

**CULTURAL RESOURCES SURVEY OF THE
NORTH AUGUSTA RIVERFRONT PROJECT,
AIKEN COUNTY, SOUTH CAROLINA**



CHICORA RESEARCH CONTRIBUTION 403

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT PROJECT, AIKEN COUNTY, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive cultural resources survey of a 115 acre tract along the Savannah River in the City of North Augusta, Aiken County, South Carolina. The work, conducted for the City of North Augusta, is meant to assist the city in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800. The Federal Highway Administration, however, has determined that they would conduct the Native American consultation mandated by 36CFR800.2(c)(3)(i) through 800.2(c)(3)(iv), as well as any public consultation stipulated by 36CFR800.2(d)(1) - as result this study did not include either.

The project tract includes a series of roads to be either modified or constructed using Federal Highway Administration (FHWA) funds, including Railroad Avenue, Georgia Avenue Extension, West Avenue Extension, and Crystal Lake Drive Extension. The project was expanded beyond these narrowly defined highway corridors to include areas of dense brick rubble and clay pits (several today filled with water) that would be used for fill or that would be filled as a result of the project.

This survey was conducted to identify and assess archaeological and historical sites which may be in the project area. The proposed undertaking will require clearing, grubbing, and grading, along with the construction of underground utilities. While this work is in anticipation of a private development, no federal licensing, permitting, or funding will be involved and the State Historic Preservation Office has determined that the private development would occur without the federal grant funding for this road work - consequently, the narrowly defined project limits.

There may be short-term construction impacts, including increased noise and dust levels, and increased construction related traffic. The long-term affects will primarily be an increase of traffic from the new residents. This study, however, only evaluates the primary affects of the project on archaeological resources and visual affects on nearby architectural resources.

For this study the same area of potential effect (APE) was used as was included in the 2002 examination of the proposed North Augusta Greenway. The architectural evaluation prepared for that study was approved by the State Historic Preservation Office and this investigation only reviewed the identified to ensure there had been no substantive modification over the past two years. While both eligible and National Register listed properties are within the 1-mile APE, they will not be directly affected by the proposed undertaking.

In addition, architectural recording was conducted of a brickmaking facility in the project area. Architectural historian Sarah Fick determined that the remains were in dilapidated to ruinous condition and that the extant remains were not eligible for inclusion on the National Register of Historic Places.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified one previously recorded site on the project tract (38AK493) and several additional sites in the APE. Some of these sites in the APE have already been damaged or destroyed by development activities, such as the site of Hamburg (38AK716) and the Falmouth Cemetery (38AK502), while others are in the path of construction, such as Campbellton (38AK276). The one site within the study tract, 38AK493, is the North Augusta Dispensary, recorded as an

architectural site. Since it was recorded, the structure has burned.

Prior to the field investigations this project received extensive historical research, using the South Caroliniana Library, the Thomas Cooper Map Repository, the S.C. Department of Archives and History, and the Aiken County Register of Mesne Conveyances. In addition, information from the Edgefield County Historical Society was also shared with us. This documentation provides a very detailed view of the activities on the project tract over the past 100 years.

The archaeological survey of the tract incorporated auger testing at 100-foot intervals on transects laid out at 100-foot intervals. All auger test fill was screened through ¼-inch mesh and tests penetrated 3 to 4 feet. Additional close-interval auger tests were conducted in several locations. Site testing involved the placement of both 2- and 5-foot units. A total of 332 auger tests, four 2-foot units, and two 5-foot units were excavated in the tract.

A geomorphological study of the study tract was conducted by geologist Keith C. Seramur, P.E. who conducted a deep testing program to determine if buried cultural horizons were present within the study tract. A backhoe was used to excavate 32 trenches into different geomorphic features on the floodplain. A series of trenches were excavated into areas of the T2 terrace along the proposed roadway. Trenches were also excavated along the northern end of the terrace adjacent to the former clay pits. Additional trenches were excavated in the eastern, industrialized section to test for alluvium preserved below fill materials, targeting the edge of the T2 terrace and elevated landforms. The investigations included excavating three trenches to a depth of 16 feet to test for deeply buried cultural deposits. Cultural areas were identified in three areas of the T2 terrace. The excavated trenches provide data to reconstruct the Holocene depositional environment and place cultural horizons into a stratigraphic context.

As a result of these investigations, five archaeological sites were identified (38AK931-935)

and the one previously recorded site (38AK493) was assessed.

Site 38AK931 is an early to late twentieth century industrial complex that housed a range of North Augusta industries, including Augusta Veneer, Industrial Lumber, Augusta Face Brick (later Georgia-Carolina Brick and Tile), Wood Pottery, a second short-lived brickyard, a box factory, a furniture factory, and a chair factory. A range of structures and concrete pads still remain in the site area, but all are in ruinous condition. They are also no longer connected in any physical ways, the area has returned to dense vegetation, and we have lost the sense of a factory setting. We have a collection of detached secondary buildings that have lost their character-defining aspects of the industrial setting. The associated archaeological remains are sparse and heavily impacted by modern activities, including salvage with a significant reduction in integrity. Significant research questions for the industries can be far better studied through historical research than archaeological investigation. With one exception this industrial site is recommended not eligible.

The one exception is the Wood Pottery, identified on a 1907 Sanborn map. Testing at the pottery has produced wasters and intact evidence of both buildings and flues associated with the kilns. Significant research questions include not only the layout and functioning of the pottery itself, but also its historic context. This loci is recommended eligible for inclusion on the National Register.

Site 38AK932 is a small but very dense lithic scatter dating from the Late Archaic/Early Woodland transition. Present are a range of lithic raw materials, fire cracked rock, bifaces, Small Savannah River projectile points, worked soapstone, and Stallings and Thom's Creek pottery. Buried under about 2-feet of alluvium, site integrity is very high and we recommend the site eligible for inclusion on the National Register of Historic Places.

Site 38AK933 is a very but somewhat dispersed contact period Native American hamlet.

Present are a broad range of lithic materials, including bifaces and very late projectile point styles such as crude triangular points and Randolph Stemmed points. The pottery includes two possibly distinct types (one grit tempered and the other with a micaceous paste). Surface treatment include complicated stamped, corncob impressed, roughened, incised, and check stamped. Trade goods present at the site include a trade bead, brass tinkling cone, cut glass, and kaolin pipe stem. Midden has been identified, along with floral remains. Post holes have been found intact below the midden deposits. This site appears to be associated with Native American groups coming to the Fort Moore area for trade purposes. Given the nature of the site, there is a possibility for human remains. This site is recommended eligible for inclusion on the National Register of Historic Places.

Site 38AK934 is a very small Native American lithic scatter. Artifact density is very light and materials are limited to nondiagnostic flakes. This site is recommended not eligible for inclusion on the National Register.

Site 38AK935 is the Baynham flowerpot factory constructed in the early to mid-1960s. The site is neither archaeological nor architecturally significant, being less than 50-years in age. Moreover, there is abundant oral history concerning the factory and its operation. While the site is recommended not eligible for inclusion on the National Register, it does contain machinery that is worthy of preservation and we understand that the City of North Augusta is taking steps to find the equipment a new home.

Finally, previously recorded site 38AK493 represents the North Augusta Dispensary – a site for which there is abundant historical documentation. The site number had been previously assigned to the architectural site and no archaeological investigations were conducted. The structure burned in 1995 and was subsequently removed aggressively to its concrete pad. Little evidence remains other than bulldozer push piles. Our testing failed to identify any remains with integrity and this site is recommended not eligible.

The auger tests across the 115 acre tract also identified several isolated remains – either prehistoric or historic materials lacking context and in areas of disturbance. These remains, by definition, are not eligible for inclusion on the National Register of Historic Places.

As a result of this work, we recommend that the Wood Pottery locus of 38AK931, site 38AK932, and 38AK933 be either green spaced in perpetuity or have data recovery plans prepared for their investigation. We also encourage the City to follow-through on its plans to remove and rehouse the flowerpot making equipment in 38AK935.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Skip Grkovic of the City of North Augusta. The work was conducted to assist the City of North Augusta comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800. During a February 23 meeting the FHWA determined that they would conduct the Native American consultation verbally stipulated by the State Historic Preservation Office and mandated by 36CFR800.2(c)(3)(i) through 800.2(c)(3)(iv), as well as any public consultation stipulated by 36CFR800.2(d)(1).

The project is situated on the Savannah River (the "riverfront") in the City of North Augusta in western Aiken County, South Carolina (Figure 1). The project tract includes a series of roads to be either modified or constructed using Federal Highway Administration (FHWA) funds, including Railroad Avenue, Georgia Avenue Extension, West Avenue Extension, and Crystal Lake Drive Extension. The project was expanded to include areas of dense brick rubble and clay pits (several today filled with water) that would be used for fill or that would be filled as a result of the project. Figures 2 and 3 show the project study area.

The project study area will be subjected to a variety of land-altering activities. The construction of new roads will require clearing, grubbing, grading, and construction within defined construction limits. In some cases this work will require the dredging of unsuitable materials and the use of replacement fill. The modification of existing roads will require similar activities, although the construction limits may be more narrowly defined. Industrial activities on the site have resulted in the widespread deposit of brick, much of which will be collected, ground,

and used as fill.

This work is in anticipation of the development of the North Augusta Riverfront by Civitas, LLC and Leyland Alliance, LLC in cooperation with the City of North Augusta. While this development will affect a larger footprint than the project study area, there are no federal funds, licensing, or permitting required *outside of the study area*. Moreover, both the South Carolina Department of Transportation and the South Carolina State Historic Preservation Office have determined that the proposed project could advance *without the federal involvement*. Therefore, the study tract has been limited to the area shown in Figure 3.

Just as this study does not include the much larger interior portion of the property, we have also **not** considered any future secondary impact of the project, including increased or expanded developments in the downtown area, especially to the west of the project.

The project study area consists of approximately 115 acres of land comprising the eastern two-thirds of the North Augusta Riverfront Development. It is bounded to the east by Georgia Avenue, to the south by the North Augusta Greenway, to the west an artificial line and the right of way of Crystal Lake Drive Extension, and to the north by the proposed new North Augusta Greenway (previously surveyed by Chicora Foundation) and the Savannah River. There are also fingers of the project study area extending north to incorporate the Crystal Lake Drive Extension, the West Avenue Extension, and the Georgia Avenue Extension.

Much of this study area (approximately 43 acres or 37%) consists of open clay borrow pits that today hold water. Additional property has

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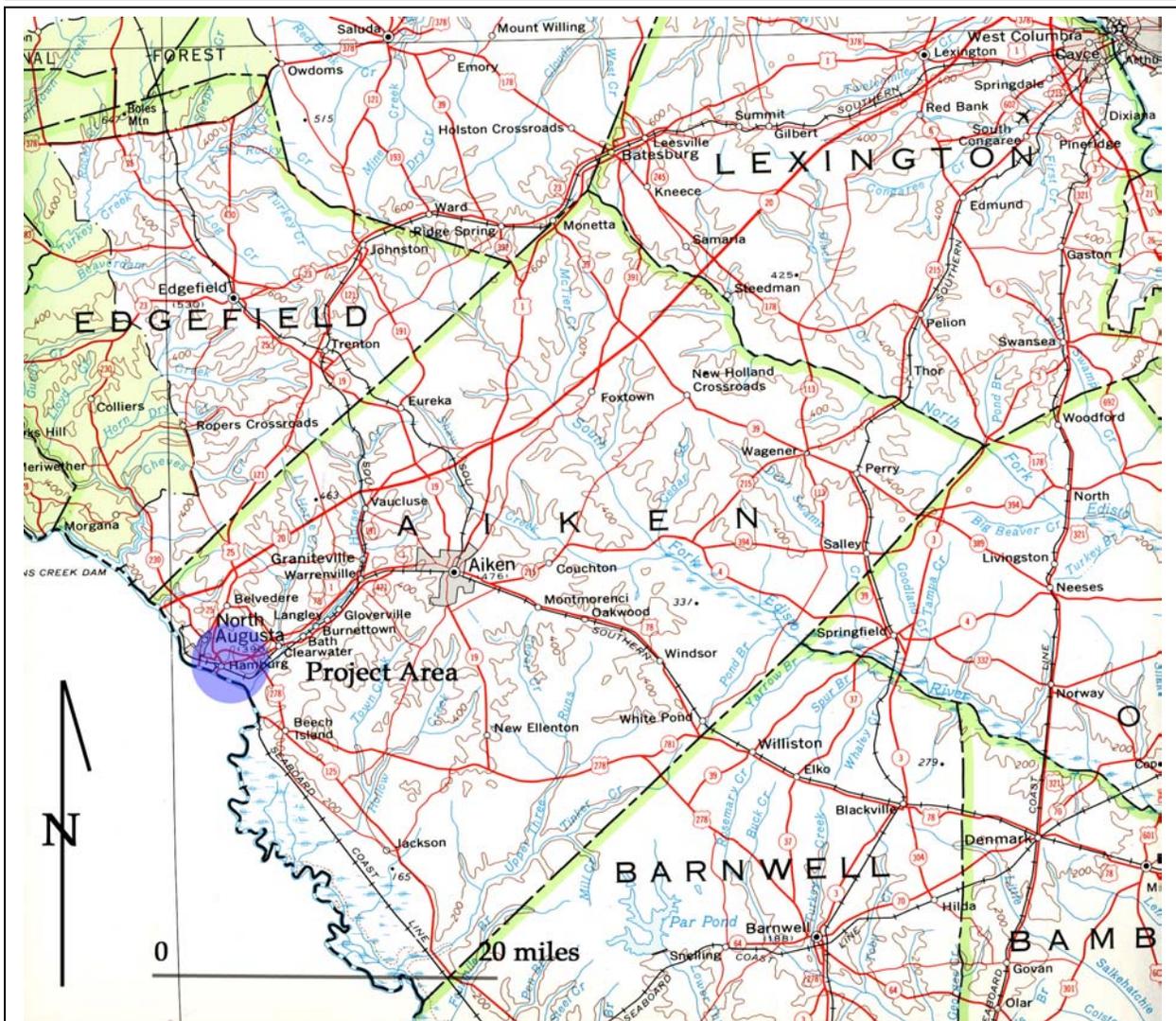


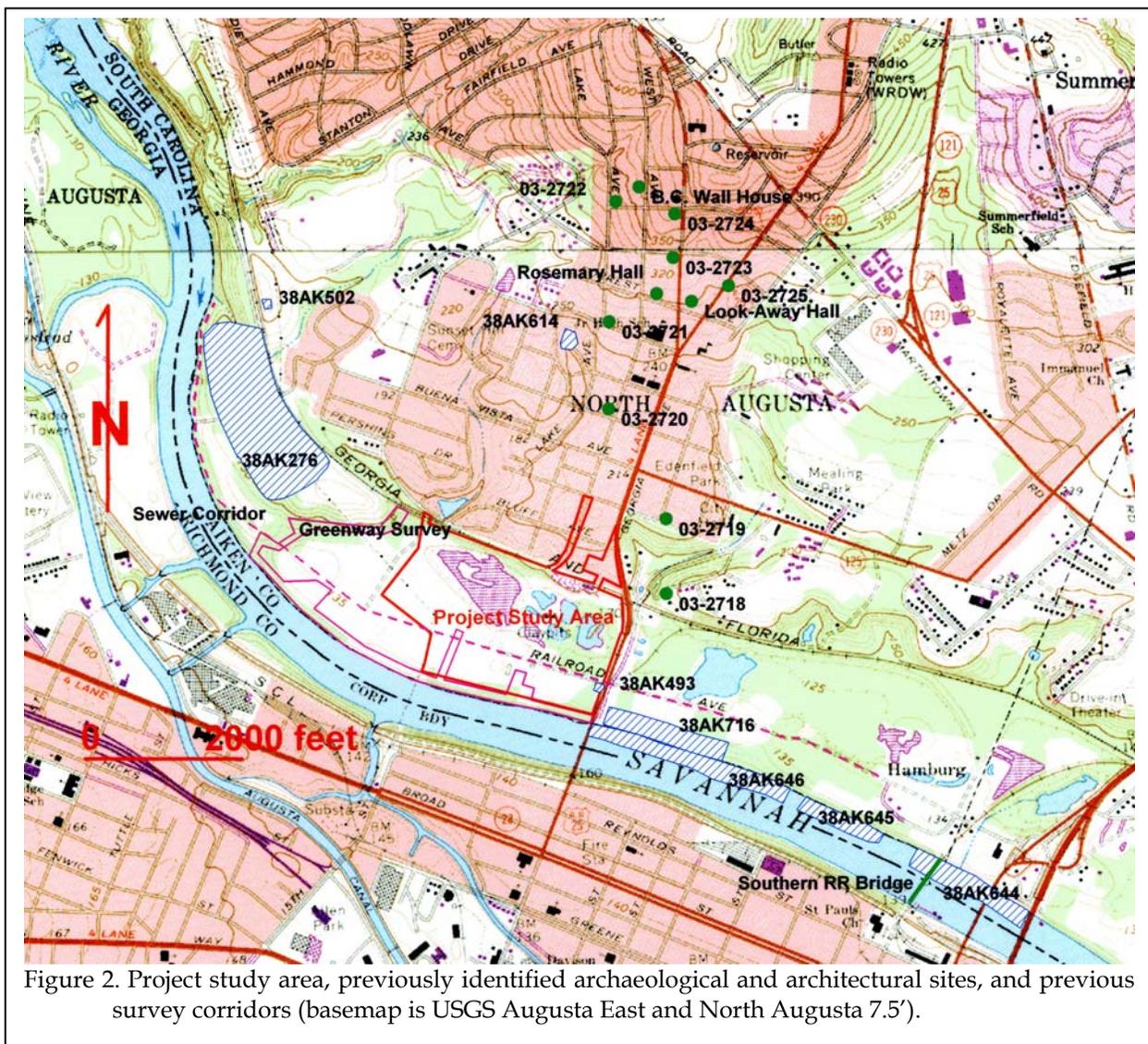
Figure 1. Project vicinity in Aiken County (basemap is USGS South Carolina 1:500,000).

been affected by intensive industrial activity, including the opening and closing of borrow pits and the dumping of large quantities of waste brick. As will be explained in the historical section, the industrial activities on the site (including two brick kilns, several lumber plants, a veneer plant, a cotton pickery, and several furniture factories) have also caused extensive land modifications, with each new construction episode significantly compromising earlier structural - and archaeological - remains. There is, consequently, relatively little of the tract that has not been affected by recent industrial activity. The industrial section of the tract today is overgrown

with scrub hardwood and dense second growth hardwood forest vegetation.

A previous investigation of the North Augusta Greenway for the City of North Augusta (Trinkley and Southerland 2002) used a 1.0 mile area of potential effect (APE) for visual intrusion on the pre-existing historic structures. That work identified three sites listed on the National Register, one steel bridge determined eligible by the SHPO, and eight structures recommended potentially eligible (pending additional historic documentation). None, however, would be affected by the proposed Greenway - a finding

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that was concurred with by the State Historic Preservation Office. Because many of these structures are elevated above the project study area, and because the study area is larger and involves a greater degree of ground disturbance, we have retained this 1.0 mile APE for this study. We were requested by Mr. Skip Grkovic, Director, Economic and Community Development, of the City of North Augusta to provide a proposal for the survey in mid-February 2003. A series of changes to the scope and also the size of the study area resulted in modifications to the proposal, with a notice to proceed given on March 15, 2003.

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, eight sites (38AK276, 38AK493, 38AK502, 38AK614, 38AK644-646, and 38AK716) were found in the 1.0 mile APE.

Site 38AK276 consists of a prehistoric lithic and ceramic scatter along with an eighteenth to nineteenth century domestic site. Its eligibility status is undetermined.

Site 38AK493 is the South Carolina Dispensary site. This site was also identified in an

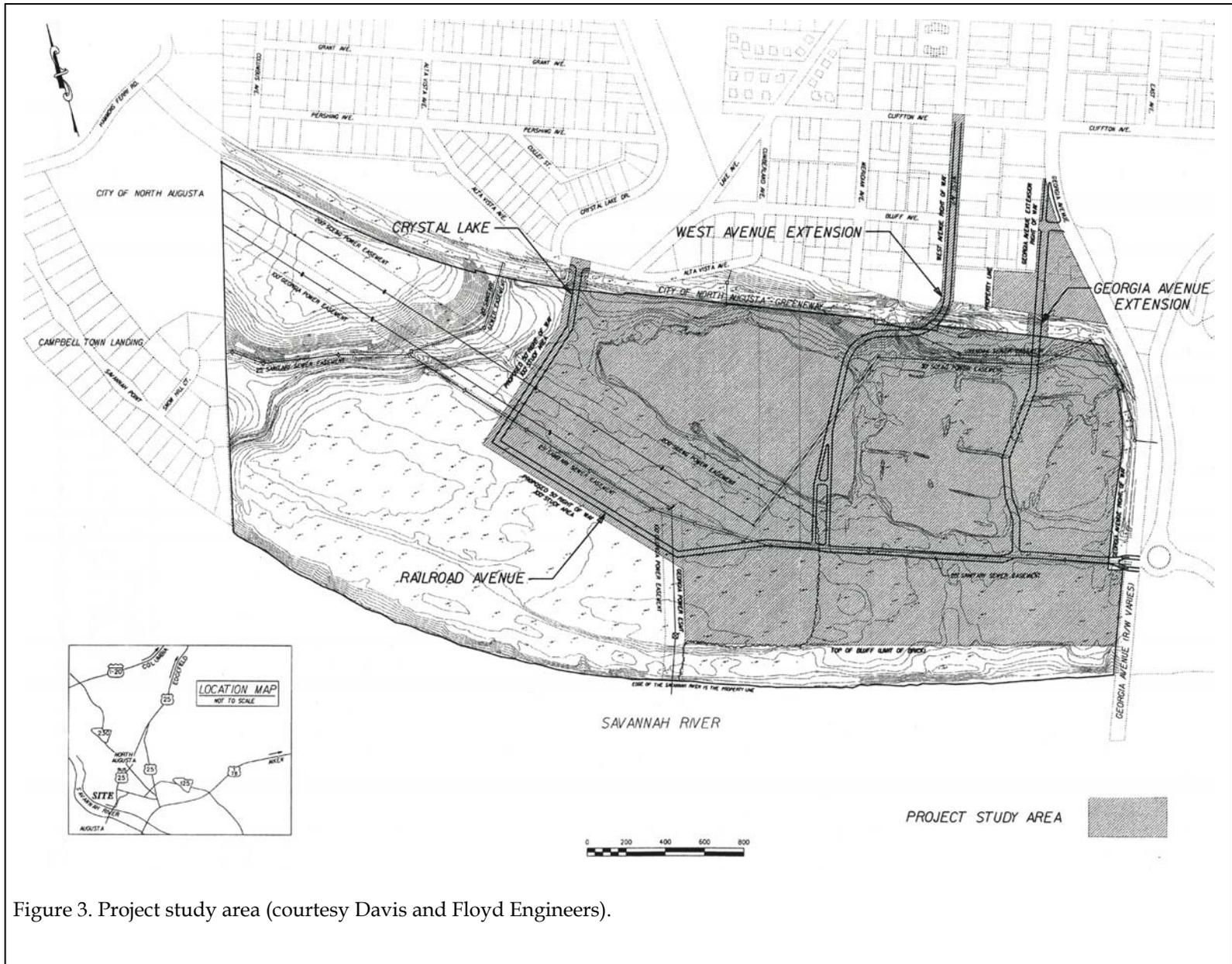


Figure 3. Project study area (courtesy Davis and Floyd Engineers).

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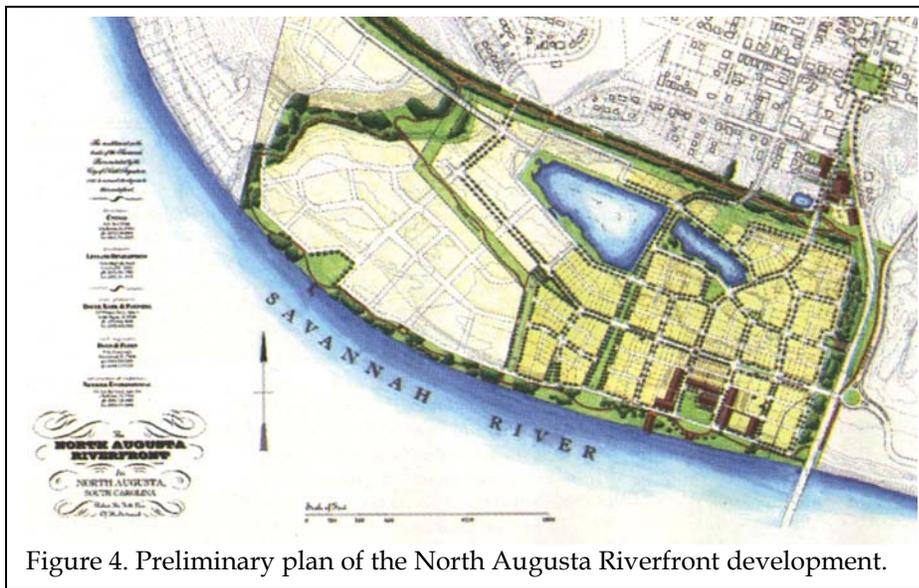


Figure 4. Preliminary plan of the North Augusta Riverfront development.

architectural survey which found the structure eligible for the National Register of Historic Places (Martin and Drucker 1987). As reported by the previous Chicora survey, this site has burned and can no longer be considered eligible as an architectural resource.

Site 38AK502 is the Falmouth Cemetery, dating to the eighteenth and nineteenth centuries. The site is reported to contain the grave of a local Revolutionary War figure, Colonel Samuel Hammond. While the cemetery is reported as potentially eligible for the National Register, at the time it was recorded it had already been extensively damaged by construction activities. Its location was also determined to be incorrect as a result of the previous Chicora study (Trinkley and Southerland 2002).

Site 38AK614 is a late Archaic to early Woodland lithic and ceramic scatter, but due to the site's inability to address any significant research questions it was recommended not eligible for the National Register.

Site 38AK644 is the Hamburg town site which dates from the eighteenth to the twentieth century. This site is recommended potentially eligible for the National Register of Historic Places. Unfortunately, it has been largely destroyed by recent golf course and development

construction.

Site 38AK645 consists of the dock structures and barges associated with the town of Hamburg. This underwater site was recommended potentially eligible for the National Register.

Site 38AK646 is a nineteenth to twentieth century scatter associated with the town of Hamburg, but this portion of the site was recommended not

eligible for the National Register.

The final site, 38AK716, is also a portion of the Hamburg town site dating to the nineteenth and twentieth century. The site was recommended potentially eligible for the National Register, but additional testing is needed for a final determination.

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. There are four properties, the B.C. Wall House, Rosemary Hall, Look-Away Hall and the Southern Railway Bridge, within the APE that are currently listed or eligible for listing on the National Register of Historic Places.

The B.C. Wall House is a ca. 1902 structure which was listed eligible for its architectural importance (Criterion C). Rosemary Hall (2-26-5) is a ca. 1902 house which was listed on the National Register for its association with James Urquhart Jackson, founder of North Augusta (Criterion A). Look-Away Hall (2-26-6) is a ca. 1895 house which is listed on the National Register for its architectural significance (Criterion C) and connection with an important local architect, Walter Jackson (Criterion B). The Southern

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Railroad Bridge) was recorded during a 1986 survey which has been determined eligible for the National Register of Historic Places (Fick 1986). The bridge was constructed ca. 1915 and once supported the Southern Railway which connected Washington, D.C. to New Orleans (Kovacik and Winberry 1987).

Archival and historical research included examination of materials at the South Carolina Department of Archives and History, the South Caroliniana Library, the Aiken County Register of Mesne Conveyance, and the Thomas Cooper Map Repository. We also are appreciative of materials provided by the Edgefield Historical Society, the University of Georgia Library, and the Georgia Institute of Archaeology.

The archaeological survey was conducted from March 29 through April 5, and April 19 through 22, 2004 by Mr. Tom Covington and Ms. Nicole Southerland under the direction of Dr. Michael Trinkley. Also participating in the study are Mr. Keith Seramur, a geologist, and Ms. Sarah Fick, an architectural historian. As a result of this work five archaeological sites have been identified - three Native American (one with a thin historic component) and two historic (all early to mid-twentieth century). In addition, one previously identified historic site (the Augusta Dispensary, 38AK493) has been further assessed.

One of the Native American sites (38AK933) is an early eighteenth century hamlet exhibiting trade goods and well made complicated stamped, incised, cob impressed, check stamped, and plain pottery. This site is recommended eligible for inclusion on the National Register of Historic Places.

The second Native American site (38AK932) is a small, but concentrated area of Late Archaic remains, including Stallings and Thom's Creek pottery, worked soapstone, and lithics. This site is also recommended eligible. Overlying the site is a smear of wasters associated with 38AK931.

The final Native American site (38AK934) is a sparse scatter of non-diagnostic lithics. This

site is recommended not eligible.

The historic industrial site (38AK931) includes the original parcels of the Augusta Face Brick site, the Southern Cotton Co. site, the Augusta Veneer site, the Augusta Veneer/Industrial Lumber site, and the Star Sprayer/People's Oil/Wood Pottery site. There are both standing architectural remains (generally in ruinous condition) and below ground remains. Because of extensive disturbance most are recommended not eligible. Components identified from the Wood Pottery site, however, have been found to have a high degree of integrity and can address significant research questions - this component alone is recommended eligible for inclusion on the National Register.

The Baynham Flower Pot mill (38AK935) is a very late twentieth century site. While the structure and associated below ground remains are recommended not eligible, the machinery at the location is recommended for preservation.

The architectural survey of the APE completed by Trinkley and Southerland (2002) was used for this study since it had already been reviewed and concurred with by the State Historic Preservation Office. That previous work revealed eight structures that are potentially eligible for inclusion on the National Register, in addition to the four structures currently listed or eligible for listing. None of these structures, however, will be affected by the proposed road project or work associated with removal of brick rubble because of the low visibility of the projects. One structure complex, in ruinous condition, was recorded at the request of the SHPO by architectural historian Sarah Fick.

Laboratory work and report production was conducted at Chicora's laboratories in Columbia, South Carolina from April 5-9, 2004.

NATURAL SETTING

Physiography and Geology

Aiken County is located midway between the mountains and the coast. On the west the County is separated from Georgia by the Savannah River. To the north it is bordered by Edgefield and Saluda counties. To the east lies Lexington County with the border established by Chiquapin Creek and the North Edisto River. To the south Aiken County is bordered by Barnwell and Orangeburg counties. It is situated about 60 miles southwest of Columbia and 125 miles northwest of Charleston.

The topography varies dramatically as one moves from the Southern Coastal Plain in the southeastern portion of the county, which is nearly level to gently sloping, into the Carolina Sandhills, which are characterized by more moderately steep topography and then into the Piedmont where the topography is steeply sloping and red clay soils dominate.

The Coastal Plain accounts for about 15% of the county, while the Sandhills account for roughly 80%. The Piedmont, limited to the northern and northwestern edge of Aiken, accounts for the remaining 5% of the county. Elevations in the county range from about 100 feet above mean sea level (AMSL) along the Savannah River to about 635 feet AMSL in the northern portions (Rogers 1985:2).

The project area is found in the area typically called the Sandhills. Most of the study area is situated in the floodplain, so is generally level with only a slight slope toward the Savannah River to the south. Elevations in this area range from about 110 feet above mean sea level (AMSL) on the Savannah to about 150 feet AMSL at the first terrace above the Savannah, which forms the project's northern boundary. Just beyond the

study area to the west there is a small, unnamed creek flowing from the northeast to the southwest. There is a very steep slope from this creek to the northwest, up to the terrace above the Savannah (see Figure 3). North Augusta itself is located above this floodplain and out of the reach of flooding.

Flooding has always been a significant factor in settlements along the Savannah River, with significant floods in January 1796 and again in January 1865. In 1908 the City of Augusta embarked on an eight-year project to build a soil and rock levee, but in 1929 it was topped, causing extensive damage to Augusta. On the South Carolina side the flood marked the official end of Hamburg, and its last residents were required to move upriver to higher ground. In 1936 the Army Corps of Engineers constructed the current levee along the Georgia waterfront, although flooding continued to be a problem on the South Carolina side (Moody 1947:1).

In the late 1940s efforts were begun to control the damage through the creation of the Clark Hill project. Research found that there had been 83 floods during the 20 year period from 1927 through 1947 and that the total average damage based on records of past floods for the Hamburg area was \$10,497 (\$84,653 in 2002\$). With the construction of the Clark Hill Dam and Reservoir, reregulation of floods having a peak of less than 38 feet on the Augusta City gage was achieved (Moody 1947:7).

The nearest permanent water is of course the Savannah River at the southern edge of the study area, as well as the small drainage just beyond the study area to the west. In addition, it is likely that historically there were a number of springs at the base of the upper terrace. Three such springs are documented for the Hamburg

area to the south on an n 1835 plat of the town (S.C. Department of Archives and History, Maps). It was likely these springs that made Hamburg – and parts of the study area – swampy.

The Carolina Sandhills extends somewhat intermittently across the midlands of South Carolina, just below the fall line, in an irregular belt 5 to 30 miles wide. The fall line itself was sculpted by the strong erosion of rivers and streams passing from the hard crystalline bedrocks of the Piedmont into the loose, unconsolidated sands of the Coastal Plain. It is along this fall line where the rapidly descending rivers form shoals – and these occur only 2 miles

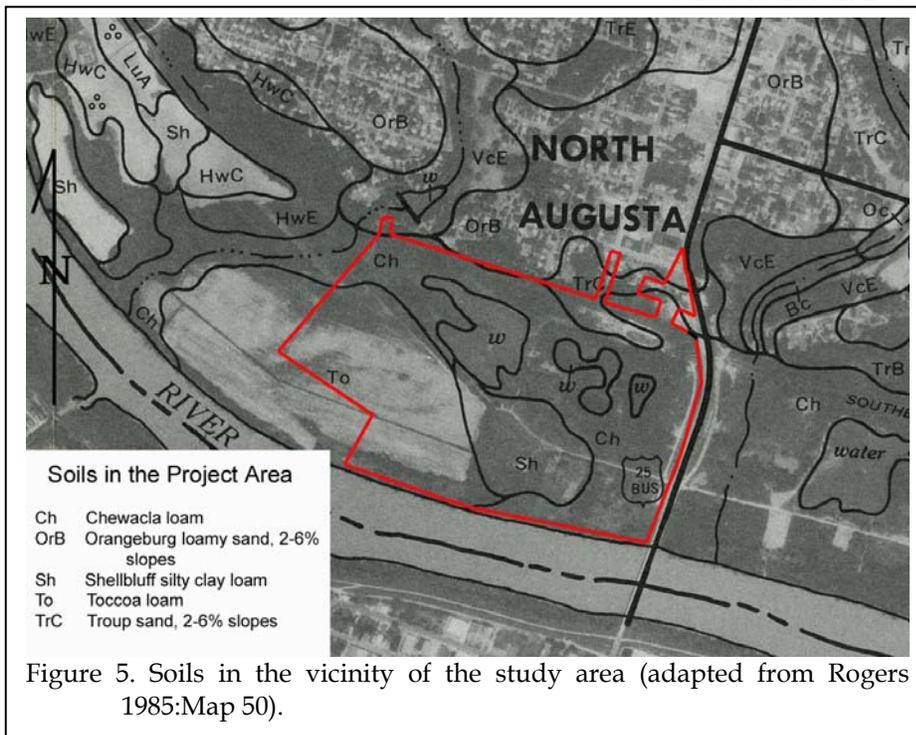
It seems more likely that this region represents the highly weathered, and discontinuous, remnants of the continental phase of the Tuscaloosa formation which dates back to the Mesozoic (Duke 1961).

Regardless, these questions of geology have little impact on the use of the Sandhills by either prehistoric or historic people. More important to our understanding of past lifeways are the soils, climate, and flora of the Sandhills.

Soils

From a soils perspective the Sandhills tend to be characterized by excessively drained sands found on 2 to 15% slopes and ridges. Well

drained to moderately well drained medium to fine textured soils with slightly compacted subsoils are found at the base of these slopes, although still on gently sloping topography. Excessively drained soils with loamy, compact subsoils are typically found on positions where the slopes break to meet the streams. Overall, inherent fertility and organic content of the soils are low. Leaching of plant nutrients is rapid and the soils are strongly acid. These features tend to give the Sand Hills a rather bleak and monotonous landscape.



upstream from the study area.

The relationship of the Sandhills to these related physiographic features has been long debated, with a common explanation being that the Sandhills are the remnants of former beaches of the Cretaceous period about 130 million years ago (Barry 1980:97). Arguing against this, however, is the realization that in many areas, the Sandhills are higher than the adjacent Piedmont.

In the project area the soils are broadly classified as the Shellbluff-Chewacla-Johnston Complex. These soils, found on floodplains, range from well drained to somewhat poorly drained and typically have a loamy subsoil.

The project area is dominated by Toccoa loams (Rogers 1985; Figure 5). These are well

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drained soils that are formed in alluvial sediments and are found on floodplains of rivers and creeks. While these soils are frequently flooded for brief periods of time, their normal water table is between 2 and 5 feet below the surface (Rogers 1985:131). They exhibit an Ap horizon of reddish brown (5YR4/4) loam to a depth of about 0.8 foot, under which is a dark brown (7.5YR3/2) loam to a depth of about 1.4 feet. Below this, to a depth of 2.2 feet, is a dark reddish brown (5YR3/2) sandy loam.

Also found in the study tract are Shellbluff silty clay loams. These are well drained soils found on floodplains and formed in the alluvium. They have a water table from 3 to 5 feet below the surface and exhibit an Ap horizon of brown (7.5YR4/4) silty clay loam to a depth of 0.4 foot atop a reddish brown (5YR4/4) silty clay loam to a depth of 1.0 foot. To a depth of 2 feet are reddish brown (5YR5/4) silty clay loams (Rogers 1985:75-76).

The third significant soil series is Chewacla. In contrast to the previous two, this soil is somewhat poorly drained and the water table will be found from 0.5 to 1.5 feet below the surface. They have an A horizon of dark brown (10YR4/3) loam to a depth of 0.8 foot over a brown (10YR5/3) sandy loam to a depth of 2.3 feet. Below this is a sandy clay loam and it was these clays that local brick works mined extensively during the early twentieth century. The combination of springs at the bluff edge, impervious clays, and high water tables all combined to create the lakes and wetland areas that are found over much of the project area.

At the upland bluffs - which comprise only a very small portion of the study area - there are Troup sands and Orangeburg sandy loams. The Troup sands well drained soils characteristic of broad, high ridges. They have a thin (ca. 0.1 foot) A horizon of grayish brown (10YR5/2) sand over a brownish yellow (10YR6/6) sand to a depth of 1.7 feet. To 4.2 feet is strong brown (7.5YR5/8) sand (Rogers 1985:76-77)

The Orangeburg soils are also well-drained and are found on broad ridgetops. Where cultivated they exhibit an Ap horizon of very dark grayish brown (10YR3/2) loam sand to a depth of 0.5 foot. Below the B horizon consists of a yellowish red (5YR4/6) sandy clay loam to a depth of 1.2 feet. To a depth of 1.7 feet is yellowish red (5YR4/8) sandy clay loam.

To the south of the project study area, Hamburg reveals almost exclusively poorly drained Chewacla soils - consistent with the descriptions of the site as "swampy," and helping to explain the need for a ditch running down the middle of the one the village's main east-west streets. To the northwest, in the area of what was historically Campbell Town or Campellton there are a variety of Shellbluff and Hiwassee soils - all well drained and far better for long-term settlement.

Aiken County is just outside the area studied by Trimble (1974), although the Piedmont in adjacent Edgefield County was found to have lost over a foot of soil to erosion. The upland areas of North Augusta would likely fall into Trimble's Cotton Plantation Area, recognized for its high Antebellum erosive land use with Postbellum continuation. This area, because of the nature of the soils, the type of agricultural products grown, and the form of tenancy common, suffered the greatest erosion in the South.

Lowry (1934) found that while the level sandy soils of the region suffered little or no erosion, those associated with the steeper slopes, or along drainageways such as creeks, suffered moderate sheet erosion.

Based on this information it seems likely that some portions of the study area - especially in the uplands and along the bluff edge - have been subjected to relatively moderate rates of sheet erosion.

Climate

Moving to the climate, this portion of



Figure 6. View of the dense hardwood and brush in the project area.

cotton or corn having been marginal. They suggest that this depressed "productivity relative to labor input" and encouraged "a broad spectrum subsistence base" (Brooks and Crass 1991:10).

Floristics

Perhaps the most noticeable feature about the Sandhills, however, is its characteristically xerophytic vegetation. Found where there is an extremely permeable layer of sandy soil that is leached of nutrients, this pattern is maintained by fire. Curiously, the vegetational pattern can quickly change, however, depending on such factors as the presence of clay subsoil and the depth of the

water table. Barry remarks, for example:

the complete transition from a xeric turkey oak barren to a hydric bay or pocosin can occur within a remarkably short

South Carolina is affected by the unusual convergence of three different weather systems. Those from the west tend to stall in the Appalachian Mountains, moist warm air masses from the Gulf of Mexico move into the area, and coastal systems come in off the Atlantic Ocean. The result, however, is far from unpleasant. In fact, Aiken has been known for at nearly 150 years as a health resort, because of its weather. The average winter temperature of 48° F and the average summer temperature of 79° F confirm the generally mild climate. There are 48 inches of annual precipitation, with over falling in the growing season (Rogers 1985:1). In spite of this, Brooks and Crass suggest an element of uncertainty in the rainfall, with the amount occurring during the prime growing season of such crops as



Figure 7. View of the open agricultural fields at the western edge of the study area.

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0R-12-34, 1938



02-0340A, 1943



02-0340A, 1951

Figure 8. Aerial images of the project tract showing changing land use and conditions.

distance, often with very little ecotone (Barry 1980:100).

Due to the proximity to the Savannah River, however, the conditions tend to be moister with hardwoods dominating the wooded areas. Dense brush and kudzu were also found throughout the wooded portions of the tract - indicating that much of the project area has been extensively affected by human action. The area to the west has historically been cultivated.

Land use activities - and the resulting affects on vegetation - are clearly visible in a series of aerial photographs showing the tract in 1938, 1943, and 1951 (Figure 8).

The cultivated field at the western edge of the study area has remained essentially unchanged throughout the twentieth century. The eastern area, however, has suffered increasing damage, primarily from the expansion of the clay pits. The 1938 aerial reveals three pits - dark and apparently being actively mined. An area along the edge of the cultivated field has apparently been stripped, in preparation of mining. There are a series of roads and other activities around the pits, but no evidence of water. By 1943 the clay pits have expanded from three to seven, covering most of the northwest corner of the project area. By 1951 some of the clay pits are being refilled, based on modern engineering studies, with brick rubble. The pit in the northeast corner of the parcel has been expanded. Industrial activity in the southeast corner of the property has continued unabated.

When the last of these aerials - from 1951 - is compared to the aerial used for the soil map (Figure 5, dated 1979), we see that the clay pits continued to be filled with brick rubble, so that relatively little of their original form is still left. Engineering studies, however, reveal depths of between 8 and 12 feet (Skip Grkovic, personal communication 2004).

PREHISTORIC AND HISTORIC BACKGROUND

Previous Research

Of the 85 reports concerning Aiken County listed by Derting et al. (1991), nearly 24% (n=20) are the result of relatively small, or at least constrained, surveys associated with highway projects, while an additional 30 studies (35%) are associated with the on-going archaeological and historical research for the Department of Energy at the Savannah River Plant. Other major "themes" in the archaeological research of Aiken County include work at Fort Moore, Coker Springs, and Silver Bluff.

Fort Moore (38AK4 and 38AK5)¹ has received much attention, beginning with its initial salvage archaeology by William Edwards (who provided no account of the work), then by Walter Joseph, Jr. in 1969 and 1970 (Joseph 1971a, 1971b) and subsequently by Richard Polhemus in 1971 (Polhemus 1971). While the site was placed on the National Register of Historic Places in 1972, there has never been any detailed, professional report issued on the various projects (see, however,

¹The two site numbers refer to a portion of the site north of bisecting SC 28 and the portion to the south of the highway. Savanna (Savano or Savannah Town) was a Shawnee Indian village that dates to at least 1708 and probably earlier. When some of the Shawnee moved to the Georgia side of the Savannah this new village became known as New Savannah. The Shawnee apparently left South Carolina by ca. 1715 (Hollingsworth 1976, Swanton 1952:99). After the departure of the Shawnee, other groups were drawn to the location for trading. Fort Moore, erected in 1716 and abandoned in 1766, guarded the Carolina frontier, provided protection to friendly Indians, and served to protect the attached trading post. There has never been a clear distinction between the two numbers, or their association with the fort, trading post, or associated village. In fact, there remains disagreement over what has been found archaeologically, probably because no comprehensive report has ever been produced.

Maness 1986). More recently Groover and Johnson (2002) have returned to the site to conduct yet additional testing, although again no comprehensive report has been prepared.

The various Edgefield potters have also attracted considerable attention, although most of this work has focused on the various individuals in Edgefield and interior Aiken County (e.g., Castille et al. 1988; Baldwin 1993; Newell 2001; Steen 1994, 2001). The only research conducted in the North Augusta area is that by Newell and Nichols (1998). This work identified nine specific sites in the North Augusta area: the Baynham Pottery Site, the Baynham Waster and Clay Pit site, the Baynham Buena Vista Avenue site, the Baynham Clay Mill site, the City Dump site, the Ravine site, the T.L. Hahn Railroad Avenue Pottery Works site, and the River Kiln site (Newell and Nichols 1998:9-16). Although this report lacks maps and no site forms are on file at the S.C. Institute of Archaeology and Anthropology, it provides critical information concerning late nineteenth and early twentieth century pottery activities in the North Augusta area.

Some work has been conducted in proximity to the survey corridor including work on U.S. 25 (Rinehart 1995) and along the Savannah River for a wastewater interceptor system (Martin and Drucker 1987). The route of this latter survey is shown on Figure 3 and it bisects the study area, going through an area of heavy industrial activity along Railroad Avenue. While no sites in that area were identified, the S.C. Dispensary Building was recorded as 38AK493. The site is discussed for its architectural merit, but no shovel tests were excavated around the structure (Martin and Drucker 1987:20), so its archaeological potential is unknown.

In 2002 Chicora archaeologists also

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

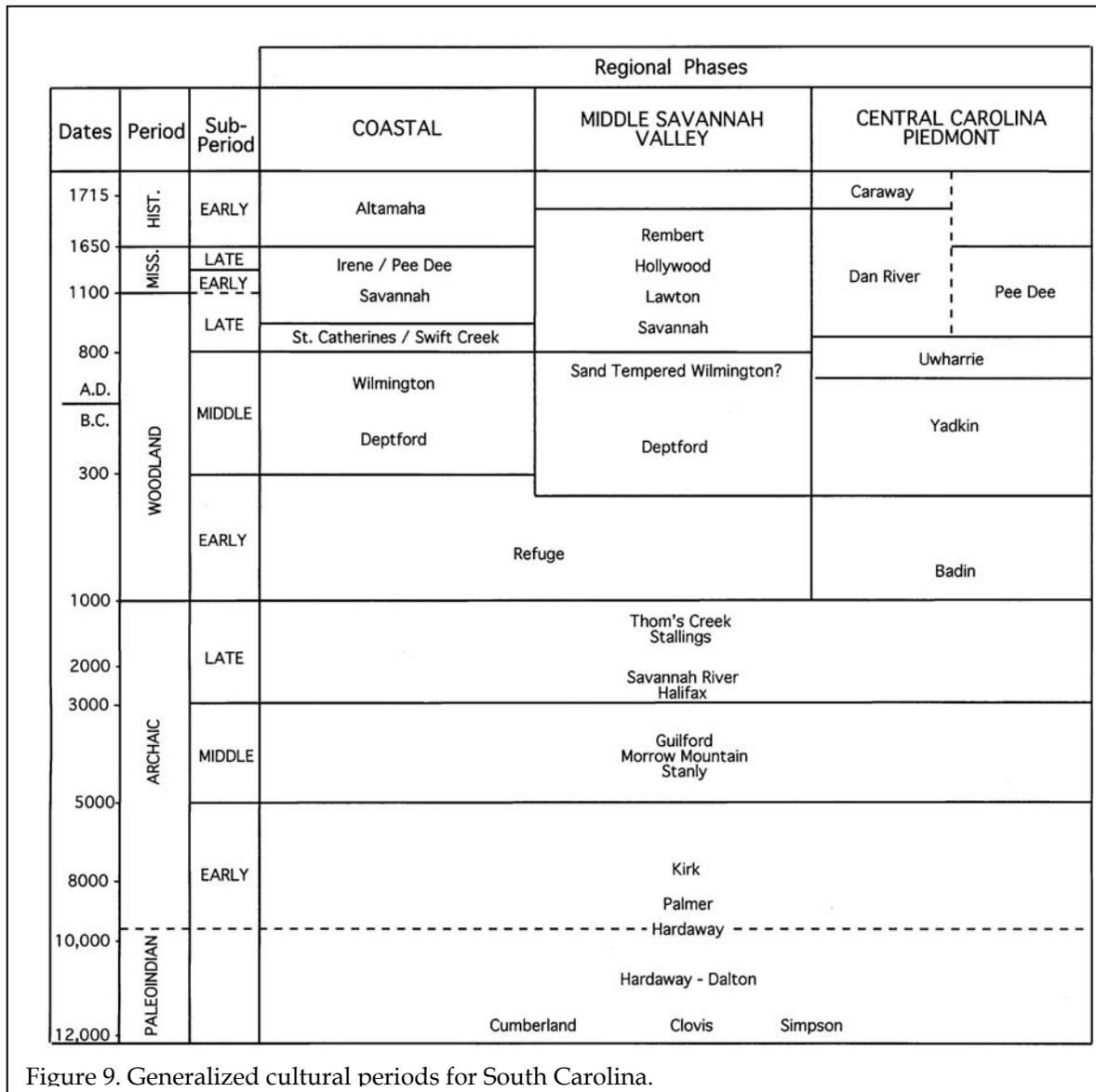


Figure 9. Generalized cultural periods for South Carolina.

conducted an intensive cultural resource survey of the proposed City of North Augusta Greenway along the edge of the Savannah River (the route is shown in Figure 3). No archaeological sites were identified in the corridor, although mention was made of the industrial remains that lay just outside the Greenway (Trinkley and Southerland 2002).

In addition to the archaeological work, North Augusta has also had several architectural inventories performed including a survey in the Lower Savannah Region (Christensen 1975), a

reconnaissance survey by the State Historic Preservation Office in 1982, and several architectural surveys of the county, including one of the western portion (Fick 1986).

Prehistoric Overview

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points; side

scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.² Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie 1992. They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

² While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaptation" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from

10,000 to 3,000 B.P.³, does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the

previous Paleoindian Period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts – these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly, and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle

³ The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

PREHISTORIC AND HISTORIC BACKGROUND

Woodland artifacts is the Morrow Mountain Stemmed projectile point. This type was originally divided into two varieties by Coe (1964:37,43), based primarily on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups which would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6,500 B.P., yet more recent research in Tennessee reveals a date range of about 7,500 to 6,500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5,500 B.P. In fact they suggest that even later dates are possible since it can often be

difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one which includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations which focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during

the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah

River projectile points (Coe 1964). The people using these points continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5,000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4,000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record

indicates an increase in pine which reduced the oak-hickory nut masts which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.⁴ This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is

⁴ The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31AN19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1,650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

A Brief History of the Chickasaw in South Carolina

The Chicasa, encountered by de Soto in present-day northeast Mississippi during the winter of 1540-41, are likely the ancestors of the better-known Chickasaws. In 1685 Henry Woodward, the trade representative of Charles Town, engaged the Chickasaws of Mississippi as allies and partners. Armed with English guns, the

Chickasaws began a series of debilitating slave raids against their neighbors (Wright 1981:113). The beneficiary of these raids were the English, who readily bought up the slaves provided by the Chickasaw (Wright 1981:139).

Following the Yemassee War, European trade interests switched from slaves to deerskins and there began a period of intense competition between England, France, and Spain for the economic resources of the New World. The Native American groups were, of course, caught up in this rivalry, but limiting our view to this statement would be simplistic. Indian groups also capitalized on the rivalry by manipulating their trade partners. The Chickasaws held an especially strategic position at the western limit of English trade, located between the French colonies of Louisiana to the south and Illinois to the north.

The traditional view is of the Chickasaw as faithful Anglophiles used by the English to drive a wedge between the French in Illinois and the French in Louisiana. Such a view, however, is being increasingly challenged (see, for example, Johnson and O'Hear n.d). French documents suggest that the Chickasaw took advantage of internal factionalism to play the English against the French, and vice versa. In fact, research suggests that the Chickasaw may have been divided into two groups during the early eighteenth century - with one trading almost exclusively with the English (villages identified as the Large Prairie) and the other (identified as the Small Prairie) trading with both French and English parties. This division also appears to have affected some inter-Indian relations as well, with the Natchez associating primarily with the Large Prairie settlements.

The Chickasaw were (and still are) culturally similar to the Choctaws. Both groups spoke a nearly identical language, their societies were matrilineal, political power was decentralized with each village having its own chief, and both viewed the sun as the ultimate expression of spiritual power (Hudson 1976; O'Brien 2003).

It is within this context that we must place South Carolina. The Yemassee War (1715-1717) resulted in the southwestward retreat of a number of small Native American groups that had previously provided the Carolina settlers with a buffer against the French to the west and the Spanish to the south. Milling (1969:188) notes that one of the larger bands that came into South Carolina to fill this vacuum was what he calls the "Lower Chickasaw," a name that appears largely confined to his discussions. While this group probably is associated with the Large Prairie settlements (given their strong English association), we can't be certain.

Originally the Council was desirous of having the entire Chickasaw Nation (enumerated by South Carolina in 1715 to include 700 men and a total population of 1,900 [Swanton 1952:179]) move into the Oconees or Hogechees [Ogeechee] and in 1722 offered an invitation, noting "we are willing they should come and settle . . . and we will assist them with all the corn we can from the Savannah Town" (Council minutes, quoted in Milling 1969:188). There is evidence, however, that at least some Chickasaw were settled in South Carolina prior to 1717 and an effort was already underway to entice more to settle at Savano Town. A December 1717 account of the Commissioners of the Indian Trade reports:

Then they [Chickasaw representatives] were asked whither any more of their People would settle at Savano Town, to which they replied, they would mention the same to them likewise, and send down an Answer thereunto (McDowell 1955:238).

The invitation was eventually was accepted by Mingo Tunni, The Squirrel King, who apparently had a sister among the Yamassees (Hicks 1998:40). Milling suggests that this represented a splinter group, supported by a comment by South Carolina Governor James Glenn in 1751, who refers to them as "a few

renegade Chickasaw, thirty or forty in number, who being banished [from] their own country, live in this Province (quoted in Milling 1969:188). Milling suggests that another, similar, group was known as the "Breed Camp," although Hicks (1998:102) indicates that this was a town in the upper Creek nation around 1760 and the group was not located in South Carolina. McDowell confirms that the "Breed Camp" at that time was "near the Coosaw River in the Upper Creek Nation" (McDowell 1958:310).

Regardless, a group of Chickasaw did come to South Carolina, but not to the Oconee or Ogeechee area. Since the Colony indicated they would be supplied from the Old Savannah Town, perhaps the Chickasaw preferred to be close to the promised supplies (Fort Moore had been built at Savannah River in 1717 - in the vicinity of present-day Beech Island). This explanation appears consistent with the account of O'Brien (2003), who notes that at least one factor in the movement from Mississippi to Carolina was to be closer to the English and their trade goods. Wright explains that the Augusta area "had long been a commercial center for the Indian trade, and a number of full-blooded and mixed blood natives and white traders lived or rendezvoused there" (Wright 1981:200).

Unfortunately, in spite of this speculation there is no clear account of why this spot was chosen. In fact, there is no clear account of when they arrived. Milling (1969:189) believes it was about 1723, based on accounts by naturalist Mark Catesby, as well as an abortive Cherokee raid against these "friendly Indians." Since the Chickasaw and Cherokee spent considerable time warring with one another this seems to be a reasonable guess. Nevertheless, it is clear that at least some Chickasaw had settled in Carolina as early as 1717.

We know that the group was well settled by 1727, when the English attempted to entice them to move closer to the English settlements at

Pallachucolas.⁵ The Squirrel King rebuffed this offer, explaining that they already settled in their current location and were to have a good crop. While the Colony continued to pressure the Chickasaw to move, they also began to note that the group was “well inclined for mischief,” apparently based on the Indians desire to attack groups of Yemassee, as well as to partake of the readily accessible liquor available from white traders and tavern keepers in the area (Milling 1969:190). In 1731 there was a report of a possible Chickasaw insurrection, although nothing happened and in 1733 the Spanish governor at St. Augustine complained that the Chickasaw were killing his people - indicating that the group was making rather substantial raids.

While the “Lower Chickasaw” were settling into life on the Savannah River, their kin found themselves embroiled in a long series of conflicts with the French and their Choctaw allies. The Mississippi Chickasaws, however, established themselves as exceptional opponents, defeating the French in 1736. Retaliatory attacks were virtually assured, and Carolina made a second effort to convince the entire Nation to relocate to the Colony. The Chickasaw Nation again refused to leave their home, even in the face of “being destroyed by the French” (quoted in Milling 1969:191). Meanwhile, Cashin (1992:20-22) notes that the South Carolina Chickasaw came to the Augusta area in 1736 to meet with James Oglethorpe concerning the hostilities with the French. Perhaps another purpose was to woo the Chickasaw into moving across the Savannah, into Georgia. We know that in 1738 there were Chickasaw visiting Savannah and expressing an interest in Georgia’s efforts at silk production (Wright 1981:205). More to the point was a December 1737 journal entry by William Stephens, secretary of the Georgia colony:

⁵ This is also known as Pallachuclas or Parichucla, an Apalachicola town on the Savannah River in Hampton County. Although briefly mentioned by Caldwell (1952:321, Figure 176), the site was never examined professionally and represents another missed opportunity to better understand the historic Native American groups in South Carolina.

Mr. Lacy arrived this day from Augusta, by who I was informed the Fort there was in great forwardness, and nearly finished; he further acquainted me, that he had lately run out a little Town near him, for the Settlement of some of the Chickasaw Indians, which he apprehended would be of great Benefit and Addition of Strength to that Part of the Province. N.B. These Indians were a vagrant branch of the Chickasaw Nation, which was far remote, and borders on the French Settlements, with whom they were in continual War . . . and this small Branch had for some Time past settled in the Neighborhood of New Windsor in the Province of Carolina, where they hunted and traded; but by some Means or other, this last Year [1737] the People of Carolina disobliged them, and they preferred rather to have a friendly Commerce with us, and to be ready in assisting us on any Occasion, under their Leader, who is known by the Name of Squirrel King (quoted in Hollingsworth 1976:59).

