			
		1	KM0301	Crown cap	1892		
		58	MF0101	Coal			
		53	MF0102	Charcoal			
		188	MF0103	Cinder/clinker			
		111	MM9901	Iron fragment, unidentified			
		38	MM9903	Slag			
		2	MR0122	Unmodified stone			
		5	ZM0506	Aluminum foil	1920		
2	ZM1202	Nuts					
1	ZM1204	Washer					
14	ZR0302	Slate, unidentified					
Lot #7	Level 3 97-105 cmbs 7.5YR5/6 Strong Brown sand	2	AC0199	Brick, unspecified			
		1	AR0108	Mortar			
		2	KG0301	Bottle, colorless bottle glass	1870		

Table 28. Jewish Cemetery, Savannah Station Tract, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		1	KG0303	Bottle, light green bottle glass			
		2	KG0501	Tableware, probably, clear curved glass			
		1	MF0101	Coal			
		3	MF0103	Cinder/clinker			
ST 3	Level 1 0-32 cmbs 10YR3/1 Very Dark Gray loamy sand Lot #8	14	AC0199	Brick, unspecified			
		3	AF0102	Asphalt, roofing	1917		
		6	AG0301	Window glass, sized	1804		
		2	AG0558	Plate Glass (greater than 3.0 mm)	1800		
		1	AM1101	Nail, wire common	1890		2009
		3	AM1505	Nail, cut or wrought, square			
		2	AR0104	Concrete			
		3	AR0108	Mortar			
		1	KC0631	Pearlware, unidentified decorated	1774	1802	1830
		1	KG0207	Bottle, embossed letters			
		1	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
		1	KG0243	Bottle, Owen's scar bottle	1903	1926	1950
		1	KG0249	Bottle, embossed "Federal Law Forbids Sale..."	1935	1949	1964
		27	KG0301	Bottle, colorless bottle glass	1870		
		13	KG0306	Bottle, amber bottle glass			
		1	KG0401	Bottle, machine made	1900		2009
		2	KG0501	Tableware, probably, clear curved glass			
	2	MF0101	Coal				
	7	MM9903	Slag				
	2	ZM0911	Electrical wire				
	Level 2 32-39 cmbs 10YR6/1 Gray sand & much slag Lot #9	3	AC0199	Brick, unspecified			
		2	AG0301	Window glass, sized	1804		
		3	AM1507	Nail fragment, unidentified			
		2	KC0700	Whiteware, plain	1820		2009
		1	KG0243	Bottle, Owen's scar bottle	1903	1926	1950
		8	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0306	Bottle, amber bottle glass			
1		KG0393	Bottle, olive green unidentified			1900	
3		MF0103	Cinder/clinker				
		5	MM9903	Slag			
ST 4	Level 1 0-21 cmbs	14	AC0199	Brick, unspecified			

Table 28. Jewish Cemetery, Savannah Station Tract, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
7.5YR2.5/1 Black loamy sand Lot #10		2	AF0102	Asphalt, roofing	1917		
		3	AG0301	Window glass, sized	1804		
		5	AM1507	Nail fragment, unidentified			
		1	AR0109	Tiles, asbestos (ceiling, etc.)			
		1	KC0398	Lead glazed, unidentified			
		1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
		1	KF0104	Shell, oyster			
		2	KF0105	Shell, clam			
		1	KG0182	Milk Glass	1743		2009
		2	KG0300	Bottle, light aqua bottle glass	1800		1920
		7	KG0301	Bottle, colorless bottle glass	1870		
		2	KG0306	Bottle, amber bottle glass			
		4	MF0101	Coal			
		2	MM9901	Iron fragment, unidentified			
		7	MM9903	Slag			
		1	ZM1211	Wire			
		1	ZR0302	Slate, unidentified			
Level 2 21-31 cmbs 10YR3/2 Very Dark Grayish Brown silty sand Lot #11		10	AC0121	Brick, machine made			
		4	AF0102	Asphalt, roofing	1917		
		3	AG0301	Window glass, sized	1804		
		1	AM1199	Nail, wire common, fragment	1890		2009
		2	AM1507	Nail fragment, unidentified			
		1	AR0104	Concrete			
		1	AR0108	Mortar			
		1	KC0105	Porcelain, plain			
		2	KG0507	Tableware, glass cup/mug			
		1	MF0101	Coal			
		1	MF0103	Cinder/clinker			
		1	MM9901	Iron fragment, unidentified			
1	MM9903	Slag					
Level 3 31-49 cmbs 10YR3/1 Very Dark Gray silty sand Lot #12		28	AC0199	Brick, unspecified			
		1	AM1505	Nail, cut or wrought, square			
		3	AM1507	Nail fragment, unidentified			
		1	KC0105	Porcelain, plain			
		1	KC0401	Ginger beer stoneware bottle	1835	1867	1900
		1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
1	KC0699	White-Bodied Ceramic, unidentified	1762		2009		

Table 28. Jewish Cemetery, Savannah Station Tract, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		2	KF0101	Bone, unidentified			
		5	KF0104	Shell, oyster			
		2	KF0105	Shell, clam			
		1	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0303	Bottle, light green bottle glass			
		1	KG0501	Tableware, probably, clear curved glass			
		2	MF0101	Coal			
		9	MF0103	Cinder/clinker			
		1	MM9901	Iron fragment, unidentified			
		2	ZR0302	Slate, unidentified			
	Level 4 49-69 cmbs	1	AC0110	Water pipe, ceramic			
	10YR3/2 Very Dark Grayish Brown loamy sand	17	AC0120	Brick, handmade			
	Lot #13	3	AG0301	Window glass, sized	1804		
		6	AM1507	Nail fragment, unidentified			
		8	AR0108	Mortar			
		1	KC2801	Yellowware, plain	1830	1885	1940
		1	KF0101	Bone, unidentified			
		4	KF0104	Shell, oyster			
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0306	Bottle, amber bottle glass			
		1	MF0101	Coal			
		2	MF0102	Charcoal			
		5	MM9901	Iron fragment, unidentified			
		5	MM9903	Slag			
		1	MR0122	Unmodified stone			
		1	ZR0302	Slate, unidentified			
	Level 5 69-76 cmbs	4	AC0120	Brick, handmade			
	10YR4/3 Brown silty sand	3	AM1505	Nail, cut or wrought, square			
	Lot #14	12	AM1507	Nail fragment, unidentified			
		1	KC0903	Mocha on white body	1795	1818	1840
		2	KC2307	Transfer print, stippled, blue underglaze	1795	1818	1840
		1	KF0101	Bone, unidentified			
		2	KF0104	Shell, oyster			
		2	KG0393	Bottle, olive green unidentified			1900
		1	MF0101	Coal			
		1	MF0102	Charcoal			
		2	MF0103	Cinder/clinker			

Table 28. Jewish Cemetery, Savannah Station Tract, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		1	MM9901	Iron fragment, unidentified			
		1	MM9903	Slag			
		2	ZR0302	Slate, unidentified			
	Level 6 76-93 cmbs 10YR4/3 Brown silty sand Lot #15	4	AM1507	Nail fragment, unidentified			
		1	KG0393	Bottle, olive green unidentified			1900
		1	MF0101	Coal			
Level 7 93-116 cmbs 10YR6/4 Light Yellowish Brown silty sand	0	N/A	Sterile				

ST 7	Level 1 0-65 cmbs 10YR3/1 Very Dark Gray silty sand and 10YR6/3 Pale Brown sand, rocks, bricks	0	N/A	Sterile			
	Level 2 65-95 cmbs 10YR6/3 Pale Brown sand	0	N/A	Sterile			
	Level 3 95-110 cmbs 10YR6/3 Pale Brown sand mot- tled with 10YR4/3 Brown sand. Lot #39	1	KG0300	Bottle, light aqua bottle glass	1800		1920
		5	KG0393	Bottle, olive green unidentified			1900
		1	ZM1247	Screw			

Table 28. Jewish Cemetery, Savannah Station Tract, Shovel Tests (continued from previous pages).



Figure 129. GPR survey on Savannah Station Tract, with Levi Sheftall Cemetery in background behind gray stone wall and red brick school behind cemetery..

Block T

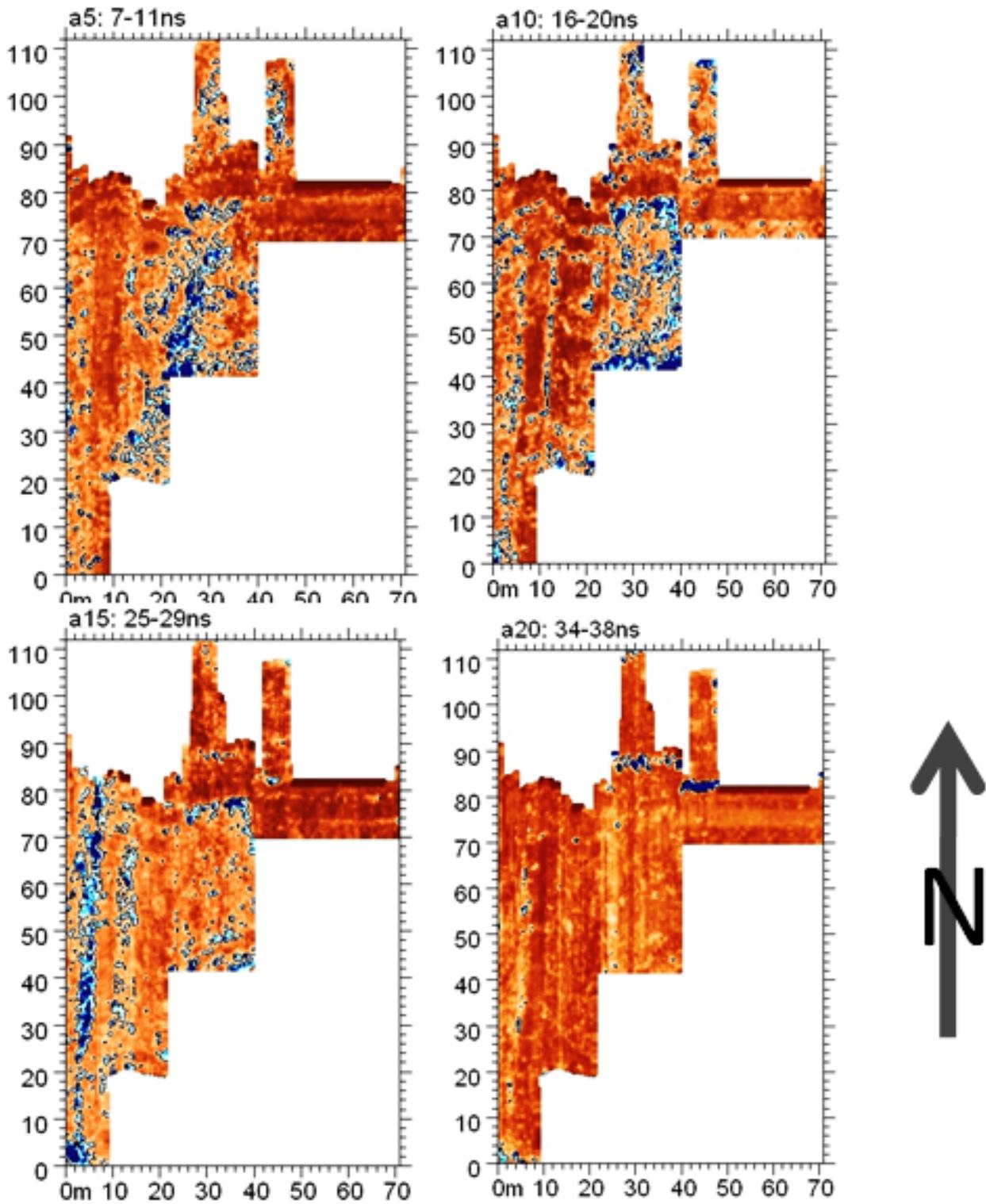


Figure 130. Plan Views of GPR Block T at increasing depths.

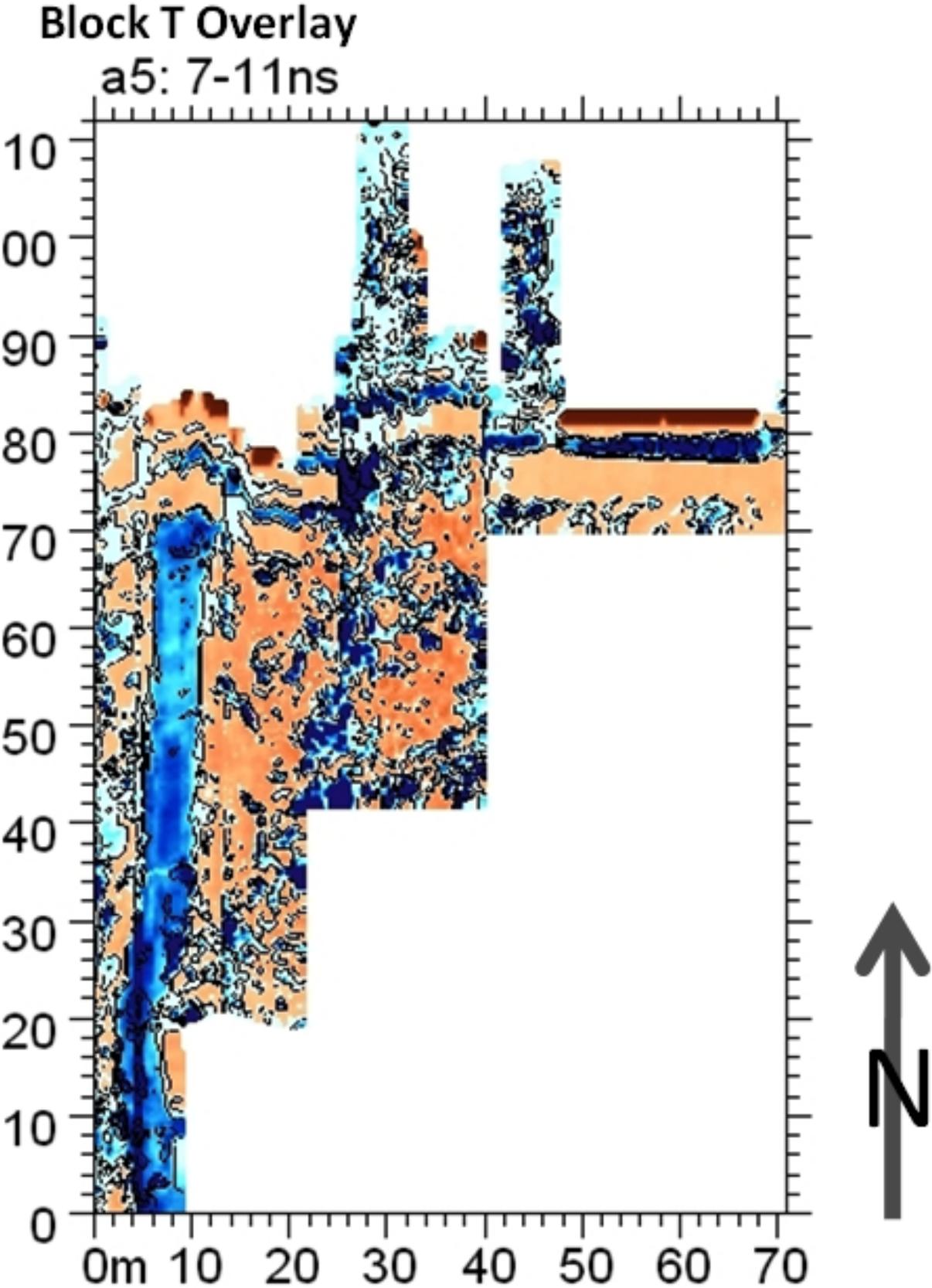


Figure 131. GPR Overlays of Plan Maps.



Figure 132. GPR Survey on Morgan and Boykin tracts. Note the extreme elevation differences by the school and interstate highway in the background.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
Jewish Cemetery/Morgan Tract							
ST 8	Level 1 0-17 cmbs 10YR3/1 Very Dark Gray loamy sand Lot #16	1	AC0110	Water pipe, ceramic			
		9	AC0199	Brick, unspecified			
		1	AF0102	Asphalt, roofing	1917		
		6	AG0301	Window glass, sized	1804		
		1	AG0558	Plate Glass (greater than 3.0 mm)	1800		
		5	AM1507	Nail fragment, unidentified			
		1	AR0104	Concrete			
		1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
		11	KG0301	Bottle, colorless bottle glass	1870		
		2	KG0304	Bottle, aqua bottle glass	1800		1920
		1	KG0306	Bottle, amber bottle glass			
		1	KG0401	Bottle, machine made	1900		2009
		2	MF0101	Coal			
		4	MF0103	Cinder/clinker			
		1	MM9901	Iron fragment, unidentified			
		4	MM9903	Slag			
		1	MZ0102	Modern miscellaneous			

Table 29. Jewish Cemetery Area, Morgan and Boykin Tracts, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		18	ZM1232	Sheet iron/steel			
	Level 2 17-48 cmbs	4	AC0121	Brick, machine made			
	10YR3/1 Very Dark Gray loamy sand with 10YR6/4 Brownish Yellow loamy sand	5	AG0301	Window glass, sized	1804		
	Lot #17	1	AM1101	Nail, wire common	1890		2009
		5	AM1507	Nail fragment, unidentified			
		1	AR0108	Mortar			
		1	KC0105	Porcelain, plain			
		4	KF0104	Shell, oyster			
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
		3	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0306	Bottle, amber bottle glass			
		4	MF0101	Coal			
		3	MF0103	Cinder/clinker			
		1	MM9901	Iron fragment, unidentified			
	Level 3 48-71 cmbs	1	AC0199	Brick, unspecified			
	10YR5/4 Yellowish Brown wet sand	1	AG0301	Window glass, sized	1804		
	Lot #18	1	AM1507	Nail fragment, unidentified			
		4	AR0108	Mortar			
		1	KF0104	Shell, oyster			
		1	MF0101	Coal			
		2	MF0103	Cinder/clinker			
		1	MF0203	Rubber, unidentified			
		1	MM9901	Iron fragment, unidentified			
		1	MZ0102	Modern miscellaneous			
ST 9	Level 1 0-21 cmbs	9	AC0199	Brick, unspecified			
	10YR3/1 Very Dark Gray loamy sand	7	AG0301	Window glass, sized	1804		
	Lot #19	5	AG0558	Plate Glass (greater than 3.0 mm)	1800		
		1	AM1507	Nail fragment, unidentified			
		2	AR0108	Mortar			
		1	KF0102	Animal teeth			
		1	KF0105	Shell, clam			
		1	KG0182	Milk Glass	1743		2009
		11	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0393	Bottle, olive green unidentified			1900
		4	MF0101	Coal			
		2	MF0103	Cinder/clinker			
		2	MM9901	Iron fragment, unidentified			

Table 29. Jewish Cemetery Area, Morgan and Boykin Tracts, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		1	MZ0101	Material, unidentified			
		3	MZ0102	Modern miscellaneous			
		1	ZC0901	Porcelain insulator			
		1	ZM1201	Bolts			
		1	ZM1211	Wire			
	Level 2 21-48 cmbs 7.5YR2.5/1 with 10YR4/2 Dark Grayish Brown sand with rubble Lot #20	7	AC0120	Brick, handmade			
		8	AG0301	Window glass, sized	1804		
		11	AG0558	Plate Glass (greater than 3.0 mm)	1800		
		2	AM1199	Nail, wire common, fragment	1890		2009
		2	AM1505	Nail, cut or wrought, square			
		2	AR0108	Mortar			
		2	KC0113	Porcelain, decal			
		1	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
		5	KF0101	Bone, unidentified			
		1	KF0104	Shell, oyster			
		3	KG0300	Bottle, light aqua bottle glass	1800		1920
		4	KG0301	Bottle, colorless bottle glass	1870		
		2	KG0306	Bottle, amber bottle glass			
		6	MF0101	Coal			
		5	MF0103	Cinder/clinker			
		3	MM9903	Slag			
		1	ZM0915	Battery carbon core			
	Level 3 48-112 cmbs 10YR6/4 Brownish Yellow sand w/ some charcoal Lot #21	3	AC0199	Brick, unspecified			
		1	AG0558	Plate Glass (greater than 3.0 mm)	1800		
		2	KF0101	Bone, unidentified			
		1	KG0300	Bottle, light aqua bottle glass	1800		1920
		4	MF0101	Coal			
2		MF0103	Cinder/clinker				
ST 10 Level 1 0-15 cmbs 10YR3/1 Very Dark Gray loamy sand Lot #22	6	AC0199	Brick, unspecified				
	2	AG0301	Window glass, sized	1804			
	1	AM1507	Nail fragment, unidentified				
	1	CP0101	Button, plastic	1940			
	1	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930	
	1	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840	
	1	KF0104	Shell, oyster				

Table 29. Jewish Cemetery Area, Morgan and Boykin Tracts, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		1	KG0243	Bottle, Owen's scar bottle	1903	1926	1950
		2	KG0300	Bottle, light aqua bottle glass	1800		1920
		2	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0303	Bottle, light green bottle glass			
		14	MF0101	Coal			
		1	MM9901	Iron fragment, unidentified			
	Level 2 15-39 cmbs 7.5YR2.5/1 Black loamy sand Lot #23	1	AG0301	Window glass, sized	1804		
		7	AM1507	Nail fragment, unidentified			
		1	KC0700	Whiteware, plain	1820		2009
		2	KF0101	Bone, unidentified			
		1	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
		3	MF0101	Coal			
		1	MM9901	Iron fragment, unidentified			
	Level 3 39-110 CMBS 10YR6/4 Light Yellowish Brown silty sand w/ some charcoal; grades into subsoil Lot #24	1	AG0301	Window glass, sized	1804		
		1	AG0558	Plate Glass (greater than 3.0 mm)	1800		
		1	KC0398	Lead glazed, unidentified			
		1	KC0631	Pearlware, unidentified decorated	1774	1802	1830
		1	KC2809	Earthenware, Rockingham glaze on buff paste	1850	1900	1950
		1	KF0104	Shell, oyster			
3		MF0102	Charcoal				
1		MM9901	Iron fragment, unidentified				
1		MZ0102	Modern miscellaneous				
ST 11	Level 1 0-19 cmbs 10YR4/2 Dark Grayish Brown silty sand Lot #25	1	AG0301	Window glass, sized	1804		
		1	AM1101	Nail, wire common	1890		2009
		1	AM1507	Nail fragment, unidentified			
		3	KF0104	Shell, oyster			
		1	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0501	Tableware, probably, clear curved glass			
		1	KG0512	Other glass vessel			
		4	ZM1232	Sheet iron/steel			
	Level 2 19-48 cmbs 10YR4/2 Dark Grayish Brown silty sand with increasing amount of 10YR5/4 Yellowish Brown sand and occasional charcoal Lot #26	2	AC0199	Brick, unspecified			
		1	KC0604	Creamware, plain	1762	1791	1820
		1	KF0113	Shell, unidentified			
		1	MF0101	Coal			
		1	MF0102	Charcoal			

Table 29. Jewish Cemetery Area, Morgan and Boykin Tracts, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
ST 12	Level 1 0-14 cmbs 10YR3/2 Very Dark Grayish Brown sandy loam Lot #29	5	AC0199	Brick, unspecified			
		1	AG0301	Window glass, sized	1804		
		2	AM1507	Nail fragment, unidentified			
		1	AR0108	Mortar			
		1	KC0699	White-Bodied Ceramic, unidentified	1762		2009
		1	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0306	Bottle, amber bottle glass			
		1	KM0311	Screw cap/top			
		2	MF0101	Coal			
		1	MM9901	Iron fragment, unidentified			
		1	MP9901	Plastic, unidentified			
		1	MZ0103	Unidentified item, composite material			
		1	ZC0901	Porcelain insulator			
		1	ZG0903	Chimney globe, crimped edge, machine made	1879		
	1	ZR0302	Slate, unidentified				
	Level 2 14-22 cmbs 10YR3/1 Very Dark Gray loamy sand (very dense layer of debris) Lot #28	33	AC0199	Brick, unspecified			
		6	AG0301	Window glass, sized	1804		
		9	AM1507	Nail fragment, unidentified			
		35	AR0108	Mortar			
		1	CM0324	Lapel pin			
		3	KC0105	Porcelain, plain			
		5	KC0501	Ironstone, plain blue tinted stone china	1842	1886	1930
		2	KC0700	Whiteware, plain	1820		2009
		3	KF0101	Bone, unidentified			
		1	KF0102	Animal teeth			
		2	KG0231	Bottle, amethyst /Manganese decolorized glass	1880	1898	1917
		14	KG0301	Bottle, colorless bottle glass	1870		
1		KG0304	Bottle, aqua bottle glass	1800		1920	
1	KG0409	Pressed glass	1825		2009		
1	KG0501	Tableware, probably, clear curved glass					
23	MF0101	Coal					
36	MF0103	Cinder/clinker					
37	MM9901	Iron fragment, unidentified					
12	MM9903	Slag					
1	MP9901	Plastic, unidentified					
1	TC0215	Tobacco pipestem, kaolin, unidentified size					

Table 29. Jewish Cemetery Area, Morgan and Boykin Tracts, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		1	ZG0602	Auto safety glass	1915		
		2	ZR0302	Slate, unidentified			
	Level 3 22-28 cmbs Brick, rubble w/asphalt-like covering on top	0	N/A	Modern debris; not recovered			
	Level 4 28-43 cmbs 10YR4/3 Brown sand Lot #30	1	AM1505	Nail, cut or wrought, square			
	Level 5 43-68 cmbs 10YR5/6 Yellowish Brown sand	0	N/A	Sterile			
	Level 6 68-74 cmbs 10YR5/8 Yellowish Brown Sand	0	N/A	Sterile			

Jewish Cemetery/Boykin Tract

ST 13	Level 1 0-16 cmbs 10YR3/1 Very Dark Gray silty sand	0	N/A	Modern debris; not recovered			
	Level 2 16-88 cmbs 10YR4/2 Dark Grayish Brown silty sand mottled with 10YR5/4 Yellowish Brown sand Lot #27	5	AC0120	Brick, handmade			
		5	AG0301	Window glass, sized	1804		
		1	AM0601	Nail, cut	1790		1890
		2	AM1505	Nail, cut or wrought, square			
		6	AM1507	Nail fragment, unidentified			
		1	CZ0102	Button, unknown composition			
		2	KC0105	Porcelain, plain			
		1	KC0309	Salt glazed/alkaline glazed			
		2	KC0604	Creamware, plain	1762	1791	1820
		2	KC0630	Pearlware, plain	1774	1802	1830
		2	KC0631	Pearlware, unidentified decorated	1774	1802	1830
		4	KC0700	Whiteware, plain	1820		2009
		1	KC0701	Whiteware, indeterminate decoration	1820		2009
		1	KC0704	Edgeware, scalloped, rim impressed, curved	1802	1815	1832
		1	KC1312	Redware, clear glazed, white slipped			
		2	KC2103	Line wares, brown or blue over and underglazed	1770	1798	1825
		2	KC2104	Annularware, pearlware	1795	1805	1815
	3	KC2303	Transfer print, linear, unidentified underglaze	1795	1818	1840	
	1	KC2800	Yellowware, decorated	1830		1940	
	4	KF0101	Bone, unidentified				
	1	KF0105	Shell, clam				
	1	KG0249	Bottle, embossed "Federal Law Forbids Sale..."	1935	1949	1964	

Table 29. Jewish Cemetery Area, Morgan and Boykin Tracts, Shovel Tests (continued on following pages).

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
		2	KG0300	Bottle, light aqua bottle glass	1800		1920
		7	KG0301	Bottle, colorless bottle glass	1870		
		1	KG0303	Bottle, light green bottle glass			
		2	KG0306	Bottle, amber bottle glass			
		2	KG0393	Bottle, olive green unidentified			1900
		1	KM0301	Crown cap	1892		
		1	MF0101	Coal			
		1	MF0103	Cinder/clinker			
		1	MM9901	Iron fragment, unidentified			
		1	PR0102	Slate pencil			
		1	TC0101	Tobacco pipe bowl, kaolin, plain			
		2	TC0210	Tobacco pipestem, kaolin, 5/64"			
		1	ZM0914	Battery			
		2	ZM1232	Sheet iron/steel			
		3	ZR0302	Slate, unidentified			

Table 29. Jewish Cemetery Area, Morgan and Boykin Tracts, Shovel Tests (continued from previous pages).

Most of this area consisted of grass or denuded areas and the land is presently two vacant lots. The purpose of this sample was to investigate the troop position of the French Haitian reserves, where a secondary engagement took place following the failure by the French and Americans to conquer the Spring Hill Redoubt. GPR plan maps of Block U reveal extensive radar anomalies (Figure 133). An overlay map of Block U is shown in Figure 134. This search yielded ambivalent results, due in large part to the heavy overburden of 19th and 20th century debris and utilities.

A composite of the GPR block data is overlaid on the city map in Figure 135. GPR Block T is the entire irregular block on the left. Block U is the entire irregular block on the right. While at this overview scale it is difficult to pick out individual features, one can note them many apparent anomalies present. Likewise, the data can be examined on a larger scale for post-Revolutionary War activity. Urban land use in this vicinity appears to have built up over time. A review of the Sanborn maps for the area of GPR Blocks T and U revealed a complex history of urban use in the late 19th and early 20th centuries. In the Block T vicinity most of the improvements were modest wooden structures and were frequently rebuilt, repaired, and/or remodeled during that period. There appear to be many features associated with the nineteenth century neighborhoods here (Frogtown & Currietown), as well as associated artifacts. Undoubtedly, research on these would paint an interesting and vivid picture of life in Savannah during this period. The area immediately to the west of Block T also had a history as a textile mill. The lack of Revolutionary War

artifacts suggests that the GPR anomalies likely post-date the revolution, with many of them resulting from the above mentioned activities.

The Jewish cemeteries serve as important landmarks in our attempt to reconstruct the battlefield landscape. The Haitian reserve troops who arrived on the battlefield and took position near the Jewish cemetery had only a few hours to prepare their defensive position. It is unlikely that this limited time span allowed for the construction of any substantial defensive ditch work or fortifications. Since their role in the battle was to be prepared to assist in the assault, their officers likely did not give any orders to prepare ditch work, since they expected to be moving forward towards the town. An artillery position was established in the same general area. That position may have been protected by earthworks, although time did not likely allow any elaborate construction. As a result of this limited occupation of the ground by the Patriot forces, we did not expect to locate any deep ditch work.

The primary accounts of the battle make little mention of any heavy fighting in the reserve position. The relic collector data, however, paints a different picture. That evidence is known from a scatter of metal battle-related artifacts, which would not likely be manifested in shovel testing or GPR survey. Metal detectors were employed in an attempt to locate this deposit, but the thick zone of subsequent build-up in the 19th and 20th centuries precluded its discovery.

