

**CULTURAL RESOURCES SURVEY OF THE  
JORDAN/F.T. WILLIAMS TRACT,  
CHESTERFIELD COUNTY, SOUTH CAROLINA**



**CHICORA RESEARCH CONTRIBUTION 481**

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November 15, 2007

This report is printed on permanent paper ∞

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## ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 160 acre tract of land in the western portion of Chesterfield County, near the city of Pageland, South Carolina. The work was conducted to assist Hedrick Industries in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The parcel is to be used as a sand mine. The topography is undulating, sloping down to the south and east toward Peddler Branch.

The proposed undertaking will require the clearing of the tract, followed by mining of the property. These activities have the potential to affect archaeological and historical sites and this survey was conducted to identify and assess archaeological and historical sites that may be in the project area. For this study, an area of potential effect (APE) 1.0 mile around the tract was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified seven sites (38CT186-187, 38CT254, 38CT275-278) within 1.0 mile of the project area. Sites 38CT186 and 187 are Middle to Late Archaic scatters; 38CT254 is an undefined prehistoric site; 38CT275 is a prehistoric scatter; 38CT276 is a prehistoric and historic scatter; 38CT277 is a Middle Archaic to Mississippian scatter; and 38CT278 is a Woodland and nineteenth to twentieth century scatter. Site 38CT254 has been determined not eligible for the National Register, however the remaining sites failed to record eligibility.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. No such sites were found in the project APE.

The archaeological survey of the tract incorporated shovel testing at 100-foot intervals along transects placed at 100-foot along the northern boundary of the tract. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 691 shovel tests were excavated along 41 transect lines.

As a result of these investigations, three sites (38CT280-282) were identified. All three sites are prehistoric lithic scatters and are recommended not eligible for the National Register of Historic Places.

A survey of public roads within a 1.0 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. No such sites were found.

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. Jason Conner of Hedrick Industries in Asheville, North Carolina. The work was conducted to assist this company comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a 160 acre tract proposed to be used for a sand mine located in western Chesterfield County near the town of Pageland (Figure 1). The survey area is irregular in shape with the western boundary bordering Shrine Pond Road (S-72) and northern boundary an existing sand mine (Figure 2). The rest of the tract was identified through survey flags, but roughly followed Peddler Branch to the east and south and a portion of a transmission line to the south.

The tract, as previously mentioned, is intended to be used for a sand mine. This work will require the clearing and mining of the project area. There will likely be increased long-term noise, traffic, and dust levels associated with the project. These activities have the potential to damage or otherwise affect any cultural resources that may be present on or near the tract.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Chesterfield County.

We were requested by Mr. Jason Conner of Hedrick Industries to provide a proposal for the survey on October 22, 2007. A proposal was sent the same day. This proposal was accepted on October 29 and work on the project began on October 30, 2007.

Initial background investigations

incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology by Chicora Foundation. As a result of that work, seven sites (38CT186-187, 38CT254, 38CT275-278) were found in the 1.0 mile APE. Sites 38CT186 and 187 are Middle to Late Archaic scatters; 38CT254 is a prehistoric site; 38CT275 is a prehistoric scatter; 38CT276 is a prehistoric and historic scatter; 38CT277 is a Middle Archaic to Mississippian scatter; and 38CT278 is a Woodland and nineteenth to twentieth century scatter. Site 38CT254 has been determined not eligible for the National Register, however the remaining sites failed to record eligibility recommendations.

In addition, 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. No comprehensive architectural survey has been performed for Chesterfield County, however an undated SHPO reconnaissance has been performed for some areas of the county. The reconnaissance, however, failed to visit near the project area.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from November 5-8, 2007 by Ms. Nicole Southerland and Mr. Connor Flanagan under the direction of Dr. Michael Trinkley. Report production was conducted at Chicora's laboratories in Columbia, South Carolina from November 9-16, 2007.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