In January 1739 the English set out “a Tract of Land for Twenty one Thousand seven hundred and Seventy four acres in New Windsor Township where the Chickesaw Indians now live” (quoted in Milling 1969:191). The survey of the tract had been done the previous year by Robert McMurdy and the land was described as being “upon Savannah River in Granville County from Horse Creek to McMullin’s line” (quoted in Rainsford 2004:2). Rainsford notes that while a plat and grant were apparently present, neither “has been found among the South Carolina records for nearly two and a half centuries” (Rainsford 2004:3).

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Nevertheless, this grant corresponds to generally good relations with the Chickasaw and that same year the Squirrel King willingly volunteered his warriors to Carolina for a planned attack on St. Augustine as part of the War of Jenkins Ear. As a result, William Gray, a veteran of the Chickasaw trade, was commissioned captain and placed in command of the Chickasaw (Cashin 1992:30).

Clearly there were Chickasaw in Georgia in 1741 with "houses and plantations." It was in that year that a military officer at Augusta, Captain Kent, reported on the flood that destroyed many residences:

There has not been such a high Flood known for many Years past; those Chickasaw Indians who live (apart from their nation) in our Neighborhood, were obliged to abandon their Houses and Plantations, which were covered with Water, and were forced to take to the River on Logs and Pieces of Timber, to save themselves, their Wives and Children; two Days ago I took up some of them, floating down the River, some on a Canoe, Bottoms upwards, and some swimming on the Water; the greatest Part of them having intirely lost all their Crops and Provisions (quoted in Hollingsworth 1976:60).

In spite of the loyalty of the Chickasaw, there seems to have been a growing reliance on the English, both for corn and other provisions, as well as for alcohol. There seem to also have been feelings of growing entitlement among the Chickasaw and by 1746 there was conflict with both settlers in the area and also the Catawba (Milling 1969:193). This resulted in considerable ire on the part of Governor Glen, who noted, "These Chickasaws have been long settled upon a very fine tract of land granted to them by the Government, but of late they have behaved with

uncommon Insolence, having threatened the lives of several of our Inhabitants and terrified the people in our new Townships, which are not yet very populous; for not contented with killing their Hogs and Poultry, they have broke open their Houses and robbed them of their Arms, Cloaths &c. This required immediate redress: I therefore spoke pretty roughly to them, telling them that unless they instantly gave up what they had taken, & brought to me the Catawba prisoners, whom they detained in Slavery, I would give orders for putting the guilty to Death" (quoted in Milling 1969:193). While the Chickasaw submitted, Glen never afterwards had a good thing to say about this group. A 1749 account reveals that at least some Chickasaw had moved to other locations, with a small band settled in the Colleton County area with several "Notchie" (Natchez) and Choctaws (Hicks 1998:36).

By 1752 tensions were high between the Chickasaw and the Cherokee and their Savannah allies, with the Cherokee killing one Chickasaw and capturing two others. The Chickasaw retaliated by killing 10 Cherokee, capturing three others and shortly thereafter killing 30 more (Hicks 1998:58; Milling 1969:194-195).

It was about this time that the French renewed their efforts to destroy the western Chickasaw. Reduced to only 2-300 braves by 1746, their number had been even further reduced by the early 1750s and so desperate was their situation that they sent an emissary to the Carolina Chickasaw, asking that they return to their homeland. Milling (1969:195) reports that the Lower Chickasaw "did not respond to the appeal," although surprisingly the Chickasaw Nation was able to defend its homeland without their assistance.

About 1754 the Chickasaw moved from the Carolina lands across the Savannah River, leaving only about 30 men in South Carolina (Hicks 1998:40), although clearly some number of the Chickasaw had left South Carolina at least by 1737 - before land had even been granted to them. And by 1741 there was still a notable population

on the Georgia side of the Savannah. In 1757 we have a brief report on the Lower Chickasaw from Captain Daniel Pepper, who wrote the new Governor, William Henry Lyttleton,

I doubt not your Excell^y has heard that there are a Body of about seventy Chickasaw living at a place called New Savannah, within twelve miles of Augusta. They consisted formerly of about forty Gun Men, but some that were scattered about the lower Town have joined them, so that they may amount to about seventy Gun Men, so that in case of a visit from the French they would be of more service to us than four hundred other Indians (quoted in Milling 1969:196).

Captain Pepper also attributed the moral decay of the Chickasaw – as well as their recent removal to the Georgia side of the Savannah River – to the neglect of the Carolina government, especially Governor Glen, as well as the increasing number of whites moving onto the Chickasaw lands.

In 1758 Edmond Atkin, the Royal Superintendent of Indian Affairs in the Southern District, became convinced that Lachlan McGillivray – a noted Chickasaw trader – was purchasing Chickasaw land for his own intents. While the bad feelings between McGillivray and Atkin went far deeper, this was sufficient for Atkin to call a meeting at New Savannah with the Chickasaw. There was considerable discussion (see Cashin 1992:179-182 for the detail), but the gist was that the Chickasaw began moving into Georgia perhaps 10 years earlier (around 1748, much earlier than suggested by Hicks) and that they were disposing of their land, with McGillivray acquiring the strip about three miles in length from “opposite Rae’s house down to a point across from the parsonage house.” In exchange, McGillivray had given the Indians land below Augusta, in the area called New Savannah, as well as a piece on the opposite side of the

Savannah in South Carolina. This infuriated Atkin, who claimed that the Chickasaw had no right to sell the land given to them by the King. In response, Tuccatoby King is reputed to have said only, “I am a Redman.” Cashin interprets the exchange to mean that “his home was in the Chickasaw Country to the west [and] he could not be excited about the Savannah River lands, which he regarded as temporary camping grounds” (Cashin 1992:182). This is a powerful statement, since it appears to summarize the Chickasaw’s view of their Savannah lands, regardless of their location.

Milling also provides a detailed account of Old Doctor, described as a conjuror “of the old stock, who came, a young man, from the far nation” (quoted in Milling 1969:197). Old Doctor explained that the move was precipitated by the increasing attacks of the northern Cherokee. In their new location they were surrounded by English and at least half of their settlements had the Savannah River between them and the marauding Cherokee. This more southerly location also placed Fort Moore between their settlements and the Cherokee.

Cashin goes on to explain that however outraged Atkin was, McGillivray had carefully orchestrated his actions, ensuring that the transfer was legal and that it was done only after Lieutenant Governor William Bull met with the Chickasaw at Fort Moore earlier in 1758. It was apparently at that time that the Chickasaw signed their lands away for two tracts of about 500 acres each. The Chickasaw lands began to be subdivided prior to the 1758 meeting, with David Douglass taking 500 acres in 1756, followed by John McQueen obtaining a warrant for 3,000 acres in 1757. In April 1757 McGillivray himself had 1,000 acres surveyed under a warrant made out to his trading partner, Daniel Clark (Cashin 1992:182). Another warrant for 1,500 acres, made out to McGillivray himself, was actually being surveyed at the same time Atkin was indigently meeting with the Chickasaw (Cashin 1992:182). One 260 acre plat for McGillivray, dated 1758, shows a tract on the Savannah River “commonly

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known by the name of the Chickasaw camp" (S.C. Department of Archives and History, Colonial Plats - Columbia Series, v. 6, pg. 381).

With the outbreak of the Cherokee War (1760-1761) the Chickasaw again supported the English, earning themselves the lasting hostility of the Cherokee. When visited by William Bull in 1761 he found the Chickasaw on the verge of starvation because of the continuing Cherokee attacks. The Assembly provided corn and Hicks (1998:40) notes that 1762 Upaimantaha was new leader of the Chickasaw (Hicks 1998:40), while Milling (1969:198) identifies the new chief as Succatabee.

Certainly Succatabee was a leader since he appeared, in 1765, in Charleston to complain about the incursions of Virginia settlers on their lands, horse thieves, and the failure of the Fort Moore commander to allow a mill, previously used by the Chickasaw for the grinding of their grain, to be repaired. This reveals that there were still Chickasaw living around Fort Moore on the South Carolina side of the Savannah (see also Milling 1969:198-199). More importantly, the Chickasaw sought a re-survey of their lands, noting that their older people who had known the boundaries were now all dead. The Carolina Council agreed to the request. As a result, the lands were resurveyed, "plainly marked and granted them in Trust to the Secretary of this Province for their use, subject to the direction of the Governor and Council, to prevent any Grants passing by surprise to any other Persons" (quoted in Rainsford 2004:4, n.16). It seems that these provisions were pointless, since much of the Chickasaw land had already been granted away.

The Chickasaw remained true to King George during the American Revolution and Milling suggests that they joined with other Indians to participate in raids in 1776 and 1782. He also notes that they vacated their lands on the South Carolina shortly after the beginning of the Revolution, if not earlier (Milling 1969:200). After the revolution, however, the Chickasaw quickly established relations with the United States (as

well as Spain, which by that time controlled the Gulf Coast). By this time, however, the Chickasaw had apparently returned to their ancestral lands.

In 1783 an ordinance for the confiscation of Loyalist estates was passed by the South Carolina Assembly that included "the Lands on the River Savannah lately possessed by the Chickasaw Indians, who have deserted to the Enemy" (quoted in Milling 1969:200). The lands, eligible for resale, were held by the State and leased instead. In December 1791 the Chickasaw requested that the confiscation be repealed - a reasonable request since many of the other Loyalist claims were acknowledged by the Assembly. Nevertheless, in December 1792 the study commission reported back that that the Indians:

either never had a right as Native proprietors of the said Lands, or by Conquest, or other mode of acquisition, or if they ever had must have ceded the Fee Simple of and in the same to the Royal Government previous to the Grant aforesaid [the grant of 1766 that replaced the lost 1739 grant], and held as Tenants-at-will and by Sufferance and therefore not entitled to Restitution or Compensation (quoted in Milling 1969:201).

Thus, by technicalities the Chickasaw were rebuked from returning to South Carolina and Milling notes that from this point on their history is lost in that of the Chickasaw Nation. In 1832 the Chickasaw homelands were opened to settlers, although the treaty of that year promised that the U.S. Government would prevent new settlement until the Chickasaws had actually left Mississippi. A suitable homeland west of the Mississippi was not found until January 1837 when the Choctaw Nation sold the western half of their lands to the Chickasaw (O'Brien 2003). Doby's (1983:339) provides an interesting account of how the Chickasaw, adapting to their new mid-continental

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

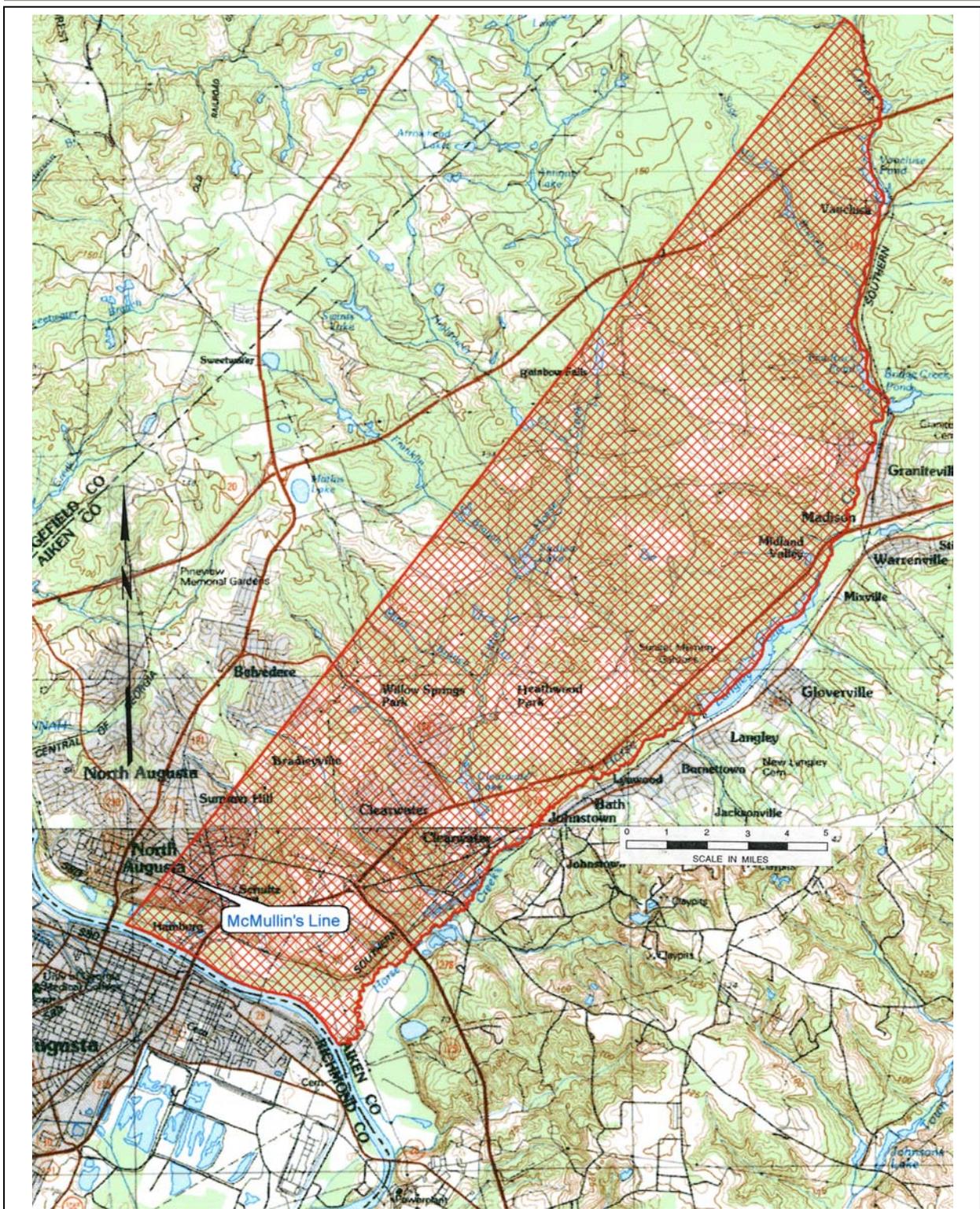


Figure 10. Probable Chickasaw lands plotted on USGS topographic map (adapted from Rainsford 2004).

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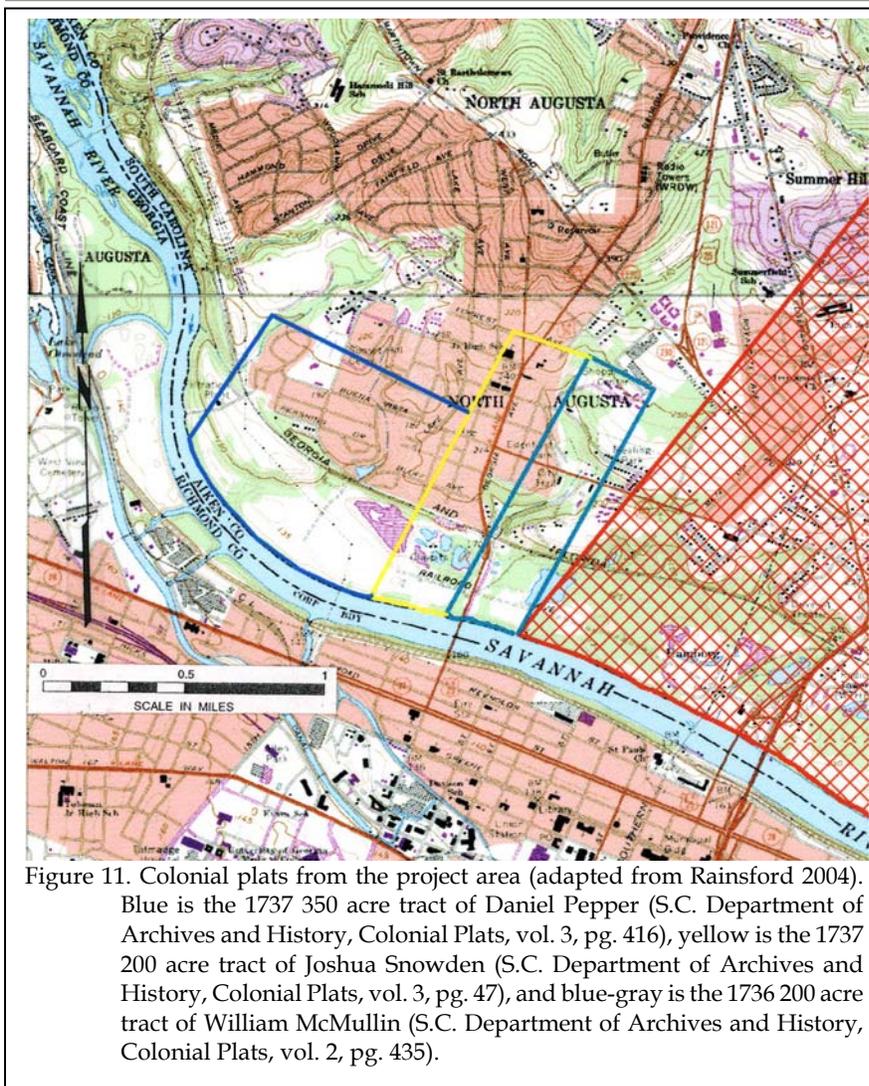


Figure 11. Colonial plats from the project area (adapted from Rainsford 2004). Blue is the 1737 350 acre tract of Daniel Pepper (S.C. Department of Archives and History, Colonial Plats, vol. 3, pg. 416), yellow is the 1737 200 acre tract of Joshua Snowden (S.C. Department of Archives and History, Colonial Plats, vol. 3, pg. 47), and blue-gray is the 1736 200 acre tract of William McMullin (S.C. Department of Archives and History, Colonial Plats, vol. 2, pg. 435).

home, quickly dropped canoes from their oral traditions.

Identifying the Chickasaw Lands

The most detailed discussion of the Chickasaw lands is offered by Rainsford (2004) who does a thorough job of examining the remnant legal documents and interpolating locations on modern maps. He notes, perhaps somewhat optimistically, that the job would have been “relatively easy,” had the 1739 or 1765 plats survived. Neither has, or at least neither can today be located (he notes that the 1739 plat was missing by at least 1765 and that the 1765 plat was missing

by at least 1792). So, we are left only with the cryptic observation that the lands extended along the Savannah River, “from Horse Creek to McMullin’s line” according to the original surveyor.

With the original plats unavailable, Rainsford wisely uses second generation mapping - a plat drawn in 1783 by Bennett Crafton, Deputy Surveyor, showing some of the lands (this plat is in the possession of the Edgefield Historical Society). It shows the land on the Savannah River between Horse Creek on the Carolina side and, “The old original line for Boundary of the Chickasaw lands and making grants in the period following the Revolution” - the old McMullin’s line. By superimposing this plat on modern maps, Rainsford believes that the line would have been “roughly across from 12th Street in Augusta, in what is now the River Golf Club” (see Rainsford 2004:6).

With the northern boundary being Horse Creek and the southern boundary being this line, Rainsford goes on to extend the line to its intersection with Horse Creek and calculate the acreage, finding it to be approximately 21,500 acres - very close to the original grant of 21,774 acres. He then attempts to determine the origin of McMullin’s line, finding that the Indian trader William McMullin was given a grant of 200 acres in 1736 and his plat was also prepared by Robert McMurdy (who prepared the 1739 Chickasaw plat).

Rainsford next attempted to correlate a



Figure 12. Bowen's 1748 *A New Map of Georgia* showing the Chickasaws on both sides of the Savannah River, above Fort Augusta (the modern location of Augusta).

series of period plats, tying them together in an effort to further support his identification of McMullin's line. He finds that the lines are different by 15° - that McMullin's line runs N30°E, while the adjoining lines run N45°E. He discounts this difference, noting that it is not "a tremendous deviation" especially for the time period and for two surveys done 18 years apart. While we rarely see this degree of difference in coastal plats, we do not have the same expertise in the Aiken and Edgefield area as Rainsford and can't comment on his interpretation.

The only modification we would make in the drawing of the various lines is to recognize that the original surveys were prepared using magnetic north. The modern USGS topographic map is based on a grid north, with magnetic north being 1.5° to the west (Augusta East 7.5', dated 1965PR71). In addition, cartographic researchers suggest that the magnetic declination for 1750 was approximately 1°E of our current point (www.phys.uu.nl/~vgent/magdec/magdec.htm). Taken together, this means that plotting of McMullin's line should be 0.5° west of north using the grid north on the USGS topographic map. This does not make any significant difference in the interpretations offered by

Rainsford.

Another plat suggests that the Chickasaw lands may have informally extended even further eastward. A 1784 plat for Leroy Hammond (discussed below as an owner of the Campbell Town ferry) shows 631 acres that seems to be in the vicinity of modern Bath, South Carolina. A note on the plat identifies the adjacent tract as "late Chickasaw Indian Land" (S.C. Department of Archives and History, *State Plat Books - Charleston Series*, vol. 4, pg. 200).

Finally, Rainsford looks at other period maps of the Augusta area to determine if they can shed light on the problem. In fact, he notes that several maps (including Bowen's 1748 *A New Map of Georgia* and

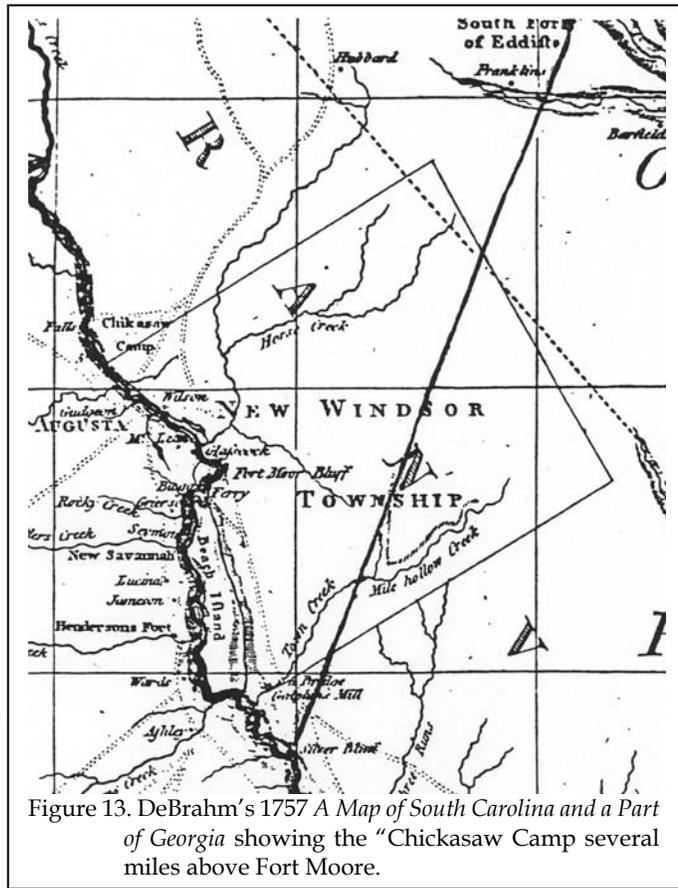


Figure 13. DeBrahm's 1757 *A Map of South Carolina and a Part of Georgia* showing the "Chickasaw Camp several miles above Fort Moore.

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DeBrahm's 1757 and 1780 maps) show the Chickasaw as directly across the Savannah from Augusta. He goes on to note that while these locations may, or may not, be accurate; the 1748 map is "crude" and fails to show the location of Fort Moore. He also notes that the error was likely picked up by DeBrahm in 1757 and was certainly incorrect in 1780 - when there were no Chickasaw in the area.

The Bowen map was prepared at a scale of 1-inch to 38½-miles (Figure 12). Covering the area from Charleston to the Mississippi (excluding southern Florida) it was sized at 18⅞ by 14¼ inches. The map includes much detail, including settlements, Indian tribes, trading routes, and (as fine dotted lines) the various Indian territories. Under these circumstances it seems well within cartographic style to slip in the Chickasaw where they fit, not necessarily where their land was located. We concur with Rainsford that this map simply isn't at a scale to allow any meaningful statement, other than the Chickasaw were in the vicinity.

DeBrahm's 1757 *A Map of South Carolina and a Part of Georgia* was printed on four sheets, each 24 by 26½-inches and at a scale of 1-inch to about 5-miles - clearly far superior to the earlier Bowen map. Cumming (1998:280) notes that this map "possesses topographical accuracy based on scientific surveys" - especially along the coast and up the major rivers. The subsequent 1780 edition is noticeably enlarged and refined, although many of the changes can be traced to Cook's 1773 map of South Carolina - which does *not* include the Chickasaw (Cumming 1998:281). Why an otherwise accurate and careful topographer would show the "Chickasaw Camps" so far removed from where other historical information places them is uncertain. We do not that any effort to

move them southward would have resulted in considerable conflicts with "Wilson," "New



Figure 14. Excavations at Fort Moore in 1971 (Fort Moore National Register File, S.C. Department of Archives and History).

Windsor," "Glasscock," "Fort Moor," and "Ferry." It may be that the location - "only" a few miles off - was thought to be "close enough."

Regardless, we concur with Rainsford that these early maps provide little in the way of reliable new data. The granted and formal Chickasaw lands are convincingly located from a point about 1,000 feet south of the 13th Street bridge south to Horse Creek. With that said, we also acknowledge that the historical documents convincingly demonstrate that the Chickasaw were rather free-ranging and very early on split into Carolina and Georgia settlements. While it is *possible* that one or more families traveled northward of the 13th Street bridge location, we have found no convincing documentation to suggest this occurred.

Identifying Chickasaw Cultural Remains

Relatively little effort has been directed at understanding - much less recognizing - the cultural remains of seventeenth and eighteenth century Native Americans in South Carolina.

Exceptions to this of course include the early efforts by Coe and his students to understand the Cherokee (for example, Egloff 1967), South (1973) for the broad coastal area, Baker (1975) for the Catawba, DePratter and Judge (1990) for the Wateree River Valley, Green (1991) for the Yemassee, and Trinkley (1999) for the Seabrook area. Nevertheless, when discussing the Chickasaw, we have little data.

Going to their homeland, we find relatively little detailed protohistoric to historic work since most eighteenth century Chickasaw villages were within or near the cities of Tupelo and Beldon and are now heavily damaged. What we do have suggests shell tempered plain and incised pottery, square to oval structures, and in-ground burial (Johnson and O’Hear n.d.; Brose

1991:80-81).

The Chickasaw pottery was first defined by Jennings (1941) and more recently further typed by Stubbs (1982). Stubbs notes that the majority of the pottery is plain, although small quantities of incising, cord marking, and roughening (some brushed, other possibly corn cob impressed). Temper gradually shifts from shell tempering to fossil shell, then sand, and finally to limited amounts of grog (Janet Rafferty, personal communication 2004). Several examples of these Chickasaw type-sherds are illustrated in Figure 14.

When we look at what Native American pottery has been identified from locations such as Fort Moore we are hampered by vague and

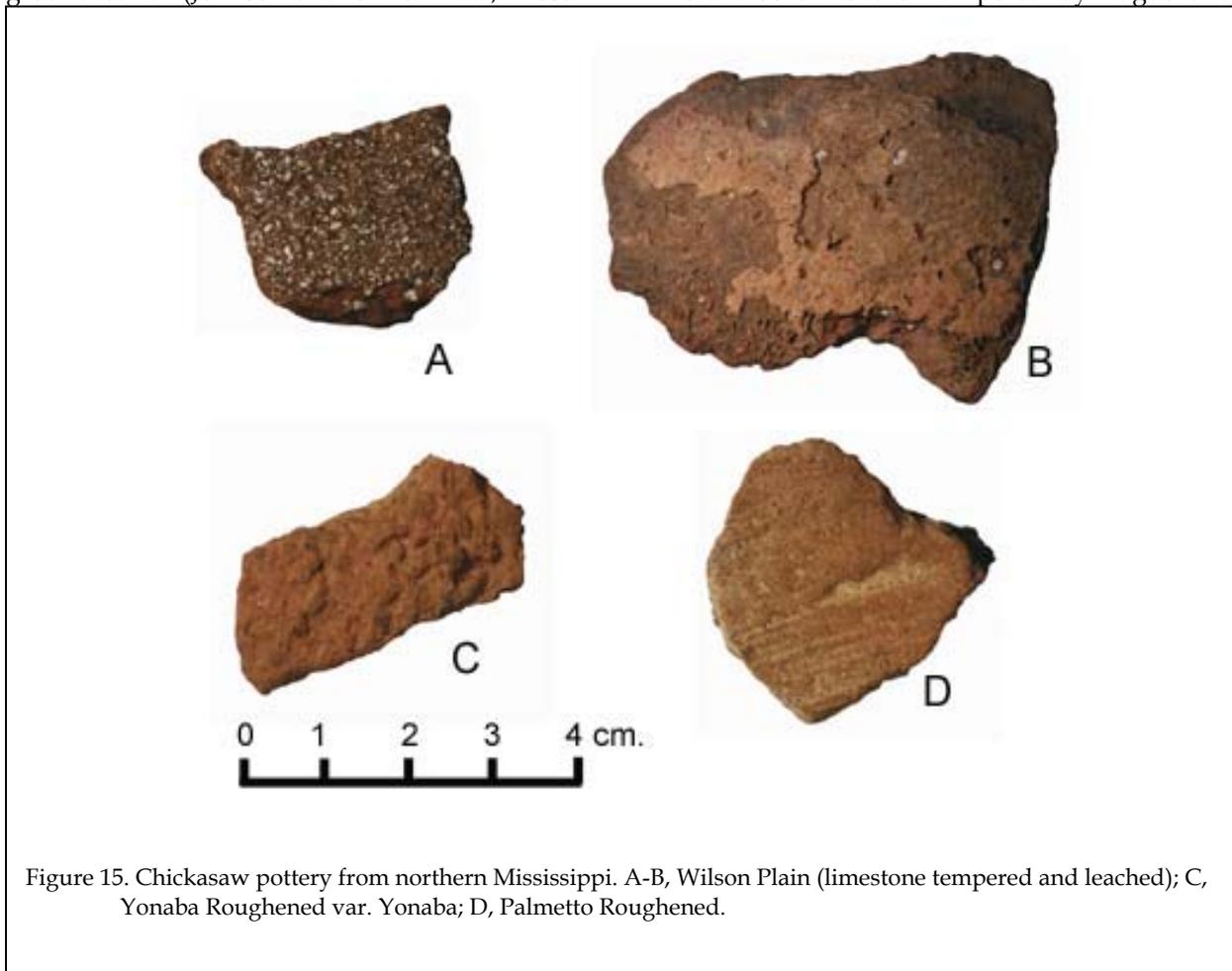


Figure 15. Chickasaw pottery from northern Mississippi. A-B, Wilson Plain (limestone tempered and leached); C, Yonaba Roughened var. Yonaba; D, Palmetto Roughened.

conflicting descriptions. For example, Polhemus remarks that the pottery was “shell-tempered” and is similar to Shawnee pottery reported from Kentucky, although he acknowledges that other groups associated with the fort include the Creek, Cherokee, Chickasaw, and Yuchi (Polhemus 1971:132). Nevertheless, the shell tempering is intriguing and certainly is suggestive of the Chickasaw.

Joseph (1971:113) identified burnished sherds, but provides no information on temper. The most recent work provides even less information, describing Native American remains only as “plain, complicated stamped, and incised sherds” (Groover and Johnson 2002:33).

It seems unlikely, however, that a small group would transport much pottery from their homeland, especially considering the location of the group in the heart of English trade. It seems likely that identification of the Chickasaw occupations would be difficult, perhaps impossible, without large collections, typically found at large, well established sites (such as Fort Moore if there was a thorough analysis of the recovered materials from the various excavations).

Historic Overview

The survey tract (presently in Aiken County) is in what is historically known as the Edgefield District. In 1826 Mills remarks that the district is historically similar to other nearby districts:

There is nothing that distinguishes the settlement of Edgefield from that of other districts in the upper and middle country. They were all gradually settled as the tide of emigration rolled from the north and east. It however may be observed of this, in contradistinction to some other districts, which were peopled a good deal by foreigners and their immediate descendants, (namely,

by Irish, Scotch, and Dutch, mixed with a few English,) that Edgefield was settled principally, and indeed almost altogether, by emigrants from Virginia and North Carolina (Mills 1972:519-520 [1826]).

Although exploration of the Savannah River Valley began as early as the sixteenth century (DePratter 1989), frontier settlement of the area did not begin until after the Yamassee Indian War (1715-1718) and it is likely that this area of what is today Aiken County wasn't intensively settled until after 1761 when hostilities between the Cherokee and the English subsided.

Among the earliest settlements were small trading posts located on the various trading paths. While these settlements were scattered along the Savannah River as far north as Keowee, at least one - Drake's Fort - was in the Augusta area. Although neither Ivers (1970) nor Hatley (1995) mention this location, Martin and Drucker (1987:7) seem to associate it with the Cherokee trade. Regardless, the location shown by Mouzon on his 1775 *An Accurate Map of North and South Carolina* is above the “falls,” north of the project area by several miles. By that time the site was also characterized as “ruins of.” Jonathan Drake was elected a Commissioner of the Indian Trade in 1716 and this fort is perhaps a trading establishment associated with him or his son-in-law, William Drake (Hicks 1998:104, McDowell 1955:78).

Another early settlement is Falmouth, although very little has been found about the village. In fact, only one mention has been found in the S.C. Department of Archives and History Combined Alphabetic Index. This one reference is of an 1824 plat of 35 acres laid out to Hightower Davis on the Savannah River. A portion of the northern boundary, adjoining lands of William Garrett, is the notation that a survey tree also served as the corner for the “Village of Falmouth.” A ferry was at the boundary of the village and Davis' property (S.C. Department of Archives and

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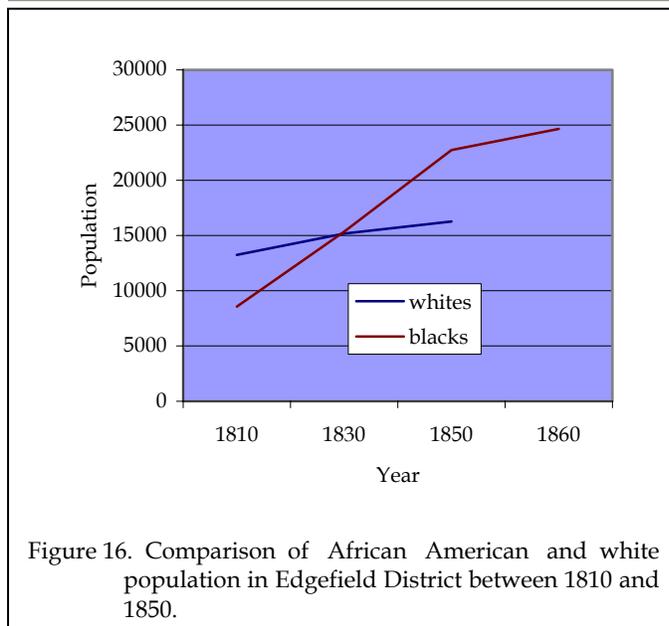


Figure 16. Comparison of African American and white population in Edgefield District between 1810 and 1850.

History, State Plat Books - Columbia Series, vol. 47, pg. 303).

Campbell Town or Campbellton is reported to have been founded by John Hammond just below the rapids. Christenen (1975) briefly comments that "Campbell Town" began in 1760 and was associated with the Indian trade. The Campbellton Ferry was historically located at the end of the road that today bisects 38AK276, suggesting that this site is likely the remains of that early settlement. Additional support for this is provided by an 1801 petition noting that Leroy Hammond (whose residence was named "Snow Hill and is shown on Mills' *Atlas* for Edgefield District, as is "Campbellton") and William Garrett had purchased John Hamilton's ferry "in Campbellton" (S.C. Department of Archives and History, Petitions to the General Assembly, 1801, item 76).

Another brief mention concerns the 1806 marriage of Joshua Key, "merchant of Campbellton" to Eliza Tankersley (Jervey 1929:187).

A few years later a ca. 1815 petition to the General Assembly by William Garrett, operator of the "Public Ferry on Savannah at Campbellton"

described the site as being "situated about two miles above the Augusta bridge" (S.C. Department of Archives and History, Petitions to the General Assembly, no date, item 859).

These documents strongly suggest that Falmouth - associated with William Garrett's lands and a ferry - is the same as Campbell Town. And while Campbell Town (or Falmouth) may have begun as a trading center, it seems clear that it continued as a nucleus attracted to the access point between Carolina and Georgia, with the settlement continuing into at least the first quarter of the nineteenth century. The association of 38AK276 with this early settlement is of considerable importance. Unfortunately the cemetery associated with the settlement - 38AK502 - has already been destroyed. Additional work in this area is critical (see Rosson 1980:7-8 for additional information).

By the mid-eighteenth century, cattle ranchers and subsistence farmers cleared land and established small farms and plantations (Kovacik and Winberry 1987:69-71). By the eve of the American Revolution cattle ranching was well established in the area (Brooks 1981).

While Tory forces were quite active in the Edgefield District during the American Revolution, only two skirmishes took place in Aiken County. These were in conjunction with the American capture of Augusta from the British, and occurred at Beech Island and Galphin's Fort (Brooks 1984).

By 1800 the population consisted of 13,063 whites, 5,006 African-American slaves, and 61 free blacks totaling 18,130. Figure 15 reveals that while the white population grew slowly, enslaved African Americans were rapidly brought into the area to provide labor for the cotton fields. In the years preceding the Civil War, the population growth in the state slowed considerably, as planters and farmers left the exhausted soils of South Carolina and moved to Georgia, Alabama, and Mississippi (Kovacik and Winberry 1987:92-

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93). In fact, while Edgefield's growth in slaves continued, there is evidence of it beginning to level off.

although he tended to overextend himself and therefore spent much of his life attempting to finesse the next deal in order to save himself from bankruptcy.

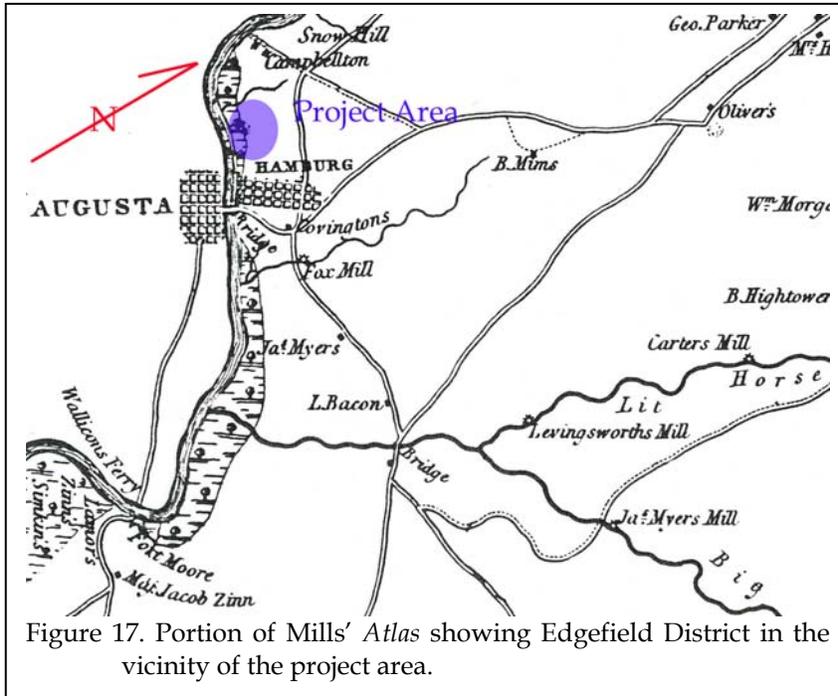


Figure 17. Portion of Mills' Atlas showing Edgefield District in the vicinity of the project area.

His first venture was the creation of a bridge across the Savannah River with his partner, Lewis Cooper. Authorized by the Legislature in 1813, construction took two years and \$73,000 (\$820,225 in 2002\$). Built of cypress with pine flooring, the bridge was 1,000 feet in length, 30 feet in width, and 40 feet above the normal level of the Savannah River. This bridge was located about 130 feet upriver (northwest) of the existing Southern Railroad bridge, crossing a small island that is still present in the river (see S.C. Department of Archives and History, State Plat Book -

Columbia Series, vol. 52, pg. 329).

Mills' Atlas (Figure 17) shows the project area west of the town of Hamburg. The area is shown to be wetlands of the Savannah River and no settlements are located in the corridor. To the northwest are two names, Snow Hill and Campbellton, both beyond the project limits (both have been previously discussed).

The toll charge authorized by the Legislature was 75¢ (\$8.40 in 2002\$) for a wagon and team or 4-wheel pleasure carriage, 37½¢ (\$4.30 in 2002\$) for two-wheeled vehicles, 12½¢ (\$1.50 in 2002\$) for a man and horse, and 6¼¢ (.70¢ in 2002\$) for a man on foot. Shultz, with no false modesty, observed that he had "been the only man who has met with success thus far in bridling that noble stream" (South Caroliniana Library, November 1849 *Memorial of Henry Shultz, for Himself and Others to the Legislature of South Carolina*).

One of the more curious historical features of the project area is the rise and fall of Hamburg. Of considerable commercial importance, at least for the period from about 1820 through 1840, there is relatively little research on the community's history and there are only two significant accounts that are at times at odds with one another (Cordle 1940, Shultz 1837, and Taylor 1934).

Coupled with the bridge was the formation of a private "Bridge Bank" that issues notes. All went well until May 1819 when a rush of note holders seeking redemption found that the bank was unable to meet the demand and closed (Taylor 1934:21, Cordle 1940:81-81). Shultz was sued by his creditors and lost his property - including his bridge. The bridge was sold to the

There is general agreement, however, that Henry Shultz, an immigrant who arrived in 1806, is the central (if not somewhat tragic) figure associated with the community. He was an entrepreneur of unparalleled vision for the period,

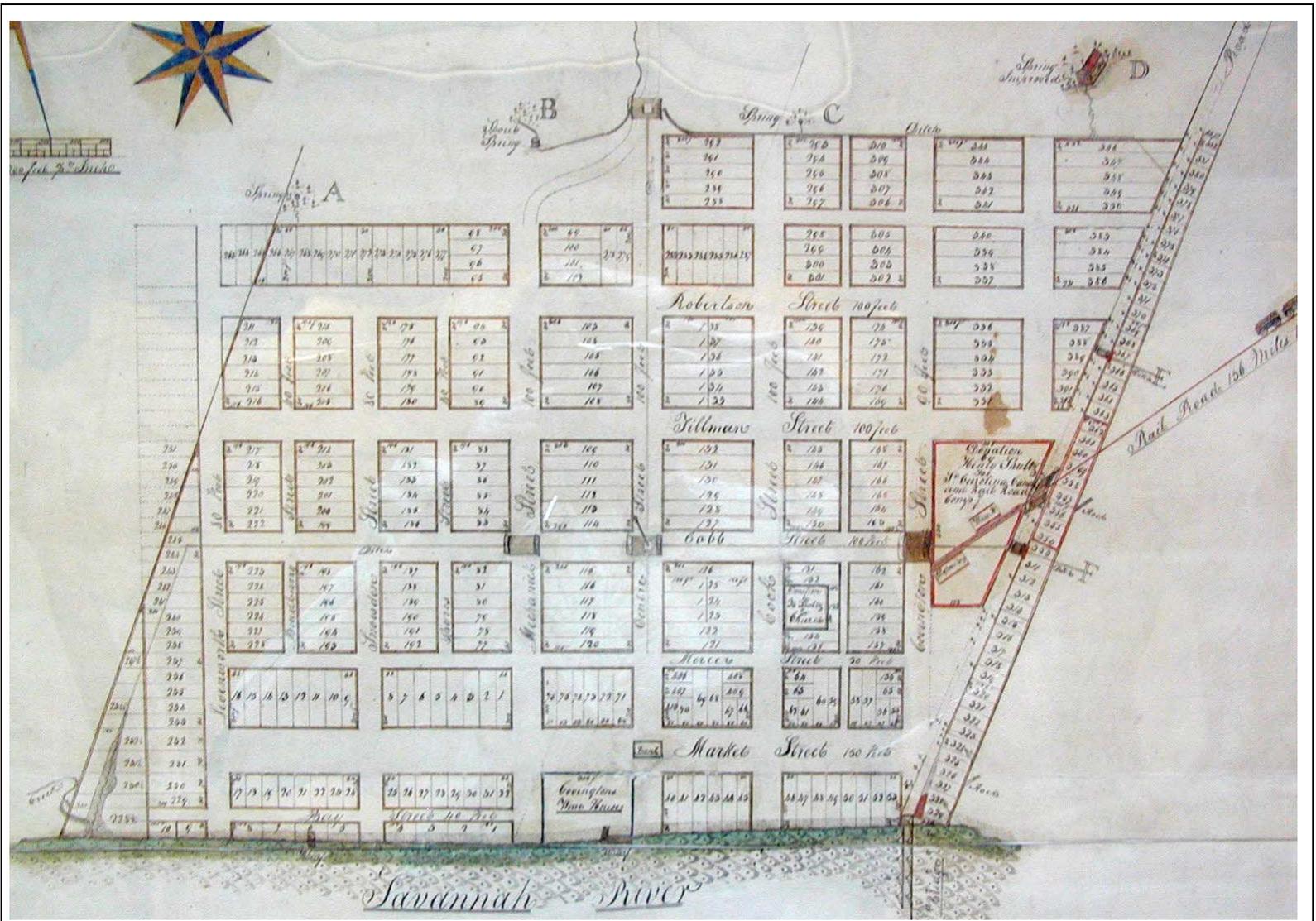


Figure 18. Portion of the 1835 Hamburg plat (S.C. Department of Archives and History, Maps). This plan is of the original portion of Hamburg and does not include the 1823 Upper Hamburg, which may never have been very extensively developed.

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Bank of Georgia, later passing to G.B. Lamar and, in 1840, to the City Council of Augusta (Hayne 1852:11). Eventually the South Carolina Railroad Company made arrangements with the City of Augusta to run its tracks over the bridge, linking South Carolina and Georgia railroad lines.

The taking of his bridge by “monied aristocrats of Augusta” embittered Shultz and determined much of his future behavior (Taylor 1934:21). It was certainly a driving force in his desire to create a commercial rival to Augusta.

The future site of Hamburg was a cornfield when first examined by Shultz (Cordle 1940:82). He entered into a short-term rental with the owner, John B. Covington for 330 acres, described as originally belonging to the Chickasaw (this provides further support of Rainsford analysis). This initial Hamburg settlement represents the lower half of what is known as Hamburg today, from the railroad tracks northwest for about 3,000 feet. Shultz’ goal was to drain the swamp and lay out a town that would compete with Augusta for the upland cotton trade (Taylor 1934:21).

By 1822 there were 78 buildings, including a 50 by 70 foot public house and a 50 by 300 foot warehouse for cotton and tobacco (Taylor 1934:21). By 1823 there were 176 structures, including a church, bank, post office, school, 39 stores, four public houses, two warehouses, 114 private dwellings, a printer, a market house, two physicians, a druggist, a silversmith, two blacksmiths, a butcher, a tailor, a saddler, and a painter. The town was estimated to have a population of between 800 and 1,000 (Cordle 1940:89).

The Report of Superintendent of Public Works for 1823 also reveals that in the first season of business in Hamburg 17,896 bales of cotton were received for shipment. By the second season that had increased to 27,857 bales. During the single month of October 1822 there were 1,228 bales received; the following year in the same month there were 3,149 bales received - an

increase of 256% (Kohn and Glenn 1938:325).

The growth spurred Shultz to purchase an additional 398 acres in 1823. Situated on the Savannah River to the east of the town core, this became known as Upper Hamburg (Edgefield County Clerk of Court, DB 40, pg. 103-104, 248-250; Cordle 1940:98). This portion of Hamburg ran from the initial boundary at the bridge crossing the Savannah River southeast across what is today US 25-78-278. It was also in 1823 that the Bank of Hamburg was organized - a financial institution that, at least for a brief while, proved to be one of the state’s soundest, with its notes widely accepted (Taylor 1934:25).

In spite of the town’s exceptional growth - and economic viability - Shultz was again overextended, having obtained a \$50,000 loan from the State of South Carolina (the equivalent of \$769,000 in 2002\$). While the town received its charter in 1827, Shultz that same year was in bankruptcy.

Unable to repay his loans, the state purchased the entire town in 1828. The state continued improving the town, widening its streets, changing the drainage patterns, and selling lots. By 1833 conditions had improved sufficiently for Shultz that he was able to redeem 55 of the town’s lots (Taylor 1934:27). It was also in 1833 that Hamburg became the western terminus of the Charleston and Hamburg Railroad, connecting the Savannah River markets directly with Charleston and establishing Hamburg as the leading interior market of South Carolina. During this flush period between 50,000 and 60,000 bales of cotton were shipped out of the Hamburg community yearly (Taylor 1934:28).

In 1835 a plat of the town was filed with the State, providing us with a glimpse of the town’s plan and numbering system. The plat provides a brief description:

By the direction of Henry Shultz founder of Hamburg I have resurveyed the Town and made

such alterations in the original plan as have been rendered necessary by the order of the Legislature of this State. For widening, extending, and changing the name of Kimbrel Street to that of Centre Street and by the completion [sic] of the Rail Road from Charleston as accurately designated in the above Map.

The letters A B and D designate the Springs of pure Water elevated in the Bluff several feet above the levels of the highest parts of the Town.

The Branch runing [sic] in at the end of Centre Street, flows from three excellent Springs, four hundred Yards from the Town line and fifteen feet above its level [sic], the water from the Springs is conveyed by a Ditch along Centre Street and in that Street to the upper and lower boundaries of the Town.

The direct Road leading from the Bridge runs on a high embankment and at E and F are guard Gates which can be closed and the Ditches immediately filled with Water or in great freshets will keep out the back water of the River from the lour [sic] parts of the Town.

The Town is elevated from Thirty to Thirty six feet above the level [sic] of the River in common Summer Water and terminates at the Northern Boundary in a beautiful Bluff rising from seventy to one hundred feet.

Certified 23 February 1835
Thos Anderson, DS

(S.C. Department of Archives and History, Maps).

Taylor notes that Hamburg was a market town and its "very existence depended upon the ability of its citizens to draw trade" (Taylor 1934:30). By 1840 the town began to face significant problems. Augusta purchased both of the bridges from South Carolina into Georgia and made them free, taking away considerable competitive advantage. In addition, there were a series of disastrous floods in 1840, 1847, and again in 1850. While the town rebuilt after each one, the effort began to sap the community's economic vitality. A final blow came when Augusta built its canal around the shoals, providing a direct water route into its commercial center (Taylor 1934:32-33).

Taylor comments that whites moved away from Hamburg by the time of the Civil War, leaving Hamburg "a settlement of about 150 lazy, shiftless Negroes" (Taylor 1934:34). While Taylor wrote in the light of Jim Crow, there is evidence that the community was impoverished. In fact, Hamburg is today perhaps best remembered for the location of the Hamburg Massacre.

In July 1876 the commander of town's militia company harassed some white travelers through the predominately black town. The whites continued to the next town, where they filed charges against the black commander. He, in turn, filed charges against them. A mob of several hundred armed whites descended on Hamburg and in the resulting fire fight one black and one white were killed. After the black militia surrendered to the overpowering white band, six blacks were murdered in cold blood by the mob (Edgar 1998:403). This began the Red Shirt campaign of Wade Hampton a series of brutal assaults on South Carolina's African American population.

By 1882 the ill-fated town was described with some contempt by a traveling journalist:

the place where a few years ago

the chivalry engage in the humane business of killing off the "damned niggers," as they were called. I was told that Hamburg was once, not only the largest cotton, but the greatest slave market in the South, and in walking over the place, I did not need to be told that the avenger of wrong had already made them a visit, and the destruction by fire was almost as complete as was Sodom and Gomorrah in olden times (McElwin 1882:13-14).

While McElwin implies a fire destroyed much of the town, Taylor makes no mention of that, remarking:

as a result of the disastrous floods in the Savannah River Valley in August and September of 1929, the Red Cross announced that it had come to the relief of Hamburg for the last time. The Negroes living in Hamburg were forthwith moved to high ground a short distance up the river, and thus was administered the *coup de grace* to the languishing existence of what was for many years the leading interior market of South Carolina (Taylor 1934:20).

As late as 1941 Hamburg was worthy of several paragraphs in the WPA Guide – briefly recounting its history and the story of the "gyascutus" (Montgomery 1941:345-346). In contrast, the nearby town of North Augusta was dismissed with the single sentence, "most of the working people of North Augusta . . . hold jobs in Augusta, Georgia" (Montgomery 1941:365).

The Edgefield District saw some activity during the Civil War. General H.J. Kilpatrick of the Union Army fought General Joseph Wheeler's troops at Blackville, Williston, and Aiken during his threat to Augusta (Wallace 1953:548).

It was not until the end of the Civil War that Aiken came under attack. Will the fall of Savannah, General O.H. Hill was placed in charge of the Confederate forces in Augusta, where it was thought that Sherman's troops would surely head in order to destroy the vast stores of cotton. By late January 1865 Union forces were rapidly advancing through South Carolina, having taken Pocotaligo on January 14th and breaking the Charleston-Savannah railway for the first time during the war. The Confederate forces established a defensive line near Three Runs in Aiken County, near where the Savannah River Plant site is today. The Union forces reached Allendale by the 31st and succeeded in taking Blackville, breaking the Charleston - Hamburg Railroad connection.

Union troops, including the 14th and the 20th Corps as well as Major General Hugh Judson Kilpatrick's cavalry, began following the railway line to the west, leading directly to Aiken. By February 10 Kilpatrick's cavalry reached Johnson's Turnout (at what is today Montmorenci), while the Confederate forces hastily established a line about two miles east of Aiken. Practicing total war, the country side was pillaged and the railway was destroyed. Kilpatrick remarked in a message to Sherman that "this is splendid country; plenty of forage and supplies" (quoted in Boylston n.d.:8). Efforts to advance through Aiken were foiled by Confederate troops under the command of General Joseph Wheeler. While Aiken was saved, as was the Graniteville cotton mill, and the stores of cotton in Augusta, South Carolina was lost.

Exhausted by war and stunned by the upheaval of their economic and social system the residents of Edgefield District, as well as the rest of South Carolina, were in a state of confusion and hardship. Immediately after the Civil War cotton prices peaked, causing many Southerners to plant cotton again, in the hope of recouping losses from the War. The single largest problem across the South, however, was labor. While some freedmen stayed on to work, others, apparently many others, left.

The hiring of freedmen began

immediately after the war, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely tempered by the enactment of the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black majority (see Orser 1988:50). Added to the Codes were oppressive contracts which reinforced the power of the plantation owner and degraded the freedom of the Blacks. The freedmen found power, however, in their ability to break their contracts and move to a new plantation, beginning a new contract. With the high price of cotton and the scarcity of labor, this mechanism caused tremendous agitation to the plantation owners.

Gradually owners turned away from wage labor contracts to two kinds of tenancy – sharecropping and renting. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks. Sharecropping required the tenant to pay his landlord part of the crop produced, while renting required that he pay a fixed rent in either crops or money. In sharecropping the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else – land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share-renting, the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest the crop was divided in proportion to the amount of fertilizer that each party supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash-renting the landlord provided the land and housing, with the renter providing

everything else and paying a fixed per-acre rent in cash.

Aiken was not created until 1871 when parts of Edgefield, Lexington, Barnwell, and Orangeburg Counties were joined together. Just prior to this the 1871 Isaac Boles *Map of Edgefield County* shows that Hamburg (and what would become North Augusta) was within the Shultz Township – named, of course, for the founder of Hamburg.

In the 1880s Edgefield County had no cotton mills and none under construction, while Aiken County had three mills (Graniteville, Vacluse, and Langley). Cotton was, however, being produced in large amounts and it was estimated that the average cost of producing merchantable cotton was about eight cents a pound and 40 dollars to bale 500 pounds. It appears that a large portion of the manufacturing in the county was milling grain or producing lumber and turpentine. Of the 84 manufacturing establishments there were 55 grist mills, 22 lumber mills, and 6 turpentine establishments (Anonymous 1884).

In Aiken County, corn was the largest agricultural product with 75,966 acres producing 703,080 bushels. Cotton closely followed with 63,127 acres producing 29,676 bales (Anonymous 1907:571). Edgefield County, however, produced primarily cotton with 58,366 acres producing 20,960 bales. 38,316 acres was planted in corn producing 306,120 bushels (Anonymous 1907:574). By 1900 Aiken county had a population of 39,032 rising from 31,822 in the previous decade. Edgefield County's population dropped dramatically from 49,259 in 1890 to 25,478 in 1900.