Block U

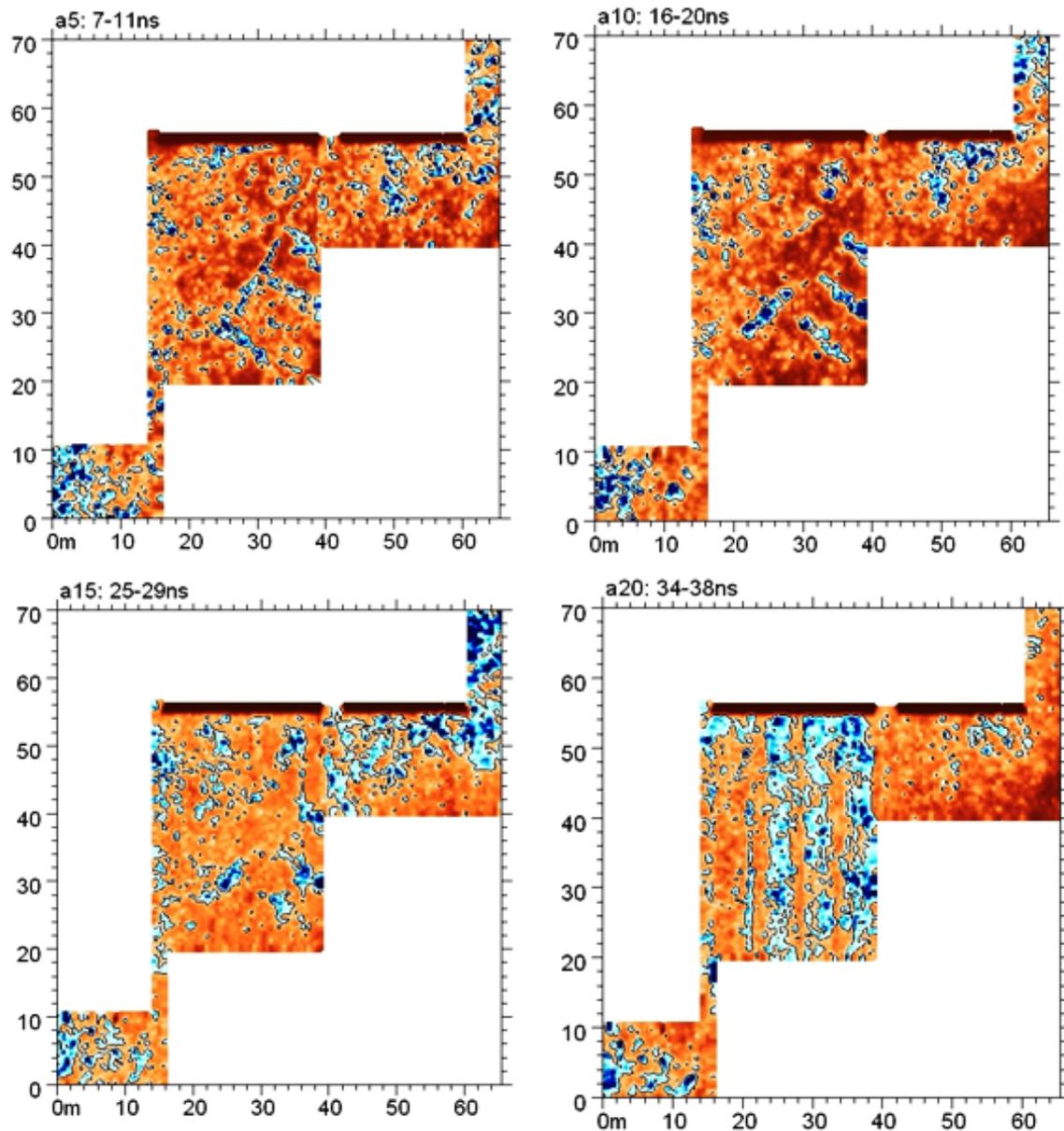


Figure 133. Jewish Cemetery Area, Morgan and Boykin tracts, Plan Views of GPR Block U at increasing depths.

Garrison Elementary Tract

Archeologists excavated four shovel tests around the playground across the street from Garrison Elementary School (Figure 136). These were designated ST A, B, C, and D. Shovel Tests A and B were located on the west side of this playground, outside the fence. ST A was approximately five meters west of the playground. ST B was three meters west of ST A, farther down the slope. ST C and D were located south of the playground, outside the fence. ST C was located off the slope, on the flat ground north of the adjacent property/fence line for the Georgia Department of Transportation facility. Table 30 details the stratigraphy and artifacts of the shovel tests containing period artifacts.

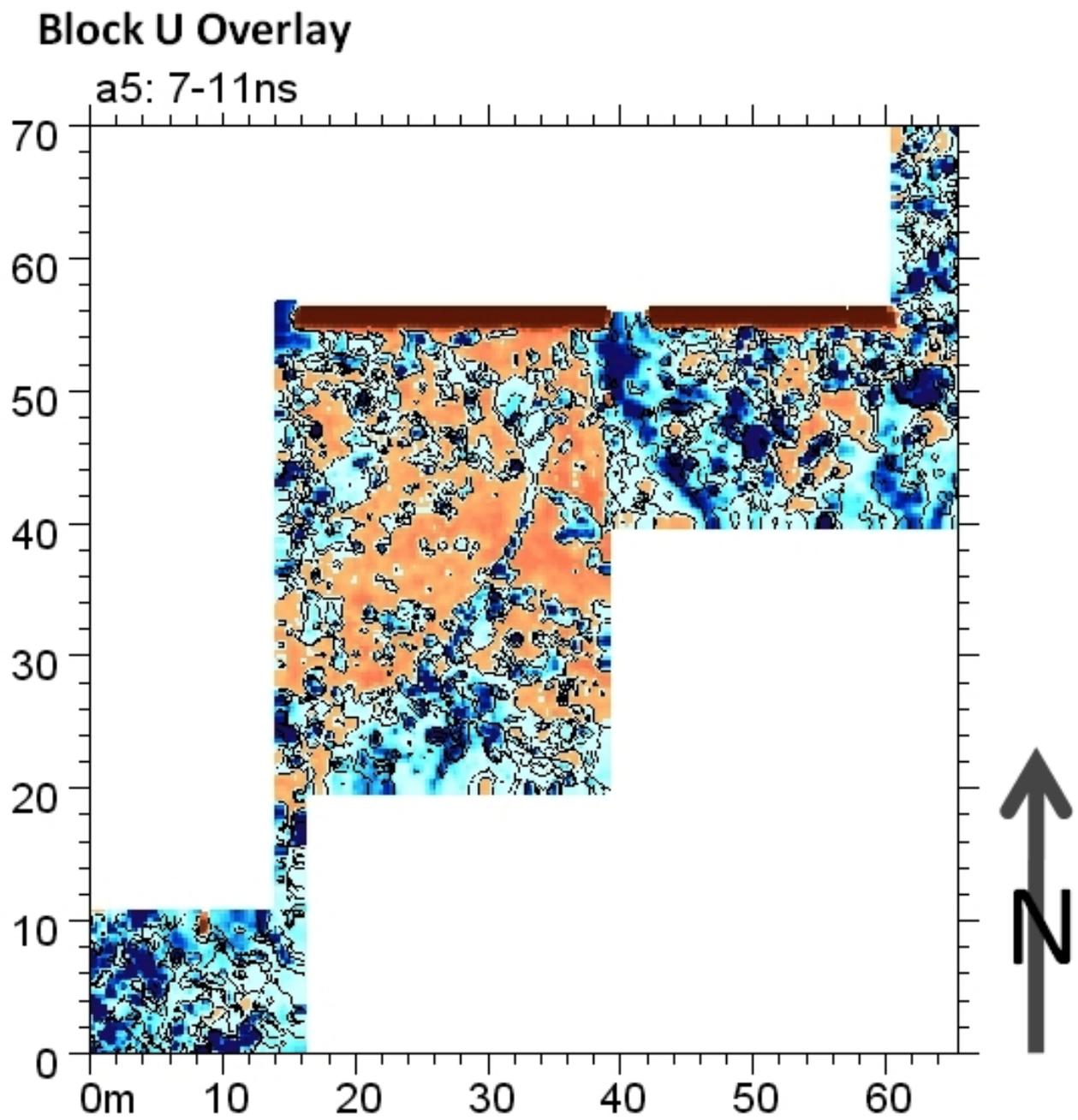


Figure 134. GPR Block U Overlays.



Figure 135. Shovel Testing outside the Garrison School playground.

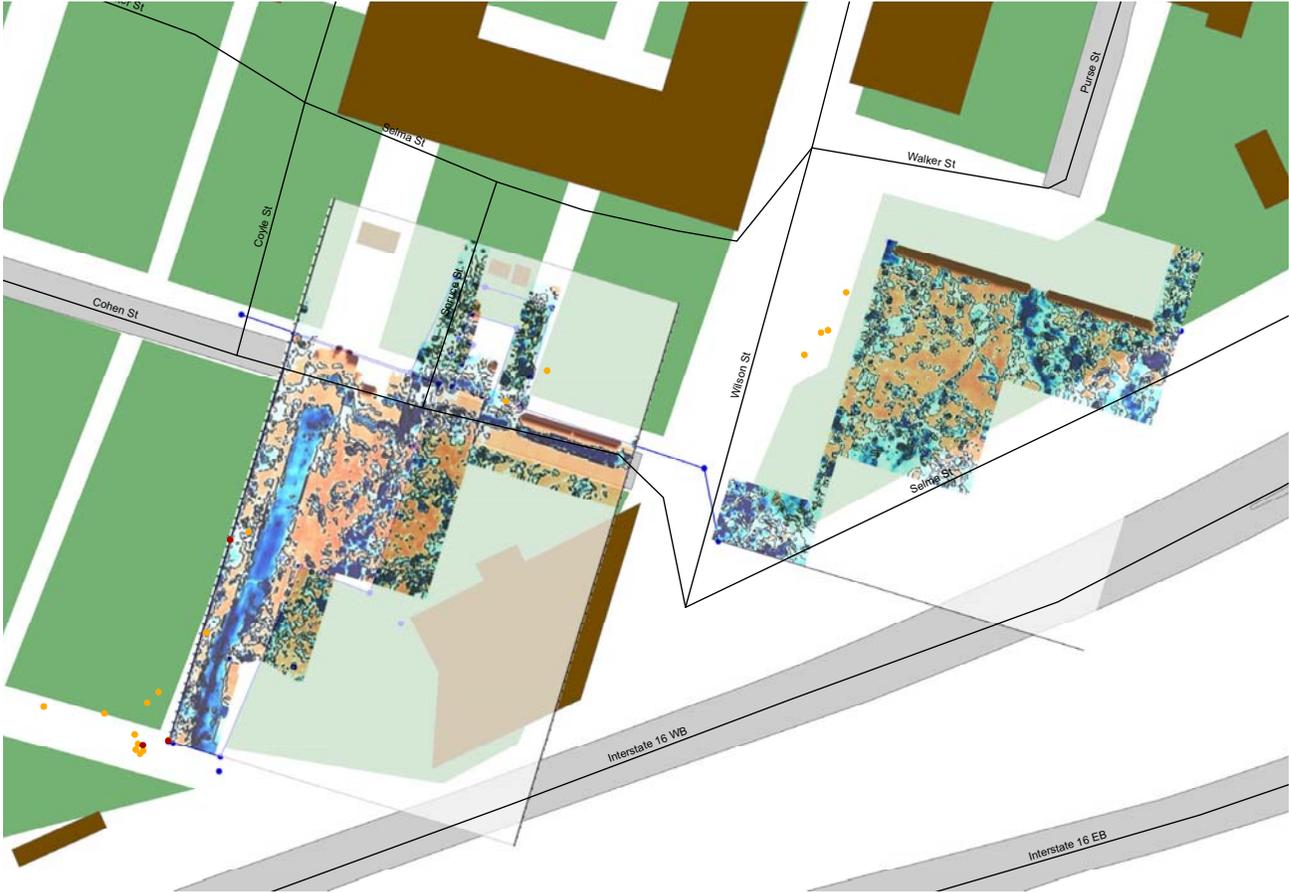


Figure 136. Composite GPR Block map results in Jewish Cemetery Area.

Unit	Level/Depth/Stratigraphy/Lot #	Count	Code	Description	Start	Mean	End
Jewish Cem/Garrison School Playground (south)							
ST A	Level 1 0-28 cmbs 10YR4/3 Brown loamy sand	0	N/A	Modern debris; not recovered			
	Level 2 28-62 cmbs Mottled thin lenses of 10YR4/3 Brown sandy loam, 10YR6/4 Light Yellowish Brown fine sand and 10YR2/2 Very Dark Brown sandy loam. Lot #97	1	KG0393	Bottle, olive green unidentified			1900
		1	KG0397	Bottle, olive green spirit bottle glass			1900
		1	KG0504	Tableware, goblet stem Modern debris; not recovered			
Level 3 62-77 cmbs 10YR2/2 Very Dark Brown sandy loam. Lot #98	1	TC0209	Tobacco pipestem, kaolin, 4/64" Modern debris; not recovered				
ST D	Level 1 0-12 cmbs 10YR4/2 Dark Grayish Brown sand	0	N/A	Modern debris; not recovered			
	Level 2 12-48 cmbs 10YR5/4 Yellowish Brown sand Lot #96	1	AG0301	Window glass, sized	1804		
		1	AM1505	Nail, cut or wrought, square			
		1	ZR2422	Flake, unspecialized 0% cortex			

Table 30. Jewish Cemetery Area, Garrison School playground south, select Shovel Tests, Artifacts.



Figure 137. Red shaded area is location of archeological metal detector reconnaissance survey (Google Earth 2011).

Metal Detector Reconnaissance Survey of Jewish Cemetery Area

Archeologists conducted a metal detector reconnaissance

survey over most of the Jewish Cemetery area as highlighted by the red shading and border (Figure 137). This included the following tracts: Savannah Station, Morgan and Boykin, Garrison School south playground (Figures



Figure 138 (left). Metal Detector Survey east of Garrison School south playground. Note I-16 in background.



Figure 139 (left). Gun found in Metal Detector Survey near playground. (Toy gun, not a gun from the Battle of Savannah!)

Figure 140 (below, left). Metal Detector Survey included a reconnaissance of area between the playground and interstate.

Figure 141 (below, right). Note the difference in elevation of the playground on the hill and the surrounding landscape towards the interstate.



138-139) and Garrison School yard. Two Nautilus metal detectors were used, including a Nautilus DMCII Ba. A variety of discrimination settings were used on each. Metal detector survey on the south playground tract included the area inside the fence and also the exterior on all sides and down the slope to West Boundary Street (Figures 140-141).

Survey of the Garrison School tract included the greenspace immediately north of the school, as well as the playgrounds west of the school, and select areas on the south side of the building. The metal detector survey confirmed across the area what the shovel tests revealed at select locations; large scale deposits of dense layers of metallic debris. While it is unknown if these deposits extend as deep everywhere as they did in the shovel tests, they do extend deep enough (minimally 15-20 cm) to make metal detecting unsuccessful. This was the case regardless of the various settings archeologists used in an attempt to mitigate this problem. Table 31 is a list of 23 metal detector hits whereby the objects were recovered as a representative sample of the types of items strewn throughout the area. Most of these items were copper, lead, or iron, reflecting the fact that metal detectors were set to discriminate out the ubiquitous aluminum beer can, pop-tops and similar trash. Samples of extremely modern metallic debris were not recovered. A few items such as “lead scrap” and “gun part” sound promising, none were associated with the Battle of Savannah, but were all more recent debris in the upper 20 cm of soil. The lead strip, bar and nondescript lead are likely industry-related from mill and/or freight railway/railroad activities. The gun part was a 19th century bullet. Other items such as hinges, an escutcheon plate, and umbrella and toy parts reflect a very small part of the architecture and domestic activity in this area during the 19th and 20th centuries.

Combined Results of Jewish Cemetery Area

Data from shovel tests throughout the Jewish Cemetery area, including the Historic Inns/Savannah Depot, Morgan, Boykin, and Garrison tracts, was combined in an effort to get an overall date on the area. This data included 34 shovel tests with diagnostic ceramics. These ceramics produced a MCD of 1802.6. This date is unusually early given the fact that it was mostly garden lots and cemeteries during this period; activities that did not generate many ceramics and other material culture by-products. This early MCD is likely a reflection of the small sample size of sherds and the skewing of the MCD away from a more recent age by omitting whitewares and similar late period ceramics. These later ceramics and similar more recent artifacts, such as machine made bottle glass and wire nails, were merely sampled and noted during our work. They represented; however, the greatest percentage of materials found. The

congested nature of this neighborhood in the late 19th and early to mid -20th centuries would have contributed greatly to the large amount of debris in the archeological record. A densely populated area, no greenspaces, and economic decline combined to produce the broken bottles and trash littering the ground and the disposal of other items in on the ground in whatever allies, nooks and crannies were available, including inside the wall of the cemeteries. The anomalies visible in the GPR Blocks T and U reflect this characterization in the myriad of utility lines and anomalies that are likely trash pits, footings, and posts holes.

While the majority of shovel tests reflected thick overburdens of modern debris and disturbed soils, not all the area landscape can be characterized in this manner. The Garrison Elementary School ground surface has the appearance of a “scooped-out bowl” reflecting severe grading. This may have been done for the construction of the school. The degree of grading can be estimated by contrasting it with the current ground surface of the Levi Sheftall Cemetery. Even noting that the upper 10-30 cm of soil there is fill (from debris and soil brought in after it was “cleaned” in 1989, one can see the extreme drop in elevation. This likely removed a lot of the modern trash and debris, but it will never be known how much of the ground surface and artifacts associated with the Battle of Savannah was removed at the same time. Likewise, the area just west of the school’s playground (on the south side of Cohen Street) dips severely and unnaturally toward West Boundary Street. Whether this grading was done for the school, during the construction of the interstate (I-16), or for some other development purpose, the results are the same as for the school lot.

Jewish Cemetery Relic Collector Survey

Two local relic collectors showed us their collections, which included items from the Jewish Cemetery area. Both are long standing members of the Coastal Empire History Hunters Association. Archeologists photographed the collections and took notes on what provenience information was available. The first collector visited, Bobby Mallard, had many artifacts related to the Revolution in Savannah. These were recovered from various locations throughout the City of Savannah and outside of town. One example included a hollow, exploded iron shell fragment from somewhere in Savannah (Figure 142). Mallard metal detected the soil that construction workers removed from Savannah’s City Market (Figure 143), as well as soil removed from the “Pink House” located at 23 Abercorn Street (Figure 144). Both contained lead balls and some other period artifact. He metal detected areas in town including the southern half of the Railroad Ward block when it was under construction for the Marriott hotel cottages, the construction area of the Savannah College of Art and

MD #	Depth	Other prov info	Count	Code	Description
MD 1	11 cmbs	Jewish Cemetery Area, south of Cohen St, South of playground		1AM1715	Latch/lock mechanism
MD 2	10 cmbs	Jewish Cemetery Area, South of Cohen St, south of playground		1MM9901	Iron fragment, unidentified
MD 3	10 cmbs	Jewish Cemetery area, south of Cohen st, south of playground		1ZM0301	Antique metal toys
MD 4	12 cmbs	Jewish Cemetery area, south of Cohen St, south of playground		1MM9902	Metal, non iron/steel, unidentified
MD 5	6 cmbs	Jewish Cemetery area, south of Cohen St, South of playground		1RM0205	Gun part, other
MD 6	8 cmbs	Jewish Cemetery area, south of Cohen St, east of playground		1ZM1233	Lead block
MD 7	10 cmbs	Jewish Cemetery area, south of Cohen St, west of playground		1FM0101	Furniture hinge, metal
MD 8	5 cmbs	Jewish Cemetery area, south of Cohen St, west of playground		1ZM1235	Lead scrap
MD 9	10 cmbs	Jewish Cemetery area, South of Cohen St, west of playground		1ZM1302	Lead, unidentified
MD 10	8 cmbs	Jewish Cemetery area, south of Cohen St, west of playground		1ZM1233	Lead block
MD 11	4 cmbs	Jewish Cemetery area, south of Cohen St, west of playground		1PM0508	Cosmetic item, metal
MD 12	5 cmbs	Jewish Cemetery area, South of Cohen St, east of playground		1ZM1235	Lead scrap
MD 13	12 cmbs	Jewish Cemetery area, south of Cohen St, in playground		1ZM0301	Antique metal toys
MD 14	16 cmbs	Jewish Cemetery area, south of Cohen St, in playground		1AM1719	Hardware, unidentified
MD 14	16 cmbs	Jewish Cemetery area, south of Cohen St, in playground		1ZM1247	Screw
MD 15	21 cmbs	Jewish Cemetery area, south of Cohen St, in playground		1ZM1213	Padlock
MD 16	12 cmbs	Jewish Cemetery area, south of Cohen St, East of small cemetery		1KM0299	Utensil handle, unidentified, metal
MD 17	8 cmbs	Jewish Cemetery Area, North of Cohen St, East of small cemetery		1FM0111	Escutcheon plate
MD 18	8 cmbs	Jewish Cemetery area, south of Cohen St, south of playground; 310 cm from datum 1 and 336 cm from ST D		1PM0102	Watch/clock part
MD 18	8 cmbs	Jewish Cemetery area, south of Cohen St, south of playground; 310 cm from datum 1 and 336 cm from ST D		1ZC0302	Marble, ceramic

Table 31. Recovered artifacts from Metal Detector Survey (continued on following page).

MD #	Depth	Other prov info	Count	Code	Description
MD 19	8 cmbs	Jewish Cemetery area, south of Cohen St, South of playground	1	ZM1103	Machine gear
MD 19	8 cmbs	Jewish Cemetery area, south of Cohen St, South of playground	1	ZR2301	Core, random
MD 20	4 cmbs	Jewish Cemetery Area, north of Cohen St, Morgan/Boykin tract	1	PM0504	Umbrella part
MD 21	8 cmbs	Jewish Cemetery Area, north of Cohen St, Morgan tract	1	CM0302	Buckle
MD 22	10 cmbs	Jewish Cemetery area, north of Cohen St, Morgan tract	1	ZM1235	Lead scrap
MD 23	8 cmbs	Jewish Cemetery area, north of Cohen St, Morgan tract	1	CM0240	Button, white metal

Table 31. Recovered artifacts from Metal Detector Survey (continued from previous page).



Figure 142 (above). Exploded hollow shell in collector's holdings.



Figure 143 (above, right). Artifacts from City Market in Savannah, including Battle of Savannah period items.



Figure 144 (right). Items from Pink House in Savannah, including lead balls.

Design (SCAD) dorms, street renovation on Montgomery and Gaston streets, and the reputed area of the War of 1812 Barracks and Urban Hospital at President and East Broad streets. Areas detected outside of town containing Revolutionary War artifacts include what is now a housing development called Silk Hope Plantation (a former 71st Scottish Highlander Revolutionary War camp and nearby Civil War site), Berwick plantation, the construction area for the Walmart in Georgetown (a suburb of Savannah), the Savannah/Augusta Road area near the Chatham/Effingham county line, a borrow pit off of I-95 adjacent to the Ogeechee River, and areas on Skidaway Island.

The second collector we visited, Michael Wheless, had an extensive Revolutionary War collection. He had metal detected many of the same areas as Bobby Mallard. Wheless found lead balls and gunflints in the SCAD dorms area. He reported the same types of artifacts, in addition to a cannonball near Wheaton and Liberty streets (Figure 145). The button with the arrow in Figure 146 shows a 71st Highlander button from this area. This regiment of Scottish Highlanders played a key role at the Battle of Savannah and during the siege leading up to it. Wheless found many items from the general area between what was Spring Hill Redoubt and where the reserve troops were stationed at the Jewish Cemetery. Some of these items included a trigger-guard from the south half of what was known as the Railroad Ward lot and is now the Marriott hotel cottages, and a lead ball and gunflint nearby (Figure 147). He reported British 51st and 52nd regimental buttons, and lead balls and gunflints recovered during construction of the Frogtown lofts (immediately northeast of the Morgan and Boykin lots), and in the area south of the Railroad Ward lot/Marriott hotel cottages. Figure 148 shows a mix of different sized lead balls. Some have been impacted, some never fired, and some still have the mold seam and nipple. Many Revolutionary War items were recovered from the area in and around the Jewish Cemetery where the French, American, and Haitian reserves were stationed to cover allied forces should they need to retreat from the battle. A portion of Wheless' collection came from soils removed from the Garrison Elementary School playground, which is a playground measuring 240 ft. north-south by 226 ft. east-west and located on the south side of Cohen Street. Playground renovation was made in the fall of either 1998 or 1999, and the rubber/asphalt mulch and underlying soils were removed from the playground with heavy machinery. This grading removed approximately 16 inches of soil below the 1990s ground surface, including the overlying mulch. They metal detected the area after the first six to eight inches of soil were removed. At this depth they found mostly large cents and coins from the 1820s-1840s as well as buttons.

The area was then graded to 16 inches below the ground surface and Wheless found pewter U.S. Eagle buttons he attributes to the War of 1812. He believes that the soil that was lying at a depth of between 16-20" below the ground surface contained most of the Revolutionary War artifacts from the 1779 Battle of Savannah, including at least 300 lead balls, in addition to cannonballs, gun parts, gunflints, and military buttons (Figures 149). At that time, Wheless made a sketch map showing the relative locations of the artifacts to each other and the playground boundaries (Figure 150). He noted a general scatter of lead balls and cannonballs across the entire playground, along with gunflints and a wrought axe head. In addition, he observed two discrete lines of lead balls and other artifacts. One line was located in the northeastern corner of the playground and was oriented northwest-southeast. The second line was located in the southwestern corner of the playground, paralleling the first line. The two lines were approximately 200 feet apart. Wheless felt that these two lines might represent opposing lines of battle between the reserves on the south and the counter-attacking British forces on the north. In addition to the lead balls, the northern line contained gunflints. Near the northern line Wheless recovered gun parts, including a ramrod guide, a hammer, and a partial trigger guard. The southern line contained lead balls, along with a side plate from a gun, a British 20th Regiment button, and unidentified iron hardware.

During the grading process, the soil and mulch were loaded into dump trucks and hauled off to a wooded location several miles northeast of Savannah. Wheless asked the construction workers for permission to metal detect the playground in-between grading, which he and other collectors did. They also metal detected the dirt after it was removed and re-deposited to a new off-site location. After this, a large amount of "new" soil was brought in and deposited on the playground soon after. Wheless feels confident that he and the many other detectorists collected most of the artifacts in the small playground south of Cohen Street.

In spite of the fact that a decision was made to build the school in the middle of a Revolutionary War battlefield, it was constructed with no archeological investigations prior to construction. No local City of Savannah ordinances or Chatham County ordinances existed then, or now, to preserve significant sites such as these, or to research and document them before they are destroyed by construction. Nor do state codes, such as the Georgia Environmental Policy Act (GEPA) protect such sites. Likewise, no archeological investigations were made prior to the construction of the school's playground, nor prior to extensive playground renovation which resulted in extreme grading and soil removal. Savannah College of Art and Design (SCAD) built a large dormitory complex on West Boundary Street.



Figure 145 (left, top). Cannonball from Savannah in relic collection.

Figure 146 (left, second from top). 71st Highlander button (white outline digitally added).

Figure 147 (left, second from bottom). Triggerguard.

Figure 148 (left, bottom). Various lead balls in collection.

Figure 149 (top). Archeologists document some of the many artifact in the collection from the Garrison School playground site in the Jewish Cemetery area.

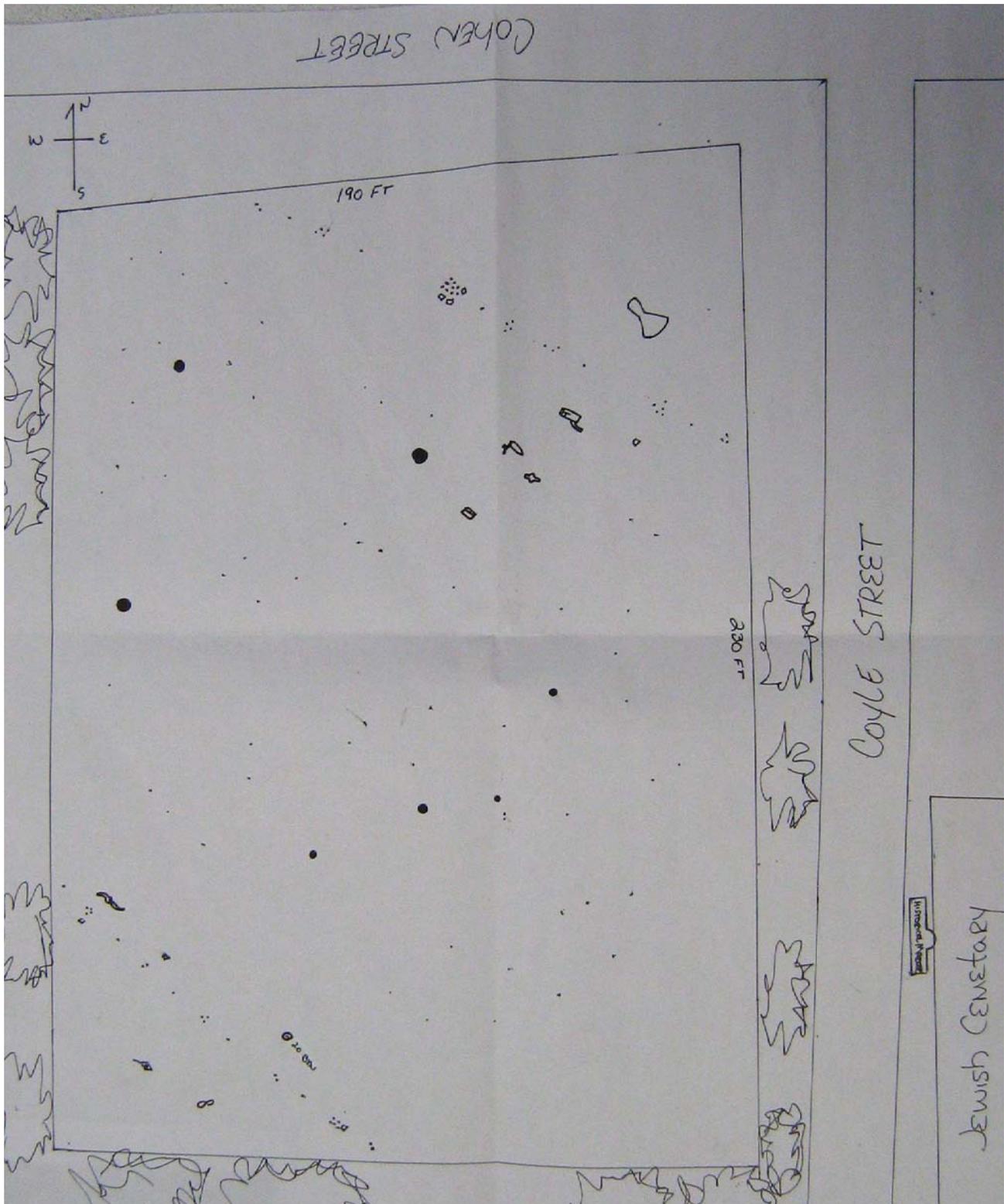


Figure 150. Map sketched by collector after metal detecting Garrison School playground. North is up. Note the two faint diagonal lines across the northeastern and southwestern corners, representing lines of lead shot and artifacts. Larger dots are actually sketches of specific artifacts.