CULTURAL RESOURCES SURVEY OF THE JORDAN/F.T. WILLIAMS TRACT

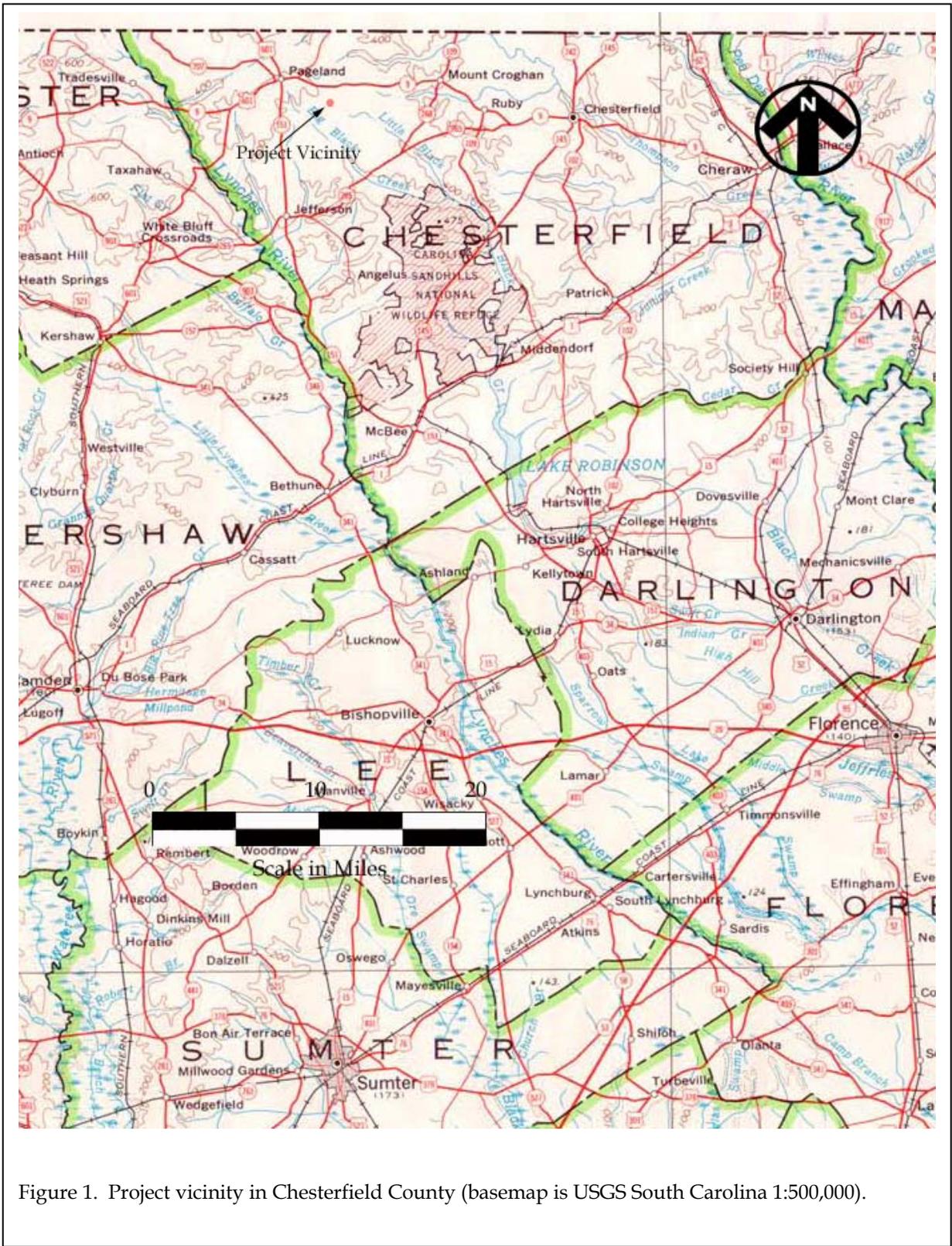


Figure 1. Project vicinity in Chesterfield County (basemap is USGS South Carolina 1:500,000).

