

**Recent Archaeological Investigations on
Dataw Island, Beaufort County, South Carolina**



**Brockington and Associates, Inc.
Atlanta Charleston Savannah
February 2006**

- 1) Sams Family Cemetery radar
Cotton Dike Cemetery reports
- 2) Well reports

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Dataw Island, Beaufort County, South Carolina**

Prepared for

The Dataw Historical Foundation
Dataw Island, South Carolina

By



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February 2006

Abstract

Archaeologists with Brockington and Associates, Inc., undertook limited investigations of the B. B. Sams Plantation Complex (38BU581) and the Cotton Dike Cemetery (38BU508) on Dataw Island, Beaufort County, South Carolina. These investigations include ground penetrating radar (GPR) survey of the Sams Family Cemetery at 38BU581 and the Cotton Dike Cemetery, an African-American cemetery, and limited excavations at the reported location of the former well in the B. B. Sams Plantation complex. The investigations within 38BU581 provided information to the Dataw Historic Foundation (DHF), a committee of the Dataw Island Owners' Association (the manager and owners of the archaeological sites on Dataw Island), for their proposed stabilization of the tabby wall around the Sams Family Cemetery and the proposed reconstruction of the former well. GPR survey of the Cotton Dike Cemetery provided an estimate of the number of graves located in this burying ground.

An informant provided the approximate location of the former well at 38BU581. We also examined this area with the GPR to assist in relocation. The well originally had a brick lining that extended approximately 2-3 feet (about 1 meters) above the ground surface. As development of Dataw Island began, ALCOA South Carolina (owner and developer of the tract) destroyed the well by knocking the above ground elements into the well shaft. This was done to reduce safety hazards associated with an open pit 4-5 feet (1.3-1.6 meters) wide and 12+ feet (4+ meters) deep. GPR survey demonstrated a disturbed area at the same location indicated by the informant. We excavated a 3 by 3 meter test unit over this disturbed area. We exposed the northern portion of the construction pit of the former well. At about 45 cm below surface, we employed a backhoe to excavate an exploratory trench from our test unit south to expose the southern edge of the construction pit. We then used the backhoe to excavate into the pit until we encountered the intact remnants of the brick lining of the former well. We removed a large segment of articulated bricks that once was part of the lining that once extended above the ground surface. These bricks will be incorporated in the reconstruction of the well lining planned for this portion of the site. We noted the depth of the intact brick elements of the former well, marked the internal diameter of the lining with PVC pipe, and backfilled the excavations.

GPR survey of the Sams Family Cemetery at 38BU581 revealed 19-26 soil anomalies that likely are graves, including those marked by stones or crypts. Several anomalies along the eastern wall and the eastern portions of the cemetery within the wall may be unmarked graves. These

anomalies all begin at approximately 1+ feet (30+ cm) below the ground surface. There appear to be no such anomalies along the other walls or in the northwest corner of the cemetery enclosure. Proposed stabilization of the tabby wall enclosing the cemetery will require excavations to less than 1 foot (30 cm) below the present ground surface. These excavations should not intrude upon any graves or possible graves although fill materials used in the stabilization may cover some of the anomalies that lie along and beneath the wall in the northeast corner of the cemetery.

GPR survey of the Cotton Dike Cemetery revealed soil anomalies throughout the area where depressions and markers are visible. We estimate that there may be 38+ graves in this cemetery based on the number of depressions and the GPR anomalies. Most are concentrated in the southern and western portions of the space dedicated to this cemetery.

Acknowledgments

We would like to thank the Dataw Historical Foundation for their concern and interest in the B.B. Sams Plantation complex that led to the initiation of these investigations. Cathy Crocker and Jack Brown provided valuable assistance and guidance throughout these investigations. Christi Henry, Dataw Island grounds maintenance department, provided the backhoe and operator (Al Orage), along with an assistant (Benji Simmons) who also provided the information concerning the location of the former well. Greg Djouboulian, MALÅ GeoScience USA, Inc., provided valuable assistance with initial design of the GPR surveys and the operation of the equipment. David Dellenbach, Chris Maisey, and Arianna Shackle served as field technicians. Emily Jateff directed Nicole Isenbarger in the laboratory processing and analysis of the artifacts recovered from the well. Carol Poplin and Jennifer Salo provided editorial assistance.

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Introduction and Setting

Introduction

The Dataw Historic Foundation (DHF) plans to stabilize the tabby wall that surrounds the Sams Family Cemetery and reconstruct the well, both components of the Sams Plantation complex (archaeological site 38BU581) on Dataw Island in Beaufort County, South Carolina. Also, the DHF desires to know the number and configuration of graves in the African-American Cotton Dike Cemetery (archaeological site 38BU508), also on Dataw Island. Archaeologists with Brockington and Associates, Inc., undertook exploratory investigations at the cemeteries and presumed location of the former well in support of these plans. These investigations were undertaken as per the Memorandum of Agreement (MOA) between ALCOA South Carolina (developer and current owner of Dataw Island), the SC State Historic Preservation Office (SHPO), Beaufort County, and the US Army Corps of Engineers, Charleston District (USACE) for managing historic properties on Dataw Island. Figure 1 displays the location of archaeological sites 38BU508 and 38BU581 on Dataw Island.

The B. B. Sams Plantation Complex was the principal country residence of the Sams family during the late eighteenth and nineteenth centuries. B. B. Sams, son of the first Sams to own Dataw Island, built an elaborate tabby settlement here in the 1820s. This settlement was unoccupied for the most part after the Civil War. Dr. Larry Lepionka, with the University of South Carolina-Beaufort, undertook extensive investigations of 38BU581 in the 1980s, as mitigation for the development of Dataw Island. One aspect of this mitigation was the stabilization and preservation of the tabby ruins of the various components of the plantation settlement. Documentation of the ruins and development of a management plan were undertaken by Colin Brooker, Brooker Architectural Design Consultants (Poplin and Brooker 1994). In 1996, the ownership of Dataw Island passed from ALCOA South Carolina to the Dataw Island Owners' Association (DIOA). The DHF is a subsidiary of the DIOA who is responsible for the maintenance of the preserved ruins and other archaeological sites preserved on Dataw Island as per the MOA.

Archaeologists with Brockington and Associates, Inc., undertook ground penetrating radar (GPR) surveys of the Sams Family Cemetery at 38BU581 and the African-American Cotton Dike Cemetery (38BU508), and test excavations at the location of the former well at 38BU581 to provide