Wheless and others also metal detected this area. The lead balls (fired and unfired) and gunflints he found there indicate that evidence from the Battle of Savannah once existed there as well. No archeological investigation was conducted prior to the construction of the SCAD complex. As a result 98 percent of the information associated with that site is now destroyed forever.

Construction of Garrison Elementary school on this extremely historical site without first implementing a professional archeological investigation is a travesty resulting in a monumental loss to history and the story of the Haitian's role in the Battle of Savannah. Priceless information about that role could have been recovered had scientific archeological procedures and investigations been undertaken before school construction began. Now, we can only try to collect what little information has not been lost. In this particular case, it is fortunate that Wheless collected the area, kept this collection segregated in labeled bags separate from his other collections, made a sketch map of the general locations of his finds, made general notes about the depths of the finds, and kept the finds together rather than selling and or trading the collection. Wheless, however, was only one of many individuals who collected the playground. Most collectors did not use even the limited standards that Wheless incorporated. For example, Wheless estimates that over 300 lead balls, including fired ones, were recovered from this very small area. Other collectors also recovered gun parts and other battle-related artifacts. Had the exact locations of these artifacts been mapped with a laser transit, the entire artifact assemblage analyzed completely, and any associated features excavated archeologically, then the story of what actually happened during the final minutes of the battle would have unfolded in concise detail. This would have included the role the Haitian reserve troops and others played; a role currently no more than a footnote in most histories of the battle.

Project Results Summary

Historical Research Results

Research for this project complemented the research conducted during the first ABPP project. Archeologists during this project more closely examined four of the nine CDs containing thousands of digital images of documents gathered during the first project from archival repositories throughout New York, Pennsylvania, Michigan, and Georgia. This scrutiny, along with new documents posted on the World Wide Web, and information from South

Carolina archives, all contributed to a larger body of data on the 1779 Battle of Savannah. It resulted in new interpretations and a more complete picture of the events and people involved, particularly locations targeted during this project and the women, children, African-Americans, and Native Americans so often ignored in traditional military histories.

Fieldwork Results

Archeologists conducted historical research and GIS study prior to undertaking survey of 11 discrete parcels of property for this project. This included the Jewish Cemetery area (Savannah Station, Morgan, Boykin, south playground tracts); Calhoun Square; Whitefield Square; Laurel Grove Cemetery (circular and northwestern greenspaces and Gentile section); Wells Park, Thomas Park, and W.W. Law Park. They conducted a combination of shovel testing, metal detector survey, transit mapping, and test unit excavation in an attempt to identify specific targets related to the Battle of Savannah. This work resulted in the discovery and documentation of the site of the reserve troops, including the Haitian troops, at the Jewish Cemetery area. Most of the landscape here had rubble overburden up to a meter or more deep which prevented archeologist from locating the site during their metal detector survey and in shovel tests. The discovery was made when archeologists included an outreach effort with local relic collectors. At that time archeologists learned that collectors had metal detected a small portion of the area (one of the playgrounds) when the playground was graded several feet below the ground surface. This grading allowed the detectors to penetrate to an extant 18th century component associated with the battle. Archeologists documented two collections from this location.

Given the fact that a deeply buried and likely *in situ* deposit had been at the small playground south of the school, it is extremely likely that this deposit extends into the other surrounding tracts including the Savannah Station, Morgan, and Boykin tracts, as well as some of the grounds of Garrison Elementary School. The size of the reserve troops and the scope of their activities would require that the site be larger than merely the area that is now a fenced playground south of Cohen St. The fact that the entire deposit beneath the playground was destroyed, except the artifacts which are dispersed in dozens or more collections, is lamentable and easily avoidable had an archeology ordinance required archeological investigation prior to school and playground construction. Now that the presence of such deposits are known and thought likely to exist in the surrounding areas, there is no excuse that these, too, should be destroyed when future development occurs.

The search at Yamacraw for the Redoubt northwest of Spring Hill Redoubt began well, with GPR survey locating a promising anomaly. Last minute bureaucratic issues involving excavation and artifact dispensation came to the fore two days before test unit excavation and public outreach was to begin. Time constraints prohibited any further attempts by archeologists to mitigate these problems and as a result, the anomaly could not be ground-truthed. There is potential; however, for archeological excavation here to determine if this area contains portions of the redoubt.

Both the French saps and French and American camps, as well as Benjamin Lincoln's headquarters proved elusive. Areas targeted for study were based on GIS mapping. The margin of error on these overlays increases as one moves away from the control points in historic downtown and toward the south. The camps and headquarters were located far south of town. It is quite possible that archeological evidence of the camps exists, but we did not find such evidence on the targeted parcels. At the very least, this negative evidence helps future research by narrowing the study area.

Results of Project Strategies

At the onset of the project the Field Director/Project Manager outlined 10 strategies to promote preservation of the Battle of Savannah Battlefield. These strategies were accomplished and are summarized below.

- *Make recommendations based on project interpretations.* See this chapter for specific recommendations.
- *Share findings and seek solutions to local battlefield site protection through three "Conversation Dates" with stakeholders and policy makers.* The first meeting with city staff and departmental policy makers was very successful. It allowed archeologists to share results of the first grant project and provide information on the goals and methodology of the second project. It enabled individuals on both sides of the project to meet, address concerns, and develop a working relationship. Archeologists specifically invited these city staff members to the third meeting (public stakeholders' meeting) (mentioned below and in greater detail in previous sections of this report). The second meeting was merged with the third for reasons discussed previously.

- *Share information through public presentations in which public comment and brainstorming are invited.* The project director gave presentations to six community organizations including high school students, a men's church group, a council of garden clubs, a Revolutionary War group, a consortium of museum and historic sites staff, and college students. CHS staff archeologists also included the *Savannah Under Fire* project in a symposium it organized at an international archeology conference. Public comment and brainstorming was strongly encouraged at all these meetings, and especially at the stakeholders' meeting at the culmination of the project.

- *Create a social networking site to share project information with the public, especially targeting those under 30 years of age.* Archeologists created the first social media development for this project. This included the *Savannah Under Fire* FaceBook page, with updates throughout the field and lab components of the project. It also included video links to YouTube. This first FaceBook page developed a following of between 140 and almost 300 people, most of who were not previously linked to archeology information in Savannah. The Facebook page was supplemented by information on the CHS web site and information on project personnel blogs.

- *Distribute copies of report to partner organizations and other interested entities.* Hard copy and/or digital reports will be distributed to area historical societies, city government, city archives, libraries, local colleges and universities, chamber of commerce/visitor center bureau, county government planning commission, economic development authorities, specific project area property owners, and other individuals and entities.

- *Speak to partner organizations about community involvement and opportunities for synergy and invite them to the "Conversation Dates" meeting.* A total of 117 individuals associated with specific, relevant organizations were invited to the public stakeholders' meeting (i.e. "Conversation Date" meeting.) These included individuals associated with economic development, tourism, city staff, historical societies,

archeological societies, county staff, community organizations, state and federal agencies, and planning commissions.

- *Investigate with partners, city government, chamber of commerce, and tourism officials, the feasibility of promoting and preserving the site as a walking tour opportunity.* Limited discussion ensued at the public stakeholders' meeting about how the battlefield sites could be incorporated into walking tours. One very effective and increasingly sophisticated and user-friendly way is to use Podcasts and/or augmented reality techniques. Such digital technologies offer the opportunity to bring a buried, invisible archeological site to life through battle sounds, audio of primary accounts read by actors, contemporary maps and images, and many other auditory and visual methods. Exterior interpretive signage would be a lower tech, less comprehensive approach, but one that would be accessible without technology hardware or operating expertise. Discussion included the mention of the importance of the information generated by this project and the past ABPP project and how that information can be a significant and useful source of content for tour guides, brochures, and other materials about Savannah's Revolutionary War past.

- *Investigate funding opportunities to put exhibit concept from Phase I into a reality after Phase II discoveries and interpretations are complete.* The Curatorial Department of the Coastal Heritage Society held a day-long departmental working meeting to identify potential funding opportunities and to research each to determine which funders had parameters that matched the exhibit project. This research included online examination of specific entities and their grant guidelines, including corporate and private giving, as well as state and federal grants. It also included a phone conversation with Kristen McMasters, Archeologist Planner and Grants Manager, ABPP, National Park Service, regarding the appropriateness of any NPS ABPP funds, or NPS funds in general for exhibit development and installation. CHS Archeologists also searched the database of the Georgia Center for Non-Profits (both online and at its Savannah office) for potential exhibit funding. A short list of potential funders was identified from the various efforts above.

- *Use media coverage and web sites to share information and promote preservation efforts among community organizations.* Online calendars; electronic newsletters; television, radio, and newspaper web sites; and newspapers and television were other venues (in addition to the social media sites discussed below) incorporated by the project to share announcements and information with the public.

- *Make recommendations for ways to preserve the battlefield site based on best practices for archeological site preservation and stakeholder input derived during above process.* Recommendations are included in this report based on the above. In addition, specific preservation concepts were discussed with property owners in the Jewish Cemetery area, as they participated (of their own accord) in a public charette and public forums involving proposed major alterations to the area. These proposed alterations include re-routing a nearby Interstate Highway flyover, reestablishing former surface road routes, creating new surface road routes, and redeveloping the area as an economic development corridor. Two property owners are interested in preserving the tracts in the Jewish Cemetery locale due to their historic nature and incorporating the tracts into Savannah's larger tourism audience. Discussion is also currently underway for considering the inclusion of the archeological components of the Battle of Savannah that fall within the proposed World Heritage Site boundaries. Properties falling within the corridor would most likely include the 5.5 foot deep fortification trench in Madison Square discovered during the first NPS project, the Spring Hill Redoubt remnants, and possibly others depending on the proposed nomination boundaries.

Interpretation

Research Design

A research design typically produces broad research questions with far-reaching implications. Many times these can

be answered by research and fieldwork. Other times the answers await further research. Often research questions and new data result in the formulation of additional questions or modified research questions. The data collected during this project, and in conjunction with the previous ABPP *Savannah Under Fire* project, resulted in all of the above. The research questions presented at the beginning of this report are addressed below, but grouped by topic.

What efforts did British forces make to defend their position? Were defensive works constructed following the military engineering standards of the day? The British made Herculean efforts to construct defensive works around Savannah in the very short period from the sighting of French vessels along the coast to the siege and battle. The British strengthened the four existing redoubts and added 10 additional ones. British forces enlarged and strengthened the abatis around these fortifications, and dug trenches between the redoubts to connect them. In addition, with meteoric speed, the British razed a brick barracks to open the field of view, used the foundation as a defensive bulwark and gun battery, and incorporated the brick rubble along fortification trench edges as additional cover.

Which of the other 13 redoubts, besides Spring Hill, saw battle activity, and to what degree? Primary documents indicate that while the main focus of attack was Spring Hill; nearby Carolina Redoubt was also a target and it played heavily in helping to defend Spring Hill. Likewise, the redoubts adjacent to Carolina Redoubt supplied fire power to aid Spring Hill. The Central Redoubt was selected as the target of one of the feints, to distract attention from the real goal of Spring Hill.

Can the Carolina Redoubt be located, and if so, what evidence is there for its reputed role in assisting with the defense of the Spring Hill Redoubt? Redoubts 12, 13, and 14 were all situated north of Spring Hill Redoubt, along the western defenses. The search for Redoubt 14, and/or possibly Redoubt 13 at Yamacraw was in process when it was thwarted. The GPR data collected revealed an anomaly that may be related to a redoubt; however, archeologists were stopped from ground-truthing it. An attempt to examine an open tract of land south of this area that may have held the Carolina Redoubt or another redoubt near Spring Hill was denied by attorneys for a developer owning that vacant tract. Any archeological site on that tract will likely be destroyed before the information about the role it played in the battle can be retrieved, as tentative plans call for the construction of a hotel. The lack of a city archeology ordinance ensures that any site on the grounds will not be documented before it is destroyed. The Carolina Redoubt and other redoubts may yet be located, if the search can stay ahead of development and resulting destruction.

What battlefield components, either above or below the ground surface, have survived and why? Which have not survived, and why? Currently, we know that several battlefield components have survived in Savannah, in surprising locations. The bottom two feet of the defensive ditch at the Spring Hill Redoubt has survived, in spite of intensive industrial development in that area for over two centuries following the battle. We have discovered that some deep fortification trenches (5.5 feet deep) from the battle still exist beneath the city. An example is the fortification trench located in Madison Square. Demarcating this area as a greenspace in 1839 helped preserve this important Revolutionary War feature. The depth of the feature below most modern intrusions such as public utilities and irrigation lines also helped ensure its survival.

Other areas examined by this and the previous ABPP project may be related to the battle, but further work is needed to confirm this hypothesis. These areas include the greenspace on Bay Street near Fort Prevost, Lafayette Square, and Thomas Park. Investigations in Davant Park failed to locate battle evidence but archeologists were able to define a deeply buried 18th century land surface that is worthy of further exploration. Limited test unit excavation in these GIS target areas revealed either features and/or artifacts suggestive of involvement with the battle. Interestingly, while we have negative evidence for the French and American camps, we cannot say they do not exist, only that they do not seem to be in the areas we have thus far examined. Given the extent of the camps and the thousands of soldiers living there for several weeks, it is extremely likely that evidence of these camps have survived archeologically somewhere within the modern city of Savannah. Likewise, until we know the exact locations of the other redoubts and battlefield features, and excavate enough at those locations and find nothing, we cannot say they those components do not exist. It is likely that some of them have survived, at least partially, the massive onslaught of development without archeological protections in Savannah.

What types of extant features survive archeologically and what do these tell us about the period immediately before, during, and immediately after the battle? What features were identified, and how can they be interpreted in relation to standard fortification construction? While we found no features during this project that could be associated with the battle, we have evidence from prior work concerning specific features. Post mold stains in the Spring Hill Redoubt ditch indicate that both pointed and flat posts of different sizes were somewhat randomly placed, possibly in irregular sets of two, inside the ditch. The posts were set vertically rather than at an angle, with soil filled in around them at the time of construction. All of this suggests that

the construction was expedient and opportunistic, incorporating whatever type of post materials were available, in as quick a fashion as possible. Stratigraphic sequences reveal that much of the upper part of the ditch was scraped away following the Revolution and a late 18th-early 19th century soil horizon developed. Part of this was scraped away later by Central of Georgia Railroad activities in the 1840s, which then deposited a stratum of coal, clinkers and cinders.

The fortification trench at Madison Square was dug by British forces with the strategy of the day that connected redoubts to each other with trenches, allowing safe movement of troops between the redoubts. The archeological deposit within the trench at Madison Square is a three year sequence of the Revolution. Stratigraphy and artifacts reveal the construction of this massively wide (well over 6 ft) and deep (minimally 5.5 ft) trench in September of 1779, its use during the October 9th battle, its use thereafter, and its infill in July-August, 1782.

Archeological features at the French and American camps offer huge potential to provide new information about the condition of the troops before, during, and after the battle. Trash pits, privies, camp kitchens and the like could tell what food was available, the medical condition of the men, the type of camp followers present and their lifestyles, general conditions of the camps, sanitary conditions, the role of Africans and African Americans in both camps, the presence or absence of Native American warriors in the camps, the role of women and families, and camp tasks and leisure time activities, to name a few. Comparisons and contrasts could be made between the French camps and the American camps; between their officers and enlisted; between the officers and enlisted within each country's camp; between sailors, soldiers, and cavalry; and between prisoners and their captors.

What were reserve troops doing before, during, and after the battle? Is there any evidence for reserve troop activities, and if there is, does it support or refute the historical documentation? The accessible artifacts recovered by metal detectorists during playground reconstruction at Garrison Elementary School suggest that the role of the Haitians was much more involved and dangerous than primary documents and secondary sources suggest. The number of lead balls, gunflints, gun parts, and other paraphernalia in only two of the collector's possession and from such a small area suggests that there was a great deal of activity at the reserve location. It also suggests that the reserve troops took an active part in attacking British troops rather than merely covering the backs of retreating French and American forces. Unfortunately, because this area was not studied archeological prior to playground modifications, we cannot be sure what was happening

before, during, and after the battle. We may be able to answer similar questions in the future if archeological test unit excavation and/or controlled stripping of overburden to document midden and features occurs on the Jewish Cemetery area tracts. The Reserve Corps portion of the Battle of Savannah is an extremely important, yet very little known facet of the story.

What features of the landscape aided or hindered the opposing forces and which are visible in the modern landscape? The slightly higher ground of the Jewish Cemetery area provided reserve troops and leaders with a better vantage of the battle, allowing them to react when needed to cover the retreat. The location of the Spring Hill Redoubt was strategic, in that it was positioned on a hill, providing a good viewshed of the surrounding area. Likewise, it was flanked to the west and southwest by a creek and its swamps, creating an obstacle for attacking troops.

Most of Spring Hill was graded, beginning in the late 18th century and with particular gusto from the 1830s-1870s. Changes in ground elevation are still apparent when looking east-west on Louisville Road (formerly Ebenezer Road or Old Augusta Road). Today, the property on either side of the road just downhill from the redoubt towers over the roadway in places as a result of the grading that pushed the soils downhill to the west and from fill soil brought in by the railroad and deposited on former slopes. This westward approach to the city is still used today and was the scene of the massive slaughter of allied troops who were trying to regroup there to attack Spring Hill and Carolina redoubts following their exodus out of the swamp. Much of the swampy area to the south and west has been drained. Huge, enclosed culverts, drain pipes and infill has changed much of the swamp and this area has lately become the target for future economic development and gentrification.

The fortification trench associated with the Central Redoubts is located in a square directly on Bull Street. This street served as the main thoroughfare and avenue of approach into and out of town in the 18th century, and continues to serve as the gateway into the historic part of the city as it bisects that section of town. Its role as a major artery may have been the reason the French and Americans selected the Central Redoubts for one of the feints during the battle.

The Savannah River is an extant natural feature that was a double-edged sword for both sides. The British found that they were hemmed in by French vessels and could not get their ships very far away from the wharves along the bluff. The French were unable to manipulate their vessels up the Savannah River for a full scale naval assault on the town, in part to navigational issues and the British ships and sunken hulks protecting the city. The river did allow

British vessels to fire successfully on attacking allied forces, particularly those troops in the area of the Spring Hill Redoubt, including the swamps and road nearby. The very steep natural bluff along the river (which still exists today) provided desperately needed cover and concealment for civilians and soldiers in town during the siege and battle. It also acted as a deterrent to a land attack from troops on vessels. The maze of tributaries, river drainages, and coastal inlets provided a hidden route for Maitland's troops coming to reinforce the British at Savannah. Some of these courses have meandered over the centuries, but the area continues to be transected by such waterways.

How well were opposing forces supplied with food, ammunition, and other necessities of battle? What effect did the weather have on activities leading up to and during the battle? Did the multi-national nature of the allied forces affect their operations? If so, how? Locating and studying the French and American camps would go a long way in providing answers to part of this question. Primary documents reveal that French and American troops were hard-pressed to have adequate food and clothing. The French capture of the vessel was a huge victory, as it provided critical food, clothing, and money that immensely aided French troops. The British besieged were actually faring better than their besiegers. British Major General Prevost calculated that he had enough commissary stores to last the soldiers and civilians in town three months.

D'Estaing's visit during Hurricane season was ill-planned. The weather provided him with an excuse for ending the siege and attacking Savannah. Storms already buffeted his ships of the line and he was ill-prepared for additional damage. The unseasonable cold and damp weather tormented the allied forces, which were not properly attired or provisioned for it.

Primary documents are riddled with issues between the French and American forces. These range from opposing agendas between the upper echelons of commanders to snide comments from rank and file. Much of this could have been caused by cultural differences and resulting misunderstandings. Some discontent among the allied forces was likely a result of past political events on the European continent and between the new American government and the established reign of the French monarchy. Regardless of the cause, the Franco-American alliance was tested during the siege and Battle of Savannah. While the alliance failed miserably in Savannah, it redeemed itself two years later at Yorktown.

How accurate are the published accounts of the battle? Which accounts were inaccurate, and why? Were standard military procedures followed before, during, and after the battle? Why or why not and how did this affect

battle operations? Generally speaking, the accounts of the battle written soon after the event by participants seem to be fairly accurate, or at least to accurately represent that participant's viewpoint. Accounts at the turn of the century and early 1800s are generally less reliable as events and dates get cloudy. Accounts later than this often have errors or are repeats of earlier accounts.

Standard military procedures were not followed for the battle. When troops were forming for the battle march d'Estaing restructured virtually all of them. As a result soldiers who normally fought together and had an effective knowledge of group dynamics and strong *esprit de corps* were now marching into fierce battle among strangers. The reason for this restructuring is unclear, but the disastrous results were not. Added to this were vehement arguments among d'Estaing and his officers about the battle plan of attack. Clearly there was no cohesion among the officers or rank and file. These last minute changes and wrangling delayed the battle by two hours and removed the opportunity for a surprise pre-dawn attack.

The battle events surrounding Spring Hill reflect an interesting chain of command. When d'Estaing could no longer command the troops in the field due to his two wounds, command fell to his second in command, Viscount de Fontanges. When Fontanges fell, Colonel Arthur Dillon took command and ordered a retreat. At no time did Major General Benjamin Lincoln, apparently watching from the reserve troop location at the Jewish Cemetery, send orders. This is likely because he was leader of the American forces and could not command French troops directly. So while Lincoln far out-ranked Dillon, the latter was in charge of the French troops due to the wounding of higher ranking officers and the resultant command chain protocols.

What negative evidence for the battlefield was located and how does that contribute to locating or understanding various portions of the battlefield? We now know that it is unlikely that the French and American camps are located in modern Wells Park, W.W. Law Park, and three specific portions of Laurel Grove Cemetery. While unexciting, this negative evidence is useful in eliminating these areas from future searches. It also tells us that the GIS information for this area needs to be shifted, either north or south. New control point information from the Jewish Cemetery area may help to determine the direction necessary.

Can evidence for the allied American and French camps be located and if so, does the evidence support or refute historical documentation? How did the environment, terrain, and military strategy at the time determine the location of the camps? We were unsuccessful in locating the camps, but feel that their discovery is possible in the future. This is particularly true with new GIS information.

(See below.) The French and Americans needed level, relatively high ground, beyond firing distance from Savannah that was preferably not too wooded. They found a place they deemed appropriate south of town that was capped on either end by swamps. A road next to it proved expedient for moving goods and troops. Military strategy dictated the arrangements of the camps, with French troops together and American troops together. Documents note that Pulaski's cavalry was camped as its own unit. The French and Americans were divided with space between them to reduce cultural, political, and military tensions.

How do new discoveries (made in Phase I and in Phase II) change the GIS map overlays and do these changes contribute to the reinterpretation of past or current concepts of the battle? The discovery that there were actually artifacts from the battle at what is now the Garrison School playground will allow this location to be used as a control point on future GIS maps. This is especially important as it establishes a control point approximately 650 yards south of our former control points. A point this much farther south will help reduce the GIS margin of error when the search for the French and American camps continue. This may provide the key to actually locating the camps. Once they are located, they can provide significant missing information about the battle and related events.

Did the battle affect strategies used by America and Great Britain in the remainder of the war? Did the battle have significant impact on the American Revolution, and if so, how? Britain's sojourn into Savannah in 1778 came under the false premise that rural colonists would flock to the Loyalist cause, support British efforts, and swell the ranks of the militia and military. This did not happen in 1778 and it did not happen in 1779 when the French and American forces threatened the very gates of British-held Savannah. While Britain managed to win the Battle of Savannah, military strategists realized that they would have to take the entire southern theater without depending on help from back country residents or other "closet Loyalists". Some argue that Britain's success at the Battle of Savannah lengthened the war by giving the country additional confidence to take Charleston and beyond. The battle significantly impacted the American cause by creating despondency and disillusionment, and by putting the Franco-American alliance at jeopardy for survival. The fact that American generals were victorious in the war, in spite of losing significant battles such as the 1779 Battle of Savannah speaks volumes. As does the survival of the alliance, which may be credited best to the political maneuvering of Benjamin Lincoln and others American generals who publicly smoothed over the many missteps and poor decisions of the siege and battle (including many made by d'Estaing). This may have been Lincoln's only credible action involving the entire siege, battle, and aftermath.

Historical Significance of Battle of Savannah and Associated Sites

Assessment for NRHP eligibility

Battlefield Boundaries

This was addressed initially in the first project report and is repeated here, with updates from this project (Elliott and Elliott 2009). Battlefield boundaries are subdivided into three categories, including the Study Area, Core Area, and Potential National Register Boundary. These are defined by the National Park Service (NPS 2000) as follows:

- *Study Area*-Encompasses the ground over which units maneuvered in preparation for combat; determined by historical research, regardless of changing land use over time. It is the "maximum delineation of the historical site...contain[ing] all places related or contributing to the battle event" including troop maneuvers, deployment, and fighting "...before, during and immediately after combat... that directly contributed to the development and denouement of the battle."
- *Core Area*-Area of combat; always within Study Area; determined by historical research, regardless of changing land use over time. "It includes those places where the opposing forces engaged and incurred casualties".
- *Potential National Register Boundary (PotNR)*-Those portions of the battlefield that have retained integrity; determined by integrity and may encompass parts of both the Study and Core Areas. It "...indicates to preservationists and planners what remains to save" and provides "...important information on which to base nominations of the battlefield to the National Register of Historic Places and other historic preservation planning decisions. "Any parts of the Study and Core Areas that have been compromised by modern development, erosion, or other destructive forces and that can no longer provide a feeling of the historic setting should be excluded from the PotNR boundary."

Savannah has a large National Historic Landmark District consisting of the town's original two dozen squares and surrounding town lots as arranged on the 1733 town

plan. The city also has almost a dozen National Register Districts made up of neighborhoods created during different periods in history. Neither the National Historic Landmark District nor the National Register Historic Districts examine, feature, or include a Revolutionary War focus. None cite or delineate the specific geographic areas around and across town that contribute to the story of the American Revolution as played out in Savannah. None of the districts equate these locations with the significant events that were important not only to colonial Savannah at the time, but more importantly that shaped events and outcome of the American Revolution in America and Europe. The 1779 Battle of Savannah was a pivotal point in the attempt to gain a strategic foothold in the southern theater; a foothold that would lead to the attack of Charleston and ultimately the British hold on the southern colonies.

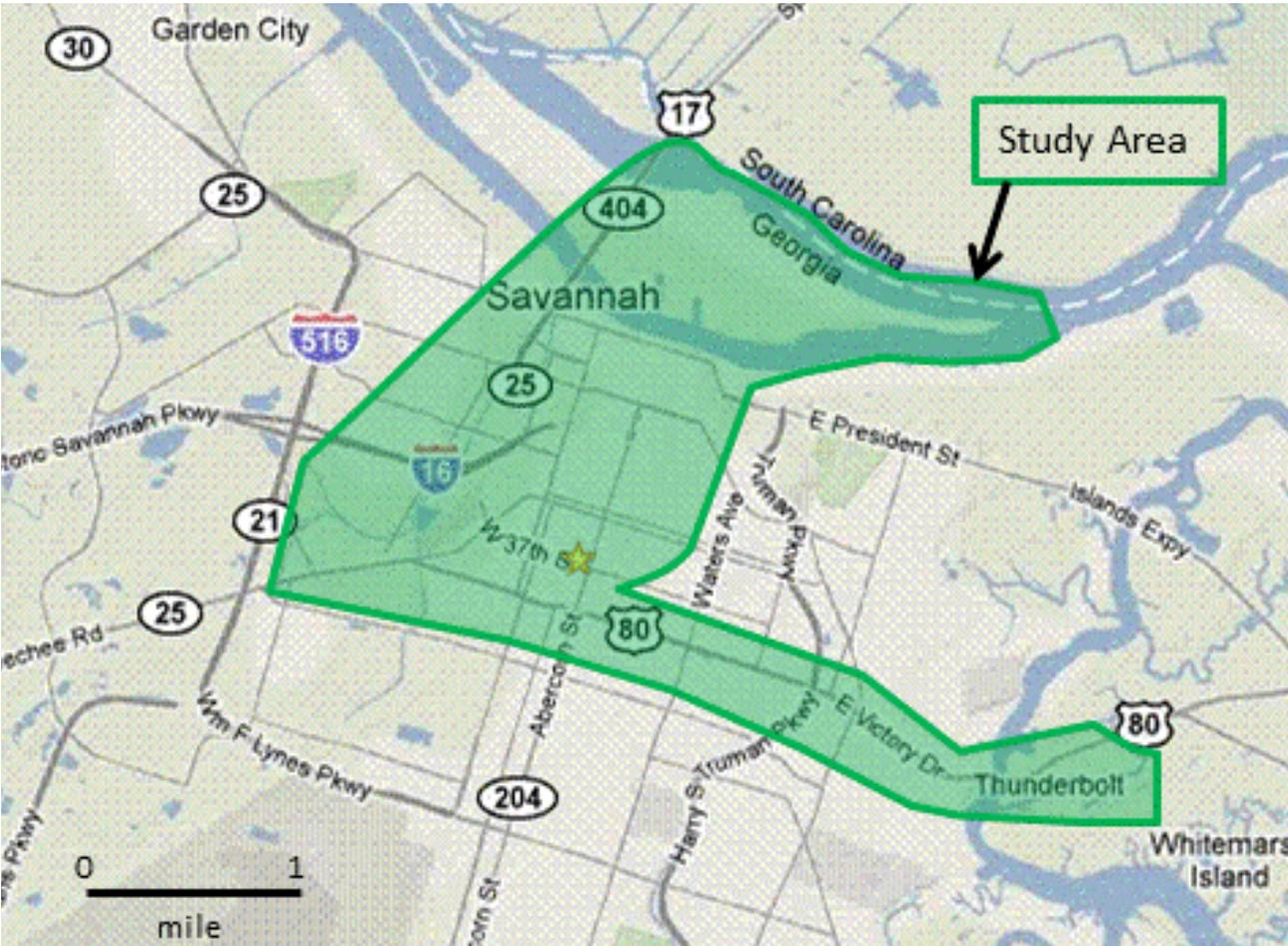
The *Savannah Under Fire* projects have shown that substantial remains of the battlefield still exist today. Primary research indicates that the Study Area extends from the Savannah River north of Hutchinson Island (where French vessels bombarded the British), south to the French and American camps (Figure 151). On the western side, the study area encompasses the swamp, Augusta Road, and the Spring Hill and Carolina redoubts and continues east through town. The eastern portion of the study area includes the Savannah River inlets, and Thunderbolt. Bonaventure Plantation area and embarkation points of Tybee Island and Beaulieu Plantation were areas pivotal to the overall events, although they were not necessarily accessed “before, during and immediately after combat”.