The Development of North Augusta

Activities in the vicinity of North Augusta began about 1890, when the North Augusta Land Company began purchasing large estates, including those of Mealings, Hornes, and Getzens. The property was surveyed in 1891 and laid out in large, regular, square blocks. By 1891 the

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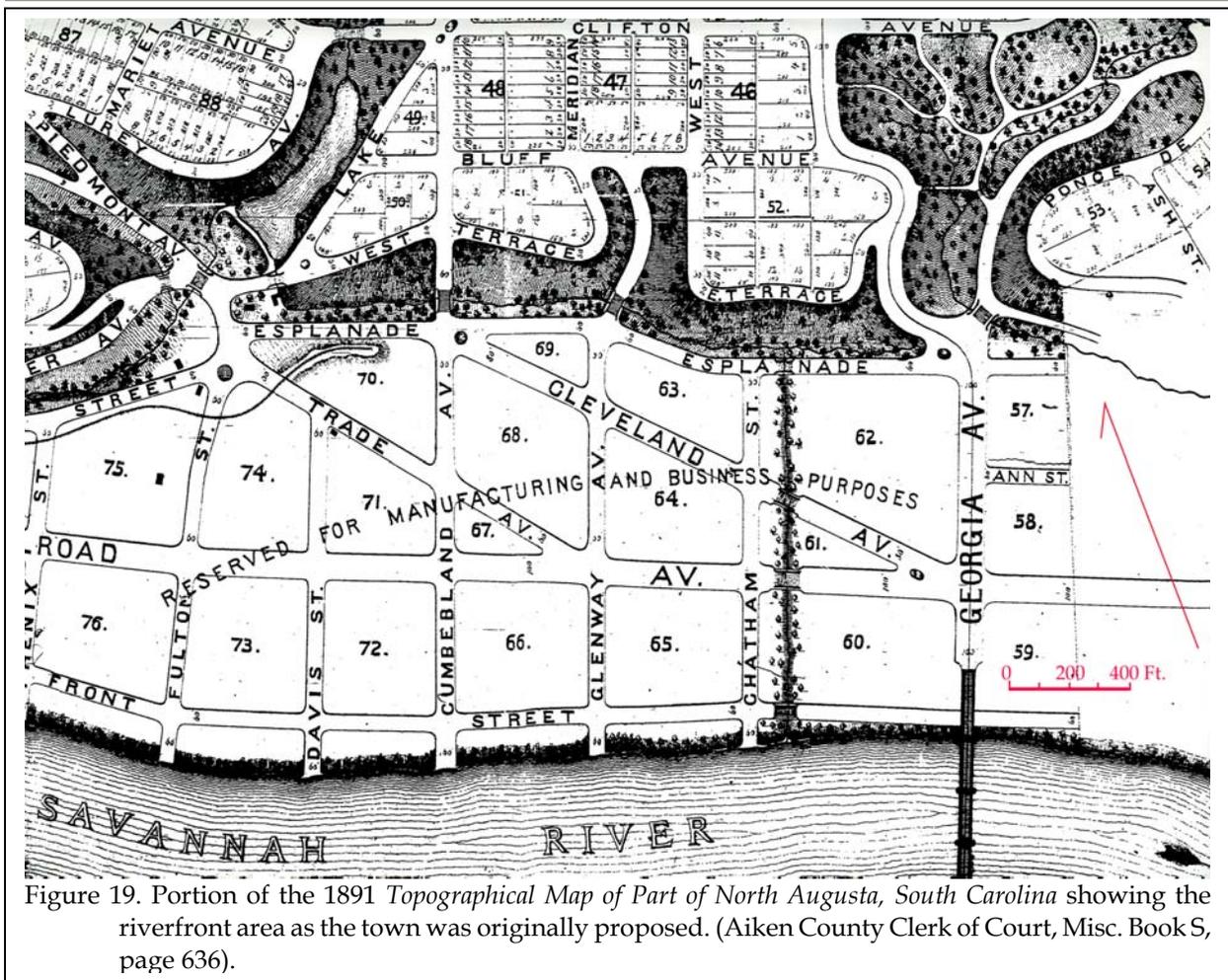


Figure 19. Portion of the 1891 *Topographical Map of Part of North Augusta, South Carolina* showing the riverfront area as the town was originally proposed. (Aiken County Clerk of Court, Misc. Book S, page 636).

Thirteenth Street bridge opened up North Augusta to Augusta. Built at a cost of \$85,000 (\$1,700,000 in 2002\$) it was torn down in 1938 for the construction of a new bridge, completed in 1939 (Rosson 1980:16). By 1897 the community had its first electric lights. A photograph taken of North Augusta’s Georgia Street in 1897, however, shows only one house under construction, surrounded by cotton fields. It wasn’t until 1903 that the demand was sufficient for electrical power that the Augusta, Aiken & Electric Co. was incorporated in Trenton, New Jersey.

By 1902 there was a move afoot to break away from Aiken County. North Augusta would serve as the new county seat of Heyward County. This effort was short-lived, being soundly defeated by the State legislature, that felt the area

was too small to be an effective government. In fact, the North Augusta community wasn’t chartered until April 11, 1906 (Anonymous 1956).

A “modern” trolley line began in 1904. In 1909 the community was serious affected by a flood, although the actual losses are not clearly documented. In 1913 North Augusta had a population of 1,500 people and by 1915 there were at least two brick and tile works in the town – the Hankinson Brick Company and South Carolina Pottery. Both were attracted to the rich clay deposits just inland from the Savannah River, as well as the cheap transportation provided by the railroad and the ready access to abundant water. Nearby, the town also boasted of the Augusta Veneer Company (Watson 1915).

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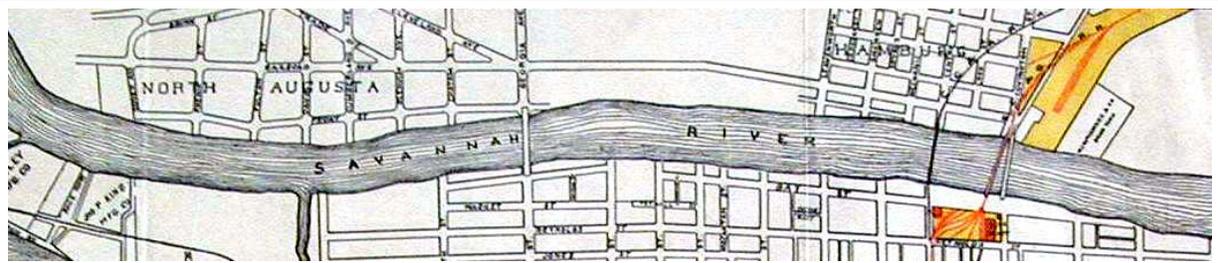


Figure 20. South Carolina and Georgia Railroad map of Augusta, Georgia, 1897. Compare the Hamburg layout to Figure 17 (courtesy South Caroliniana Library).

Rosson states that in 1916 interest in North Augusta waned as a result of the disastrous Hampton Terrace Hotel fire. At some point after this the North Augusta Land Company (that had previously been solely responsible for the sale of land in the town), commissioned Blanchard and Calhoun, an Augusta Real Estate firm, to handle transactions in North Augusta. This firm found “that numerous vacant lots appearing on the original Boeckh map had simply been taken over

Noted for its healthful climate, and unsurpassed view for beauty. Connected with Augusta, Ga. by steel bridge, automobile turnpike, electric railway, telephone, etc. . . . North Augusta is largely a residence and school town, yet it has a bank, cotton ginnery, cotton warehouse, lumber plant, box and crate works, veneer plant, cotton refining company, post office, pottery, grist mill, automobile repair shops, blacksmith and wheelwright shops, several grocery and supply stores, hotel, floral gardens and bathing pond (Anonymous 1918:1)

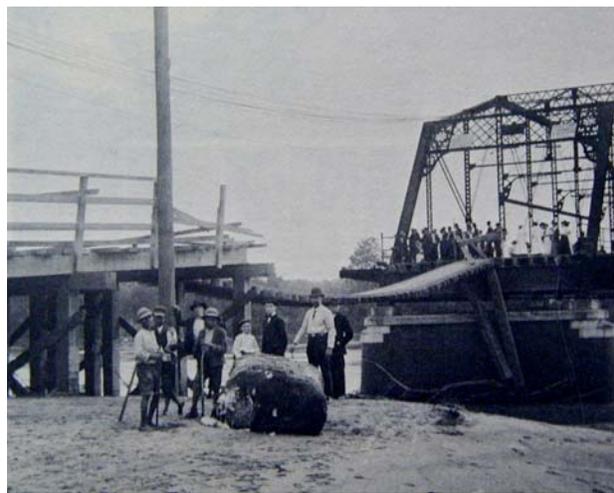


Figure 21. View of the 1891 Thirteenth Street bridge damaged during the 1929 flood (adapted from Rosson 1980:209).

and built on” (Rosson 1980:136).

In 1918 a City Directory for North Augusta (the first one published), described the area as:

A growing and progressive town on the high hills of South Carolina, opposite Augusta, Ga.

By 1929 the trolleys were abandoned and replaced by buses. It was also in 1929 that North Augusta suffered a second significant flood, which apparently destroyed the North Augusta Natatorium – suggesting that a good portion of the downtown area was damaged. The flood level was reported to be 46.3 feet on the Augusta gauge, with a discharge of 350,000 cfs (Wilber Smith & Associates 1980:13). For comparison, with the completion of Lake Hartwell the 100-year flood would have a discharge of 250,000 cfs. Rosson (1980:209) illustrates a photograph showing that a portion of the North Augusta bridge was destroyed.

In 1937 Georgia Street was finally paved. But it probably wasn’t until November 1950 that North Augusta’s future was truly secured. At that time the Atomic Energy Commission announced

plans for the construction of a new facility for the production of fissionable and fusionable material 20 miles to the southeast. North Augusta's population jumped from 3,659 in 1950 to over 14,000 in 1956. This represents North Augusta's great economic expansion.

Tract Specific History

There are a variety of documents that are readily available to help better understand the activities that have taken place on the study tract, including aerial photographs, period maps, documentary accounts, Sanborn Insurance Maps, and of course the title documents. In this section we will briefly review the maps and other documentary sources, attempting to tie the various fragments together. We'll also provide some additional details concerning at least a few of the businesses that operated in the study area.

In the second section we'll review the lot-by-lot title information that is currently available at this survey stage.

Overview of Maps and Other Resources

The earliest map of the project tract is the 1891 plan of North Augusta prepared by Boeckh for the North Augusta Land Company which has been reproduced here as Figure 19. It reveals no development in the project area, suggesting that whatever earlier settlements there may have been in the vicinity, no standing structures were present.

Streets were laid out – or at least planned – to provide 60-foot wide avenues running down to the river. The avenues running parallel to the river were 60-feet wide, with the exception of the central roadway, Railroad Avenue, which was 100 feet wide, providing room for the anticipated railway spur that would be necessary in an industrial section. While most streets ran to form relatively square blocks, Trade and Cleveland were laid out at 45 degree angles, perhaps to break up the monotony, but more likely to provide different block sizes. None of these blocks are

divided into lots – it seems clear that the town intended for industries to purchase entire blocks for their factories and other buildings.

By 1901 a brief account boasts that upon entering North Augusta across the bridge:

The first thing that greets the eye is a small forest of smoking chimneys of a number of flourishing industries, such as planning-mills, lumber yards, brickyards, a pottery, a grist mill, etc. All is life and activity here, denoting plenty of rush orders that tax their capacity to the utmost. . . . the electric car only gives time for a glimpse at the industrial section of the town which lies in the valley, next to the river (Moore 1901:41).

The earliest Sanborn Fire Insurance Map dates from 1904 and provides the first glimpse of the industrial activity present in the project area. Four distinct businesses (or site areas, from an archaeological perspective) are present. While Railroad Avenue is not labeled, it of course follows the main spur tracks northwest from Georgia Avenue (Figure 22).

The only business northeast (north for the sake of these discussions) is Industrial Lumber Company. Ten structures are shown, including the two story brick building at the corner of Railroad and Georgia Avenue that housed the plant's offices. To the northwest was a second, and much larger, two story brick building where most of the fabrication took place, with the plant producing "sashes, doors, and blinds." It was connected to the office and warehouse by an aerial walkway. Behind this building was the boiler, while three sheds and a stable surrounded the operations. A "dry kiln" was present on a rail platform and a "shavings vault" was located to the northeast of the fabrication plant.

At the beginning of the twentieth century

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

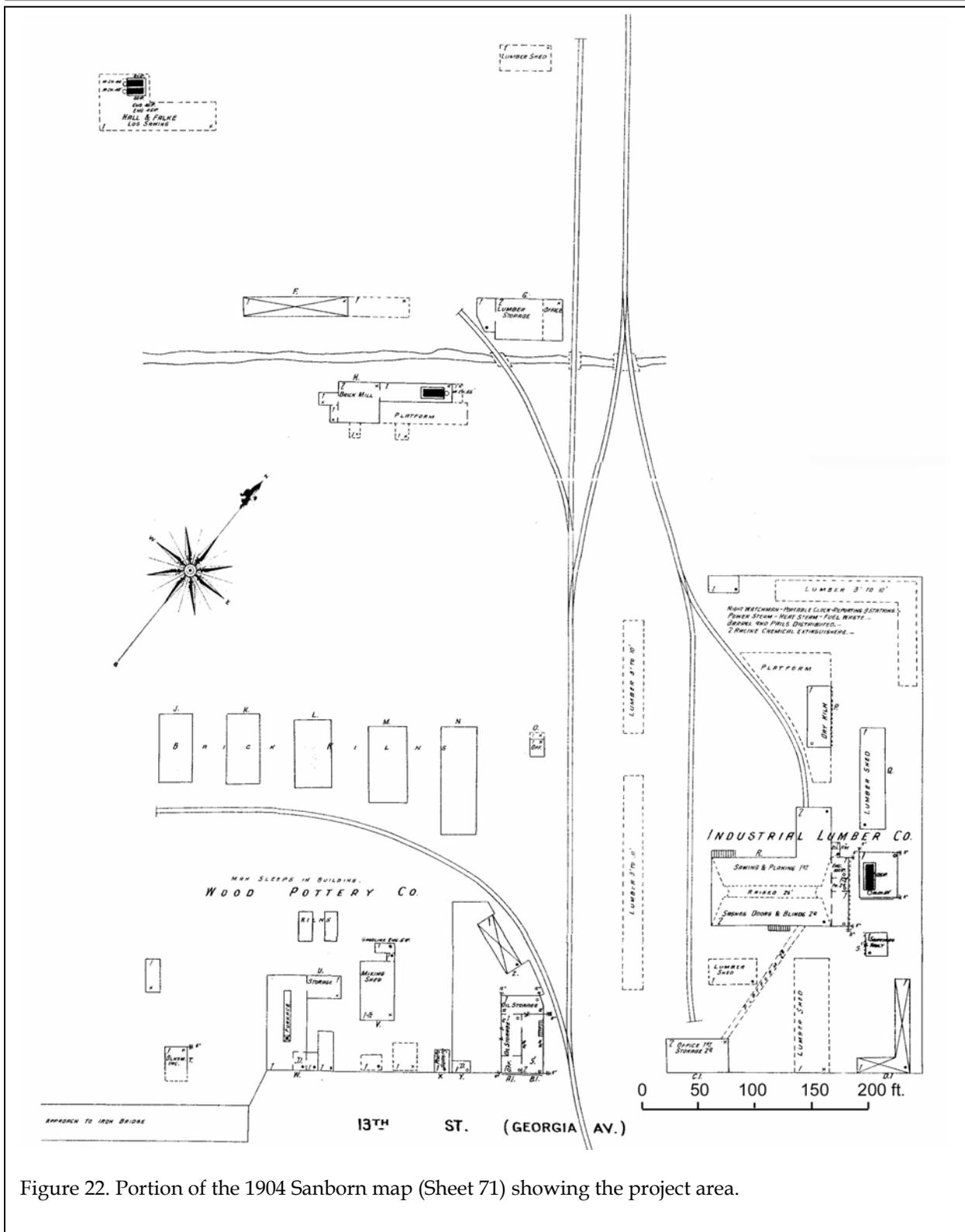


Figure 22. Portion of the 1904 Sanborn map (Sheet 71) showing the project area.

PREHISTORIC AND HISTORIC BACKGROUND

lumber products and planing mill products (i.e., sash, doors, and blinds) ranked second and fifth respectively among South Carolina's seven leading industries. The number of planing mills in South Carolina (county specific data are not available) increased from 53 in 1900 to 60 in 1905 and the invested capital more than doubled from \$412,128 to \$947,286). The number of employees increased from 495 to 974 and in 1905 the value of the products were \$1,478,581 (a 45.5% increase from 1900). In spite of this, however, most (53.3%) planing mills continued to be sole proprietorships (only 26.7% were incorporated) and many were small - for example, over a quarter produced less than \$5,000 in products and only one produced more than \$100,000 in products. Most (41.6%) produced between \$20,000 and \$100,000. Most of the workers were males and over the age of 16. The average wage was \$308 a year (Anonymous 1906).

Not surprisingly the majority of the invested capital was tied up in the machinery. Figure 23 reveals a period photograph of the interior of a mill - it is dominated by heavy industrial equipment design to plane, edge, and otherwise work the lumber into useable products. The only structure identified that may be unfamiliar to most readers are the dry kilns. These allowed for high volume seasoning of lumber to maximize its serviceability. Generally there would be one or more chambers, rooms, or tunnels in which air would be circulated around the wood being dried (generally to a level of 3-15% moisture) (Rasmussen 1961).

South of Railroad Avenue and bordering Georgia Avenue was the Dispensary building. To the rear (i.e., west) was a stable. Also on the dispensary lot to the south was a small dwelling. Just beyond was a "photo gallery" while beyond that was the Wood Pottery Co.

This operation included two kilns and a furnace with a brick chimney, a mixing shed, and a variety of small structures.

While the previously discussed planing

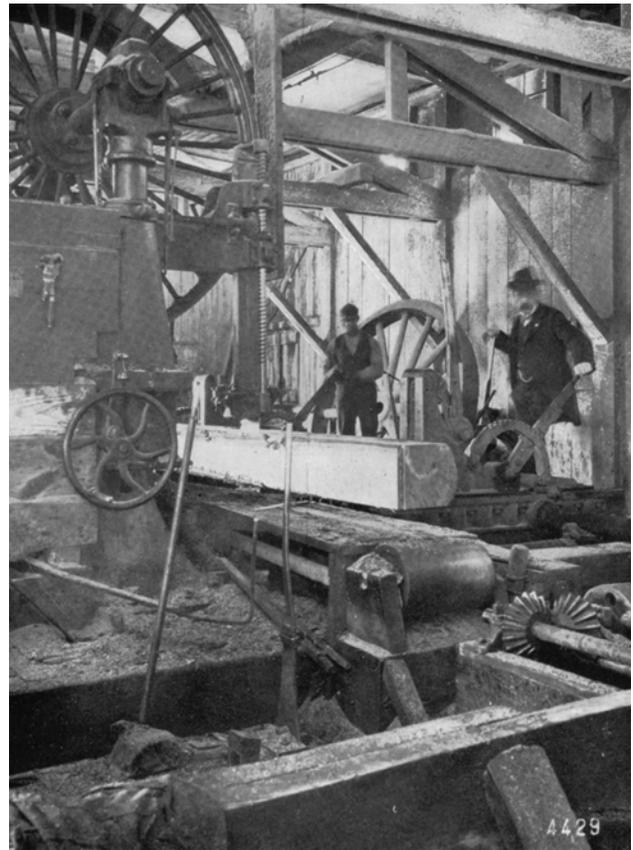


Figure 23. Turn of the century photograph of a Virginia mill (U.S. Commerce Department, Bureau of the Census).

mill was an example of a very large South Carolina industry, this pottery is an example of a very small. In 1905 South Carolina produced only \$12,200 in pottery, with \$11,500 being stoneware (representing 205,000 gallons). There were five establishments, with capital of only \$97,438 (most of that tied up in machinery). On average 88 individuals (all men or children) were employed across the state. In general the machinery used was limited - the census reports only one pug mill and one wad mill in use. Two of the kilns were up draft, two others were down draft (Anonymous 1907).

To the south of the pottery was a vacant blacksmith shop and to the west, on the opposite side of the rail spur, was an unnamed brickyard, consisting of five rectangular kilns and an office at

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

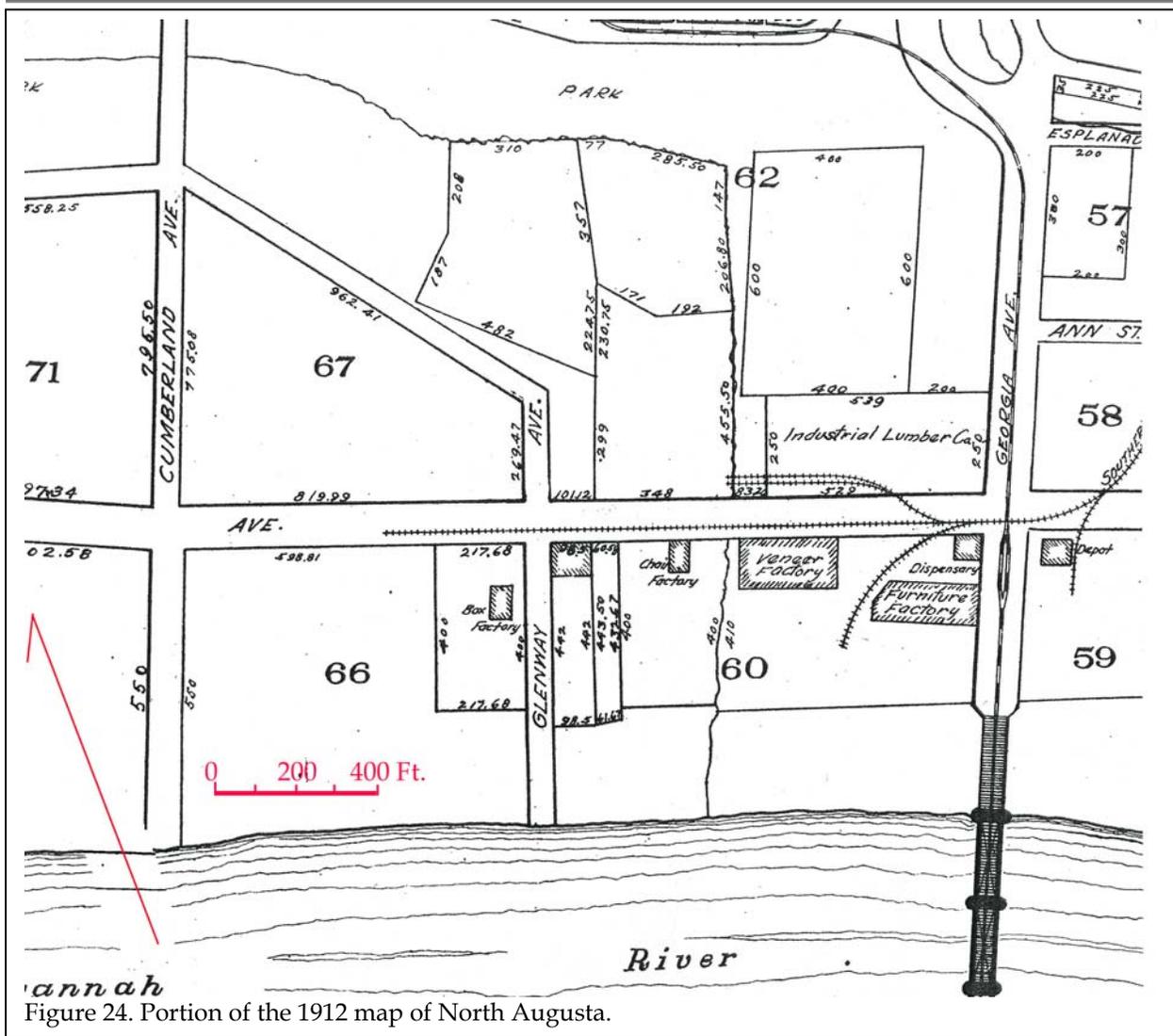


Figure 24. Portion of the 1912 map of North Augusta.

the spur end and a brick mill and boiler at the far (western) end.

While brick operations will be discussed in greater detail in a following section, it is appropriate to mention that this early date these were probably clamps, also known as field kilns. These were impermanent kilns made up of a special arrangement of the bricks themselves. While often thought of as an eighteenth or nineteenth century firing method, clamps continued to be used into the first quarter of the twentieth century (Pierce Merry, personal communication 2004; Searle 1920:20). Searle, in fact, provides full details of laying out a clamp,

stacking the green brick, and firing the brick. In 1905, there were 47 brick making operations in South Carolina with 150 kilns. Of these most nearly a third (n=47) were clamps. Round down-draft kilns (also called beehive kilns) accounted for only 18% of the kilns in use.

Although the firing may have been inefficient (at least by mid-twentieth century standards), the presence of the brick mill with a boiler, reveals that machinery was used to form the brick. Given the nature of brick making at the time, it is likely that the machines were designed for stiff mud bricks.

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Regardless, this activity would have left little evidence – other than dense brick remains – on the landscape. Being impermanent by definition, clamps would leave little evidence other than the headwalls and extensive ground scorching. Machinery, among the most valuable of all commodities in brick making, would have been salvaged and moved to the next location (James Postell, personal communication 2004).

Across the gully that is noted on almost all of the maps of this area are four buildings – a structure identified as “lumber storage,” a stable, a “lumber shed,” and Hall & Falke Log Sawing (with two boilers).

By 1912 a new plan of North Augusta (Figure 24) reveals nine lots with six structures and the spur line running down the south side of Railroad Avenue and splitting into three spurs at the end.

At the northwest corner of Georgia and Railroad avenues is the 539 by 250 foot (3.1 acre) Industrial Lumber Company lot, identical (absent building footprints) to the earlier Sanborn map.

At the southwest corner of Georgia and Railroad avenues was a building labeled “Dispensary.” Immediately south was a structure labeled, “Furniture Factory.” To the west was the “Veneer Factory.” These structures seem to have replaced Wood Pottery and the brickyard, present only eight years earlier.

On the other side (i.e., west) of a small drainage was the “Chair Factory.” Since no building is shown in that location in 1904, this is presumably a new business.

At the southeast corner of Glenway and Railroad avenues on a lot measuring 492 by 98.5 feet (1.1 acre) was an unidentified building.

On the southwest corner of Glenway and Railroad avenues was the “Box Factory,” facing east and situated on a lot measuring 400 by 217.68 feet (2 acres).

This map reveals several new industrial activities – two furniture plants and a box factory. All are relatively minor industries. For example, in 1905 there were only six furniture establishments in South Carolina – and this number declined to two by 1925. While South Carolina was a major lumber producer, furniture was primarily produced in North Carolina, Tennessee, and Georgia (Anonymous 1906; Hager 1927:134).

The furniture industry required a variety of wood working machines, but little in the way of either land or buildings. The equipment was largely portable and would have been salvaged with the demise of the business.

In 1905 there were only three box factories, increasing to four by 1925 (Anonymous 1906; Hager 1927). The industry responded to the demand for boxes and crates by local manufacturers, orchards, and especially truck farmers. This industry required even less than the furniture operations. The principle components were wood and small brads. Little would have been left in the archaeological record.

When this map is compared to the 1891 plat of the town we begin to see some significant differences in the layout of the streets and also in the block numbers. This problem is made a little clearer by reference to Figure 25, which overlays the 1912 map on the 1891 drawing, using Cumberland and Georgia avenues, and the drainage as east-west constants, with the various upland town lots and the Georgia-Railroad Avenue intersection, as north-south constants.

Suddenly the location of the Savannah River has changed, the layout of the various roads has shifted, blocks have been collapsed into each other, and several roads have been abandoned entirely. This is pointed out since some of the early titles may reference block numbers that are different depending on which map is used – resulting in potential confusion.

Regardless, the map provides the location of several key structures that are found in other

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

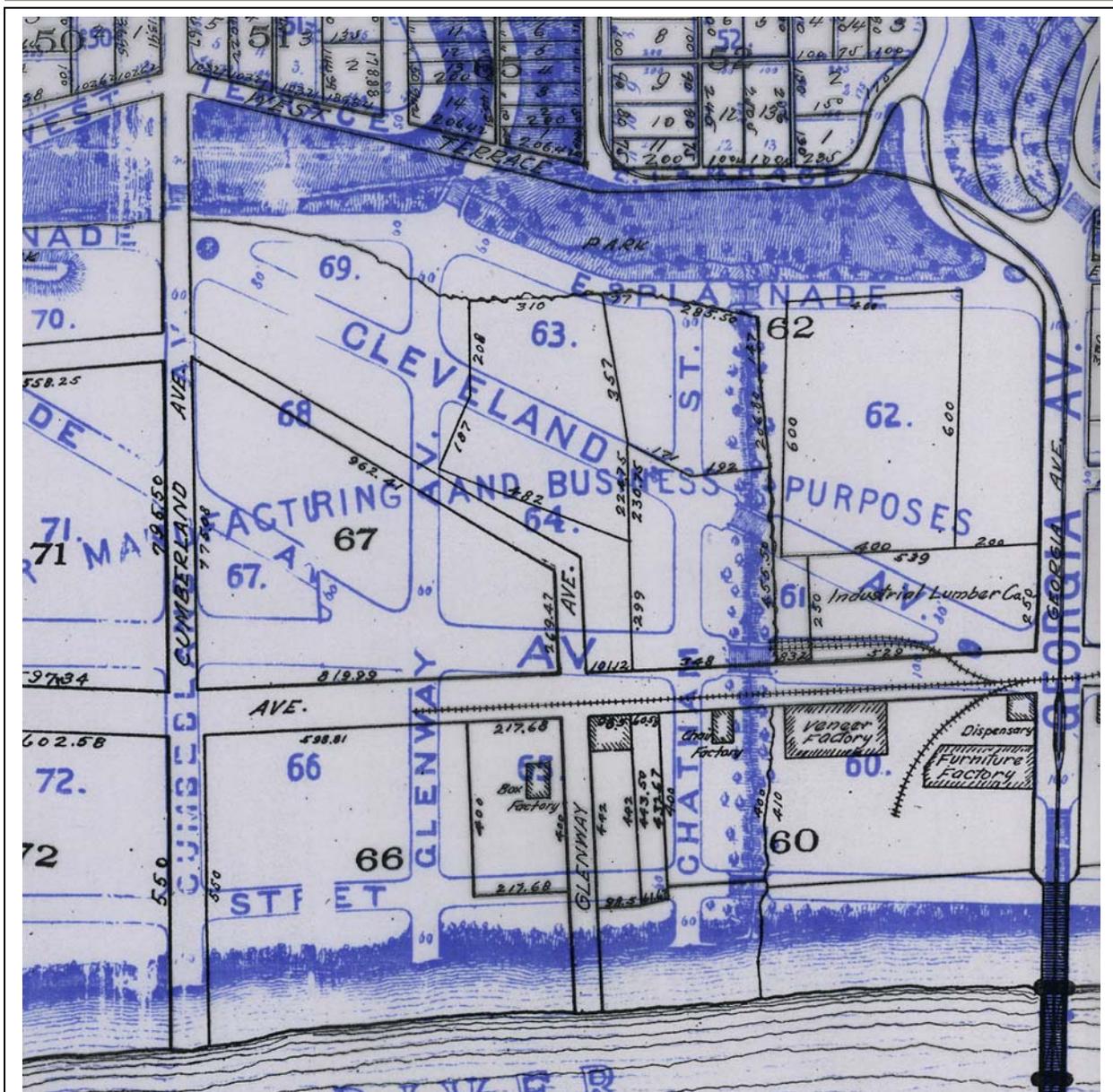


Figure 25. 1912 North Augusta map (black) overlaid the original 1891 plat of the town (in blue).

historical sources.

One of the most significant of the buildings was the dispensary. Rosson (1980:139-142) provides a detailed history, so we'll only cover a few of the more critical details. With the demise of Ben Tillman's terribly unsuccessful State Dispensary system in 1907, individual counties had the option of establishing and regulating

dispensaries. Realizing that all of Georgia would go dry in January 1908 the Aiken County Board of Control decided that a dispensary of alcohol at the foot of the Augusta bridge would have considerable patronage, providing significant profits to Aiken County. North Augusta and Augusta fought determined, but losing, battles against the location and the local board of control obtained the Shapira Building for the new

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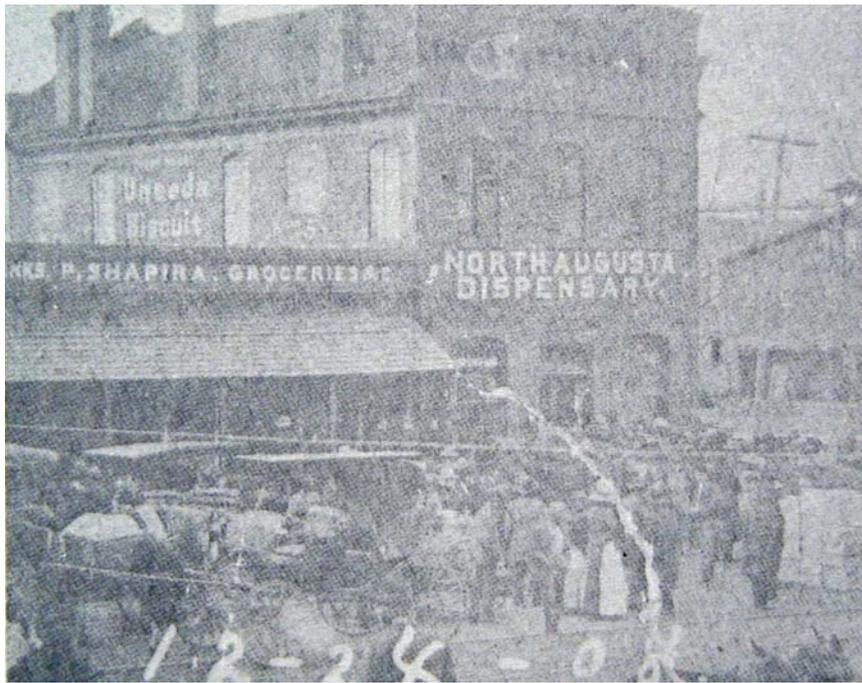


Figure 26. December 28, 1908 photograph of the Dispensary building, looking north from Georgia Avenue.

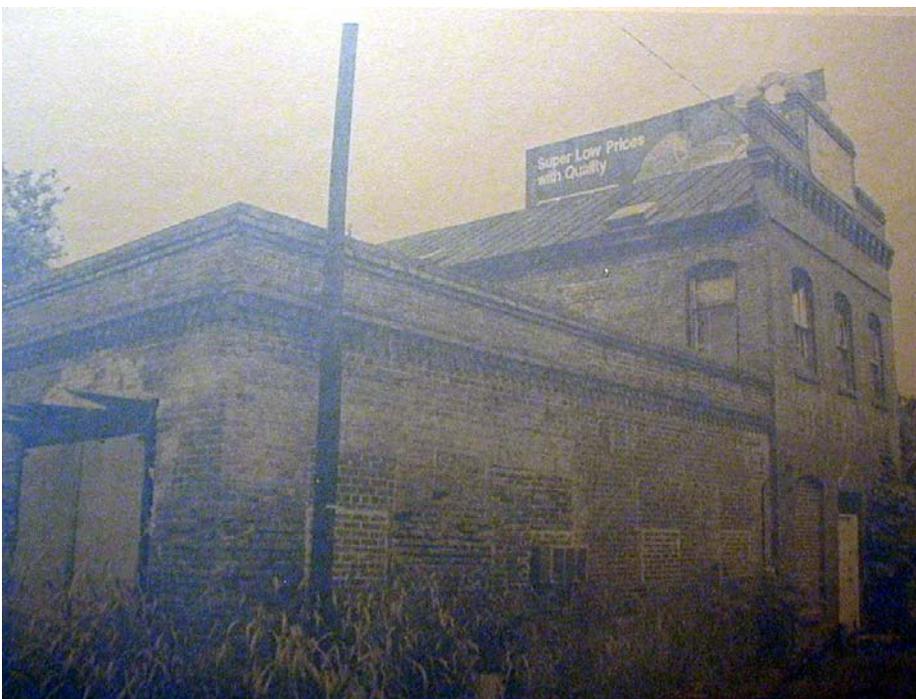


Figure 27. Photograph of the Augusta Dispensary and adjoining Shapira Grocery building.

dispensary. This building, located on Block 60, is reported to have been constructed in 1891 of red brick and was being used by the L.H. Hankinson brick works as their office and commissary for workers (the brick works themselves were located between Thirteenth and Fifth Streets, at the end of Market Street, in the Hamburg area to the east). At the foot of the Thirteenth Street bridge and with a rail line directly at its side and the interurban (that ran between North Augusta and Aiken), it was a perfect location.

At first business was slow, but it seems that it turned brisk rather quickly, with Rosson reporting one newspaper claimed \$1,000 (\$20,000 in 2002\$) a week business by the end of 1908. This seems to be an overestimate since she also reports that in the first six months of 1909 the dispensary reported \$5,853.77 (\$117,000 in 2002\$) or about \$244 (\$4,900 in 2002\$) a week (Rosson 1980:141).

To the south side of the dispensary was Shapira's Grocery, seen in somewhat better detail in the

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twentieth century photograph of the boarded building, prior to its loss to fire. Curiously, both Figures 26 (dating to 1908) and Figure 27 (ca. 1980) show the adjoining Shapira Grocery - which is not shown in the 1904 Sanborn map (Figure 22).

South Carolina voted for prohibition in September 1915 and the Augusts Dispensary closed for the sale of alcohol. The use of the building afterward is not well documented.

Although the 1912 map shows none of the Industrial Lumber Company buildings, the December 1908 photograph of the Augusta Dispensary (Figure 26), shows a very large building in the background.

The 1915 *Yearbook of South Carolina* identifies two brick and tile companies in the

North Augusta area - Hankinson Brick Co. and South Carolina Pottery. We know that both were located east of Georgia Avenue, in an area that has been developed - both industrial sites have been lost. The only other industrial activity identified in the vicinity is the Augusta Veneer Company (Watson 1916: 117, 135).

The 1918 *North Augusta Directory* provides some indications of activities in the industrial section. On Railroad Avenue, going from Georgia to the west, there was the office of the Augusta Veneer Company, the factory for this business, the South Atlantic Cotton Company, and the North Augusta Box and Crate Factory.

But the area was not entirely industrial since the directory lists at least two residences: a George Bennett and his wife Lessie lived at the

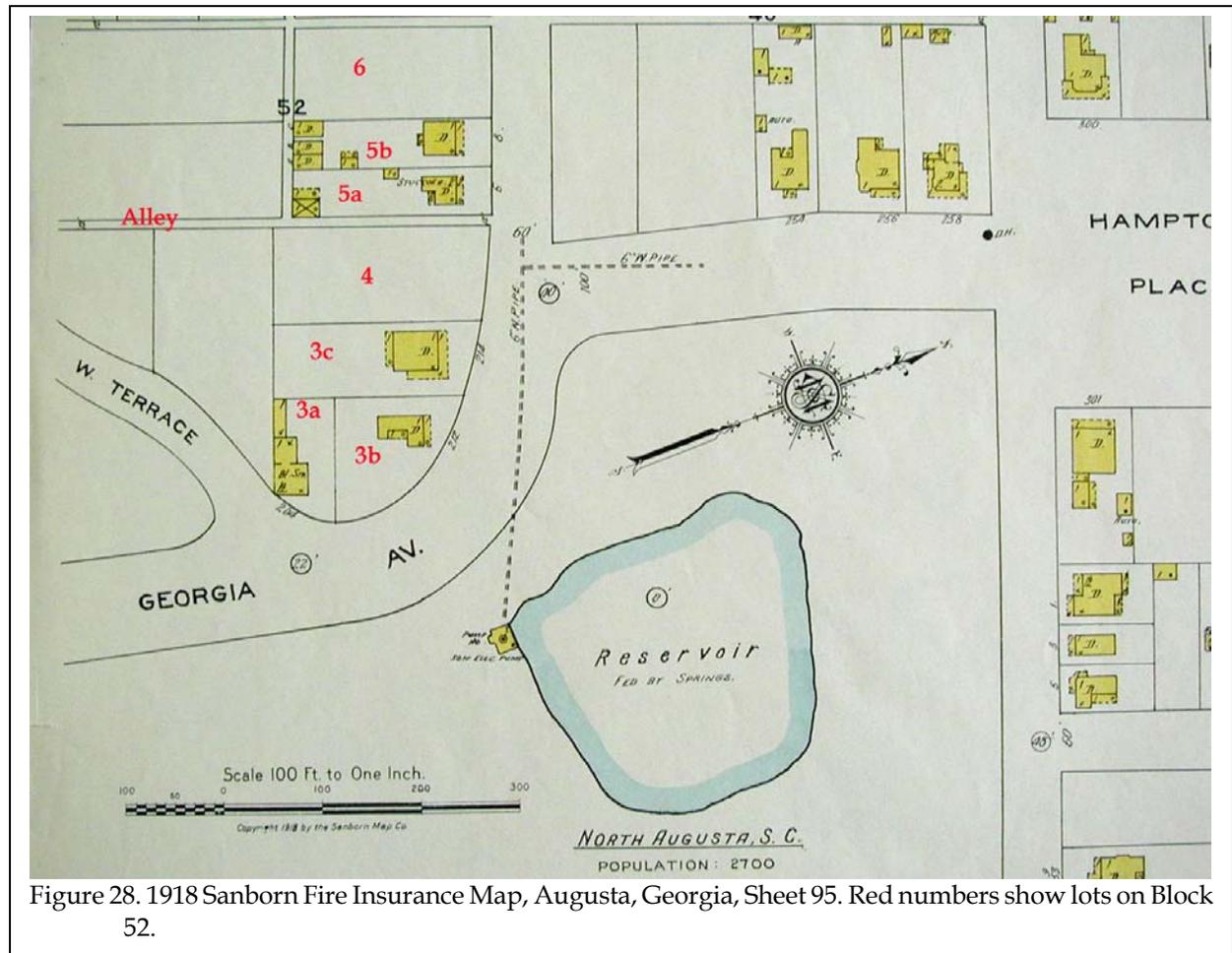


Figure 28. 1918 Sanborn Fire Insurance Map, Augusta, Georgia, Sheet 95. Red numbers show lots on Block 52.

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“rear Veneer Co.” Mr. Bennett is listed as white and worked at the Hankinson Brick Company. Also in this same area, “rear Veneer Co.” was James Cole, an African American carpenter.

Skimming the directory also reveals that the proprietor of the North Augusta Box and Crate Works was B.M. Youngblood, while the manager of the Veneer Company was C.P. Mulherin.

sites located on the lot (Lot 3 had been subdivided into three smaller parcels, a, b, and c). The current project will use Lot 4 and the alleyway between Lots 5 and 5a for the Georgia Avenue Extension. Based on this information, no historic structures will be affected by the proposed activities in this area.

By 1923 industrial activity was significant in the project area (Figure 29). The Sanborn Map of

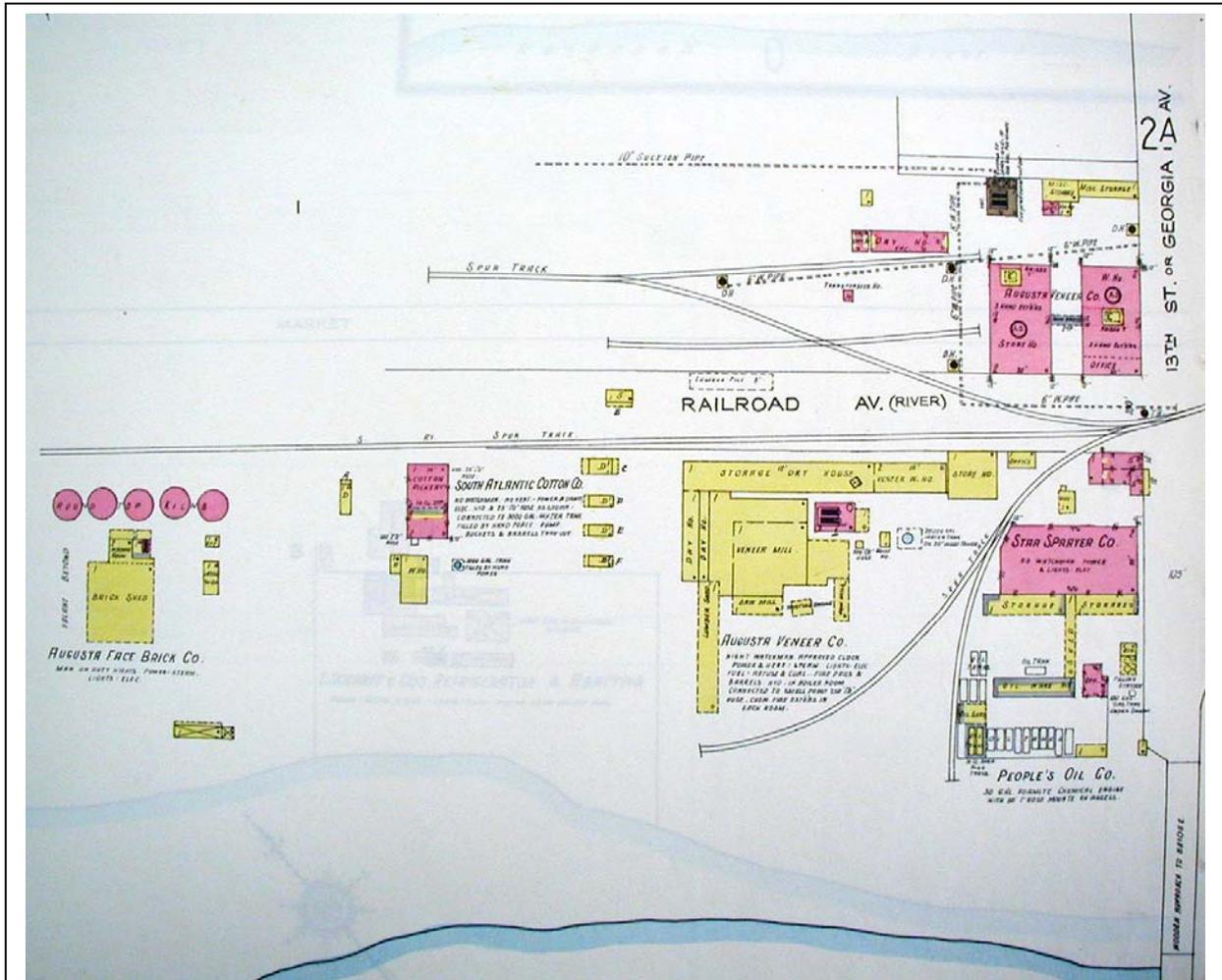


Figure 29. 1923 Sanborn Map of North Augusta (Sheet 1A) showing the riverfront industrial area.

The next available Sanborn map is the 1918 sheet covering the upland residential area (Figure 28). It reveals that at some previous time the sharp bend in Georgia Avenue has been softened, running the corridor through Block 52, Lot 3. This resulted in the destruction of domestic

that year shows four business clusters south of Railroad Avenue and one to the north, Augusta Veneer Company.

The process of veneer manufacturing was relatively straight-forward. Logs would be sorted,



Figure 30. Photograph of the Industrial Lumber Co. buildings (adapted from Rosson 1980:132).

graded, and cut to size and often steamed to soften the wood. The veneer would be created by either turning the log on a lathe so a long blade could peel the veneer or they would be sliced. Once created, the veneer would then be dried, patched, and graded (this process is briefly explained for a Cheraw, South Carolina plant of about the same time period in Watson 1907:473).

Figure 29 shows the process clearly. The two dominant features of the veneer plant were the two brick structures north of Railroad Avenue (previously Industrial Lumber). The eastern structure by 1923 was a warehouse and office while the one to the west was a storehouse. To the north of these two buildings were boilers and storage structures. To the west was a "dry house."

The actual veneer, however, was produced south of Railroad Avenue. Wood frame structures there included two saw mills and, between them, a hoisting engine for placing the logs in position for cutting. Beyond the saw mills was the veneer mill - where the wood veneer was actually created from the sized logs. Past the veneer mill were a series of dry houses, designed to allow the moist veneer to "cure" before being put into the warehouse or shipped out.

We see considerable changes between 1904 and 1923 - prior to the acquisition of

Industrial Lumber by Augusta Veneer the plant was massively enlarged, as evidenced by Figure 30. This reveals that the small 1904 brick building was significantly enlarged to match the other structure on the site. Rail lines were relocated and many structures were removed.

In addition, the Augusta Veneer factory and its new spur completely replaced the 1904 brick kilns and mill east of the drainage.

To the south, at the corner of Railroad and Georgia avenues, the dispensary building is no longer labeled as such. It is now shown simply as a commercial brick building with an interior partition and a rear addition.

The 1904 Wood Pottery Co. has been completely removed from the landscape and in its place is a large brick building identified as the Star Sprayer Co. and behind it, toward the river (i.e., south) was People's Oil Company. Rosson explains that,

People's Oil Company, founded by H.C. Boardman . . . was the first independent oil company south of Baltimore, Maryland and operated for almost 30 years . . . Its primary business was the sale of kerosene and lubricating

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oil. Later, in connection with this company, a filling station was opened, the first in this area. People's Oil Company was sold in 1927 to the Atlantic Oil Company, and in less than two months was wiped out by the flood of that year (Rosson 1980:131).

Although these were apparently two different businesses (and People's Oil does have a small office), the two sites seem joined together and additional research will be necessary to better understand their relationship. One suggestion is that Star Sprayer used oil to spray on dirt roads still very common during this period.

The 1923 Sanborn Map reveals a small tank farm, apparently just up from the lowest river terrace and east of a spur line. Also present were an oil warehouse, shed, and a "filling station," as well as a 530 gallon underground gas tank.

Situated beyond the veneer factory were a series of five one-story wood frame structures. Four of these, south of Railroad Avenue and all facing west, were dwellings. The fifth, in the middle of the right-of-way for Railroad Avenue, was a store, perhaps a commissary .

Beyond these structures was the South Atlantic Cotton Company that replaced the various structures perhaps associated with Hall & Falke. The one story brick structure is labeled on the Sanborn map as a "cotton pickery." This would have been a structure where the cotton seeds were removed from cotton so it could be pressed and baled. To the south of the pickery was a warehouse for the cotton and to the west was a fifth dwelling.

The final industry present in 1923 was the Augusta Face Brick Company. This facility had five "round" or "beehive" kilns parallel to Railroad Avenue and behind them a wood frame "brick shed" where the clay was extruded into

brick. The shed included a machine room and a boiler. To the east of the brick shed was the frame office and a frame workshop. To the south, set-off from the industrial operations, was a frame stable.

Beehive kilns are circular in plan with fireboxes may be arranged around the circumference or a firebox and flue may be located under the kiln. These take the form of circular down-draft kilns (also known as periodic kilns):

Down-draft kilns are constructed in such a way that hot air from the fires below does not come in contact with the green bricks but instead is channeled inside along the wall or outside by means of some type of flue to the top of the kiln. There the curved or domed roof and the draft caused by a tall attached chimney force the hot air downward through the mass of bricks and out through openings in the floor. The permanent nature of this type of kiln as well as the pattern of air flow provides a more even distribution of heat throughout the kiln. This results in a more uniform product. Down-draft kilns are constructed in circular (bee-hive) and rectangular form (Gurcke 1987:32).

Brick kilns were common to the Augusta-North Augusta area. The 1918 Sanborn map reveals at least five operations from East Boundary and Gwinn west toward Savannah Road. These include the Standard Brick Co., Merry Brothers Brick Yard, Electric City Brick Co., McKenzie Brick Co., and Augusta Brick Company. The 1923 Sanborn, while no longer showing the Augusta area, does reveal not only the Augusta Face Brick plant on the survey tract, but also the Hankinson Brick Co. in Hamburg. The Hankinson works, now destroyed (regrettably without any investigation), included four round kilns, one continuous gas kiln, and one rectangular kiln and

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

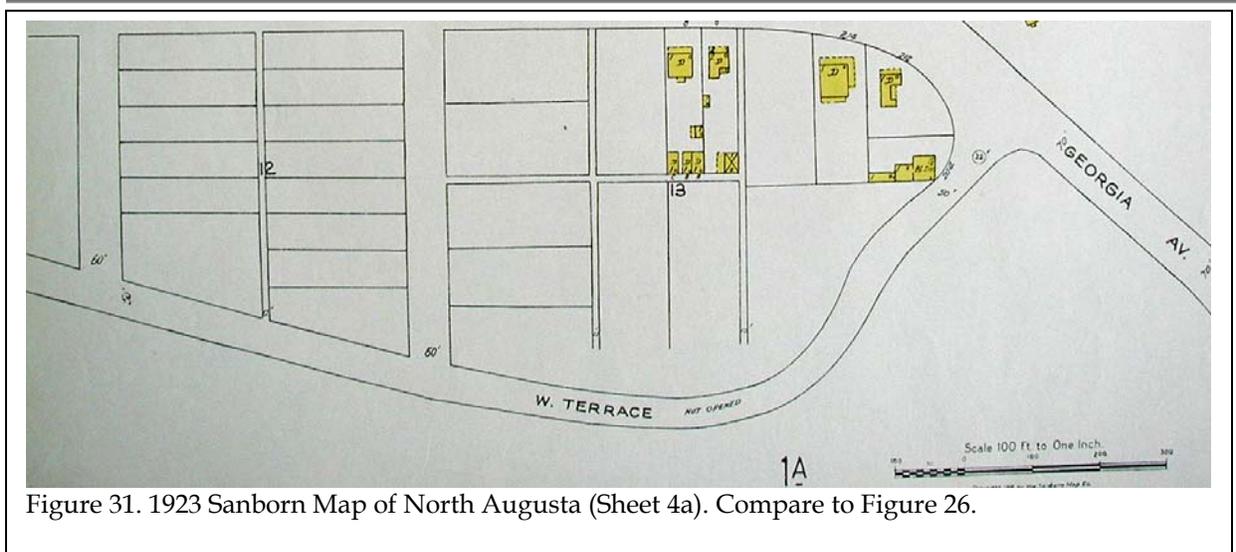


Figure 31. 1923 Sanborn Map of North Augusta (Sheet 4a). Compare to Figure 26.

was clearly a much larger operation. The inclusion of several kilns reveals that this plant was “on the cutting edge” of technology and that a variety of brick production techniques were present on-site.

1934 aerial of the project area (Figure 8; blown-up for Figure 32). This photograph reveals that veneer mill operations had been discontinued, although it appears that at least one structure was still

An oral informant, James Postell, noted that in the 1930s the Hamburg area had at least seven brick yards, including three or four Georgia-Carolina yards and one known as Rice & Satcher. He commented that the Hamburg area produced far better clays - with depths of 20 to 24 feet - than the N. Augusta area, where clay deposits were typically only 8-10 feet (James Postell, personal communication, 2004).

A note to the west on the 1923 Sanborn states, “vacant beyond,” while another note to the northwest indicates “swampy land.” Consequently, in 1923 there were only these five industries in six different locations.

Between 1918 and 1923 there were no changes in construction found on lots in the upland area around Georgia and Bluff avenues (Figure 31). Nor are any structures shown to the east on other lots bordering West Terrace or Bluff.

The next resource available is the



Figure 32. 1934 aerial photograph of the project area showing industrial activities.

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standing (or in ruins). The area up to the property line has been actively mined for clay or is in the process of being prepared for mining.

The most obvious industrial activity is the Augusta Face Brick Company plant at the western

end of Railroad Avenue. Eight round or "beehive" kilns are clearly shown in the aerial, indicating considerable expansion since the 1923 Sanborn survey.

Some remains of the veneer plant south of

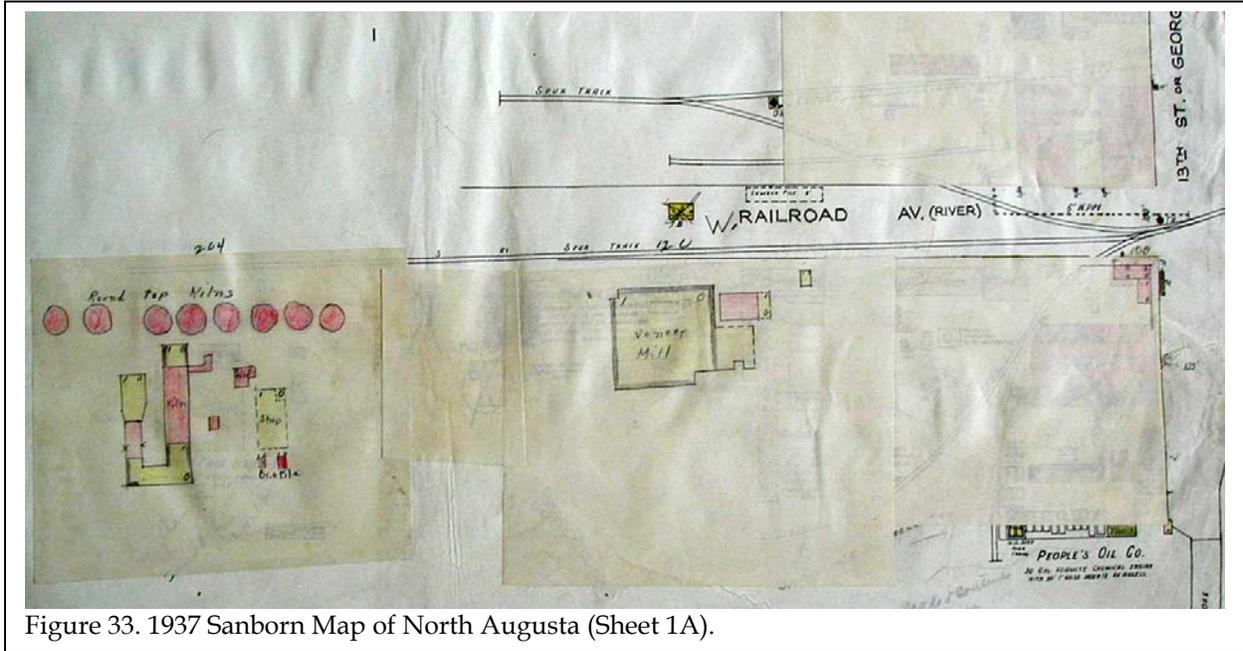


Figure 33. 1937 Sanborn Map of North Augusta (Sheet 1A).

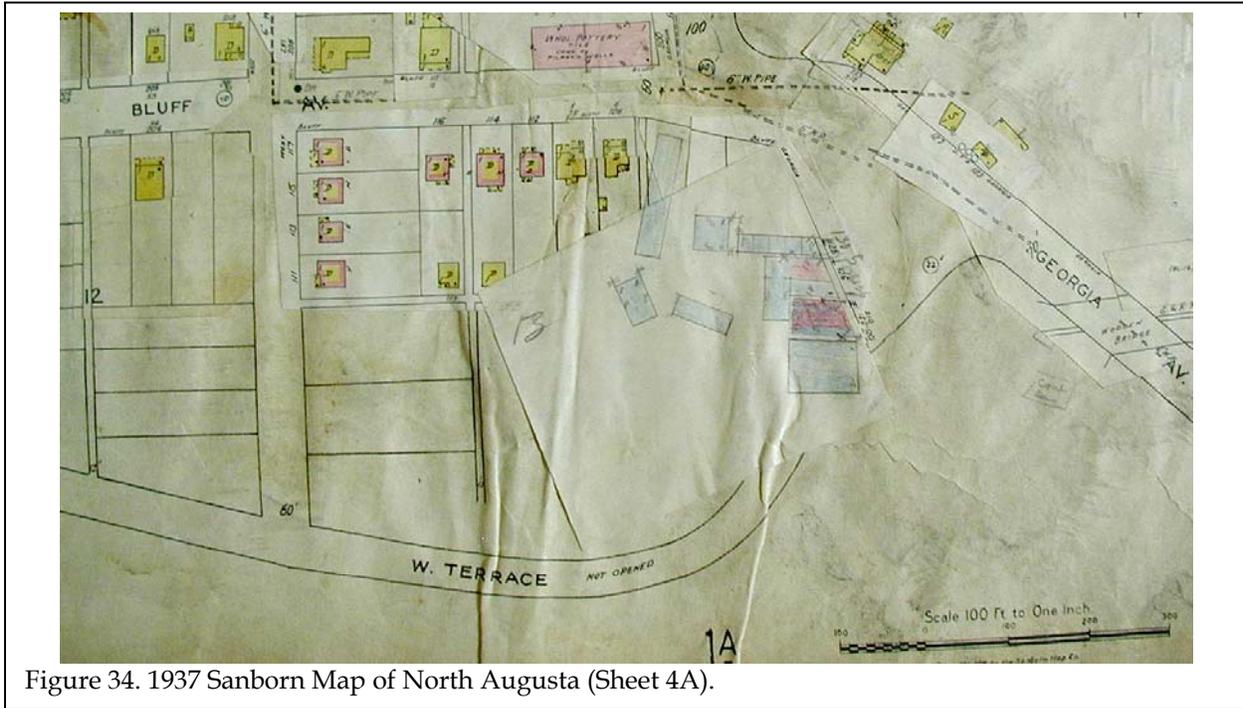


Figure 34. 1937 Sanborn Map of North Augusta (Sheet 4A).