INTRODUCTION

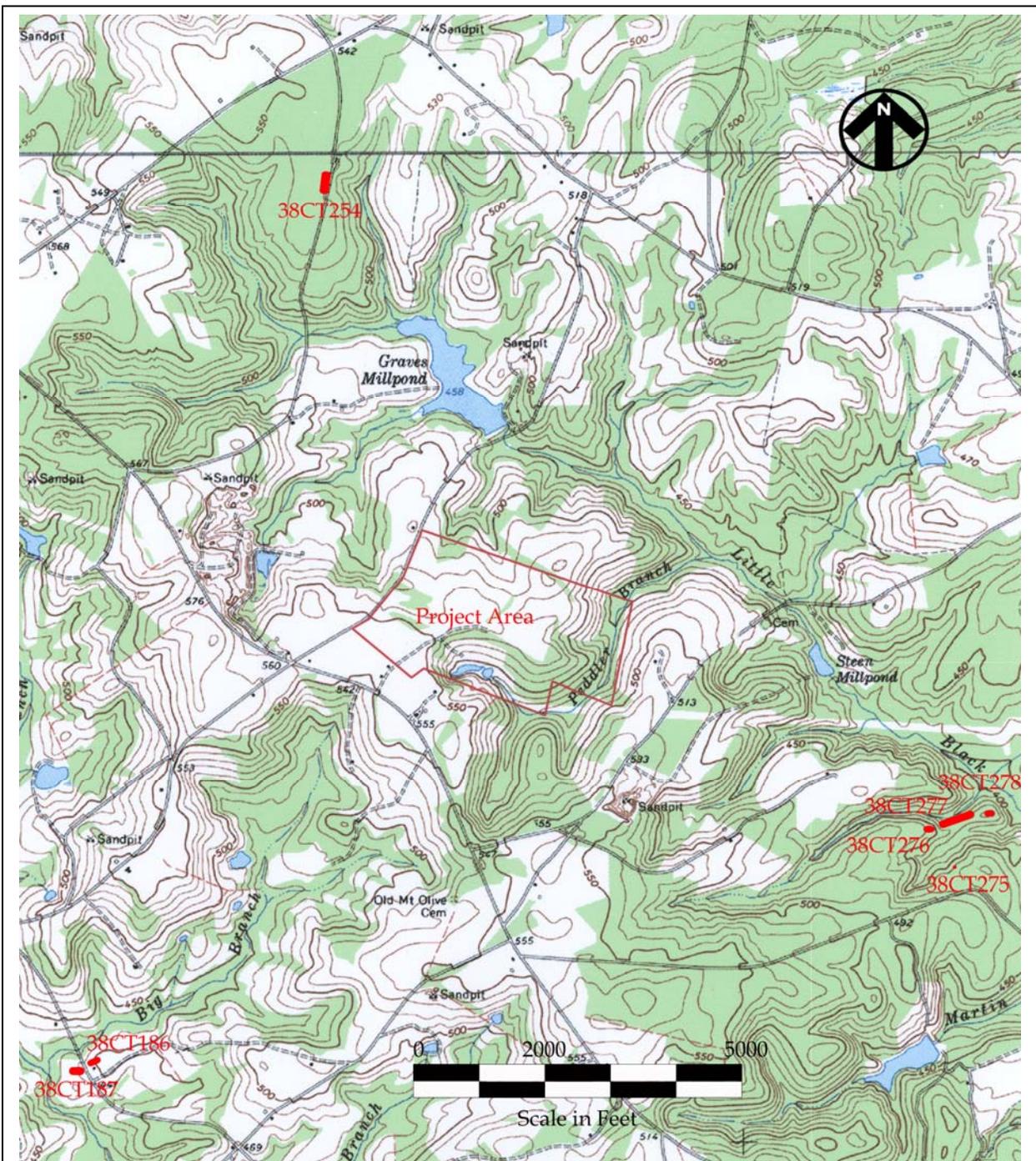


Figure 2. Project area and previously identified sites (basemap is USGS Jefferson NE 7.5').



## NATURAL ENVIRONMENT

### Physiography

Chesterfield County is situated in the Fall Line and Sand Hills area of South Carolina. It is bounded to the north by Union County, North Carolina; to the east by Marlboro County, South Carolina and the Great Pee Dee River; to the south by Darlington County, South Carolina; and to the west by Lancaster and Kershaw counties, South Carolina as well as Lynches River. The western half of the county is drained by Lynches River while the eastern half is drained by the Great Pee Dee. The project area itself is drained by Peddler Branch, which feeds into Little Black Creek.

The Fall Line Sandhills lie in a discontinuous belt 5 to 15 miles wide through the center of the Midlands, paralleling the coast. Fall Line topography is formed by the vigorous erosion of streams that pass from the piedmont bedrock to the loose sands of the coastal plain. The streams rapidly descend to form shoals in major rivers or waterfalls on small streams (Barry 1980:97).

Cooke (1936) has divided the Sandhills into the Aiken Plateau, the Congaree Sand Hills, the Richland Sand Hills, and the High Hills of the Santee. The Richland Red Hills and the High Hills of the Santee are both similar in size and morphology. These two groups are considered the "Red Sand Hills" while the remaining groups are considered the "White Sand Hills" (Colquhoun 1965). The project area is located in the Fall Line region, with the Red Sand Hills just east of the area.

Elevations in the county range from about 75 feet above sea level at the Pee Dee River to about 725 feet above sea level near the town of Pageland (Morton 1995). The survey area is characterized by elevations ranging from 460 to 575 feet above mean sea level (AMSL). Topography is undulating with elevation dropping to the east and south toward Peddler Branch.

### Geology and Soils

The soils in Chesterfield County were formed in material weathered from rock and in sediment that was deposited by the ocean, by streams, or successively by both. In general, the underlying rocks are crystalline and metamorphic rocks such as Carolina slate, gneiss, schist, and granite. Mills describes the soils as being poor for cultivation. He states:

[a] large proportion of this district presents pine barren sand



Figure 3. View of typical vegetation in the project area.

hills, not worth cultivation, except when intersected by streams; where a little good soil is found. Along the northern boundary the land inclines towards the clayey and stony kind, and present a rolling surface. The river lands are of a rich soil, as also those bordering the creeks, in proportion to their extent (Mills 1972 [1826]:497).

to 10%, have an A horizon of brown (10YR5/3) sand to 0.8 foot in depth over a brownish yellow (10YR6/6) sand to a depth of 2.3 feet.

The well drained Vaucuse soils have an A horizon of dark gray (10YR4/1) loamy sand to 0.2 foot in depth over a brownish yellow (10YR6/6) loamy sand to 0.5 foot in depth.

The frequently flooded Johnston soils have an A horizon of black (10YR2/1) sandy loam to 2.1 feet in depth over a very dark gray (10YR3/1) sandy loam to 3.2 feet in depth.

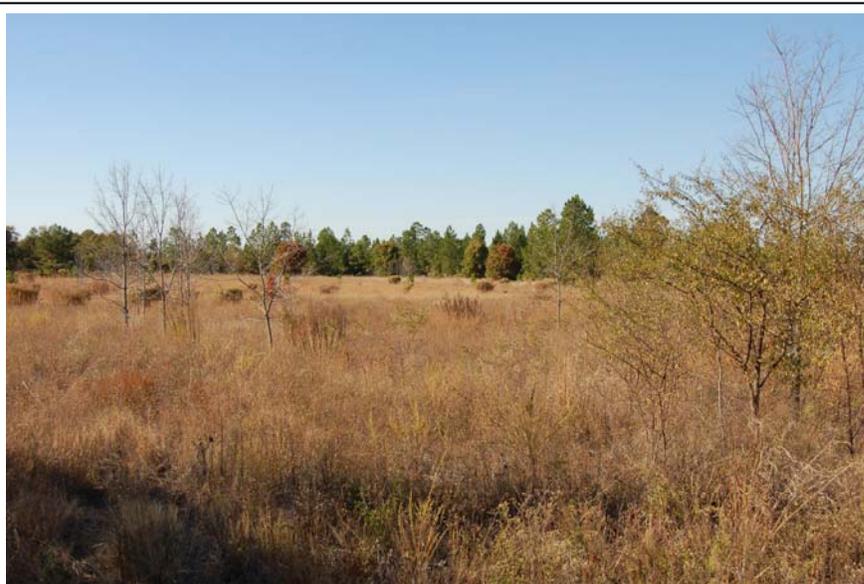


Figure 4. View of old field in the project area.