The Core Area (Figure 152) within this Study Area includes:

- the area in and around the Central Redoubts
- horseshoe barracks battery between the Central Redoubts
- Spring Hill Redoubt
- Carolina Redoubts
- Battlefield Area of the allied column charges extending north of the camps to the line of defensive works along the southern edge of the town
- Augusta Road (the section beginning at Spring Hill Redoubt and running west)
- the Savannah River
- the riverfront
- Fort Prevost
- Jewish Cemetery (retreat area and reservists’ counter attack)

The Potential National Register Boundary (PotNR) for the 1779 Battle of Savannah is just emerging with the *Savannah Under Fire, 1779* studies. Figure 153 depicts the potential boundary, although this boundary is likely to expand with additional archaeological and historical research. These projects successfully demonstrated that there are significant extant resources related to this battle in the Study and Core Areas. This combined research has highlighted the Central redoubts in and around Madison and Lafayette Squares, the Spring Hill Redoubt, the area around Fort Prevost, and the Reserve Corps area around the Jewish cemeteries as partial boundaries of the PotNR. It is extremely likely that additional battlefield boundaries exist, but have not been documented yet. This hypothesis is supported by the magnitude of the French and American camps and the number and depth of redoubts, fortification trenches, and batteries.

These resource types have enormous potential to offer new information as defined by Criterion D of the National Register of Historic Places. The Jewish Cemetery is one excellent example. We now know that the location has battle-related artifacts and that there are likely more similar sections in the Jewish Cemetery area that lie beneath 3-4 feet of rubble overburden. These areas, unlike the playground collected by relic hunters, have the potential to reveal a significant amount of information about the end of the battle. If protected for the future, study of these resources can provide tantalizing information on the Reserve Corps activities and details regarding the Haitian involvement in minimizing allied troop losses as the Franco-American forces fell into a disordered retreat during the battle. With preservation and further limited study, the Davant Park anomaly has potential as well by Criterion D standards. Key fortification trenches adjacent to redoubts such as this can provide important new information on the battle and its effects. This and other areas of the battlefield that offer intact landscapes of the period can provide contextual information related to KOCOIA determinations and battle planning and execution; all key attributes in understanding Savannah’s important role in the events and outcome of the American Revolution.



Figures 151 (Top) and 152 (Bottom) show the Study and Core Areas, respectively.

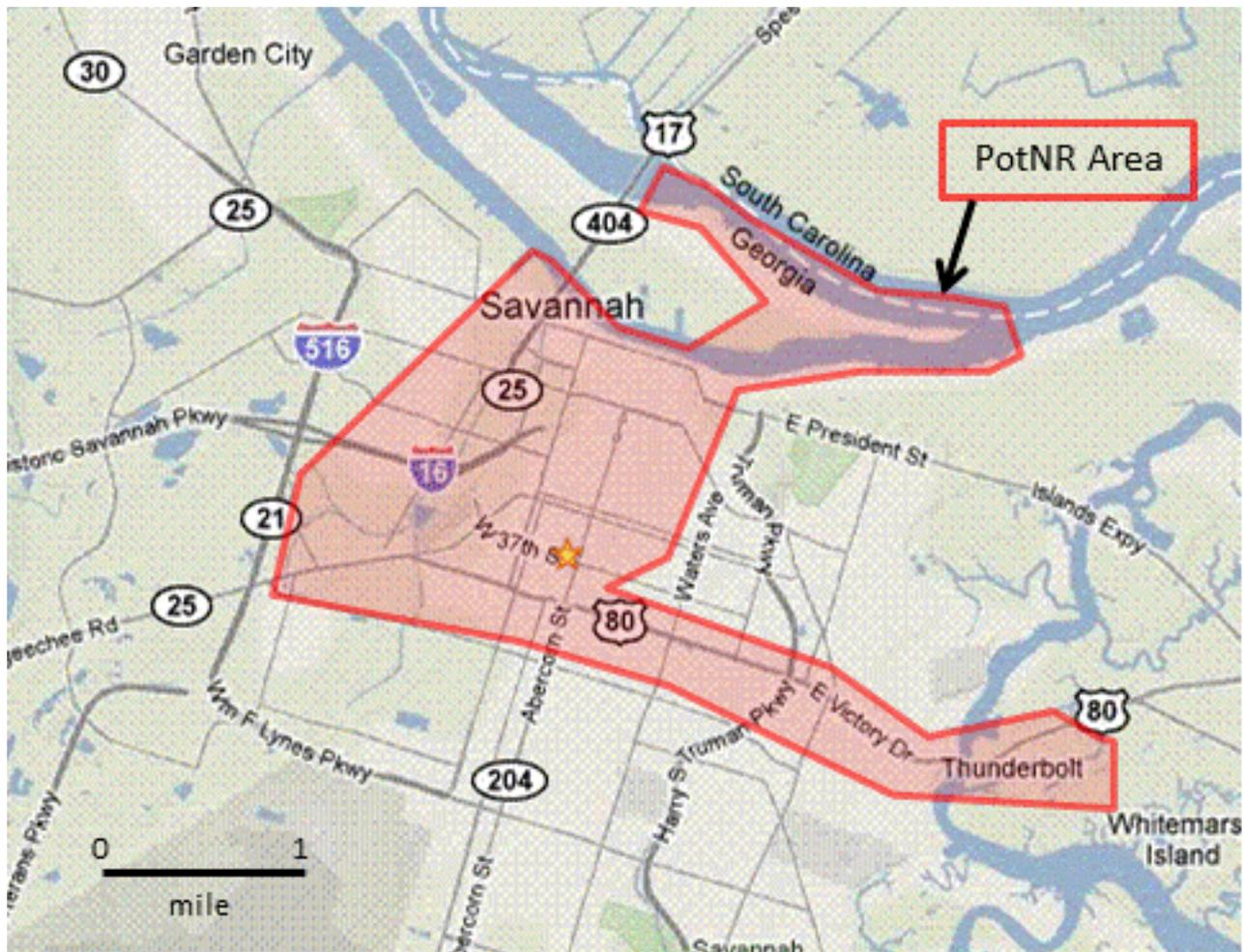


Figure 153. Map showing Potential National Register Boundary (PotNR) based on the Savannah Under Fire project.

Chapter 5. Recommendations

--Where Do We Go From Here?

Savannah's Revolutionary War Heritage Tourism Legacy

Heritage tourism is second in economic importance to Savannah's economy and it has a colorful history. While many historic preservationists point to the destruction of the City Market and the formation of the Historic Savannah Foundation in the mid-1950s as the beginning of this movement, its roots actually extend far deeper. Savannah's Revolutionary War heritage was actually recognized much earlier - less than a decade after the war ended.

It began in May, 1791, when President George Washington visited Savannah and during his visit he toured the 1779 battle fortifications. His tour guide on the battlefield was Brigadier General Lachlan McIntosh, a veteran of the October 9 engagement. Washington wrote of his battlefield tour in his diary,

A little after 6 o'clock in Company with Genl. McIntosh, Genl. Wayne, the Mayor, and many others (principal Gentlemen of the City) I visited the City, and the attack and defence of it in the year 1779, under the combined forces of France and the United States, commanded by Count de Estaing & Gen. Lincoln.—To form an opinion of the attack at this distance of time, and the change which has taken place in the appearance of the ground by the cutting away of the woods, &c. is hardly to be done with Justice to the subject; especially as there is remaining scarcely any of the defences (Lossing 1860:187).

Historian Benson Lossing added in his notes to Washington's diary, "Traces of these lines of defence are still visible in the rear of the town" (Lossing 1860:187). For an account of their appearance as late as 1848, see Lossing's *Pictorial Field Book of the Revolution*, ii., 531, second edition. Lossing, whose heritage touring of Savannah is well documented in his writings, observed the remains of the French ditchwork on Savannah's east side. Lossing made a sketch of these earthworks, which appeared as an engraving in his book. His original sketches reside in the Huntington Library in San Marino, California.

President Washington's tour of the battlefield was also covered in the national press. The *City Gazette* noted,

On Saturday morning the president, attended by gen. McIntosh and several other gentlemen, took a view of the remaining traces of the lines constructed by the British for the defence of Savannah in 1779; the general having been second in command under gen. Lincoln at storming them had an opportunity of giving an account of every thing interesting during the siege and in the attack (*City Gazette* 1791:2).

At a dinner later that afternoon, the president and about 200 guests drank several toasts, including one to, "The memory of those brave men who fell before the lines of Savannah on the 9th of October, 1779". (*City Gazette* 1791).

As a token of his appreciation for the people of Savannah, President Washington presented two bronze cannons, which were used on the battlefield at Yorktown, to the Chatham Artillery. These two artillery pieces have had a unique history since their donation to the city, where they remain on display in Emmett Park. These two cannons were hidden by the Confederates during the American Civil War to avoid their being plundered and removed by the U.S. troops (Georgia Historical Commission 1982).

In the decades that followed the memory of the American Revolution in Savannah faded. Old veterans of the engagement had mostly died by the 1830s. Other wars, such as the War of 1812 and the American Civil War, further diverted attention from Savannah's Revolutionary War legacy. A few dedicated historians, such as Hugh McCall, Benson Lossing, and Charles C. Jones, Jr., focused some attention on the subject. Monuments were constructed in Savannah's elegant squares to two of the renowned participants, Count Casimir Pulaski and Sergeant William Jasper.

Even those efforts, however, were met with some cloudy history and disagreement among those who sought to commemorate these men and that event. Regarding Pulaski, the argument hinged on his ultimate burial place and whether the bones that were placed within his memorial were actually his (de Couvray 1800:1-149; Johnson 1825:35; Bentalou 1826:34; SCAR 2011:R8205 [Pension application of Eleazer Phillips]). That controversy continued to brew when the monument was dedicated on October 11, 1853 and it remains to be resolved to the present day. Plans for a Pulaski monument in Savannah were hatched as early as the 1820s, when Revolutionary War veterans

were becoming an aging population. When the Marquis de Lafayette visited Savannah in 1825, he presented cornerstones for two monuments intended to honor Generals Greene and Pulaski, one in Johnson Square and one in Chippewa Square. Five years later, only enough funds had been raised by a state lottery to fund one of the monuments (Macon Weekly Telegraph 1830:31). The Greene monument in Johnson Square was completed at that time. Major General Greene's contribution to the Patriot victory in the American Revolution is indisputable, but he did not participate directly in any of the battles in Georgia (The American Architect and Building News 1877:107-110). The 75th anniversary of the Battle of Savannah stirred community and national pride; however, finally resulting in the monument specifically honoring Pulaski. It was completed at a cost of about \$17,000. Funding for the Pulaski monument was raised by another state lottery. When the monument was restored in 1996, the economic cost of preserving the monument had risen exponentially (The American Architect and Building News 1877:107-110; White 1855:308-312).

Regarding Sergeant Jasper, the memorializing was more unified, although the commentary was incorrect. His monument was dedicated on October 9, 1879, the centennial of the attack on the Spring Hill Redoubt, where Sergeant Jasper died while attempting to plant the patriot colors on its ramparts. The monument was erected in the center of Madison Square, where it remains today. John Gordon, who gave an eloquent speech at the Jasper monument dedication noted, "as this column rises on the spot where Jasper fell", later he states, "Yonder, where stands his monument, fell Count Pulaski. Here, near the spot where the monument is to stand, Sergeant Jasper fell" (Gordon 1879:555; Macon Weekly Telegraph 1879:2). His rousing speech was met with cheers and applause by more than 30,000 onlookers, who crowded Madison Square for the event. Other notables present included President Grover Cleveland.

Geographically speaking, General Gordon was wrong on both counts. The Pulaski monument was erected in Monterey Square, nearly a mile from the actual spot where Pulaski fell. The Jasper monument in Madison Square, was situated hundreds of yards from the Spring Hill Redoubt location. Gordon probably was aware that these monuments were not erected in their historically accurate locations, but he did not let it impact his oration, nor did his geographical license seem to matter to the people.

A generation later, the topic was revisited with more concern for geographical accuracy. A newspaper article, dated February, 1909, heralded the, "Spot Where Jasper Fell Located Near Savannah". A committee report by the Society of the Sons of the American Revolution had,

"succeeded in placing, beyond the doubt, the exact spot where Sergeant Jasper fell". It noted, "The spot is the famous Spring Hill redoubt, which has never been marked, and except from old accounts, could hardly have been found at all", and the committee further admonished that a monument to Jasper, "stands in Savannah, but no attention has been paid to the place where he was killed". The report stated that the site of the Spring Hill redoubt, "cuts the present Augusta road [modern-day Louisville Road], with its western face about 420 feet west of the western line of the present West Broad street [modern-day Martin Luther King, Jr. Boulevard]. The article concluded with the optimistic anticipation of, "a demonstration on October 9, next, when a table or monument of some sort will mark the redoubt" (Atlanta Constitution 1909:8). In February, 1911 a monument was dedicated at Spring Hill Redoubt thanks to the persistence of the Sons of the American Revolution (Macon Telegraph 1911:10). That marker was taken from its original location during toxic soil removal from the former railroad property in the early 21st century and has since been reestablished on the actual site of the Spring Hill Redoubt as uncovered by archeologists.

Another marker commemorating the battlefield in the Spring Hill Redoubt vicinity was erected by the Georgia Historical Commission in 1952. That marker, which presently stands on the north side of the Savannah Visitors' Center, contained this geographic reference to the battlefield, "A short distance west of this marker stood the famous Spring Hill Redoubt and along here ran the line of British entrenchments that surrounded Savannah" (Georgia Historical Commission 1952c). Other related markers erected by the Georgia Historical Commission during this era include: "Old Jewish Burial Ground", which was placed outside the walls of the Mordecai Sheftall cemetery; "Revolutionary War Barracks and Fortifications", which is located in the basement of the DeSoto Hilton, southeast of the intersection of Bull and Liberty streets; and another marker commemorating the 1778 capture of Savannah by the British (Georgia Historical Commission n.d., 1952a-b).

The formation of the Historic Savannah Foundation in 1955 addressed the historic preservation needs of the built (above-ground architecture) environment. The American Bicentennial celebration in 1976 provided another boost to recognizing Savannah's Revolutionary War resources. The Savannah Historic District was listed in the National Register of Historic Places in 1966 and the city was recognized as a National Historic Landmark in 1977. The boundaries for both the NRHD and NHL listings did not include any archeological data, nor was historical archeology considered as a contributing factor in the nominations (Dillon 1977). From a perspective of the Revolutionary War battlefields in Savannah, the district boundary was

arbitrary and did not incorporate major portions of the battlefield landscape.

An archeological study in the late 1970s/early 1980s funded by the National Park Service fell short of its intended goal (Rutsch and Morrell:1981). Despite the excavation of extensive backhoe trenches, that team of researchers was unable to locate any vestiges of the American Revolution, or any artifacts dating to the 18th century. Subsequent archeological research from the 1970s-1990s also failed to locate any Revolutionary War-related deposits in Savannah. Other archeological projects in the 1980s and 1990s on Savannah's west side, with one exception, did not discover any Revolutionary War evidence (Crawford 1980; Honerkamp et al. 1983; Elliott 1990, 1999, 2001, Elliott et al. 1995). The notable exception was the Fahm Street Extension project, where archeologists located a light scatter of Revolutionary War battle debris in mixed early context (Wood 1985). Project schedules and budgetary constraints prohibited any more detailed investigation of the battlefield in that important study. By the year 2000, it appeared that archeological evidence from that era was largely nonexistent and not worthy of further study.

Discoveries by the Coastal Heritage Society archeologists in August, 2005, however, negated this view and forced a rethinking of the subsurface potential of Savannah's underground resources. Portions of the Spring Hill Redoubt ditch work, as well as battle-related artifacts, were discovered on property immediately south of Louisville Road. That hard-earned discovery was the stimulus that led to the first and second (present) NPS ABPP battlefield studies.

Recommendations

Research Recommendation

That professional archeological research be encouraged and supported financially, logistically, and wholeheartedly by the City of Savannah, Chatham County, and the economic development, tourism, collegiate, corporate, real estate, and residential communities. Archeological research of the Battle of Savannah is in its infancy. Much more work is needed to adequately locate, study, and preserve these important archeological resources. This need is especially dire as development in Savannah increases, destroying forever the significant and varied components across the city. Additional research is necessary to determine where surviving components such as the other 13 redoubts, batteries, saps, barracks, French and American

camp, and military headquarters for both sides are located. Finding them is a necessary step towards their study and preservation.

A persistent question in any discussion of Revolutionary War action in the Savannah theatre remains, where are the war dead? Between 800- 1,000 soldiers were wounded or killed at the Battle of Savannah, but the ultimate disposition of the remains of these men, with a few rare exceptions, remains a mystery. Historical archeology remains one hope for solving this mystery. Researchers elsewhere in the world have employed various remote sensing technology in attempts to solve similar problems and have met with mixed results (Davis et al. 2000; Witten and Fenner 2001; May 2008; Ruffell et al. 2009). GPR survey and other remote sensing strategies, combined with historical/geographical study, remains the key to locating any mass burial sites in Savannah, if such sites have survived.

Preservation Recommendations

That the archeological components of the Battle of Savannah be included in the city's World Heritage Site nomination. The battle was a major turning point in Britain's quest to hold Savannah and take Charleston as attention turned to the southern theater of the war. Key components of the battle have been discovered by archeologists to be intact, including Spring Hill Redoubt and the fortification trench by the Central Redoubt. The latter lies on Bull Street, in Madison Square and is one of the best surviving components of the 1779 battle that has been discovered, to date. The 5.5 foot deep fortification trench there likely runs throughout the square. This trench was key in the battle and is, in itself a microcosm of the battle and its global participation. For example, the trench was dug by Africans/African-Americans, defended by the British, fired on by the French during the siege, and attacked by the Franco-American allies while being defended by the British. The allied and British factions were global in nature, and included African American, American, French, Haitian, Hessian, Irish, Polish, and Native American troops. Obviously, the entire American Revolution had an influence on the world that forever changed it. Including the presence of the battlefield remains is a natural tie-in to a World Heritage Site nomination. In fact, it is hard to imagine that such a component could be omitted, particularly now, when substantial evidence of the battlefield has been located and identified in situ.

That the City of Savannah take an active and responsible approach to the understanding and preservation of the archeological heritage for which it is the steward. By fostering knowledge and preservation of these sites, Savannah

will increase pride in local neighborhoods, decrease blight, heighten community awareness and quality of life, and provide fodder for cultural tourism and responsible economic development. Archeologists can work with the city toward these goals.

That Savannah and Chatham County minimize future destruction of the remaining non-renewable archeological resources entrusted to the care of city and county leaders, by creating a City and County archeologist positions. Archeological resources within the City of Savannah and Chatham County at large are in dire need of protection. Development and looting have already permanently destroyed vast numbers of archeological sites and the information they contain. Measures can be taken now, however, to curtail such destruction and reap benefits in the process.

That Savannah residents, area citizens, preservationists, economic developers, tourism officials, corporations, area colleges and universities, and all interested parties work with the City of Savannah to get the necessary and appropriate ordinance passed to protect Battle of Savannah and other archeological sites. Twenty plus years and still waiting... How many sites have been destroyed in the interim? How many more will be destroyed? The time has come. We can wait no longer.

extant and gone) critical to the siege and battle (swamps, Spring Hill, Musgrove Creek, Savannah River, etc.)

That historical and archeological information about the battle (especially the Spring Hill and Jewish Cemetery reserve troop areas) be incorporated into the development, planning, and interpretation of the Martin Luther King Jr. Blvd. westside development corridor. Include this information in a variety of materials such as corridor signage, web site presence, real estate materials, economic development information and neighborhood-accessible materials. Use this information to replace current perceptions of Savannah's west side with an accurate portrayal of its rich and unique history.

The reader is referred to the previous report Savannah Under Fire: Identifying Savannah's Revolutionary War Battlefield (Elliott and Elliott 2009) for additional discussion on these and other recommendations.

Interpretation Recommendations

The major role Savannah played in the American Revolution is unknown to the majority of Savannahians, visitors, and Americans in general. This can be countered by effective interpretation as suggested below. Such interpretation will offer a comprehensive and continually accessible complement to the educational programs currently conducted by various Revolutionary genealogy and historical societies in the area. Suggested interpretive opportunities for residents, students, heritage tourists, and many others are as follows.

That content (historical and archeological information) from both NPS ABPP Savannah Under Fire projects be added to current Revolutionary War podcast tours and included in new self-guided and guided tours, and to include augmented reality components when possible.

That interpretive signage be created at key locations and a walking tour brochure developed that connects the 1779 Battle of Savannah battlefield and siege components. This would include the locations of the following, with appropriate text and graphic information: 14 redoubts, saps, abatis, French and American camps, prison ships, select soldiers barracks, reserve troop location, feints, Yamacraw river bluff, Tybee Island and the key natural features (both

References Cited

- Albert, Alphaeus H.
1976 *Record of American Uniform and Historical Buttons Bicentennial Edition*. SCS Publications, Fairfax, Virginia.
- The American Architect and Building News
1877 Early Settler Memorials. *The American Architect and Building News* XXII(610):107-110.
- American Herald
1787 New York, November 19. *American Herald*, November 26, 1787, p.3.
- American State Papers
1975-1997 *American State Papers, 14 Volumes*. CIS US Serial Set Index. Congressional Information Service. Washington, D.C.
- Anonymous
c. 1780 Anonymous letter. Early American History Store, Rancho Sante Fe, California. Photocopy on file, Coastal Heritage Society, Savannah, Georgia.
- Atlanta Constitution
1909 Spot Where Jasper Fell Located Near Savannah. *Atlanta Constitution*, February 15, 1909, p.8.
- Baltimore Daily Intelligencer
1794 Savannah, April 8. *Baltimore Daily Intelligencer*, May 1, 1794, p. 2.
- Beatson, Robert
1804 *Naval and Military Memoirs of Great Britain: from the Year 1727 to 1783*. Six Volumes. J. Strachan, Edinburgh, Scotland.
- Bentalou, Paul
1824 *Pulaski Vindicated from an Unsupported Charge, Inconsiderately or Milignantly Introduced in Judge Johnson's Sketches of the Life and Correspondence of Major Gen. Nathaniel Greene*.
- 1826 *A Reply to Judge Johnson's Remarks...Relating to Count Pulaski...*J.D. Toy, Baltimore, Maryland.
- Blanchard, Amos
1825 *American Military Biography: Containing the Lives, Characters, and Anecdotes of the Officers of the Revolution, who were most Distinguished in Achieving our National Independence*. Printed for Subscribers, Cincinnati, Ohio.
- Boswell, James
1779 America: Operations at Savannah. *The Scots Magazine* 41:673.
- Callaghan, John Cornelius
1870 *History of the Irish Brigades in the Service of France*. P. O'Shea, New York, New York.
- Carleton, Sir Guy
1783 Papers. "Book of Negroes", 1783. Item #100, Record Group 800100 .B800120. South Carolina Department of Archives and History, Columbia.
- Chatham County Superior Court
1803 Deed Book X, Folio 461-464. August 3, 1803. (Originally recorded in Georgia Secretary's Office in Deed Book X:996-997). Copy on file at Mickve Israel, Savannah, Georgia.
- City Gazette
1791 Savannah, May 19. *City Gazette*, May 19, 1791:2.
- City of Savannah
2010 "Timeline: City Hall in Mourning—October 9, 1915 Mayor Davant Dies in Office" <http://www.ci.savannah.ga.us/CityWeb/RLibCat.nsf/d43ec-6d7aedfa02a85256edf004a3860/d0c48dc43ed079b8852570e60051f850?OpenDocument>. May, 10.
- City of Savannah Department of Cemeteries
2010a Springfield Plantation. <http://www.savannahga.gov/cityweb/cemeteriesweb.nsf/>, November 28, 2010.
- 2010b Laurel Grove North History. <http://www.savannahga.gov/cityweb/cemeteriesweb.nsf/>, November 28, 2010.
- 2010c Laurel Grove North Cemetery map. <http://www.savannahga.gov/cityweb/cemeteriesweb.nsf/>, November 28, 2010.

References Cited

- Clarke, Alured
1781 Affidavit to Lt. General Cornwallis regarding memorialist Charles Ogilvie, January 11. Public Record Office (PRO 30/11/69, p. 421-41) David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Colton, J.H.
1855 *The City of Savannah, Georgia*. Published by J.H. Colton & Co., New York.
- Condon, Edward O’Meagher
1887 *The Irish Race in America*. Fords’ National Library, New York, New York.
- Connecticut Journal
1779 *Connecticut Journal*, December 1, 1779:3.
1815 Latest from the South. Savannah, January 22. *Connecticut Journal*, February 6, 1815, p.3.
- Conyers, Larry B., and Dean Goodman
1997 *Ground-Penetrating Radar: An Introduction for Archaeologists*. Altimira Press, London, England.
- The Country Magazine
1788 Remarkable Instances of Courage. *The Country Magazine* 1:315.
- Crawford, Peggy
1980 An Intensive Archaeological Survey of Georgia Department of Transportation, Project M-5030(2), the Liberty Street Realignment Project, Chatham County, Georgia. Georgia Department of Transportation, Atlanta.
- Daily Advertiser
1794 *Daily Advertiser*, March 12, 1794, p.2.
- Davis, J. Les, J. Alan Heginbottom, A. Peter Annan, Rod S. Daniels, B. Peter Berdal, Tom Bergan, Kirtsy E. Duncan, Peter K. Lewin, John S. Oxford, Noel Roberts, John J. Skehel, and Charles R. Smith
2000 Ground Penetrating Radar Surveys to Locate 1918 Spanish Flu Victims in Permafrost. *Journal of Forensic Sciences* 45(1):68-76.
- Davies, K.G. [ed.]
1977 Documents of the American Revolution 1779-1783 (Colonial Office Series), Volume XVI Calendar 1779-1780 July-Dec., Irish Academic Press, Ireland.
- De Couvray, Jean Baptiste Louvet
1800 *The Interesting History of the Baron de Lovinski*. J. Babcock, Hartford, Connecticut.
- Dillon, James
1977 The Savannah Georgia NHL Historic District (Nomination Form). National Park Service, Washington, D.C.
- Doolittle Sculps
1796 Georgia Also the Two Floridas from the best Authorities.
- Draper, Lyman
1740-1891 Manuscript Collection. Microfilm and microfiche. South Carolina Department of Archives and History, Columbia, South Carolina.
- Dull, Jonathan R.
1975 *The French Navy and American Independence, A Study of Arms and Diplomacy, 1774-1787*. Princeton University Press, Princeton, NJ.
- Elliott, Daniel
1990 The Lost City Survey, Archaeological Reconnaissance of Nine 18th Century Settlements in Chatham and Effingham County. LAMAR Institute Publication Series . The LAMAR Institute, Watkinsville, Georgia.
1999 Archaeological Investigations of City Parking Lot Number 2, Liberty Street, Savannah, Georgia. GASF Manuscript 1852, Athens, Georgia.
2001 Cultural Resource Survey and Testing of the Proposed Civic Center Parking Garage, PB-315 in Savannah, Georgia. Southern Research, Ellerslie, Georgia. Submitted to City of Savannah, Leisure Services Bureau, Building & Grounds Department, Design and Construction Group, Savannah, Georgia.
- Elliott, Daniel
2003a Ebenezer Revolutionary War Headquarters: A Quest to Locate and Preserve. Lamar Institute, Box Springs, Georgia. Submitted to American Battlefield Protection Program National Park Service, Washington, D.C.
2003b Archaeological Investigations at Fort Morris State Historic Site, Liberty County, Georgia. Southern Research Historic Preservation Consultants, Ellerslie, Georgia. Submitted to Historic Preservation Division, Georgia Department of Natural Resources, Atlanta.

- 2003c Ground Penetrating Radar Survey of the Waldburg Street Site. Rocquemore Research, Box Springs, Georgia. Submitted to Southern Research Historic Preservation Consultants, Ellerslie, Georgia.
- 2007 Archaeological Investigations at Tabbies 1 and 2, North End Plantation, Ossabaw Island, Georgia. LAMAR Institute Publication Series, Report 108. Savannah, Georgia.
- 2008 Ground Penetrating Radar Survey at the Railroad Ward, Savannah, Georgia, with Supplemental Historical and Archival Research Materials. LAMAR Institute Publication Series Report 104, Savannah, Georgia.
- Elliott, Daniel T., David Jones, and Jeffrey L. Holland
1995 Oglethorpe Median: Archaeological Testing of Site 9CH795, Savannah, Georgia. Garrow & Associates, Inc., Atlanta, Georgia. Submitted to Chatham County-Savannah Metropolitan Commission, City of Savannah, Savannah, Georgia.
- Elliott, Rita
2007 Savannah Under Fire: Identifying Savannah's Revolutionary War Battlefield. Research Design for Grant Agreement No. GA-2255-07-007. Submitted to the National Park Service, American Battlefield Protection Program, Washington, DC.
- Elliott, Rita Folse and Daniel T. Elliott
2009 Savannah Under Fire: Identifying Savannah's Revolutionary War Battlefield. Final Report for Grant Project No. GA-2255-07-007. Submitted to the National Park Service, American Battlefield Protection Program, Washington, DC.
- Elstner, J.M., and Company
1886 The Industries of Savannah. J.M. Elstner & Company, Savannah, Georgia.
- Faden, William
1784 Plan of the Siege of Savannah with the Joint Attack of the French & Americans on the 9th October, 1779. Coastal Heritage Society Collections, Savannah, Georgia.
- Federalist Papers
1789 Vol. 6, Georgia Delegates. The Modern English Collection. University of Virginia, Charlottesville, VA.
- Fike, Richard E.
1967 *Guide to Old Bottles*. Published by the author, Ogden, Utah.
1987 *The Bottle Book*. Peregrini Smith Books, Salt Lake City, Utah.
- Fitzgerald, John
1783 *The Cork Remembrancer*. J. Sullivan, Cork, England.
- Fitzpatrick, John C., editor
1931-1944 *The Writings of George Washington from the Original Manuscript Sources, 1745-1799, Volume 17*. Government Printing Office, Washington, D.C.
- Flayderman, Norm
1980 *Flayderman's Guide to Antique American Firearms and Their Values*. DBI Books, Northfield, Illinois.
- Foner, Philip Sheldon
1976 *Blacks in the American Revolution. Contributions in American History, No. 55*. Greenwood Press, Westport, Connecticut.
- Fuser, L.V.
1779 [Letter from L.V. Fuser to] H. Clinton, St. Augustine, October 30, 1779. *The Town and Country Magazine, or Universal Repository of Knowledge, Instruction and Entertainment* 11:670-671. A. Hamilton, Jr., London, England.
- Gardiner, Asa Bird
1905 *The Order of the Cincinnati in France. Rhode Island State Society of Cincinnati, Providence, Rhode Island*.
- Gay, Sarah
1781 Petition by Memorialist to Lt. Colonel Alured Clarke. Public Records Office (PRO 30/11/69, p. 32) David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Georgia Gazette
1797 "The Corporation of Savannah in Account Current with William Henry Long, City Treasurer..." November 10. Savannah, Georgia.
- Georgia Historical Commission
n.d. "Old Jewish Cemetery" (Historical Marker n.d.). Georgia Historical Commission, Atlanta, Georgia.
1952a "Capture of Savannah December 29, 1778" (Historical Marker 025-8). Georgia Historical Commission, Atlanta, Georgia.