Figure 35. 1943 aerial photograph of the project area showing industrial activities.

Railroad Avenue are present, although the buildings associated with the South Atlantic Cotton Company, the Sprayer Company, and People's Oil are all gone - perhaps destroyed by the 1929 flood.

These observations are all confirmed by the 1937 Sanborn Map (Figure 33) that shows only

a few remnant buildings of the veneer plant (although shown in a new location we believe this is in error, since the building outline appears consistent with the core of the original structure), with the brick yard expanding to eight round or beehive kilns and one rectangular kiln. Also gone is any indication of dwellings in the bottomlands. It appears that the 1929 flood dramatically

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Figure 36. 1951 aerial of the project tract.

changed the area, with only a very few industries able to survive.

Figure 34 reveals significant changes in the upland area around Georgia and Bluff avenues. Houses are beginning to fill-in along Bluff and West avenues, although West Terrace, fronting the bluff, was still not opened. Along Georgia Avenue residences have given way to commercial firms - the structures on lots 3a, 3b, and 3c (see Figure 28) have all been demolished

and in their place are a series of concrete block and brick structures. A similar block structure has been constructed on Lot 4, which up to this map had been shown vacant.

The 1943 aerial (Figure 35) provides a much clearer view than the earlier aerial photograph (Figure 31) and the extent of the clay pits is well documented. A portion of the veneer plant and the brick plant, along with the dispensary building and one of the two brick



Figure 37. 1959 aerial photograph of the project area.

structures originally associated with Industrial Furniture Company, are the only features recognizable at the site.

There are aeries for 1951 and 1959 (Figures 36 and 37). Both reveal some modification of the property between the brick company and the remnant veneer plant. At first glance it appears to be water, but this is not the case. It may be a concrete floor, but this also seems unlikely over such a large area. While we have not been able to determine exactly what took place, there is good field evidence that the activities destroyed all of the domestic structures that were present in this industrialized area. The only building that might remain is the store shown on the 1923 Sanborn.

By 1959 the veneer plant has been reduced in size, whether by new construction or the abandonment and demolition of sections of the

older plant is unclear. Both the brick veneer plant buildings north of Railroad Avenue have been demolished by 1951 and much of the remaining project area appears abandoned and taken over by vegetation.

Figure 38 shows the development in the upland area of the project in 1960. Between 1937 and 1960 relatively little changed. The long concrete block structure shown in 1937 is in a somewhat different location (probably an error in the 1937 map) and is identified as a 20-room motel. While more dwellings are shown having been built to the west, all are on existing lots. There is little other change in the area of the proposed project.

Title Research

Prior to the consolidation of the property

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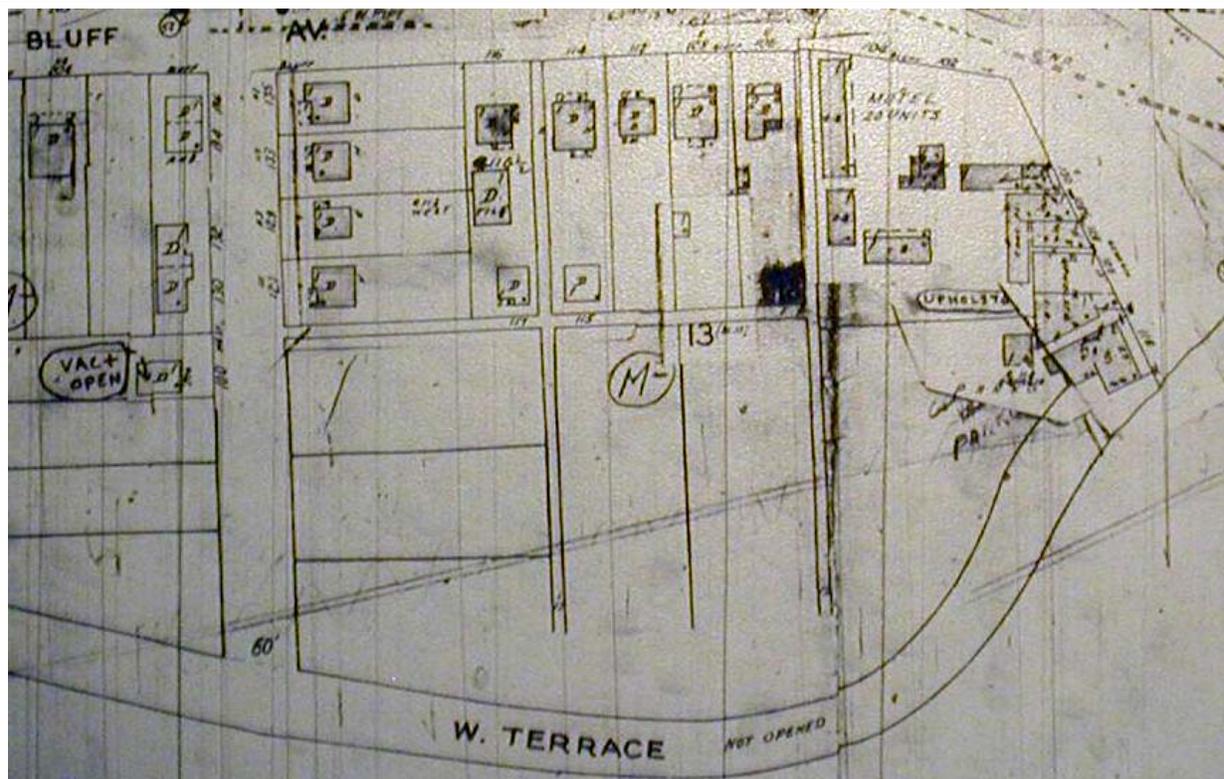


Figure 38. 1960 Sanborn Map of North Augusta (Sheet 4A).

by the City of North Augusta, the study tract consisted of 11 distinct parcels, shown in Figure 39. These discussions will briefly review the available ownership information for each of the parcels.

Parcel 1

In 1918 this parcel was sold by the North Augusta Land Company to J. LeRoy Hankinson and J.C. Barksdale (Aiken Co. DB 30, pg. 125). They held the property for only a very short time before selling, on May 31, 1920, to Charles N. Churchill (Aiken Co. DB 30, pg. 589). Churchill then held the tract – apparently cultivating the land – until his death. In 1932 his executor, James R. League sold the property to Charles W. Churchill and Delle H. Hoey (Aiken Co. DB 56, pg. 693).

During this time there were several farm buildings, including a barn and a tenant house, situated on the high bluff just west of the study

area (Georgia Power Co., Stevens Creek-Augusta 44kV Transmission Line, dated August 1936, File H-72).

In 1937 the owners sold the property to A.C. Haskell (Aiken Co. DB 74, pg. 142 for \$4,250). The Haskell family held the property to 1979, using the fields as pasturage for dairy cattle (although no dairy operations took place on the tract). In 1969 A.C. Haskell and his wife sold the property to B. Guion Haskell (Aiken Co. DB 382, pg. 285). In 1979 Haskell's executor sold the property to Judith H. McCarthy et al. for \$30,000 (Aiken Co. DB 628, pg. 225).

As far as we can determine from this title search the only activities that took place on property were either farming or ranching.

Parcel 2

This parcel is primarily outside the study area, so our title search went only to 1950. At that

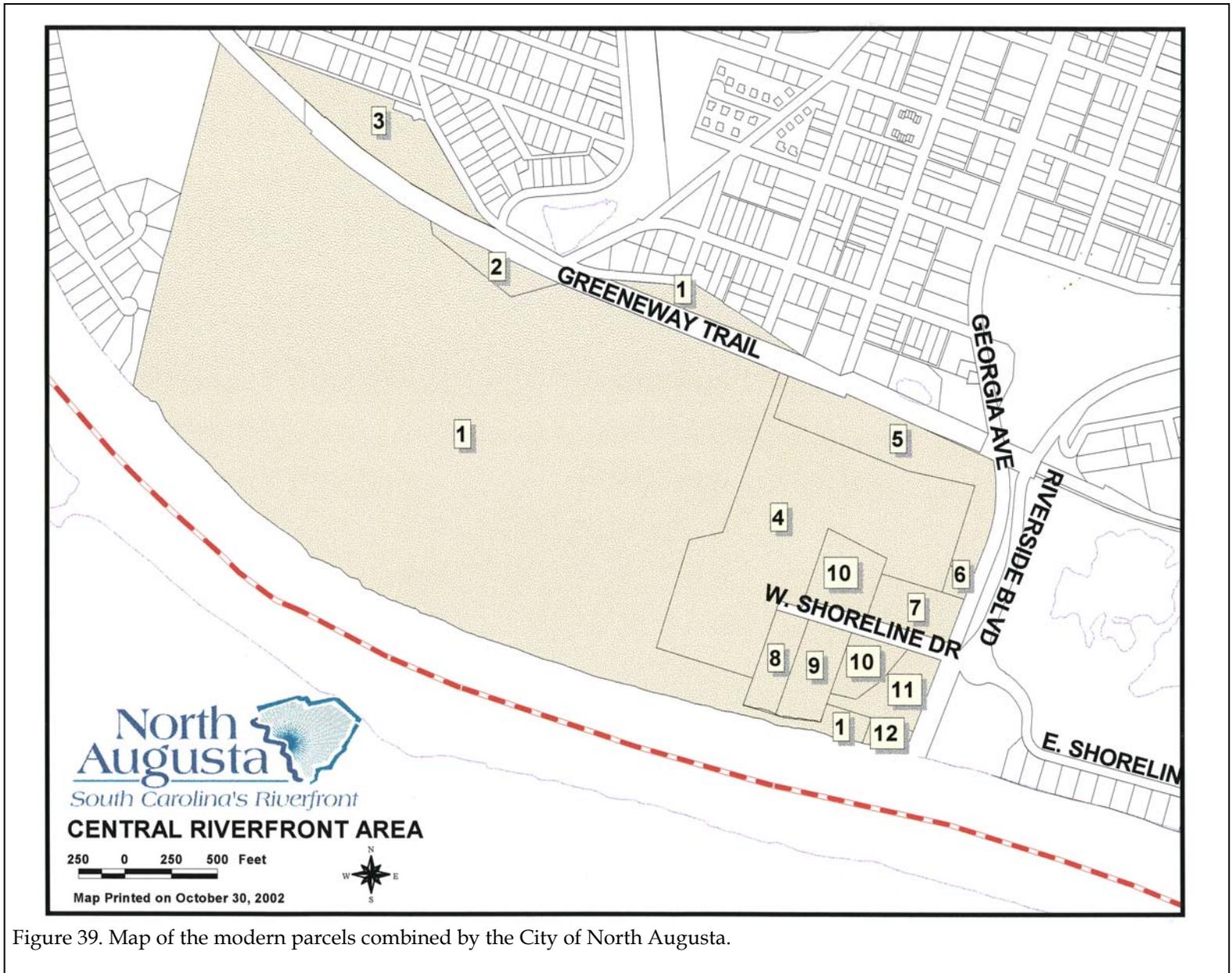


Figure 39. Map of the modern parcels combined by the City of North Augusta.

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time the tract was owned by M. Gary Satcher and L. Guy doing business as Crystal Lake Development. It appears that this property was a small corner of the Crystal Lake subdivision found just north of the project tract. At that time the property was sold to R.F. Dillon for \$300 (Aiken Co. DB 122, pg. 89). From Dillon the land passed to Milledge Peterson in 1961 for a slight loss (\$285; Aiken Co. DB 241, pg. 148). Nine months later, Peterson sold the property to Thomas S. Pierce and William Pierce for \$500 (Aiken Co. DB 248, pg. 202).

Parcel 4

A sizable portion of the tract (32½ acres) was acquired by Augusta Face Brick in January 1920 from J.L. Hankinson for \$4,500 (Aiken Co. DB 34, pg. 231) and appears to be part of a much larger parcel that Hankinson purchased in 1918 from North Augusta Land Co., at least partially for speculation and partially to be used for clay mining by his own brickworks (centered in Hamburg) (Aiken Co. DB 30, pg. 125).

The parcel, however, does not represent the entire brick yard, and Augusta Face Brick continued making purchases, including the lot of the Augusta Box and Crate Works, acquired from J.L. Barksdale (Aiken Co. DB 34, pg. 234). At least two additional tracts were obtained in 1926 - one from James R. League (the executor of Charles N. Churchill) (Aiken Co. DB 49, pg. 194) and another from F.A. Roberson (Aiken Co. DB 51, pg. 214). These tracts are shown on a plat dated 1928 (Figure 40). This suggests that the brickyard began construction in 1920, with its first land acquisition (corresponding to its absence on the 1904 Sanborn,

but presence on the 1923 Sanborn and 1928 plat). This plat, however, reveals that the works have gone through a number of changes.

The Augusta Face Brick Co. did not last long. In 1928 it was acquired by the Georgia-Carolina Brick Co. for \$10 and "other valuable consideration" - primarily land swaps. The deed specified that the sale included:

All brick, tile, or other manufactured products on hand, together with all coal, wood, fuel or supplies of every kind located at the plant . . . and all of the

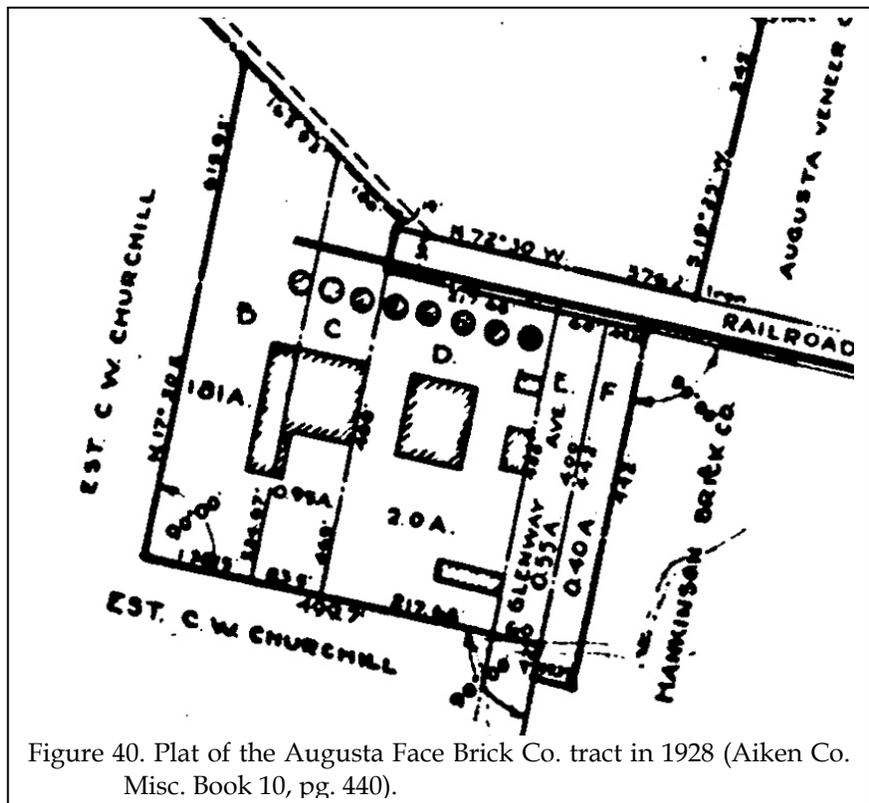


Figure 40. Plat of the Augusta Face Brick Co. tract in 1928 (Aiken Co. Misc. Book 10, pg. 440).

engines, boilers, machinery for quarrying, working and manufacturing brick or clay products, and all tools, implements, fixtures and chattels personal of every description used by the said Brick Company . . . all as shown on inventories

and appraisals of National Appraisal Company (Aiken Co. DB 52, pg. 684).

What is interesting is that the president of Augusta Face Brick was J.L. Hankinson, suggesting that Hankinson owned and operated several brickyards under different names. In addition, Georgia-Carolina also bought out the Hankinson Brick Works in Hamburg (Aiken Co. DB 52, pg. 687) – suggesting that the first wave of consolidation in the brick industry was taking place as early as the late 1920s. Colias (1996) suggests this was tied into the significant economic slump that the brick industry faced around World War I. With the increasing use of concrete and later oil to make roads, brick companies were forced to take drastic cost-cutting steps. This may be the case, but it appears that the problems began far earlier, or at least were cyclical. In 1902 the Census Department remarked that the:

decline in common brick output is undoubtedly due to changes in methods of construction, the modern steel-frame building, with its large use of fireproofing and hollow building blocks in place of common brick; the increasing use of cement and vitrified brick for sidewalks, etc. Another cause for the small increase in brick and tile products is found in the fact that the building trades are early affected by seasons of business depression and are the last to revive; and evidently at the taking of the Twelfth Census the brick making industry had not fully recovered from the panic of 1893 (North 1902:clvi).

In 1978 the property, held by Merry Co. (also known as Merry Bricks, who acquired Georgia-Carolina Brick & Tile through merger ca. 1976), was sold to Knox, Ltd. (Aiken Co. DB 603,

pg. 22). At that time the deed specified that the parcel had been subject “to that certain action entitled “Georgia-Carolina Brick & Tile Co. vs. The City of North Augusta et al.” the final decree being filed on June 20, 1977 and recorded at Judgment Roll 56,616.” This record was not examined as part of this research.

Knox, Ltd, an investment company, sold the property in May 1991 to Augusta Fold Planning and Development Company for \$1 million (Aiken Co. DB 1251, pg. 246; see also PB 10, pg. 53 and a quit claim deed DB1251, pg. 251). This firm held the parcel for about 4½ years, when it was sold to Omni Vest, LLC (Aiken Co. DB 1528, pg. 60). Omni Vest held the property for just over two months before selling it for \$1,134,464 to North Augusta Golf Ventures in June 1995 (Aiken Co. DB 1542, pg. 87; see also PR 25, pg. 44).

It was on this parcel that the Augusta Face Brick kilns were built and operated through most of the twentieth century. It is also at the eastern edge of this tract that, prior to brick manufacturing, a box manufacturer and another, unidentified structure, were built (see Figure 24).

Parcel 5

This parcel was originally part of the Parcel 1 and its title is identical from its 1918 sale by the North Augusta Land Co. to Hankinson and Barksdale to the 1937 sale by Churchill and Hoey to A.C. Haskell.

Haskell, in 1946, sold the property to the Baynham family, listed as Hugh G. Baynham, J.A. Baynham, Roy Walker Baynham, Mark Andrew Baynham, and Clifton Arthur Baynham (Aiken Co. DB 99, pg. 227). In 1954 the surviving Baynham sold their interest in the property (as well as their pottery east of Georgia Avenue) to Mark A. Baynham, Sr. for \$21,500 (Aiken Co. DB 171, pg. 175).

By the early 1960s the Baynham must have hit hard times. This parcel was sold by the Master, Howard K. Williamson to State Bank &

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Trust for \$1,000 as a result of the suit brought by the Bank against Baynham (Aiken Co. DB 300, pg. 341; Judgment Roll 35,537). About a month later the property was purchased from State Bank & Trust by Helen M. Baynham for \$2,000 (Aiken Co. DB 317, pg. 121).

The property then passes back and forth between Baynham family members. It was first sold by Helen to Mark Sr. in 1978 (Aiken Co. DB 594, pg. 55) and was then sold back by Mark Jr. in 1985 (Aiken Co. DB 906, pg. 228). In 1991 the property was sold by Helen M. Baynham to Murooka Corp. for \$250,000 (Aiken Co. DB 1264, pg. 25). The City acquired the property in 2000 as a result of legal action against Augusta Riverside Development Co., formerly Murooka (Aiken Co. DB 1954, pg. 230; Judgment Roll 98,016).

Parcel 6

We believe this tract has the same early history as Tract 5 through the 1978 sale by Helen M. Baynham to Mark A. Baynham, Sr. (Aiken Co. DB 594, pg. 55). Then, six months later, the property is sold to Mark A. Baynham, Jr. (Aiken Co. DB 614, pg. 299). In 1991 Baynham sells the property to Murooka Corp. for \$30,000 (Aiken Co. DB 1264, pg. 22). Murooka apparently had problems before its suit with the City, since in 1997 this parcel was sold by the Master to James L. Williams for \$1,000 (Aiken Co. DB 1733, pg. 330).

Situated on the edge of the extensive clay pit operations, the only activity we have documented from this tract is a small concrete block structure that housed an ornamental welding shop operated by Mark Baynham.

Parcel 7

The earliest we have been able to document this parcel is its 1911 sale by Industrial Lumber Co. to the Augusta Veneer Company (Aiken Co. DB 15/257). This deed reveals that it covers two parcels - this tract, identified in the deed as 3.07 acres containing "offices and two brick warehouses, two elevators, etc.," as well as what we are identifying as Parcel 9, described in the deed as being illustrated on a November 27, 1907 plat attached to the deed from Hankinson Brick Co. to Augusta Box and Manufacturing Co. (Aiken Co. DB 15, pg. 257).

The Augusta Veneer Company apparently

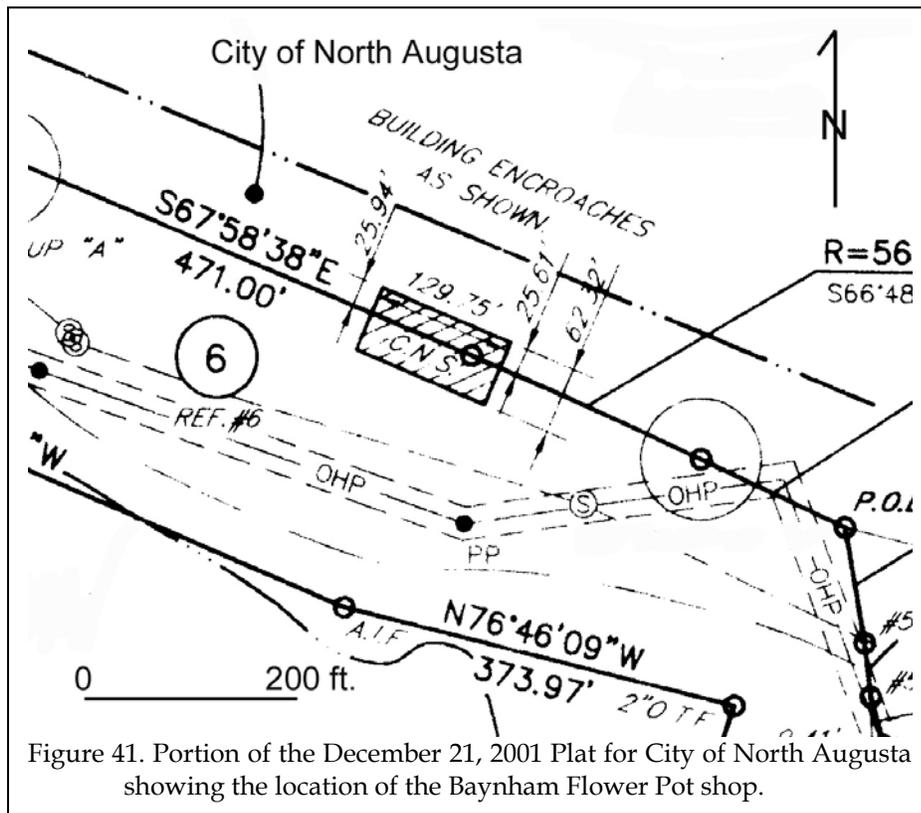


Figure 41. Portion of the December 21, 2001 Plat for City of North Augusta showing the location of the Baynham Flower Pot shop.

At least one plat (Figure 41) reveals the existence of the Baynham flowerpot kiln on this parcel (and partially extending onto railroad property).

held the property until its March 1934 sale by the Master to C.P. Mulherin for \$2,305 (Aiken Co. DB 63, pg. 445). Mulherin sold the parcel to Hull, Towill, Norman, Barrett & Johnson in 1975 (Aiken Co. DB 512, pg. 599), who in turn sold it to Michael Austin Graybill that same year (Aiken Co. DB 515, pg. 537). Graybill held the parcel until his 1991 sale of the tract to Murooka Corp. for \$75,000 (Aiken Co. DB 1264, pg. 19; see also PB 25, pg. 156-1).

Parcel 8

The earliest owner we have identified is G.W. Greene, Jr., who in 1917 sold the parcel to the South Atlantic Cotton Company (Aiken Co. DB 27, pg. 336). Figure 42 shows a 1917 plat of this sale, revealing two parcels, identified as "A," and "B." Parcel A, plus the Hankinson property to Glenway (on the west) are incorporated into what we are identifying as Tract 8.

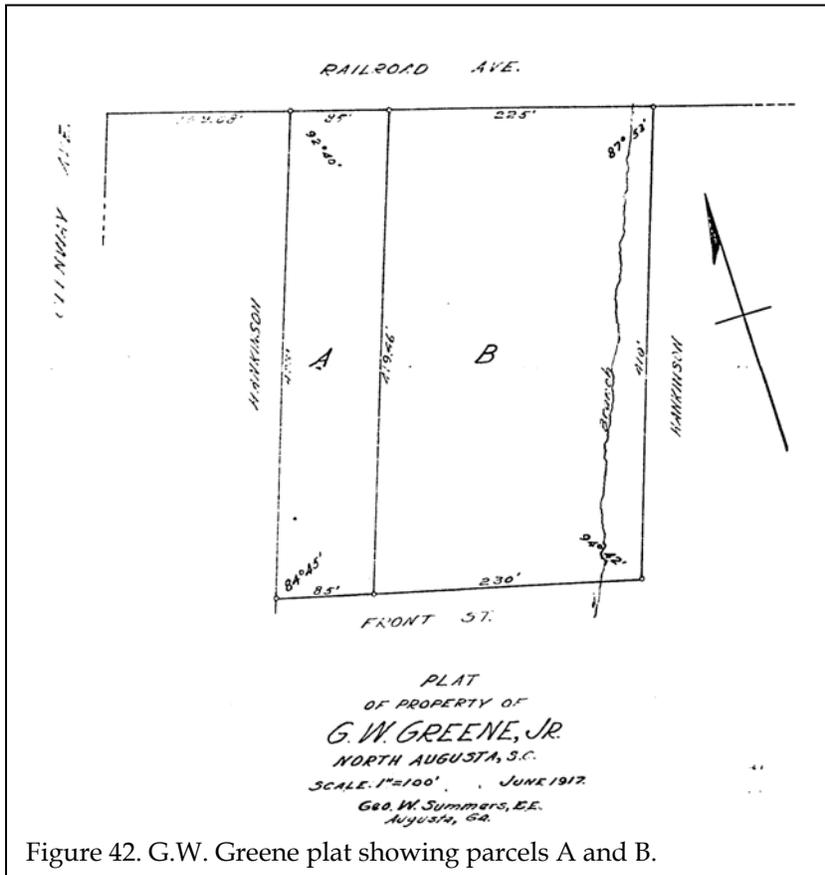


Figure 42. G.W. Greene plat showing parcels A and B.

The South Atlantic Cotton Company remained in business until 1925, when it sold its property to Cecil Cockran (Aiken Co. DB 45, pg. 73). By 1928 Cockran had apparently died and the property was sold to Mark Baynham, apparently as executor of the Cockran estate (Aiken Co. DB 56, pg. 12). In 1947 Baynham sold the tract to John D. Twiggs (Aiken Co. DB 108, pg. 190) who immediately sold the parcel to Alex B. Barrett for \$100 (Aiken Co. DB 108, pg. 191). The Barrett family held the tract until some point past 1965.

Parcel 9

Tract 9 consists of parcel "B" shown on the Greene plat (Figure 42), but it appears that this may be the tract sold, in 1891 by the North Augusta Land Co. to Southern Pine Fiber Company (Aiken Co. DB P, pg. 648). Although the transfer from Southern Pine Fiber isn't clear, by 1901 we believe the parcel was owned by L.H.

Hankinson, when it was sold to Merry Brothers (Aiken County DB F1, pg. 241) - as previously discussed for Parcel 4. Although we have not documented the title, the 1912 plat of North Augusta reveals that a "chair factory" had been built on this parcel.

In 1916 Merry Brothers sold the parcel to G.W. Greene, Jr. for \$2,500 (Aiken Co. DB 26, pg. 126; see also the deed of correction, DB 48, pg. 175).

Greene, just a year later, sold the parcel to South Atlantic Cotton Company and we see in the Sanborn Maps extensive expansion of the older "chair factory."

Although the actual transfers are unclear, by 1935 the property was owned by Willie Belle Jackson and was being sold to Paul B. Bush (Aiken County DB

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70, pg. 248; see also DB 105, pg. 109 for an additional conveyance).

The property then passed from Bush to James W. Holloway by probate and through the conveyance of James Daniel Holloway (Aiken Co. DB 511, pg. 799). In 1985 the property was sold by Holloway to Ann Anderson, Brenda Joyce Weatherington and others (Aiken Co. DB 874, pg. 33). For much of its recent history it was used as a horse pasture.

Parcel 10

This parcel has proven to be especially difficult to research quickly. While today it extends to both the north and south sides of Railroad Avenue, it appears that over much of the area's history, the north and south parcels had different owners, with different activities taking place. Our research suggests that the northern parcel never saw any development, while the portion to south was the location of the original Augusta Veneer factory.

The northern parcel has been identified as being sold by Hankinson Brick Co. in February 1910 to Industrial Lumber (Aiken DB 9, pg. 727) - although there is no indication that Industrial Lumber actually used the parcel for more than a store yard.

The southern parcel, on March 28, 1911, was sold by Hankinson Brick Co. to Augusta Box Manufacturing Co. (Aiken Co. DB 17, pg. 30) for \$5,000. The same day it was sold by Augusta Box to Industrial Lumber for \$12,500 (Aiken Co. DB 17, pg. 31).

Parcel 11

In 1891 Tideman Oil Company acquired 1.97 acres in Block 60 that is our Parcel 11 (Aiken Co. DB P, pg. 652). The tract was sold by Tideman to Hankinson & O'Keef in 1911 (Aiken Co. DB 17, pg. 56).

It seems clear, however, that this parcel

contains additional historic tracts. For example, we have identified the sale of a lot by the Irish American Bank to Wood Pottery Co. (Aiken Co. Misc. Book 1, pg. 314). There was a mortgage or note on the property of \$5,000, plus \$186.67 in interest and the document references a deed book (where there is no appropriate reference) and a mortgage book (which Aiken County no longer has).

This October 1907 document reveals that the mortgage had not been paid and consented to the sale of the property to satisfy the note. While we can't be certain whether the parcel being discussed is that to the east or west of the bridge, it is possible that Wood choose not to pay the mortgage on the pottery, destroyed by fire in 1906, and allowed the tract to be sold off.

The next sale we have found for this parcel is the 1939 conveyance by L.H. Hankinson, Jr. to Carrie H. Foster, et al. for \$700 (Aiken Co. DB 73, pg. 562). It was during the intervening 28 years that the property was used by People's Oil Company and Star Sprayer Co. We have not, however, been able to identify their specific ownership.

By 1943 the property is sold by Foster (as the executor of the will of L.H. Hankinson, Sr.) to Nina H. Stafford, Anita S. Cathey, and herself (Aiken Co. DB 85, pg. 392). A year later these individuals sell the property to Otis West (Aiken Co. DB 91, pg. 211). West sold the property to Orion B. Whatley, Jr. in 1951 (Aiken Co. DB 134, pg. 74). In 1964 Whatley sells the property to Mrs. Erline S. McClellan for \$8,500 (Aiken Co. DB 276, pg. 159).

In 1974, as a result of a suit brought by Orion B. Whatley, Jr. against James J. McClellan et al. (Aiken Co. Judgment Roll 48,320), the property was sold by the Master to William H. McKie for \$12,650. It then goes from McKie (by will) to <. Gilligham and Edythe McKie (Aiken Co. DB 1140, pg. 261) in 1989. From them it was sold to Allen Davis Lafavor (Aiken Co. DB 1140, pg. 268) in October 1989 and only three days later is sold by

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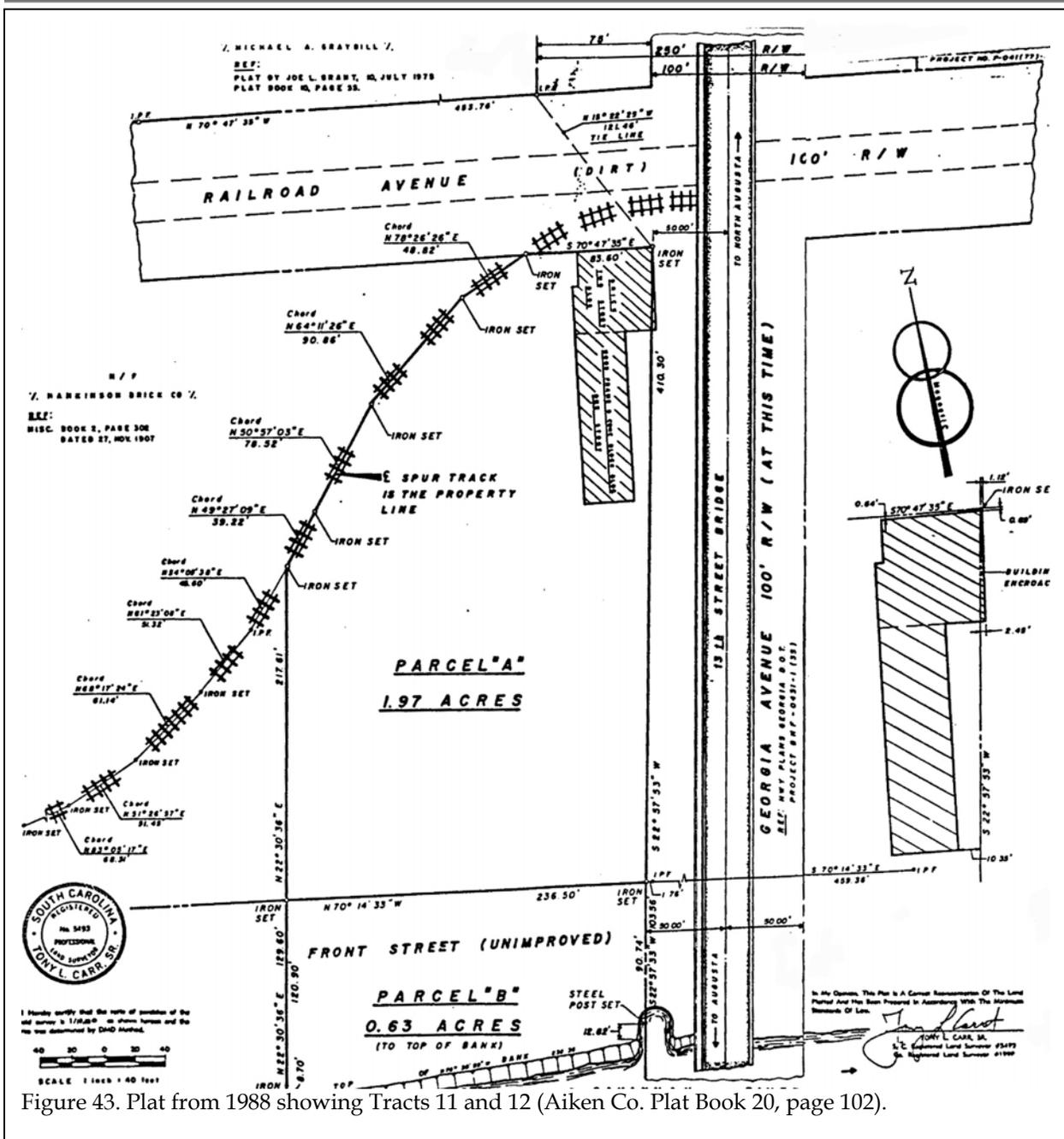


Figure 43. Plat from 1988 showing Tracts 11 and 12 (Aiken Co. Plat Book 20, page 102).

Lafavor to Kailash Behari Sharma and Prem Lata Sharma (Aiken Co. DB 1140, pg. 272).

Parcel 12

This tract appears to be the right of way for Front Street and it does not appear that any development took place in this area. We believe

that this parcel was likely combined with Parcel 11 in many (perhaps all) of the mid- to late-twentieth century conveyances.

Unresolved Issues

Although incomplete, the title research conducted thus far is far more than is typically

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done for a Level 1 study. We have been careful to point out areas where we have unresolved ownership or building activities.

Beyond this, we have found that some early deeds that almost certainly relate to our property, but have not been incorporated into the chain. For example,

- In 1894 and 1896 we have identified deeds to L.H. Hankinson for 3 acres in Block 63 and a lot in Block 60 on Railroad Avenue (Aiken Co. DB Y, pg. 240). The exact location of these early parcels is uncertain, but they demonstrate that very early Hankinson was acquiring large amounts of land for its good brick clay or as investments.
- In 1897 and 1907 the Irish-American Dime Savings Bank acquired two tracts of 3.85 acres and 0.61 acres on Railroad Avenue, as well as part of Block 65 (Aiken Co. DB Z, pg. 317, DB 9, pg. 190). While one parcel is thought to represent the Wood Pottery, what parcels are represented is uncertain, although it appears that the land was acquired as an investment.
- The firm of Verdery & Arrington acquired 1 acre in Block 65 in 1910 (Aiken Co. DB 15, pg. 232). The same firm sold a 1 acre tract in the same block in 1905 to T.L. Hahn. The relationship of these two lots is uncertain, as is Hahn's use of the property.

Summary of Historic Structure Research

This research reveals significant changes on the project tract. It may be helpful to readers to briefly review industrial activities by specific tract.

Parcels 1 and 2

We have found no indication of industrial structures, although clay mining did extend onto Tract 1.

Parcel 4

It appears this tract was vacant in 1904 but by 1912 there was a box factory south of Railroad Avenue and another unidentified building on Railroad Avenue.

By 1923 the portion south of Railroad Avenue was largely taken over by the Augusta Face Brick Co. with beehive kilns toward the road and railroad spur, a brick shed behind them, and at the far south edge of the property a stable. These activities likely destroyed the Augusta Box (and Crate) factory.

The other unnamed building from 1912 had been demolished since there was now a dwelling on the tract, south of Railroad Avenue.

By the 1934 aerial and 1937 Sanborn, the brick operations south of Railroad Avenue had expanded as had the clay extraction pits to the north of Railroad Avenue. The extent of these operations is also clearly seen in the 1943 and 1959 aerials. The amount of disturbance as a result of these activities was substantial. There also appears to have been periodic demolition and reconstruction on the site, further confusing the archaeological record.

Parcel 5

It appears this tract was vacant from 1904 through at least 1923, and probably through 1959. We have not been able to document exactly when Baynham built his last pottery operation on this Tract, but it was likely in the 1960s (Newell and Nichols 1998:48).

Parcel 6

It appears this tract was vacant from 1904 through at least 1923 and probably well into the 1950s.

Parcel 7

The 1904 Sanborn reveals that this tract was entirely used by Industrial Lumber. The 1912 City of Augusta map indicates only that this same

parcel was still held by Industrial Lumber. Based, however, on photographic evidence it appears that the small 1904 office was removed and replaced by a larger brick building, matching the 1904 sawing and planning mill.

By 1923 the property had been taken over by the Augusta Veneer Co. Many buildings appear to have either been removed or extensively modified. The railroad spurs running through this parcel were also extensively changed.

All of these buildings were gone by the time of the 1937 Sanborn map, although the foundations are still clearly visible as late as 1943. By 1959 the area was fully overgrown and the clay pit operations were beginning to expand up to or slightly beyond the property lines.

Parcel 8

In 1904 two structures were present on this parcel. In the northwest corner was a one story frame lumber shed, while in the center rear of the lot was the log sawing mill of Hall & Falke. All of this activity appears to have ceased by 1912, when the North Augusta plan shows the area vacant.

By 1923 the South Atlantic Cotton Co. had built a pickery on this lot, at the northwest corner of the lot, just south of Railroad Avenue. A warehouse was constructed behind the pickery.

By 1937 there is no indication of industrial activity at this location and it appears that the property was largely abandoned. Aerial photographs reveal some sort of ground feature, perhaps cultivated soil and/or pasturage. The 1959 aerial, in particular, reveals a dark stain that corresponds to the foundation of the South Atlantic Cotton Co.

Parcel 9

In 1904 this parcel, divided by the drainage ditch, was the location of a frame lumber storage building west of the ditch on the

property's northeast corner and a stable along the ditch to the south. To the east of the ditch was a single structure – a brick mill (associated with the kilns on Parcel 10 south and extending onto Parcel 11. The stable and lumber storage building are gone by 1912, when the city plan reveals the presence of a “Chair Factory” on this parcel.

The “Chair Factory” had been completely removed by 1923 and, in its place, was a series of four dwellings – probably rental property for mill workers and others. Research reveals that these houses were used by both black and white laborers.

All evidence of occupation was eliminated by 1937 and the 1959 aerial reveals that the area of the domestic structures in the area of cultivation – which probably further degraded any archaeological footprint.

Parcel 10

It appears Parcel 10 north was vacant in 1904 and 1912. By 1923 rail sidings from the adjacent veneer plant were extended onto this tract, but there were no structures. The mid- to late twentieth century aerial photographs reveal no activities, other than clay mining, on the north portion of Parcel 10.

Parcel 10 south contained at least three kilns – probably clamps or field kilns – associated with the brick mill on Parcel 9. By 1912 the brick operation is entirely gone and was replaced by a “Veneer Factory” situated along Railroad Avenue.

In 1923 we see considerable expansion of the veneer works, so that virtually all of the lot is covered by some form of industrial activity. A new spur line has been added that today forms the division between Parcels 10 and 11.

The Augusta Veneer plant is still shown, in a much reduced footprint, on the 1937 Sanborn and, in fact, vestiges are still clearly visible as late as 1959.

Parcel 11

In 1904 Parcel 11 contained several kilns associated with the brick mill on Parcel 9, as well as four distinct business operations – a vacant blacksmith shop, the dispensary building with a small dwelling and a rear stable, a photo gallery, and the Wood Pottery Co. This latter business included a mixing shed where the clays would be prepared and a building with a furnace and brick chimney. This building also contained a small dwelling, where there is a note that a “man sleeps in building.” To the rear of this structure were two kilns, probably fed by underground flues from the furnace in the structure. Also present on the lot were several other unidentified and ephemeral structures.

We know that in March 1906 the Wood Pottery burned (Augusta Chronicle article reproduced by Newell and Nichols (1998:58). While it has been suggested that the Wood Pottery was to the west of the Georgia Avenue bridge, this information suggests that the pottery was actually on the east side of the bridge.

By 1912 the only previous structure still present is the dispensary – all of the other businesses and their buildings have been removed and were replaced by a “Furniture Factory,” situated along Georgia Avenue on or against the two kilns and a portion of the pottery furnace shed.

In 1923 the dispensary building is still present, but the “Furniture Factory” has been torn down and, in its place, is the Star Sprayer Co. To the south is People’s Oil. The combination of these industrial developments completely covers the earlier Wood Pottery Co.

By 1937 only the dispensary building is still shown on Tract 11 and even this structure has been modified by the addition of a concrete block building that appears to have taken the approximate shape of the early Shapira grocery. Everything else, however, is gone. By 1959 the area has been completely taken over by a tangle of

vegetation.

Parcel 12

This tract was vacant from at least 1904 and we have been able to document no activities on any of the Sanborn or other maps. It is likely that no development took place in this area since it was formally laid out (although never developed) as Front Street.

Conclusions

The historical documentation reveals extensive – and in many locations very intensive – industrial development during the early to mid-twentieth century. Over many tracts there has been a succession of buildings with earlier structures demolished and new ones constructed.

The two brick kilns, coupled with clay mining, have been particularly destructive. As a result of these activities a very large quantity of either clinker (overfired) or salmon (underfired) bricks are expected over the entire area. They have probably combined with the rubble from the demolition of earlier structures to create dense lens of debris.

The domestic structures identified in the historical research appear intended for working class renters and were likely poorly constructed, providing a very ephemeral archaeological footprint. They were also present for a relatively short period of time and this likely reduced the amount of trash that would have built up in the yards.

One of the most interesting historical features is the Wood Pottery Co. Newell and Nichols (1998:38-39) provide a brief discussion of this pottery. The first mention, other than the 1904 Sanborn, seems to be in 1905 and the names associated are John Moore, President, James P. Wood, Manager, and George U. Fletcher, worker. The only location is Georgia Avenue. As mentioned earlier, although it was thought by Newell and Nichols (1998:14-15) that the pottery

was located to the east of the bridge, this study suggests that it was situated in the study area, west of Georgia Avenue.

Newell and Nichols, however, suggest that the pottery in the study area is that of T.L. Hahn. This is based largely on circumstantial evidence, including Wood being listed as an electrician in the 1907 city directory. Moreover, they point to the previously identified George U. Fletcher working for Hahn's Pottery Co. and a listing for Hahn's Pottery in the 1908 city directory (although Wood is again listed as a potter in 1908) (Newell and Nichols 1998:18).

It seems plausible that the pottery shown on the 1904 Sanborn is the one being referenced by the 1908 city directory - and is certainly the one from which Newell and Nichols report having recovered 1,600 pounds of wasters (Newell and Nichols 1998:14). There remains some question concerning the owners and operators, but it may be that this location switched hands and the recovered materials represent a mixture of several potters.

Regardless of the name, it appears that this pottery has been impacted to some degree by a furniture factory, then Star Sprayer and People's Oil. Finally, there also have been late twentieth century activities on the site.

METHODS

Historical Research

The historical research included the examination of resources at the South Caroliniana Library, the University of South Carolina Map Repository, the Aiken County Register of Mesne Conveyance, the South Carolina Institute of Archaeology and Anthropology, and the South Carolina Department of Archives and History. We were also provided with information on the general area prepared by Mr. Bettis Rainsford (2004) of the Edgefield County Historical Society.

Background research (specifically SCDAH GIS and SCIAA site locations) previously gathered for the river walk project (Trinkley and Southerland 2002) was also briefly rechecked for inclusion in this study. We found no substantive changes.

Research focused initially on secondary documentation and a variety of maps and aerial photographs that could provide land-use data. With the conclusion of that work we then began preparing very brief property ownership accounts. Because there were 11 tracts included in the study area we were not able to prepare complete titles for each one – nor do we believe that such work is necessary for this survey level investigation. Instead we attempted to focus research efforts on those that appeared to be more intensively occupied. This allowed us to obtain a broad range of information for the property that might otherwise not have been collected.

We also examined accounts of different types of early to mid-twentieth century industrial activities – such as the production of veneer and bricks – to better understand the sites and remains found in the study area. Because the State Historic Preservation Office was most concerned with the brick works in the project work, our background

focused heavily on these works.

Finally, as an adjunct to our historic research, we conducted oral history interviews with a variety of individuals associated with or having knowledge of the brickworks, including Mr. Jerry Cannon; Mr. Gould Hagler; Mr. Pierce Merry; Mr. Alvin Postell; Mr. James Postell; Mr. Lowrey Stalb, AIA; and Chief Lee Weatherington.

Mr. Cannon is an African American whose father worked in the brick yard after WWII loading rail cars. Mr. Hagler is a retired attorney whose family owned Georgia-Carolina Brick and Tile Company. Mr. Pierce Merry is the grandson of Merry Brothers Brick and Tile co-founder, Arthur H. Merry and worked at Merry Brothers until it was acquired by Boral Brick. Mr. Alvin Postell worked at the plant in the study area in 1947 and 1948 as a maintenance engineer. His brother, Mr. James Postell, worked in brick yards most of his life and at the North Augusta plant between 1945 and 1947. Mr. Stalb is a well-known Augusta architect who designed structures throughout Georgia and South Carolina. He was consulted for additional information on the use of hollow or structural clay tile. Chief Weatherington owned an adjacent tract in the late twentieth century and is familiar with the late activities on the site.

Archaeological Field Methods

The initially proposed field techniques involved two strategies for shovel testing. Along the road centerline (the area of greatest association between the federal funding and the project), we proposed a single transect, with test placed at 50 foot intervals. Elsewhere on the study tract (see Figure 3 for the extant of the project area) we proposed shovel tests at 100-foot intervals along transects placed at 100-foot intervals.

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All soil would be screened through ¼-inch mesh, with each test numbered sequentially by transect. Each test would measure about 1 foot square and would normally be taken to a depth of at least 2.0 foot. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

We found almost immediately that changes to these proposed techniques would be required. First and foremost, much of the project area revealed rubble to a depth of 2 to 3 feet – making shovel testing not only nearly impossible, but also generally unproductive. As a result, we abandoned shovel testing and instead implemented the use of a Bobcat with a 12-inch hydraulic auger. This allowed us to auger to depths of 3.5 to 4 feet – and to penetrate the brick rubble, lower intact deposits, original soils, and even some paleosols (in non-industrial areas).

We also found that it was very difficult to obtain reasonable site boundary information using close interval testing. Materials in the heavily industrialized eastern portion of the site area were sparse, widely scattered, and heavily impacted. Few, if any, undisturbed areas were identified and a great many tests were “positive” (although not necessarily yielding useful cultural information). In other words, the eastern project area is very much like any complex urban site with deep – and horizontally continuous – deposits. As a result,

very little close interval testing was conducted. Instead, we relied on a combination of the 100-foot tests, historical research, and trenching to provide clues on site dimensions.

In fact, perhaps one of the largest modifications was our definition of site. Materials were found throughout the project area, by definition allowing the entire area to be identified as a single site. This, however, is not an especially useful management approach since it would result in a variety of confusing “loci” – some perhaps significant and others not significant – all lumped under one site number.

We consulted with Mr. Keith Derting at SCIAA and explored several options. We then examined the recovered materials and their quantities, looking for any indications of either core areas or distinctions between the different lots. When no real differences were found, we decided to incorporate all of these historic materials into one site. We did, however, give a separate site number to a prehistoric site within the industrial complex. And we also used loci to identify the various historic structures and complexes.

In the open field areas to the west a more conventional approach was taken. Sites there were identified based on recovered materials from either auger tests or trenches. Boundaries were determined by a combination of close interval auger testing and additional trenching. Site definition, however, is somewhat problematical since these sites were generally found under 2 to 4 feet of floodplain alluvium.

Obviously, no auger testing was conducted in the various clay pits since at the time of the study all were holding water. We also did not conduct shovel tests immediately adjacent to the pits, in areas where the topography revealed heavy disturbance from the mining operations (characterized by push piles from 2 to 6 feet in height, abrupt elevation changes, and clearly disturbed topography).

Auger testing was also not conducted in

METHODS



Figure 44. Backhoe being used to open a trench to explore a possible site area.

those paved or concreted areas associated with the extension of Georgia Avenue. Previous historic research revealed that the area adjacent to the project tract at the north had been vacant until extensive, late twentieth century development. The parcel to the west was identified as a coal yard that had been excavated out by the railroad. When abandoned, it was refilled to create the modern grade. This historic documentation was felt to be more than adequate to exclude this area from intensive testing.

As a result of this work a series of 33 transects were run across the main study tract from east to west (and numbered 0 through 32). As previously discussed, auger tests were excavated at 100-foot intervals except on the road right-of-way, where auger tests were placed every 50-feet.

We found that for much of the project, the corridor centerline is along a previously constructed sewer right-of-way (see Martin and Drucker 1987). This required an effort to locate our 50-foot tests

outside the sewer line excavation.

Two additional transects were placed to explore the road extensions north of the project tract. Transect 33 was excavated in the Georgia Avenue Extension area and Transect 34 was excavated on the centerline of the West Avenue Extension. In both of these areas the shovel tests were excavated at 50 foot intervals.

Not including close interval tests, a total of 240 auger tests were excavated in the study area. To these are added an additional 31 close interval tests at 50-foot intervals along the proposed road corridor and 8 tests in the core of one of the prehistoric sites and 12 tests at another. Combined 287 auger tests, four 2-foot units, and two 5-foot squares were excavated for either site discovery or testing.

The 2-foot test units were placed at a site with several feet of overburden. This overlying soil was first removed by a backhoe to within a few inches of the paleosol containing the archaeological remains. From that point on the



Figure 45. Troweling a test unit at the base of the excavations.

excavations were by hand and all soil was screened through ¼-inch mesh. Where possible, the excavations distinguished between the paleosol (an old A horizon which was designated Level 1) and the A/C interface (which was designated Level 2).

At another buried site several 5-foot units were excavated and again we used a backhoe to remove the upper soil and expose what was determined to be the base of an old plowzone. The fill from these units was also screened through ¼-inch mesh.

The GPS positions were taken with a Garmin GPS 12XL rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

GPS accuracy is generally affected by a number of sources of potential error, including errors with satellite clocks, multipathing, and selective availability. We have previously determined the 3D¹ and DGPS readings with the Garmin 12XL were identical. Therefore, we relied on 3D navigation mode, with expected potential horizontal errors of 10 m or less.

Architectural Survey

As previously mentioned, the architectural survey from our 2002 study (Trinkley and Southerland 2002) has been reviewed and approved by the SHPO. The sites identified are shown on Figure 2. Typical of such projects, this

¹A basic requirement for GPS position accuracy is having a lock on at least four satellites, which places the receiver in 3D mode. This is critical – as an example, positions calculated with less than four satellites can have horizontal errors in excess of a mile, or over 1,600 m.

survey recorded only those sites which “retain some measure of [their] historic integrity” (Vivan n.d.:5) and which were visible from public roads.

The architectural survey associated with the North Augusta area of potential effect (APE) was limited to a re-examination of the previously identified sites to verify that there had been no substantive changes over the past two years. None were identified and the results of the previous study are briefly outlined in our results section.

Although all of the standing remains within the study are in ruinous condition the State Historic Preservation Office requested that one site, the brickyard, be further evaluated by an architectural historian. This work was accomplished by Ms. Sarah Fick.

Beyond her work, every standing structure on the project tract was photographed using color print film and will be briefly discussed with its corresponding archaeological site and loci number. Where possible a function has been attributed using historic documents. We identified no structures for which we recommend additional photographic or architectural recordation. Ms. Fick evaluated the standing structures in the brickyard as not eligible. All of the structures appear to be relatively common mid- to late twentieth century types, but this evaluation will be discussed in more detail in a following section.

Geomorphological Study

A deep testing program was conducted to determine if buried cultural horizons were present within the proposed development on Terraces along the Savannah River. The work was conducted by Mr. Keith Seramur of Keith C. Seramur, P.G., PC of Boone, North Carolina. Mr. Seramur is a licensed geologist in South Carolina and has over a decade of experience providing geomorphology services to archaeologists including interpretation of stratigraphy, site formation processes and depositional history in fluvial, aeolian and coastal settings of the Southeast.

METHODS

This investigation was designed to interpret the floodplain geomorphology and Holocene stratigraphy in the project area. A backhoe was used to excavate trenches into different geomorphic features on the floodplain. A series of trenches were excavated into areas of the second terrace (T2) along the proposed roadway. Trenches were also excavated along the northern end of the terrace adjacent to the former clay pits. Eleven trenches were excavated in the industrialized area to test alluvium preserved below fill materials. These trenches targeted the edge of the T2 terrace and elevated landforms in the industrialized areas. Three trenches were extended to a depth of 16 feet to test for deeply buried cultural deposits. Thirty two backhoe trench profiles trenches were described. These descriptions used standard soil taxonomy (Birkeland, 1999; and Schoeneberger et al., 1998) and geological descriptive methods (Folk, 1980).

Particle size analyses were completed for 14 of the sediment samples. This analysis included determining percent sand and fines (silt and clay) and the distribution of the sand fraction. To accomplish this, samples were dried, split, and weighed using a digital torsion balance. Samples were then placed in distilled water and dispersed using a sonic dismembrator. Each sample was wet sieved through a 63 micron sieve and the sand fraction retained on the sieve was then dried and weighed. The remaining suspension of silt and clay was placed in temporary storage. Weight of the sand fraction is divided by total dry weight of each sample to determine percent sand. Sand was dry sieved and each one-half phi size fraction was weighed and recorded. The phi grade scale ($\phi = \log_2 d$, where d is grain diameter in mm) is used for grain size measurements. A larger phi size represents smaller grain sizes as 4 phi is the boundary between sand and silt and -1 phi is the boundary between sand and gravel. This scale facilitates the application of conventional statistical practices to the sedimentology data (Folk 1980). Histograms were prepared showing particle size distribution of the sand size fraction in weight percentage for each 1/2 phi size.

Particle size distribution is used to interpret processes that form and bury alluvial strata containing cultural horizons. These sedimentary processes are used to evaluate the potential for site preservation. The mode of the sand distribution is an indication of the strength or velocity of currents that deposited the sand. Fewer artifacts are moved by lower velocity currents. Site disturbance is less likely when cultural horizons are buried by lower energy depositional processes.

Sediment with a particle size of medium sand or greater ($<2 \phi$ or $>0.25 \text{ mm}$) are transported by higher velocity currents. These are referred to as traction deposits because they are transported at the base of the flow essentially in continuous contact with the submerged floodplain. Fine sand and smaller particles ($>2 \phi$ or $<0.25 \text{ mm}$) can be transported in suspension. This finer sediment is deposited by vertical settling of fine sand and silt out of slow moving, sediment laden floodwater. Suspension deposits (also referred to as overbank deposits) blanket the floodplain surface without moving cultural materials or disturbing the underlying stratigraphy.

The local hydrology of the stream valley is described and the prehistoric geomorphology of the floodplain is reconstructed. Sediment samples were collected and analyzed from strata in select trenches and where buried cultural horizons were identified. Site formation processes and Holocene depositional history is interpreted from the stratigraphy, pedogenesis and sedimentology of the alluvium.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and

History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

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

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site’s eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site’s data sets or categories of

archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site’s archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site’s ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties in the North Augusta APE, we focus on evaluating these sites using National Register Criterion C, looking at the site’s “distinctive characteristics.” Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

METHODS

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials – the physical items used on and in the property – are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

For the brickyard, the structures were further evaluated using National Register Criterion A, association with historic events or activities, using the historic research, oral history, and economic information identified.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository.

Analysis of the collections followed professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of historic remains follow such authors as Price (1970) and South (1977). Prehistoric materials were defined by such authors as Coe (1964), Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986).