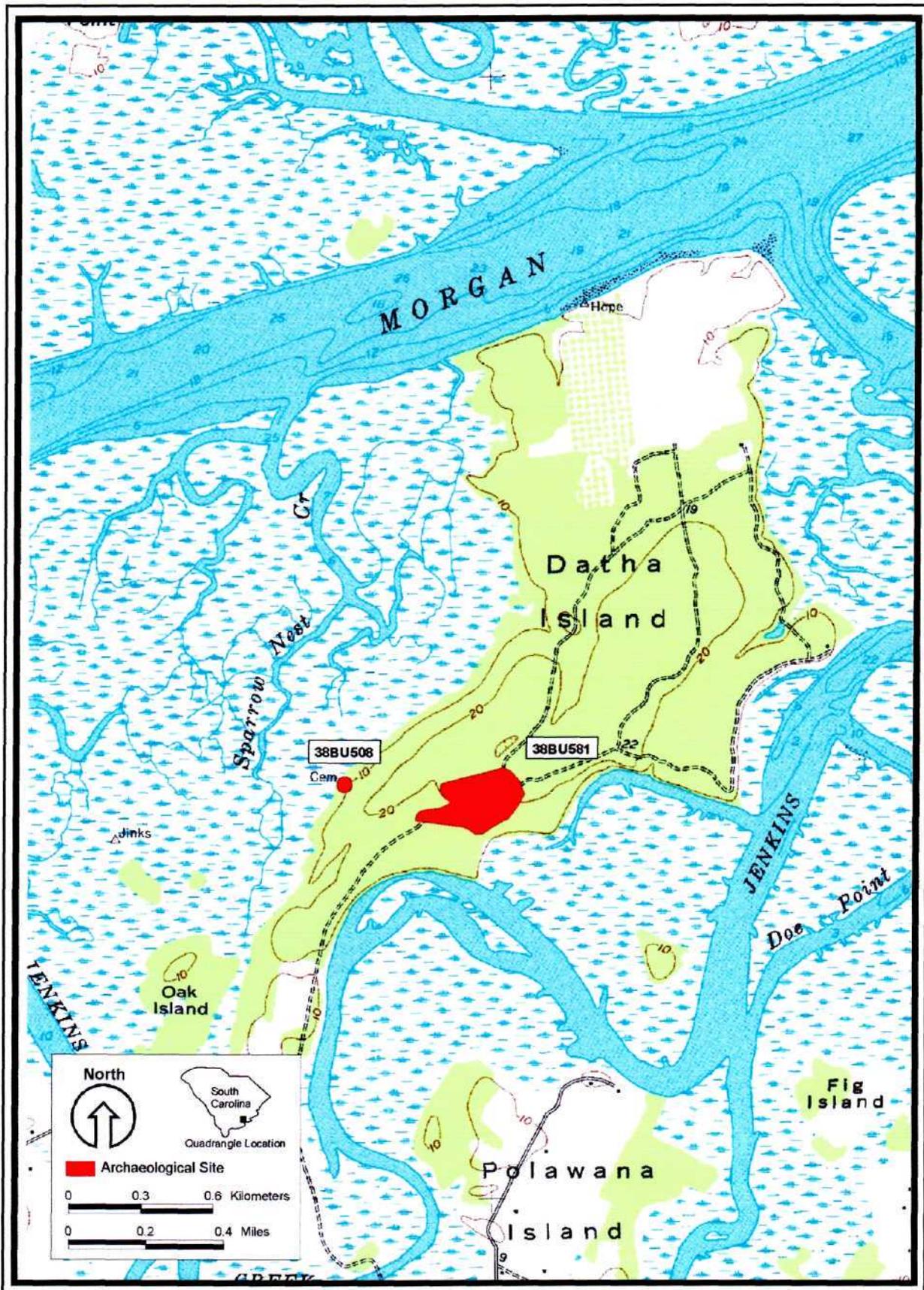


Figure 1. The location of the B. B. Sams Plantation Complex (38BU581) and the Cotton Dike Cemetery (38BU508) on Datha Island (USGS 1956 *Frogmore, SC* quadrangle).

information about these sites or elements of sites that will permit the DHF to pursue their plans to preserve and interpret important historic resources on Dataw Island. These investigations were approved by the SHPO and Beaufort County as per the MOA, as well as the proposed activities to stabilize the wall that surrounds the Sams Family Cemetery. Briefly, GPR survey of the Sams Family Cemetery indicates that there are possible unmarked graves near the northeast corner of the wall, both inside and outside the enclosure. All lie at a sufficient depth below the ground surface that the proposed stabilization activities may cover these possible graves with gravel ballast but will not intrude into the grave shafts. Test excavations at the location of the former well determined its exact location and recovered a large segment of the former brick lining. A contract for the stabilization of the wall and the reconstruction of the former well will be let shortly, and prosecuted under the direction of the Principal Investigator (Dr. Eric Poplin) and Consulting Architect (Colin Brooker). GPR survey of the Cotton Dike Cemetery indicates that there are at least 38 marked and unmarked graves in the burying ground, located primarily in the southern and western portions of the lot set aside for this cemetery.

Dr. Eric Poplin served as Principal Investigator and Field Director for these investigations. Dr. Poplin designed the archaeological investigations and was present during all activities. Ms. Gwendolyn Burns and Dr. Poplin, conducted the GPR surveys. Mr. Greg Djouboulian (MALÅ GeoScience USA, Inc.) provided assistance with the operation of the GPR equipment. David Dellebach, Chris Maisey, and Arianna Shackle assisted with the test excavations, as well as a number of Dataw residents and visitors. GPR survey of the Sams Family Cemetery required approximately three person-days to complete. Test excavations at the location of the former well required four person-days to complete. GPR survey of the Cotton Dike Cemetery required approximately two person-days to complete.

A brief description of Dataw Island and the investigated archaeological sites follows. Chapter II presents the methods and results of the GPR surveys of the two cemeteries. Chapter III describes the methods and results of the excavations at the location of the former well. Chapter IV provides a summary of the investigations and recommendations for future actions at the investigated sites. A inventory of artifacts recovered from the well excavations is appended.

A Brief Natural and Cultural History of Dataw Island

Dataw Island lies approximately 6.0 miles (10 kilometers) east of the Town of Beaufort, South Carolina, separated from St. Helena Island by Sparrow Creek to the west and Jenkins Creek to the south and east; the Morgan River flows along the north shore of the island. The island contains approximately 866 acres of mostly uplands. Dataw Island currently contains a private residential community. ALCOA South Carolina, Inc., purchased Dataw Island and initiated its development in the early 1980s. As noted above, the DIOA became the majority owner of Dataw Island in 1996, and manages the preserved archaeological sites and ruins on the island through the DHF. These sites and ruins were preserved in place as per the MOA noted above that accompanied permits issued to ALCOA South Carolina for the development of Dataw Island.

Homes and community amenities cover much of Dataw Island today. Large trees cover most of these facilities, remnants of the maritime forests that once covered Dataw Island. The island is surrounded by marshes associated with the Morgan River, Jenkins Creek, or Sparrow Creek. A bridge spans Jenkins Creek providing access to the island from nearby Polowana and St. Helena Islands.

Poplin and Brooker (1994) provide a detailed description of the natural and cultural setting of Dataw Island. A brief synopsis appears here to provide a context for the archaeological investigations undertaken at 38BU581 and 38BU508. We will begin with the Post-Contact history of the island since the investigated sites date from this period.

Dataw Island was first granted in 1698 to Charles Odingsells, at which time it was called Westbrook's Island. Caleb Westbrook, an Indian trader, received a grant of 260 acres on what would become Dataw Island in 1680. Apparently, he left no heirs to inherit his lands following his death at the hands of a Savannah Indian in 1684. In 1702, the Odingsells' grant was reissued to Joseph Boone. Boone's heirs retained title to Dataw Island until 1733, when they sold it to Anne Wigg, wife of Thomas Wigg, and later Anne Gibbes, wife of John Gibbes. Dataw eventually passes to her granddaughters, Sarah Gibbes and Anne Carson in 1774. Sarah Gibbes then obtained her sister's share since she and her husband are listed as sole owners in 1783 when they sell Dataw Island to William Sams.

The use and development of Dataw Island prior to Sams purchase is unknown. Lewis Reeve (1739-1774), the son of Anne Wigg Gibbes by an earlier husband, is described as a planter on Dataw

Island for his entire life (Barnwell 1969:23). Poplin and Brooker (1994) conject that a planter's house and small settlement likely existed on Dataw Island at 38BU581 prior to the Revolutionary War, with construction possibly as early as 1760. Possibly, Reeve built the first plantation house and settlement on Dataw.

Sams began to expand the plantation on Dataw Island. He likely expanded the planter's house and the agricultural lands on the island. Following his death and his wife's, Dataw passed to two of his younger sons, Berners Barnwell and Lewis Reeve Sams. They divided the island between them with B. B. Sams taking the southern half that contained the family's plantation settlement. By 1826, B. B. Sams had constructed the elaborate tabby residence and compound, with its many outbuildings, some incorporated into the compound and others standing nearby; the remnants of this settlement are archaeological site 38BU581. Lewis Reeve Sams built a new residence and settlement on the north end of Dataw Island, most of which was destroyed in the 1890s by a large hurricane.

The B. B. Sams house burned in the 1870s. Following the Civil War and into the mid-twentieth century, Dataw was occupied by tenant farmers and stockmen, and owned by absentee landlords. Timber was harvested from the island on one or more occasions during this time. Twentieth century maps of the island indicate that the northern portion was farmed well into the 1950s, with the southern half of the island reverting to timber lands. This is how Dataw appeared when ALCOA South Carolina purchased the island in the early 1980s.

Archaeological investigations began on Dataw Island at this time as well. Drucker (1982) completed the initial survey of the island. Lepionka (1988) completed a more intensive examination of parts of the island and test excavations at a number of sites. Information from these surveys formed the basis for the MOA developed to manage the archaeological sites determined eligible for the National Register of Historic Places (NRHP). Lepionka initiated data recovery investigations at 38BU581 in 1985, and excavated extensively throughout the many building ruins of the site. Poplin and Brooker (1994) took Lepionka's data and conducted additional investigations at a number of sites to complete the requirements of the MOA. As per the MOA, most of the ruins associated with the B. B. Sams Plantation complex (38BU581) are preserved in place. Figure 2 provides a plan of the complex, with buildings numbered as per Poplin and Brooker (1994). The areas examined during the current investigations are highlighted in Figure 2.