References Cited

- 1952b “Revolutionary War Barracks and Fortifications” (Historical Marker 025-9). Georgia Historical Commission, Atlanta, Georgia.
- 1952c “Attack on British Lines October 9, 1779” (Historical Marker 025-10). Georgia Historical Commission, Atlanta, Georgia.
- 1982 “Chatham Artillery’s ‘Washington Guns’” (Historical Marker 025-54). Georgia Historical Commission, Atlanta, Georgia.
- General Engineering Geophysics, LLC
2004 Computer Assisted Radar Tomography Survey for Mapping Revolutionary War Fortifications, Earthen Works, and Archeological Artifacts. Letter report submitted to Coastal Heritage Society, Savannah, Georgia. General Engineering Geophysics, LLC., Charleston, South Carolina.
- Google Earth
2011 Satellite images of Savannah, Georgia.
- Gordon, John B.
1879 Oration of Gen. John B. Gordon. *Donahoe’s Magazine* 2:554-560.
- Great Britain, Parliament, House of Commons
1877 Accounts and Papers of the House of Commons, Volume 82. Harrison and Sons, London, England.
- Green, Nathanael
1782a Letter to General Anthony Wayne, June 18. Nathanael Green Papers, GR 2034, Huntington Library, San Marino, California.
- 1782b Letter to General Anthony Wayne, June 21. Nathanael Green Papers, GR 2036, Huntington Library, San Marino, California.
- Green Rick
1976ca “Old Cemetery Renewed: Jewish Burying Ground Bicentennial Project” (probably in Savannah Morning News), in SCAD Restoration Plan (1998).
- Greer, Georgianna
1996 *American Stonewares, The Art & Craft of Utilitarian Potters*. Schiffer publishing, Atglen, Pennsylvania.
- Griffin, Martin I. J.
1911 *Catholics and the American Revolution, Volume III. Martin I.J. Griffin, Philadelphia, Pennsylvania*.
- Harden, William
1913 *A History of Savannah and the South*. Cherokee Publishing Company.
- Hamilton, T.M.
1976 *Firearms on the Frontier: Guns at Fort Michilimackinac 1715-1781*. Reports in Mackinac History and Archaeology Number 5, Mackinac Island State Park Commission, Pendell Printing, Midland, Michigan.
- Hayes, Richard
1945 *Biographical Dictionary of Irishmen in France: Part XIV. Studies: An Irish Quarterly Review* Vol. 34(134): 259-270.
- Historical Manuscripts Commission (HMC)
1972 [reprint] Report on American Manuscripts in the Royal Institution of Great Britain. Volume II. Gregg Press, Boston.[Reprint of 1906 copy.] David Library of the American Revolution, Washington Crossing, Pennsylvania.
- 1906 Report on American Manuscripts in the Royal Institution of Great Britain. Volume II. John Falconer, Dublin. David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Honerkamp, N., R.B. Council, and C.H. Fairbanks
1983 *The Reality of the City: Urban Archaeology at the Telfair Site, Savannah, Georgia*. GASF Manuscript 5671, Athens, Georgia.
- Hoffman, E.F.
1865 *Map of Savannah, Georgia and Vicinity, Plate LXX in Atlas to Accompany the Official Records of the Union and Confederate Armies 1861-1865*, published in 1895, U.S. War Department, GPO.
- Hoffman, Elliott W.
1981 *Black Hessians: American Blacks as German Soldiers. Negro History Bulletin* 44(4):81-82, 91.
- Hough, Franklin B., editor
1866 [reprinted in 1975] *The Siege of Savannah, by the Combined American and French Forces, Under the Command of Gen. Lincoln, and the count D’Estaing in the Autumn of 1779*. J. Munsell, Albany, New York. <http://books.google.com>.
- Hume, Ivor Noël
1983 *A Guide to the Artifacts of Colonial America*. Alfred A. Knopf, New York, New York.

- Jay, William
1833 John Jay to Benjamin Lincoln, April 2, 1779 [Letter]. *The Life John Jay With Selections from His Correspondence and Miscellaneous Papers.* by His Son, William Jay in Two Volumes. Vol. II.
- Jenkins, Samuel Hunt
1781 Petition by Memorialist to Lt. Colonel Alured Clarke, January 3. Public Record Office (PRO 30/11/69, p.37) David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Johnson, Joseph
1851 Traditions and Reminiscences, Chiefly of the American Revolution in the South. Walker & James, Charleston, South Carolina.
- Jones, C.C. [transl.]
1874 *The Siege of Savannah in 1779, as Described in Two Contemporaneous Journals of French Officers in the Fleet of Count D'Estaing.* J. Munsell, Albany, New York.
- Prepare to discard: in *France in the American Revolution* by James Perkins, Houghton Mifflin, Boston.
- Jones, George Fenwick
1982 The Black Hessians: Negroes Recruited by the Hessians in South Carolina and Other Colonies. *The South Carolina Historical Magazine* 83(4): 287-302.
- Jones, Olive, and Catherine Sullivan
1989 The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures National Historic Parks and Sites Branch, Parks Canada, Ottawa, Ontario, Canada.
- Kaplan, Sidney, and Emma Nogrady Kaplan
1989 *The Black Presence in the Era of the American Revolution.* Revised edition. University of Massachusetts Press, Amherst, Massachusetts.
- Keim, D.R.
1907 Rochambeau. A commemoration by the Congress of the United States of America of the Services of the French Auxiliary Forces in the War of Independence. Government Printing Office, Washington, D.C.
- Kimber, Isaac, and Edward Kimber
1779 From the London Gazette. Admiralty Office, December 21, 1779. *The London Magazine, or Gentleman's Monthly Intelligencer* 48:573-575.
- Lanning Michael Lee
2005 *African Americans in the Revolutionary War.* Citadel Press, New York, New York.
- Laurens, Henry
1779 Henry Laurens' Notes on a Georgia Campaign. *Federalist Papers*, (MS Schi: Lauren's Papers, no. 24, 20th January 1778 [i.e. 1779]), University of Virginia, Charlottesville, VA.
- Lawrence, Alexander A.
1979 *Storm Over Savannah.* Tara Press, Savannah, Georgia.
- Lawson, Barry R., Ellen P. Ryan, and Rebecca Bartlett Hutchison (cited as Lawson et al)
2002 *Reaching Out, Reaching In: A Guide to Creating Effective Public Participation for State Historic Preservation Programs.* (hard copy published in 1993). Heritage Preservation Services, National Park Service, Washington, DC.
- Lee, F.D., and J.L. Agnew
1869 *Historical Record of the City of Savannah.* J.H. Estill, Savannah, Georgia.
- Leech, Rick and Lawrence E. Babits
1990 Report on Archeological Cleaning of the Levi Sheftall Cemetery: the Field Work and its Interpretation Spruce and Cohen Streets, Savannah, Georgia. Report on file, Bull Street Branch, Live Oak Public Libraries, Savannah, Georgia.
- Leonard, J. P.
1890 Historical Notes on the Services of the Irish Officers in the French Army Addressed to the National Assembly by One of its Members, General Arthur Dillon, 1792; trans. from the French by J. P. Leonard. J. Duffy, Dublin, Ireland.
- Levy, B.H.
1978 "Savannah's Old Jewish Community Cemetery". Prepared for the Trustees of the Mordecai Sheftall Cemetery Trust. Savannah, Georgia.
1983 *Savannah's Old Jewish Community Cemeteries.* Mercer University Press, Macon, Georgia.
- Levy, Marion Abrahams (Mrs. B.H.)
1950 "Savannah's Old Jewish Burial Ground" p. 265 in *Georgia Historical Quarterly*, (December 1950), Savannah, Georgia.
- Lincoln, General Benjamin
1779 Letter to Honorable Col. Laurens and the

References Cited

- Gentlemen of the Committee of Correspondence. October 22. Charles Town, South Carolina. George Washington Papers, 1697-1799. Series 4, October 21, 1779-December 8, 1779. Film 36, Reel 62. David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Long, C. Thomas
2009 Britain's Green Water Navy in the Revolutionary Chesapeake: Long-Range Asymmetric Warfare in the Littoral. *International Journal of Naval History* 8(2):1-55.
- Lossing, Benson John, editor
1860 *The Diary of George Washington from 1789 to 1781*. C.B. Richardson & Co., New York, New York.
- Lysons, Daniel
1796 "Account by Mrs. Anne Prevost/Lettres et Dialogues" in *The Environs of London: Counties of Herts, Essex & Kent*. T. Cadell, London, England (translated by Babelfish for this report)
- MacDonell, A.H.
1907 *The Code of the City of Savannah of 1907*. Morning News Print, Savannah, Georgia.
- Macon Telegraph
1845 Health of Savannah. September 5, 1845.
- 1911 Georgia Unveils Table of Bronze. *Macon Telegraph*, February 23, 1911, p.10.
- Macon Weekly Telegraph
1830 Greene & Pulaski Monument. *Macon Weekly Telegraph*, February 20, 1830, p.31.
- 1879 The Jasper Centennial Oration of General John B. Gordon, Delivered October 9, 1879. *Macon Weekly Telegraph*, October 14, 1879, p.2.
- Marion, Francis
1761-1794 Papers. 1361, South Caroliniana Library, University of South Carolina, Columbia.
- 1779 Manuscript, "Pay Role of Capt. Thomas Hall's Company in the Second Regiment of South Carolina on Continental" 1 Aug-1 Nov. South Caroliniana Library, University of South Carolina, Columbia.
- McGillivray, Alexander
1779 October 26. Letter to Major General Augustine Prevost in Savannah. Great Britain, Colonial Office American & West Indies Correspondence, CO5/182 (p.211), Film 590, Reel 50, David Library of the American Revolution, Washington Crossing, Pennsylvania.
- McKearin, Helena and Kenneth M. Wilson
1978 *American Bottles and Flasks and Their Ancestry*. Crown Publishers, Inc., New York, New York.
- McKinnon, John
1798 Plan of the Forty Five and Five Acre Lots in the Township of Savannah. (Traced by Assistant City Engineer W.O.D. Rockwell in 1908 from a tracing by surveyor McKinnon in 1798, from original by Thos. McCall, late Surveyor General), City of Savannah, Research Library & Municipal Archives, Savannah, Georgia.
- 1825 City of Savannah. City Engineers Office. City of Savannah, Research Library & Municipal Archives, Savannah, Georgia.
- Marmion, Chevalier William F.
1998 Irish Brigade Officers of the French Army in the American Revolution. *Irish Roots Magazine* 3.
- May, J. Alan
2008 *Archaeological Remote Sensing and Data Recovery at Ramsour's Mill Mass Grave Monument, 31LN209, Lincolnton, Lincoln County, North Carolina*. The Shiele Museum of Natural History, Charlotte, North Carolina.
- Moncrief, James
1780a Manuscript 74. The Siege of Charleston. South Caroliniana Library, University of South Carolina, Columbia.
- 1780b Letter to Lord Cornwallis. Public Record Office. (PRO 30/11/59-67, p.136), Film 411, Reel 49. David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Moore, Warren
1967 *Weapons of the American Revolution and Accoutrements*. Promontory Press, New York, New York.
- Moore, Thomas Will
1781a Affidavit to Lt. Colonel Alured Clarke on behalf of Sarah Gay, April 4th. Public Record Office (PRO 30/11/69, p.33). David Library of the American Revolution, Washington Crossing, Pennsylvania.

- 1781b Affidavit to Lt. Colonel Alured Clarke on behalf of Charles Ogilvie, January 11. Public Record Office (PRO 30/11/69 p.43) David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Moss, Bobby Gilmer
2009 Roster of South Carolina Patriots in the American Revolution, Volume II:K-Z. Genealogical Publishing Company, Baltimore, Maryland.
- Motte, Isaac
1780 Letter to Thomas Bee, and annotated notes about it by the Modern English Collection, Electronic Text Center, University of Virginia, Charlottesville, Virginia.
- Murphy, W.S.
1954 The Irish Brigade of France at the Siege of Savannah, 1779. *Georgia Historical Quarterly* 38(4).
- National Aegis
1815 The Following Short but Energetic Appeal is from the Savannah Republican. *National Aegis*, February 8, 1815, p.3.
- National Park Service
2000 Battlefield Survey Manual. Available on the internet at: www.nps.gov/history/hps/abpp/revwar/pdfs/ManualSect2.pdf
- 2006 The Museum Handbook Part I and II. Museum Management Program, Washington, D.C.
- 2010 The American Revolution. Lighting Freedom's Flame. Stories From the Revolution. African Americans in the Revolutionary Period. May 26. http://www.nps.gov/revwar/about_the_revolution/african_americans.html
- Neumann, George C.
1967 The History of Weapons of the American Revolution. Harper and Row, New York.
- 1991 Swords & Blades of the American Revolution. Rebel Publishing, Texarkana, Texas.
- Neumann, G. C., and F. J. Kravic
1989 *Collector's Illustrated Encyclopedia of the American Revolution*. Rebel Publishing Company, Texarkana, Texas.
- Ogilvie, Charles
1781 Memorialist Petition to Lt. Colonel Alured Clarke, January 11. Public Record Office (PRO 30/11/69, p. 41) David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Onahan, William J.
1881 An Irish Brigade Commanded by County Arthur Dillon at the Siege of Savannah, 1779. *Donahoe's Magazine* 5(2):99-102.
- Oracle
1808 Ordinance. *Oracle*, May 12, 1808, p.2. New York.
- Ozanne, Pierre
1779 Siege de Savannah...en 7bre et 8bre 1779. Library of Congress, Washington, DC.
- Perry, Robert
2008 "Ground Penetrating Radar Survey Report" letter, November 16, to Lauree San Juan, Mickve Israel, Savannah, Georgia. Topographix, Hudson, New Hampshire.
- Porbeck, Friedrich von
1782 Letters from Friedrich von Porbeck to Lieutenant General von Jungkenn. von Jungkenn Papers, William L. Clements Library, University of Michigan, Ann Arbor, Michigan. Translationed by Henry Retzer.
- Prevost, Major General Augustin
1779a Account of Battle. November 1. Great Britain, Colonial Office American & West Indies Correspondence, CO5/237, Film 590, Reel 50, David Library of the American Revolution, Washington Crossing, Pennsylvania.
- 1779b Letter to Sir Henry Clinton, August 7. Great Britain, Colonial Office American & West Indies Correspondence, CO5/98, Film 590, Reel 19, ppgs. 378-379. David Library of the American Revolution, Washington Crossing, Pennsylvania.
- 1779c Letter to Sir Henry Clinton, October 22. Great Britain, Colonial Office American & West Indies Correspondence, CO5/98, Film 590, Reel 19, ppgs. 391-392. David Library of the American Revolution, Washington Crossing, Pennsylvania.
- 1779d Account of Meeting with Creeks, August 2. Great Britain, Colonial Office American & West Indies Correspondence, CO5/80, Film 590, Reel 10, ppgs. 258-263. David Library of the American Revolution, Washington Crossing, Pennsylvania.

References Cited

- 1779e Letter to Clinton, July 30, 1779. Great Britain, Colonial Office American & West Indies Correspondence, CO5/98, Film 590, Reel 19, ppgs.217-219. David Library of the American Revolution, Washington Crossing, Pennsylvania.
- 1779f Extract of a Letter from Major-General Augustin Prevost, Commanding his Majesty's Forces in the Province of Georgia to the Right Hon. Lord George Germaine, One of his Majesty's Principal Secretaries of State, Dated Savannah, Nov. 1, 1779; received by Capt. Shaw, Aid de Camp to the Major-general Prevost. *The Remembrancer* 9:71-83.
- Proctor, Samuel, Louis Schmier, and Malcom Stern
1984 Selected Essays from the Southern Jewish Historical Society. Southern Jewish Historical Society. Mercer University Press, Macon, Georgia.
- Quarles, Benjamin
1961 *The Negro in the American Revolution*. University of North Carolina Press, Chapel Hill, North Carolina.
- Ray, Tracy
2010 Letter to Rita Elliott, January 12. From Oglethorpe Associates/Bennett Hofford Company, Charleston, SC.
- Rebarer, Frank E., compiler
1879 *Rebarer's Digest: Supplement to City Code, 1871.* Containing the Ordinances of the City of Savannah, from July, 1871, to May, 1879. George N. Nichols, Savannah, Georgia.
- Republican Farmer
1915 From Georgia. *Republican Farmer*, February 2, 1815, p.2.
- The Royal Georgia Gazette
1780 "Account of the Siege of Savannah, by the French and Reels Commanded by Count d'Estaing and General Lincoln". James Johnston, Savannah, Georgia.
- Ruffell, Alastair, Alan McCabe, Colm Donnelly, and Brian Sloan
2009 Location and Assessment of an Historic (150-160 Years Old) Mass Grave Using Geographic and Ground Penetrating Radar Investigation, NW Ireland. *Journal of Forensic Sciences* 54(2):382-394.
- Russell, David Lee
2000 *The American Revolution in the Southern Colonies*. McFarland & Co., Jefferson, North Carolina.
- Rutsch, E.S., and B.H. Morrell
1981 Archeological Survey of the Savannah Revolutionary Battlefield Park, City of Savannah. GASF Manuscript 1528, Athens, Georgia.
- Salem Gazette
1782 New York, January 5. *Salem Gazette*, January 31, 1782, p.3.
- Sanborn Map and Publishing Company
1884 Sanborn Fire Insurance Maps. Galileo, Digital Library of Georgia. Accessed March 4, 2010 at http://dlg.galileo.usg.edu/meta/html/dlg/sanb/meta_dlg_sanb_savannah_1884.html
- 1888 Sanborn Fire Insurance Maps. Galileo, Digital Library of Georgia. Accessed March 4, 2010 at http://dlg.galileo.usg.edu/meta/html/dlg/sanb/meta_dlg_sanb_savannah_1888.html
- 1898 Sanborn Fire Insurance Maps. Galileo, Digital Library of Georgia. Accessed March 4, 2010 at http://dlg.galileo.usg.edu/meta/html/dlg/sanb/meta_dlg_sanb_savannah_1898.html
- 1916 Sanborn Fire Insurance Maps. Galileo, Digital Library of Georgia. Accessed March 4, 2010 at http://dlg.galileo.usg.edu/meta/html/dlg/sanb/meta_dlg_sanb_savannah_1916.html
- Savannah Morning News
1886 "Old Burying Grounds: Resting Places of Some of Savannah's Early Dead", October 26, 1886, Savannah, Georgia.
- Savannah Republican
1849a "Proceedings of Council, Savannah, March 29, 1849", March 31. Savannah, Georgia.
- 1849b "Proceedings of Council, Savannah, July 19, 1849", July 21. Savannah, Georgia.
- 1850 "Proceedings of Council, August 29, 1850", Savannah, Georgia, September 1.
- Savannah College of Art and Design (SCAD)
1998 "Restoration Plan for the Old Jewish Cemetery, Savannah, Georgia." *Historic Preservation 727: Preservation Restoration*. November. Savannah, Georgia.

- Sholes
1882 Sholes' Directory of the City of Savannah, Volume 4. The Morning News Print, Savannah, Georgia.
- Shruder, Thomas
1770 Plan of the Town of Savannah/Resurvey of the Strand, the Wharf Lots, and common of the Town of Savannah. (Actually a copy of a 1929 tracing by City Engineer W.R. Shellman of an 1832 tracing by John Bethune), City of Savannah, Research Library & Municipal Archives, Savannah, Georgia.
- Sivilich, D. M.
1996 Analyzing Musket Balls to Interpret a Revolutionary War Site. *Historical Archaeology* 30(2):101-9.
- The Society for Historical Archaeology (SHA)
2008 "Bottle/Glass Colors" by Bill Lindsey, on <http://www.sha.org/bottle/colors.htm>, November 15, 2008.
- Solomons, A.
1882 Letter to A. Wild, President, Mickve Israel Congregation, May 11, Savannah, Georgia in "Restoration Plan for the Old Jewish Cemetery, Savannah, Georgia" *Historic Preservation* 727: Preservation Restoration. Savannah College of Art and Design. Savannah, Georgia.
- South, Stanley A.
1977 *Method and Theory in Historical Archaeology*. Academic Press, New York.
- South Carolina Department of Archives and History (SCDAH)
2010 Online Catalog. Historical Summary section, Details Page for Record Group Number, 800100, Series Number .B800120. <http://rediscov.sc.gov/scar/>
- Southern Campaign of the American Revolution (cited as SCAR)
2008 Pension Application Records (By pensioner name and various pension numbers such as S34923 or R802), www.southerncampaign.org/pen/. Accessed December 15, 2008.
- William Algood, S41408
Augustine Balthrop W8113
James Barnes S1746
Louis Baury de Bellerive W28025
Joseph Bertoulin R802
William Campbell W4149
- Edward Doyle, S32216
John T. Holland S34923
Christopher Garlington S6874
John Garretson, S35962
William Hasell Gibbes S9339
Joseph Gilmer, W355
Adam Gitsinger, W8880
Absalom Hooper, W7813
John Martin, S15935
James McElwee W9553
Benjamin Munnerlyn, W84790
William Poplin
George Watts, W1009
- 2011 Pension Application Records, Transcribed by Will Graves (By pensioner name and various pension numbers such as S34923 or R802), www.southerncampaign.org/pen/. Accessed April 17, 2011.
- John Bird, S39196
Thomas Boon, W23656
Samuel Burton, S39254
Jim Capers, R1669
Louis DeSaussure, BLWt1585-200
Fields Farrar, BLWt70-300
Philip Martin Frew, W9435
James Gabriel, S2571
Joseph Gilmore, W355
Thomas Godfrey, W9456
Isaac Herin, W10098
Solomon Legare, S21860
Edward Lloyd BLWt2007-200
John Looney, S1553
John Love, R21476
William Moore, S36166
Charles Motte, BLWt629-400
Michael Nash, W4042
William Rogers (Rodgers), S36276
Leroy Roux, S21952
John Sullivan, S22002
John Swords, W8773
Samuel Warren, BLWt1859-300
George Watts, W1009
John Wickham, blwt125-200
- Stedman, Charles
1794 *The History of the Origin, Progress, and Termination of the American War, Volume 2. J.* Murray, London, England.
- Stern, Malcom H.
1965 "The Sheftall Diaries: Vital Records of Savannah Jewry (1733-1808)" pp. 243-277 in *American Jewish Historical Quarterly*.

References Cited

- Stephens, C. (City of Savannah Surveyor)
1840 Map of the City of Savannah with the Extended Limits. City of Savannah. P.A. Mesur Lithographer, New York.
- Stevens, B.F. (editor/translator)
1970 B.F. Stevens's Facsimiles of Manuscripts in European Archives Relating to America 1773-1783, Vol XXIII, Nos 1946-2023. Mellifont Press, Inc., Wilmington, Delaware.
- Stocqueler, J.H. Esq.
1853 *The Military Encyclopaedia; A Technical, Biographical, and Historical Dictionary, Referring Exclusively to the Military Sciences, The Memoirs of Distinguished Soldiers, and the Narratives of Remarkable Battles*. Wm. H. Allen & Co., London.
- Stokes, Anthony
1783 *A View of the Constitution of the British Colonies: in North America and the West Indians, at the Time the Civil War Broke Out on the Continent of America*. B. White, London, England.
- Suter, Charles R.
1864 Map of the Rebel & Union Intrenchments of Savannah. Manuscript map, Cartographic Unit, National Archives and Records Administration, College Park, Maryland.
- Tallemach, Thomas, John Woolf[d?], John Starr [?]
1781 Testimonial for Petitioner/Memorialist Samuel Jenkins, January 31. Public Record Office (PRO 30/11/69, p38), David Library of the American Revolution, Washington Crossing, Pennsylvania.
- Tice, Warren K.
1997 *Uniform Buttons of the United States 1776-1865*. Thomas Publication, Gettysburg, Pennsylvania.
- The Town and Country Magazine
1779 From the London Gazette, Dec. 25. Extract of a Letter from Sir James Wright, Bart. Governor of the Province of Georgia, to Lord George Germaine, dated Savannah, Nov. 5, 1779, received by Captain Shaw. *The Town and Country Magazine, or Universal Repository of Knowledge, Instruction and Entertainment* 11:671-672. A. Hamilton, Jr., London, England.
- Troiani, D.
2001 *Military Buttons of the American Revolution*. Thomas Publications, Gettysburg, Pennsylvania.
- United States Congress
1857 Report to Accompany H.R. Number 438. Reports of Committees: 30th Congress, 1st Session. Government Printing Office, Washington, D.C.
- United States Secretary of the Interior
1983 *Standards and Guidelines for Archeology and Historic Preservation*, Federal Register.
- The Universal Magazine
1779b Papers that Passed between Major-general Prevost and Count d'Estaing, at Savannah, in Georgia; referred to from General Prevost's Letter in our last Magazine, Page 340 &c. *The Universal Magazine* 64:354-357.
- 1779b American Advices. From the London Gazette, December 21. *The Universal Magazine* 64:326-
- Urban, Sylvanius
1779 Monday 20. *The Gentleman's Magazine, and Historical Chronicle* 49:614.
- 1779 Extract of a Letter from Major-General Augustin Prevost, Commanding his Majesty's Forces in the Province of Georgia to the Right Hon. Lord George Germaine, One of his Majesty's Principal Secretaries of State, Dated Savannah, Nov. 1, 1779. *The Gentleman's Magazine, and Historical Chronicle* 49:633-639.
- 1780 American News. Gen. Lincoln's Letter to Congress on the Defeat of the Combined Army before Georgia. Charles Town, Oct. 22, 1779. 93-94. *The Gentleman's Magazine, and Historical Chronicle* 50:93-94.
- 1787 *The Gentleman's Magazine, and Historical Chronicle* 57(2):660. E. Cave, London, England.
- Vincent, Edward
1853 Vincent's Subdivision Map of the City of Savannah. Cartographic and Architectural Division, National Archives and Records Administration, Washington, D.C.
- WPA
1935 Plan of Jewish Cemeteries and Surroundings. M.O. Bellingrodt, Civil Engineer. Project of the W.P.A. of Georgia, Savannah. City of Savannah, Research Library & Archives, Savannah, Georgia.
- Ward-Chipman Papers
1779a Muster Roll of Col. Alexander Innis' Company, South Carolina Royalists, December 1. Film 272,

- Reel 9, C4222 British Military Records "C" Series,
Canada National Archives,
- Waring, George E.(comp)
1886 Plan of the City and Harbour at Savannah, in
Chatham County, State of Georgia, A.D. 1818,
publ. in *Report on the Social Statistics of Cities*,
Part II, U.S. Census Office, Washington, DC.
- Wayne, Anthony
1782 Letter to Genl. Nathanael Greene, May 18.
Anthony Wayne Manuscripts Volume 17, The
Historical Society of Pennsylvania, Philadelphia.
- Weekly Messenger
1829 *Weekly Messenger*, April 16, 1829, p.4.
- White, George
1855 *Historical Collections of Georgia*. Pudney &
Russell, New York, New York.
- Whitehead, Ruth Holmes
2002 "Book of Negroes", 1783. Searchable CD Rom.
South Carolina Department of Archives and
History, Columbia.
- William L. Clements Library
1779 Return. Abstract of the Number of Men Women
and Children, Negroes and Prisoners Victualled
at the Commissary General's Stores at Savannah
from 11th to 20th October 1779. Great Britain,
Army in America. Sir Henry Clinton Papers, Army
in America. Sir Henry Clinton Papers, [72]10,
University of Michigan, Ann Arbor.
- Wilson, David K.
2005 *The Southern Strategy, Britain's Conquest of South
Carolina and Georgia, 1775-1780*. University of
South Carolina Press, Columbia, South Carolina.
- Wilson, John
1779 Plan of the Siege of Savannah, and the Defeat
of the French and Rebels on the 9th Octr 1779.
By His Majesty's Forces Under the Command
of Major General Augustin Prevost. Surveyed
by John Wilson A. Engineer. William Clements
Library, University of Michigan, Ann Arbor.
- Witten, Alan, Robert Brooks, and Thomas Fenner
2001 The Tulsa Race Riot of 1921: A Geophysical
Study to Locate a Mass Grave. *The Leading Edge*
20:655-660.
- Wood, K. G.
1985 Life in New Leeds: Archeological and Historical
Investigations at the Fahm Street Extension Site
9Ch703 (FS) Savannah, Georgia. Southeastern
Archeological Services, Inc., Athens, Georgia.
Submitted to City of Savannah, Savannah,
Georgia.
- Wright, Jr., Major James
1780 Letter to Lord Cornwallis. Public Record Office
(PRO 30/11/59-67, ppgs. 58-59). Film 411, Reel
19. David Library of the American Revolution,
Washington Crossing, Pennsylvania.
- Young, Martha
1781 Petition of Memorialist to Lt. Colonel Alured
Clarke, March 20, 1781. Public Record Office,
PRO 30/11/69 , p.52) David Library of the
American Revolution, Washington Crossing,
Pennsylvania
- Zubly, John Joachim
1781 The Government of God over Nations Thankfully
Acknowledged in his Humbling the Rebellious
and Protecting his People. A Sermon, Occasioned
by the Repulse of the French and Rebels be-
fore Savannah, in Georgia, October 9, 1779.
Charleston, South Carolina. Reviewed in *The
Critical Review: or, Annals of Literature* 51:396. A.
Hamilton, London, England].

Appendices

Appendix A

Minutes from First Meeting

In Attendance:

- Bridget Lidy
- Laura Seifert
- Rita Elliott
- Marc Nelson, Engineering
- Jerry Flemming, Cemeteries
- Bill Haws, Park & Trees
- Jim Parker, Park & Trees
- Martin Fretty, Housing
- Jim Shirley, Buildings & Grounds
- Earline Davis, Housing
- Tara Polli, Citizen Office

After an opening statement by Bridget, everyone introduced himself or herself. Rita Elliott gave a PowerPoint presentation on the history of the 1779 Battle of Savannah, the previous work done during the 2007-2008 grant, and finally what is planned for 2010.

Fahm Street- Because this is a residential area with many children, we will need to cover any units with plywood in addition blocking them with orange mesh fencing. We will meet with the resident's association (they meet monthly) in addition to our usual outreach efforts.

Colonial Cemetery- The area south of Colonial Cemetery is called Davant Park. There are no known issues in the area, although there are probably utilities along the road.

Mother Matilda Beasley Park: This is a county park. This area underwent soil remediation because it is a former railroad area and near the East Broad School. Jim Shirley will call the county and see whom we need to contact.

Calhoun and Whitfield Squares: During this discussion, we explained our overall research process, future interpretation, and what value this information has for preservationists and planners.

Thomas Square: This is Jim Shirley's jurisdiction. No known issues.

Wells Park: This is the proper name for this park. Jim Shirley found a John Ryan bottle fragment in this park during renovations. This is Jim Shirley's jurisdiction.

Laurel Grove Cemetery: We are planning a radar survey in this area. Jerry said there are many unmarked burials in this cemetery, and he knew of no previous ground-penetrating radar that took place here.