Curation

Archaeological site forms for the identified resources have been filed with the South Carolina Institute of Archaeology and

Anthropology (SCIAA). The field notes and artifacts resulting from these investigations will be curated at that institution as the North Augusta Riverfront Survey project. The collections have been cleaned and/or stabilized as necessary, although no conservation treatments have been conducted on any of the metals recovered. All original records and duplicate copies were provided to the curatorial facility on pH neutral, alkaline buffered paper. Photographic materials were color prints and are not considered archival, therefore these materials are retained by Chicora Foundation.

The architectural survey card (and accompanying black and white negatives) for the one site requested by the State Historic Preservation Office to be surveyed has been provided to the client for submission along with this report.

ARCHITECTURAL EVALUATIONS BEYOND THE PROJECT TRACT

Introduction

As previously explained, Chicora's 2002 study of the North Augusta Greenway (Trinkley and Southerland 2002) used an area of potential effects (APE) 1 mile around the project area. There had been no comprehensive architectural survey for the City of North Augusta, although there were previously recorded structures.

As a result of that work we identified three structures surveyed by the State Historic Preservation Office in 1982 (the B.C. Wall House, Rosemary Hall, and Look-Away Hall) within the APE that were listed on the National Register of Historic Places. The Southern Railroad Bridge was recorded during a 1986 survey (Fick 1986) and was determined eligible for listing on the National Register. The Augusta Dispensary building was determined eligible for listing as a result of a 1987 archaeological survey (Martin and Drucker 1987).

In addition to these sites, the 2002 study also conducted a brief architectural reconnaissance of the area within the 1 mile APE. Although much of this APE has been built out within the past 30 to 40 years, eight structures were identified that were evaluated as potentially eligible for inclusion in the National Register. The State Historic Preservation Office concurred with this assessment.

None of these architectural resources would be affected by the river walk proposed by the City and no additional management actions were requested at that time.

This current study briefly reviewed those previously identified to ensure that they were still extant, finding that all were. These sites will be briefly reviewed.

Architectural Sites

The **B.C. Wall House** is located at 1008 West Avenue and is a ca. 1908 structure listed at the local level of significance under Criterion C, architectural importance in 1992.

Rosemary Hall, also known as the James Urquart Jackson House, is at 804 Carolina Avenue and was listed in 1975 at the local level of significance under Criterion A. Jackson was the founder of North Augusta and the structure was constructed between

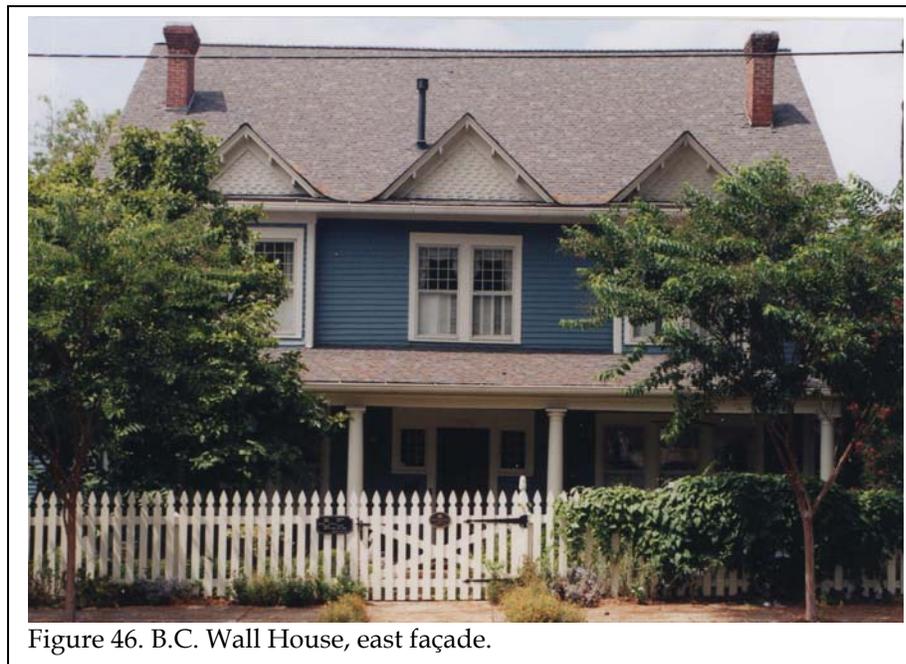


Figure 46. B.C. Wall House, east façade.



Figure 47. Rosemary Hall, south façade.

1900 and 1902.

The last structure listed on the register is **Look-Away Hall**, also known as the Mealing House. This structure is situated at 103 West Forest Avenue and was built ca. 1898. It was listed in 1992 at the local level of significance under Criterion B, import persons.

The **Southern Railroad Bridge**, situated at the southeastern edge of the APE, has been



Figure 48. Look-Away Hall, south and east (front) facades.

determined eligible for inclusion on the National Register. This is a five span steel bridge with stone and concrete piers and a central drawbridge section. It was built in 1915 and is a significant visual indicator of North Augusta's ties to both the Savannah River and the railroad (Fick 1986).

In 1987 Martin and Drucker recommended the **Augusta Dispensary**, on the southwest corner of Railroad and Georgia avenues, as eligible for

inclusion in the National Register under Criterion C - and this was concurred with by the State Historic Preservation Office. This structure was a rectangular, two-story commercial building with a gable roof. Constructed in common bond there were segmental-arched window openings. There was a stepped parapet that had a cornice with brick corbelled brackets and, along the top edge, a narrower corbelled brick cornice. There was a one story brick structure at the south corner - characterized as an addition - that also had a

decorative brickwork cornice. This was Shapira's Grocery, present at least by the time the structure was rented by the dispensary system.

While not well documented, it appears that there was also a CMU addition, shown by the various Sanborn maps.

Subsequently, this vacant structure suffered a significant

ARCHITECTURAL EVALUATIONS

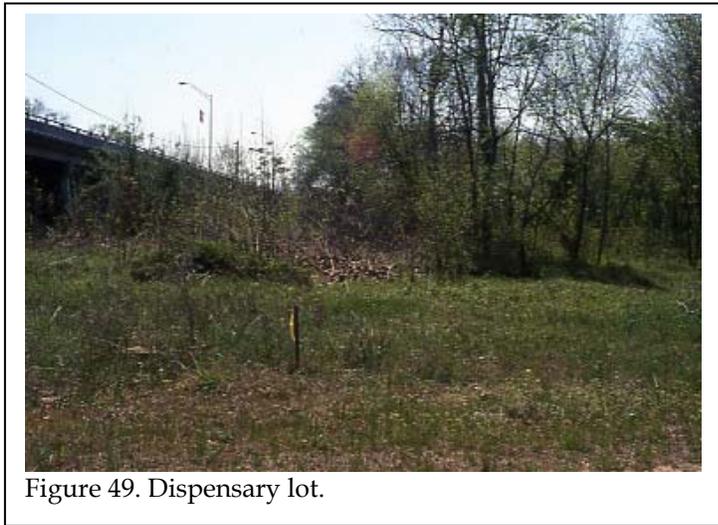


Figure 49. Dispensary lot.

fire about 1995. Shortly afterwards the structure was demolished and the entire structure down to the concrete slab was removed. All that remains today are heaps of concrete block rubble – all of

the brick has been salvaged.

During the 2002 study of the North Augusta Greenway, eight structures were identified within the APE that were recommended potentially eligible. Architectural cards were completed and submitted to the SHPO for evaluation. The SHPO concurred and these are listed below in Table 1.

All sites were revisited as a result of this survey and we found no substantive modifications.

Assessment of Impact

With the exception of the railroad bridge, all of the identified structures are situated on high ground overlooking the study tract and most are

Table 1.
Architectural Sites Recorded in the APE (Trinkley and Southerland 2002)

Site No.	Address	Comments
U/03/2718	505 Ponce de Leon Avenue	ca. 1920; 1½ story weatherboarded structure w/lateral gable metal roof; exposed roof rafters; centered gable dormer; transoms at front entry.
U/03/2719	203 Clifton Avenue	ca. 1910; 1 story weatherboarded structure with hipped roof and full facade porch; corbelled chimney; transom; 1/1 windows; turned porch posts w/brackets, turned balusters.
U/03/2720	502 West Avenue	ca. 1920; 2½ story weatherboarded structure with pyramidal roof; front and left porch; decorative truss at front gable with arched Queen Anne block glass window; corbelled chimney.
U/03/2721	217 Jackson Street	ca. 1910; 2 story weatherboarded structure with end to front gable roof; porch front and right facades; turned porch supports with brackets, turned balusters, balustrade.
U/03/2722	315 Arlington Heights	ca. 1905; 2 story weatherboarded structure with gambrel metal roof; double hung sashes with geometric pane configurations on second story; corbelled chimney.
U/03/2723	820 Carolina Avenue	ca. 1913; 2½ story weatherboarded structure with hip and gable roof; full porch; corbelled chimneys; transom and side lights at front entrance; transom over side porch entrance.
U/03/2724	914 Carolina Avenue	ca. 1910; 2½ story weatherboarded structure with truncated hip roof; full facade porch; Queen Anne block glass tripartite windows in front gable; ionic columns at entrance; fanlight.
U/03/2725	819 Tyler Avenue	ca. 1920; 1½ story weatherboarded structure with end to front gable roof; exposed rafters and purlins; purlins feature decorative

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT PROJECT

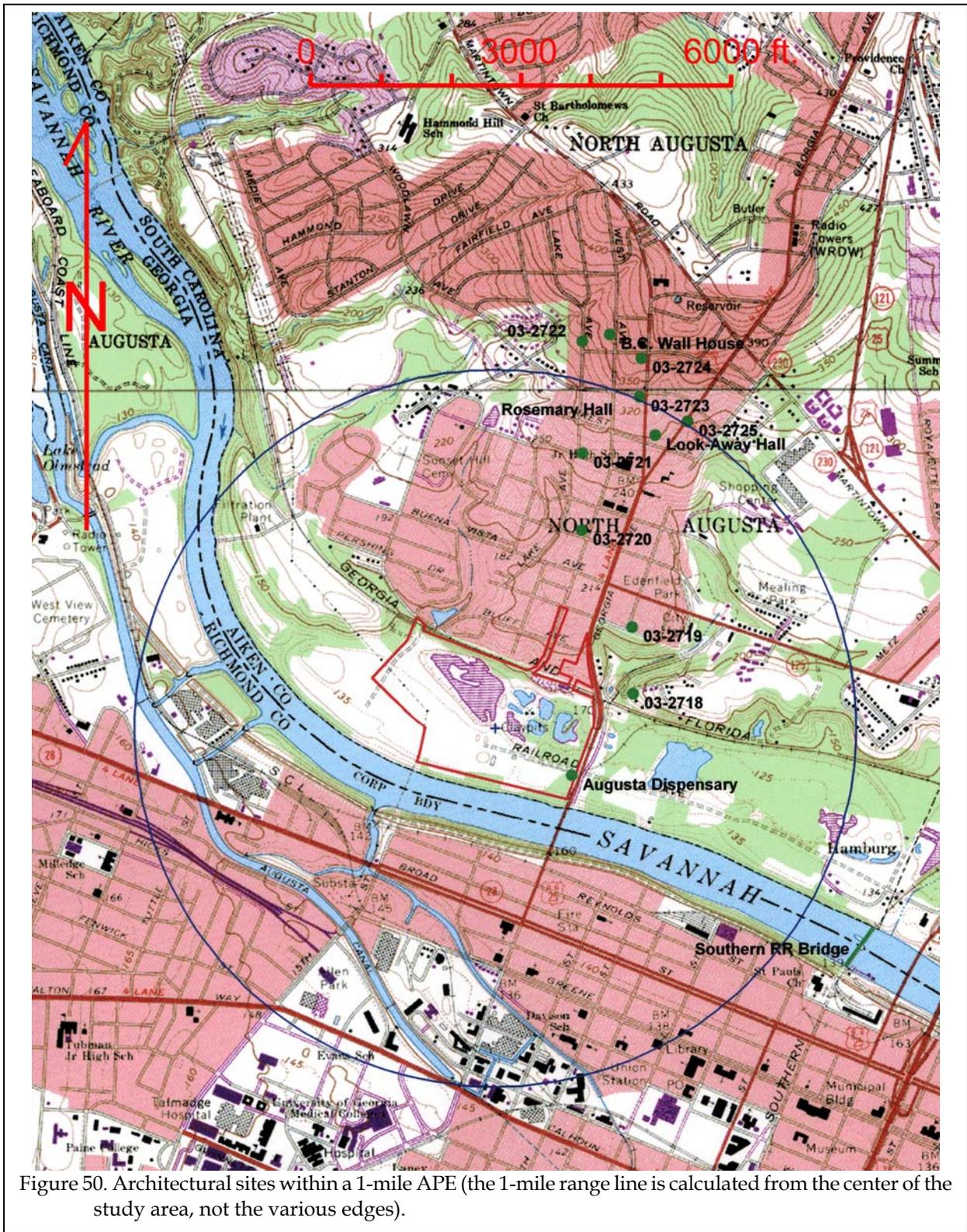


Figure 50. Architectural sites within a 1-mile APE (the 1-mile range line is calculated from the center of the study area, not the various edges).



Figure 51. View from Look-Away Hall south toward the project area (just to the right of the church steeple). Note that the viewscape is dominated by modern and non-eligible structures, as well as dense foliage. It is impossible to observe the proposed development area.

over a half mile distant from the center point of the study area (Figure 50).

Figure 51 reveals that from the upper bluff, the view along Georgia Avenue is dominated by North Augusta's business section. This combination of large commercial structures combined with natural vegetation, makes it unlikely that any of the proposed development activities (at most two-stories in height) will be visible from the majority of the listed or eligible structures.

In addition, with a difference in elevation of 70 feet at structure 2718 and 215 feet at the B.C. Wall House, all of the views from these structures will be over the proposed development, not into it.

Consequently, we believe that the listed or potentially eligible structures will not be affected by the proposed development activities.

RESOURCES IN THE PROJECT AREA

Introduction

Five archaeological sites (one with standing architectural remains in ruinous condition) were identified on the survey tract and one previously recorded archaeological site was re-assessed. These include three Native American sites (38AK932, 38AK933, and 38AK934) and three historic sites (38AK493, 38AK931, 38AK935). These sites are shown in Figures 52 and 53.

Two of the Native American sites (38AK932 and 38AK933) are recommended as eligible for inclusion on the National Register of

The previously recorded archaeological site, 38AK493, has been further assessed. It is recognized as a component or loci of historic site 38AK931 and is recommended not eligible. The standing structure present at this site at its original recordation (and found eligible by the State Historic Preservation Office) has since burned and nothing remains but a concrete pad.

The remaining below ground components or loci of 38AK931 - like 38AK493 - are recommended not eligible. Data sets are sparse, the site's integrity has been significantly damaged by not only a variety of industrial activities, but

Site No.	Site Type	Major Loci	Central UTM	Eligibility
38AK931	Historic, Industrial Complex	Wood Pottery Star Sprayer/Peoples Oil/Brick Industrial Lumber Augusta Veneer Augusta Face Brick/Georgia-Carolina Brick and Tile	409415E 3705305N	E NE NE NE NE
38AK932	Late Archaic/Stallings		409277E 3705228N	E
38AK933	Contact Period Hamlet		409004E 3705393N	E
38AK934	Lithic Scatter		408868E 3705825N	NE
38AK935	Baynham Flower Pot Mill		409540E 3705630N	NE*
38AK493	N. Augusta Dispensary		409581E 3705237N	NE
NE = not eligible, E = eligible				
* While the site is not eligible, we recommend preservation of the machinery associated with the site				

Historic Places under Criterion D, information potential. One locus (the Wood Pottery) within one historic site (38AK931) is recommended eligible for inclusion on the National Register of Historic Places, also under Criterion D, information potential. Another historic site (38AK935) is recommended not eligible, although the machinery still located at the site is recommended for preservation.

also various salvage efforts at the end of each industrial activity. There are few research questions appropriate to the site and most can be better addressed through the historical documents and collection of oral history. Those questions that can be devised are not thought to be significant.

There are standing structures associated with 38AK931. Those evaluated by the State Historic Preservation Office has having the

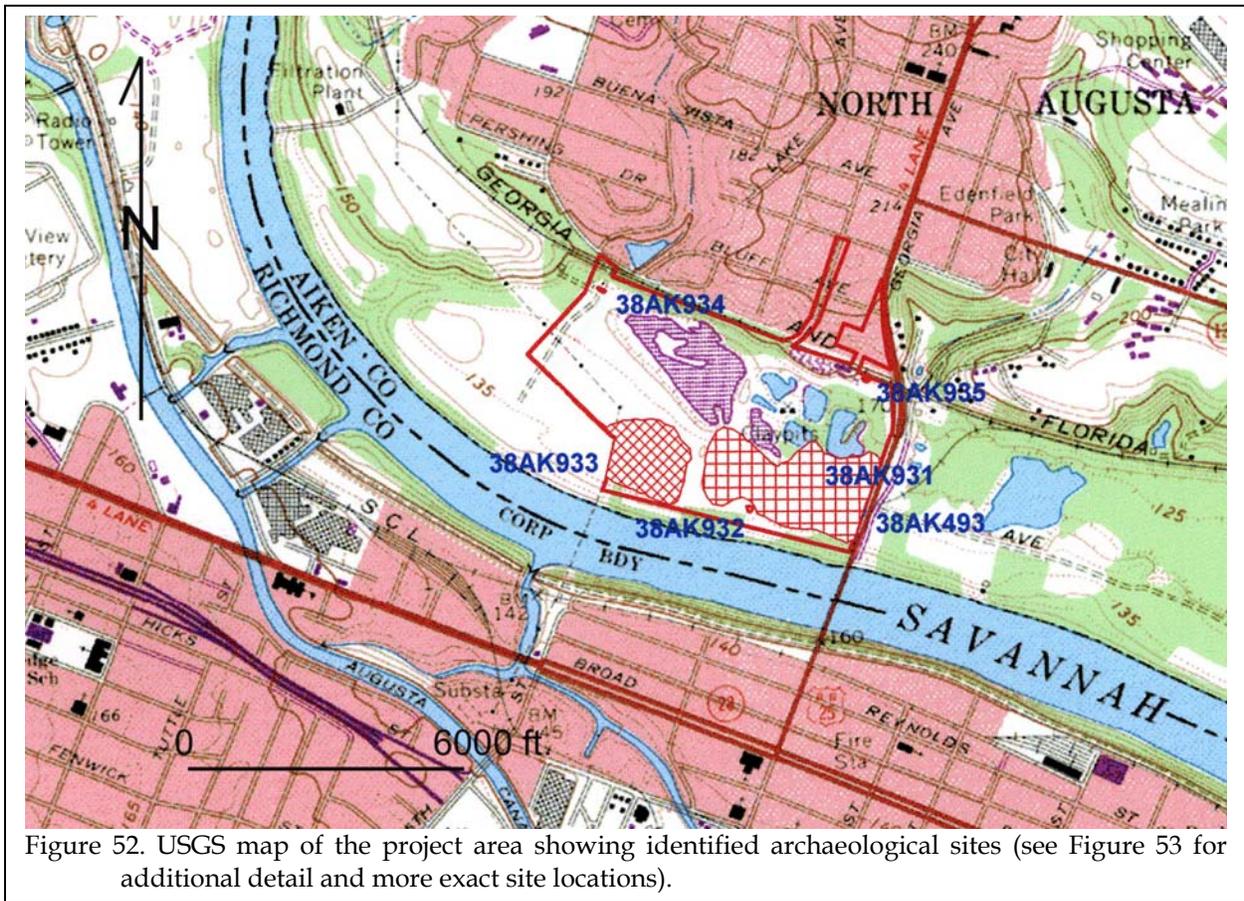


Figure 52. USGS map of the project area showing identified archaeological sites (see Figure 53 for additional detail and more exact site locations).

greatest integrity (associated with the Augusta Face Brick, later Georgia-Carolina Brick and Tile) have been evaluated by an architectural historian. The extant ruinous buildings were connected in physical ways that no longer exist and we have lost the sense of a factory. Today we have a collection of detached secondary buildings. The character-defining aspects of the plant, the kilns, rail tracks, and dryer, are the pieces completely gone. With the loss of the other factories, the surrounding property is no longer an industrial area. Even if it had been important to North Augusta's economy (and its economic importance is questionable), nothing here retains a sense of time and place. There is no integrity of design, setting, feeling, or association.

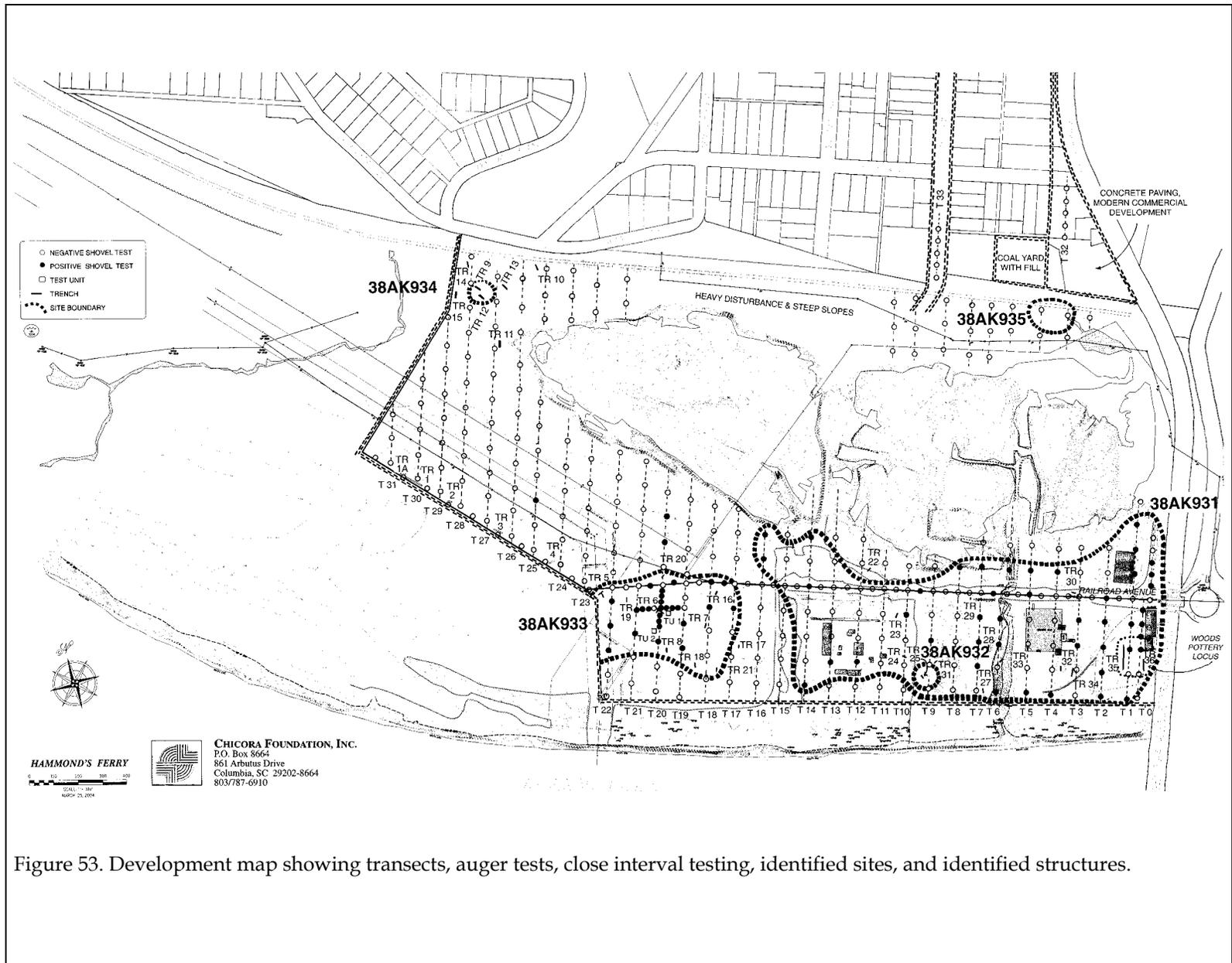
This study does, however, provide a broad overview of several different twentieth century industries, both in this section and our previous historical overview. We hope that this

information will help establish a context for future researchers who may be confronted with similar resources.

38AK493

This site, the North Augusta Dispensary, was previously identified by Martin and Drucker (1987:20). No shovel testing was conducted around the then standing structure, although the report specifies that “a bulldozed lot occurs west of the structure; the truncated surface of this lot was observed to contain only modern debris.” The standing structure was recommended eligible.

Since that survey, the structure burned and all of the resulting rubble has been removed from the lot (with the exception of the concrete floor and portions of the adjacent concrete block structure). It appears that these clean-up efforts affected the ground surface to a depth of several



IDENTIFIED ARCHAEOLOGICAL SITES

Figure 53. Development map showing transects, auger tests, close interval testing, identified sites, and identified structures.

feet (based on badly disturbed profiles found in adjacent auger testing).

No clear site boundaries were determined for this site, although the implication is that the number was assigned to the structure itself.

During the current study this site was incorporated with the larger industrial site, 38AK931.

38AK931

This is a large site situated at the eastern edge of the study tract that incorporates a variety of early to mid-twentieth century industrial activity (see Table 2). These various loci are all combined here since artifacts blur from one area to another (Figure 53). In other words, while there are very distinct historical loci, based on property boundaries, the distribution of artifacts is not so neat or organized and it is not readily possible to distinguish one locus from another on the basis of the archaeological signature.

A central UTM for the site 409415E 3705305N (NAD27 datum) and the site is found on the second terrace above the Savannah River at elevations of about 130 feet AMSL. The site area measures about 1450 feet east-west by 540 feet north-south, being bounded to the north by clay extraction pits, to the south by the drop off onto the first terrace (which was outside our study area), to the east by Georgia Avenue, and to the west by a large field into which the industrial development did not extend.

The site area is dominated by light to modern second growth scrub - vegetation that has grown up since industrial activities on the site ceased (generally in the 1940s, although a few loci continued to be used into the 1950s and one was used into the mid-1970s. The site is found on two soils - Chewacla loams and Shellbluff silty clay loams.

The site area was primarily examined using auger testing at 100 foot intervals, with the fill screened through ¼-inch mesh. A total of 136

auger tests were examined, with 43 (32%) being positive (Table 3). These tests reveal consistently disturbed soil profiles to depths of approximately two feet - evidence of the various construction and demolition episodes on the tract.

In addition to the auger tests there were also 12 trenches placed in the site area - nine for geological examinations and three for specific site studies.

There were also many areas of disturbed ground that provided at least some indication of the artifact density for the most recent activities on the site. The density of these surface remains varied dramatically. In the vicinity of 38AK493 - a structure that was not only occupied until relatively recently but which was also close to the main access road - we found a very broad distribution of very late twentieth century remains. These findings were consistent with the "modern debris" noted by Martin and Drucker (1987).

These artifacts are dominated by clear glass (n=58) and window glass (n=57), together accounting for 49% of the recovered specimens. The next most common remains are nails (n=23) and Albany slip stoneware (n=26). The nails, of course, document the industrial buildings on-site, as does the window glass. The stoneware, however, is likely associated with the various twentieth century pottery efforts on the tract and on neighboring parcels. Newell and Nichols (1998) have previously documented that wasters are very common in the general area.

More clearly domestic artifacts (such as whiteware, furniture hardware, personal items, and clothing remains) are nearly absent, accounting for only 13 specimens (5% of the total collection).

The assemblage, therefore, is dominated by remains of industrial activity, largely the structures themselves - window glass and nails. There are very few clearly "industrial" items - we recovered only a few wire fragments and one thumbscrew.

Table 3.
Artifacts Recovered from Auger Tests at 38AK931

	T0	T0	T0	T0	T0	T0	T0	T1	T2	T2	T2	T2	T2	T3	T3	T4	T4	T5	T5	T5	T6	T6	T6	T6.5	T7	T7	T7	T7	T8	T9	T9.5	T10	T12	T13	T13	T14	T14	T14	T16	T16	Total									
	N0.5	S0.5	S1	S1.5	S2	N1	N1.5	S1	S2	S4	N1	N2	N3	base	S1	S2	S3	S4	S1	S2	N1	S4	base	N1	S4	N1	S1	S2	S4	base	N1	S1	S2	S3	N1	S2	base	S1	S3	S3	base	N2	S4	N1	N2					
SW, brown								1							1																																	2		
SW, Albany	1				2			1			1				1		11				1	1		4	1																									26
SW, Albany/Bristol																										1																							1	
SW, burnt																																																	1	
Wh porcelain, undec						2																																											4	
Industrial porcelain						1																																										2		
Whiteware, undec.																																																	2	
Refined EW, burnt								1																																									1	
Iron container frags																																																	1	
Glass, clear		2	5	3	1	2			2	12	1				5							1																											58	
Glass, aqua																																																		2
Glass, lt. green																																																		7
Glass, green																																																	2	
Glass, brown																																																	7	
Glass, blue																																																		1
Glass, purple																																																	1	
Glass, milk																																																	5	
Glass, melted	1					1	10	1																																									14	
Window glass	1																																																57	
Nail frag/UID nail																																																		23
Screw																																																		1
Bolt																																																		2
Wire frags																																																		4
Thumbscrew																																																		1
Leather shoe sole																																																		1
Coal frags																																																	6	
Concrete frags																																																	1	
PH, small sherd	1																																																1	
PH, quartz flake																																																		1
	3	5	5	4	5	35	1	1	4	15	7	3	2	1	14	2	13	1	5	3	1	2	5	1	1	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	235

IDENTIFIED ARCHAEOLOGICAL SITES

Each of the different loci within 38AK931 will be discussed below.

Wood Pottery

The Wood Pottery area is clearly shown in Figure 22, the 1907 Sanborn Map, but was not very clearly identified in the auger survey - in fact, only two of the tests on the first two lines to the south produced stoneware. Consequently, we laid in two trenches (see Figure 53) to examine the posited pottery area, looking specifically at the furnace and kiln area, where we hoped to recover evidence of the pottery being manufactured and

demonstrate that foundation remains are present and in good condition.

Trench 35 identified two distinct flues - probably running from the furnace to the two kilns. Consequently this trench, like Trench 34, was probably placed too far to the south to intercept its intended target. Nevertheless, it does demonstrate the flues are in a very good state of preservation. In addition, the profiles reveal a very large amount of heavily burnt red clay, suggesting the extreme heat and length of the kiln operation on the site. Also present in the trench is a brick wall, perhaps of the adjacent mixing shed.



Figure 54. Wood Pottery, Trench 35, showing one of the two brick flues to the pottery kilns.

possibly evidence of the burning operations.

The trench profiles are shown in Figures 54 and 55. Trench 34, placed in the vicinity of the furnace appears to have missed the furnace, but identified a brick wall, perhaps of the pottery furnace building or perhaps of the adjoining pottery workshop. Although additional work will be required to determine exactly what structure has been encountered, the trench does

Artifacts were collected from these trenches as they were being cleaned. These remains are itemized in Table 4. While a broad range of materials were recovered, the specimens were dominated by wasters from the Wood operation. These materials include stoneware with Albany slip, primarily stacker jugs, as well as unglazed stoneware flowerpots and coarse, unglazed earthenwares. Two specimens of an

alkaline glaze were identified, although these may not be from the Wood operation since they represent a small minority of the materials present.

The specimens recovered are very similar to a range of materials found by Newell and Nichols (1998) and ascribed to Baynham (see, for example Newell and Nichols 1998:Figures 6 and 7), Hahn (Newell and Nichols 1998:Figure 17), and

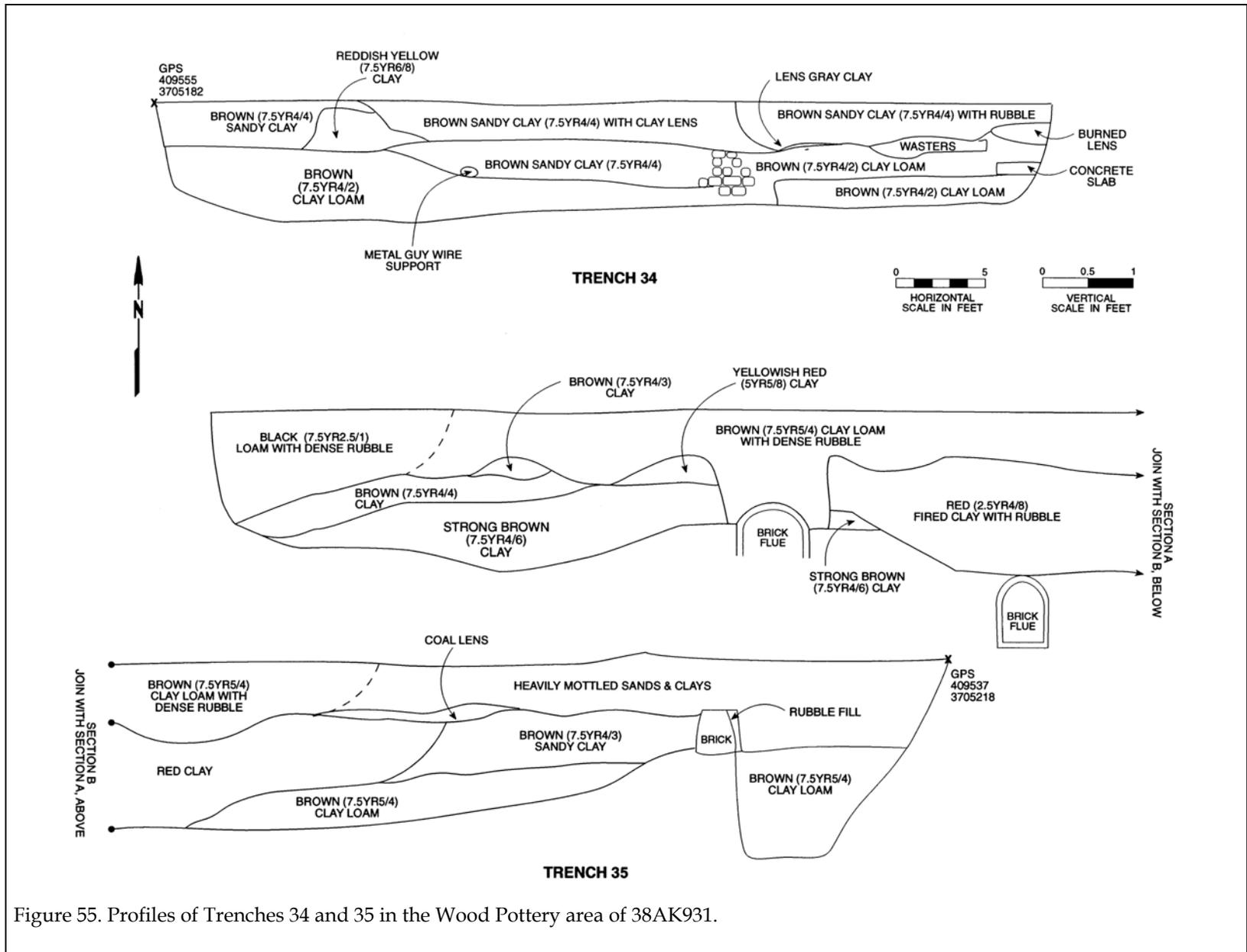


Figure 55. Profiles of Trenches 34 and 35 in the Wood Pottery area of 38AK931.



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Table 4.
Artifacts recovered from Trenches 34 and 35
(Wood Pottery) at 38AK931.

	TR 34	TR 35	Totals
SW, Albany		33	33
SW, Albany/Bristol	1		1
SW, Bristol		1	1
Wh porcelain, gilt		1	1
SW, flowerpots		10	10
SW, flowerpots, alkaline glaze		1	1
Whiteware, undec.		5	5
Whiteware, brn ext.		1	1
Coarse Red EW, lead glaze	10	25	35
Coarse Red EW, unglazed	6	8	14
Terra cotta flowerpot frags		3	3
Clay wadding	3	10	13
Glass, clear		8	8
Glass, lt. green		1	1
Glass, brown		2	2
Glass, milk		1	1
Window glass		2	2
Nail frag/UID nail	1		1
Porcelain electrical insul.		1	1
Brass spigot handle		1	1
Porcelain floor tile		1	1
Clinker		1	1
Slate fragment		1	1
Angle iron	1		1
Wire frags	1		1
Faunal remains		1	1
Totals	23	118	141

Wood (Newell and Nichols 1998:Figure 26). Representative specimens from the trenches are shown in Figure 56.

Of particular interest were the large numbers of clay wadding fragments found in the trenches, especially Trench 35. These are wads of clay and sand that were used between vessels to prevent them from firing together.

The artifacts from this work are listed in Table 4.

This locus within 38AK931 exhibits a broad range of data sets, including intact architectural remains (two foundation sections), evidence of the pottery works (the two flues), and

a large quantity of waster pottery. The pottery itself includes a variety of forms and materials (glazed and unglazed, flower pots, crocks, and jugs). The integrity of this particular locus appears good, allowing the recovery of foundations and flues that have not been damaged by later activities.

There is relatively little documentary history concerning this site - or for that matter other twentieth century potteries in South Carolina. A brief examination of data on pottery production reveals that in 1907 there were only six pottery establishments in South Carolina (Anonymous 1907), making this an unusual site type. The amount of business done by these six potteries is small - only \$12,200 - and they were operated with very minimal capital (\$97,438). They also employed very few people - 88 on average. The making of pottery by the early twentieth century was certainly not a significant economic activity for South Carolina - but it still represents the last gasp of the much more widely studied nineteenth century alkaline glazed pottery tradition.

Given this apparent dearth of primary sources, the Wood Pottery locus may be able to address a broad range of research questions, not the least of which being whether one single potter's name or style can be ascribed to the site. Answering this question will depend on identifying a very large quantity of wasters and attempting to sort them into identifiable - and possibly distinct - styles and then comparing those styles to other pottery sites in the Augusta area, including those previously studied by researchers such as Newell (Newell and Nichols 1998). It will also depend on understanding, as Steen (1994:41) as eloquently pointed out, that a great many human factors influence the production of a pot, although all actions are shaped by culture and environment. As a result, the success of such an effort will depend on carefully selecting those attributes to study - and to that end Steen (1994) again provides excellent guidance.

Even if the various potters operating at this site cannot be distinguished, research here should allow better identification of these wares at other sites – allowing researchers to identify the source or origin of consumer goods elsewhere in the region.

In addition, since twentieth century

kilns, (2) recover a sample of wasters from on-site, and (3) sample other structural remains present on-site. While the use of mechanical equipment to strip off overlying rubble will be necessary, it is also critical that an adequate sample of wasters be obtained through hand excavation or other techniques to allow a thorough investigation of the various forms and manufacturing styles to be examined.



Figure 57. Trench 36 excavated in the brickyard area, looking north.

Star Sprayer/People's Oil/Brick

These first two operations, according to the Sanborn maps, were situated to the south and west of Wood Pottery. People's Oil was an oil distributorship that also included a small service station on the site. While most of the tanks were above grade, at least one 500 gallon tank is shown on the Sanborn maps as

pottery production is not well documented, research at this site can help explore the process of twentieth century pottery production in South Carolina, adding significantly to the historic record and supplementing the spartan economic accounts.

We recommend this locus of 38AK931 as eligible for inclusion on the National Register of Historic Places under Criterion D, information potential. The site are appears to cover an area of approximately 150 feet north-south by 150 feet east west (0.6 acre), centered at approximately UTM 409570E 3705182N.

If this locus cannot be green spaced in perpetuity, we recommend that data recovery excavations be conducted to (1) examine the layout and operation of the furnace, flues, and

being below grade. Very little is known about Star Sprayer, although it appears intimately associated with the oil company, sharing a lot and being connected. It is possible that this firm was involved in the spraying of oil on dirt roads – a common practice during the early twentieth century. Well into the 1920s South Carolina had a large proportion of its county roads unimproved (78%); those that were improved were largely sand-clay or used some form of oil or bituminous material as a binder (Hager 1927:238).

Regardless, very little was found in this area and it appears that the two industries have left only very faint archeological footprints. There are no remains identified that are appropriate for National Register consideration.

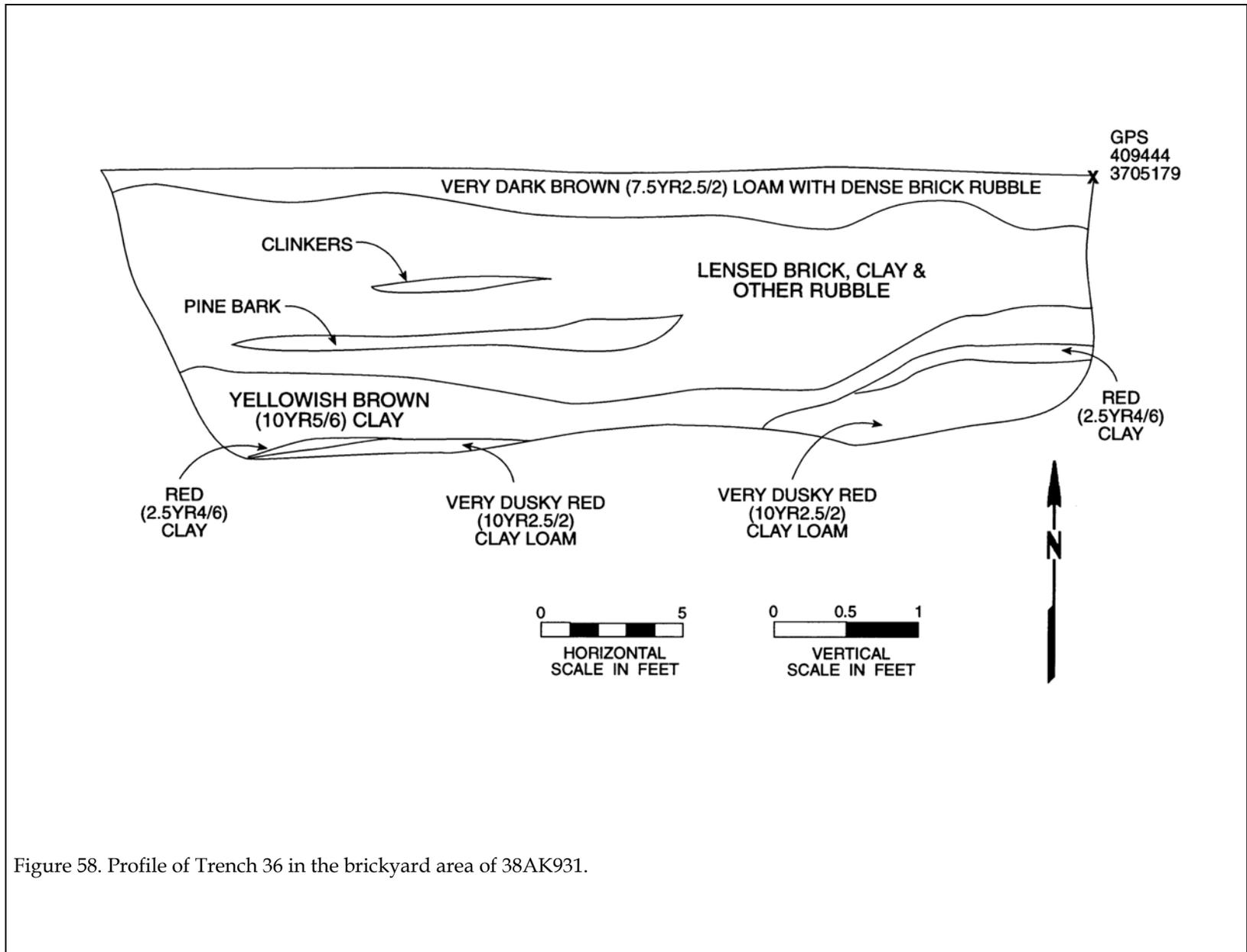


Figure 58. Profile of Trench 36 in the brickyard area of 38AK931.

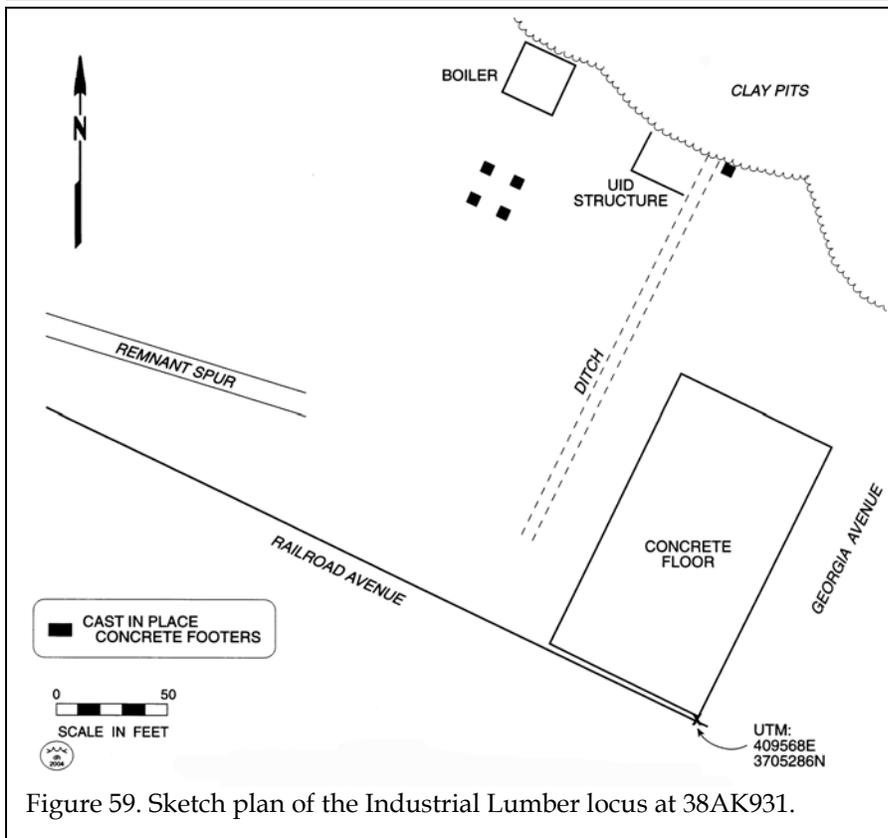


Figure 59. Sketch plan of the Industrial Lumber locus at 38AK931.

Prior to People’s Oil, however, the 1904 Sanborn (Figure 22) reveals an early brickyard in this same area. The Sanborn shows a small office a mixing shed, and five rectangular kilns, probably representing individual field kilns or clamps. The kilns have been damaged by the subsequent construction of a railroad spur (which is still present) and the remainder of the site has been destroyed by the Augusta Veneer plant, discussed below.

In order to examine the kiln area, however, Trench 36 was excavated. This trench is shown in Figures 57 and 58. The upper 1.5 feet contain dense rubble, lensed clay, clinkers, and a dense lens of pine bark. Below this are lenses of heavily fired red clay. The upper deposits are lenses of brickyard deposits combined with materials contributed by Augusta Veneer. For example, the dense bark lens is almost certainly debris discarded in the process of veneer manufacturing. The lowest deposits – red brick clay and heavily fired zones – are likely the

remains of the clamps firing on this location prior to the veneer works.

The nature of early twentieth century clamp construction, clearly outlined by Searle (1920), leaves little in the way of features or other archaeological remains. Moreover, the technology is well documented. Mr. Pierce Merry, for example, explained that these small brickworks did very well during the early 1900s, up to the Florida building boom burst about 1920. He reports that while there were some general scove or clamp kiln types, everyone had their own idea of how to make these kilns. We do not believe that there are significant research

questions that the site can address. In addition, the brickyard deposits have lost integrity through the disturbances caused by the later veneer plant operations. Consequently, we recommend this locus – centered at approximately 409450E 3705180N not eligible.

Industrial Lumber

The Industrial Lumber facility is shown by Sanborn maps north of Railroad Avenue and bordering Georgia Avenue to the east. The historic research reveals that the property went through several periods of expansion prior to being taken over by Augusta Veneer and dramatically downsized. Overtime the buildings were lost and clay mining began to intrude on the locus’ northern edge.

As previously discussed in the historic section, in the 1920s there were a number of lumber plants, many of which were intimately tied to the state’s burgeoning timber industry. Hager

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Figure 60. Posited boiler room remains, looking northwest.

the remains of the plant's boiler facility. South of the boiler are cast-in-place concrete footings, possibly for a water tank. At the western edge of the locus is a remnant railroad spur, although the tracks have been salvaged (Figure 59).

The boiler room is shown in Figure 60. The outline of a structure about 23 feet square can still be discerned, although nothing

(1927:92) reports 55 planing mills in South Carolina employing over 1,000 laborers producing \$29,508,585 in products.

remains of the boilers reported by the Sanborn to have been present. In fact, we have been unable to identify any machinery associated with the plant – it appears that all equipment was salvaged. The associated buildings were then

The archaeological remains from this area are sparse and the remaining structures are in advanced states of decay. The most prominent feature is the concrete pad for the building at the northwest corner of Railroad and Georgia avenues. Measuring 134 by 75 feet the foundation is constructed of bricks stamped "Augusta Brick." To the northwest is a partial brick structure, heavily impacted by the excavation clay pits. To the west is a third structure that represents

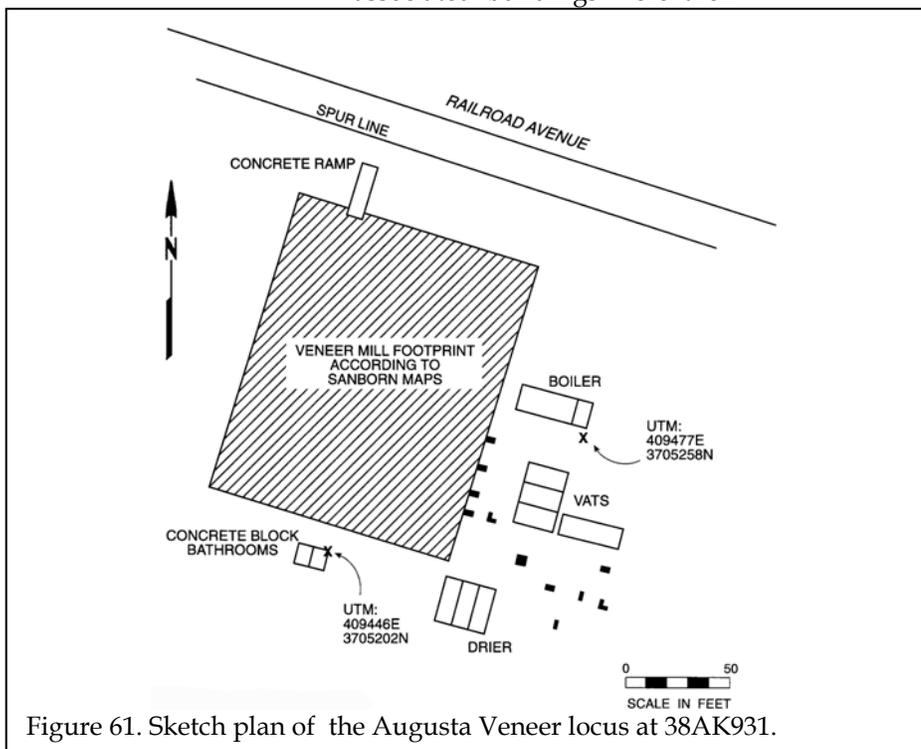
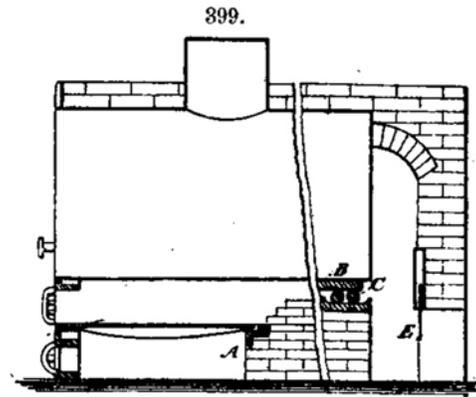


Figure 61. Sketch plan of the Augusta Veneer locus at 38AK931.



Boiler, looking west. Note clay lining.



Example of boiler from Benjamin (1893:I:164)



Vats probably used to soften the wood



Drier, showing tracks



Concrete block building



Close-up of concrete block bathrooms

Figure 62. Structures at Augusta Veneer locus of 38AK931.

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demolished. While much of the brick remains scattered across the site, we also believe that much was salvaged, probably being sold throughout the North Augusta and Augusta areas.

We do not believe that there are significant research questions associated with early to mid-twentieth century lumber processing that cannot be more productively addressed through historical research. Regardless, the site's integrity has been significantly affected by demolition and salvage. Data sets were very sparse, providing little potential for archaeological research. We therefore recommend this locus not eligible for inclusion on the National Register of Historic Places.

Augusta Veneer

This facility was originally located on the south side of Railroad Avenue, but eventually acquired the Industrial Lumber property as well. The plant, based on the Sanborn maps, acquired logs and made veneer from them. The logs were likely soaked first to soften them, then were either sawn or "peeled." The resulting veneer sheets would then have been placed in driers, where the moisture was gradually removed, and then moved to their warehouses for shipment out by rail.

Hager (1927:92) notes that all of the Southern states were important veneer producers, with the region providing a third of the nation's total veneer production.

This site area, however, produced few artifacts and none that are especially industrial in nature. This is the result of the nature of the industry on one hand and the extensive salvage and demolition that took place on the other.

Nevertheless, we do have evidence of seven structures on the site, including a concrete ramp to the rail siding, a large concrete footprint associated with the veneer plant, the boiler, two sets of vats, a dryer structure, and to the rear of the plant, toilet buildings (Figure 61). Most of these buildings can be identified on the Sanborn

maps and the functions for all can be at least generally ascribed based on either the Sanborn maps or a general knowledge of veneer manufacturing.

The concrete footprint measures about 42 by 37 feet and is situated immediately south of the rail spur running along Railroad Avenue. To the east of the main factory was the boiler. The Sanborn maps indicate two horizontal tube boilers – and this is confirmed by the remains. The most notable feature of this boiler today is the hardened clay insulation that originally surrounded the boilers. These were very common industrial features and *Appletons' Cyclopaedia of Applied Mechanics* (Benjamin 1893:I:152-202) provides a very detailed explanation, as well as various drawings.

To the south of the boiler are two vats, one measuring about 25 by 21 feet and divided into three compartments and another to the east measuring 30 by 10 feet. While these certainly could be cisterns for the boiler, we suspect that there was a water well and these vats were intended to soak the logs prior to their being rendered into veneer. Surrounding these structures are a variety of cast-in-place concrete footings for heavy machinery. Reference to the Sanborn maps suggests that these were probably associated with the hoists for moving logs in and out of the vats, as well as the sawmill that would have been used to cut the logs into suitable lengths.

To the rear of the vats is a three compartment structure that is a drier – a building in which temperature and humidity would have been controlled in order to gradually dry the veneer, preventing warping. Further to the west is a concrete block building with two bathroom stalls (still evidenced by piping and holes, presumably to a septic tank).

These structures are representative of buildings that would have been common on a veneer plant of the period. They would originally have been connected in ways – clearly shown by

the Sanborn maps – that no longer exist. We have lost the sense of the original plant and its character-defining aspects. We are left with a paltry assortment of secondary buildings, all in ruinous condition and no longer retaining any integrity of design, setting, feeling, or association.

As a result, we recommend this locus of 38AK931 not eligible for inclusion on the National Register of Historic Places.

Augusta Face Brick/Georgia-Carolina Brick and Tile Company

This site is situated on the south side of Railroad Avenue at the western end of 38AK931. A central UTM is 409210E 3705315N and the site is the most obvious, at least in terms of above ground remains. The below ground remains, however, are extremely sparse. Auger testing reveals that while there is extensive disturbance and much brick rubble (all without mortar) on the site, artifacts are very scarce and represent primarily bottle glass. There are remains of flues, but these will be evaluated as part of the above ground structural remains.

Oral History

As part of the site assessment, we have collected oral history from a number of individuals familiar with the site (including Mr. Jerry Cannon; Mr. Gould Hagler; Mr. Pierce Merry; Mr. Alvin Postell; Mr. James Postell; Mr. Lowrey Stalb, AIA; and Chief Lee Weatherington.). These histories are woven together here to provide an overview of the brickyard operations. What is most interesting about the accounts is that they very closely agree not only with each other, but also with accounts such as Searle's (1920) *Modern Brickmaking* – suggesting that the operations were typical for the time period (a view voiced by several of those interviewed).

The individuals most familiar with the day-to-day operation of the plant were James Postell, who worked at the facility from 1945 through 1947, and his brother, Alvin Postell, who

worked at the plant as a mechanic from 1947 through 1948. Their memory of the individual buildings and plant operations, however, closely matched those that Pierce Merry said would be typical of a plant during the period of the 1930s, 1940s and 1950s.

Alvin Postell, as a mechanic responsible for the repair of the machinery on the plant, remembered that the equipment was manufactured by "J.C. Steele." This company is J.C. Steele & Sons of Statesville, North Carolina. Organized in 1889, it is today the largest producer of heavy clay products machinery in the United States (www.jcsteele.com). When asked what might have happened to the equipment, he explained that brickyards rarely discarded or junked equipment – it was almost always salvaged and used at another plant or kept for spare parts.

Both Alvin and James remember the mill house being three story, with a timber trestle (later replaced by a metal trestle) leading up to the top floor. Cars loaded with clay from the pits would be transported to the base of the ramp, in the early years (prior to WWII) by mule in 1½ cubic yard carts, and later by two small "Plymouth" locomotives that were on the site. From there the clay cars would be winched to the top, where there was a hopper and feeder. On the second floor there were two mills to grind and screen the clay, then a pug mill to mix the clay with a small amount of water. The source of this water was a drilled well. On the bottom floor was an extruder and 18-brick cutter.

Pierce Merry remarked that brick machines of this time period (post 1930) combined a pug mill, compression auger, and de-airing or vacuum chamber and that 18-brick cutters were the norm, typically being used with 150 to 250 horsepower electric motors.

The brick, once extruded and cut, would be taken by "hackers" to cars with two or three tiers and the cars would then be put in the drier. The drier, as was typical of plants of this size, was operated off waste (cooling) heat from the kilns themselves. The eight tunnels would be filled from

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one end and hot air directed under the tunnels from the kilns. As the cars progressed through the tunnels they would get progressively hotter and this would dry the moist brick. James Postell remembers that the nearby furnace shown on the Sanborn maps was an oil burner that provided supplemental heat to the drier, if it was needed. This particular plant never converted to natural gas. Pierce Merry explained that this process was common.

From the driers the “hackers” would hand carry the brick into the kiln. Everyone agrees that the plant had eight beehive or down draft kilns and they were roughly 30 feet in diameter with about 8 to 10 fire boxes along the outside edges of each one. Originally the plant used coal, with a stoker making the rounds to add more coal about every 45 minutes. James reports that a special, “egg-size” coal was used for the firing and that in the 1940s some automatic stokers went into use on some (although not all) of the kilns. Gould Hagler also reported that an employee came up with an auger device to automatically stoke the fires.