Ground Penetrating Radar Surveys of the Cemeteries

The DHF wished to determine the approximate number and location of all graves within the Sams Family Cemetery and the Cotton Dike Cemetery. We recommended GPR survey as the least intrusive approach that could provide an informed estimate. The DHF propose to stabilize the wall around the cemetery in the near future to prevent its possible collapse. Activities associated with the stabilization will require the excavation of 0.75-1 feet (20-30 cm) of fill adjacent to the cemetery wall. See Chapter IV for a more detailed discussion of the stabilization procedures. The DHF wished to determine the number and location of probable graves near the wall to prevent inadvertent intrusions into graves. At least one member of the Sams Family has expressed a desire to be buried within the cemetery. An estimate of the number and location of graves within the walled space would allow managers to assess such any such request received by the DIOA. The DHF wishes to know the number and location of graves within the Cotton Dike Cemetery to permit better management of this preserved African-American cemetery.

Methods

GPR creates images of changes in soil chemistry, texture, hydrology, or other materials underground. It records the length of time necessary for the radar signal to bounce back from soil layers or objects. To acquire a clear image of the subsurface strata, we transmit the radar signal at set intervals over the examined space. The GPR collects the best results when the antenna remains at the same distance above the ground surface. Thus, in areas where there are lots of irregularities on the ground surface, small trees, or dense undergrowth/ground cover, the data may be skewed.

At the Sams Family Cemetery and the Cotton Dike Cemetery, we used the RAMAC© X3M cart system with a 500 megahertz antenna, rented from MALÅ GeoScience USA, Inc., to collect information. At the Sams Family Cemetery, we collected GPR information along transects spaced at 1.5 feet/0.5 meter intervals running north-south inside the cemetery wall. We also collected information along a transect running parallel and immediately adjacent to the outside of each wall. Collecting GPR images at this interval provides an opportunity to intersect a grave at more than one point since most graves are approximately 6-7 feet (2 meters) long. Marked graves in the Sams Family Cemetery are aligned approximately east-west. At the Cotton Dike Cemetery, we collected GPR information along transects spaced at 3 foot/1 meter intervals running northeast-southwest.

This alignment is roughly perpendicular to depressions within the cemetery and perpendicular to fences that separate the cemetery from the neighboring residential lots. We used a wider interval because of the larger area to survey at 38BU508. Figure 3 provides views of the GPR survey of the Sams Family Cemetery at 38BU581.

We created a grid over both cemeteries using measuring tapes, a compass, and pin flags. The flags were set at the ends of spaces to be examined, at appropriate intervals. A tape was then stretched between corresponding flags at the end of each transect. The tape provides a guide for the traverse of the examined space with the radar antenna. The GPR antenna was pushed along the outstretched tape between the flags. We observed the image or profile on each traverse or transect of the examined space. Observed anomalies that could not be explained as roots or other irregularities were marked with pin flags as well. This permits the immediate mapping of these anomalies and an efficient relocation if one decides to get additional radar images by passing over the anomaly in a different direction. We prepared a sketch map of the surveyed cemeteries, showing the transects, surface features within each cemetery, and any anomalies observed during the GPR survey.

GPR Survey of the Sams Family Cemetery

We conducted the GPR survey of the Sams Family Cemetery on 11 March 2005. We prepared our sketch map and laid out the survey lanes, and then began to collect GPR information. The Sams Family Cemetery lies in the north-central portion of 38BU581 (see Figure 2). The cemetery contains 14 marked graves (three in crypts) surrounded by a tabby wall. A very large live oak stands to the north of the marked graves. The tabby wall encloses the cemetery on the east, north, and west sides, and the southwest portion on the south side. The ruins of a small chapel, also constructed of tabby, stand in the southeast corner of the cemetery. The wall is approximately 80 feet (24 meters) north-south by 72 feet (22 meters) east-west, including the large room of the chapel. The chapel was a rectangular building with its long axis running east-west. It has two rooms- a large room lying within the cemetery wall and a smaller room (anteroom) that extends east of the cemetery enclosure. The chapel measures approximately 20 by 40 feet (6 by 12 meters); the large room is approximately 20 by 30 feet (6 by 9 meters). A gate (a gap in the tabby wall) permits access to the enclosed space at its southeast "corner," where the wall approaches the north wall of the chapel. The wall is approximately 1 foot (30 cm) thick and rises 4 feet (1.27 meters) above the ground surface, with a 0.75-1 foot (25-30 cm) high footing below the ground surface. The footing of the wall is 2-



Figure 3. Views of the GPR survey of the Sams Family Cemetery at 38BU581. Top: Dr. Poplin adjusting the radar data collector prior to survey; note the pin flags defining survey transects in center of photograph. Bottom: Dr. Poplin and Mr. Greg Djouboulian pushing the GPR equipment along a survey transect.

4 inches (5-10 cm) wider than the above ground elements. It is possible that the wall was built after the chapel; the tabby “pours” visible in the building remnants and the wall do not integrate cleanly. Figure 4 provides a plan of Sams Family Cemetery. Note that individual marked graves are not shown, just areas where the stones and crypts are present, preventing easy access with the GPR survey unit.

At the time of the survey, the area to the east, north, and west of the cemetery wall was grassed or covered in very thin leaf litter. Denser leaf litter and some underbrush was present along the south wall. We removed the underbrush by hand cutting prior to the GPR survey. The interior of the enclosed space was mostly bare dirt with leaves piled along the north, west, and south walls. The large oak noted above stands just north of the marked graves. The stumps of two large cedar trees stand to the north of the oak (see Figure 4). The trees were removed to provide access to the cemetery and to provide more space for the live oak. Tabby rubble extends west from the west wall of the chapel into the enclosed space. An interpretive sign stands in the west-central portion of the enclosure, west of the marked graves (see Figure 4).

GPR survey over the inside of the cemetery identified multiple anomalies throughout the space within the cemetery wall. We examined the distributions of the anomalies along each profile (the information recovered along a transect) and compared these to the locations of anomalies on adjoining profiles. We then compared the depth of adjacent anomalies and the general nature of their appearance in each profile. Anomalies of similar depths and configurations that occur on three or more adjacent transects were interpreted as probable graves, or where two or more anomalies were present adjacent to grave markers. We interpreted two to four adjacent anomalies with similar depths or other characteristics as possible graves. Figure 5 provides a plan of the Sams Family cemetery showing the location of the anomalies encountered during the survey, and the locations of possible and probable graves interpreted from the GPR information. Figure 5 also displays samples of the GPR profiles generated along selected transects.

The possible graves occur along the east edge of the enclosed space and through the central portion of the enclosed space, in and adjacent to the marked graves. Interestingly, there are no anomalies present in the space inside the gate and along the north wall of the chapel. This would have been a walkway and high “traffic” area where graves were not likely to be placed unless the remainder of the cemetery was completely full. Also, there are few anomalies and no possible/probable graves in the southwest and northwest corners of the enclosed space, particularly north of a line formed by the oak tree and the two cedar stumps. Could these trees or their



Figure 4. Plan of Sams Family Cemetery at 38BU581.