### Climate

Elevation, latitude, and distance from the coast work together to affect the climate of South Carolina, including the Fall Line and Sand Hills. In addition, the more westerly mountains block or moderate many of the cold air masses that flow across the state from west to east. Even the very cold air masses which cross the mountains are warmed

somewhat by compression before they descend on the Piedmont and adjacent Sand Hills.

Consequently, the climate of Chesterfield County is temperate. The winters are relatively mild and the summers warm and humid. Rainfall in the amount of about 48 inches is adequate, although less than in some neighboring counties. About 27 inches of rain occur during the growing season, with periods of drought not uncommon during the summer months.

### Floristics

In this region, the dominant vegetation is the white oak which is either dominant itself or in

Four soil series are found within the project area. The most common soils are the well drained Ailey sands and the excessively drained Alpin sands. Vaucuse loamy sands, found on 10-15% slopes, are found to the south and east along the drainage, while Peddler Branch itself is situated on very poorly drained Johnston sandy loams.

Ailey sands have an A horizon of brown (10YR5/3) sand to a depth of 0.3 foot over a light yellowish brown (10YR6/4) sand to 2.3 feet in depth. In the project area, Ailey soils can be found on slopes up to 15%.

Alpin sands, which occur on slopes from 0

combination with loblolly pine. Other overstory trees consist of sweetgum, beech, southern red oak, post oak, mockernut hickory, and southern sugar maple. Understory vegetation is dominated by flowering dogwood, sourgum, redbud, and other smaller species such as holly and leatherwood. Herbaceous flora is generally varied, but includes many species of the xeric woodlands as well as those more prevalent in the piedmont (Barry 1980:138-140).

Currently, the vegetation in the project area is a second growth pine and hardwood forest (Figure 3). A portion of the tract is an old field that has grown up in various understory vegetation (Figure 4).



## PREHISTORIC AND HISTORIC BACKGROUND

### Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), *Archaeology of the Southeastern United States: Paleoindian to World War I*. Figure 5 offers a generalized view of South Carolina's cultural periods.

### **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).

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.

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).

CULTURAL RESOURCES SURVEY OF THE JORDAN/F.T. WILLIAMS SITE

			Regional Phases		
Dates	Period	Sub-Period	COASTAL	MIDDLE SAVANNAH VALLEY	CENTRAL CAROLINA PIEDMONT
1715	HIST.	EARLY	Altamaha		Caraway
1650		LATE	Irene / Pee Dee	Rembert Hollywood	Dan River
1100	MISS.	EARLY	Savannah	Lawton Savannah	
800		LATE	St. Catherines / Swift Creek		Uwharrie
A.D.	WOODLAND	MIDDLE	Wilmington	Sand Tempered Wilmington?	Yadkin
B.C.			Deptford	Deptford	
300		EARLY	Refuge	Badin	
1000	ARCHAIC	LATE	Thom's Creek Stallings		
2000			Savannah River Halifax		
3000		MIDDLE	Guilford Morrow Mountain Stanly		
5000	PALEOINDIAN	EARLY	Kirk Palmer		
8000			Hardaway		
10,000		Hardaway - Dalton			
12,000	Cumberland Clovis Simpson				

Figure 5. Generalized cultural sequence for South Carolina.

**Archaic Period**

The Archaic Period, which dates from 10,000 to 3,000 B.P.<sup>1</sup>, does not form a sharp break

<sup>1</sup> 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.

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 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 that 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.

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). These people 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.

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 4000 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 that 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.<sup>2</sup> 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 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

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<sup>2</sup> 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.

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 1650 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).

**Historic Research**

The early history of Chesterfield County was only briefly presented by Mills (1972 [1826]:496):

This district was originally settled by emigrants from Virginia and Pennsylvania, about the year 1745. At that

time it formed a part of Craven county, afterwards of Cheraw precincts; and now constitutes in itself an independent judicial district.

The Cheraw district was originally part of Craven County in 1682. In 1731 the township of Queensboro was laid out at the confluence of the Great Pee Dee and the Little Pee Dee Rivers to entice settlement in that region. However, settlers were slow coming in.

Welsh began settling the area in the late 1730s and other immigrants, including Scots, Irish, Germans, French, and English, soon followed. In addition, settlers from Virginia and Pennsylvania moved into the area. While subsistence based, farmers discovered that cane brakes were perfect for raising livestock. As more land was cleared, other economic sources such as lumber developed. During the colonial period the major crops were wheat, corn, and indigo.