The kilns reached a temperature of about 1,900°F and the combination of coal and the high manganese in the local clays produced bricks that were “flashed,” or exhibited a wide range of colors, especially dark reds and blacks.

About 1949 the plant partially switched from coal to oil, although the conversion was never complete according to James Postell. The use of oil created a clear red brick and it may be that coal continued to be used to produce the more distinctive – and sought after – flashed brick. James Postell mentioned that many of these bricks can be seen throughout North Augusta.

Mr. Merry remembered that the plant had only periodic kilns (round, beehive downdraft kilns) – which he described as relatively efficient burning brick, but not efficient from a handling standpoint since production was low and the kilns had to be taken out of production to cool for removing the brick. He described their products as “having a market, although the quality of the brick was not great.” In particular he recalls that the

kilns produced a large amount of flashing on the bricks. He also mentioned that even Merry Brothers Brick and Tile had a few periodic kilns in operation as late as the 1980s.

It would take two days to load the kiln and then the coal would be fired up to allow one day of water smoking – a process of gradually increasing the temperature to complete the drying process. An additional two to three days would be required to complete the firing and then two days to cool the kiln (during which time the reject heat would be used in the driers).

A reasonable loss from these firings would be 5%, with a total production at the plant of about 50,000 brick a day. Pierce Merry suggests typical waste was about 4% and that a 30-foot diameter kiln ought to have been producing about 90,000 brick, so there is a slight discrepancy here.

The kilns would then be unloaded and the brick taken directly into the yard for local sales or would be placed in rail cars, padded with hay, for shipments to Charleston, Savannah, and Jacksonville. Bricks were also shipped by truck to Atlanta and Athens. Gould Hagler worked a brief while as a helper making these deliveries and remembers that all the brick was unloaded by hand, using brick tongs.

Pierce Merry recalls that Georgia-Carolina was very aggressive in pricing their brick in the Charleston and Savannah markets and that they provided much of the brick for various military installations. He specifically believes that Georgia-Carolina brick was used at Parris Island, although he doesn’t know what plants were supplying the brick.

A typical workforce at the brickyard would be about 50 people – most of whom were African Americans. James Postell explained that many days he would be the only white, other than management, on the site. He also explained that the beside the manager, there was a loading foreman, responsible for the hackers taking the bricks from the mill to the dryer, from the dryer to

the kiln, and from the kiln to the railcars or yard; a millroom foreman, responsible for the clay mixing and extrusion processes; and a burning foreman, responsible for the proper timing of the kiln operations. These were all considered management and paid set wages. Everyone else was hourly, in the 1940s getting paid between \$12 and \$18 a week. The average work week was six days, each 10 hours long. There were typically one or masons also kept on the brickyard to make repairs to the kilns. One of these, George Jennings, went from being a brick mason to the operator of his own brickyard, purchasing the R&S in the 1940s.

Jerry Cannon's father was one of the black laborers at the site during the late 1930s and he remembers that he father would begin work very early - 5 or 6 am and that he would take his father breakfast on his way to school. His father worked loading railcars with bricks and would usually finish work about 1:00 in the afternoon. He was unsure what he father made, explaining that his parents never talked about money around the children.

When asked about what products were made at the plant James Postell explained that almost all of the production was brick and that the clay beds for this yard (those situated in the north portion of the study tract) were about 8 to 10 feet in depth. In contrast, the clay in Hamburg was considered far superior and beds there went 20 to 24 feet in depth. All the mining at this plant was done using a gas powered drag line. By the 1950s they had switched to a small diesel engine.

He indicated that the plant never made fire brick commercially, although "every once in a while someone would have the bright idea that they could make their own fire brick, but it never worked out." In fact, most of the fire brick seen on the site today is from the kilns, where it was used to line the fire boxes. The best of this brick was from Babcock & Wilcox in Augusta or from a Kentucky or Ohio firm.

Likewise, James Postell states that the plant never produced structural tile, claiming tile

requires a special type of clay not found at this site. There were two or three efforts to experiment and each time it was a failure. Most of the tile came from another of the Georgia-Carolina plants in Augusta.

Since the tile was very common at other Georgia-Carolina yards, it was trucked in for the construction of the various buildings on site. It was used not to promote the product, but rather because it was readily available, inexpensive, and quicker to lay than brick. Pierce Merry agrees, noting that tile requires a very pure clay (while brick clay includes more sand). Dies to handle the pure clay had to be special made and all the tile was probably produced in one of the Georgia-Carolina Augusta plants (he believes there were at least six).

Local Augusta architect Lowrey Stalb (best known as a partner in the firm of Eve and Stalb) was consulted to get additional information about the use of this structural tile. He reports that some built using it because it was inexpensive, although he typically used it as a back-up to brick veneer. He generally specified 3-cell 12 by 12 tile laid with the cells running vertically to provide interior wall drainage if there was ever a leak. He noted that the tile could be acquired with a ribbed finish that allowed plaster work directly to the tile without the need for lathe. The combination of low cost, quick and easy installation, fire resistance, and ability to plaster over it all worked in its favor. The only problem with the product that he mentioned was the difficulty in controlling the dimensions during firing. Consequently it was possible to plumb up only one side a wall. If used for a brick veneer backing this wasn't an issue, but if the tile was used as an interior partition wall it was joked that you "could climb up one side of the wall."

Mr. Stalb mentions that its use declined as sheetrock became more widely available and that the period of greatest use, at least in his practice, was from about 1945 to about 1965. This seems to represent the midpoints of the date range suggested by Jester 1995:151). Stalb also believes that the most common producer of the tile was

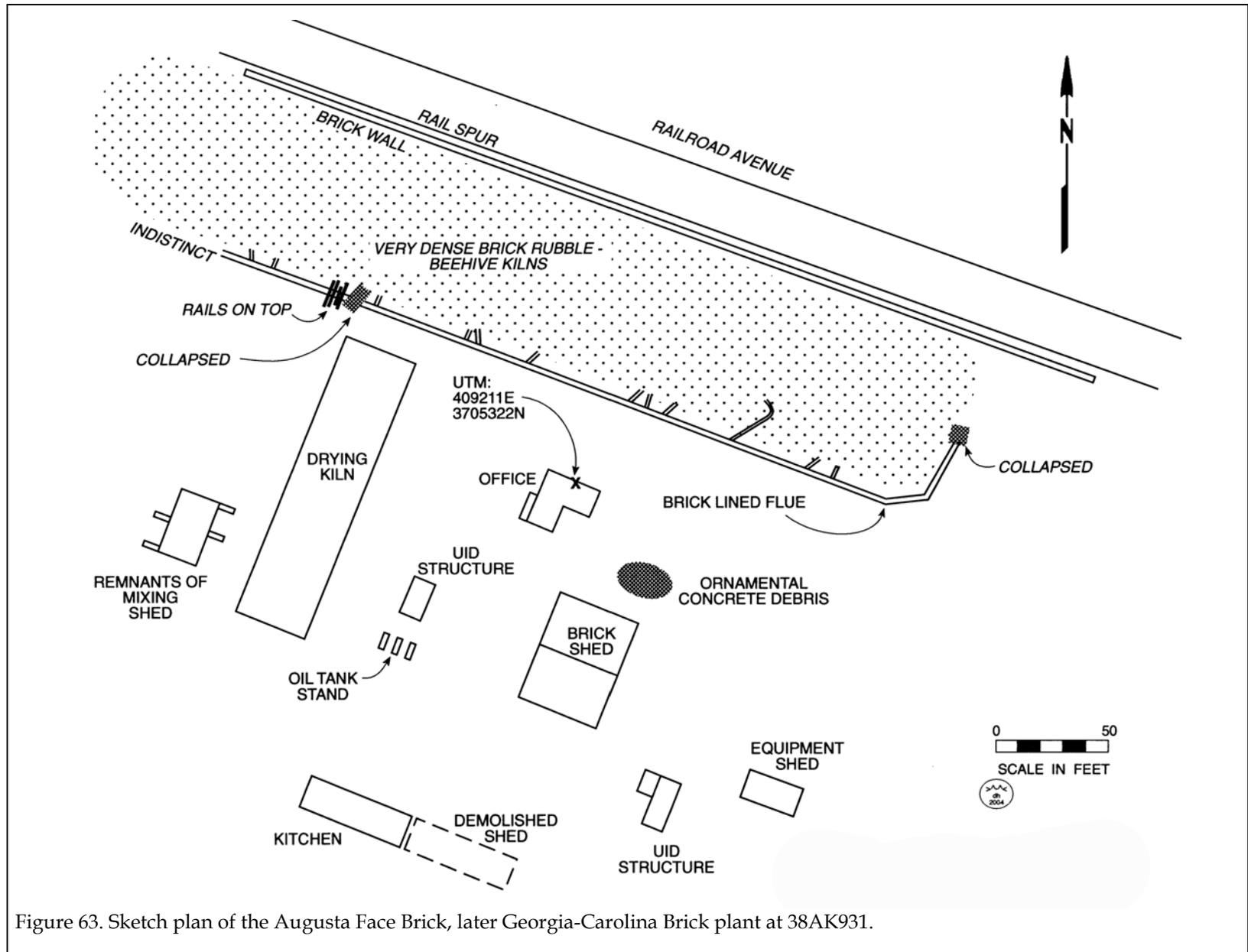


Figure 63. Sketch plan of the Augusta Face Brick, later Georgia-Carolina Brick plant at 38AK931.

Merry Brothers, not Georgia-Carolina.

James and Alvin Postell both remembered that the large building at the back of the yard was a kitchen and eating area. The plant allowed the wife of one of the employees to cook meals there for the laborers. Breakfast and lunch were both offered, and the cost was 50¢. James Postell indicated that the person who ran the kitchen occasionally changed, but had to be a good cook and was generally the wife of the one of the better employees.

When asked about the apparent financial success of the plant, James Postell speculated that the plant, built in the 1920s, had fully depreciated off and was very cheap to operate. It was this, he believes, that kept the place open for so long, since the production was very small (about 240,000 brick a week) compared to other plants (upwards of a million brick a week) during the same period.

James and Alvin Postell both remembered that the large "brick shed" was actually a shop area where trucks, locomotives, and other heavy equipment was repaired. The outer portion was also used to store the hay that used to pack around brick shipped by rail.

These discussions also revealed that the plant was closed during the depression, but opened back up prior to WWII. Around that time the plant, under the name Consumer's Brick, was leased to J.A. Jones Construction out of Charlotte. A very large regional firm, they were responsible for a tremendous amount of construction and they wanted a dedicated supplier of brick. When the lease ran out they chose not to renew and Georgia-Carolina again picked up the plant's operation.

James and Alvin (as well as Gould Hagler) remember that throughout the 1940s the plant was flooded on average twice a year. Each time the workers would move critical machinery, and especially the electric motors, to the upper floor of the mill building. Afterwards, they would make repairs, shovel out the clay, dump waster bricks in low spots, and begin again.

Both Pierce Merry and Gould Hagler recount that Merry Brick and Tile acquired Georgia-Carolina Brick and Tile through a merger in 1976 and that Boral acquired Merry Brick and Tile in 1981. There is agreement that it is unlikely Boral retained any of the historical documents and Mr. Hagler reports that a relative acquired a large amount of Georgia-Carolina paper from Boral as it was being discarded. None of the saved material, however, related to the North Augusta operations. During at least part of the plant's mid-twentieth century history, however, it was operated by Gould Hagler's father, John Carroll Hagler, Jr. (b. 1899).

Mr. Merry remembers looking over the plant's operation at the time of the 1976 merger and deciding that there was no reason to attempt to restart the facility given its small size and limited production capability. He also recalls that the primary reason Georgia-Carolina closed the brickyard was that there was, at most, two more years of clay available for its operation. He felt that the cost of bringing clay into the plant by truck would be prohibitively expensive and there was little reason to keep the facility open.

Lee Weatherington notes that the kilns had been demolished by 1964. In the mid-1970s the plant site was leased by Hugh Baynham and he used the facility to make ornamental concrete. Initially the water was transported to the site in barrels, but eventually a waterline was run from Weatherington's property, where horses were pastured. All of the work was done by hand, and some of the remains still present indicate such items as birdbaths and picnic tables were made. Apparently the operation was at least marginally profitable and Mr. Weatherington recalls that Baynham sold his products as far south as Florida.

Structural Remains

Today there are 11 distinct features (Figure 63) still present on the site and each of these will be briefly discussed.

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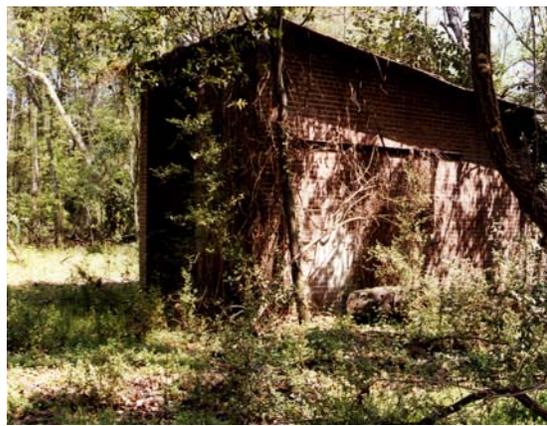
Section of exposed brick flue, showing flues running to kilns.



Office, front façade looking south-southwest, showing tile construction.



Brick shed, view to the southwest.



Equipment shed, view to the northeast.



Unidentified structure constructed of tile, view to the northwest.



Demolished brick building, view to the southwest.

Figure 64. Structures at Augusta Face Brick locus of 38AK931.



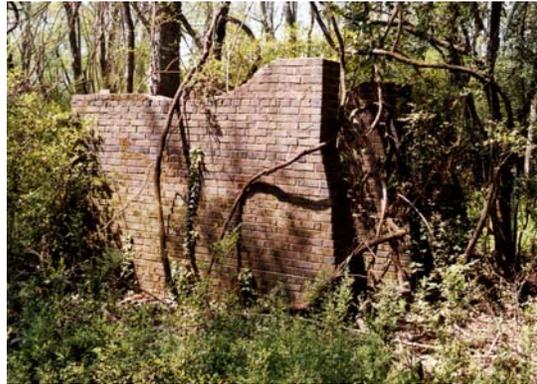
Kitchen building, looking to the southwest. Note the use of narrow gage rails for shed roof.



Drier or drying kiln, looking northeast. Much of this has collapsed.



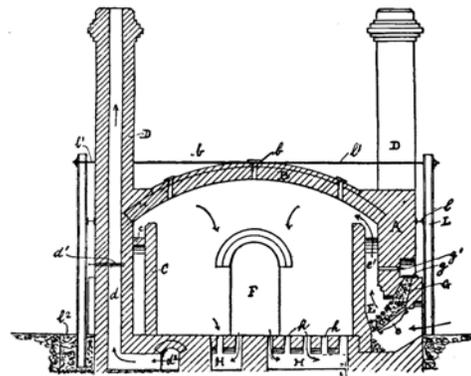
View of drier interior, looking southwest. The flue area is shown under the kiln.



Oil tank support, view to the west.



Unidentified brick building to the southwest of the office, looking west.



Cross section of down draft kiln (Searle 1920:284).

Figure 65. Structures at Augusta Face Brick locus of 38AK931.

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At the north edge of the site, parallel to Railroad Avenue is the rail spur, evidenced today only by a depression and the adjacent brick retaining wall.

Beyond these features, to the south, is an area of very dense brick rubble. This is the area of eight beehive kilns. Today all of the kilns have been demolished, leaving piles of rubble and little else. At some point the flues for these kilns have been partially exposed, allowing us to see the main flue, off which at least 12 identified flues to specific kilns were run. To understand the function of these flues, it will help to briefly explain the operation of a down draft kiln.

Around the outside edges of the kiln are fireboxes that receive the coal. These open into the kiln but are separated from the brick by what is known as a bag (or screen) wall – a standing wall that directs the heat upwards. There it hits the arched roof and is drawn back down to flue grates in the floor. This circulation pattern better, and more evenly, fires the brick within the kiln.

These flues, therefore, were used (with a damper) during the firing process to draw some minor amount of air out of the kilns. At the conclusion of the firing, they would also be used to draw all of the hot air out, circulating it into the drying kiln. Additional flues would also lead to one or more chimneys to draw off the gases in the kilns.

Consequently, only a portion of the flues have actually been exposed, but enough is evident to not only understand the operation, but to also observe the different construction between the original five kilns (where the main flue was arched brick) and the three that were added latter (where the main flue is brick lined and was covered with concrete slabs).

To the south of these kilns is the brickyard. The central structure is a small L-shaped office with a side bath addition. This office is constructed of structural tile and had a gable roof. All wood members are missing and the

structure is in ruinous condition. On the east elevation there is a brick veneer over the clay tile designed to illustrate the range of bricks produced by the kiln. These include the previously discussed black or flashed bricks, as well as a range of dusky red face and engineering bricks.

Behind and to the southeast of the office is a large structure identified on Sanborn maps as a “brick shed.” This is a brick, concrete block, and corrugated metal building with a gable metal roof. Oral informants explain that the rear section of this building was used as a shop for the repair of equipment. Originally this structure had windows on its south and west elevations – all have been bricked closed. The front, open portion of this structure was used for hay storage.

To the southeast is an equipment shed constructed of brick. The corrugated metal shed roof is supported by narrow gage rails and the front elevation is corrugated metal sheeting with a pedestrian opening. Windows on the south elevation have been bricked closed.

To the west of the equipment shed is a structure whose function is unknown. It was constructed of structural tile and brick on a concrete pad. The interior had a structural tile partition wall, now completely demolished. All window and door framing has been completely removed. The arched roof consists of hollow structural tiles, probably reinforced with rebar and concrete. The gable ends of the structure were infilled with brick.

To the rear (south) of the previously discussed brick shed are two long, narrow brick buildings. The eastern structure is demolished, with only partial wall sections left standing. The western structure, identified by oral informants as the kitchen where employees could buy breakfast or lunch, is of brick construction. The shed roof is now gone, although it was supported by narrow gage rails. A bathroom is found at the west end of the structure.

Moving to the west, the largest remaining

structure are the driers. This is a concrete, brick, and tile structure about 5-feet in height above grade, with about 3-foot high flues below. Only the southern portion of this building is still extant and it is in failing condition, with the side walls collapsed and portions of the floor broken, exposing the flues underneath. This structure, in particular, represents a serious safety hazard.

To the west of the driers are the remains of the mixing shed. Originally a three story building with a trestle on the north elevation, very little of the structure still remains. The third story has collapsed onto the second, and portions of the outer walls have collapsed outward. Compared to the Sanborn maps, only a small portion of this building is still extant – and the trestle has been completely removed.

Between the driers and office is another structure of unknown function. It is constructed of brick with a corrugated metal shed roof supported by narrow gage rails. The front entrance has been extensively damaged.

Comparison to Other Register Listed Properties

We have examined the National Register for similar sites to determine how they were evaluated. We have found two – the Cherokee Brick and Tile Company in Bibb County, Georgia (Moffson and Johnston 2002) and the Guignard Brick Works in Lexington County, South Carolina (Power 1995).

The Cherokee facility is still an active brickyard with a detailed history to its founding in 1877 (although it relocated to the present site in 1904). The nomination is for a district that incorporates 11 contributing buildings, two contributing sites, and 11 contributing structures (as well as 18 non-contributing resources). The identified (and extant) buildings include three plants, a clay storage building, office, garage, laboratory, mine shop, dynamite shed, rail car loading shed, brickyard shed, brickmaking equipment, mine system, extant rail system, rail cars, levee, beehive kiln foundations, and coal silo.

The district is also adjacent to the Burns Brick Company, as well as the National Register-listed Macon Railroad Industrial District. The district is eligible under Criterion A, because the brick-making equipment and clay mines represent brick manufacture in Georgia from the late nineteenth century through the mid-twentieth century, and Criterion C, because many of the buildings reflect modern industrial design (with known architects) in the early decades of the twentieth century.

The Guignard Brick Works consists of a much smaller assortment of structures and buildings – four beehive kilns and an office building. The site was nominated under Criterion A because the plant produced bricks for the development of Columbia, and Criterion C because it was felt to be an example of an early twentieth century industrial complex. Although the nomination specifies that the site may have archaeological potential, there is very little in the way of supporting documentation and the research questions are rather vaguely posed as, “additional buildings and structures – primarily from the period ca. 1886-ca. 1974, during the commercial operation of the Guignard Brick Works on this site – is likely to yield significant information about the process of brick-making at this complex from the late-nineteenth century to the mid-twentieth century” (Power 1995:10).

Evaluation of Structural Remains

The Georgia-Carolina Brick and Tile Company Site retains several ancillary or service buildings whose condition ranges from fair to ruinous, and the remnants of a brick-lined flue and a drying kiln. The firing kilns are represented by heaps of brick rubble.

The property was assigned Statewide Survey Site Number 032754, with 032754.00 being the office, site, flue, eight kilns, dryer, three-story mixing shed, paired service sheds, oil tank stand, and a simple brick utility shed. 032754.01 is the machine shop/storage building at the center of the building complex, 032754.02 is a brick equipment shed that retains a fair degree of

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architectural integrity, and 032754.03 is a work shed or office built largely of structural tile blocks.

These service buildings retain some interesting design components – the brick veneer at one wall of the office building, the roofing at 032754.03, the curious door configuration at 032754.02 – but overall, the property does not retain its sense of time and place as a busy small industry of the 1920s through 1950s. The character-defining elements of the plant, its kilns, flue, dryer kiln, and narrow-gauge track for a small locomotive, have all been lost or ruined.

The property does not appear to meet the National Register Criteria for Evaluation. It does not possess integrity of design, setting, materials, workmanship, feeling, and association; further, it does not appear to be associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), or to embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C). Although brickmaking has been part of the historic landscape of the North Augusta/Augusta region for generations, this complex was not economically important to the region, its technology was conventional, and its support buildings were similar in design and quality to the service buildings found around industrial sites nationwide.

A rail spur, including the connection to a mainline system, a graded bed, and its iron track, represents not only the movement of heavy material within a complex, but also transportation to market. While it is typical for the metal tracking to have been removed, at this site the spur and main line (Railroad Avenue) have deteriorated to the point of unrecognizability as a railway.

The eight beehive kilns, apparently built during two periods of construction (ca. 1925 and ca. 1930) remain only as piles of rubble and brick.

The main flue, and the smaller flues that run to each kiln, have been opened, destroying their structural integrity but exposing the layout of the system. As an interpretive technique, this would allow a layperson to understand the movement of heat through a brickyard, but with the loss of firebox and kilns, the flue has lost its context along with its integrity.

The office was a utilitarian structure constructed of tile, with a gabled roof (all wood members have been lost). Its plan was simple, and the building was given interest only by the modest sawtoothed brick corbel, and the brick used to face the east elevation. Using a variety of colors and glazing may have been an illustration of the plant's capabilities, or an effort to "dress up" the executives work quarters. However, with the ruin of the building, these components cannot be read as historically significant.

There are a number of ranch style houses in North Augusta, apparently dating from the 1920s through the 1950s, that feature brickwork patterned in varied colors & textures. We did not investigate whether these were obtained from brick factories in Augusta and North Augusta. Further study might reveal what influence, if any, the presence of brickworks nearby played in the selection of brick for North Augusta residences. It is unlikely that the display of brick veneer on the exterior of an industrial office building influenced the selection of brick by architects, builders, or their clients.

The large structure (032754.01) identified on Sanborn maps as a "brick shed" has been determined to have been used as a repair shop and storage building. Its original design and construction were not significant architecturally, and with the infill of its windows and doors, and partial collapse of the roof system, this building has lost its physical integrity.

The brick equipment shed (032754.02) appears to be in fairly sound condition. Its function has not been learned, but the building's unusual design suggests secure or fireproof

storage. The corrugated metal at the front is fastened closed, blocking half the opening, and the only windows have been infilled with brick. The common brickwork and the use of salvaged metal railing indicate a makeshift solution to construction needs.

The work shed or office (032754.03) facing the equipment shed was laid up in structural tile, with three courses of brick supporting the tile roof. While this building appears architecturally unusual because of the tile roofing, its condition is ruinous and the original craftsmanship was not distinctive.

The two long, narrow brick buildings at the south edge of the site are also in ruinous (east) and poor (west) condition. Only partial wall sections remain of the east structure. The west structure retains walls and metal roof supports, but no roofing, window, or door material. This building is of interest because of informant data about kitchen and restroom usage, but its current state does not indicate the historic uses.

Of all structures clearly associated with the historic uses and function of a brickyard, the dryer kiln retains the most above-ground material. However, although the cross-section left by removal of its west wall makes it possible to “read” the structure’s function, the loss of walls and supports jeopardizes the structure’s survival. It cannot be said to retain integrity of design, materials, or workmanship.

The collapsed mixing shed was a character-defining aspect of the brickyard. This function of this three-story building, with its locomotive ramp, hopper, mills, extruder, and cutter, was as vital to brickmaking as the kilns. The machinery and layout of the mixing shed were its significant elements; both have been lost with the removal of the equipment and disintegration of the building.

Two other above-ground features remain, in poor condition. The base for the fuel oil tank and the adjacent brick shed were utilitarian structures (use undetermined). Unlike the kilns

and mixing shed, they appear to have been common solutions to the typical needs of a mid-twentieth century business.

The overall appearance of the Georgia-Carolina Brick and Tile Company Site is incoherent. The linkages among the remnant structures have been lost, and the sense of the individual components as industrial structures has been lost. The property does not seem to have played a significant role in the historical development of the surrounding area, and no important historical events or processes occurred here. It is our opinion that neither the property nor any of its elements are eligible for listing in the National Register of Historic Places.

Evaluation of Archaeological Potential

Regardless of curiosity, for an archaeological site to be eligible for inclusion on the National Register it must not only have integrity, and be able to address research questions, but those questions must be significant. The key in this evaluation is determining whether there are significant research questions appropriate for a mid to late twentieth century brickyard (and then evaluate integrity).

A source often cited when archaeological brickyards are discussed is Karl Gurcke’s *Bricks and Brickmaking: A Handbook for Historical Archaeology* (Gurcke 1987). After describing the brickmaking processes, Gurcke turns to archaeology, providing a comprehensive literature review, at least through the publication date. There are a number of references to seventeenth, eighteenth, and even early nineteenth century kilns and excavations, but none that extend into the twentieth century. His discussions are focused on the failure of archaeologists to adequately record and report on brick as an artifact – not on the ability of brickyards to provide important cultural or even technological information. In short, he fails to provide any reasonable context for the archaeological investigation of twentieth century brickyards.

While the National Register has no

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publication that deals directly with brickyards, *National Register Bulletin 42* (Noble and Spude 1992) does provide information on the evaluation of historic mining properties. This seems to be a reasonable comparison – both are essentially extractive industries and both have extensive mill sites where the materials are converted to a commercial product.

When research questions are discussed under Criterion D, the authors explain that some of the more significant questions might include, “variability and change in mining technology, mining society and culture, and mining landscapes,” going on to frame such topics as:

- the conditions under which innovations in technology take place and are accepted or rejected;
- the formation of communities, the miner’s domestic household, the spatial organization of mining settlements, the production and consumption of commodities in the mining frontier marketplace, ethnicity and ethnic relations, gender, and social structure; and
- the characteristics and evolution of mining landscapes (Noble and Spude 1992:17).

All are viable research topics – but none apply in this case. Most fundamentally, unlike mining, where camps were set up adjacent to the mining operations, brickyards were urban ventures, seemingly situated on the edge of urbanized area. The reasons are tied to freight charges and commercial need. An effort was made to place brickyards not only where there was clay, but also where there was a ready market. Consequently, those who worked in the brickyard form part of the urban society of Augusta and North Augusta and cannot be studied at the brickyard.

Even the presence of a kitchen does not offer the promise of meaningful dietary or social

reconstructions. The operation was conducted in a very limited fashion for a very limited number of individuals with many foods prepared off-site and brought into the building for serving. In addition, the use of this food was voluntary and, according to oral informants, had as much to do with the ability to pay the 50¢ as it did with the quality of the food. In addition, studies into the late nineteenth century reveal that “modern” diets will leave relatively few archaeological indicators (Atwater and Woods 1897, Frissell and Bevier 1899).

Topics associated with technology – while significant to the history of technology – are not appropriate for this site since all informants (several of whom are experts in the area) agree that the plant exhibited virtually nothing special in the way of technological innovation or change – it was the archetypical small brick plant. The only innovative feature mentioned by anyone, was the development of an auger to automatically feed coal into some of the kiln fireboxes. That topic cannot be studied since neither these devices, nor even the kilns, have survived.

The aerial photographs and various period maps do indicate landscape changes. These changes, however, can today be better studied using those sources, coupled with oral informants, than they can on the ground, where there has been much loss and modification resulting from abandonment, salvaging, and decay.

Returning to Noble and Spude (1992:18), they recommend a field assessment that looks for information sources, such as “isolated artifacts, archeological features such as trash dumps or privy pits or wells, standing buildings and structures, machinery, or landforms such as mill tailings or mine waste rock dumps.” These, of course, are “data sets,” and they then recommend that the quantity and quality of these resources be evaluated. Their example is that “domestic trash dumps . . . often contain artifacts carrying information about the consumer behavior of domestic households, household organization, gender, ethnicity, and social structure.”

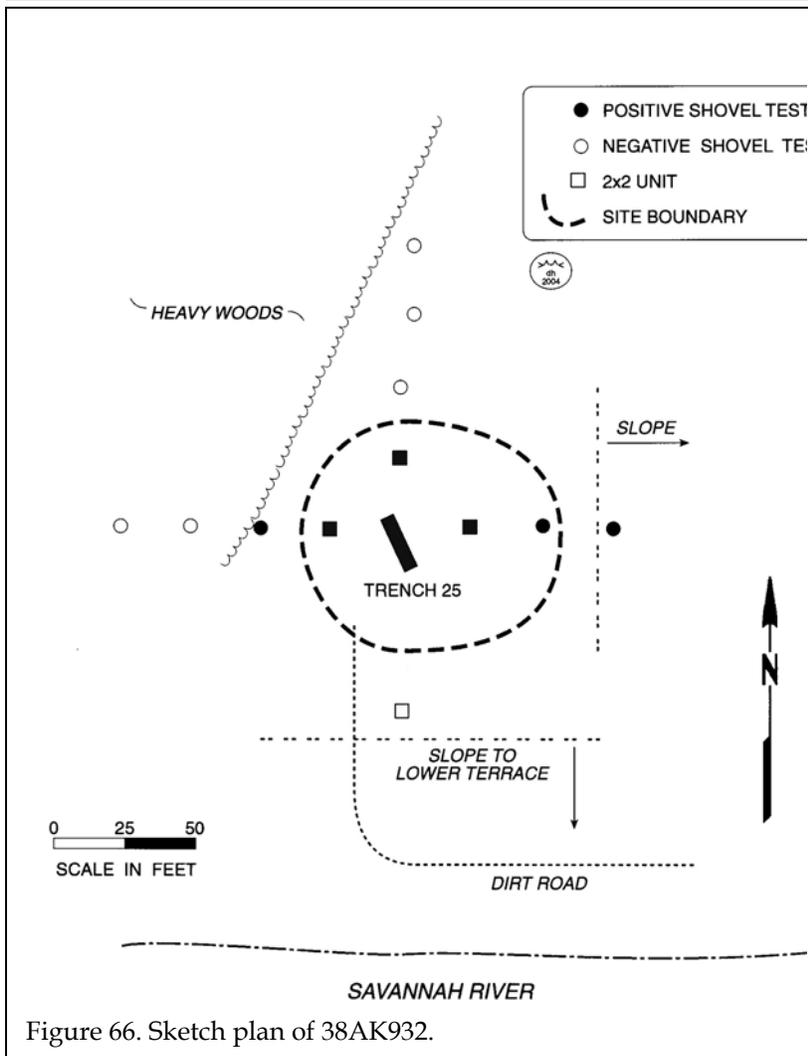


Figure 66. Sketch plan of 38AK932.

When the brickworks are examined, we find that the site has been stripped of all machinery, buildings are in dilapidated to ruinous condition, the only wells noted by informants were drilled, the bathroom facilities are all plumbed, trash dumps (if they existed) have almost certainly been destroyed by the movement of brick, the most technologically characteristic features (such as the drier and kilns) have been extensively damaged, and other features (such as the trestle) have been removed from the landscape. We are looking at fragments of the original site – indicating that integrity is very low.

Nobel and Spude (1992:18) also briefly discuss those facilities that were used into the late

twentieth century, noting that to be eligible a resource must be associated with important recent themes or developments. There are no significant themes represented by this property in the late twentieth century – in fact, it went out of operation because it failed (or was economically unable) to adapt and change its technology.

Consequently, we recommend the site’s archaeological remains not eligible for inclusion on the National Register. We believe that the site has been extensively documented and that the gathered information is significant primarily to assist future researchers develop more detailed contexts for the evaluation of similar sites.

Other Documented Resources

The historic research identified several other structures on the site, including a chair factory, furniture factory, and box factory. We have previously commented that all of these industrial activities were relatively uncommon in South Carolina and

had very minor economic impacts. For example, in 1905 there were three box factories and six furniture factories in South Carolina. The box factories had total capital of \$8,856 (or less than a \$3,000 average) – clearly indicating that such activities required little in the way of land, buildings, or tools. The furniture factories, on the other hand, had total capital of \$162,794 (or an average of about \$27,000) – primarily in “cash and sundries,” so again relatively little was required in the way of land, buildings, or tools. The yearly value of products for the box factories was only \$8,601 or about \$2,900 each, while the six furniture factories combined had products valued at \$202,163 (about \$33,700 each).

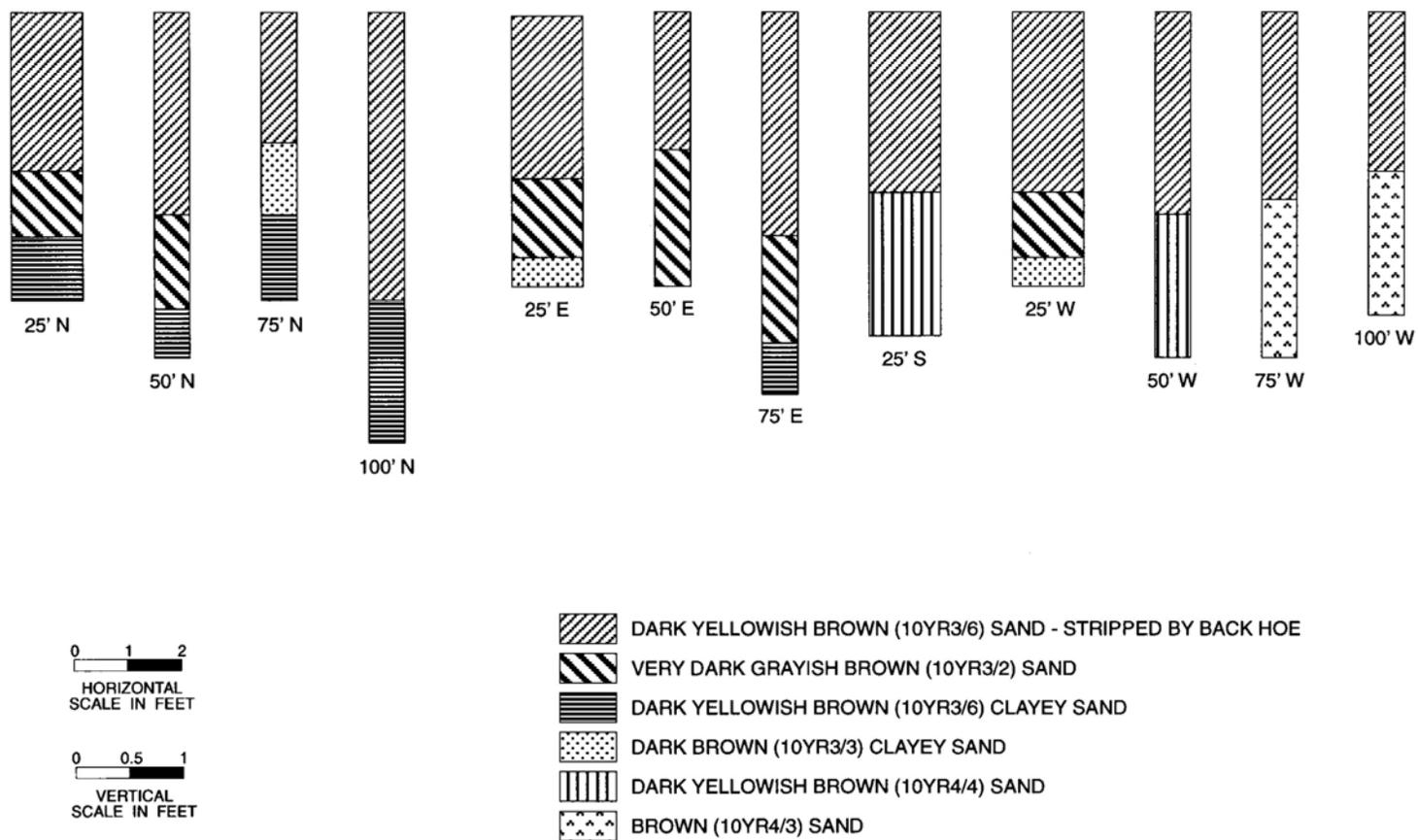


Figure 67. Profiles of test units and shovel tests at 38AK932.

Table 5.
Artifacts Recovered from 38AK932

	Tr 25	2x2 Unit 25'N, Lv 1	2x2 Unit 25'N, Lv 2	100'N Spoil	2x2 Unit 25'E, Lv 1	50'E, Lv 1	75'E, Lv 1	2x2 Unit 25'S, Lv 1	2x2 Unit 25'W, Lv 1	2x2 Unit 25'W, Lv 2	50'W, Lv 1	Totals
Sherds, small	5	1			6				11	5		28
Stallings Plain	1	1	1		1				1	1		6
Stallings Drag & Jab					3				1	1		5
Thoms Creek Reed Punctate					1							1
Thoms Creek Drag & Jab										1		1
Thoms Creek Plain									1			1
Baked Clay Object										1		1
Flakes, quartz	4	5			9	3			10	4		35
Flakes, quartzite	1											1
Flakes, chert	4	3			6	1		1	7	3	1	26
Flakes, argalite	17											17
Flakes, metavolcanic	8	10	4		3	1	1		15	9		51
Fire cracked quartz	2		1		1							4
Worked soapstone	1		1									2
Bifaces, quartz	2											2
Bifaces, chert					1							1
Bifaces, metavolcanic	1								1			2
Bifaces, argelite	1											1
Projectile points, quartz					1							1
Projectile points, chert	1											1
Raw material					2							2
Total Prehistoric	48	20	7	0	34	5	1	1	47	25	1	189
Kaolin pipestem		1										1
Stoneware, brown	5											5
Stoneware, Bristol/Albany				1								1
Stoneware, Albany	11			2								13
Total Historic	16	1	0	3	0	0	0	0	0	0	0	20

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By 1927 Hager (1927:340) observes that the number of box and crate factories (because of the increase in truck farming) increased to four, while no furniture factories remained in South Carolina.

None of these activities had a particularly significant economic impact and it is unlikely that any of them left much in archaeological record. In fact, no archaeological or architectural remains have been identified with any of these resources.

38AK932

This is a small prehistoric site situated at the southern edge of 38AK931. The central UTM is 409277E 3705228N (NAD27 datum). The site is situated at the edge of the second terrace (T2) on Chewacla loam soils at an elevation of about 130 feet AMSL. Situated on the terrace edge, the topography drops to the south. To the south there is a natural drainage. The area is relatively level to the north and west – making the terrace edge and spring drainage the defining features.

The site was first encountered in Trench 25, being recognized as a paleosol (old A horizon with an A/C transition) about 2 feet below the extant ground surface. This paleosol produced a number of Late Woodland lithics, although with a few sherds. The site, however, was not found in either of the two auger tests on Transect 9 located to the north and south of the trench.

Subsequently the site was further tested (and boundaries defined) by the excavation of four 2 by 2 foot units and shovel tests on cardinal directions to the north, south, east, and west (Figure 66). Materials were recovered from a number of these units, but only those with *more than one specimen* were used to define the site boundaries of 80 feet north-south by 90 feet east-west. Profiles varied (see Figure 67), but materials were only found in those units with a distinct paleosol, identified as a very dark grayish brown (10YR3/2) sand. There were, however, some units where the paleosol was preserved, but remains were either absent or very poorly represented (such as 50 feet north, and 75 feet east). The

profile, however, changed most dramatically to the south and west. To the south the paleosol was replaced by a dark yellowish brown (10YR4/4) sand that was sterile. To the west the artifact bearing paleosol was replaced by a brown (10YR4/3) sand that was also sterile.

Artifacts from the site are listed in Table 5. The lithics include a broad range of raw materials – quartz, chert, metavolcanics, and argelite. Also present is soapstone. Diagnostic flaked tools include two projectile points – both Small Savannah River Stemmed points (Oliver 1981). One, a chert example, was recovered from Trench 25 and measures 54.3mm in length, 31.6mm in width, and 9.5mm in thickness. The second point, from the 2 by 2 foot test unit 25 feet east of the trench, is quartz and measures 55.6mm in length, 31.0mm in width, and 9.5mm in thickness. This point type is found in transitional Late Archaic or Early Woodland assemblages.

Also present in the collections are a range of Stallings (identified as St. Simons by DePratter 1979:114-115 and Stallings by Sears and Griffin 1950) and Thom's Creek (Phelps 1968 and Trinkley 1976) sherds. This pottery – like the projectile points – is generally described as transitional between the Late Archaic and Early Woodland, perhaps having a date range of 2,000 B.C. to about 1,000 B.C.

In addition to the prehistoric material from this area, both the trench and other tests produced small quantities of historic remains – always in the upper levels, never in the paleosol. These historic materials (also shown in Table 5) are consistent with the industrial site (38AK931) on which the prehistoric remains occur. The historic remains are dominated by stoneware waster sherds, providing further credence to Newell and Nichols (1998), who comment that wasters are found over a very large area along the Savannah waterfront.

Site 38AK932 exhibits a wide range of data sets, including flakes, bifaces, and finished tools. The assemblage suggests that both preforms

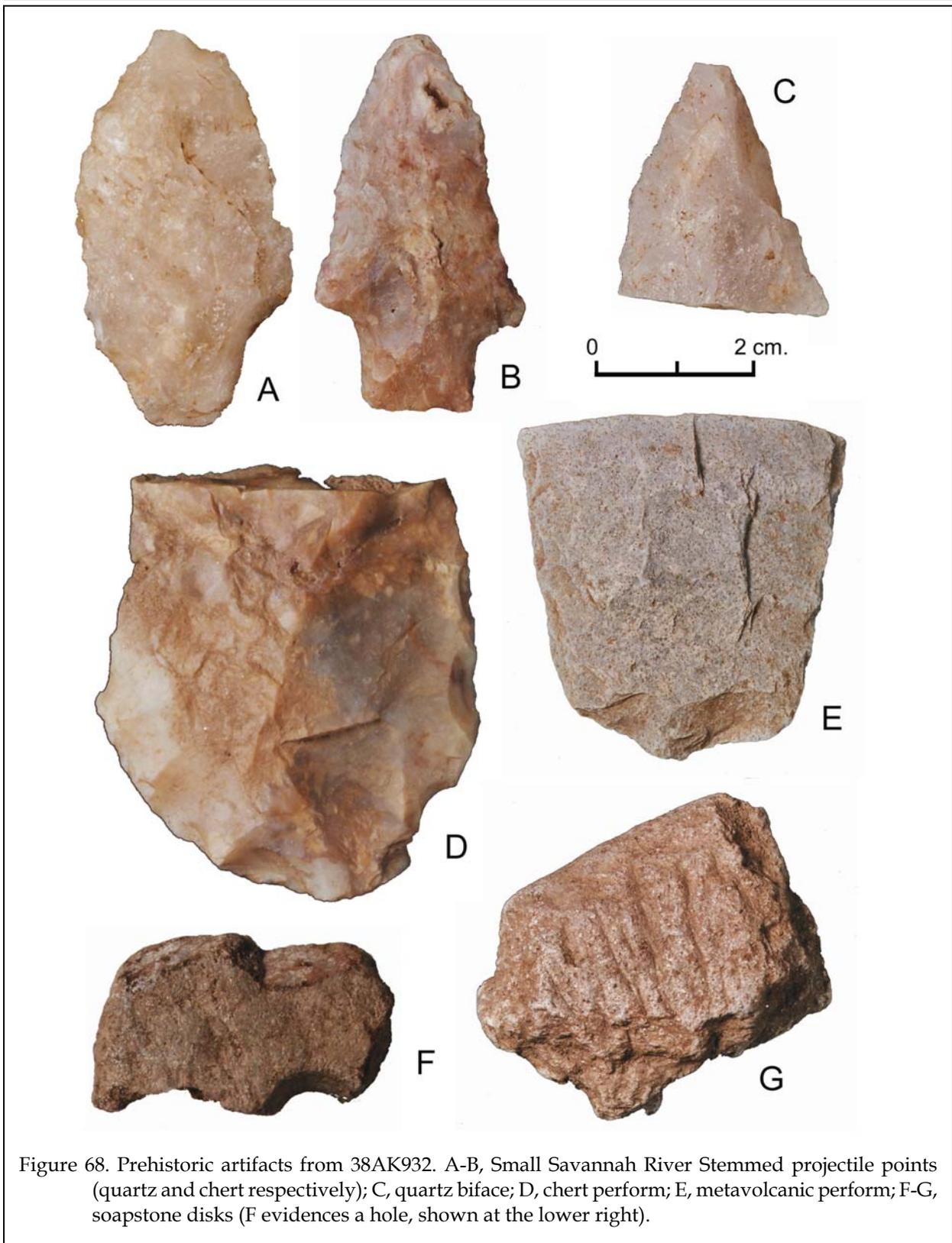


Figure 68. Prehistoric artifacts from 38AK932. A-B, Small Savannah River Stemmed projectile points (quartz and chert respectively); C, quartz biface; D, chert perform; E, metavolcanic perform; F-G, soapstone disks (F evidences a hole, shown at the lower right).

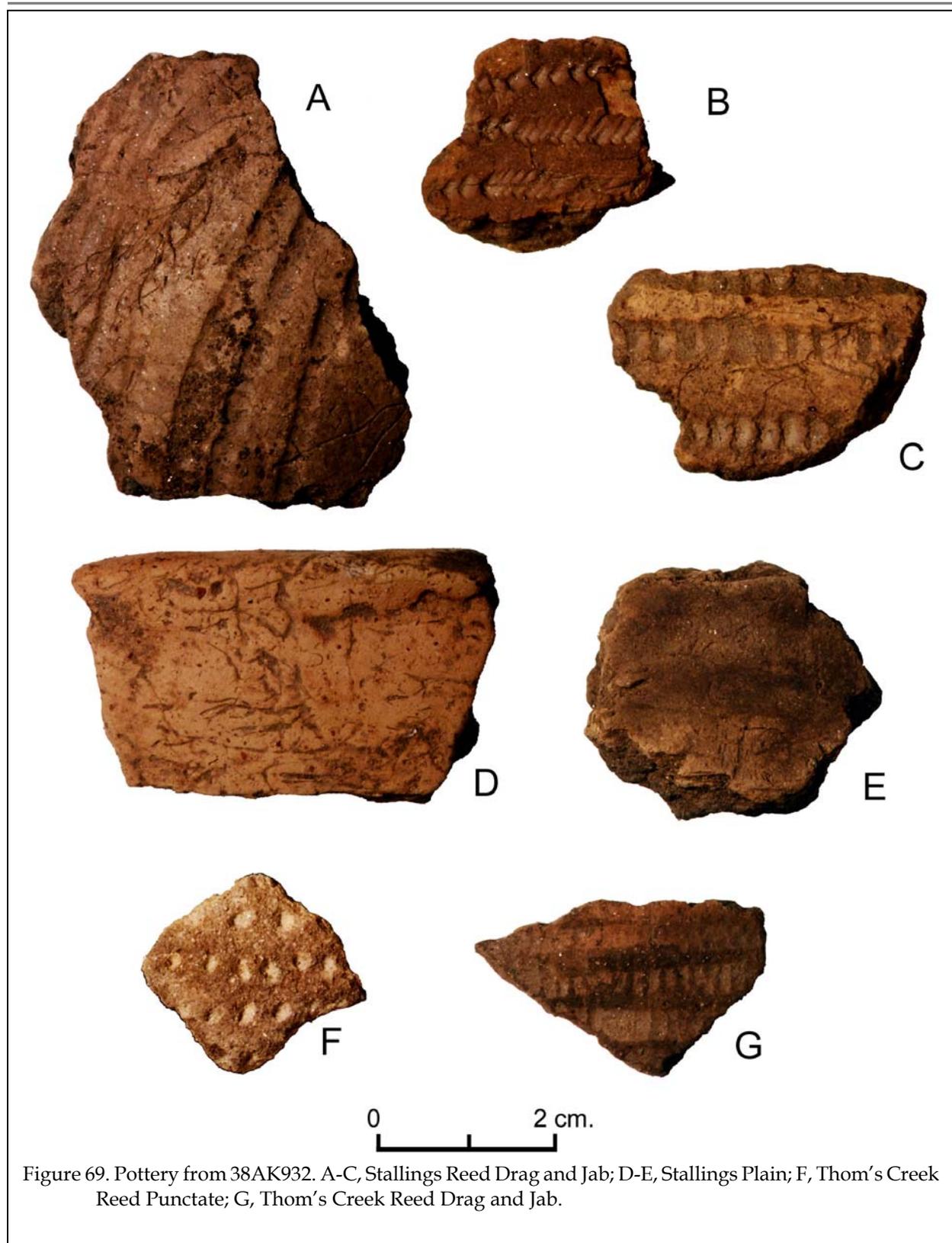


Figure 69. Pottery from 38AK932. A-C, Stallings Reed Drag and Jab; D-E, Stallings Plain; F, Thom's Creek Reed Punctate; G, Thom's Creek Reed Drag and Jab.

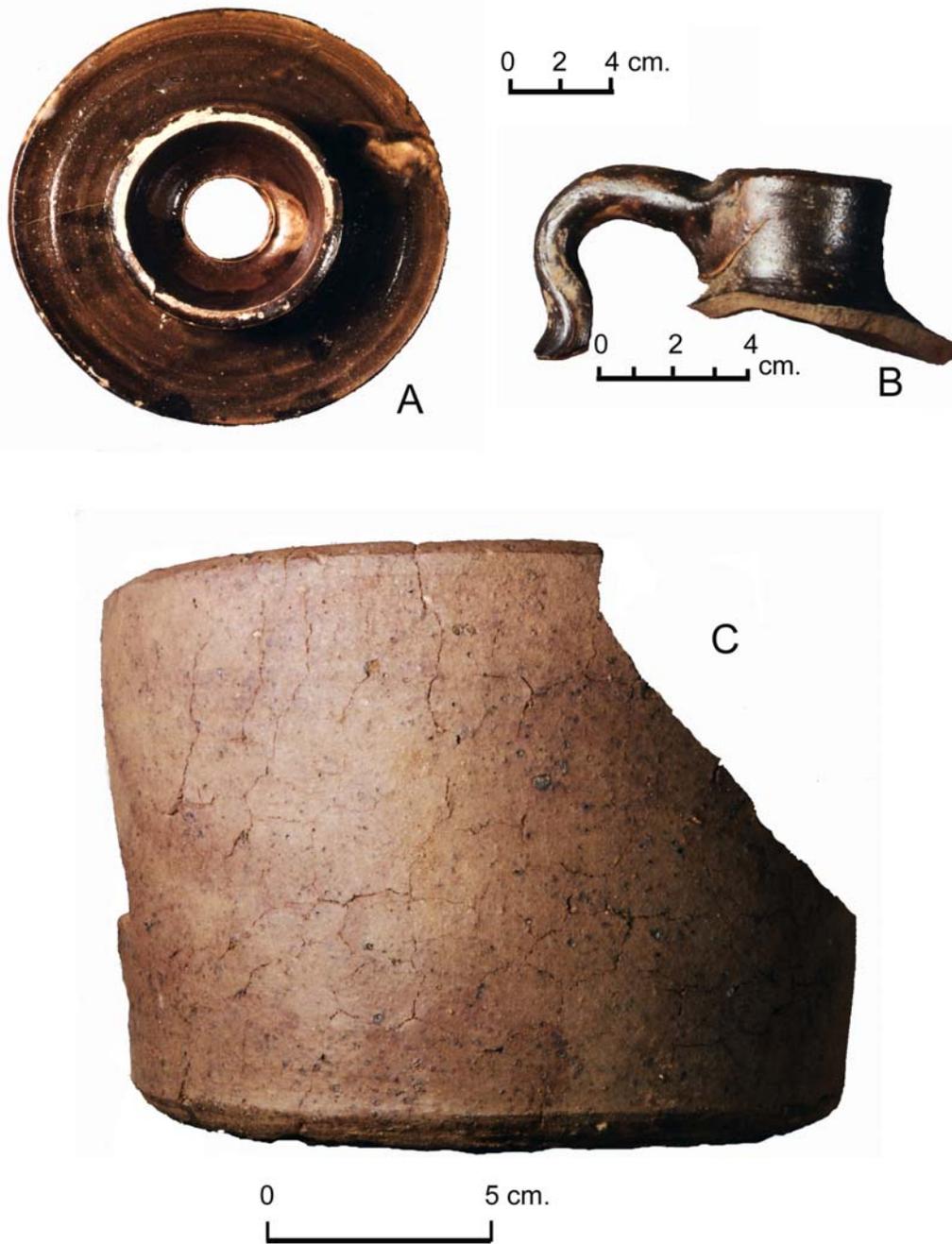


Figure 70. Stoneware wasters from above the prehistoric deposits. A, Albany slip glazed stoneware churn lid; B, Albany slip glazed stoneware lip, neck, and handle (the neck is apparently most similar to Baynham's style according to Newell and Nichols 1998); C, unglazed brown stoneware crock form.

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and raw materials were being brought to the site and finished. A range of lithic materials are also present, including quartz, chert, metavolcanics, and agrelite.

While no features were encountered, the collection does include fire cracked rock, suggesting of hearths. Also present is a backed clay object as well as several soapstone disks – also suggestive of cooking activities.

We are also finding Stallings and Thom's Creek pottery, both consistent with the diagnostic lithics identified from the site, as well as the soapstone and baked clay.

Site integrity is also evaluated as very high – the site is sealed beneath about 2-feet of flood deposits and we have found no indication of historic intrusions. We also note that the site appears to represent a single component, although both Stallings and Thom's Creek materials are intermingled (radiocarbon dates for the two, however, do overlap).

There are a number of Late Archaic/Early Woodland sites identified in the upper coastal plain, many of which are briefly summarized by Sassaman and Anderson (1994:77-90). Most are far larger than 38AK932 and exhibit a much longer occupation, typically including stratified or nonstratified remains from at least the Middle Archaic through Early Woodland (or later). One consistent theme, however, is the presence of these sites on terrace edges, often in close proximity to a spring or drainage. Many of the sites also exhibit an ecotone setting and there is a strong swamp margin orientation (Sassaman and Anderson 1994:150-151).

As a result of their 1994 synthesis (which has been little modified since), Sassaman and Anderson proposed four Late Archaic site types that would be “automatically eligible” for inclusion on the National Register:

- Intact buried deposits, especially if features, floral, or faunal remains were

found;

- Stratified deposits;
- Sites with evidence of structural remains; or
- Areally extensive sites (Sassaman and Anderson 1994:199).

Only one of these criteria – the site is intact and buried – can be applied to 38AK932, although it lacks clear evidence of floral or faunal remains and features are only tentatively indicated by the fire cracked rock.

It can be argued – and one of our colleagues has – that since all four criteria are not applicable, the site is of little consequence. We reject this view not only as far too narrow, but also as ignoring the unique – and largely unexamined – nature of sites such as this.

First, it seems to us that Sassaman and Anderson's criteria are too narrow, especially for a region where, by their own admission, there is still much uncertainty surrounding settlement pattern models. It seems that sites such as 38AK932 provide a unique opportunity to examine a site type that has not been either previously identified or at least previously studied.

Second, we believe that the very nature of this site makes its recovery problematic and that we risk the loss of an opportunity to study an exceptionally well preserved (because of its deep burial) representative of a small, short-term, possibly specialized settlement. We envision that this is precisely the kind of site that researchers such as Anderson and Sassaman would argue in favor of studying, especially given the range of data sets present.

Consequently, we recommend the prehistoric component of 38AK932 eligible for inclusion on the National Register under Criterion D, information potential. In particular, we believe that excavation has the ability to address questions

Table 6.
Artifacts Recovered from Auger Tests and Trenches at 38AK933

	T17 1S	T17.5 base	T18 base	T18 1S	T19 2S	T19 3S	T19.25 1.5S	T19.5 base	T19.5 1.5S	T19.75 1.75S	T20 1S	T20 1.25S	T20 1.5S	T20 1.75S	T20 2S	T20 2.25S	T20 2.5S	T20 3S	T20.5 base	T20.5 2S	T20.75 2S	T21 2S	T21 3S	T22 2S	T22 3S	T22 4S	TR5	TR6	TR7	TR8	TR16	TR18	TR19	TR20	TR21	Totals	
Rect. comp stamp pottery			1			1					1					2											1	1	1	1						1	10
Curv. comp stamp pottery																																				2	2
Cob impressed pottery							1									1												1				1					4
Check stamped pottery																																			1	2	
Incised pottery															1																					1	2
Fillet applique pottery													1																							1	1
Plain smooth/burnished						1																			1		3	1				1			1		8
Small plain smooth sherds		1	1	4	2		6	1	2	2	6	3	5	2	4	10	2	1	2	5	4	2	2	1	3	2		25	3	4	4	4	1	3	4		117
UID sherds											1						1																			2	2
Fired clay pipebowl frag.																																				1	1
UID fire clay object																																				1	1
Quartz flakes				2		1		1	1							1	3	1			1						7	6	4	3	3			1		35	
Chert flakes																			1								1									3	
Metavolcanic flakes														1																						1	1
Biface/biface frag																			2			1						2			1					6	
Projectile point																																				1	1
Quartz raw material																											3							2	1	6	
Trade bead																																				1	1
Tinkling cone						1																														1	1
Kaolin pipe stem/bowl frag																									1								2			3	3
Cut glass																1																				1	1
Manganese glass			1																								1									2	2
Industrial stoneware	1																																			1	1
Whiteware, undec.				1																																1	1
Totals	1	1	2	6	4	2	9	1	3	3	6	5	5	4	4	13	9	2	3	7	5	2	3	1	4	3	13	38	10	16	8	3	6	6	4	212	

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Table 7.
Artifacts Recovered from Test Units 1 and 2 at 38AK933

	TU 1	TU 2	TU 2, ph 1	TU 2, ph 2	TU 2, ph 3	Totals
Rect. comp stamp pottery	1	1				2
Cob impressed pottery		2		1		3
Check stamped pottery		1				1
Plain smooth/burnished	7	12			1	20
Small sherds	121	124	11	1	4	261
UID sherds	2				1	3
Worked soapstone		1				1
Quartz flakes	8	6				14
Chert flakes	1		1			2
Metavolcanic flakes	1					1
Fire cracked quartz	1					1
Rounded pebbles		6				6
Coarse EW, lead glazed		1				1
Faunal material		1		1		2
Ethnobotanical material		1		1		2
Clear glass (modern)	4					4
Totals	146	156	12	4	6	324

concerning site function, helping to broaden our understanding of the competing settlement models for the Interior Coastal Plain of South Carolina.