Kelly Grayson Park (WW Law Community Center): This is Jim Shirley's jurisdiction. There is a playground and other improvements made to the green space surrounding the community center.

Truman Parkway: The area of interest is near Spencer Elementary and a basketball complex. It is also near Blackshear homes (Earline Woods' jurisdiction). People used to dig in the woods east of the school in the 1990s.

General notes:

- After we conduct reconnaissance surveys, the next step will be us contacting individuals about specific digging locations.
- Marc will try to obtain the GIS layer of utilities for us.
- Public information would probably be willing to videotape us at work and create films for the public access channel.

Appendix B

Minutes from Stakeholder's Meeting

Savannah Under Fire: Unveiling the American Revolution in Savannah, Georgia
Presentation and Stakeholder Meeting
Minutes

Date/Time: Tuesday, February 1, 2011 6-7:15 p.m.

Location: Savannah History Museum Theater/Savannah Visitor's Center, 303 Martin Luther King, Jr. Blvd., Savannah, Georgia.

Participants: 50 adults, 2 children

Presentee: Rita Elliott, Curator of Exhibits & Archaeology, Coastal Heritage Society (Project Director)

Note Takers: Laura Seifert (Project Archaeologist); P.T. Ashlock (Archaeologist and Project Volunteer)

Photographer: Lydia Moreton (CHS staff/one of project administrators)

Logistics Support: Dan Elliott (Project Archaeologist)

The minutes were prepared February 3, 2011, by Rita Elliott, using information from the note takers.

Overview

The hour presentation was divided in thirds. The first 20 minutes consisted of a PowerPoint presentation overview of the *Savannah Under Fire* Revolutionary War projects conducted by Coastal Heritage Society through National Park Service, American Battlefield Protection Program Grants. The second 20 minute portion of the PowerPoint presentation was an overview of how preservation of archaeological sites such as these has economically and culturally benefitted other cities and counties across the U.S., including case studies. The third portion of the meeting consisted of opening the floor to the audience for comments and discussion on the project, the presentation, and how these archaeological sites in Savannah and Chatham County can be preserved. This portion of the meeting was slated for 20 minutes but remained on-going until the audience had no more comments. This portion, therefore, was approximately 35 minutes. A link to the PowerPoint presentation and text notes has been posted on the project's Facebook site and other locations on the internet, and will be included in the materials submitted to the NPS along with the report. The notes below detail the remaining portion of the meeting.

Notes from Discussion Portion of Meeting (3rd Part)

Rita Elliott opened the floor to questions, comments, and discussion. Below are the questions from the audience and a summary of the responses.

Question: What's next?

Rita: Nothing, there is no ongoing archaeological research in Savannah. There is only an occasional contract archaeology project, but not much of that, either.

Question: What is known and unknown?

Rita: There are many other types of archaeological sites in Savannah. There are Native American sites going back to 10,000 B.C. There are colonial sites beginning in 1733. There are more Revolutionary War sites, War of 1812 sites, Federal period sites, Civil War sites...all the way through the early and middle 1900s...

Additional Question/Comment: Could you give that information to the city council?

Rita: We could create context document could be created that would contain such information and take it to the city council to get started. [Rita did not address the funded required for such a document.]

Question: Will there be more Rev War research?

Rita: That would be great, but it depends on schedules...

Comment: African-American culture is a popular topic for research. You should do research in the lanes and alleys, look at the slave quarters, use maps to find them. These sites are being destroyed quickly. There are all white people in the room you need to find a way to include African-Americans.

Rita: Yes African-American research is popular. And that is the beauty of archeology. It studies all people, especially those not in the historical record, such as African-Americans, who are mostly in the records through white perspectives, the illiterate, women, children... And we could use maps, Sanborn maps and earlier maps to help locate these areas. We tried recently

to work with a well-known African-American site here in Savannah. Had it all lined up to do archaeology and investigate it and they just dropped the ball, even though we tried very hard to work with the site personnel. And I am disappointed to see no African-Americans here tonight, although many were invited. Perhaps we need to try to invite them in a different way?

Question (by Henry Morgan): What can private landowners do? How can landowners deal with relic collectors?

Rita: We can't stop development. Or even people wanting to do stuff in their yards like gardening, etc. If you find items, make a map, keep the object in a bag labeled with its location/context, mark the location on the bag and the map... If landowners want to fund archaeology on their property, then archaeologists would love to come out... Not all collectors are the same. There is a broad range of collectors, just like plumbers or gardeners... The problem is, when objects are collected, all information and context are lost. Context is key. It is a lot like a crime scene (explanation). So if someone comes knocking on your door to dig a privy in your yard, they are going to destroy all the information that goes with it. There are ways for collectors and archaeologists to work together, however. It's the only way to move forward.

Comment (Henry Morgan): Preservation in place is a great method and is very easy.

Rita: Yes. Believe it or not, archaeologists don't want to dig every site. We believe in banking sites for the future, as well, when there will be new technologies and new questions to study sites.

Comment: When relic hunters and archaeologists collaborate, we still need context

Question: Is the report from the project available?

Rita: Thanks, Dan for holding up the printed copy. Yes, this report from the first grant season is available online via the Savannah Under Fire Facebook site and the Coastal Heritage Society's web site under Battlefield Park. The report for the second grant season is currently being compiled. The draft will be completed in March and the final should be approved by NPS in June. After that, it too will be posted on the web where it will be available for free download by the public.

Question (by Jeff Kirkland): Will the political climate support an archaeological ordinance? What can a citizen do?

Rita: I am the last one to be an expert on politics! And archaeologists can't say we need an ordinance because that merely looks self-serving. Nobody will listen to that. But people who aren't archaeologists can contact their city and county officials and voice support for archaeological and historic preservation legislation. For example, my colleague, Laura Seifert, also an archaeologist on this project, always points out the recycling example here in Savannah. For years the city didn't have a recycling program, but finally when residents got together and demanded one, the city developed a program.

Question (Barry Sheehy): How does the absence of an ordinance influence our application to be a UNESCO World Heritage Site?

Rita: Great question! I'm not sure. Others in our organization are more versed in this and may know the answer. I'll have to ask. It is my understanding that the application includes downtown along Bull Street.

Rita/Dan: The UNESCO site is only downtown and there are archaeological sites being destroyed everywhere. Just the Revolutionary War battlefield is larger than the downtown National Register District.

Comment: Downtown is protected.

Rita: No, the archaeological sites downtown are no more protected than sites on the south side or those on the west side or the east side... There are no protections for archaeological sites just because they are in a National Register District in Savannah.

Comment (Henry Morgan): City parking garages have surely destroyed archaeology sites.

Rita: Two garages did have archaeology, but many buildings have not. Most of the construction in Savannah does not require archaeology. The Garrison Elementary School that we just discussed on the battlefield site did not require archaeological investigation.

Question (by Farris Cadle): Are there any volunteer opportunities?

Rita: It depends on project. We had lots of volunteers on the NPS project (by our standards). Commercial archaeology projects are usually too busy, fast, and have insurance issues to have volunteers. But public archaeology programs, in fact all the ones I mentioned tonight in other cities and counties, have lots of volunteers.

Comment (Carl Arndt): We have an active archaeology club in town, CGAS. We have worked with Rita in the past.

Rita: Yes, Coastal Georgia Archaeological Society has provided us volunteers on some projects, including this one.

Comment: Make a presentation to the Historical Review Board. They make seemingly ridiculously small decisions, seems like they should have an interest in the larger issue of archaeology.

Rita: That's an idea. I'd be happy to talk to them. I talk to anyone who listens (and to a lot of people who don't!) Thank you.

Question: What are the advantages of an archaeological ordinance?

Rita: Do you mean beyond all the economic, community, and cultural benefits mentioned here tonight?

Additional Comment: Yes, what would it do?

Rita: Specifically, it depends on how the ordinance is written. It can do anything you want it to do. All the cities and counties I mentioned tonight have differences in their ordinances, but there are many similarities running through them. It can protect sites on public land, private land, or both. Most of the ordinances usually include some type of review for ground disturbance projects, and then a small number of those projects will require archaeology. I'm not sure what Savannah has drafted. It has been working on an ordinance for almost 25 years, with nothing to show. It would be good to see what they have, and take the best from the ordinances of these other cities and counties and include that.

Comment: Speak to the MPC planning staff, particularly as they are making decisions about subdivision zoning issues. Possibly could add an ordinance through them.

Rita: Oh, that is good to know about the subdivision zoning issues. Good idea. Thank you.

Rita: Are there any other comments? No, then thank you very much!

Comment overheard by note taker Laura Seifert to CHS President & CEO, Scott Smith, after formal presentation: talk to the school board and get some school programs going that involve archaeology.

Topics note taker P.T. Ashlock recorded:

- UNESCO applicability
- Community petition initiative (similar to one for recycling initiative)
- Report to city council
- Base plan with community initiative –(examine what sites to focus on; where; & there importance)
- Location pinpoints – (P.T. thought—to identify threatened sites while development is not at its peak and try to preserve them)
- African American presence (P.T. notes they are doing the Houston site cemetery and church project in Port Wentworth)
- Period continuum and baseline-(developing period historic and prehistoric continuum in context document)
- Context document
- Sanborn maps
- Private land interests (Does this include funding, property access, general support?)
- Petition for new ordinances
- Relic hunters and archeological cooperation

Appendix C
Artifact Inventory

ARTIFACT INVENTORY by Provenience

Savannah Under Fire: Expanding the Boundaries

Coastal Heritage Society. National Park Service American Battlefield Protection Program Grant #2, 2009-2011.

Unit	Level	Feature	Depth	SumOfCount	Code	Description	Lot #
				1	KC2301	Willow ware, pearlware	38
				1	KC2301	Willow ware, pearlware	111
		Trench 3		1	KC2303	Transfer print, linear, unidentified underglaze	2
		Trench 3		1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	1
MD 1			11 cmbs	1	AM1715	Latch/lock mechanism	77
MD 10			8 cmbs	1	ZM1233	Lead block	86
MD 11			4 cmbs	1	PM0508	Cosmetic item, metal	87
MD 12			5 cmbs	1	ZM1235	Lead scrap	88
MD 13			12 cmbs	1	ZM0301	Antique metal toys	89
MD 14			16 cmbs	1	AM1719	Hardware, unidentified	90
MD 14			16 cmbs	1	ZM1247	Screw	90
MD 15			21 cmbs	1	ZM1213	Padlock	91
MD 16			12 cmbs	1	KM0299	Utensil handle, unidentified, metal	92
MD 17			8 cmbs	1	FM0111	Escutcheon plate	73
MD 18			8 cmbs	1	PM0102	Watch/clock part	93
MD 18			8 cmbs	1	ZC0302	Marble, ceramic	93
MD 19			8 cmbs	1	ZM1103	Machine gear	94
MD 19			8 cmbs	1	ZR2301	Core, random	94
MD 2			10 cmbs	1	MM9901	Iron fragment, unidentified	78
MD 20			4 cmbs	1	PM0504	Umbrella part	74
MD 21			8 cmbs	1	CM0302	Buckle	75
MD 22			10 cmbs	1	ZM1235	Lead scrap	76
MD 23			8 cmbs	1	CM0240	Button, white metal	95
MD 3			10 cmbs	1	ZM0301	Antique metal toys	79
MD 4			12 cmbs	1	MM9902	Metal, non iron/steel, unidentified	80
MD 5			6 cmbs	1	RM0205	Gun part, other	81
MD 6			8 cmbs	1	ZM1233	Lead block	82
MD 7			10 cmbs	1	FM0101	Furniture hinge, metal	83
MD 8			5 cmbs	1	ZM1235	Lead scrap	84
MD 9			10 cmbs	1	ZM1302	Lead, unidentified	85
ST 1	1			12	AC0120	Brick, handmade	3
ST 1	1			1	AG0558	Plate Glass (greater than 3.0 mm)	3
ST 1	1			1	AM1507	Nail fragment, unidentified	3
ST 1	1			1	AR0104	Concrete	3
ST 1	1			1	AR0108	Mortar	3
ST 1	1			1	KG0299	Bottle, amber/olive green glass	3
ST 1	1			7	KG0301	Bottle, colorless bottle glass	3
ST 1	1			2	KG0393	Bottle, olive green unidentified	3

ST 1	1			1	KM0311	Screw cap/top	3
ST 1	1			2	MM9901	Iron fragment, unidentified	3
ST 1	1			4	MM9903	Slag	3
ST 1	1			1	MP9901	Plastic, unidentified	3
ST 1	1			5	ZM1232	Sheet iron/steel	3
ST 1	1			1	ZR0302	Slate, unidentified	3
ST 1	2			9	AC0199	Brick, unspecified	4
ST 1	2			1	KF0104	Shell, oyster	4
ST 1	2			1	KG0393	Bottle, olive green unidentified	4
ST 1	2			2	MM9901	Iron fragment, unidentified	4
ST 10	1			6	AC0199	Brick, unspecified	22
ST 10	1			2	AG0301	Window glass, sized	22
ST 10	1			1	AM1507	Nail fragment, unidentified	22
ST 10	1			1	CP0101	Button, plastic	22
ST 10	1			1	KC0501	Ironstone, plain blue tinted stone china	22
ST 10	1			1	KC2303	Transfer print, linear, unidentified underglaze	22
ST 10	1			1	KF0104	Shell, oyster	22
ST 10	1			1	KG0243	Bottle, Owen's scar bottle	22
ST 10	1			2	KG0300	Bottle, light aqua bottle glass	22
ST 10	1			2	KG0301	Bottle, colorless bottle glass	22
ST 10	1			1	KG0303	Bottle, light green bottle glass	22
ST 10	1			14	MF0101	Coal	22
ST 10	1			1	MM9901	Iron fragment, unidentified	22
ST 10	2			1	AG0301	Window glass, sized	23
ST 10	2			7	AM1507	Nail fragment, unidentified	23
ST 10	2			1	KC0700	Whiteware, plain	23
ST 10	2			2	KF0101	Bone, unidentified	23
ST 10	2			1	KG0231	Bottle, amethyst /Manganese decolorized glass	23
ST 10	2			3	MF0101	Coal	23
ST 10	2			1	MM9901	Iron fragment, unidentified	23
ST 10	3			1	AG0301	Window glass, sized	24
ST 10	3			1	AG0558	Plate Glass (greater than 3.0 mm)	24
ST 10	3			1	KC0398	Lead glazed, unidentified	24
ST 10	3			1	KC0631	Pearlware, unidentified decorated	24
ST 10	3			1	KC2809	Earthenware, Rockingham glaze on buff paste	24
ST 10	3			1	KF0104	Shell, oyster	24
ST 10	3			3	MF0102	Charcoal	24
ST 10	3			1	MM9901	Iron fragment, unidentified	24
ST 10	3			1	MZ0102	Modern miscellaneous	24
ST 11	1			1	AG0301	Window glass, sized	25
ST 11	1			1	AM1101	Nail, wire common	25
ST 11	1			1	AM1507	Nail fragment, unidentified	25

ST 11	1			3	KF0104	Shell, oyster	25
ST 11	1			1	KG0301	Bottle, colorless bottle glass	25
ST 11	1			1	KG0501	Tableware, probably, clear curved glass	25
ST 11	1			1	KG0512	Other glass vessel	25
ST 11	1			4	ZM1232	Sheet iron/steel	25
ST 11	2			2	AC0199	Brick, unspecified	26
ST 11	2			1	KC0604	Creamware, plain	26
ST 11	2			1	KF0113	Shell, unidentified	26
ST 11	2			1	MF0101	Coal	26
ST 11	2			1	MF0102	Charcoal	26
ST 12	1			5	AC0199	Brick, unspecified	29
ST 12	1			1	AG0301	Window glass, sized	29
ST 12	1			2	AM1507	Nail fragment, unidentified	29
ST 12	1			1	AR0108	Mortar	29
ST 12	1			1	KC0699	White-Bodied Ceramic, unidentified	29
ST 12	1			1	KG0301	Bottle, colorless bottle glass	29
ST 12	1			1	KG0306	Bottle, amber bottle glass	29
ST 12	1			1	KM0311	Screw cap/top	29
ST 12	1			2	MF0101	Coal	29
ST 12	1			1	MM9901	Iron fragment, unidentified	29
ST 12	1			1	MP9901	Plastic, unidentified	29
ST 12	1			1	MZ0103	Unidentified item, composite material	29
ST 12	1			1	ZC0901	Porcelain insulator	29
ST 12	1			1	ZG0903	Chimney globe, crimped edge, machine made	29
ST 12	1			1	ZR0302	Slate, unidentified	29
ST 12	2			33	AC0199	Brick, unspecified	28
ST 12	2			6	AG0301	Window glass, sized	28
ST 12	2			9	AM1507	Nail fragment, unidentified	28
ST 12	2			35	AR0108	Mortar	28
ST 12	2			1	CM0324	Lapel pin	28
ST 12	2			3	KC0105	Porcelain, plain	28
ST 12	2			5	KC0501	Ironstone, plain blue tinted stone china	28
ST 12	2			2	KC0700	Whiteware, plain	28
ST 12	2			3	KF0101	Bone, unidentified	28
ST 12	2			1	KF0102	Animal teeth	28
ST 12	2			2	KG0231	Bottle, amethyst /Manganese decolorized glass	28
ST 12	2			14	KG0301	Bottle, colorless bottle glass	28
ST 12	2			1	KG0304	Bottle, aqua bottle glass	28
ST 12	2			1	KG0409	Pressed glass	28
ST 12	2			1	KG0501	Tableware, probably, clear curved glass	28

ST 12	2			23	MF0101	Coal	28
ST 12	2			36	MF0103	Cinder/clinker	28
ST 12	2			37	MM9901	Iron fragment, unidentified	28
ST 12	2			12	MM9903	Slag	28
ST 12	2			1	MP9901	Plastic, unidentified	28
ST 12	2			1	TC0215	Tobacco pipestem, kaolin, unidentified size	28
ST 12	2			1	ZG0602	Auto safety glass	28
ST 12	2			2	ZR0302	Slate, unidentified	28
ST 12	4			1	AM1505	Nail, cut or wrought, square	30
ST 13	2			5	AC0120	Brick, handmade	27
ST 13	2			5	AG0301	Window glass, sized	27
ST 13	2			1	AM0601	Nail, cut	27
ST 13	2			2	AM1505	Nail, cut or wrought, square	27
ST 13	2			6	AM1507	Nail fragment, unidentified	27
ST 13	2			1	CZ0102	Button, unknown composition	27
ST 13	2			2	KC0105	Porcelain, plain	27
ST 13	2			1	KC0309	Salt glazed/alkaline glazed	27
ST 13	2			2	KC0604	Creamware, plain	27
ST 13	2			2	KC0630	Pearlware, plain	27
ST 13	2			2	KC0631	Pearlware, unidentified decorated	27
ST 13	2			4	KC0700	Whiteware, plain	27
ST 13	2			1	KC0701	Whiteware, indeterminate decoration	27
ST 13	2			1	KC0704	Edgeware, scalloped, rim impressed, curved	27
ST 13	2			1	KC1312	Redware, clear glazed, white slipped	27
ST 13	2			2	KC2103	Line wares, brown or blue over and underglazed	27
ST 13	2			2	KC2104	Annularware, pearlware	27
ST 13	2			3	KC2303	Transfer print, linear, unidentified underglaze	27
ST 13	2			1	KC2800	Yellowware, decorated	27
ST 13	2			4	KF0101	Bone, unidentified	27
ST 13	2			1	KF0105	Shell, clam	27
ST 13	2			1	KG0249	Bottle, embossed "Federal Law Forbids Sale..."	27
ST 13	2			2	KG0300	Bottle, light aqua bottle glass	27
ST 13	2			7	KG0301	Bottle, colorless bottle glass	27
ST 13	2			1	KG0303	Bottle, light green bottle glass	27
ST 13	2			2	KG0306	Bottle, amber bottle glass	27
ST 13	2			2	KG0393	Bottle, olive green unidentified	27
ST 13	2			1	KM0301	Crown cap	27
ST 13	2			1	MF0101	Coal	27
ST 13	2			1	MF0103	Cinder/clinker	27
ST 13	2			1	MM9901	Iron fragment, unidentified	27

ST 13	2			1	PR0102	Slate pencil	27
ST 13	2			1	TC0101	Tobacco pipe bowl, kaolin, plain	27
ST 13	2			2	TC0210	Tobacco pipestem, kaolin, 5/64"	27
ST 13	2			1	ZM0914	Battery	27
ST 13	2			2	ZM1232	Sheet iron/steel	27
ST 13	2			3	ZR0302	Slate, unidentified	27
ST 14	1			1	AG0301	Window glass, sized	31
ST 14	1			1	KF0104	Shell, oyster	31
ST 14	1			3	MF0101	Coal	31
ST 14	1			1	MF0103	Cinder/clinker	31
ST 14	1			1	MM9901	Iron fragment, unidentified	31
ST 14	2			1	KG0301	Bottle, colorless bottle glass	32
ST 14	2			3	MF0101	Coal	32
ST 15	1			2	AC0199	Brick, unspecified	33
ST 15	1			1	KC0501	Ironstone, plain blue tinted stone china	33
ST 15	1			1	KF0104	Shell, oyster	33
ST 15	1			1	KG0301	Bottle, colorless bottle glass	33
ST 15	1			4	MF0101	Coal	33
ST 15	1			1	MF0103	Cinder/clinker	33
ST 15	1			8	MP9901	Plastic, unidentified	33
ST 15	2			1	AC0120	Brick, handmade	34
ST 15	2			4	AM1507	Nail fragment, unidentified	34
ST 15	2			2	KC0105	Porcelain, plain	34
ST 15	2			3	KC0501	Ironstone, plain blue tinted stone china	34
ST 15	2			1	MF0103	Cinder/clinker	34
ST 16	1			2	AC0199	Brick, unspecified	37
ST 16	1			1	KC0401	Ginger beer stoneware bottle	37
ST 16	1			1	KF0104	Shell, oyster	37
ST 16	1			2	KG0301	Bottle, colorless bottle glass	37
ST 16	1			1	KG0303	Bottle, light green bottle glass	37
ST 16	1			1	MM9901	Iron fragment, unidentified	37
ST 16	1			1	ZG0302	Marble, glass, machine made	37
ST 16	1			1	ZM0915	Battery carbon core	37
ST 17	1			6	AC0199	Brick, unspecified	35
ST 17	1			2	AG0301	Window glass, sized	35
ST 17	1			4	AM1507	Nail fragment, unidentified	35
ST 17	1			5	KC0630	Pearlware, plain	35
ST 17	1			1	KC0636	Pearlware, underglaze polychrome painted floral patterns	35
ST 17	1			1	KC1299	Coarse earthenware, unidentified	35
ST 17	1			1	KC2303	Transfer print, linear, unidentified underglaze	35
ST 17	1			5	KF0104	Shell, oyster	35
ST 17	1			1	KG0251	Bottle, applied color lable bottle	35

ST 17	1			11	KG0301	Bottle, colorless bottle glass	35
ST 17	1			1	KG0303	Bottle, light green bottle glass	35
ST 17	1			4	KG0393	Bottle, olive green unidentified	35
ST 17	1			1	MP9901	Plastic, unidentified	35
ST 17	1			5	MZ0101	Material, unidentified	35
ST 17	1			1	TC0211	Tobacco pipestem, kaolin, 6/64"	35
ST 17	1			1	ZM0915	Battery carbon core	35
ST 17	1			2	ZR0302	Slate, unidentified	35
ST 17	2			3	AG0301	Window glass, sized	36
ST 17	2			3	AM1505	Nail, cut or wrought, square	36
ST 17	2			1	KC2702	Refined earthenware, decal	36
ST 17	2			2	KF0104	Shell, oyster	36
ST 17	2			5	KG0301	Bottle, colorless bottle glass	36
ST 17	2			1	KG0393	Bottle, olive green unidentified	36
ST 17	2			1	MF0101	Coal	36
ST 17	2			6	MM9901	Iron fragment, unidentified	36
ST 17	2			4	MZ0101	Material, unidentified	36
ST 17	2			1	ZR0302	Slate, unidentified	36
ST 2	1			66	AC0199	Brick, unspecified	5
ST 2	1			96	AF0102	Asphalt, roofing	5
ST 2	1			1	AG0301	Window glass, sized	5
ST 2	1			9	AR0108	Mortar	5
ST 2	1			1	KF0104	Shell, oyster	5
ST 2	1			1	KG0207	Bottle, embossed letters	5
ST 2	1			1	KG0249	Bottle, embossed "Federal Law Forbids Sale..."	5
ST 2	1			7	KG0301	Bottle, colorless bottle glass	5
ST 2	1			1	KG0303	Bottle, light green bottle glass	5
ST 2	1			1	KG0306	Bottle, amber bottle glass	5
ST 2	1			1	KG0501	Tableware, probably, clear curved glass	5
ST 2	1			31	MF0101	Coal	5
ST 2	1			54	MF0103	Cinder/clinker	5
ST 2	1			24	MM9901	Iron fragment, unidentified	5
ST 2	1			39	MM9903	Slag	5
ST 2	1			5	ZR0302	Slate, unidentified	5
ST 2	2			2	AC0110	Water pipe, ceramic	6
ST 2	2			53	AC0199	Brick, unspecified	6
ST 2	2			6	AF0102	Asphalt, roofing	6
ST 2	2			18	AG0301	Window glass, sized	6
ST 2	2			1	AG0558	Plate Glass (greater than 3.0 mm)	6
ST 2	2			4	AM1199	Nail, wire common, fragment	6
ST 2	2			1	AM1505	Nail, cut or wrought, square	6
ST 2	2			12	AR0108	Mortar	6
ST 2	2			1	CM0303	Eyelet	6
ST 2	2			2	KC0105	Porcelain, plain	6

ST 2	2			1	KC0700	Whiteware, plain	6
ST 2	2			16	KF0101	Bone, unidentified	6
ST 2	2			6	KF0104	Shell, oyster	6
ST 2	2			2	KG0231	Bottle, amethyst /Manganese decolorized glass	6
ST 2	2			2	KG0249	Bottle, embossed "Federal Law Forbids Sale..."	6
ST 2	2			1	KG0251	Bottle, applied color lable bottle	6
ST 2	2			3	KG0252	Bottle, continuous thread finish, machine made	6
ST 2	2			1	KG0300	Bottle, light aqua bottle glass	6
ST 2	2			77	KG0301	Bottle, colorless bottle glass	6
ST 2	2			4	KG0303	Bottle, light green bottle glass	6
ST 2	2			14	KG0306	Bottle, amber bottle glass	6
ST 2	2			1	KG0393	Bottle, olive green unidentified	6
ST 2	2			1	KG0401	Bottle, machine made	6
ST 2	2			10	KG0501	Tableware, probably, clear curved glass	6
ST 2	2			1	KG0516	Other glass	6
ST 2	2			1	KM0301	Crown cap	6
ST 2	2			58	MF0101	Coal	6
ST 2	2			53	MF0102	Charcoal	6
ST 2	2			188	MF0103	Cinder/clinker	6
ST 2	2			111	MM9901	Iron fragment, unidentified	6
ST 2	2			38	MM9903	Slag	6
ST 2	2			2	MR0122	Unmodified stone	6
ST 2	2			5	ZM0506	Aluminum foil	6
ST 2	2			2	ZM1202	Nuts	6
ST 2	2			1	ZM1204	Washer	6
ST 2	2			14	ZR0302	Slate, unidentified	6
ST 2	3			2	AC0199	Brick, unspecified	7
ST 2	3			1	AR0108	Mortar	7
ST 2	3			2	KG0301	Bottle, colorless bottle glass	7
ST 2	3			1	KG0303	Bottle, light green bottle glass	7
ST 2	3			2	KG0501	Tableware, probably, clear curved glass	7
ST 2	3			1	MF0101	Coal	7
ST 2	3			3	MF0103	Cinder/clinker	7
ST 23	1	0-34 cmbs		2	AM1507	Nail fragment, unidentified	69
ST 23	1	0-34 cmbs		1	KC0401	Ginger beer stoneware bottle	69
ST 23	1	0-34 cmbs		1	KC0604	Creamware, plain	69
ST 23	1	0-34 cmbs		1	KC2103	Line wares, brown or blue over and underglazed	69
ST 23	1	0-34 cmbs		1	KG0512	Other glass vessel	69
ST 23	1	0-34 cmbs		2	MF0102	Charcoal	69
ST 23	1	0-34 cmbs		1	MR0122	Unmodified stone	69

ST 24	3			14	AR0108	Mortar	63
ST 24	3			1	MF0102	Charcoal	63
ST 25	1			1	AC0121	Brick, machine made	70
ST 25	1			4	AC0199	Brick, unspecified	70
ST 25	1			7	AG0301	Window glass, sized	70
ST 25	1			1	AM1199	Nail, wire common, fragment	70
ST 25	1			3	AM1507	Nail fragment, unidentified	70
ST 25	1			1	KC0105	Porcelain, plain	70
ST 25	1			1	KC0630	Pearlware, plain	70
ST 25	1			1	KC0700	Whiteware, plain	70
ST 25	1			2	KC1301	Redware, unglazed, coarse	70
ST 25	1			1	KC2103	Line wares, brown or blue over and underglazed	70
ST 25	1			2	KF0104	Shell, oyster	70
ST 25	1			1	KG0300	Bottle, light aqua bottle glass	70
ST 25	1			2	KG0301	Bottle, colorless bottle glass	70
ST 25	1			3	KG0501	Tableware, probably, clear curved glass	70
ST 25	1			2	MF0101	Coal	70
ST 25	1			2	MM9901	Iron fragment, unidentified	70
ST 25	1			1	MM9902	Metal, non iron/steel, unidentified	70
ST 25	1			3	MM9903	Slag	70
ST 25	1			1	ZC0302	Marble, ceramic	70
ST 25	1			1	ZR0302	Slate, unidentified	70
ST 25	2			1	AM0601	Nail, cut	67
ST 25	2			1	KC0113	Porcelain, decal	67
ST 25	2			1	KC0700	Whiteware, plain	67
ST 25	2			2	KG0301	Bottle, colorless bottle glass	67
ST 25	2			1	KG0501	Tableware, probably, clear curved glass	67
ST 28	1			5	KF0104	Shell, oyster	64
ST 28	1			1	KG0301	Bottle, colorless bottle glass	64
ST 28	3			1	AM1507	Nail fragment, unidentified	71
ST 28	3			1	KF0104	Shell, oyster	71
ST 3	1			14	AC0199	Brick, unspecified	8
ST 3	1			3	AF0102	Asphalt, roofing	8
ST 3	1			6	AG0301	Window glass, sized	8
ST 3	1			2	AG0558	Plate Glass (greater than 3.0 mm)	8
ST 3	1			1	AM1101	Nail, wire common	8
ST 3	1			3	AM1505	Nail, cut or wrought, square	8
ST 3	1			2	AR0104	Concrete	8
ST 3	1			3	AR0108	Mortar	8
ST 3	1			1	KC0631	Pearlware, unidentified decorated	8
ST 3	1			1	KG0207	Bottle, embossed letters	8
ST 3	1			1	KG0231	Bottle, amethyst /Manganese decolorized glass	8