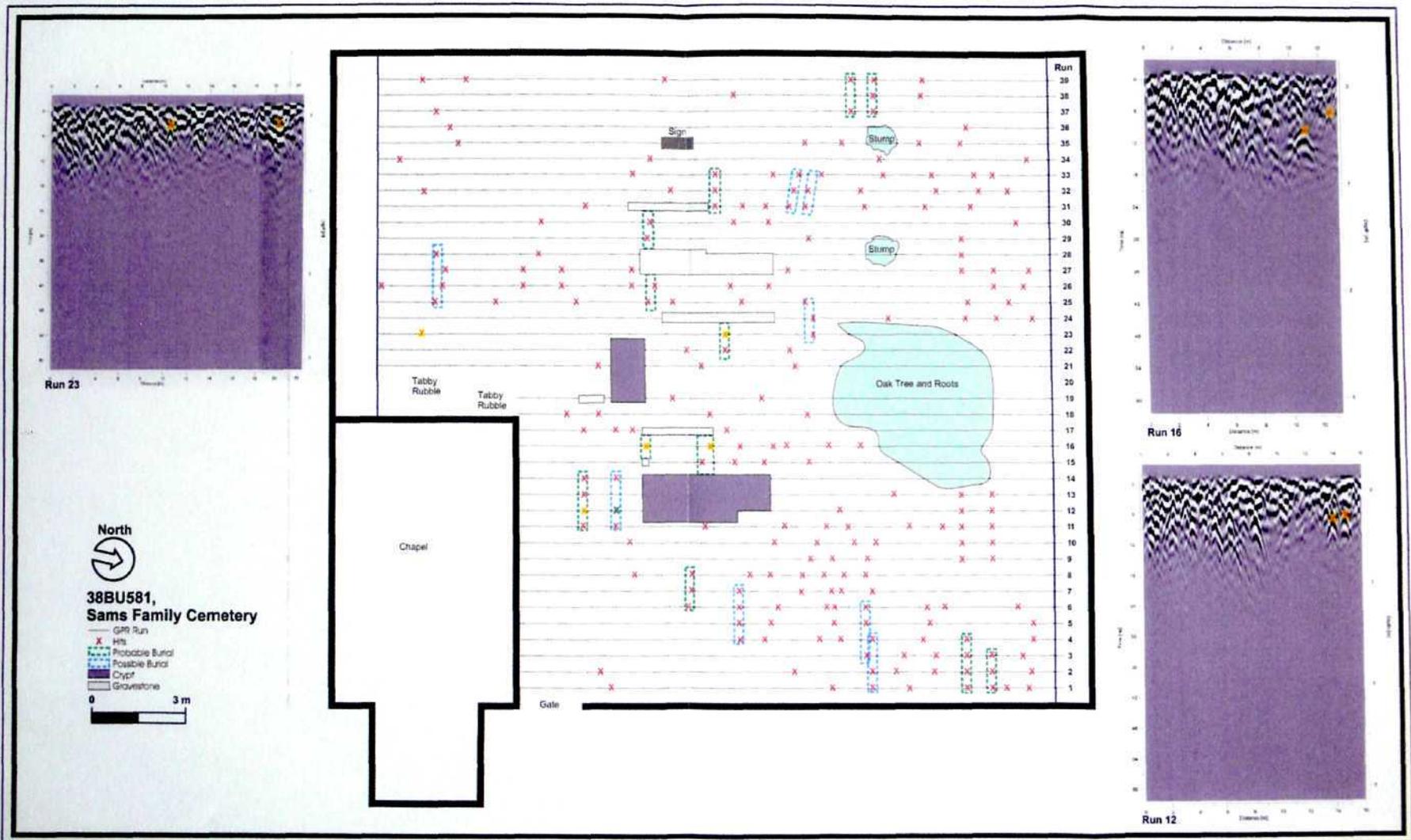


Figure 5. Plan of the interpreted GPR survey information at the Sams Family Cemetery.

forebearers defined the cemetery before the wall was constructed? Note that the adjacent anomalies that extend over four or more transects likely are roots from the oak tree.

Based on the results of the GPR survey, we estimate that the cemetery contains at least 19-26 graves, including the ones with markers or crypts. Most occur in the central portion of the walled space where the grave markers are present. There are a few possible graves in the northeast corner of the walled space that are very close to the wall. This could support the interpretation that the wall was constructed after the chapel was built and after the cemetery was established. The GPR profiles also indicate that most of the anomalies interpreted as possible/probable graves begin at 1.5-2 feet (50-60 cm) below the present ground surface. Thus, the excavation of 1 foot (30 cm) of soil adjacent to the wall footing that will be undertaken during the stabilization of the wall should not intrude into any grave shafts to a significant depth.

GPR Survey of the Cotton Dike Cemetery

We conducted the GPR survey of the Cotton Dike Cemetery on 4 May 2005. As at the Sams Family Cemetery, we prepared our sketch map and laid out the survey lanes, and then began to collect GPR information. The Cotton Dike Cemetery lies in the western portion of Dataw Island, on the edge of the marshes of Sparrow Creek (see Figure 1). The cemetery contains four grave markers and 27 or more depressions that are or may be graves. Split rail fences separate the cemetery from the adjacent residential lots. The northern fence is approximately 100 feet (30 meters) long; the eastern fence is approximately 75 feet (24 meters) long, with a 15 foot (5 meter) wide entrance at the northeast corner; the southern fence extends approximately 60 feet (20 meters) from the southeast corner of the cemetery. Moderate to large hardwoods occur across the cemetery. There is no undergrowth beneath the trees in most of the fenced space. Dense wax myrtle and palmettos grow on the sloping lands that drop to the marsh on the western edge of the cemetery. Leaf litter covers the ground throughout the fenced space. An interpretive sign stands to the right of the gap in the fence near the northeast corner of the cemetery. Figure 6 provides a plan of the Cotton Dike Cemetery.

GPR survey over the cemetery identified multiple anomalies throughout the space within the fence. Like the information recovered from the Sams Family Cemetery, we examined the distributions of the anomalies along each profile and compared these to the locations of anomalies on adjoining profiles, and their depths and appearance. Anomalies of similar depths and

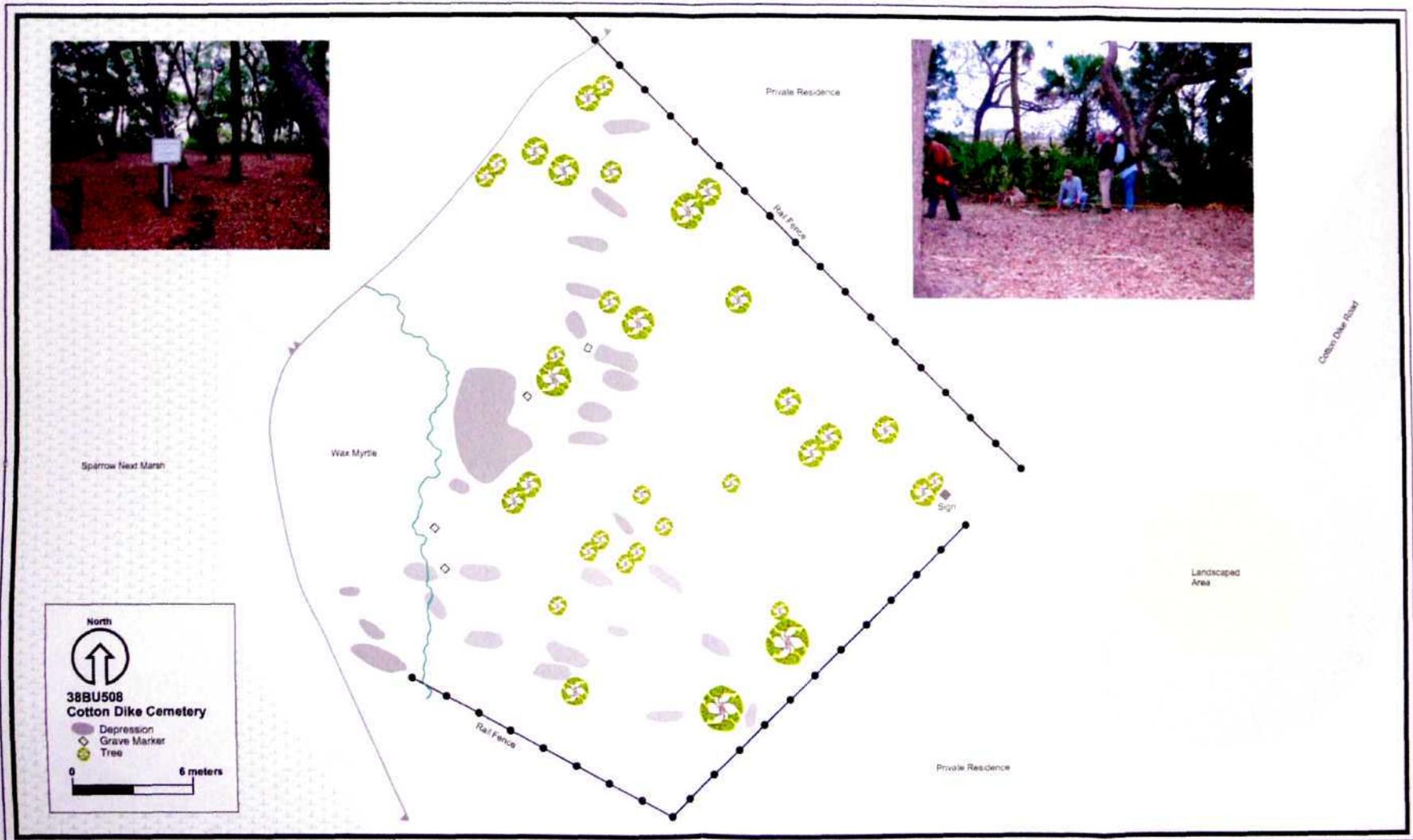


Figure 6. Plan of the Cotton Dike Cemetery (38BU508) on Dataw Island.

configurations that occur on two or more adjacent transects were interpreted as probable graves, or where two or more anomalies were present within or near depressions. We interpreted two to three adjacent anomalies with similar depths or other characteristics as possible graves. Figure 7 provides a plan of the Cotton Dike Cemetery showing the location of the anomalies encountered during the survey, and the locations of possible and probable graves interpreted from the GPR information and the ground surface. Figure 7 also displays a sample of the GPR profile generated along Transect 20.