In the 1760s colonists attempted to bring law and order to the area. Colonists complained that they were too far from existing courts and

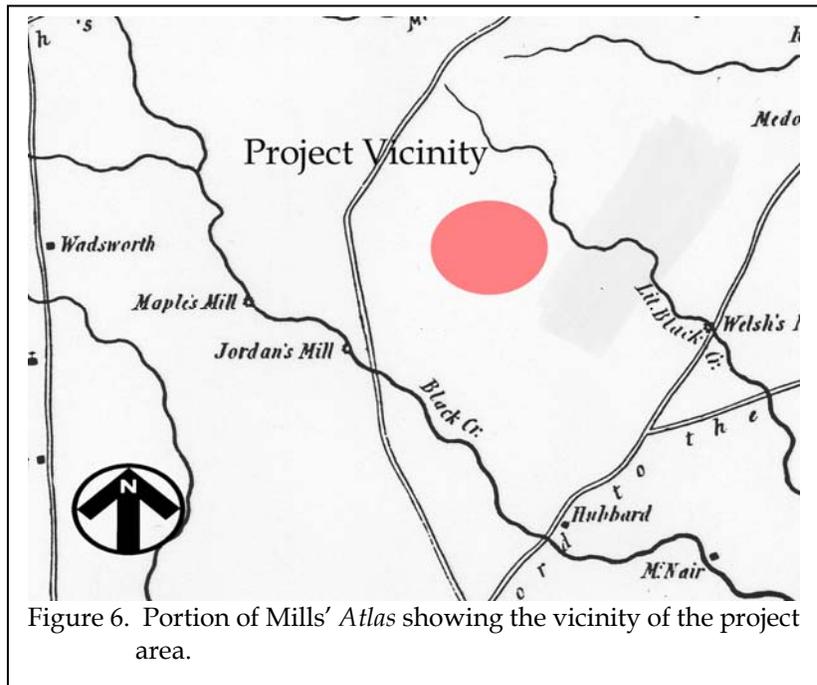


Figure 6. Portion of Mills' Atlas showing the vicinity of the project area.

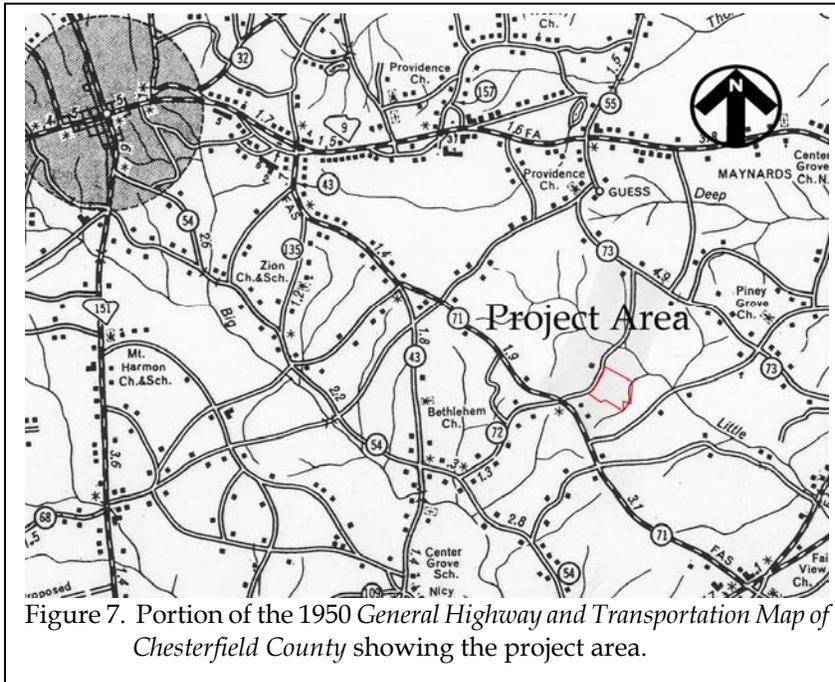


Figure 7. Portion of the 1950 *General Highway and Transportation Map of Chesterfield County* showing the project area.

magistrates for them to be of any use. Frustrated by their unheard cries for assistance, they began taking matters into their own hands. These "regulators" allowed only writs and warrants to be served which had been given their consent.

During the American Revolution a number of skirmishes took place in the back country. British Major McArthur was stationed at Cheraw, where a number of encounters took place between he and Colonel Powell of the Continental Army. Unaccustomed to the warm subtropical climate, many of the British fell ill and died. McArthur was forced to withdraw to Lynches Creek, about two miles from Jefferson, to recuperate and received reinforcements. Other than these developments, very little war related activities took place in Chesterfield County (Gregg 1867).

After the war, the Cheraw district grew rapidly and in 1785 the district was divided into three counties: Marlborough, Chesterfield, and Darlington. Improvements were then made in the transportation system creating more roads and public ferries. By 1820 the population of the

county consisted of 4,412 white and 2,333 black inhabitants (White 1972).

In 1826 the town of Chesterfield became the county seat. At this time the town consisted of 12 houses, two stores, and a new courthouse. Mills *Atlas* of 1825 (Figure 6) shows no subscribers in the project area. Most of the subscribers shown are situated along major creeks and roads, which probably accurately depicts the settlement pattern in the area at that time.