ST 3	1			1	KG0243	Bottle, Owen's scar bottle	8
ST 3	1			1	KG0249	Bottle, embossed "Federal Law Forbids Sale..."	8
ST 3	1			27	KG0301	Bottle, colorless bottle glass	8
ST 3	1			13	KG0306	Bottle, amber bottle glass	8
ST 3	1			1	KG0401	Bottle, machine made	8
ST 3	1			2	KG0501	Tableware, probably, clear curved glass	8
ST 3	1			2	MF0101	Coal	8
ST 3	1			7	MM9903	Slag	8
ST 3	1			2	ZM0911	Electrical wire	8
ST 3	2			3	AC0199	Brick, unspecified	9
ST 3	2			2	AG0301	Window glass, sized	9
ST 3	2			3	AM1507	Nail fragment, unidentified	9
ST 3	2			2	KC0700	Whiteware, plain	9
ST 3	2			1	KG0243	Bottle, Owen's scar bottle	9
ST 3	2			8	KG0301	Bottle, colorless bottle glass	9
ST 3	2			1	KG0306	Bottle, amber bottle glass	9
ST 3	2			1	KG0393	Bottle, olive green unidentified	9
ST 3	2			3	MF0103	Cinder/clinker	9
ST 3	2			5	MM9903	Slag	9
ST 31	1 and 2	0-57 cmbs		1	KC2206	Polychrome painted, large floral	66
ST 31	1 and 2	0-57 cmbs		2	MM9901	Iron fragment, unidentified	66
ST 31	3 bottom	86-121 cmbs		5	AC0120	Brick, handmade	68
ST 31	3 bottom	86-121 cmbs		3	AG0301	Window glass, sized	68
ST 31	3 bottom	86-121 cmbs		5	AM1505	Nail, cut or wrought, square	68
ST 31	3 bottom	86-121 cmbs		2	AM1507	Nail fragment, unidentified	68
ST 31	3 bottom	86-121 cmbs		1	KC0700	Whiteware, plain	68
ST 31	3 bottom	86-121 cmbs		1	KC0701	Whiteware, indeterminate decoration	68
ST 31	3 bottom	86-121 cmbs		2	KF0101	Bone, unidentified	68
ST 31	3 bottom	86-121 cmbs		2	KF0105	Shell, clam	68
ST 31	3 bottom	86-121 cmbs		1	KG0301	Bottle, colorless bottle glass	68
ST 31	3 bottom	86-121 cmbs		1	KG0393	Bottle, olive green unidentified	68
ST 31	3 bottom	86-121 cmbs		3	MF0103	Cinder/clinker	68
ST 31	3 bottom	86-121 cmbs		2	ZR0302	Slate, unidentified	68

ST 31	3 (top)		67-86 cmbs	3	AC0120	Brick, handmade	65
ST 31	3 (top)		67-86 cmbs	1	AG0301	Window glass, sized	65
ST 31	3 (top)		67-86 cmbs	1	AM1714	Hinge, iron, unidentified	65
ST 31	3 (top)		67-86 cmbs	1	KC2801	Yellowware, plain	65
ST 31	3 (top)		67-86 cmbs	9	KF0105	Shell, clam	65
ST 31	3 (top)		67-86 cmbs	1	KG0393	Bottle, olive green unidentified	65
ST 31	3 (top)		67-86 cmbs	3	MF0103	Cinder/clinker	65
ST 31	3 (top)		67-86 cmbs	1	MM9901	Iron fragment, unidentified	65
ST 31	3 (top)		67-86 cmbs	1	RM0102	Brass/copper cartridge	65
ST 31	3 (top)		67-86 cmbs	3	ZR0302	Slate, unidentified	65
ST 32	1			1	AM1505	Nail, cut or wrought, square	72
ST 32	1			1	KC1301	Redware, unglazed, coarse	72
ST 32	1			1	KC1304	Redware, black glazed, unrefined	72
ST 32	1			1	KG0501	Tableware, probably, clear curved glass	72
ST 38	2			2	AC0199	Brick, unspecified	138
ST 38	2			1	AR0108	Mortar	138
ST 38	2			2	MM9903	Slag	138
ST 38	2			1	ZR0302	Slate, unidentified	138
ST 39	2			3	AC0199	Brick, unspecified	140
ST 4	1			14	AC0199	Brick, unspecified	10
ST 4	1			2	AF0102	Asphalt, roofing	10
ST 4	1			3	AG0301	Window glass, sized	10
ST 4	1			5	AM1507	Nail fragment, unidentified	10
ST 4	1			1	AR0109	Tiles, asbestos (ceiling, etc.)	10
ST 4	1			1	KC0398	Lead glazed, unidentified	10
ST 4	1			1	KC0501	Ironstone, plain blue tinted stone china	10
ST 4	1			1	KF0104	Shell, oyster	10
ST 4	1			2	KF0105	Shell, clam	10
ST 4	1			1	KG0182	Milk Glass	10
ST 4	1			2	KG0300	Bottle, light aqua bottle glass	10
ST 4	1			7	KG0301	Bottle, colorless bottle glass	10
ST 4	1			2	KG0306	Bottle, amber bottle glass	10
ST 4	1			4	MF0101	Coal	10
ST 4	1			2	MM9901	Iron fragment, unidentified	10
ST 4	1			7	MM9903	Slag	10
ST 4	1			1	ZM1211	Wire	10
ST 4	1			1	ZR0302	Slate, unidentified	10
ST 4	2			10	AC0121	Brick, machine made	11
ST 4	2			4	AF0102	Asphalt, roofing	11
ST 4	2			3	AG0301	Window glass, sized	11
ST 4	2			1	AM1199	Nail, wire common, fragment	11
ST 4	2			2	AM1507	Nail fragment, unidentified	11
ST 4	2			1	AR0104	Concrete	11
ST 4	2			1	AR0108	Mortar	11

ST 4	2			1	KC0105	Porcelain, plain	11
ST 4	2			2	KG0507	Tableware, glass cup/mug	11
ST 4	2			1	MF0101	Coal	11
ST 4	2			1	MF0103	Cinder/clinker	11
ST 4	2			1	MM9901	Iron fragment, unidentified	11
ST 4	2			1	MM9903	Slag	11
ST 4	3			28	AC0199	Brick, unspecified	12
ST 4	3			1	AM1505	Nail, cut or wrought, square	12
ST 4	3			3	AM1507	Nail fragment, unidentified	12
ST 4	3			1	KC0105	Porcelain, plain	12
ST 4	3			1	KC0401	Ginger beer stoneware bottle	12
ST 4	3			1	KC0501	Ironstone, plain blue tinted stone china	12
ST 4	3			1	KC0699	White-Bodied Ceramic, unidentified	12
ST 4	3			2	KF0101	Bone, unidentified	12
ST 4	3			5	KF0104	Shell, oyster	12
ST 4	3			2	KF0105	Shell, clam	12
ST 4	3			1	KG0231	Bottle, amethyst /Manganese decolorized glass	12
ST 4	3			1	KG0300	Bottle, light aqua bottle glass	12
ST 4	3			2	KG0301	Bottle, colorless bottle glass	12
ST 4	3			1	KG0303	Bottle, light green bottle glass	12
ST 4	3			1	KG0501	Tableware, probably, clear curved glass	12
ST 4	3			2	MF0101	Coal	12
ST 4	3			9	MF0103	Cinder/clinker	12
ST 4	3			1	MM9901	Iron fragment, unidentified	12
ST 4	3			2	ZR0302	Slate, unidentified	12
ST 4	4			1	AC0110	Water pipe, ceramic	13
ST 4	4			17	AC0120	Brick, handmade	13
ST 4	4			3	AG0301	Window glass, sized	13
ST 4	4			6	AM1507	Nail fragment, unidentified	13
ST 4	4			8	AR0108	Mortar	13
ST 4	4			1	KC2801	Yellowware, plain	13
ST 4	4			1	KF0101	Bone, unidentified	13
ST 4	4			4	KF0104	Shell, oyster	13
ST 4	4			2	KG0301	Bottle, colorless bottle glass	13
ST 4	4			1	KG0306	Bottle, amber bottle glass	13
ST 4	4			1	MF0101	Coal	13
ST 4	4			2	MF0102	Charcoal	13
ST 4	4			5	MM9901	Iron fragment, unidentified	13
ST 4	4			5	MM9903	Slag	13
ST 4	4			1	MR0122	Unmodified stone	13
ST 4	4			1	ZR0302	Slate, unidentified	13
ST 4	5			4	AC0120	Brick, handmade	14
ST 4	5			3	AM1505	Nail, cut or wrought, square	14

ST 4	5			12	AM1507	Nail fragment, unidentified	14
ST 4	5			1	KC0903	Mocha on white body	14
ST 4	5			2	KC2307	Transfer print, stippled, blue underglaze	14
ST 4	5			1	KF0101	Bone, unidentified	14
ST 4	5			2	KF0104	Shell, oyster	14
ST 4	5			2	KG0393	Bottle, olive green unidentified	14
ST 4	5			1	MF0101	Coal	14
ST 4	5			1	MF0102	Charcoal	14
ST 4	5			2	MF0103	Cinder/clinker	14
ST 4	5			1	MM9901	Iron fragment, unidentified	14
ST 4	5			1	MM9903	Slag	14
ST 4	5			2	ZR0302	Slate, unidentified	14
ST 4	6			4	AM1507	Nail fragment, unidentified	15
ST 4	6			1	KG0393	Bottle, olive green unidentified	15
ST 4	6			1	MF0101	Coal	15
ST 41	1			1	KC0105	Porcelain, plain	137
ST 41	1			1	MM9903	Slag	137
ST 41	2			1	ZR2412	Flake, thinning 0% cortex	139
ST 43	1			1	KG0393	Bottle, olive green unidentified	134
ST 43	1			2	MM9901	Iron fragment, unidentified	134
ST 43	2			1	AG0301	Window glass, sized	135
ST 43	2			1	KC0700	Whiteware, plain	135
ST 43	2			1	KC3110	Plain ceramic	135
ST 43	2			1	MF0103	Cinder/clinker	135
ST 43	2			2	MM9903	Slag	135
ST 44	3		31-50 cmbs	1	KG0512	Other glass vessel	141
ST 45	1		0-37 cmbs	2	AC0199	Brick, unspecified	143
ST 45	1		0-37 cmbs	1	AR0108	Mortar	143
ST 45	1		0-37 cmbs	2	KC0105	Porcelain, plain	143
ST 45	1		0-37 cmbs	1	KC0113	Porcelain, decal	143
ST 45	1		0-37 cmbs	1	KG0182	Milk Glass	143
ST 45	1		0-37 cmbs	2	KG0231	Bottle, amethyst /Manganese decolorized glass	143
ST 45	1		0-37 cmbs	1	KG0300	Bottle, light aqua bottle glass	143
ST 45	1		0-37 cmbs	2	KG0301	Bottle, colorless bottle glass	143
ST 45	1		0-37 cmbs	1	RM0103	Shotgun shell	143
ST 45	1		0-37 cmbs	1	ZR0302	Slate, unidentified	143
ST 47	1		0-20 cmbs	1	AC0121	Brick, machine made	142
ST 47	1		0-20 cmbs	1	AG0301	Window glass, sized	142
ST 47	1		0-20 cmbs	3	AM1505	Nail, cut or wrought, square	142
ST 47	1		0-20 cmbs	1	KG0300	Bottle, light aqua bottle glass	142
ST 48	1 and 2		0-27 cmbs	2	AR0108	Mortar	127
ST 48	1 and 2		0-27 cmbs	3	KF0104	Shell, oyster	127
ST 48	1 and 2		0-27 cmbs	1	KG0301	Bottle, colorless bottle glass	127
ST 48	1 and 2		0-27 cmbs	1	KG0401	Bottle, machine made	127

ST 48	1 and 2		0-27 cmbs	1	MM9901	Iron fragment, unidentified	127
ST 48	3		27-40 cmbs	1	AC0120	Brick, handmade	126
ST 48	3		27-40 cmbs	1	AG0301	Window glass, sized	126
ST 48	3		27-40 cmbs	1	AR0108	Mortar	126
ST 48	3		27-40 cmbs	1	KC0699	White-Bodied Ceramic, unidentified	126
ST 48	3		27-40 cmbs	1	KC1301	Redware, unglazed, coarse	126
ST 48	3		27-40 cmbs	7	KG0301	Bottle, colorless bottle glass	126
ST 48	3		27-40 cmbs	2	KG0501	Tableware, probably, clear curved glass	126
ST 48	3		27-40 cmbs	1	MM9903	Slag	126
ST 48	4		40-65 cmbs	2	AC0199	Brick, unspecified	128
ST 48	4		40-65 cmbs	2	KF0104	Shell, oyster	128
ST 48	4		40-65 cmbs	1	MF0101	Coal	128
ST 48	4		40-65 cmbs	1	MM9901	Iron fragment, unidentified	128
ST 48	4		40-65 cmbs	1	ZR0302	Slate, unidentified	128
ST 48	5		65-98 cmbs	1	KG0306	Bottle, amber bottle glass	129
ST 48	5		65-98 cmbs	1	MZ0101	Material, unidentified	129
ST 49	2			3	AC0121	Brick, machine made	147
ST 49	2			1	AM1199	Nail, wire common, fragment	147
ST 49	2			2	AM1507	Nail fragment, unidentified	147
ST 49	2			1	MP9901	Plastic, unidentified	147
ST 49	3			3	AC0199	Brick, unspecified	148
ST 49	3			1	MM9901	Iron fragment, unidentified	148
ST 49	3			1	ZR0302	Slate, unidentified	148
ST 50	2			4	AC0199	Brick, unspecified	136
ST 50	2			2	AF0105	Asphalt	136
ST 50	2			1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	136
ST 50	2			2	KF0104	Shell, oyster	136
ST 50	2			1	KF0230	Seed, other	136
ST 50	2			4	MF0101	Coal	136
ST 50	2			1	MR0122	Unmodified stone	136
ST 50	2			1	ZR0302	Slate, unidentified	136
ST 54	3/4			8	AC0199	Brick, unspecified	132
ST 54	3/4			1	AG0301	Window glass, sized	132
ST 54	3/4			1	AR0104	Concrete	132
ST 54	3/4			9	AR0108	Mortar	132
ST 54	3/4			1	KF0104	Shell, oyster	132
ST 54	3/4			1	KG0301	Bottle, colorless bottle glass	132
ST 54	3/4			2	ZR0302	Slate, unidentified	132
ST 57			0-45 cmbs	1	KG0300	Bottle, light aqua bottle glass	130
ST 57			0-45 cmbs	1	KG0306	Bottle, amber bottle glass	130
ST 58			0-45 cmbs	1	AG0301	Window glass, sized	114
ST 58			0-45 cmbs	1	KG0301	Bottle, colorless bottle glass	114
ST 58			0-45 cmbs	1	MM9901	Iron fragment, unidentified	114
ST 59			0-40 cmbs	1	AC0199	Brick, unspecified	125

ST 59			0-40 cmbs	1	KC0105	Porcelain, plain	125
ST 60	1		0-40 cmbs	1	KG0306	Bottle, amber bottle glass	144
ST 62			0-35 cmbs	1	AC0121	Brick, machine made	120
ST 62			0-35 cmbs	1	KG0301	Bottle, colorless bottle glass	120
ST 62			0-35 cmbs	1	KG0303	Bottle, light green bottle glass	120
ST 62			0-35 cmbs	1	KG0306	Bottle, amber bottle glass	120
ST 63			15-40 cmbs	1	AR0108	Mortar	113
ST 63			15-40 cmbs	1	KC0105	Porcelain, plain	113
ST 63			15-40 cmbs	1	KF0104	Shell, oyster	113
ST 63			15-40 cmbs	1	KG0300	Bottle, light aqua bottle glass	113
ST 64			25-40 cmbs	4	AC0199	Brick, unspecified	115
ST 64			25-40 cmbs	1	KG0301	Bottle, colorless bottle glass	115
ST 65	3			1	AC0199	Brick, unspecified	103
ST 65	5			1	KG0300	Bottle, light aqua bottle glass	104
ST 66			35- cmbs	2	KG0300	Bottle, light aqua bottle glass	112
ST 66			35- cmbs	9	KG0301	Bottle, colorless bottle glass	112
ST 66			35- cmbs	1	KG0304	Bottle, aqua bottle glass	112
ST 66			35- cmbs	1	KG0306	Bottle, amber bottle glass	112
ST 66			35- cmbs	2	MF0101	Coal	112
ST 66			35- cmbs	1	MM9901	Iron fragment, unidentified	112
ST 66			35- cmbs	1	ZC0902	Porcelain electrical fuse	112
ST 67			30-50 cmbs	1	AC0199	Brick, unspecified	117
ST 67			30-50 cmbs	1	AG0301	Window glass, sized	117
ST 67			30-50 cmbs	1	KG0501	Tableware, probably, clear curved glass	117
ST 68	2			5	AC0121	Brick, machine made	131
ST 68	2			2	AG0301	Window glass, sized	131
ST 68	2			1	AM1199	Nail, wire common, fragment	131
ST 68	2			2	KF0104	Shell, oyster	131
ST 68	2			1	KG0301	Bottle, colorless bottle glass	131
ST 68	2			1	MF0101	Coal	131
ST 68	2			1	MM9901	Iron fragment, unidentified	131
ST 68	3			2	AC0121	Brick, machine made	119
ST 68	3			1	AG0301	Window glass, sized	119
ST 68	3			1	AR0108	Mortar	119
ST 68	3			1	KG0306	Bottle, amber bottle glass	119
ST 69			25-55 cmbs	6	AC0199	Brick, unspecified	145
ST 69			25-55 cmbs	5	AR0108	Mortar	145
ST 69			25-55 cmbs	9	KF0104	Shell, oyster	145
ST 69			25-55 cmbs	2	KG0301	Bottle, colorless bottle glass	145
ST 69			25-55 cmbs	1	MM9901	Iron fragment, unidentified	145
ST 7	2-3			1	KG0300	Bottle, light aqua bottle glass	39
ST 7	2-3			5	KG0393	Bottle, olive green unidentified	39
ST 7	2-3			1	ZM1247	Screw	39
ST 70			40-63 cmbs	9	AC0121	Brick, machine made	146

ST 70			40-63 cmbs	1	AG0301	Window glass, sized	146
ST 70			40-63 cmbs	2	AM0699	Nail, cut, fragment	146
ST 70			40-63 cmbs	1	KC1301	Redware, unglazed, coarse	146
ST 70			40-63 cmbs	1	KC1303	Redware, fine black glazed	146
ST 70			40-63 cmbs	1	KC2303	Transfer print, linear, unidentified underglaze	146
ST 70			40-63 cmbs	12	KF0104	Shell, oyster	146
ST 70			40-63 cmbs	2	KG0300	Bottle, light aqua bottle glass	146
ST 70			40-63 cmbs	2	KG0501	Tableware, probably, clear curved glass	146
ST 70			40-63 cmbs	5	MF0101	Coal	146
ST 70			40-63 cmbs	2	MM9903	Slag	146
ST 70			40-63 cmbs	1	TC0103	Tobacco pipe bowl, kaolin, molded	146
ST 70			63-93 cmbs	1	FG0202	Mirror glass	133
ST 70			63-93 cmbs	1	KC0222	Rhenish blue and gray	133
ST 70			63-93 cmbs	1	MF0101	Coal	133
ST 70			63-93 cmbs	2	ZR0302	Slate, unidentified	133
ST 70	1		0-30 cmbs	1	KC0604	Creamware, plain	102
ST 70	1		0-30 cmbs	1	KC0605	Creamware, molded	102
ST 70	1		0-30 cmbs	1	KG0301	Bottle, colorless bottle glass	102
ST 70	1		0-30 cmbs	1	MZ0101	Material, unidentified	102
ST 71	5			1	AC0199	Brick, unspecified	118
ST 71	5			1	AG0558	Plate Glass (greater than 3.0 mm)	118
ST 71	5			1	AM1505	Nail, cut or wrought, square	118
ST 71	5			3	KF0104	Shell, oyster	118
ST 71	5			1	MF0101	Coal	118
ST 72			25-50 cmbs	1	AM1505	Nail, cut or wrought, square	101
ST 72			25-50 cmbs	3	KF0104	Shell, oyster	101
ST 72			25-50 cmbs	1	KG0306	Bottle, amber bottle glass	101
ST 72			25-50 cmbs	1	MF0101	Coal	101
ST 72			25-50 cmbs	1	MM9901	Iron fragment, unidentified	101
ST 73			0-35 cmbs	1	AC0121	Brick, machine made	123
ST 73			0-35 cmbs	1	KF0104	Shell, oyster	123
ST 73			0-35 cmbs	1	KG0231	Bottle, amethyst /Manganese decolorized glass	123
ST 73			0-35 cmbs	1	KG0501	Tableware, probably, clear curved glass	123
ST 73			0-35 cmbs	1	RM0102	Brass/copper cartridge	123
ST 73	2		35-85 cmbs	1	AC0121	Brick, machine made	124
ST 73	2		35-85 cmbs	2	AM1507	Nail fragment, unidentified	124
ST 73	2		35-85 cmbs	23	AR0108	Mortar (Tabby)	124
ST 73	2		35-85 cmbs	39	KF0104	Shell, oyster	124
ST 73	2		35-85 cmbs	1	KG0299	Bottle, amber/olive green glass	124
ST 73	2		35-85 cmbs	1	KG0302	Bottle, dark green bottle glass	124
ST 73	2		35-85 cmbs	1	KG0306	Bottle, amber bottle glass	124

ST 73	2	35-85 cmbs	2	KG0501	Tableware, probably, clear curved glass	124
ST 73	2	35-85 cmbs	4	MF0101	Coal	124
ST 73	2	35-85 cmbs	1	RM0102	Brass/copper cartridge	124
ST 73	2	35-85 cmbs	8	ZM1232	Sheet iron/steel	124
ST 73	2	35-85 cmbs	1	ZR0302	Slate, unidentified	124
ST 74	1		10	AC0199	Brick, unspecified	122
ST 74	1		1	AG0301	Window glass, sized	122
ST 74	1		1	AM1505	Nail, cut or wrought, square	122
ST 74	1		3	KC0630	Pearlware, plain	122
ST 74	1		1	KC0632	Pearlware, underglaze blue floral h.p.	122
ST 74	1		1	KC0636	Pearlware, underglaze polychrome painted floral patterns	122
ST 74	1		2	KC1302	Redware, clear glazed, plain	122
ST 74	1		1	KC2103	Line wares, brown or blue over and underglazed	122
ST 74	1		1	KF0101	Bone, unidentified	122
ST 74	1		1	KF0104	Shell, oyster	122
ST 74	1		3	KG0301	Bottle, colorless bottle glass	122
ST 74	1		3	KG0501	Tableware, probably, clear curved glass	122
ST 74	1		6	MF0101	Coal	122
ST 74	1		2	MM9901	Iron fragment, unidentified	122
ST 74	1		1	TC0209	Tobacco pipestem, kaolin, 4/64"	122
ST 74	1		3	ZM1211	Wire	122
ST 74	2		13	AC0199	Brick, unspecified	100
ST 74	2		2	KC0630	Pearlware, plain	100
ST 74	2		1	KC0631	Pearlware, unidentified decorated	100
ST 74	2		2	KG0301	Bottle, colorless bottle glass	100
ST 74	2		1	MF0103	Cinder/clinker	100
ST 75	1	0-9 cmbs	2	AG0301	Window glass, sized	109
ST 75	1	0-9 cmbs	11	AR0108	Mortar	109
ST 75	1	0-9 cmbs	1	KC0105	Porcelain, plain	109
ST 75	1	0-9 cmbs	1	KC0700	Whiteware, plain	109
ST 75	1	0-9 cmbs	1	KC1504	Delftware, blue h.p.	109
ST 75	1	0-9 cmbs	1	KG0301	Bottle, colorless bottle glass	109
ST 75	1	0-9 cmbs	1	KG0306	Bottle, amber bottle glass	109
ST 75	1	0-9 cmbs	1	KM0301	Crown cap	109
ST 75	1	0-9 cmbs	1	MF0101	Coal	109
ST 75	1	0-9 cmbs	1	MM9901	Iron fragment, unidentified	109
ST 75	1	0-9 cmbs	2	ZR0302	Slate, unidentified	109
ST 75	2	9-60 cmbs	1	AR0104	Concrete	108
ST 76	1		2	AC0199	Brick, unspecified	105
ST 76	1		2	AG0301	Window glass, sized	105
ST 76	1		1	AM1507	Nail fragment, unidentified	105
ST 76	1		1	AR0108	Mortar	105

ST 76	1			1	KC0604	Creamware, plain	105
ST 76	1			1	KC0630	Pearlware, plain	105
ST 76	1			2	KC0632	Pearlware, underglaze blue floral h.p.	105
ST 76	1			1	KC0636	Pearlware, underglaze polychrome painted floral patterns	105
ST 76	1			1	KC1299	Coarse earthenware, unidentified	105
ST 76	1			1	KC2103	Line wares, brown or blue over and underglazed	105
ST 76	1			1	KG0304	Bottle, aqua bottle glass	105
ST 76	1			1	KG0306	Bottle, amber bottle glass	105
ST 76	1			1	MF0101	Coal	105
ST 76	1			1	MF0103	Cinder/clinker	105
ST 76	1			2	ZR0302	Slate, unidentified	105
ST 76	1			1	ZR2422	Flake, unspecialized 0% cortex	105
ST 76	2			4	AC0199	Brick, unspecified	110
ST 76	2			1	KC0231	Molded refined white salt glazed	110
ST 76	2			1	KC3110	Plain ceramic	110
ST 76	2			1	MM9901	Iron fragment, unidentified	110
ST 77	1	0-22 cmbs		1	AR0104	Concrete	107
ST 77	1	0-22 cmbs		1	AR0108	Mortar	107
ST 77	1	0-22 cmbs		1	KC1303	Redware, fine black glazed	107
ST 77	1	0-22 cmbs		4	KG0301	Bottle, colorless bottle glass	107
ST 77	1	0-22 cmbs		1	MF0101	Coal	107
ST 77	1	0-22 cmbs		1	MM9903	Slag	107
ST 79	1			1	AG0301	Window glass, sized	99
ST 79	1			1	KC2103	Line wares, brown or blue over and underglazed	99
ST 79	1			1	KC2308	Transfer print, stippled, dark blue underglaze	99
ST 79	1			2	KC2800	Yellowware, decorated	99
ST 79	1			3	KG0300	Bottle, light aqua bottle glass	99
ST 79	1			5	KG0301	Bottle, colorless bottle glass	99
ST 79	1			3	KG0303	Bottle, light green bottle glass	99
ST 79	1			1	KG0306	Bottle, amber bottle glass	99
ST 79	1			1	KG0501	Tableware, probably, clear curved glass	99
ST 79	1			1	MF0101	Coal	99
ST 79	1			2	MM9901	Iron fragment, unidentified	99
ST 79	1			1	MP9901	Plastic, unidentified	99
ST 79	2			1	AM1507	Nail fragment, unidentified	116
ST 79	2			1	KC0398	Lead glazed, unidentified	116
ST 79	2			1	KG0300	Bottle, light aqua bottle glass	116
ST 79	2			2	KG0301	Bottle, colorless bottle glass	116
ST 79	2			1	KG0306	Bottle, amber bottle glass	116
ST 79	2			1	MM9901	Iron fragment, unidentified	116

ST 79	2			1	MZ0101	Material, unidentified	116
ST 79	3			1	AC0121	Brick, machine made	121
ST 79	3			2	AG0301	Window glass, sized	121
ST 79	3			1	KC1304	Redware, black glazed, unrefined	121
ST 79	3			2	KF0104	Shell, oyster	121
ST 79	3			2	KG0301	Bottle, colorless bottle glass	121
ST 79	3			1	MM9901	Iron fragment, unidentified	121
ST 79	3			1	MM9903	Slag	121
ST 79	3			2	ZR0302	Slate, unidentified	121
ST 8	1			1	AC0110	Water pipe, ceramic	16
ST 8	1			9	AC0199	Brick, unspecified	16
ST 8	1			1	AF0102	Asphalt, roofing	16
ST 8	1			6	AG0301	Window glass, sized	16
ST 8	1			1	AG0558	Plate Glass (greater than 3.0 mm)	16
ST 8	1			5	AM1507	Nail fragment, unidentified	16
ST 8	1			1	AR0104	Concrete	16
ST 8	1			1	KC0501	Ironstone, plain blue tinted stone china	16
ST 8	1			11	KG0301	Bottle, colorless bottle glass	16
ST 8	1			2	KG0304	Bottle, aqua bottle glass	16
ST 8	1			1	KG0306	Bottle, amber bottle glass	16
ST 8	1			1	KG0401	Bottle, machine made	16
ST 8	1			2	MF0101	Coal	16
ST 8	1			4	MF0103	Cinder/clinker	16
ST 8	1			1	MM9901	Iron fragment, unidentified	16
ST 8	1			4	MM9903	Slag	16
ST 8	1			1	MZ0102	Modern miscellaneous	16
ST 8	1			18	ZM1232	Sheet iron/steel	16
ST 8	2			4	AC0121	Brick, machine made	17
ST 8	2			5	AG0301	Window glass, sized	17
ST 8	2			1	AM1101	Nail, wire common	17
ST 8	2			5	AM1507	Nail fragment, unidentified	17
ST 8	2			1	AR0108	Mortar	17
ST 8	2			1	KC0105	Porcelain, plain	17
ST 8	2			4	KF0104	Shell, oyster	17
ST 8	2			1	KG0300	Bottle, light aqua bottle glass	17
ST 8	2			3	KG0301	Bottle, colorless bottle glass	17
ST 8	2			1	KG0306	Bottle, amber bottle glass	17
ST 8	2			4	MF0101	Coal	17
ST 8	2			3	MF0103	Cinder/clinker	17
ST 8	2			1	MM9901	Iron fragment, unidentified	17
ST 8	3			1	AC0199	Brick, unspecified	18
ST 8	3			1	AG0301	Window glass, sized	18
ST 8	3			1	AM1507	Nail fragment, unidentified	18