Visible depressions, assumed to be graves, occur to the west of an imaginary line extending from the northwest corner to the southeast corner of the fenced space. We interpreted three possible graves to the east of the visible depressions and five other possible graves among the depressions, primarily in the southeast corner of the fenced space. The three possible graves to the east of the imaginary line lie within 15-20 feet (4.5-6 meters) of the visible depressions.

Based on the inspection of the ground surface and the GPR information, we estimate that there are at least 38 possible/probable graves in the Cotton Dike Cemetery. The GPR profiles also indicate that most of the anomalies interpreted as possible/probable graves begin at 5-6 feet (1.7-2 meters) below the ground surface. Anomalies associated with depressions first appear at 2.5-3 feet (0.7-1 meter) below the ground surface. The difference obviously reflects the lower ground surface within the depression. Most of these graves lie in the western and southern portion of the fenced space. It is possible that more graves are present in the densely overgrown areas in the western portion of the cemetery. We could not collect GPR data from this area nor was it easy to traverse or even see the ground surface. There appear to be no graves in the northeast portion of the fenced space.

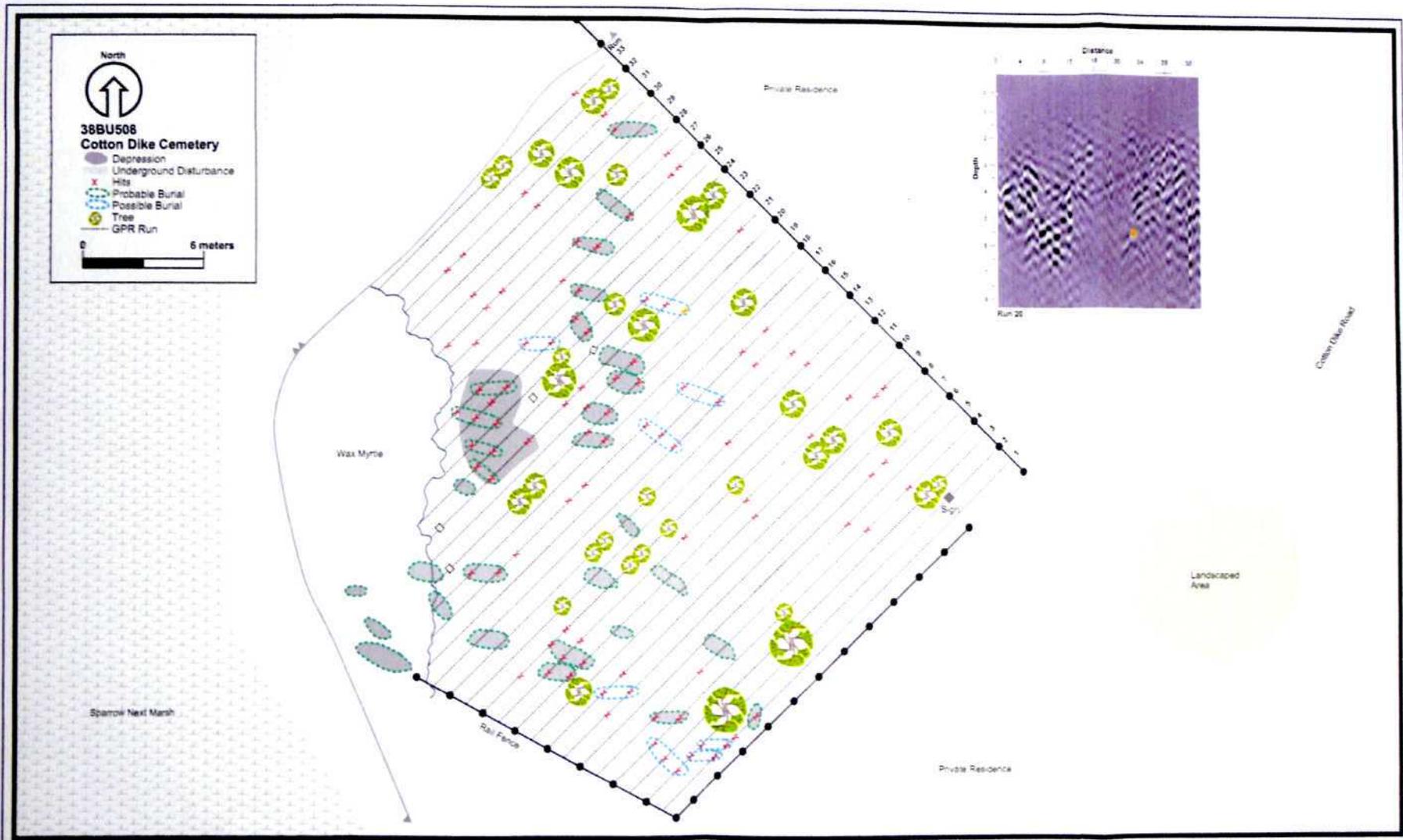


Figure 7. Plan of the GPR survey of the Cotton Dike Cemetery.

Excavations at the Former Well

Excavations at the location of the former well provide information for the reconstruction of this feature within the stabilized ruins of the B. B. Sams Plantation Complex (38BU581). The well was partially demolished and filled in the mid-1980s during the initial development activities on Dataw Island. At that time, the well was brick lined, with the brick construction extending approximately 3 feet (1 meter) above the ground surface. The shaft extended to approximately 12 feet (4 meters) below the surface. Water appeared in the well possibly in response to tidal fluctuations of the water table. The DHF desire to recreate this important component of the plantation settlement to enhance visitors' understanding of the organization of the plantation residences.

Methods

Examination of the suspected location of the former well involved several "exploratory" techniques prior to the excavation of a test unit. Benji Simmons, Dataw Island grounds maintenance staff, was present when the well was filled in the 1980s. He marked the area where he remembered the well to be. This location corresponds with the shown in the schematic plan of the B. B. Sams Plantation Complex (see Figure 2). On 11 March 2005, we inspected this location and noted a number of bricks and brick fragments on the ground surface. Large hardwood trees cover this portion of 38BU581, and leaf litter covers the ground to a depth of 4-6 inches (10-15 cm). We conducted a brief GPR survey of the location, examining an area defined by imaginary lines extending west from the northwest and southwest corners of nearby Building VIII (see Figure 2) with the area marked by the informant. We collected GPR information along transects spaced at 1.5 foot/0.5 meter intervals. This survey provided practice with the GPR equipment prior to the survey of the Sams Family Cemetery. GPR anomalies indicated a disturbed area around the location marked by the informant. We marked the limits of this disturbed area with pin flags.

We returned to 38BU581 on 15-16 June 2005. We laid out a 10 by 10 foot (3 by 3 meter) excavation unit (designated Unit 401) using the orientation of Building VIII as our grid alignment. All previous excavations at 38BU581 were oriented to the various buildings where samples were collected. No permanent grid has been established for the site. Once we had laid out our excavation

unit, we removed the leaf litter from the ground surface and began to excavate the fill within the unit. Figure 8 provides a view of the crew laying out Unit 401.



Figure 8. The crew laying out Unit 401 at the suspected location of the former well.