Between 1820 and 1856 South Carolina saw an increase in manufacturing and business. In the late 1820s gold was discovered near Miller's Store (now Jefferson). Although some increases occurred, generally South Carolina remained a state based on subsistence farming and one crop cotton staple (Wallace 1951).

Few Chesterfield County citizens owned slaves, making the residents more like their North Carolina neighbors. Although against secession, the county sent five companies of infantry, as well as supplies, for the Confederate cause. Chesterfield County did not see much action until the last days of the war during Sherman's return from his "March to the Sea". In March of 1865 Union forces reached Chesterfield. After a skirmish with Confederate troops, a number of public buildings were burned.

After Sherman's troops reached Cheraw, they located a large number of Confederate military supplies sent up from Charleston. Sherman inventoried 24 cannons, 2000 muskets, 3600 barrels of gunpowder, and "other things" (Glatthaar 1985). Unfortunately, a careless soldier caused many of the supplies to be lost in an explosion that also killed several men and

wounded many more.

The arrival of the railroad can be attributed to the eventual recovery of the county. In the 1880s lines were built connecting Chesterfield County to important towns including Salisbury, North Carolina and Camden, South Carolina. During reconstruction and into 1900, small subsistence farming continued. Those larger farmers who had been dependent on slaves turned to sharecropping and tenant farming. The early 1900s brought improvements to the county, although by in large, the area was still impoverished. Cotton was still the staple crop although farmers began experimenting with growing melons, grapes, and other fruits. Chesterfield County shipped 30,000 bales of cotton in 1925 and had become the state's largest peach producer. The South Carolina *General Highway and Transportation Map of Chesterfield County* from 1950 shows a number of houses along the major roads and near the project area (Figure 7). No structures, however, are found within the project boundaries.

A major shift in agriculture occurred over the next several decades. By 1940 the tractor was widely used. Low cotton yields forced a conversion to soybean production in the 1960s. By the 1970s, poultry and eggs had replaced cotton as the leading income for the county. Today, agriculture remains an important part of the economy, although industry is beginning to offset its importance. Chesterfield has become one of the largest wood pulp producing counties in the state.

### **Previous Research**

Very little archaeological research has been performed in Chesterfield County. Most of the work has been performed at the survey level and consists of work associated with highway projects (e.g. Cable and Cantley 1979; Trinkley 1982). Other projects consist of a survey of the Carolina Sandhills National Wildlife Refuge (Wright 1978) as well as a golf course survey at Cheraw State Park (Barker 1990).

Two surveys have been performed near the current project area – both for sand mines (Norris 2007; Trinkley and Southerland 2001). Both surveys recorded sites, however all the sites were recommended not eligible for the National Register of Historic Places.

There are additional archaeological investigations in Chesterfield County (see Derting et al. 1991), although these projects are largely confined road and highway widening projects.



## METHODS

### Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along transects placed at 100-foot intervals.

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 1.0 foot or until subsoil was encountered. 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 the surface survey or shovel tests within a 50 foot 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 25 to 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.

Transects were set up from west to east along the northern boundary of the tract, which was marked with flagging tape. Shovel tests, at 100-foot intervals on these transects, ran from north to south and were also sequentially numbered by transect. A total of 691 shovel tests were excavated along 41 transect lines (Figure 8). Additional testing was performed for the identified sites.

The GPS positions were taken with a WAAS enabled Garmin 76 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. WAAS or Wide Area Augmentation System is a system of satellites and ground stations that provide GPS signal corrections, yielding higher position accuracy – generally an accuracy of 10 feet or better 95% of the time. This was a problem at the sites areas where a second growth of pines and hardwoods provided a dense canopy.

### Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained “some measure of its historic integrity” (Vivian n.d.:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs were taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