ST 8	3			4	AR0108	Mortar	18
ST 8	3			1	KF0104	Shell, oyster	18
ST 8	3			1	MF0101	Coal	18
ST 8	3			2	MF0103	Cinder/clinker	18
ST 8	3			1	MF0203	Rubber, unidentified	18
ST 8	3			1	MM9901	Iron fragment, unidentified	18
ST 8	3			1	MZ0102	Modern miscellaneous	18
ST 80	1		0-18 cmbs	3	AC0199	Brick, unspecified	106
ST 80	1		0-18 cmbs	1	AM1505	Nail, cut or wrought, square	106
ST 80	1		0-18 cmbs	1	AR0108	Mortar	106
ST 80	1		0-18 cmbs	1	KC0636	Pearlware, underglaze polychrome painted floral patterns	106
ST 80	1		0-18 cmbs	1	KF0104	Shell, oyster	106
ST 80	1		0-18 cmbs	1	KG0231	Bottle, amethyst /Manganese decolorized glass	106
ST 80	1		0-18 cmbs	1	KG0251	Bottle, applied color lable bottle	106
ST 80	1		0-18 cmbs	1	KG0299	Bottle, amber/olive green glass	106
ST 80	1		0-18 cmbs	3	KG0300	Bottle, light aqua bottle glass	106
ST 80	1		0-18 cmbs	20	KG0301	Bottle, colorless bottle glass	106
ST 80	1		0-18 cmbs	6	KG0303	Bottle, light green bottle glass	106
ST 80	1		0-18 cmbs	1	KG0393	Bottle, olive green unidentified	106
ST 80	1		0-18 cmbs	1	KM0301	Crown cap	106
ST 80	1		0-18 cmbs	1	MF0101	Coal	106
ST 80	1		0-18 cmbs	2	MM9901	Iron fragment, unidentified	106
ST 80	1		0-18 cmbs	1	PM0120	Coin	106
ST 9	1			9	AC0199	Brick, unspecified	19
ST 9	1			7	AG0301	Window glass, sized	19
ST 9	1			5	AG0558	Plate Glass (greater than 3.0 mm)	19
ST 9	1			1	AM1507	Nail fragment, unidentified	19
ST 9	1			2	AR0108	Mortar	19
ST 9	1			1	KF0102	Animal teeth	19
ST 9	1			1	KF0105	Shell, clam	19
ST 9	1			1	KG0182	Milk Glass	19
ST 9	1			11	KG0301	Bottle, colorless bottle glass	19
ST 9	1			1	KG0393	Bottle, olive green unidentified	19
ST 9	1			4	MF0101	Coal	19
ST 9	1			2	MF0103	Cinder/clinker	19
ST 9	1			2	MM9901	Iron fragment, unidentified	19
ST 9	1			1	MZ0101	Material, unidentified	19
ST 9	1			3	MZ0102	Modern miscellaneous	19
ST 9	1			1	ZC0901	Porcelain insulator	19
ST 9	1			1	ZM1201	Bolts	19
ST 9	1			1	ZM1211	Wire	19
ST 9	2			7	AC0120	Brick, handmade	20

ST 9	2			8	AG0301	Window glass, sized	20
ST 9	2			11	AG0558	Plate Glass (greater than 3.0 mm)	20
ST 9	2			2	AM1199	Nail, wire common, fragment	20
ST 9	2			2	AM1505	Nail, cut or wrought, square	20
ST 9	2			2	AR0108	Mortar	20
ST 9	2			2	KC0113	Porcelain, decal	20
ST 9	2			1	KC2103	Line wares, brown or blue over and underglazed	20
ST 9	2			5	KF0101	Bone, unidentified	20
ST 9	2			1	KF0104	Shell, oyster	20
ST 9	2			3	KG0300	Bottle, light aqua bottle glass	20
ST 9	2			4	KG0301	Bottle, colorless bottle glass	20
ST 9	2			2	KG0306	Bottle, amber bottle glass	20
ST 9	2			6	MF0101	Coal	20
ST 9	2			5	MF0103	Cinder/clinker	20
ST 9	2			3	MM9903	Slag	20
ST 9	2			1	ZM0915	Battery carbon core	20
ST 9	3			3	AC0199	Brick, unspecified	21
ST 9	3			1	AG0558	Plate Glass (greater than 3.0 mm)	21
ST 9	3			2	KF0101	Bone, unidentified	21
ST 9	3			1	KG0300	Bottle, light aqua bottle glass	21
ST 9	3			4	MF0101	Coal	21
ST 9	3			2	MF0103	Cinder/clinker	21
ST 9	3			4	MM9903	Slag	21
ST A	2			1	KG0393	Bottle, olive green unidentified	97
ST A	2			1	KG0397	Bottle, olive green spirit bottle glass	97
ST A	2			1	KG0504	Tableware, goblet stem	97
ST A	3			1	TC0209	Tobacco pipestem, kaolin, 4/64"	98
ST D	2		12-48 cmbs	1	AG0301	Window glass, sized	96
ST D	2		12-48 cmbs	1	AM1505	Nail, cut or wrought, square	96
ST D	2		12-48 cmbs	1	ZR2422	Flake, unspecialized 0% cortex	96
TU 1		1		1	RP0103	Miscellaneous gun parts, plastic	47
TU 1		2		1	AC0121	Brick, machine made	45
TU 1		2		19	AC0199	Brick, unspecified	45
TU 1		2		4	AG0301	Window glass, sized	45
TU 1		2		6	AM1507	Nail fragment, unidentified	45
TU 1		2		2	AR0104	Concrete	45
TU 1		2		4	AR0108	Mortar	45
TU 1		2		3	KC0399	Stoneware, unidentified	45
TU 1		2		1	KC0501	Ironstone, plain blue tinted stone china	45
TU 1		2		4	KC0604	Creamware, plain	45
TU 1		2		1	KC0609	Creamware, overglazed transfer printed	45

TU 1	2		2	KC0630	Pearlware, plain	45
TU 1	2		1	KC0631	Pearlware, unidentified decorated	45
TU 1	2		1	KC0634	Pearlware, underglaze blue non-Chinese motifs h.p.	45
TU 1	2		1	KC1102	Slipware, combed clear glaze	45
TU 1	2		1	KC1309	Redware, brown glazed, unrefined	45
TU 1	2		1	KC2103	Line wares, brown or blue over and underglazed	45
TU 1	2		1	KC2307	Transfer print, stippled, blue underglaze	45
TU 1	2		1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	45
TU 1	2		23	KF0101	Bone, unidentified	45
TU 1	2		10	KF0104	Shell, oyster	45
TU 1	2		5	KG0300	Bottle, light aqua bottle glass	45
TU 1	2		7	KG0301	Bottle, colorless bottle glass	45
TU 1	2		13	KG0393	Bottle, olive green unidentified	45
TU 1	2		5	MF0101	Coal	45
TU 1	2		3	MF0103	Cinder/clinker	45
TU 1	2		27	MM9901	Iron fragment, unidentified	45
TU 1	2		10	MM9902	Metal, non iron/steel, unidentified	45
TU 1	2		5	MM9903	Slag	45
TU 1	2		1	MR0122	Unmodified stone	45
TU 1	2		7	MZ0101	Material, unidentified	45
TU 1	2		1	RM0102	Brass/copper cartridge	45
TU 1	2		2	RP0103	Miscellaneous gun parts, plastic	45
TU 1	2		1	ZG1203	Bottle glass flake	45
TU 1	2		11	ZR0302	Slate, unidentified	45
TU 1	3		12	AC0199	Brick, unspecified	46
TU 1	3		5	AG0301	Window glass, sized	46
TU 1	3		4	AM1507	Nail fragment, unidentified	46
TU 1	3		9	AR0108	Mortar	46
TU 1	3		1	KC0309	Salt glazed/alkaline glazed	46
TU 1	3		1	KC0399	Stoneware, unidentified	46
TU 1	3		2	KC0631	Pearlware, unidentified decorated	46
TU 1	3		1	KC2206	Polychrome painted, large floral	46
TU 1	3		8	KF0101	Bone, unidentified	46
TU 1	3		3	KF0104	Shell, oyster	46
TU 1	3		5	KG0301	Bottle, colorless bottle glass	46
TU 1	3		6	KG0393	Bottle, olive green unidentified	46
TU 1	3		12	MF0101	Coal	46
TU 1	3		3	MF0103	Cinder/clinker	46
TU 1	3		25	MM9901	Iron fragment, unidentified	46
TU 1	3		16	MM9903	Slag	46

TU 1		3		1	RR0133	Chert worked fragment, unidentified	46
TU 1		3		43	ZM1232	Sheet iron/steel	46
TU 1		3		4	ZR0302	Slate, unidentified	46
TU 1		4		34	AC0199	Brick, unspecified	44
TU 1		4		1	AC0199	Brick, unspecified	52
TU 1		4		12	AG0301	Window glass, sized	44
TU 1		4		3	AM1507	Nail fragment, unidentified	44
TU 1		4		1	AM1507	Nail fragment, unidentified	52
TU 1		4		4	KC0105	Porcelain, plain	44
TU 1		4		1	KC0501	Ironstone, plain blue tinted stone china	44
TU 1		4		1	KC0604	Creamware, plain	44
TU 1		4		1	KC0630	Pearlware, plain	44
TU 1		4		1	KC0631	Pearlware, unidentified decorated	44
TU 1		4		1	KC0636	Pearlware, underglaze polychrome painted floral patterns	44
TU 1		4		1	KC0704	Edgeware, scalloped, rim impressed, curved	52
TU 1		4		2	KC1301	Redware, unglazed, coarse	52
TU 1		4		1	KC1511	Delftware, plain	44
TU 1		4		1	KC2303	Transfer print, linear, unidentified underglaze	44
TU 1		4		1	KC2307	Transfer print, stippled, blue underglaze	44
TU 1		4		11	KF0101	Bone, unidentified	44
TU 1		4		1	KF0101	Bone, unidentified	52
TU 1		4		1	KF0104	Shell, oyster	44
TU 1		4		35	KF0104	Shell, oyster	52
TU 1		4		1	KF0105	Shell, clam	44
TU 1		4		1	KG0299	Bottle, amber/olive green glass	52
TU 1		4		5	KG0300	Bottle, light aqua bottle glass	44
TU 1		4		2	KG0301	Bottle, colorless bottle glass	44
TU 1		4		3	KG0393	Bottle, olive green unidentified	44
TU 1		4		2	KG0393	Bottle, olive green unidentified	52
TU 1		4		41	MF0101	Coal	44
TU 1		4		4	MF0101	Coal	52
TU 1		4		1	MF0102	Charcoal	44
TU 1		4		7	MF0103	Cinder/clinker	44
TU 1		4		7	MM9901	Iron fragment, unidentified	44
TU 1		4		7	MM9901	Iron fragment, unidentified	52
TU 1		4		2	MM9903	Slag	44
TU 1		4		7	MZ0101	Material, unidentified	44
TU 1		4		5	ZR0302	Slate, unidentified	44
TU 1	1			2	AM1101	Nail, wire common	40
TU 1	1			3	AM1507	Nail fragment, unidentified	40

TU 1	1			1	AR0108	Mortar	40
TU 1	1			1	KC0700	Whiteware, plain	40
TU 1	1			1	KC0701	Whiteware, indeterminate decoration	40
TU 1	1			1	KG0300	Bottle, light aqua bottle glass	40
TU 1	1			1	KG0301	Bottle, colorless bottle glass	40
TU 1	1			1	KG0306	Bottle, amber bottle glass	40
TU 1	1			1	PM0120	Coin	40
TU 1	1			1	ZR0302	Slate, unidentified	40
TU 1	3			2	AC0120	Brick, handmade	41
TU 1	3			1	AG0301	Window glass, sized	41
TU 1	3			1	AM1101	Nail, wire common	41
TU 1	3			2	AM1505	Nail, cut or wrought, square	41
TU 1	3			4	AM1507	Nail fragment, unidentified	41
TU 1	3			1	AM1511	Tack	41
TU 1	3			1	KC0102	Porcelain, blue underglaze h.p.	41
TU 1	3			4	KC0105	Porcelain, plain	41
TU 1	3			1	KC0399	Stoneware, unidentified	41
TU 1	3			9	KC0501	Ironstone, plain blue tinted stone china	41
TU 1	3			1	KC0502	Ironstone, blue tinted stone china, decorated	41
TU 1	3			1	KC0630	Pearlware, plain	41
TU 1	3			4	KC0631	Pearlware, unidentified decorated	41
TU 1	3			1	KC0700	Whiteware, plain	41
TU 1	3			1	KC0712	Edgeware, scalloped, unimpressed	41
TU 1	3			1	KC1299	Coarse earthenware, unidentified	41
TU 1	3			1	KC2202	Whiteware, hand painted	41
TU 1	3			2	KC2303	Transfer print, linear, unidentified underglaze	41
TU 1	3			1	KC2307	Transfer print, stippled, blue underglaze	41
TU 1	3			1	KC2800	Yellowware, decorated	41
TU 1	3			1	KC2801	Yellowware, plain	41
TU 1	3			1	KF0101	Bone, unidentified	41
TU 1	3			1	KF0104	Shell, oyster	41
TU 1	3			1	KF0105	Shell, clam	41
TU 1	3			1	KG0251	Bottle, applied color lable bottle	41
TU 1	3			1	KG0253	Bottle, applied finish	41
TU 1	3			4	KG0300	Bottle, light aqua bottle glass	41
TU 1	3			1	KG0301	Bottle, colorless bottle glass	41
TU 1	3			2	KG0303	Bottle, light green bottle glass	41
TU 1	3			1	KG0304	Bottle, aqua bottle glass	41
TU 1	3			3	KG0305	Bottle, cobalt blue bottle glass	41
TU 1	3			1	KG0306	Bottle, amber bottle glass	41

TU 1	3			7	KG0393	Bottle, olive green unidentified	41
TU 1	3			1	KM0304	Beer/Soda pull tab	41
TU 1	3			3	MM9901	Iron fragment, unidentified	41
TU 1	3			7	MP9901	Plastic, unidentified	41
TU 1	3			1	MR0122	Unmodified stone	41
TU 1	3			2	PM0120	Coin	41
TU 1	3			1	RM0106	Bullet, other	41
TU 1	3			1	RM0112	Lead ball	41
TU 1	3			1	TC0210	Tobacco pipestem, kaolin, 5/64"	41
TU 1	4			5	AC0120	Brick, handmade	42
TU 1	4			4	AM1505	Nail, cut or wrought, square	42
TU 1	4			2	AM1507	Nail fragment, unidentified	42
TU 1	4			1	CC0101	Button, porcelain	42
TU 1	4			1	CF0303	Button, wooden	42
TU 1	4			1	CG0102	Button, glass	42
TU 1	4			3	KC0105	Porcelain, plain	42
TU 1	4			1	KC0398	Lead glazed, unidentified	42
TU 1	4			3	KC0399	Stoneware, unidentified	42
TU 1	4			8	KC0501	Ironstone, plain blue tinted stone china	42
TU 1	4			7	KC0604	Creamware, plain	42
TU 1	4			8	KC0630	Pearlware, plain	42
TU 1	4			1	KC0631	Pearlware, unidentified decorated	42
TU 1	4			4	KC0700	Whiteware, plain	42
TU 1	4			2	KC0705	Edgeware, scalloped, rim impressed, straight	42
TU 1	4			1	KC0712	Edgeware, scalloped, unimpressed	42
TU 1	4			1	KC0903	Mocha on white body	42
TU 1	4			1	KC1301	Redware, unglazed, coarse	42
TU 1	4			2	KC2103	Line wares, brown or blue over and underglazed	42
TU 1	4			1	KC2303	Transfer print, linear, unidentified underglaze	42
TU 1	4			1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	42
TU 1	4			2	KC2312	Transfer print, Japanese brown on ivory body	42
TU 1	4			2	KC2809	Earthenware, Rockingham glaze on buff paste	42
TU 1	4			11	KF0101	Bone, unidentified	42
TU 1	4			3	KF0104	Shell, oyster	42
TU 1	4			2	KG0252	Bottle, continuous thread finish, machine made	42
TU 1	4			1	KG0257	Bottle, rolled rim	42
TU 1	4			1	KG0259	Bottle seal	42

TU 1	4			2	KG0300	Bottle, light aqua bottle glass	42
TU 1	4			3	KG0301	Bottle, colorless bottle glass	42
TU 1	4			1	KG0303	Bottle, light green bottle glass	42
TU 1	4			1	KG0306	Bottle, amber bottle glass	42
TU 1	4			8	KG0393	Bottle, olive green unidentified	42
TU 1	4			1	MF0101	Coal	42
TU 1	4			1	MM9903	Slag	42
TU 1	4			1	MP9901	Plastic, unidentified	42
TU 1	4			1	RM0113	Bullet	42
TU 1	4			1	RR0133	Chert worked fragment, unidentified	42
TU 1	4			1	TC0101	Tobacco pipe bowl, kaolin, plain	42
TU 1	4			1	TC0210	Tobacco pipestem, kaolin, 5/64"	42
TU 1	4			1	ZM1208	Iron flat strip	42
TU 1	4			1	ZR0302	Slate, unidentified	42
TU 1	4			1	ZR2452	Flake, fragment 0% cortex	42
TU 1	5			2	AC0199	Brick, unspecified	43
TU 1	5			6	AG0301	Window glass, sized	43
TU 1	5			7	AM1507	Nail fragment, unidentified	43
TU 1	5			1	AR0104	Concrete	43
TU 1	5			4	AR0108	Mortar	43
TU 1	5			1	CC0101	Button, porcelain	43
TU 1	5			1	KC0102	Porcelain, blue underglaze h.p.	43
TU 1	5			1	KC0250	Black basalt	43
TU 1	5			6	KC0501	Ironstone, plain blue tinted stone china	43
TU 1	5			9	KC0604	Creamware, plain	43
TU 1	5			9	KC0630	Pearlware, plain	43
TU 1	5			6	KC0631	Pearlware, unidentified decorated	43
TU 1	5			1	KC0634	Pearlware, underglaze blue non-Chinese motifs h.p.	43
TU 1	5			2	KC0636	Pearlware, underglaze polychrome painted floral patterns	43
TU 1	5			3	KC0700	Whiteware, plain	43
TU 1	5			1	KC0704	Edgeware, scalloped, rim impressed, curved	43
TU 1	5			1	KC0901	Dipped ware, tan, rust, brown, olive, or ochre	43
TU 1	5			1	KC1296	Coarse earthenware, lead glazed	43
TU 1	5			1	KC2103	Line wares, brown or blue over and underglazed	43
TU 1	5			2	KC2206	Polychrome painted, large floral	43
TU 1	5			2	KC2303	Transfer print, linear, unidentified underglaze	43

TU 1	5		4	KC2307	Transfer print, stippled, blue underglaze	43
TU 1	5		2	KC2401	Refined earthenware, molded	43
TU 1	5		3	KC2702	Refined earthenware, decal	43
TU 1	5		7	KF0101	Bone, unidentified	43
TU 1	5		5	KF0104	Shell, oyster	43
TU 1	5		1	KF0105	Shell, clam	43
TU 1	5		1	KG0300	Bottle, light aqua bottle glass	43
TU 1	5		4	KG0301	Bottle, colorless bottle glass	43
TU 1	5		1	KG0302	Bottle, dark green bottle glass	43
TU 1	5		1	KG0305	Bottle, cobalt blue bottle glass	43
TU 1	5		15	KG0393	Bottle, olive green unidentified	43
TU 1	5		2	MF0101	Coal	43
TU 1	5		2	MM9901	Iron fragment, unidentified	43
TU 1	5		1	MM9902	Metal, non iron/steel, unidentified	43
TU 1	5		1	MM9903	Slag	43
TU 1	5		1	PF0201	Pencil, part	43
TU 1	5		1	PR0102	Slate pencil	43
TU 1	5		1	RR0133	Chert worked fragment, unidentified	43
TU 1	5		1	TC0101	Tobacco pipe bowl, kaolin, plain	43
TU 1	5		1	TC0210	Tobacco pipestem, kaolin, 5/64"	43
TU 1	5		4	ZR0302	Slate, unidentified	43
TU 1	6	73-83 cm bd	77	AC0199	Brick, unspecified	48
TU 1	6	73-83 cm bd	1	AC0200	Tile, ceramic	48
TU 1	6	73-83 cm bd	1	AG0301	Window glass, sized	48
TU 1	6	73-83 cm bd	7	AM1507	Nail fragment, unidentified	48
TU 1	6	73-83 cm bd	1	AR0108	Mortar	48
TU 1	6	73-83 cm bd	1	KC0102	Porcelain, blue underglaze h.p.	48
TU 1	6	73-83 cm bd	1	KC0105	Porcelain, plain	48
TU 1	6	73-83 cm bd	1	KC0309	Salt glazed/alkaline glazed	48
TU 1	6	73-83 cm bd	1	KC0399	Stoneware, unidentified	48
TU 1	6	73-83 cm bd	6	KC0604	Creamware, plain	48
TU 1	6	73-83 cm bd	2	KC0630	Pearlware, plain	48
TU 1	6	73-83 cm bd	2	KC0631	Pearlware, unidentified decorated	48
TU 1	6	73-83 cm bd	1	KC1301	Redware, unglazed, coarse	48
TU 1	6	73-83 cm bd	1	KC2307	Transfer print, stippled, blue underglaze	48
TU 1	6	73-83 cm bd	22	KF0101	Bone, unidentified	48
TU 1	6	73-83 cm bd	42	KF0104	Shell, oyster	48
TU 1	6	73-83 cm bd	3	KG0301	Bottle, colorless bottle glass	48
TU 1	6	73-83 cm bd	2	KG0304	Bottle, aqua bottle glass	48
TU 1	6	73-83 cm bd	7	KG0393	Bottle, olive green unidentified	48
TU 1	6	73-83 cm bd	9	MF0101	Coal	48
TU 1	6	73-83 cm bd	15	MF0102	Charcoal	48

TU 1	6		73-83 cm bd	5	MM9901	Iron fragment, unidentified	48
TU 1	6		73-83 cm bd	1	RM0112	Lead ball	48
TU 1	6		73-83 cm bd	5	ZR0302	Slate, unidentified	48
TU 1	7		83-100 cm bd	2	AC0199	Brick, unspecified	49
TU 1	7		83-100 cm bd	4	AM1507	Nail fragment, unidentified	49
TU 1	7		83-100 cm bd	2	KC0604	Creamware, plain	49
TU 1	7		83-100 cm bd	1	KC0699	White-Bodied Ceramic, unidentified	49
TU 1	7		83-100 cm bd	1	KF0101	Bone, unidentified	49
TU 1	7		83-100 cm bd	9	KF0104	Shell, oyster	49
TU 1	7		83-100 cm bd	1	MF0101	Coal	49
TU 1	7		83-100 cm bd	1	MF0102	Charcoal	49
TU 1	8		100-112 cm bd	1	AC0199	Brick, unspecified	50
TU 1	8		100-112 cm bd	2	KF0104	Shell, oyster	50
TU 1	9		112-131 cm bd	1	AG0301	Window glass, sized	51
TU 2	1		10-23 cm bd	1	KF0101	Bone, unidentified	53
TU 2	1		10-23 cm bd	2	KG0251	Bottle, applied color lable bottle	53
TU 2	1		10-23 cm bd	1	KG0300	Bottle, light aqua bottle glass	53
TU 2	1		10-23 cm bd	3	KG0301	Bottle, colorless bottle glass	53
TU 2	1		10-23 cm bd	1	KG0303	Bottle, light green bottle glass	53
TU 2	1		10-23 cm bd	1	KG0306	Bottle, amber bottle glass	53
TU 2	1		10-23 cm bd	1	KG0393	Bottle, olive green unidentified	53
TU 2	1		10-23 cm bd	1	KM0304	Beer/Soda pull tab	53
TU 2	1		10-23 cm bd	7	MM9901	Iron fragment, unidentified	53
TU 2	1		10-23 cm bd	1	ZM0622	Spark plug	53
TU 2	3		38- 60 cm bd	30	AC0120	Brick, handmade	54
TU 2	3		38- 60 cm bd	11	AM1505	Nail, cut or wrought, square	54
TU 2	3		38- 60 cm bd	11	AR0108	Mortar	54
TU 2	3		38- 60 cm bd	1	KC0105	Porcelain, plain	54
TU 2	3		38- 60 cm bd	1	KC0309	Salt glazed/alkaline glazed	54
TU 2	3		38- 60 cm bd	1	KC0501	Ironstone, plain blue tinted stone china	54

TU 2	3	38- 60 cm bd	1	KC0631	Pearlware, unidentified decorated	54
TU 2	3	38- 60 cm bd	2	KC0699	White-Bodied Ceramic, unidentified	54
TU 2	3	38- 60 cm bd	1	KC2103	Line wares, brown or blue over and underglazed	54
TU 2	3	38- 60 cm bd	3	KC2303	Transfer print, linear, unidentified underglaze	54
TU 2	3	38- 60 cm bd	4	KF0101	Bone, unidentified	54
TU 2	3	38- 60 cm bd	1	KF0102	Animal teeth	54
TU 2	3	38- 60 cm bd	15	KF0104	Shell, oyster	54
TU 2	3	38- 60 cm bd	1	KG0300	Bottle, light aqua bottle glass	54
TU 2	3	38- 60 cm bd	4	KG0301	Bottle, colorless bottle glass	54
TU 2	3	38- 60 cm bd	1	KG0305	Bottle, cobalt blue bottle glass	54
TU 2	3	38- 60 cm bd	6	KG0393	Bottle, olive green unidentified	54
TU 2	3	38- 60 cm bd	1	KM0310	Bottle seal, metal	54
TU 2	3	38- 60 cm bd	10	MF0101	Coal	54
TU 2	3	38- 60 cm bd	10	MF0102	Charcoal	54
TU 2	3	38- 60 cm bd	11	MF0103	Cinder/clinker	54
TU 2	3	38- 60 cm bd	7	MM9901	Iron fragment, unidentified	54
TU 2	3	38- 60 cm bd	1	MM9902	Metal, non iron/steel, unidentified	54
TU 2	3	38- 60 cm bd	7	MM9903	Slag	54
TU 2	3	38- 60 cm bd	2	MR0122	Unmodified stone	54
TU 2	3	38- 60 cm bd	2	RR0133	Chert worked fragment, unidentified	54
TU 2	3	38- 60 cm bd	2	TC0103	Tobacco pipe bowl, kaolin, molded	54
TU 2	3	38- 60 cm bd	3	TC0210	Tobacco pipestem, kaolin, 5/64"	54
TU 2	3	38- 60 cm bd	1	ZM0405	Ferrule	54
TU 2	3	38- 60 cm bd	12	ZM1232	Sheet iron/steel	54

TU 2	3		38- 60 cm bd	3	ZR0302	Slate, unidentified	54
TU 2	4		59-69 cm bd	9	AC0199	Brick, unspecified	56
TU 2	4		59-69 cm bd	1	AM1507	Nail fragment, unidentified	56
TU 2	4		59-69 cm bd	3	AR0108	Mortar	56
TU 2	4		59-69 cm bd	3	KC0501	Ironstone, plain blue tinted stone china	56
TU 2	4		59-69 cm bd	3	KC0700	Whiteware, plain	56
TU 2	4		59-69 cm bd	1	KC2805	Yellowware, embossed/molded	56
TU 2	4		59-69 cm bd	1	KG0299	Bottle, amber/olive green glass	56
TU 2	4		59-69 cm bd	2	KG0305	Bottle, cobalt blue bottle glass	56
TU 2	4		59-69 cm bd	1	KG0306	Bottle, amber bottle glass	56
TU 2	4		59-69 cm bd	1	KG0393	Bottle, olive green unidentified	56
TU 2	4		59-69 cm bd	2	MF0101	Coal	56
TU 2	4		59-69 cm bd	6	MF0103	Cinder/clinker	56
TU 2	4		59-69 cm bd	4	MM9901	Iron fragment, unidentified	56
TU 2	4		59-69 cm bd	1	MM9903	Slag	56
TU 2	4		59-69 cm bd	1	TC0209	Tobacco pipestem, kaolin, 4/64"	56
TU 2	4		59-69 cm bd	1	ZR0302	Slate, unidentified	56
TU 2	5, Zone A (west side)			3	AC0199	Brick, unspecified	59
TU 2	5, Zone A (west side)			1	AG0301	Window glass, sized	59
TU 2	5, Zone A (west side)			4	AM1507	Nail fragment, unidentified	59
TU 2	5, Zone A (west side)			2	MF0101	Coal	59
TU 2	5, Zone A (west side)			3	MF0103	Cinder/clinker	59
TU 2	5, Zone A (west side)			1	TC0199	Tobacco pipe bowl, unidentified clay	59
TU 2	5, Zone A (west side)			1	TC0212	Tobacco pipestem, kaolin, 7/64"	59
TU 2	5, Zone B (east side)			1	AR0108	Mortar	60
TU 2	5, Zone B (east side)			1	KC0398	Lead glazed, unidentified	60

TU 2	5, Zone B (east side)			1	KC0700	Whiteware, plain	60
TU 2	5, Zone B (east side)			4	KF0104	Shell, oyster	60
TU 2	5, Zone B (east side)			2	KG0393	Bottle, olive green unidentified	60
TU 2	5, Zone B (east side)			5	MF0101	Coal	60
TU 2	5, Zone B (east side)			2	MM9903	Slag	60
TU 2	6		78-85 cm bd	2	KF0104	Shell, oyster	62
TU 3		5	50-80 cm bd	6	AC0199	Brick, unspecified	57
TU 3		5	50-80 cm bd	2	AM1505	Nail, cut or wrought, square	57
TU 3		5	50-80 cm bd	4	AM1507	Nail fragment, unidentified	57
TU 3		5	50-80 cm bd	2	AR0108	Mortar	57
TU 3		5	50-80 cm bd	1	KC0699	White-Bodied Ceramic, unidentified	57
TU 3		5	50-80 cm bd	2	MF0101	Coal	57
TU 3		5	50-80 cm bd	1	MM9903	Slag	57
TU 3		5	50-80 cm bd	1	TC0210	Tobacco pipestem, kaolin, 5/64"	57
TU 3		5	50-80 cm bd	1	ZM1206	Metal hooks	57
TU 3		5	50-80 cm bd	1	ZM1232	Sheet iron/steel	57
TU 3	3		35-50 cm bd	7	AG0301	Window glass, sized	55
TU 3	3		35-50 cm bd	5	AM1505	Nail, cut or wrought, square	55
TU 3	3		35-50 cm bd	1	KC0701	Whiteware, indeterminate decoration	55
TU 3	3		35-50 cm bd	1	KC2303	Transfer print, linear, unidentified underglaze	55
TU 3	3		35-50 cm bd	1	KC2310	Transfer print, stippled, red, green, purple, black underglaze	55
TU 3	3		35-50 cm bd	1	KF0104	Shell, oyster	55
TU 3	3		35-50 cm bd	3	KG0301	Bottle, colorless bottle glass	55
TU 3	3		35-50 cm bd	2	KG0306	Bottle, amber bottle glass	55
TU 3	3		35-50 cm bd	1	KG0393	Bottle, olive green unidentified	55
TU 3	3		35-50 cm bd	1	TC0101	Tobacco pipe bowl, kaolin, plain	55
TU 3	3		35-50 cm bd	3	ZM1211	Wire	55
TU 3	4		40-53 cm bd	1	KC0700	Whiteware, plain	58
TU 3	4		40-53 cm bd	2	ZM0915	Battery carbon core	58
TU 3	5		53-72 cm bd	2	AM1505	Nail, cut or wrought, square	61
TU 3	5		53-72 cm bd	1	AM1507	Nail fragment, unidentified	61
TU 3	5		53-72 cm bd	2	MF0101	Coal	61
TU 3	5		53-72 cm bd	1	RM0101	Percussion cap	61

End of Artifact Inventory.