We removed the fill in 0.5 foot/15 cm arbitrary levels within the Unit 401. We screened the fill through $\frac{1}{4}$ inch mesh hardware cloth, collecting or documenting artifacts that remained in the screen. We weighed brick, tabby, mortar, and shell (defined as rubble) and discarded this material adjacent to Unit 401. We retained all other artifacts for cleaning and identification. We maintained standardized level records for each excavation level, and sketched and photographed the floor of each level within the unit. We removed three arbitrary levels from Unit 401, exposing a large rubble-filled stain thought to be evidence of the demolition of the well. This stain filled the southern portion of Unit 401.

Due to time constraints, we obtained a backhoe from the Dataw Island grounds maintenance department, and excavated a trench from the south wall of Unit 401 to expose the southern edge of the soil stain. Once exposed, we mapped the limits of the stain and then excavated into the stain

until we encountered the intact portions of the brick lining of the former well. We stopped excavations at this point, drawing and photographing the features thus exposed. We then placed PVC pipe along the inside edge of the brick lining and used the backhoe to refill Unit 401 and the backhoe trench. The PVC pipe extends up through the backfill mark the inside limits of the former well. Masons will be able to use these markers as guides for the reconstruction of the upper portion of the well. Figure 9 provides a view of the backhoe excavation in progress.



Figure 9. Backhoe excavations underway in Unit 401.

Results

Test Unit 401 was a 10 by 10 foot (3 by 3 meter) excavation unit. This unit was dug in 0.5 foot/15 cm arbitrary levels. Several members of the local community were present to observe the archaeology, while some actually took part in finding artifacts in the screens. Three levels were excavated, making the base of the hand excavations 1.5 feet (45 cm) below surface.

Level 1 revealed a dense layer of shell, mortar, and brick fragments, concentrated mainly in the southern half of the unit. Figure 10 displays a plan of the base of Level 1. We removed 128

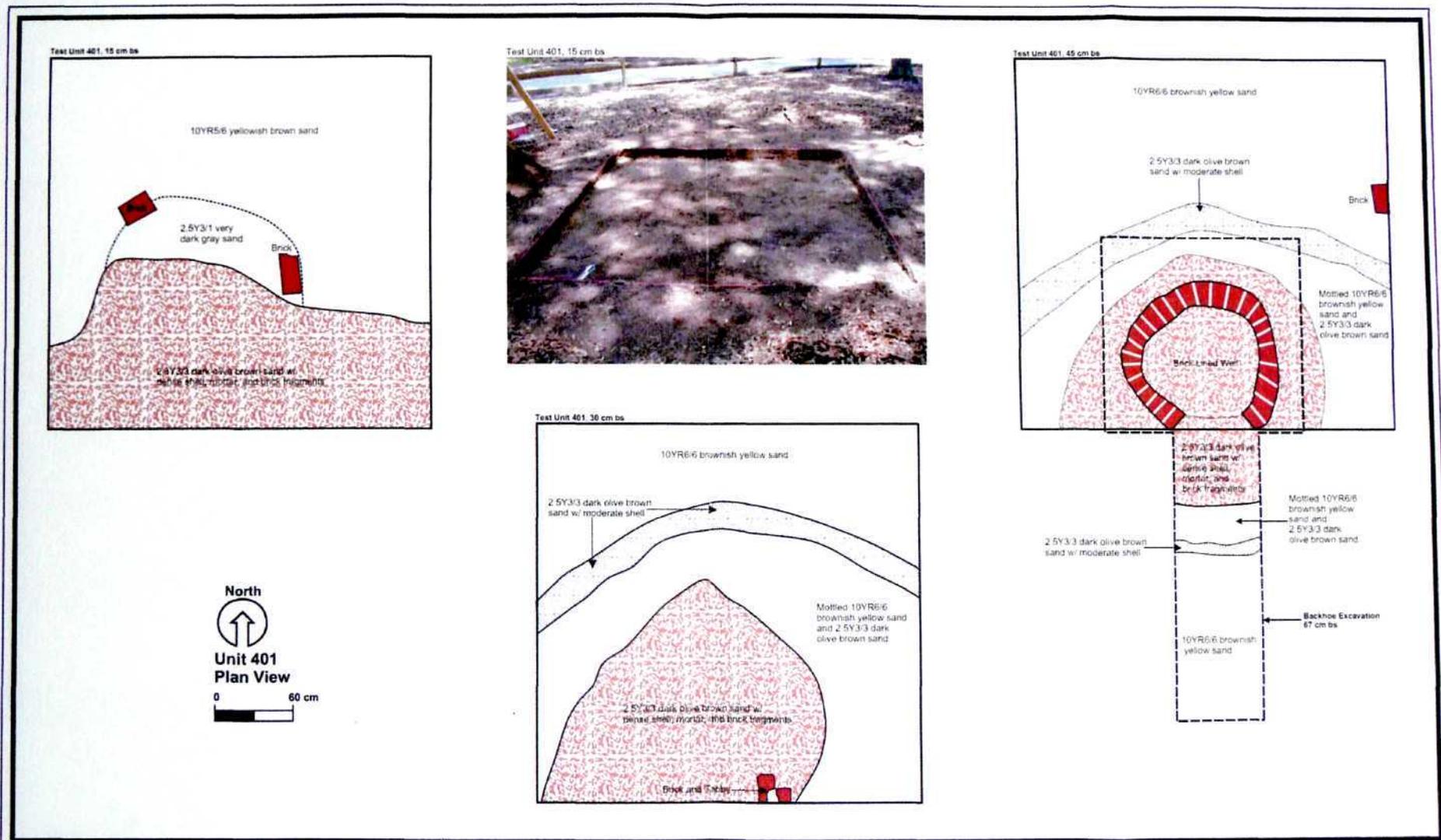


Figure 10. Plan of excavation levels in Unit 401.

pounds (58.25 kilograms) of these materials from Level 1 in Unit 401. We recovered 53 artifacts, with the majority of which were bottle glass fragments, architectural debris (window glass and nails), and ceramic sherds from the eighteenth and nineteenth centuries. The most interesting artifact recovered was a brass jews harp fragment. Figure 11 provides a view of volunteers assisting with the screening of fill from Unit 401. Table 1 summarizes the artifacts from Unit 401.



Figure 11. DHF volunteers assisting with the screening of fill from Unit 401.

Level 2 contained much more shell, mortar, and brick than the previous level, with 440 pounds (220 kilograms) weighed and discarded. The investigators noted that the concentrations of shell and brick were more defined, and the concentration was now a circular/ovoid shape. This concentration extended to the middle of the unit, surrounded by a circular band of shell (see Figure 10). We recovered 242 artifacts from Level 2, with the majority being architectural debris (see Table 1). The range of recovered ceramics was similar to Level 1. We also recovered numerous bottle glass fragments representing various bottle types and forms. Some faunal remains also were recovered.

Table 1. Artifacts Recovered from Unit 401 at the Former Well.

<u>Class</u>	<u>Type</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Backhoe Trench</u>	<u>Total</u>
Kitchen	Porcelains	1	5	3		9
	Creamwares		4	6		10
	Pearlwares	2	3			5
	Whitewares	3	16	31	1	51
	Ironstones		1	1		2
	Redwares		1			1
	Buffwares			1		1
	Salt Glazed Stoneware		5	3		8
	Unidentifiable Stoneware	2	1	1		4
	Burned Ceramics		2	1		3
	Table Glass		1	2		3
	Bottle Glass	19	38	26	2	85
	Burned glass	4	14	9		27
	Architecture	Shutter Hook				1
Window Glass		8	41	52		101
Brick Tile		1				1
Wrought Nails			1	1		2
Cut Nails			39	36		75
Wire Nails			2	3		5
Unidentifiable Nails		10	46	58		114
Iron Bracket				1		1
Iron Door Handle				1		1
Arms		percussion cap		1		
Clothing	buttons			3		3
Personal	jew's harp	1				1
Tobacco	Pipe Bowls/Stems		4	3		7
Activities	Wire	1				1
	Slate		1			1
Other	Unidentifiable 20 th c. artifacts	1	2			3
	Unidentifiable Iron/Steel		9	13		22
	Unidentifiable Slag		1			1
	Iron Can Fragment			2		2
Pre-Contact Ceramics			4	3		7
Total		53	242	260	4	559
Rubble (in kg)		58.25	220.00	243.75		522.00
Faunal Remains (in g)		1.27	34.83	113.34		149.44

Level 3, the final level, again revealed a dense circular concentration of brick, shell, and mortar. This feature extends into the south wall of Unit 401. The arc of shell described above was now a much denser lense of shell but farther south than encountered in Level 2 (see Figure 10). We recovered 260 artifacts from Level 3; all were similar to the materials recovered in Levels 1 and 2 (see Table 1). Again, architectural debris made up the majority of artifacts, with ceramic sherds being the second most prevalent artifact class. A few buttons were found in this level, along with door and/or window hardware. We weighed and discarded 536 pounds (242.75 kilograms) of rubble from Level 3.