### Site Evaluation

Archaeological sites will be evaluated for

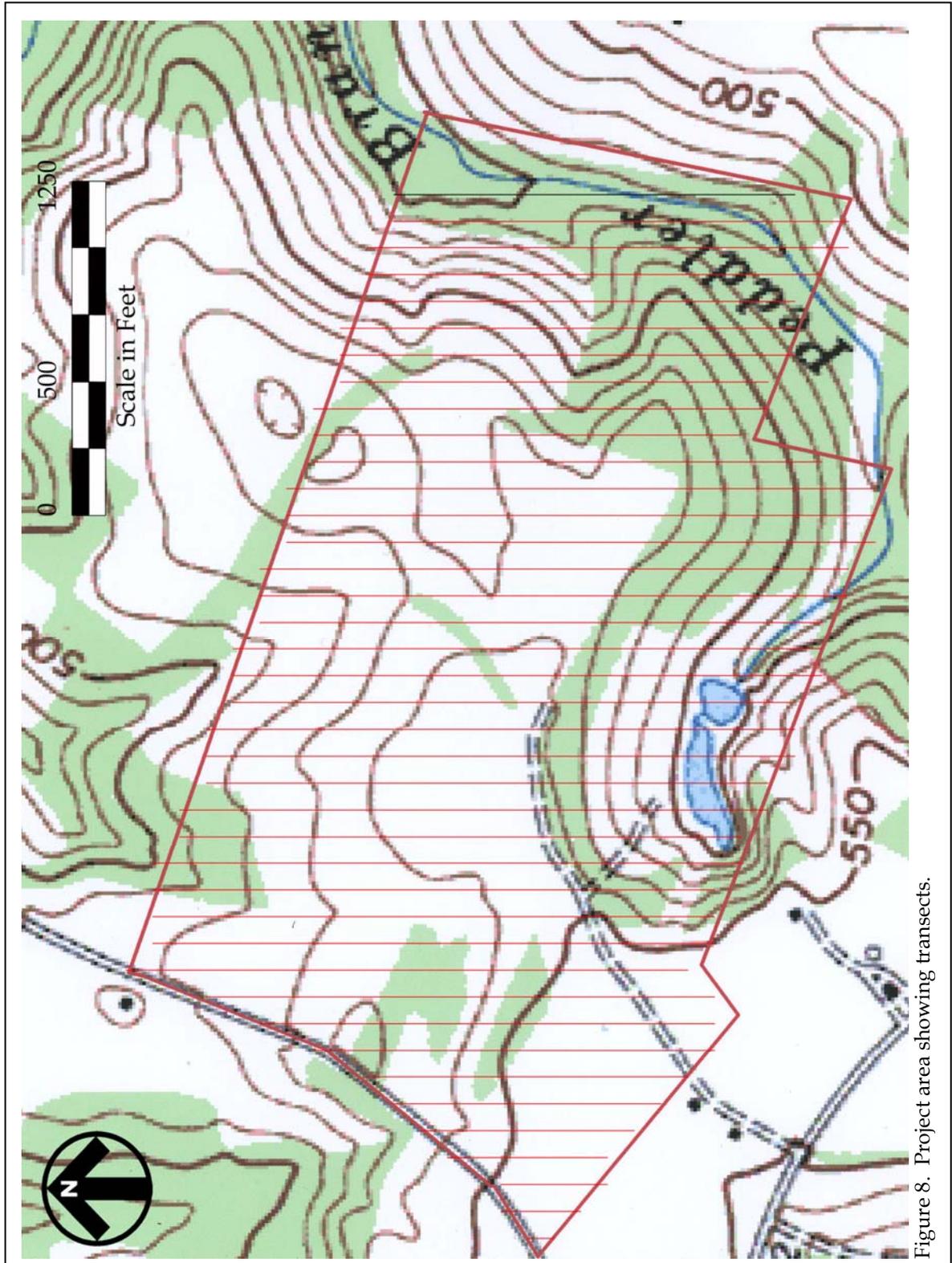


Figure 8. Project area showing transects.



Figure 9. Shovel testing in the project area.

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 would be somewhat different. Given the relatively limited architectural data available for most of the properties, we would 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.

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 C the physical items used on and in the property C 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.

### Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been



Figure 10. View of transect line along the northern boundary of the project area.

catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes have been prepared for curation using



Figure 11. Existing sand mine to the north of the project area.

archival standards and will be transferred to that agency as soon as the project is complete. Non-archival digital photographic materials will be retained by Chicora for 60 days.

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 prehistoric materials were defined by such authors as Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986).



## RESULTS OF SURVEY

### Introduction

As a result of this cultural resources survey three archaeological sites (38CT280-282) were recorded (Figure 12). All three sites are recommended not eligible for the National Register for their inability to address significant research questions.

The architectural survey did not identify any structures or other resources that might be potentially eligible for the National Register of Historic Places.

### Archaeological Resources

#### 38CT280

Site 38CT280 (Figure 13) is a surface and subsurface lithic scatter located on a ridge side slope in a sparse mixed pine and hardwood forest. The area had good surface visibility, providing a central GPS UTM of 564082E 3843352N (NAD27 datum).

The site was originally noticed on the surface, however shovel testing was performed with Transect 24, Shovel test 1 being excavated. The shovel test was negative, however additional close interval testing was performed at 25-foot intervals along the cardinal directions to try to define the site area. One shovel test, 25 feet north of Transect 24, Shovel test 1, was found to be positive, producing a single quartz flake. A total of 14 shovel tests were excavated in and around the site area.

Soils in the site area resembled the Alpin Series, which has an A horizon of brown (10YR5/3) sand to a depth of 0.8 foot over a brownish yellow (10YR6/6) sand to a depth of 2.3 feet. The subsurface flake was found in the upper 0.8 foot of soil.

The site area, given the positive shovel test and surface collection, measures about 50 feet north-south by 25 feet east-west. The majority of the site extends to the north off the current project area. The land to the north, however, is still owned by the Piedmont Sands Company, who also owns the current survey tract.

The site is sparse, producing only ten artifacts -- seven quartz flakes and three chert flakes. No diagnostic artifacts were recovered. With most of the artifacts located on the surface, the site lacks integrity. In addition, the site lacks the data sets and quantity of remains needed to