The overlying historic component is recommended as a non-contributing element and no further work is recommended.

38AK933

This is a large contact period Native American site situated in the second terrace (T2) of the open field just beyond (i.e., west of) the industrial section of the project tract (Figure 53). A central UTM is 409004E 3705393N (NAD27 datum) and the elevations in this area are approximately 130 feet AMSL. The Savannah River is about 200 feet to the south and the remains of the mid to late eighteenth century Campbell Town or Campbellton are found about 0.6 mile to the west.

As discussed in the historic overview, this field has been under cultivation or in pasture throughout the twentieth century and probably before. Geological testing reveals a series of flood deposits, with evidence of cultivation between

floods – a situation typical for floodplain fields.

Both auger tests and geological testing revealed the remains of a paleosol or old plowzone about 2 feet below the modern surface. Portions of this old plowzone are very dark and appear to represent a plowed midden deposit. The midden is areally spotty, varying in thickness from 0.1 foot to nearly 0.6 feet. At the base of the old plowzone plow scars are clearly visible in some areas, documenting that the midden has been plowed. Artifacts are most concentrated in the midden

zone, but do occur about 0.5 foot above the midden – probably representing the overlying plowzone. It appears that the midden area was covered with deposits shortly after occupation and plowing has mixed the midden with the overlying sterile remains, creating a low density artifact zone (where sherds, for example, have been fragmented by plowing) above the higher density midden zone (where artifacts are less damaged).

Testing in the site area incorporated 25 auger tests at 100-foot intervals, four at 50-foot intervals, 12 at 25-foot intervals, and nine trenches. Of the 41 auger tests 27 (66%) were positive. Of these 27 positive tests, four (15%) produced nineteenth or twentieth century remains overlying the prehistoric deposits – representing materials discarded in the fields or brought in by flooding. The artifacts are listed in Table 6.

Two 5-foot units were also excavated at the site, in an area that was felt to be generally representative of site density (i.e., the two areas had “average” density). The results of those excavations can be seen in Table 7 and in Figures 71 and 72.

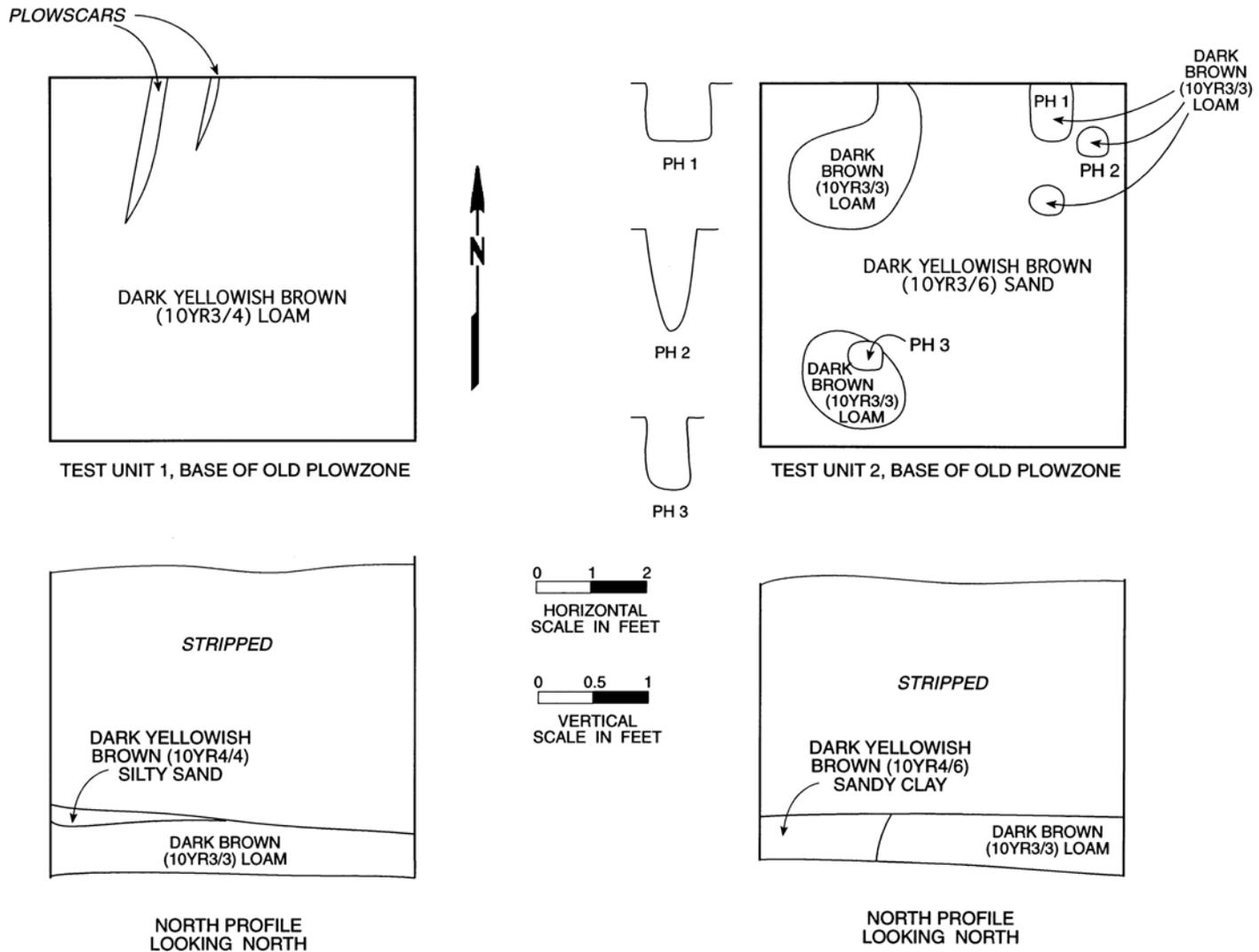


Figure 71. Plan and profiles of Test Units 1 and 2, 38AK933.

IDENTIFIED ARCHAEOLOGICAL SITES



Figure 72. Test Unit 2, base of old plowzone, view to the

While the most common artifacts are plain, smoothed sherds, a variety of surface treatments are present. In order of frequency these include rectilinear complicated stamped, plain or burnished, and roughened sherds, many of which are probably corn cob impressed. Small quantities of check stamped, incised, and curvilinear complicated stamped are also present in the assemblage. Rim decorations are limited to fillet appliquéés. At least two distinct pastes were noted in the collection, although at this survey level no effort was made to separate surface treatments – a fine, micaceous clay and a coarser paste with noticeable quartz sand inclusions. It is likely that at least two distinct “types” are represented.

Accompanying these ceramics are a small assortment of trade items, including a blue glass seed bead, a brass tinkling cone, a kaolin pipe stem, and a fragment of light green glass that has been intentionally cut. While we have no radiocarbon dates, there seems to be little doubt that these remains are contact period. Certainly this is consistent with Anderson’s very detailed account of the Savannah River Valley’s abandonment after ca. A.D. 1450 and its re-occupation in the mid to late seventeenth century (Anderson 1994:324-327).

Nevertheless, the recovery pottery cannot be convincingly typed since it resembles a broad range of late wares produced by Native Americans in this region.

Green, discussing pottery identified at a known Yemassee town, describes much of the pottery as Altamaha, noting much rectilinear complicated stamping, check stamping, and incising, all with a temper of “small to large particles of sand and grit, although some specimens contain quantities

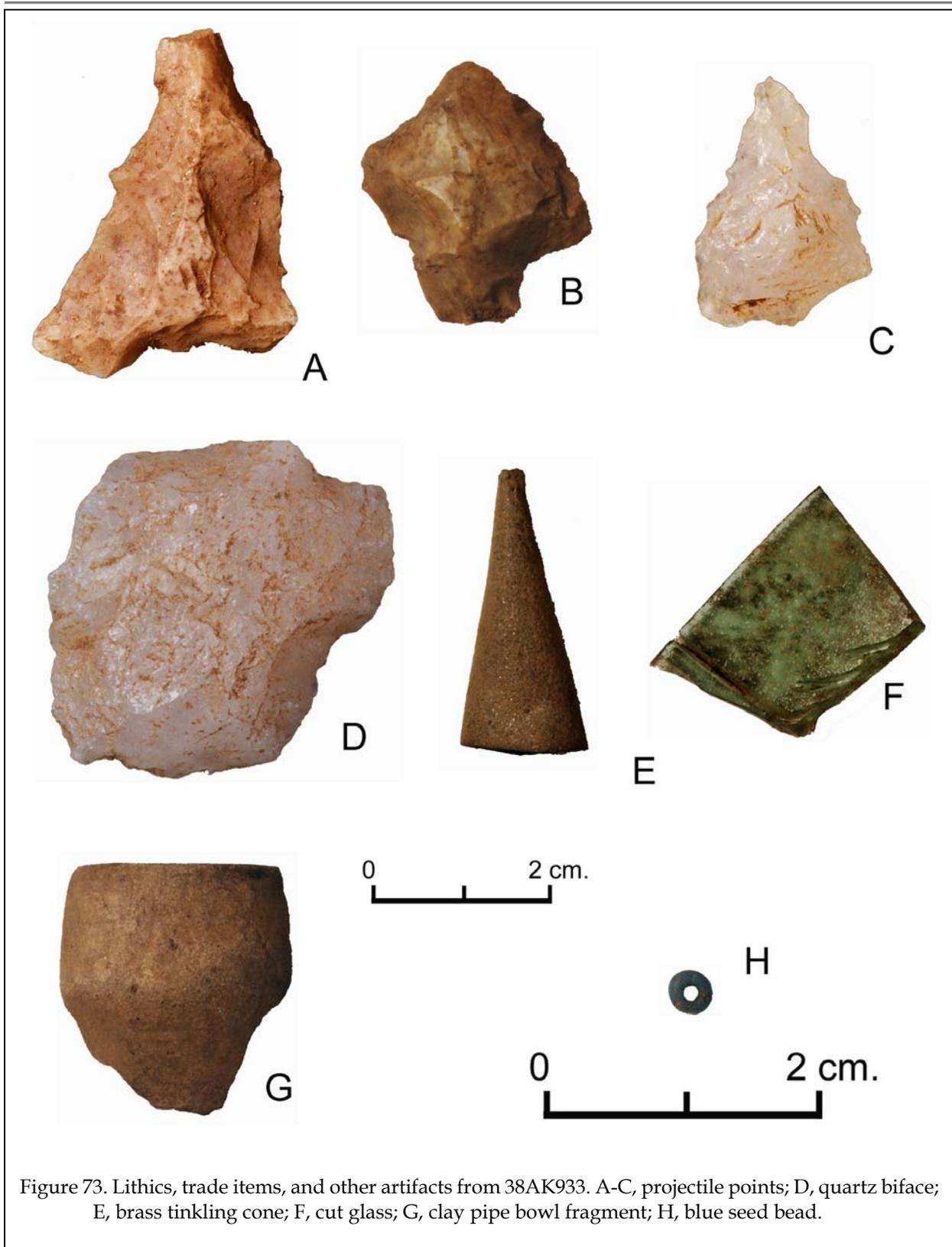
of grog and limestone/marl” (Green 1991:96).

It may also be compared to the Qualla type associated with historic Cherokee, with surface treatments of complicated stamped (including both curvilinear and rectilinear), burnished, check stamped, cord marked, and corncob impressed. The paste tends to be sand or crushed grit, although some shell tempered wares are also identified (Egloff 1967:38-46; cf. Hally 1986).

In the Catawba Valley Moore suggests that Cowans Ford pottery is characteristic of the A.D. 1680-1725 period. This ware has a paste that ranges from fine to coarse sand. Surface treatments are complicated stamped (curvilinear being most common), plain or burnished, incised, and corncob impressed (Moore 2002:267).

For the Siouan Piedmont, Wilson (1983:377-479) provides the best synthesis, identifying the prevailing pottery as Old Town – a pottery tempered with very fine sand or no sand at all. Surface treatments include net impressing, corncob impressed, smoothed or burnished, complicated stamping, and check stamping.

From the Upper Savannah River Hally



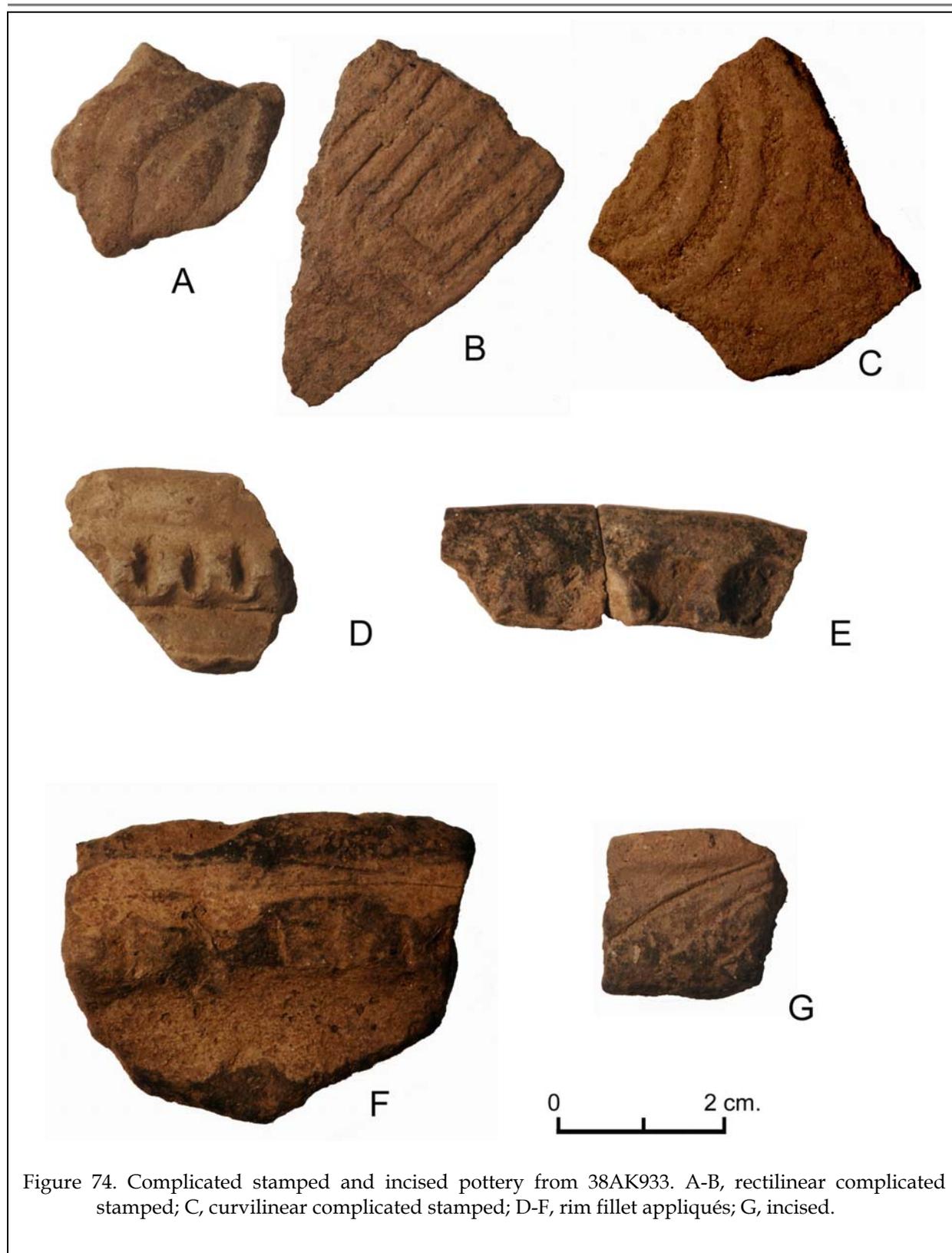


Figure 74. Complicated stamped and incised pottery from 38AK933. A-B, rectilinear complicated stamped; C, curvilinear complicated stamped; D-F, rim fillet appliqués; G, incised.

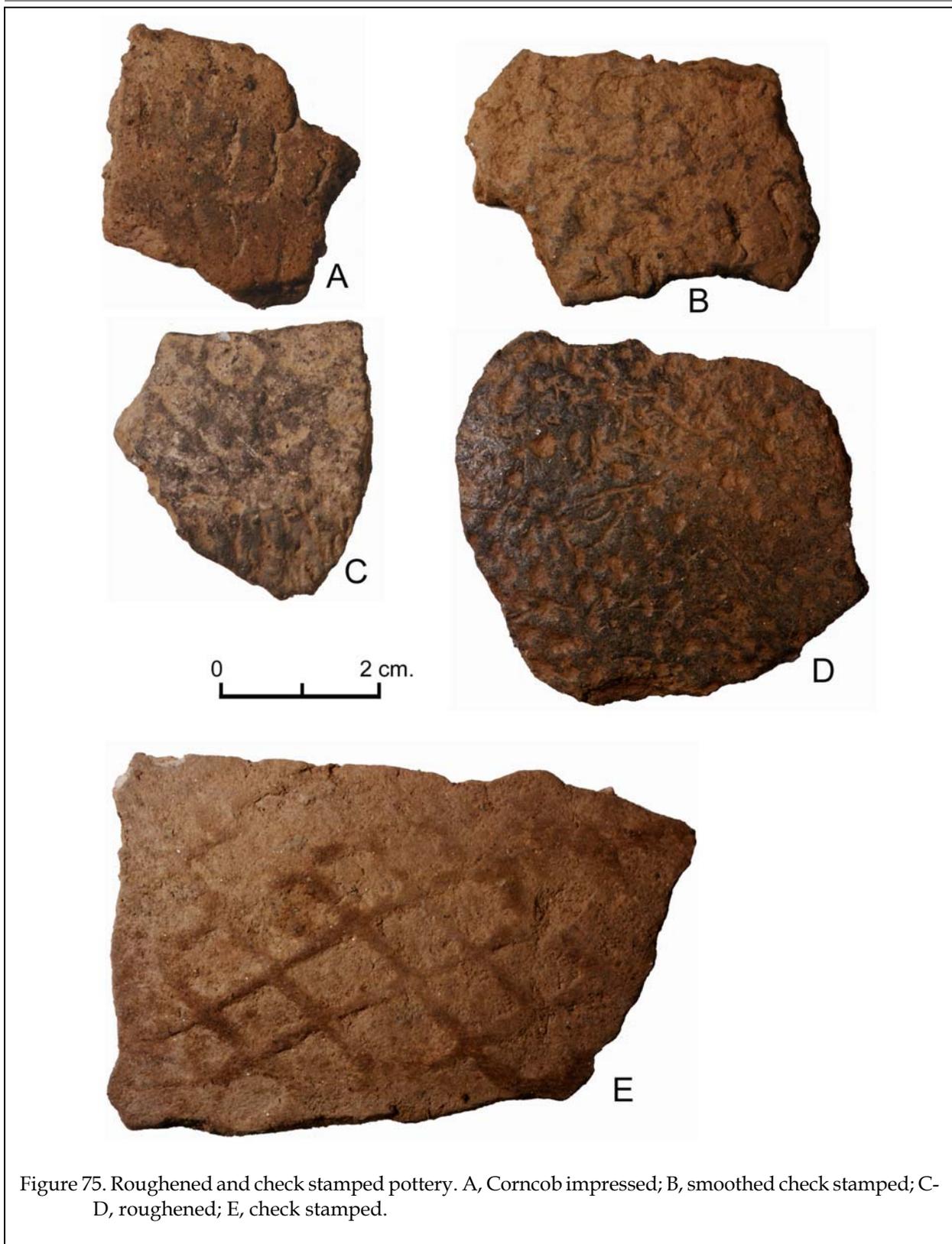


Figure 75. Roughened and check stamped pottery. A, Corncob impressed; B, smoothed check stamped; C-D, roughened; E, check stamped.

IDENTIFIED ARCHAEOLOGICAL SITES

(1990) associates Lamar Complicated Stamped and Lamar Incised with the historic Cherokee Estatoe phase (A.D. 1650-1750). Also present is brushing, check stamping, plain, and burnished wares. In general we can accept this phase as providing a refinement to Egloff's Qualla.

For the Middle Savannah River Sassaman and his colleagues resort to briefly mentioning the Appalachian remains from Palachacolas - materials that include red filmed plain, roughened, and incised (Kasita Red Filmed, Walnut Roughened, and Ocmulgee Fields Incised respectively). Also present at the site was shell-tempered pottery (Sassaman et al. 1990:212). Otherwise, they note that the Shawnee, Apalachee, Apalachicola, Chickasaw, Yamacraw, and Yuchi all were in the area and presumably made some archaeological contributions. Their comment that, in 1990, "practically no information of an archaeological nature is available" is regrettably still the case (Sassaman et al. 1990:16). This situation has, unfortunately, not been improved by even the most recent investigations at nearby Fort Moore (Groover and Johnson 2002).

We feel certain, given the controversy surrounding the presence of Chickasaw in the area, some effort will be made to associate the remains at 38AK933 with this group. Such an effort would be foolhardy at best and intellectually indefensible at worst. We have previously discussed (and illustrated in Figure 14) the wares that have been associated with the Chickasaw in their northern Mississippi homeland. There are some broad similarities - such as the roughened surface finish - but there are also very significant differences, such as the absence of complicated stamped surface treatments. In addition, there is no indication of either shell or limestone temper at 38AK933.

Moreover, it is questionable whether a close ethnic affiliation is possible for much pottery. As Coe explained in 1961, "there is no necessary correlation between ethnic and ceramic continuity" (Coe 1961:59). There seems to have been widespread adaptation of a range of Lamar

styles and motifs. Shell tempering is found in Cherokee and Yemassee pottery - not exclusively in Chickasaw wares.

It would be far wiser to recognize that a number of groups came into close cultural contact in the Savannah River valley around Augusta and sites such as 38AK933 may have been occupied by any number of ethnic groups.

Turning to the lithics, several of the projectile points are very crudely manufactured triangular examples as well as one small stemmed point that can be classified as a Randolph Stemmed (Coe 1964:49-50; Coe 1995:206).

Tinkling cones are conical ornaments rolled from trapezoidal plates of thin brass sheet metal. Brain notes that they were "either attached to clothing and bags or worn on strings attached to the angles and wrists" (Brain 1979:195). Their name comes from the fact that they made a "tinkling sound" when rattled. The one example from 38AK933 appears well made and suggests that it was a trade item (as opposed to one made by the Native Americans from sheet brass). The dark blue seed bead corresponds to Brain's Variety IIA6 (Kidd IIA55-57) (Brain 1979:102). While the temporal significance has to be carefully accepted, Brain suggests that this type of bead is found most commonly from 1700 to 1740, with reduced numbers from 1740 to 1767, disappearing from trade shortly thereafter. Such beads, at least in North Carolina, have frequently been associated with burials.

The trenches and auger tests were used to establish site boundaries measuring about 350 feet north-south and at least 550 feet east-west, although the site likely extends to the west, outside our project area. While the site occupies an area of about 4 acres, there seems to be a core area, either of denser occupation or better midden preservation - we aren't sure which.

Much of the site appears to be relatively low density; this may simply indicate the presence of several house structures, spread across the field,

with the resulting concentrations not being clearly defined by survey level testing. This would certainly be consistent with a hamlet established in vicinity to Fort Moore to take advantage of the English trading partners, as well as to secure some degree of protection.

Test Unit 2 produced several well defined postholes, ranging in depth from 0.4 to 0.7 foot. This confirms that postholes and features are present at the site and that they are likely well preserved. Several of these postholes produced both ethnobotanical remains (carbonized wood) and faunal remains (small fragments of animal bone). This suggests that it will be possible to recover subsistence information from the site.

Finally, sites of this time period are known to be associated with human remains. Although no skeletal remains were encountered during the survey they may possibly be present, given the age of the site, the nature of Native American population dynamics at this time, and the presence of artifacts often found in association with burials.

Site 38AK933 has yielded a broad range of data sets - lithics, including flakes and finished tools; at least two probable types of pottery; at least one Native American tobacco pipe bowl; a small assortment of eighteenth century trade goods, including a trade bead, brass tinkling cone, kaolin pipe stem, and cut glass; intact features; charcoal and faunal remains; and evidence of intrasite patterning, possibly reflecting individual house loci. This is an impressive array of data sets and, we believe, these data can address a broad range of significant research questions.

Most fundamentally, the site provides an opportunity to better examine contact period pottery - perhaps helping to establish types or at least begin to unravel some of the confusion currently found in the lexicon. This site may offer a springboard toward the better examination of Native American wares at nearby Fort Moore, or

at the very least Fort Moore offers an site ripe for even simple comparisons.

It also provides an opportunity to examine and explore Native American and white contact on the South Carolina border. If human remains are present, it provides the opportunity to dramatically expand our understanding of diet, disease, and health among Native American populations nearly a hundred years after initial contact.

The site provides an opportunity to better understand settlements in the historic period - exploring a small hamlet to learn about housing, site activities, and burial practices.

There is also good evidence that the integrity at this site is very high. The 2 feet of alluvium has protected the site from looting and pot hunting, as well as agriculture. The site was fortuitously situated off the industrial section of the property. Our investigations reveal dark, intact midden, indicating that while plowing has occurred, it has not aggressively mixed the site.

Consequently, we recommend the site as eligible for inclusion on the National Register of Historic Places under Criterion D, information potential. This is an exceptionally important site for the understanding of contact period Native American populations along the Middle Savannah River Valley.

38AK934

This site is situated at the north edge of the study tract, between the cultivated fields and the excavated clay pits (Figure 53). The central UTM is 408868E 3705825N. The site is in an area of sparse second growth vegetation, suggesting that at one time it was completely open - either for cultivation or, more likely, for borrow activities. The elevation is about 130 feet AMSL and the soils are Chewacla loams.

IDENTIFIED ARCHAEOLOGICAL SITES



Figure 76. Baynham flowerpot building at 38AK935, view to the west-southwest.

found just beyond the site to the west. None of the brick evidences mortar, so it appears that this is discard from the brickmaking process.

The prehistoric artifacts recovered are six quartz flakes from Trench 9 and two fragments of possible quartz raw materials from Trench 10. The nearby auger tests failed to produce any materials.

The site was first encountered by geological testing in Trench 9 in a paleosol about 1.5 feet below the existing ground level. Site boundaries were established by Trench 10 to the

The data sets from this site are very sparse, consisting of only flakes. No diagnostic materials, no evidence of features (such as fire cracked rock or pits in the profiles of the two trenches), no evidence of floral or faunal remains, and the very low density of remains suggest that the site has very little ability to address significant research questions.

Table 8.
Artifacts Recovered from 38AK934

	TR 9	TR 10
Flakes, quartz	6	
Raw material, quartz		2

east, and the auger tests which surrounded the site. As a result of this work the site is estimated to measure, at most, 100 by 100 feet. The actual dimensions are likely smaller given the very low density of archaeological remains.

The site is recommended not eligible for inclusion on the National Register of Historic Places and no additional management activities are recommended, pending the review of the SHPO.

This site also evidences far greater disturbance from modern activities, with the upper 1.5 feet containing brick rubble, clay lenses, and other evidence of mining activities. In addition, at least one brick filled pit was found in the profile of Trench 9 extending into the prehistoric paleosol. No historic artifacts were encountered, although modern (i.e., late twentieth century) trash was

Table 9.
Artifacts Recovered from
38AK935

	Surface
Flower pot frag, fired	1
Flower pot frag, green	3
Totals	4

38AK935

This is a relatively small site situated at the northern edge of the study tract, partially on the existing North Augusta Greenway (Figure 53). The central UTM is 409540E

3705630N and the site elevation is about 160 feet AMSL. This is the site of the Baynham Flowerpot Factory during the late twentieth century (Newell and Nichols 1998:23-25). This pottery began in the

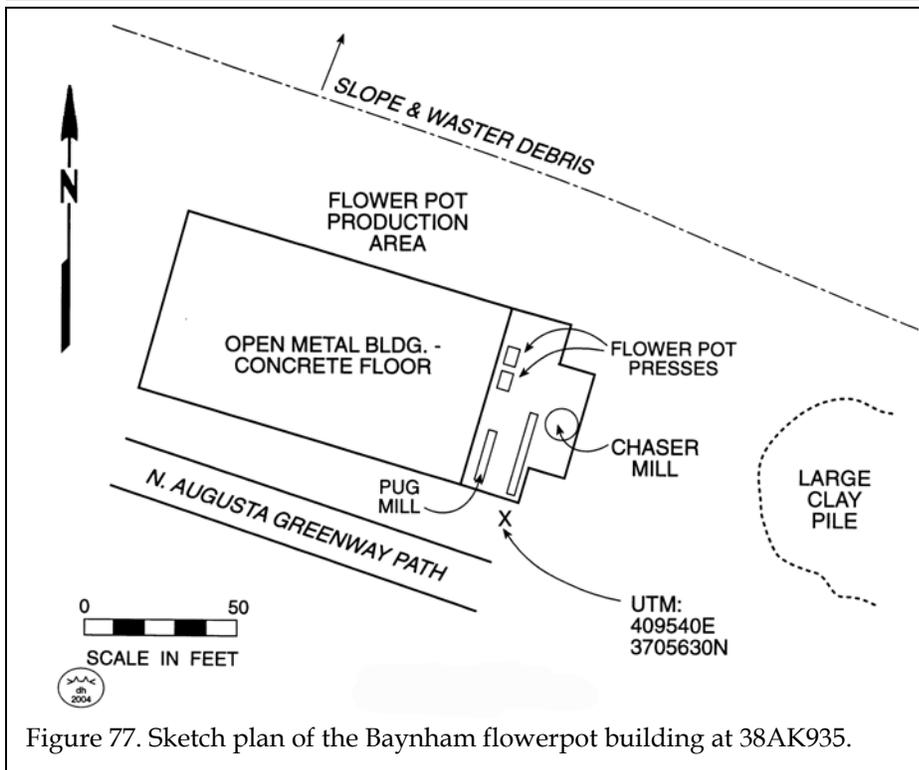


Figure 77. Sketch plan of the Baynham flowerpot building at 38AK935.

Lawton ca. 1870 (Newell and Nichols 1998:24). Baldwin actually seems to state that it was the flowerpot presses that were acquired from an earlier potter (Baldwin 1993:113).

Regardless of origin, the processing side of the building contains an iron chaser mill, sometimes also called an edge-runner mill. Similar mills were used in brickmaking and Searle (1920:125-128) describes several types. All, however, consist of a pair of heavy rollers that rotate on a stationary bed. Generally part of the bed is a grate, allowing

early to mid-1960s when Buddy Baynham moved it from the earlier Buena Vista Avenue site to this site (Nancy Fulmer Baynham, quoted in Newell and Nichols 1998:47-48).

the crushed material to fall through. Often water is mixed with the clay at this stage, in which case the devise is often called a wet pan.

Developed as an utilitarian structure, the one building at the site has steel beams and girders supporting a metal panel gable roof and corrugated metal panel walls. The western third of the building (where the pottery machinery is located) has an earthen floor, while the remaining portion of the structure has a concrete floor.

The source of the clay at the Baynham site is still extant large mound to the west. Clay would have been wheel barrowed to the pan for grinding. The example at the Baynham site does not appear to have a grate, but the resulting material would have been hand shoveled from the pan to the surrounding hopper, where it would have been deposited under the mill.

Based on oral history Newell and Nichols (1998:23) state that the gas-fired circular flowerpot kiln was under the metal roof building, although we can see no evidence of it today. At the east end of the building they report a "large iron clay mill" and "flower pot presses." They believe, based on oral history, that the presses date to the first Baynham mill (ca. 1910) on the east side of Georgia Avenue). Likewise, they suggest that the clay mill was purchased by Mark Baynham from an earlier pottery. They state that Baldwin believes the mill was brought to the area by Henry Roscoe

From there small amounts would have been placed on a conveyor that took the clay up to a pug mill. This is a machine for mixing water and clay, consisting of a long, horizontal barrel containing a longitudinal shaft fitted with knives. These slice through the clay, mixing it with water that is added by sprays. The knives are canted to provide some screw action, forcing the clay along the barrel and out the end. Again, very similar devices were used in brick works and Searle (1920:134-136) provides several examples.

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Equipment in the Baynham flowerpot factory.



Chaser mill showing pan and two heavy iron wheels.



Conveyor for ground clay moving it up to the pug mill.



Pug mill.



Two mechanical rams or flowerpot presses.



Close-up of one press, showing the ram and the brass equipment tag.

Figure 78. Views of the works at 38AK935.

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT PROJECT

Table 10.
Isolated Finds in the Project Area

	Tr 1A	Tr 3	Tr 11	T20 2N	T20 3N	T25 base	Totals
Prehistoric sherd, small	1						1
Flake, quartz		1				1	2
Stoneware, alkaline glaze				1			1
UID nail fragment					1		1
Brick fragments			4				4
Totals	1	1	4	1	1	1	9

From the pug mill the extrusion was apparently cut in sections, dipped in kerosene to help prevent the clay from sticking and was moved by conveyor to the two presses (actually mechanical rams). These presses have molds inserted for different size flowerpots. Once stamped out, the green pots were allowed to dry and then fired. There are abundant samples of green pot fragments on the earthen floor of the shed and there are pottery wasters on the slopes to the north of the building. Table 9 lists the recovered materials from this site.

We have found no manufacturer's markings on the chaser mill, although a heavy encrustation of dried grease may hide a name or other identifications. One gear, which seems to be a replacement, was identified with the markings, "Boston USA/20 P.A./P.A. 1048Y/G."

No identification could be found on the pug mill, although its location made careful inspection impossible.

One of the flowerpot presses, however, was marked "Baird Machine" on its housing and a brass tag on the side read, "Manf'd By/Baird Machine and Manufacturing Co./ Detroit, Mich./USA." The other press also has a brass tag, but it was largely unreadable from corrosion. It was possible to discern that this press was "Serial 65." Careful inspection reveals differences in the two presses, suggesting that they may have been acquired at different time periods.

We have found that Baird Machine &

Manufacturing Company was in business by 1910 and continued until about 1940. Located in Detroit (Wayne County), Michigan, the president and treasurer was William J. Baird, the vice-president was Andrew Baird, and Crawford Baird was the secretary. An advertisement in the 1911 Detroit City Directory explains that the company was the

manufacturer of "Special Machinery, Tools, Dies, Jigs and Gears, Experimental and Model Works," while another advertisement states that they were, "Designers and Manufacturers of / Special and Pharmaceutical Machinery / Pottery Machinery / Tools, Dies and Gears, Gasoline Engines / Experimental and Model Work / York Air Compressors for Dentists, Doctors, Artists, Etc." Consequently, the two flowerpot presses may have come from Baynham's original pottery.

The chaser mill appears to be an amalgamation of several generations of parts. The pan itself appears repaired multiple times. At least one gear appears to be a replacement. The date of this device cannot be accurately determined at this time, but it does not appear to be entirely original.

Site 38AK935, given its recent age and construction is evaluated as not eligible for inclusion on the National Register of Historic Places. Nevertheless, we do recommend that an effort be made to relocate the equipment to a museum or organization interested in preserving the history of pottery making in the Augusta area. A perfect choice would be an organization in Aiken or Edgefield counties - the heart of the pottery production in South Carolina.

Isolated Finds

During the course of the auger testing we identified six tests with nine artifacts - three prehistoric and six historic. In each case (both prehistoric and historic) the remains were identified within the upper foot of the deposits.

IDENTIFIED ARCHAEOLOGICAL SITES

For the prehistoric remains this suggests that the materials are deposited from disturbed contexts, perhaps from the clay pits or from various industrial activities. These remains are consistent with the others identified for site on the study tract, but were so far removed from the established site boundaries that we have decided to identify them as isolated finds.

By definition these isolated remains are not eligible for inclusion on the National Register.

GEOMORPHOLOGY STUDY

Keith C. Seramur, PG
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Boone, North Carolina

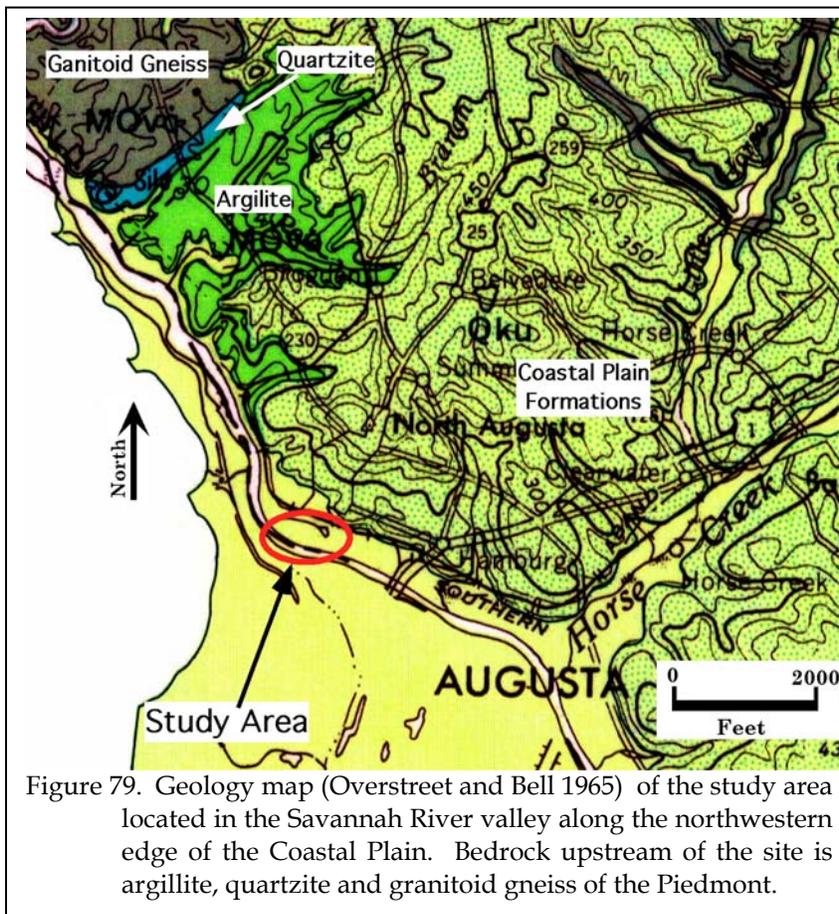
Geologic Setting

The Savannah River valley at North Augusta is located along the northwestern edge of the Coastal Plain physiographic province. The study area is underlain by Coastal Plain formations but Piedmont argillite is mapped less than 2,000 feet upstream (Figure 79) (Overstreet

and Bell 1965). The Savannah River valley is cut into Coastal Plain sediment and sedimentary rocks. The confluence of Horse Creek and the Savannah River is about 4,000 feet downstream.

The Savannah River valley at North Augusta is 3,500 feet wide and incised about 100 feet below the surrounding uplands. The Savannah River flows behind a

dam structure at the project location so the river elevation is artificially high and lower terrace(s) are submerged. There is reportedly one terrace below the river elevation, but it was a low, frequently inundated surface. For the purpose of this investigation the submerged terrace will be assigned a T_0 designation. A narrow T_1 terrace occurs along the river channel (Figure 80) about 14 feet above the present river elevation. The T_1 terrace can be divided into a T_{1a} and T_{1b} surface. The T_1 terrace becomes very narrow across the eastern portion of the project area. The T_1 and T_2 terraces north of the river are about 2,000 feet wide. The T_2 terrace is about 24 feet above the present river elevation. The project area and geomorphology investigation is limited to areas on the T_2



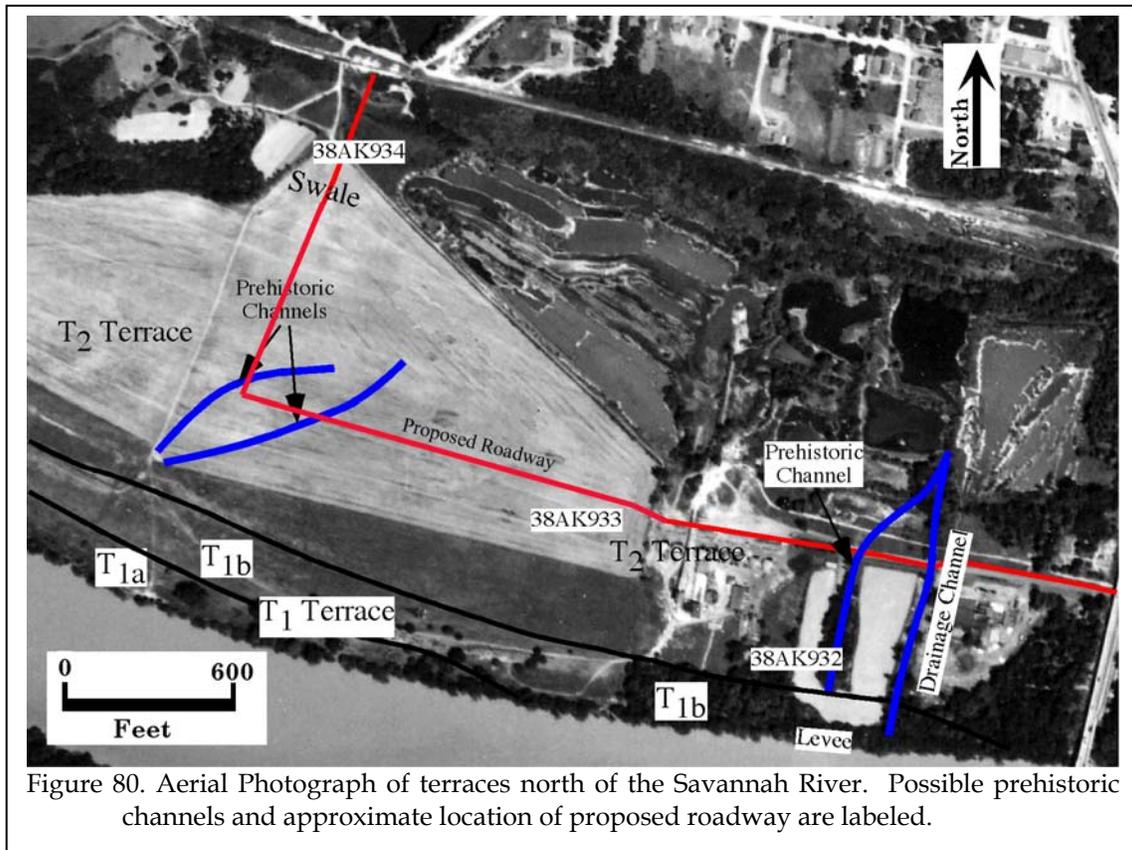


Figure 80. Aerial Photograph of terraces north of the Savannah River. Possible prehistoric channels and approximate location of proposed roadway are labeled.

terrace. The location of all trenches is shown in Figure 53, appearing on page 85 of this study.

Agricultural Fields and Site 38AK933

Descriptions

Thirteen trenches were excavated into the T₂ terrace in the agricultural fields at the west end of the project. Trenches TR 1 through TR 7 were located along the proposed roadway (Figure 81). Trenches TR 8 and TR 16 through TR 20 were excavated to delineate the horizontal extent of a cultural horizon identified in trenches TR 6 and TR 7 (Figure 82).

Soil profiles were recorded in each of these trenches and are shown in the following figures. Sediment on this terrace consisted of silty sand and sandy silts. Historic fill material was recorded in several of the trenches closer to the

industrial portion of the project area.

Four paleosols (buried soils) were recorded on the T₂ terrace. These paleosols are recognized primarily as buried A-horizons (Ab) with E- and B- horizons recognized in some of the profiles. Three stratified paleosols were recorded in Trenches TR 3 and TR 4 with buried A-horizons Ab₁ through Ab₃ recorded in Trench TR 3 and Ab₂ through Ab₄ observed in Trench TR 4 (Figure 81). B-horizons were associated with paleosols Ab₂ and Ab₃. Paleosol Ab₃ in Trench TR 5 appeared to contain sufficient organics to obtain a radiocarbon date. A bulk sediment sample was collected from paleosol Ab₃ between the depths of 4.8 ft. and 5.4 ft. This sample was shipped to Beta Analytical, Inc. for radiocarbon dating of the bulk low carbon sample.

Trenches TR 2 & TR 3 were enlarged to allow deep testing to depths of 13.1 feet and 9.8

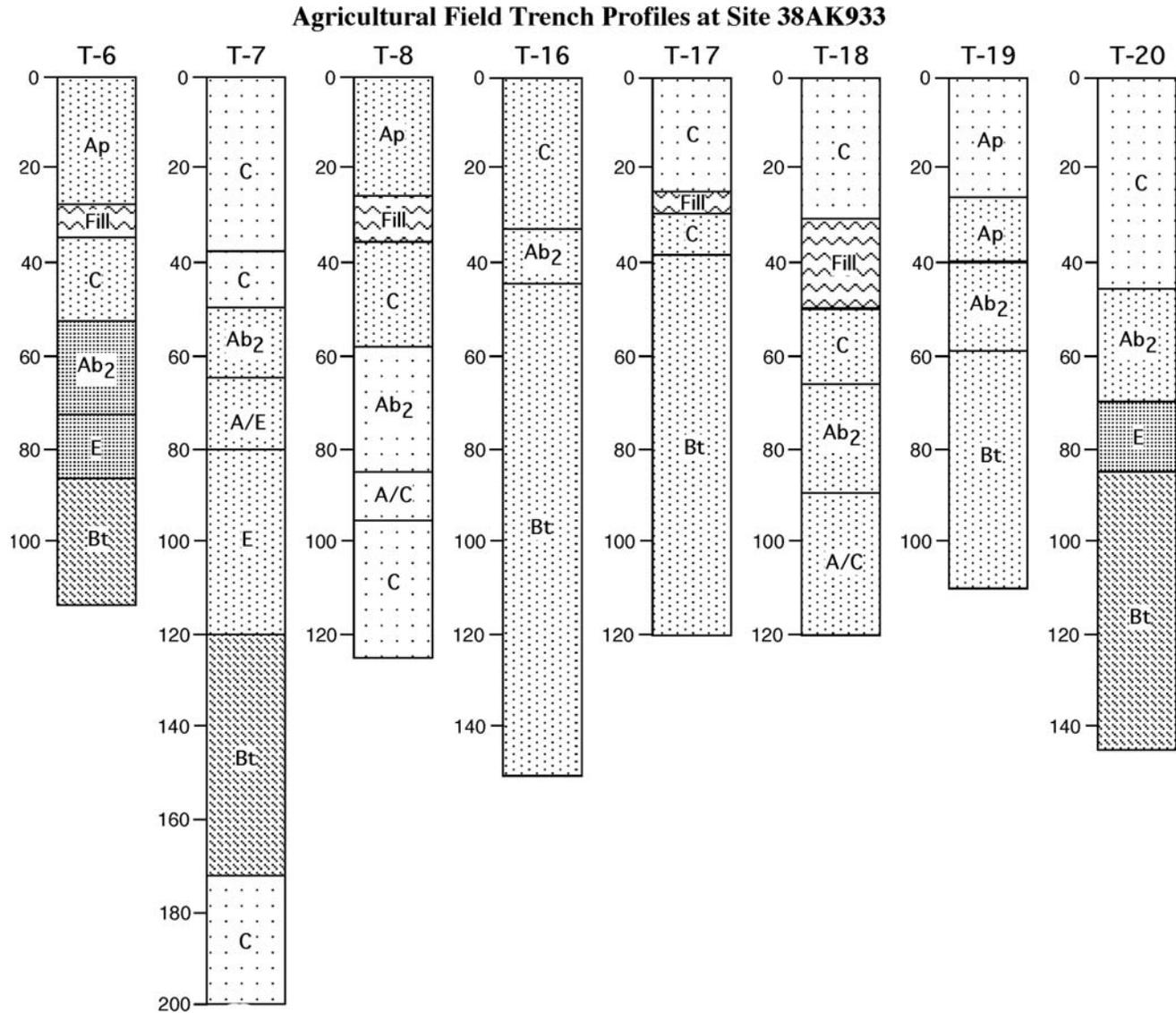


Figure 82. Field logs of trench profiles recorded as site 38AK933. Explanation of labels for pedogenic horizons and grain size patterns are shown in Figure 86.

feet, respectively. Trench TR 5 was deep tested to a depth of 7.7 feet and then the trench was excavated to a total depth of 16.4 feet to look for evidence of buried paleosols. Trench TR 21 was excavated to record soils at the transition between the T₁ and T₂ terraces and open up a window into deeply buried strata of the T₂ terrace. This trench was extended to a depth of 16.4 feet and tested for buried cultural horizons.

A cultural horizon was identified in paleosol Ab₂ in trenches TR 6 and TR 7 (Figure 82). Some flakes were also recorded in a buried B-horizon at trench TR 5. The horizontal extent of these buried cultural horizons were fairly well delineated by the surrounding trenches.

Sediment samples were collected from the profile in Trenches TR 3, TR 6 and TR 8. Three buried A-horizons in trench TR 3 were sampled and analyzed for particle size distribution. Ab₃ is a very fine to fine sand with 37% fines (silt and clay) (Figure 83). Ab₂ consisted of a very fine to fine sand with an increase in coarse sand (40% fines). Ab₁ is a bimodal sediment with a sand fraction of 30% coarse sand and 33% very fine sand. The percentage of coarse sand increases in more recent deposits as shown in the changes between Ab₃, Ab₂ and Ab₁ (Figure 83). The percent fines also decreased in the younger alluvium to 30% in Ab₁.

The pedogenic horizons of the paleosol Ab₂ at Trench TR 6 were sampled and analyzed. This paleosol consisted of a sandy silt B-horizon (57% fines) with the sand fraction being primarily very fine sand (Figure 81). The E-horizon is primarily a coarse sand (20% fines) and the buried A-horizon varied from coarse to very fine sand with 30% fines.

The paleosol Ab₂ in Trench TR 8 is a buried A-horizon over a C-horizon or parent material. Sediment from the A-horizon and C-horizon at Trench TR 8 were sampled and analyzed for particle size distribution. Trench TR

8 consisted of a silty sand with minimal amounts of fines ranging from 11% to 20%. The sand fraction in both samples was primarily a medium sand (Figure 84). Although only two samples were analyzed from this trench the sedimentology in this portion of the floodplain is consistent down the profile.

Interpretation of Trenches in the Agricultural Area

The higher percentage of fines with depth in Trench TR 3 is expected as fines are moved down through the profile (translocation) by pedogenesis. This process of eluviation and illuviation does not effect distribution of the sand size fraction which is shown on the sedimentology logs (Figure 81). Changes in the sand size distribution can be used to evaluate changes in current velocity or flood magnitude over time. The increase in sand size up the profile noted between Ab₃ and Ab₁ indicates that the younger deposits were formed during higher magnitude flood events. Ab₁ may be a historic soil and Ab₂ is associated with a contact period archaeology site. Agricultural and land use practices during Native American occupation and eventual European settlement of the river valley probably contributed to the increase in the severity of these flood events.

The B-horizon in Trench TR 6 contains a high percentage of fines due to pedogenesis. The sand fraction at 3.3 feet is much finer than within the buried A-horizons. The 3.3 feet and 2.0 feet samples of Trench TR 6 show a coarsening upward as was observed at Trench TR 3. The 2.6 feet sample is much coarser than the rest of the profile. This sample is interpreted as a flood deposit formed at Trench TR 6 during a high magnitude flood event. This flood occurred just prior to stabilization of the terrace surface, formation of paleosol Ab₂ and Native American occupation at site 38AK933.

Trench TR 8 is located closer to the edge

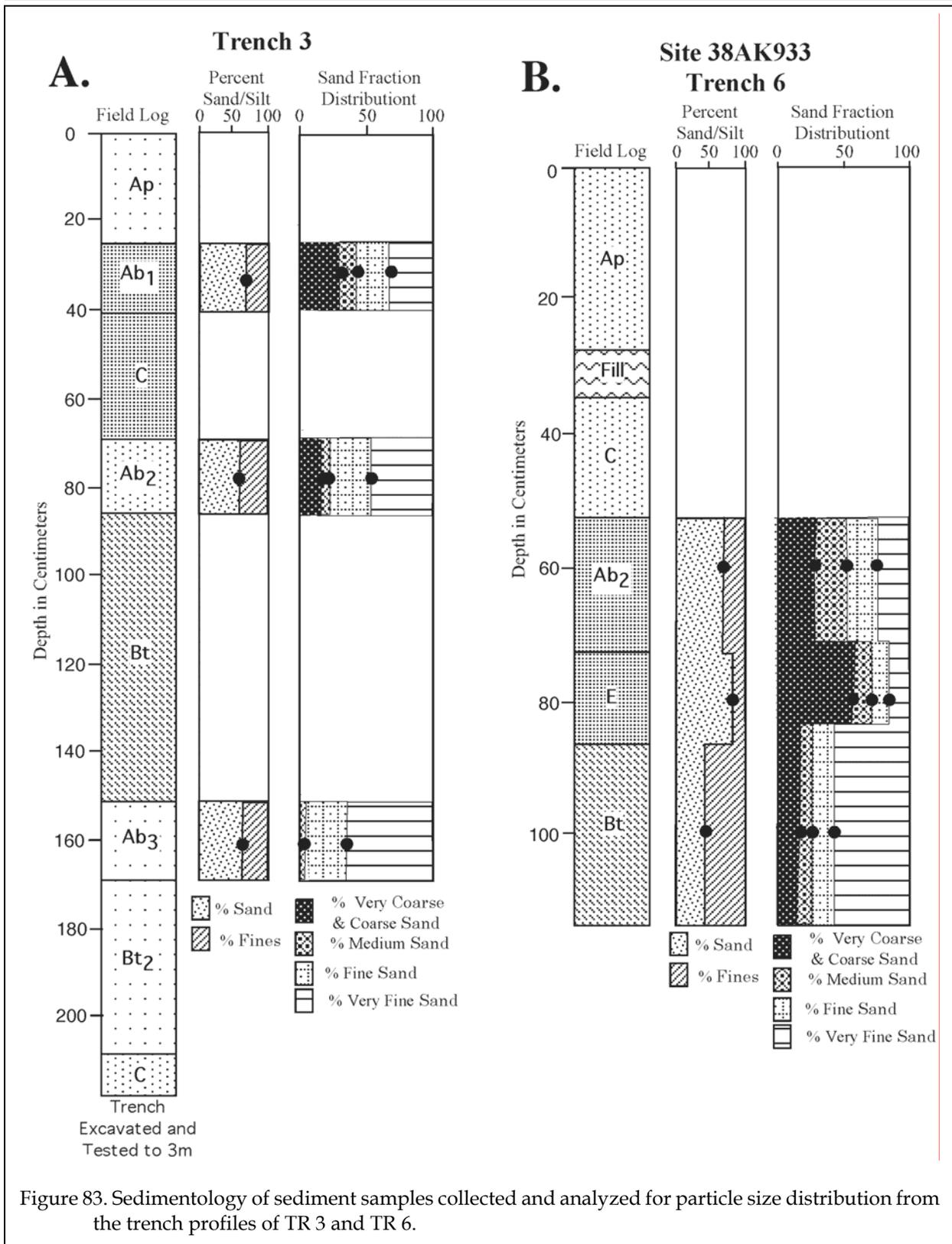


Figure 83. Sedimentology of sediment samples collected and analyzed for particle size distribution from the trench profiles of TR 3 and TR 6.

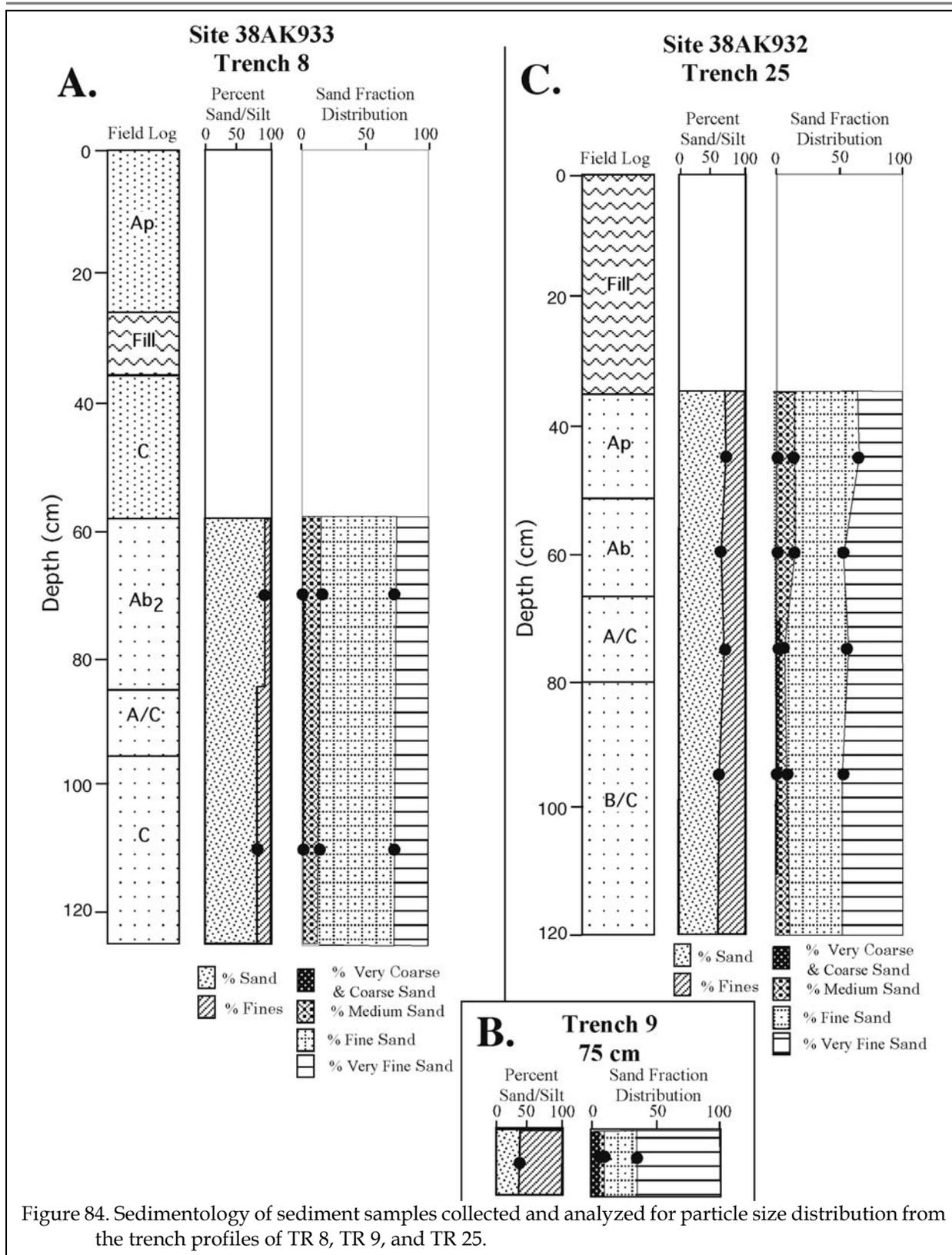


Figure 84. Sedimentology of sediment samples collected and analyzed for particle size distribution from the trench profiles of TR 8, TR 9, and TR 25.

of the T₂ terrace. Floodwaters would form a slightly elevated area along the terrace edge consisting of deposits low in silt and clay as observed at this trench. The lack of a B-horizon at this trench could be due in part to the low percentage of fines deposited in sediment on this part of the terrace.