Once hand excavations were finished, a backhoe was employed to scrape an area directly over the circular concentration of rubble and shell to expose the brick lining of the well. The scraping revealed intact brick foundation at approximately 2.2 feet (67 cm) below the ground surface. We then excavated a trench from the south wall of Unit 401 to expose the south edge of the soil stain and rubble lense associated with the well. Figure 10 displays a plan of the excavations once the intact well lining and southern edge of the associated soil stain was exposed. One large fragment of the former well lining that extended above the ground surface was removed from above the intact lining with the backhoe. We placed this fragment of intact masonry adjacent to the excavation so that the masons who will reconstruct the well can note how it was constructed. We also kept as many whole bricks as possible, cached in the same location, for the masons to use to match the bricks they employ in the reconstruction or to use during the reconstruction. Figure 12 displays views of the exposed upper surface of the intact brick lining of the well and a view of the large fragment of intact masonry recovered with the backhoe.

Some assumptions about the construction of this well and how it was used can be made from these excavations and the recovered artifacts. It is possible that a structure or well house once covered the well. The high frequency of nails and the door/window hardware may be evidence of such a structure. However, since artifacts of all types were found in the unit, these architectural materials may be part of the large scatter of artifacts derived from the nearby plantation buildings. Rubble may have been pushed from nearby into the well to help fill it when it was closed in the 1980s. We first thought that the soil stain that surrounds the well was associated with its demolition. After exposing the brick lining and the south edge of this stain, we now believe that the stain is the construction pit associated with the well. This former pit tapers down as it extends into the ground. More work could be conducted here to determine if there are postholes or tabby piers that once supported a well house. These posts may have been set into the fill of the construction pit after the well was finished or in subsoils beyond the edges of Unit 401.



Figure 12. Views of the former well. Top: Fragment of masonry recovered from fill above the well. Bottom: Intact brick lining exposed by backhoe excavations.

Also, the shell lense that marks the outer edge of this pit appears to line the construction pit. Did the excavators of the original well shaft line their pit with shell as they backfilled? If the builders placed the shell in the pit during excavation, it would be mixed with the surrounding soils. Instead, it is quite distinct, suggesting that the shell was placed in the pit and then the mottled fill between the shell and the brick lining was placed in the pit. Possibly, the shell helped filter ground water as it seeped into the well or helped to prevent displacement of the well within the construction pit until the fill in the construction pit had settled sufficiently.

Summary and Recommendations

Investigations at the B. B. Sams Plantation complex (38BU581) and the Cotton Dike Cemetery (38BU508) provided information to the DHF necessary to pursue their proposed management actions with regard to these two sites. GPR survey of the Sams Family Cemetery at 38BU581 demonstrated the location of probable and possible graves within the walled space or near its northeast corner. GPR anomalies interpreted as graves begin at 2-3 feet (0.6-1 meter) below the ground surface. Stabilization of the wall (see below) should not intrude into any of these possible burials although fill materials may cover them. Excavations at the reported location of the former well exposed the construction pit and the remnants of the brick lining of the well. This location was marked so that the upper portions of the well can be reconstructed above ground, providing visitors with an appreciation of the relationship of this important element to the other buildings and facilities of the B. B. Sams Plantation complex. GPR survey at the Cotton Dike Cemetery demonstrated that there are 38+ graves in the cemetery; most lie in the southern and western portions of the fenced space.

DHF proposes to stabilize the tabby wall that surrounds the Sams Family Cemetery through the installation of gravel fill on each side of the footing of the wall. The wall has cracked in two places and fragments of the wall eventually will topple over. The approach designed and proposed to prevent the toppling of the wall will involve the excavation of a footing trench approximately 2 feet (0.6 meters) wide and approximately 0.75 feet (24 cm) deep or to the base of the wall footing. Limestone gravel then will be placed in the trench to the approximate height of the wall footing. Soil or crushed shell then will be placed on top of the gravel. The compact mass of gravel should prevent the twisting movement of the base of the wall segments that will occur in time, thus preventing their collapse. A diagram of this approach appears in Figure 13. Dr. Eric Poplin and Mr. Colin Brooker will supervise the installation of the ballast. The DHF has received a bid for the work and is currently developing a contract to undertake the stabilization. The same contractor also will reconstruct the upper portions of the well.

These investigations also provide a venue for additional investigation of the B. B. Sams Plantation complex, should the DHF decide to pursue more archaeological investigations. Excavations adjacent to Unit 401 at the location of the former well may expose the remnants of a well house that once covered this element of the plantation settlement. Other areas that have not

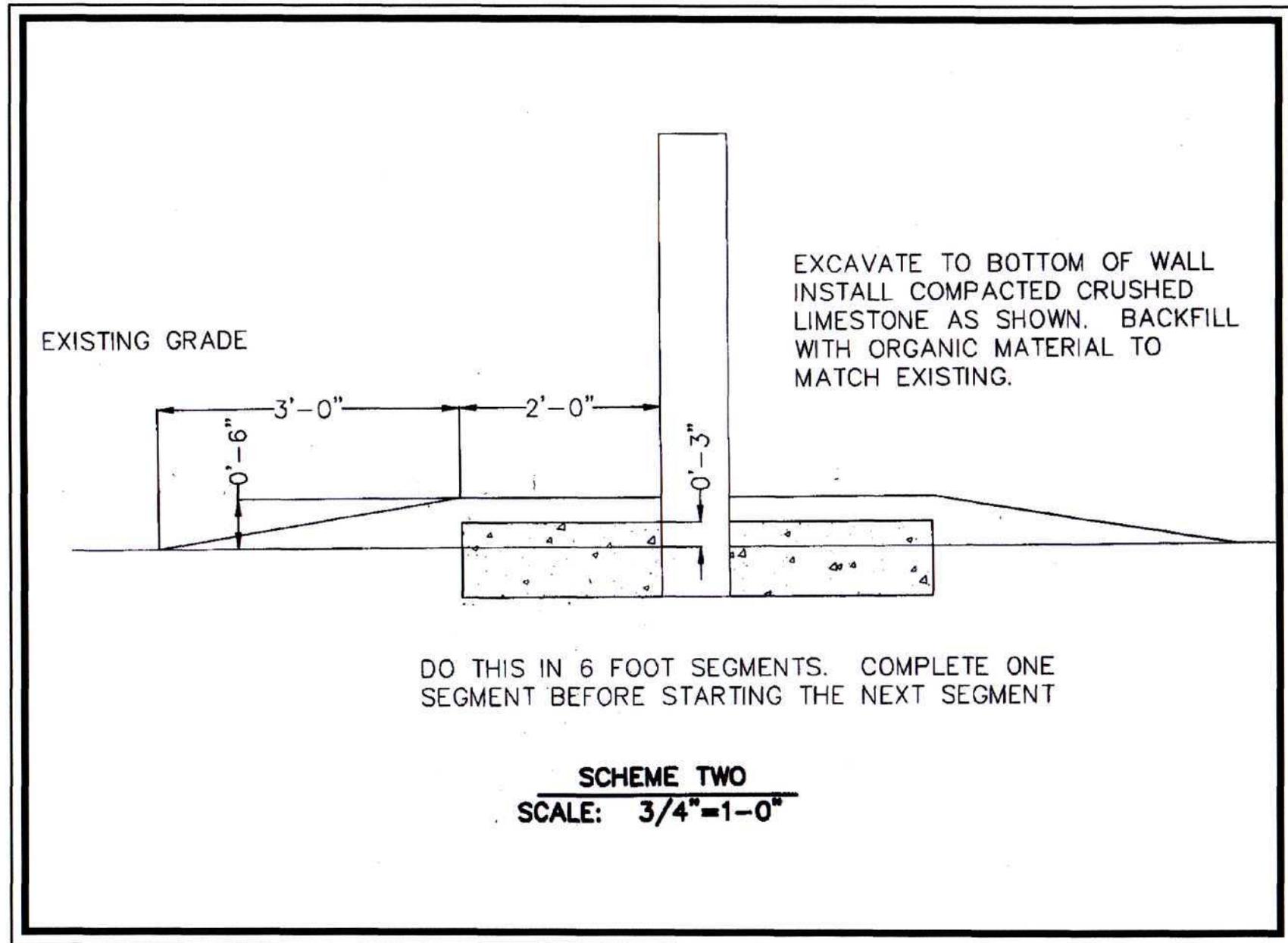


Figure 13. Diagram of the stabilization approach proposed for the tabby wall that surrounds the Sams Family Cemetery at 38BU581.

witnessed extensive investigation to date include the interior of the walled compound that stands to the south of the well.

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Appendix A
Artifact Inventory

Artifact Catalog

Brockington and Associates, Inc. uses the following proveniencing system. Provenience 1 designates general surface collections. Numbers after the decimal point designate subsequent surface collections, or trenches. Proveniences 2 to 200 designate shovel tests. Controlled surface collections and 50 by 50 cm units are also designated by this provenience range. Proveniences 201 to 400 designate 1 by 1 m units done for testing purposes. Proveniences 401 to 600 designate excavation units (1 by 2 m, 2 by 2 m, or larger). Provenience numbers over 600 designate features. For all provenience numbers except 1, the numbers after the decimal point designate levels. Provenience X.0 is a surface collection at a shovel test or unit. X.1 designates level one, and X.2 designates level two. For example, 401.2 is Excavation Unit 401, level 2. Flotation samples are designated by a 01 added after the level. For example, 401.201 is the flotation material from Excavation Unit 401, level 2.

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Site Number	Page Number
38BU581	A - 1

SITE NUMBER: 38BU581

PROVENIENCE NUMBER: 401 . 0 Unit 401 Surface Collection in Backhoe Trench

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1	5.17	blue transfer printed whiteware	
2	1	3.74	clear bottle glass	
3	1	2.24	cobalt blue bottle glass	
4	1	189.76	iron shutter hook	

PROVENIENCE NUMBER: 401 . 1 Unit 401 Level 1 (0-15cm) 3x3m

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1	0.61	overglazed painted porcelain	
2	2	1.26	blue hand painted pearlware	1 rim
3	2	14.57	unidentifiable stoneware	eroded/burned
4	2	2.41	undecorated whiteware	
5	1	0.20	amular whiteware	blue
6	6	11.41	olive green bottle glass	
7	3	56.74	aqua bottle glass	1 with molded lettering "IND"
8	6	14.05	clear bottle glass	
9	1	3.71	amber bottle glass	
10	2	7.41	clear mold blown bottle glass	
11	1	4.47	cobalt blue mold blown bottle glass	
12	4	32.15	burned glass	
13		1.27	faunal remains	
14	1	14.24	brick tile	with tar on one side
15	4	3.74	clear flat (window) glass	
16	4	3.08	aqua flat (window) glass	
17	10	38.24	unidentifiable nail	
18	1	8.48	brass jews harp	fragment
19	1	1.15	wire	iron

Site Number: 38BU581

20	1	1.14	unidentifiable 20th century artifacts	iron screen fragment
21		58.25	building rubble	brick, mortar, and shell - discarded in field

PROVENIENCE NUMBER: 401_2 Unit 401 Level 2 (15-30cm) 3x3m

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	1	2.44	overglazed painted porcelain	
2	1	0.17	Chinese undecorated porcelain	
3	3	1.13	Chinese blue underglazed porcelain	
4	4	9.07	undecorated creamware	
5	2	4.27	blue hand painted pearlware	
6	1	1.45	blue transfer printed pearlware	
7	1	1.21	black glazed/slipped redware	
8	5	84.73	brown salt glazed stoneware	
9	1	3.30	unidentifiable stoneware	grey bodied, brown glazed
10	1	0.65	undecorated whiteware	
11	15	44.66	blue transfer printed whiteware	5 rims, 2 bases
12	1	10.96	undecorated ironstone	base
13	2	14.27	unidentified burned ceramic	
14	3	25.58	dark olive green bottle glass	
15	15	35.50	olive green bottle glass	1 neck fragment
16	2	2.82	green bottle glass	
17	11	33.87	aqua bottle glass	1 with molded "N"
18	4	28.97	clear bottle glass	
19	1	1.90	amber bottle glass	
20	1	0.33	yellow bottle glass	
21	1	1.58	clear mold blown bottle glass	
22	1	1.87	unidentifiable form tableglass	clear with transparent gold film on exterior
23	14	27.54	burned glass	
24		25.55	faunal remains	
25		2.89	teeth	
26		6.39	turtle shell	
27	14	10.23	clear flat (window) glass	
28	27	24.03	aqua flat (window) glass	
29		1.10	mortar	discarded in lab
30	1	4.28	wrought nail	
31	39	121.76	common cut nail	
32	2	10.46	common wire nail	
33	46	146.03	unidentifiable nail	
34	1	0.95	plastic button	black - photo
35	1	0.58	percussion cap, revolver	
36	1	1.52	plain kaolin pipe stem	
37	2	8.35	molded kaolin pipe stem	1 with "3"/"2" on stub and stamped "78" on stem - photo
38	1	1.70	glazed kaolin pipe stem	yellow glaze - photo
39	1	2.51	slate, undetermined function	
40	9	113.31	unidentifiable iron/steel	
41	1	3.64	unidentifiable slag	
42	1	0.20	unidentifiable plastic object	
43	1	6.94	cord marked body sherd, fine/medium sand temper	Savannah
44	1	14.02	cord marked rim sherd, fine/medium sand temper	Savannah
45	2	1.58	residual sherd	

Site Number: 38BU581

PROVENIENCE NUMBER: 401 . 3 Unit 401 Level 3 (30-45cm) 3x3m

Catalog #	Count	Weight (in g)	Artifact Description	Comments
1	3	4.53	undecorated porcelain	
2	1	2.16	buffware with combed slip	
3	4	5.37	undecorated creamware	
4	2	0.81	hand painted/overglaze enamel creamware	polychrome
5	3	28.73	brown salt glazed stoneware	
6	1	6.11	unidentifiable stoneware	grey bodied, brown glazed
7	10	15.07	undecorated whiteware	
8	1	1.74	blue shell edged whiteware	
9	1	1.30	green shell edged whiteware	
10	3	2.58	hand painted whiteware	
11	12	19.61	blue transfer printed whiteware	2 rim, 2 base, 1 handle
12	1	2.46	black transfer printed whiteware	
13	1	0.74	annular whiteware	blue
14	1	0.91	finger painted whiteware	
15	1	2.10	color glazed whiteware	blue
16	1	2.67	undecorated ironstone	
17	1	17.22	unidentified burned ceramic	
18	2	5.67	dark olive green bottle glass	
19	6	121.96	olive green bottle glass	
20	9	13.74	aqua bottle glass	
21	6	6.39	clear bottle glass	
22	2	0.52	cobalt blue bottle glass	
23	1	0.79	aqua panel bottle glass	
24	1	0.89	glass stemware	
25	1	0.85	leaded tableglass, unidentifiable form	
26	9	16.15	burned glass	
27		98.64	faunal remains	
28		8.29	teeth	
29		6.41	turtle shell	
30	13	7.69	clear flat (window) glass	
31	39	29.86	aqua flat (window) glass	
32		6.75	mortar	discarded in lab
33	1	9.46	wrought nail	
34	36	135.90	common cut nail	
35	3	20.22	common wire nail	
36	58	171.41	unidentifiable nail	
37	1	0.23	bone button	South type 20 - photo
38	1	0.42	porcelain buttons	photo
39	1	2.19	brass button	South type 18 "**ORANGE*COLOUR*GILL" - photo
40	1	1.49	molded kaolin pipe bowl	eagle design
41	2	3.99	plain kaolin pipe stem	
42	1	53.62	iron bolt or bracket (architectural)	bracket
43	1	102.97	iron door handle (not knob)	
44	2	11.84	iron can fragment	
45	13	125.50	unidentifiable iron/steel	
46		1.24	slate, undetermined function	
47	1	12.51	dentate stamped body sherd, grog temper	and shell scraped, Refuge
48	1	4.60	plain body sherd, fiber temper	Stallings
49	1	4.19	eroded body sherd, coarse sand temper	