Table 11.
Trench Depths and Estimated Age of Deposits

Trench Number	Depth (in feet)	Estimated age based on sedimentation rate in Trench 5
TR 2	13.1	16,600 BP
TR 3	9.8	12,400 BP
TR 5	7.7	9,700 BP
TR 7	9.8	8,300 BP
TR 21	16.4	20,700 BP (?)

Preliminary interpretation of soil profiles identified three buried paleosols in the upper 8 feet. Buried A-horizons were not observed in the deeper alluvial deposits between 8 feet and 16 feet. The paleosols are not continuous between all 13 trenches but can generally be traced between two or more trenches. The variation in sedimentology between these trenches shows changes in the depositional environment across this portion of the T₂ terrace. Preservation of the paleosols varied between these depositional environments. A cultural horizon was identified in the upper paleosol (Ab₂) at Trenches TR 6, TR 7 and TR 8. Paleosol Ab₂ was apparently eroded from the floodplain or incorporated into the plow zone at Trench TR 5. Some flakes were noted in the B-horizon of Trench TR 5 below plow zone and historic sediment. Cultural materials were not identified in any of the profiles below the B-horizon (~2.5 feet) associated with paleosol Ab₂.

Buried paleosols were not observed below 7.7 feet in Trench TR 5. Beta Analytical, Inc. recovered sufficient charcoal from the bulk sediment sample of paleosol Ab₃ to obtain a conventional radiocarbon date. The radiocarbon

age for this charcoal sample is 6440 ±80 B.P. (Beta-191296; organic sediment; δ¹³C = -23.4‰) and the 2 sigma calibrated result is Cal BC 5520 to 5290 (Cal BP 7480 to 7240). Using radiocarbon age and an average depth of 5 feet (155cm) for this sample, alluvium was deposited on the T₂ terrace at a rate of 0.79 feet/1000 years (24cm/1000 yr.). This sedimentation rate is applied to the depth of other trenches to estimate the age of the deposits tested for buried cultural horizons. The following table lists the depth of the deeper trenches and estimated age of deposits.

The estimated age for the deposits in Trench TR 21 is too old as sedimentation rates are higher closer to the edge of the terrace where this trench was located. These estimated ages indicate that this terrace was tested for buried cultural horizons in sediment older than 10,000 years BP.

Northwestern T₂ Terrace and Site 38AK934

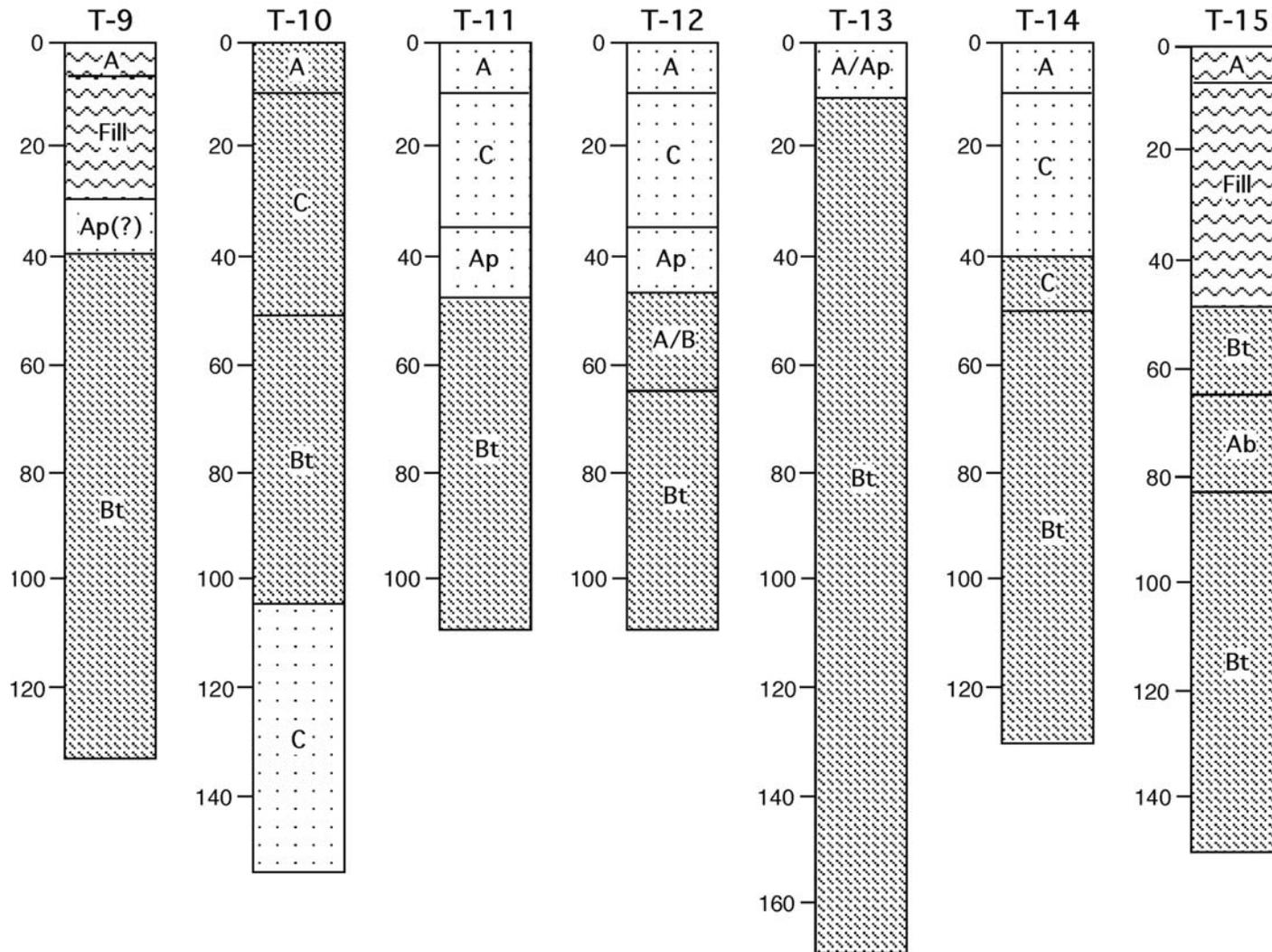
Description

Seven trenches were excavated into the northwestern T₂ terrace adjacent to the former clay pits (Figure 85). Sediment in this portion of the T₂ terrace consisted primarily of sandy silt. A buried paleosol was observed in Trench TR 15 and a transitional A/B-horizon in Trench TR 12 (Figure 85). The other 5 trenches appeared to be fill and historic alluvium over an older B-horizon.

All of the trenches contained thick B-horizons consisting of a hard fine sandy silt. Several flakes were identified along a horizon in the profile of Trench TR 9 at a depth of 2.5 feet and in Trench TR 12. Cultural materials were not identified in the trenches excavated around Site 38AK934.

One soil sample was collected along the flake horizon in Trench TR 9 to compare this depositional environment with other areas of the T₂ terrace. This sediment contains 65% fines and only 35% sand (Figure 84). This is the alluvial

Trench Profiles in the Northwestern T₂ Terrace and at Site 38AK934



GEOMORPHOLOGY STUDY

Figure 85. Field logs of trench profiles recorded in northwestern T₂ terrace and at site 38AK934. Expansion of labels for pedogenic horizons and grains size patterns are shown in Figure 86.

Trench Profiles at Site 38AK932

Explanation of Symbols and Patterns for Trench Profiles	
Symbols	Soil Designation
	--Lamella
	--Larger Clasts
	--Pebbles
	Ap--Plow Zone
	Ab--Paleosol, Buried A-Horizon
	A, E, B, C --Pedogenic Horizons

Lithology of Sedimentary Units			
	Fine Sandy Silt		Silty Fine Sand
	Medium Sandy Silt		Silty Medium Sand
	Coarse Sandy Silt		Silty Coarse Sand
	Alluvial Fill		Sandy Gravel
	Historic Debris		

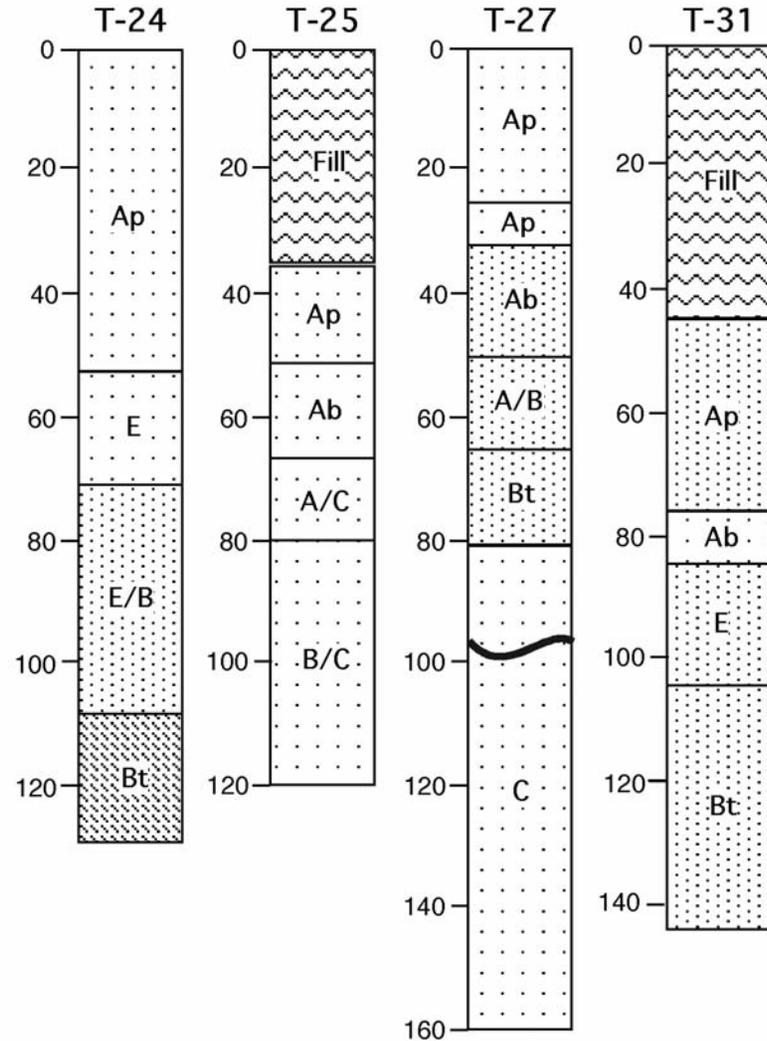


Figure 86. Field logs of trench profiles recorded as site 38AK932.

sediment that was being mined for the brick kilns. The sand fraction was primarily very fine sand. A bed of sand was recorded in the base of Trench TR 10 which is an unusually coarse deposit for this depositional setting.

Interpretation

Historic disturbance probably removed any buried soils from the shallow alluvium. A roadway was observed through this area on some of the older aerial photographs. Buried A-horizons are not as common in depositional environments where sedimentation rates are low. Low sedimentation rates allow organics accumulated in an A-horizons to oxidized or get leached out of the profile during burial. The flake horizon in trench TR 9 was probably deposited on a relatively stable terrace surface in an organic-rich A-horizon.

These are suspension or overbank deposits that accumulate in low energy depositional environments. Suspension deposits form as fine sand and silt settle vertically out of slow moving, sediment-laden floodwater. This sediment blankets the terrace surface without moving cultural materials or disturbing the underlying stratigraphy. Suspension deposits accumulate slowly over time preserving archaeological stratigraphy and cultural context. Cultural materials buried in suspension deposits would not have been moved from their discard location by fluvial processes.

The bed of sand in the base of Trench TR 10 is probably an old flood channel cut into the terrace. These channels carry floodwater into and out of different areas of the terrace during flood events.

Industrialized Area and Site 38AK932

Description

Eleven trenches were excavated into the

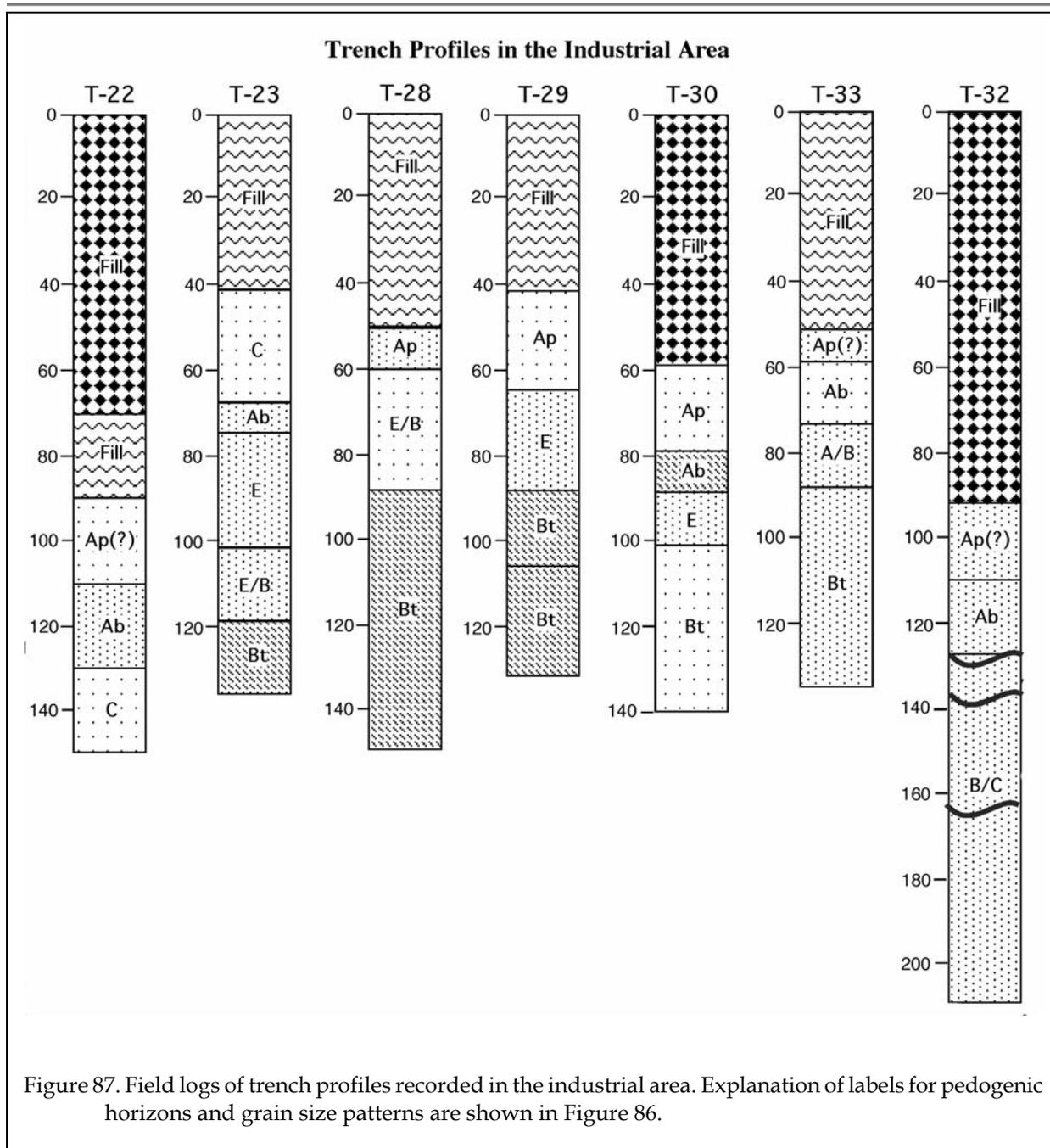
T₂ terrace in the industrialized area. These trenches were located along the southern edge and on elevated portions of this terrace. Much of this area contained thick historical deposits and fill that included brick rubble and other discard materials. A paleosol was observed below historic deposits in many of the trenches (Figures 86 and 87). A cultural horizon was identified within this paleosol at Trench TR 25 near the southern edge of the T₂ terrace.

Artifacts recovered from the trench profile included lithics with several small pieces of ceramics. Petrology of these lithic materials are meta-volcanics (argillite), vein quartz, chert and a garnet-mica schist (soapstone). Meta-volcanic (argillite) bedrock is mapped just upstream of this floodplain and the garnet-mica schist occurs locally within the granitoid gneiss to the north (Figure 79) (Overstreet and Bell 1965). Other Piedmont rock types could have been available in the Savannah River bed before the river was dammed.

The paleosol (in Trenches TR 22, TR 25, TR 27, TR 30, TR 31, TR 32 and TR 33) is a silty sand and buried below layer of debris or historic alluvium (Figures 86 and 87). A loose to friable B-horizon was recorded in the profile of these buried paleosols except at Trenches TR 22 and TR 32. Alluvium in these trenches is a fine to medium silty sand.

Trenches TR 23, TR 24, TR 28 and TR 29 contained a truncated soil profile with a well developed B-horizon (Figures 86 & 87). A thin buried A-horizon of silty sand was recorded in Trenches TR 23 and TR 28. The well developed B-horizon in these trenches is a stiff, fine, sandy silt.

Four soil samples were collected from the profile of Trench TR 25 to interpret the depositional environment at Site 38AK932. Alluvium in this trench contains 28% to 41% fines and the sand fraction was primarily very fine to fine sand (Figure 84). Deposits below the plow



zone contained a higher percent fines.

Interpretation

The well developed, silty B-horizon recorded in Trenches TR 23, TR 24, TR 28 and TR 29 is evidence of an elevated, stable landform. Floodwater is channeled around elevated portions

of the terrace which become inundated by slow flowing, sediment-laden floodwater. As a result fine grain suspension deposits dominate the elevated portions of the terrace. The truncated soil profile in these trenches is evidence that the shallow prehistoric alluvial deposits were eroded from this area.

Sedimentology of Trench TR 25 indicates a relatively low energy depositional environment. Sedimentation is predominantly suspension settling with some current deposition during flood events. Trench TR 25 is situated on a slight rise just upstream of a swale on the terrace. The depositional processes that formed the paleosol in Trench TR 25 are favorable for preservation of cultural context at site 38AK932.

Discussion

The T₂ terrace is about 24 ft above the current (artificially elevated) water level in the river. Sediment deposition occurred on this terrace during flood events until the dams upstream were constructed. These flood events buried and preserved former occupation surfaces with prehistoric and historic alluvium. Aerial photos and the terrace topography provide some evidence of the prehistoric terrace hydrology. One prehistoric channel (intermittent stream or flood chute) extended across the terrace west of Site 38AK933 (Figure 80). A second channel (probable intermittent stream) occurred in the vicinity of the drainage ditch across historic site 38AK931. The present drainage channel is shown on a 1934 aerial photograph and extends north toward the edge of the stream valley. This channel appears to have been modified during development of industry in this area. This intermittent stream could have previously flowed through the swale adjacent to site 38AK932 (Figure 80). It is possible that site 38AK932 was occupied when the intermittent stream flowed through this swale about 100 feet west of its current location.

In general, grain size in the sand fraction increases in the younger deposits. This coarser alluvium was deposited by higher magnitude flood events. The magnitude of flood events on the terrace appears to have increased since the mid to early Holocene. This is not necessarily due to climate, but could be a result of increased prehistoric settlement of the river valley.

The trenches not disturbed by industrial activity were capped with 0.66 ft to 2.0 ft of historic alluvium. This alluvium is interpreted to have been deposited since European settlement about 250 years ago. Assuming an average thickness of 0.98 feet for sediment deposited in the last 250 years, a historic sedimentation rate of 3.9 ft/1000 years is calculated for this terrace. The historic sedimentation rate is about five times higher than the prehistoric sedimentation rate calculated from the radiocarbon date in trench TR 5 (0.79 ft/1000 years).

Sites 38AK932 and 38AK934 were buried in lower energy depositional environments dominated by suspension settling. Suspension deposits blanket the floodplain surface without moving cultural materials or disturbing the underlying stratigraphy. A typical flood event may only deposit a thin <.4-inch layer fine sand and silt on the T₂ terrace. Suspension deposits accumulate slowly over time preserving archaeological stratigraphy and cultural context. Cultural materials buried in suspension deposits would not have been moved from their discard location during burial by alluvial processes. However, disturbance by pedogenesis (pedoturbation) is more likely in areas of lower sedimentation rates.

Site 38AK933 was buried in alluvium with a bimodal grain size distribution that resulted from current deposition as well as suspension settling. Current deposits form in a higher energy depositional environments where erosion and re-deposition can occur during flood events. Smaller artifacts, such as flakes and sherds, can be transported by currents that flow across the terrace and deposit medium to coarse sand. Larger artifacts are less susceptible to transport by these currents but may be moved by erosion of the surrounding sand. These areas tend to have higher sedimentation rates and bury sites quickly reducing the potential for site disturbance by pedoturbation.

Sites 38AK932 and 38AK933 were both preserved in buried A-horizons. It is uncertain whether these were formed at the same time or if the A-horizon at 38AK932 is older. These buried A-horizons indicate that a stable floodplain surface had existed for a period of time sufficient for the accumulation of organics. Both of these sites were formed during a period of floodplain stability and relatively lower sedimentation rates due to a decrease in flood frequency.

CONCLUSIONS

The Proposed Project

This project involves the construction of new roads and modification of existing roads using federal (Federal Highway Administration -- FHWA) grants by the City of North Augusta. This work is associated with a major new development on the North Augusta Riverfront being undertaken by private developers with no federal funding, licensing, or permitting. The State Historic Preservation Office has determined that the project would take place without the federal road funding, therefore there is no "but for" involvement in the project. As a result, the approximately 115 acre project area has been defined on the basis of the proposed road alignments, the presence of brick clay pits, and areas with dense brick rubble that will be ground for fill and/or road base material.

Anticipated affects of the project include widespread ground disturbance in the project area, including clearing, grading, removal of brick fill, demolition of standing structures, and the construction of new roadways. There will be infrastructure construction, such as storm water drainage. There may also be short-term affects, such as increased construction traffic, and increased noise or dust levels. This study, however, does not include any long-term secondary effects of the project, such as increased development along the North Augusta riverfront.

This study involved detailed historical background research, archaeological investigations, architectural history study, and geomorphological study. The work was conducted to assist the City of North Augusta comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800. During a February 23 meeting the FHWA determined that they would conduct the

Native American consultation verbally stipulated by the State Historic Preservation Office and mandated by 36CFR800.2(c)(3)(i) through 800.2(c)(3)(iv), as well as any public consultation stipulated by 36CFR800.2(d)(1). Therefore, those consultations are not part of this study.

Geomorphological Testing

As previously mentioned, a deep testing program was conducted to determine if buried cultural horizons are present in the project area. A backhoe was used to excavate 32 trenches into different geomorphic features on the floodplain, as well as along the northern end of the terrace adjacent to the former clay pits. The investigations included three trenches excavated to a depth of 16 feet to test for deeply buried deposits.

The Savannah River flows behind a dam structure at the project location so the river elevation is artificially high and lower terraces are submerged. For the purpose of this study the submerged terrace is assigned a T0 designation. A relatively narrow T1 terrace (including T1a and T1b surfaces) occurs along the river channel, but is outside the project area. This study explored the larger T2 terrace which is within the study tract.

In the agricultural fields at the western end of the project area 13 trenches revealed three buried paleosols in the upper 8 feet. Buried A-horizons were not observed in the deeper alluvial deposits between 8 and 16 feet. The paleosols are not continuous between all 13 trenches, but can generally be traced between two or more trenches. Sedimentology changes across this portion of the T2 terrace indicate different depositional environments. Site 38AK933 was identified in one of these paleosols.

In the area of the northwestern T2 terrace

adjacent to the former clay pits seven trenches were excavated. This part of the terrace appears slightly lower in elevation. Sediment in these trenches is finer grained, indicating a lower energy depositional environment and most likely lower sediment accumulation rates. A remnant, but discontinuous, paleosol was identified in two trenches. Buried A-horizons were either eroded or not well preserved in this portion of the terrace. Site 38AK934 was identified in the B-horizon of an eroded paleosol.

In the industrialized area eight trenches were excavated along the southern edge and on elevated portions of the T2 terrace. Much of this area contained thick historical deposits containing abundant brick rubble. Site 38AK932 was identified in the paleosol of one trench at the edge of the T2 terrace.

Three additional trenches were excavated along and north of Railroad Avenue in the industrialized area. Two paleosols were identified although no cultural remains were found in either.

Architectural Sites

Three National Register listed properties, the B.C. Wall House, Look-Away Hall, and Rosemary Hall, are within 1-mile of the proposed undertaking. In addition, eight structures have been previously evaluated as potentially eligible for inclusion on the National Register (Trinkley and Southerland 2002).

These structures, however, will not be affected by the proposed undertaking. They are located a considerable distance from the project, the intervening area is dominated by modern commercial structures, and there is a significant difference in elevation that allows the listed and potentially eligible structures to “look over” the project area.

The North Augusta Dispensary structure, identified by Martin and Drucker (1987) and designated 38AK493, was destroyed by fire ca. 1995 and is no longer a standing architectural site.

The standing structures on the project site are in dilapidated to ruinous condition. Nevertheless, the State Historic Preservation Office requested that one set, associated with the Augusta Face Brick Company (later the Georgia-Carolina Brick and Tile Company), be recorded. The property was assigned Statewide Survey Site Number 032754, with 032754.00 being the office, site, flue, eight kilns, dryer, three-story mixing shed, paired service sheds, oil tank stand, and a simple brick utility shed. 032754.01 is the machine shop/storage building at the center of the building complex, 032754.02 is a brick equipment shed that retains a fair degree of architectural integrity, and 032754.03 is a work shed or office built largely of structural tile blocks.

The property does not meet the National Register Criteria for Evaluation. It does not possess integrity of design, setting, materials, workmanship, feeling, and association; further, it does not appear to be associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), or to embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C). Although brickmaking has been part of the historic landscape of the North Augusta/Augusta region for generations, this complex was not economically important to the region, its technology was conventional, and its support buildings were similar in design and quality to the service buildings found around industrial sites nationwide.

The overall appearance of the site is incoherent. The linkages among the remnant structures have been lost, and the sense of the individual components as industrial structures has been lost. The property does not seem to have played a significant role in the historical development of the surrounding area, and no important historical events or processes occurred here. It is our opinion that neither the property nor any of its elements are eligible for listing in the National Register of Historic Places.

CONCLUSIONS

As a result of these investigations we do not believe that the architectural resources on, or in the vicinity of, the proposed project will be affected by the development activities.

Archaeological Sites

A combined strategy of historic research, auger tests to depths of 3-4 feet, and trenches for geological and site identification has led to the identification of five archaeological sites in the defined project area and the reassessment of the previously recorded North Augusta Dispensary.

Site **38AK931** represents a large industrial site consisting of at least five recognized loci - Wood Pottery, Star Sprayer/Peoples Oil/unnamed brickyard, Industrial Lumber, Augusta Veneer, and Augusta Face Brick (later Georgia-Carolina Brick and Tile). Architectural remains at these sites are in dilapidated to ruinous condition, archaeological remains are heavily disturbed by the overlying deposits of successive industrial activities. Site integrity is very low in most areas. In addition, we do not believe that the bulk of these sites can contribute information concerning significant research topics.

There is, however, one exception, at 38AK931. The Wood Pottery was found to exhibit intact subsurface features, consisting of at least brick flues and foundations. In addition, the site has the ability to address significant research questions. In particular Newell and Nichols have discussed the relationship of the Hahn and Wood potters, identifying some differences in their wares. Research at this kiln site, as opposed to waster sites, has the ability to more definitively associate the potters with their pots. Combined with additional historical research there is the possibility to help untangle issues regarding the early twentieth century potters of North Augusta. Consequently, we recommend the Wood Pottery loci at 38AK931 as eligible for inclusion on the National Register of Historic Places. The site should be green spaced or, if that is not feasible, a data recovery plan should be developed. The remaining loci of the site are evaluated as non-

contributing.

Site **38AK932** represents a small Late Archaic/Early Woodland transitional site evidenced by a range of lithic materials, fire cracked rock, tools, worked soapstone, and Stallings and Thom's Creek pottery. The site, on the T2 terrace, is buried by about 2-feet of alluvium and is well preserved. The site also has the potential to address a range of significant research questions, including the refinement of inner coastal plain settlement and subsistent models to take into account small, discrete limited use sites. This site is recommended eligible for inclusion on the National Register of Historic Places. Since the site is very small, it may be suitable for long-term green spacing, although such efforts would need to incorporate protection from looting. Otherwise, data recovery is a suitable option, with excavations designed to recover the significant information.

Site **38AK933** is a very large contact period Native American site that includes a range of data sets. Auger testing, trenching, and controlled excavations have recovered perhaps two distinct types of pottery - one with a coarse sand or grit paste and another with a very fine micaceous paste. Surface treatments include complicated stamped, incised, corncob impressed or roughened, and check stamped. A range of lithics were recovered, including crude triangular points and Randolph Stemmed points. These materials are all consistent with a very late settlement and the ceramics are similar to materials associated with a variety of Native American groups, including the Yemassee, Cherokee, and Catawba. Also recovered were trade goods, including a blue seed bead, a brass tinkling cone, and kaolin pipe stems. This site appears to be a small hamlet, perhaps consisting of several structures.

Controlled excavations at the site produced distinct post holes and it appears that there is a remnant midden that has not been completed plowed through. Site integrity is high, with the site buried by about 2-feet of alluvium.

Given the site type and its period, there is the potential for human remains to be present.

While it may be tempting to suggest that the site is associated with the Chickasaw known to have been in the North Augusta vicinity, the pottery is not consistent with the wares produced in the Chickasaw heartland at the same time. It seems much more likely that these sherds are associated with one or more of the larger and more common groups that frequented this border area for trade. Nevertheless, this is a very important site and we recommend it eligible for inclusion on the National Register of Historic Places. Given the size of the site we understand that green spacing may be problematical. If preservation in place cannot be achieved, data recovery excavations combining controlled hand excavations and areally broad mechanical stripping will be necessary.

Site **38AK934** is a very small, thin scatter of lithics at the northern edge of the T2 terrace. Only a few items were found in spite of multiple trenches and auger tests. No diagnostics were recovered. The sparse data sets and the inability of the site to address significant research questions lead us to recommend the site not eligible for inclusion on the National Register of Historic Places.

Site **38AK935** is a small, discrete area of twentieth century clay flower pot production. The Baynham operation was moved to this facility in the early to mid-1960s. The structure itself, a steel beam construction covered with corrugated metal on a concrete and earthen floor, is without architectural merit. Moreover, some defining features, such the kiln itself, have been removed. Extensive oral history well documents the site and its operation, providing more information than could be gleaned from archaeological studies. There is machinery from the flower pot operation, including a chaser mill, pug mill, and mechanical ram presses that the City of North Augusta has expressed an intent to preserve. Otherwise, the site is recommended not eligible for inclusion on the National Register of Historic Places.

Site **38AK493** was originally used to define the now destroyed North Augusta Dispensary building. At the time the number was assigned no archaeological deposits were identified, except for modern debris scattered across the rear area or lot. Since that time there has been extensive damage to the site area, largely the result of salvage associated with the fire that destroyed the building. While almost no brick is left on the site, push piles are present and some wall sections have been found several hundred yards from the building – it appears that what was not salvaged was aggressively removed from the landscape. Few archaeological remains were found and none can directly be associated with the dispensary or its operation. Consequently, this site (considered a locus of 38AK931) is recommended not eligible for inclusion on the National Register of Historic Places.

Recommendations

The geological study has thoroughly examined the terrace within the identified project area. A number of old-A horizons were identified and several of these also contained cultural remains. These have been further explored by trenches and auger tests (which in all cases penetrated into the levels of identified paleosols containing cultural remains.

There are no National Register listed or eligible sites outside the project area that will be affected by the proposed undertaking – all are buffered by the existing commercial district, long distances with natural vegetation, or by elevational setting. The standing remains on the project tract are in ruinous condition and are evaluated as not eligible for inclusion on the National Register of Historic Places.

Six archaeological sites (previously identified or newly encountered) are on the study tract. A locus (Wood Pottery) within one site (38AK931), and two additional sites (38AK932 and 38AK933) are recommended eligible under Criterion D, information potential. These sites may be either green spaced, thereby preserving them, or they may be subjected to data recovery with the

CONCLUSIONS

approval of the State Historic Preservation Office.

It is possible that additional archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of *concentrations* of artifacts (such as bottles, ceramics, or projectile points) to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

SOURCES CITED

- Abbott, Lawrence E., Jr., John S. Cable, Mary Beth Reed, and Erica E. Sanborn
 1995 *An Archaeological Survey and Testing of the McLean-Thompson Property Land Acquisition, and the Ambulatory Health Care Clinic Project, Fort Bragg, Cumberland County, North Carolina*. Technical Report 349. New South Associates, Stone Mountain, Georgia.
- Anderson, David G.
 1979 *Excavations at Four Fall Line Sites: The Southeastern Beltway Project*. Commonwealth Associates, Inc., Jacksonville, Michigan. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia.
- 1992a A History of Paleoindian and Early Archaic Research in the South Carolina Area. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 7-18. Council of South Carolina Professional Archaeologists, Columbia.
- 1992b Models of Paleoindian and Early Archaic Settlement in the Lower Southeast. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 28-47.
- Council of South Carolina Professional Archaeologists, Columbia.
- 1994 *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast*. University of Alabama Press, Tuscaloosa.
- Anderson, David G., Charles E. Cantley, and A. Lee Novick
 1982 *The Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina*. Commonwealth Associates, Jackson, Michigan.
- Anonymous
 1884 *South Carolina in 1884: A View of the Industrial Life of the State*. The News and Courier, Charleston, South Carolina.
- 1906 *Census of Manufacturers: 1905 North Carolina, South Carolina*. Bulletin 39. Department of Commerce and Labor, Bureau of the Census, Washington, D.C.
- 1907 *Census of Manufacturers: 1905 Glass and Clay Products*. Bulletin 62. Department of Commerce and Labor, Bureau of the Census, Washington, D.C.
- 1918 *North Augusta City Directory*. n.p., n.p.
- 1956 *North Augusta's 50th Anniversary – 1906-1956 Historical Panorama Program*. John B. Rogers

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

- Producing Co., Fostoria, Ohio.
- 1965 *Four Reasons Why South Carolina Believes the New National Accelerator Laboratory Should be Located in the Aiken-Augusta Area on the Savannah River.* S.C. State Development Board, Columbia.
- Atwater, W.O. and Chas. D. Woods
1897 *Dietary Studies with Reference to the Food of the Negro in Alabama in 1895 and 1896.* U.S.D.A. Bulletin 38. Washington, D.C.
- Baker, Steven G.
1975 *Working Draft of The Historic Catawba Peoples: Exploratory Perspectives in Ethnohistory and Archaeology.* Ms. on file, Department of History, University of South Carolina, Columbia.
- Baldwin, Cinda K.
1993 *Great & Noble Jar: Traditional Stoneware of South Carolina.* University of Georgia Press, Athens.
- Barry, John M.
1980 *Natural Vegetation of South Carolina.* University of South Carolina Press, Columbia.
- Benjamin, Park
1893 *Appletons' Cyclopaedia of Applied Mechanics.* D. 3 vols. Appleton, New York.
- Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.
1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina.* Garrow and Associates, Inc., Atlanta.
- Boylston, Raymond P., Jr.
n.d. *The Battle of Aiken.* n.p, n.p.
- Brain, Jeffrey P.
1979 *Tunica Treasure.* Peabody Museum of Archaeology and Ethnology, Harvard University and Peabody Museum of Salem. Cambridge, Massachusetts.
- Brooks, Richard
1981 *Initial Historic Overview of the Savannah River Plant, Aiken and Barnwell Counties, South Carolina.* Research Manuscript Series 170. S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
1984 *An Intensive Archaeological Survey of the Proposed L-Lake Phase I Areas: Savannah River Plant, Barnwell County, South Carolina.* Ms. on file, S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Brooks, Richard and David Crass
1992 *A Desperate Poor Country: History and Settlement Patterning on the Savannah River Site, Aiken and Barnwell Counties, South Carolina.* South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Brose, David S.
1991 *Yesterday's River: The Archaeology of 10,000 Years Along the Tennessee-Tombigbee Waterway.* Cleveland Museum of Natural History, Cleveland.
- Cabak, Melanie A., Mark D. Groover, and Mary M. Inkrot
1999 *Rural Modernization During the*

SOURCES CITED

- Recent Past: Farmstead Archaeology in the Aiken Plateau. *Historical Archaeology* 33(4):19-43.
- Cable, John S.
 1982 Differences in Lithic Assemblages of Forager and Collector Strategies. In *Archaeological Survey and Reconnaissance Within the Ten-Year Floodpool Harry S. Truman Dam and Reservoir*, edited by Richard Taylor. Report submitted to the U.S. Army Corps of Engineers, Kansas City District.
- Caldwell, Joseph R.
 1952 The Archaeology of Eastern Georgia and South Carolina. In *The Archaeology of Eastern United States*, edited by James B. Griffin, pp. 312-321. University of Chicago Press, Chicago.
 1958 *Trend and Tradition in the Prehistory of the Eastern United States*. Memoirs of the American Anthropological Association 88.
- Cashin, Edward J.
 1992 *Lachlan McGillivray, Indian Trader: The Shaping of the Southern Colonial Frontier*. University of Georgia Press, Athens.
- Castille, George J., Cinda K. Baldwin, Carl R. Steen, Steve Smith, and Stanley South
 1988 *Archaeological Survey of Alkaline-Glazed Pottery Kiln Sites in Old Edgefield District, South Carolina*. McKissick Museum and S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Chapman, Jefferson
 1977 *Archaic Period Research in the Lower Little Tennessee River Valley, 1975: Icehouse Bottom, Harrison Branch, Thirty Acre Island, Calloway Island*. Report of Investigations 18. University of Tennessee, Knoxville.
- 1985a Archaeology and the Archaic Period in the Southern Ridge-and-Valley Province. In *Structure and Process in Southeastern Archaeology*, edited by Roy S. Dickens and H. Trawick Ward, pp. 137-179. The University of Alabama Press, University.
 1985b *Tellico Archaeology: 12,000 Years of Native American History*. Reports of Investigations 43, Occasional Paper 5, University of Tennessee, Knoxville.
- Charles, Tommy and James L. Michie
 1992 South Carolina Paleo Point Data. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 242-247. Council of South Carolina Professional Archaeologists, Columbia
- Christensen, William F.
 1975 *A Survey of Historical Sites in the Lower Savannah Region*. Lower Savannah Regional Planning and Development Commission.
- Coe, Joffre
 1961 Cherokee Archaeology. In *Symposium on Cherokee and Iroquois Culture*, edited by William N. Fenton and John Gulick, pp. 51-60. Bureau of American Ethnology Bulletin 180. Smithsonian Institution, Washington, D.C.

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

- 1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society 54(5). D.C.
- Coe, Joffre L., editor
 1995 *Town Creek Indian Mound: A Native American Legacy*. University of North Carolina Press, Chapel Hill.
- Colias, Mike
 1996 *Building Blocks of an Age: A Foundation of Brick for Southeast Ohio*. *Southeast Ohio Magazine*, Summer/Fall.
- Cordle, Charles G.
 1940 *Henry Shultz and the Founding of Hamburg, South Carolina*. In *Studies in Georgia History and Government*, edited by James C. Conner and Lucien E. Roberts, pp. 79-93. University of Georgia Press, Athens.
- Cumming, William P.
 1998 *The Southeast in Early Maps*. Revised edition, ed. By Louis DeVorsey, Jr. University of North Carolina Press, Chapel Hill.
- Daniel, I. Randolph, Jr.
 1992 *Early Archaic Settlement in the Southeast: A North Carolina Perspective*. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 68-77. Council of South Carolina Professional Archaeologists, Columbia.
- DeBow, J.D.B.
 1954 *Statistical View of the United States*. A.O.P. Nicholson, Washington.
- DePratter, Chester
 1979 *Ceramics*. In *The Anthropology of St. Catherines Island 2. The Refuge-Deptford Mortuary Complex*, edited by David Hurst Thomas, Clark and Spencer Larsen, pp. 109-132. Anthropological Papers of the American Museum of Natural History 56, Part 1, New York.
- 1988 *Indian Occupations of the Savannah River Valley During the Late Prehistoric and Early Historic Periods*. Manuscript in the possession of the author.
- DePratter, Chester and Christopher Judge
 1990 *Wateree River*. In *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*, edited by Mark Williams and Gary Shapiro, pp. 56-58. University of Alabama Press, Tuscaloosa.
- Derrick, Samuel M.
 1975 *Centennial History of the South Carolina Railroad*. Reprint Company, Spartanburg, South Carolina.
- Derting, Keith M., Sharon L. Pekarul, and Charles J. Rinehart
 1991 *A Comprehensive Bibliography of South Carolina Archaeology*. Research Manuscript 211. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Dobyns, Henry F.
 1983 *Their Number Become Thinned: Native American Population Dynamics in Eastern North America*. University of Tennessee Press, Knoxville.

SOURCES CITED

- Duke, James A.
 1961 The psammophytes of the Carolina Fall-Line Sandhills. *Journal of the Elisha Mitchell Scientific Society* 77:3-24.
- Edgar, Walter
 1998 *South Carolina: A History*. University of South Carolina Press, Columbia.
- Egloff, Brian John
 1967 *An Analysis of Ceramics from Historic Cherokee Towns*. Unpublished M.A. Thesis, Department of Anthropology, University of North Carolina, Chapel Hill.
- Ferguson, Leland G.
 1971 *South Appalachian Mississippian*. Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.
- Fick, Sarah
 1986 *Aiken County, South Carolina - Final Survey (Western Portion)*. Preservation Consultants, Charleston, South Carolina.
- Fick, Sarah and David Schneider
 1988 *Aiken County - East, South Carolina: Historical and Architectural Inventory*. Preservation Consultants, Charleston, South Carolina.
- Frissell, H.B., and Isabel Bevier
 1899 *Dietary Studies of Negroes in Eastern Virginia in 1897 and 1898*. U.S.D.A. Bulletin 71. Washington, D.C.
- Goodyear, Albert C., John H. House, and Neal W. Ackerly
 1979 *Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont*. Anthropological Studies 4, Occasional Papers of the Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Green, William G.
 1991 *The Search for Altamaha: The Archaeology of an Early 18th Century Yamasee Indian Town*. Unpublished M.A. Thesis, Department of Anthropology, University of South Carolina, Columbia.
- Grover, Mark D. and Pamela Johnson
 2002 *Archaeological Investigations at Fort Moore: Results of 2001 Site Survey and Testing*. Ms. on file, S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Gunn, Joel D. And Kathy Wilson
 1993 *Archaeological Data Recovery Investigations at Sites 38CT54 and 38CT58 Along the S.C. 151 Jefferson Bypass, Chesterfield County, South Carolina*. Garrow and Associates, Raleigh. Submitted to the S.C. Department of Highways and Public Transportation, Columbia.
- Gurcke, Karl
 1987 *Bricks and Brickmaking: A Handbook for Historical Archaeology*. University of Idaho Press, Moscow, Idaho.
- Hager, John M.
 1927 *Commercial Survey of the Southeast*. Domestic Commerce Series 19. Department of the Commerce, Bureau of Foreign and Domestic Commerce, Washington, D.C.

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

- Hally, David J.
1990 Phase Characteristics: Upper Coosa River. In *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*, edited by Mark Williams and Gary Shapiro, pp. 43-44, 52-55. University of Alabama Press, Tuscaloosa.
- Hatley, Tom
1995 *The Dividing Paths: Cherokees and South Carolinians through the Revolutionary Era*. Oxford University Press, New York.
- Hayne, I.W.
1852 *Report to His Excellency Governor Means on the Subject of the Augusta Bridge, and the Navigation of the Savannah*. Walker, Richards & Company, Charleston.
- Hicks, Theresa M., editor
1998 *South Carolina Indians, Indian Traders and Other Ethnic Connections Beginning in 1670*. The Reprint Company, Spartanburg.
- Hollingsworth, Dixon
1976 *Indians on the Savannah River*. The Partridge Pond Press, Sylvania, Georgia.
- Hudson, Charles
1976 *The Southeastern Indians*. University of Tennessee Press, Knoxville.
- Ivers, Larry E.
1970 *Colonial Forts of South Carolina 1670-1775*. Tricentennial Booklet 3. University of South Carolina Press, Columbia.
- Jennings, Jesse D.
1941 Chickasaw and Earlier Indian Cultures of Northeast Mississippi. *Journal of Mississippi History* 3:155-226.
- Jervey, Elizabeth Heyward
1929 Marriage and Death Notices from the Charleston Courier 1806. *South Carolina Historical Magazine* 30:185-191.
- Jester, Thomas C.
1995 *Twentieth-Century Building Materials: History and Conservation*. McGraw Hill, New York.
- Johnson, Jay K. and John W. O'Hear
n.d. *The Chickasaws: A Research Proposal*. National Endowment for the Humanities, Washington, D.C.
- Joseph, J. Walter, Jr.
1971a Excavations Near the Site of Fort Moore, Aiken County, South Carolina. *The Notebook* 5(5):111-126.
1971b Amateurs and Professionals Team-Up to Salvage Fort Moore. *South Carolina Antiquities* 3(2):65-67.
- Kohn, David and Bess Glenn, editors
1938 *Internal Improvement in South Carolina, 1817-1828*. n.p., Washington, D.C.
- Kovacik, Charles F. and John J. Winberry
1987 *South Carolina: The Making of a Landscape*. University of South Carolina Press, Columbia.
- Lowry, M.W.
1934 *Reconnaissance Erosion Survey of the State of South Carolina*. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

SOURCES CITED

- Maness, Harold S.
 1986 *Forgotten Outpost: Fort Moore and Savannah Town, 1685-1765*. BPB Publications, Pickens, South Carolina.
- Martin, Debra K. and Lesley M. Drucker
 1987 *Archaeological Inventory Survey of Pole Branch and Southwest Interceptors, Aiken County, South Carolina*. Carolina Archaeological Services, Columbia.
- McAlester, Virginia and Lee McAlester
 1984 *A Field Guide to American Houses*. Alfred A. Knopf, New York.
- McDowell, W.L., editor
 1955 *Journals of the Commissioners of the Indian Trade, September 20, 1710 – August 29, 1718*. South Carolina Archives Department, Columbia.
- 1958 *Documents Relating to Indian Affairs, May 21, 1750 – August 7, 1754*. South Carolina Archives Department, Columbia.
- McElwin, Henry
 1882 *Travels in the South: A Series of Letters*. n.p., np.
- Michie, James
 1977 *The Late Pleistocene Human Occupation of South Carolina*. Unpublished Honor's Thesis, Department of Anthropology, University of South Carolina, Columbia.
- Milling, Chapman J.
 1969 *Red Carolinians*. University of South Carolina Press, Columbia.
- Mills, Robert
 1972 [1826] *Statistics of South Carolina*. Reprinted. The Reprint Press, Spartanburg, South Carolina.
- Montgomery, Mabel, editor
 1942 *South Carolina: The WPA Guide to the Palmetto State*. Oxford University Press, New York.
- Moody, L.S.
 1947 *Report on Flood Control Benefits from the Clark Hill Project*. Chamber of Commerce, Augusta, Georgia.
- Moore, David G.
 2002 *Catawba Valley Mississippian: Ceramics, Chronology, and Catawba Indians*. University of Alabama Press, Tuscaloosa.
- Moore, Henry P.
 1901 *Twentieth Century Book of Augusta*. Foote and Davies Co., Atlanta.
- Newell, Mark M.
 2001 *A Spectacular Find at the Joseph Gregory Baynham Pottery Site. Ceramics 2001:229-232*.
- Newell, Mark M. and Nick Nichols
 1998 *The River Front Potters of North Augusta, Preliminary Report*. Research Manuscript HC01-15. Georgia Archaeological Institute, Augusta.
- Noble, Bruce J., Jr. and Robert Spude
 1992 *Guidelines for Identifying, Evaluating, and Registering Historic Mining Properties*. National Register Bulletin 42. National Park Service, Washington, D.C.
- North, S.N.D.
 1902 *Manufacturers Part I United States by Industries. Twelfth Census of the United States Taken in the Year 1900*. U.S. Census Office, Washington, D.C.

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

- O'Brian, Greg
2003 Chickasaws: The Unconquerable People. Ms. on file, Mississippi Historical Society, Jackson. Department of Cultural Resources, Raleigh.
- Oliver, Billy L.
1981 *The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type*. Unpublished Master's thesis, Department of Anthropology, University of North Carolina, Chapel Hill.
- 1985 Tradition and Typology: Basic Elements of the Carolina Projectile Point Sequence. In *Structure and Process in Southeastern Archaeology*, edited by Roy S. Dickens and H. Trawick Ward, pp. 195-211. The University of Alabama Press, University.
- Orser, Charles
1988 *The Material Basis of the Postbellum Tenant Plantation: Historical Archaeology in the South Carolina Piedmont*. University of Georgia Press, Athens.
- Overstreet, William C. and Henry Bell III
1965 *The Crystalline Rocks of South Carolina*. Bulletin 1183. S.C. Geological Survey, Columbia.
- Phelps, David A.
1968 Thom's Creek ceramics in the central Savannah River locality. *The Florida Anthropologist* 21(1):17-30.
- 1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History,
- Polhemus, Richard R.
1971 Excavations at Fort Moore - Savano Town (38BK4&5). *The Notebook* 3(6):132-133.
- Rainsford, Bettis C.
2003 *The Chickasaw Indians of South Carolina*. Ms. on file, Edgefield County Historical Society, Edgefield, South Carolina.
- Rasmussen, Edmund F.
1961 *Dry Kiln: Operator's Manual*. Agricultural Handbook 188. U.S. Department of Agriculture, Forest Service, Washington, D.C.
- Rhodes, Daniel
1968 *Kilns: Design, Construction, and Operation*. Chilton Book, Radnor, Pennsylvania.
- Rinehart, Charles J.
1995 *An Intensive Archaeological and Architectural survey of the Proposed U.S. 25 Improvements, North Augusta, Aiken County, South Carolina*. South Carolina Department of Transportation, Columbia.
- Rogers, Vergil A.
1985 *Soil Survey of Aiken County Area, South Carolina*. United State Department of Agriculture. Soil Conservation Service, Washington, D.C.
- Rosson, Elizabeth Murphy
1980 *History of North Augusta*. North Augusta Historical Society, North Augusta, South Carolina.
- Ryan, Thomas M.
1972 *Archaeological Survey of the*

SOURCES CITED

- Columbia Zoological Park, Richland and Lexington Counties, South Carolina*. Research Manuscript Series 37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Sassaman, Kenneth E.
- 1983 *Middle and Late Archaic Settlement in the South Carolina Piedmont*. Unpublished master's thesis. Department of Anthropology, University of South Carolina, Columbia.
- 1985 A Preliminary Typological Assessment of MALA Hafted Bifaces from the Pen Point Site, Barnwell County, South Carolina. *South Carolina Antiquities* 17:1-17.
- 1993 *Early Woodland Settlement in the Aiken Plateau: Archaeological Investigations at 38AK157, Savannah River Site, Aiken County, South Carolina*. Savannah River Archaeological Research Papers 3. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- 1995 The Cultural Diversity of Interactions Among Mid-Holocene Societies of the American Southeast. In *Native American Interactions: Multiscalar Analyses and Interpretation in the Eastern Woodlands*, edited by Michael Nassaney and Kenneth E. Sassaman, pp. 174-204. University of Tennessee Press, Knoxville.
- Sassaman, Kenneth E. and David G. Anderson
- 1990 Typology and Chronology. In *Native-American Prehistory of the Middle Savannah River Valley*, edited by Kenneth E. Sassaman, Mark J. Brooks, Glen T. Hanson, and David G. Anderson, pp. 143-216. Savannah River Archaeological Research Publication 1. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- 1994 *Middle and Late Archaic Archaeological Records of South Carolina: A Synthesis for Research and Resource Management*. Council of South Carolina Professional Archaeologists, Columbia.
- Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson
- 1990 *Native American Prehistory of the Middle Savannah River Valley*. Savannah River Archaeological Research Papers 1. Occasional Papers of the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.
- Searle, Alfred B.
- 1920 *Modern Brickmaking*. 2nd Revised Edition. D. Van Nostrand, New York.
- Sears, William B. and James B. Griffin
- 1950 Fiber Tempered Pottery of the Southeast. *Prehistoric Pottery of the Eastern United States*. Ceramic Repository for the Eastern United States. University of Michigan, Ann Arbor.
- Shultz, Henry
- 1837 *Origin of the Town of Hamburg, South Carolina: Memorial of Henry Shultz*. Benjamin Brantley, Augusta.

CULTURAL RESOURCES SURVEY OF THE NORTH AUGUSTA RIVERFRONT

- 1849 *Memorial of Henry Shultz, for Himself & Others to the Legislature of South Carolina.* n.p., n.p. *Historical Review* 2(1):20-38.
- South, Stanley A.
- 1959 *A Study of the Prehistory of the Roanoke Rapids Basin.* Master's thesis, Department of Sociology and Anthropology, University of North Carolina, Chapel Hill.
- 1973 *Indian Pottery Taxonomy for the South Carolina Coast.* S.C. *Institute of Archaeology and Anthropology Notebook* 8:1-2.
- Steen, Carl
- 1994 *An Archaeological Survey of Pottery Production Sites in the Old Edgefield District of South Carolina.* Diachronic Research Foundation, Columbia.
- 2001 *Industrial Pottery in the Old Edgefield District.* *Ceramics* 2001:226-229.
- Steuart, William M.
- 1913 *Manufacturers 1909: Reports for Principal Industries. Thirteenth Census of the United States taken in the Year 1910.* Department of Commerce, Bureau of the Census, Washington, D.C.
- Stubbs, John D., Jr.
- 1981 *A Preliminary Classification for Chickasaw Pottery.* *Mississippi Archaeology* 17(5):50-57.
- Swanton, John R.
- 1952 *The Indian Tribes of North America.* Bulletin 145. Smithsonian Institution, Bureau of American Ethnology, Washington, D.C.
- Taylor, Rosser H.
- 1934 *Hamburg: An Experiment in Town Promotion.* *North Carolina*
- Trimble, Stanley W.
- 1974 *Man-Induced Soil Erosion on the Southern Piedmont, 1700-1970.* Soil Conservation Society of American, Ankey, Iowa.
- Trinkley, Michael
- 1976 *A Typology of Thom's Creek Pottery for the South Carolina Coast.* Unpublished M.A. Thesis, Department of Anthropology, University of North Carolina, Chapel Hill.
- 1980a *Additional Investigations at 38LX5.* South Carolina Department of Highways and Public Transportation, Columbia.
- 1980b *Investigation of the Woodland Period along the South Carolina Coast.* Ph.D. dissertation. Department of Anthropology, University of North Carolina, Chapel Hill.
- 1989 *An Archaeological Context for the South Carolina Woodland Period.* Chicora Foundation Research Series 22. Chicora Foundation, Inc., Columbia, S.C.
- 1998 *Archaeology at the Western Portion of 38CH1257 and 38CH1259: A Glimpse of Woodland and Civil War Archaeology on Seabrook Island, Charleston County, South Carolina.* Research Series 56. Chicora Foundation, Inc., Columbia.
- Trinkley, Michael and Nicole Southerland
- 2001 *Cultural Resources Survey of the Proposed New Radar to Beaulieu 115kV Transmission Line, Aiken County, South Carolina.* Research Contribution 317. Chicora Foundation, Columbia.

SOURCES CITED

- 2002 *Cultural Resources Survey of the North Augusta Greenway, Aiken County, South Carolina*. Research Contribution 364. Chicora Foundation, Inc., Columbia.
- Trinkley, Michael, Debi Hacker, and Natalie Adams
 1993 *Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina*. Research Series 39. Chicora Foundation, Inc., Columbia.
- Wallace, David D.
 1951 *South Carolina: A Short History, 1520-1948*. University of South Carolina Press, Columbia.
- Walthall, John A.
 1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama*. University of Alabama Press, University.
- Ward, Trawick
 1983 A Review of Archaeology in the North Carolina Piedmont: A Study in Change. In *The Prehistory of North Carolina An Archaeological Symposium*. Edited by Mark A. Mathis and Jeffrey J. Crow, pp. 53-81. North Carolina Division of Archives and History, Raleigh.
- Waring, Antonio J., Jr.
 1968 The Refuge Site, Jasper County, South Carolina. In *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.*, edited by Stephen B. Williams, pp. 198-208. Papers of the Peabody Museum of Archaeology and Ethnology 58.
- Watson, E.J.
 1907 *Handbook of South Carolina*. State Department of Agriculture, Commerce and Immigration. State Company, Columbia.
- 1915 *Twelfth Annual Report of the Commissioner of Agriculture, Commerce, and Industries of the State of South Carolina*. Gonzales & Bryan, Columbia.
- Wilber Smith & Associates
 1980 *North Augusta Riverfront Land Use Master Plan*. Wilber Smith & Associates, Columbia.
- Williams, Stephen B., editor
 1965 *The Paleo-Indian Era: Proceedings of the 20th Southeastern Archaeological Conference*. Bulletin 2. Southeastern Archaeological Conference.
- Wilson, Jack H., Jr.
 1983 *A Study of the Late Prehistoric, Protohistoric, and Historic Indians of the Carolina and Virginia Piedmont*. Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor.
- Wright, J. Leitch, Jr.
 1981 *The Only Land They Knew: American Indians in the Old South*. The Free Press, New York.

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