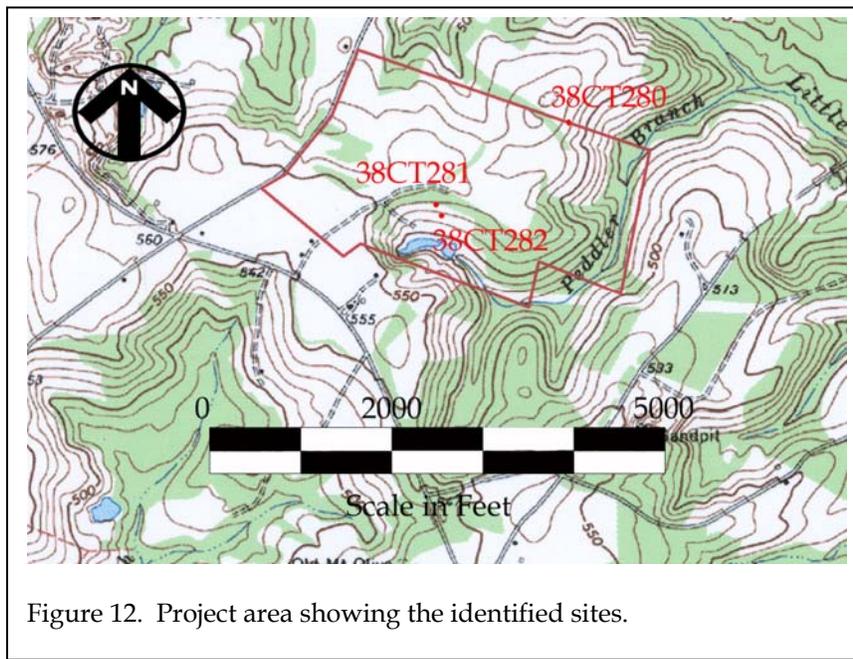
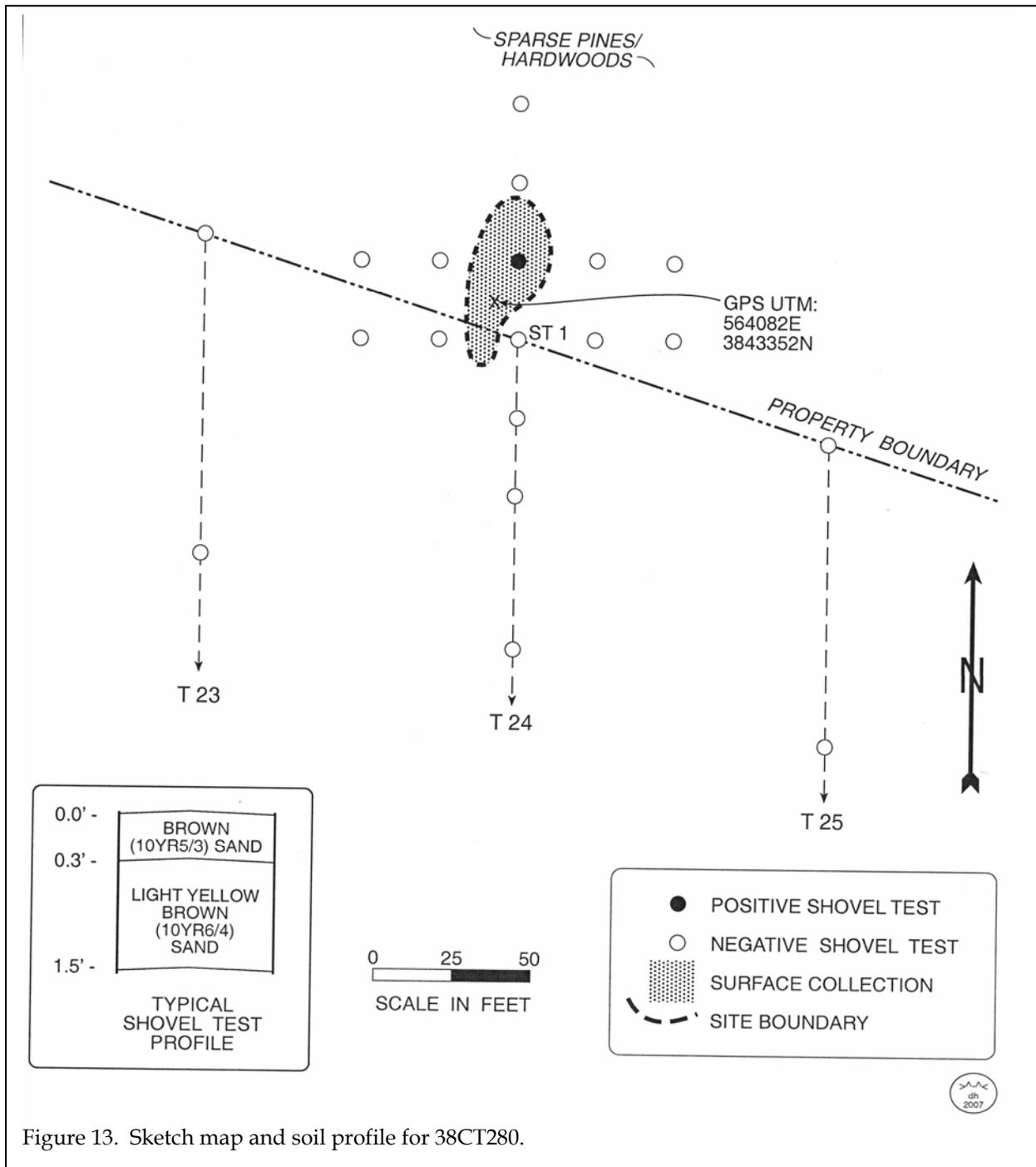


Figure 12. Project area showing the identified sites.



address significant research questions about prehistoric life.

Site 38CT280 is recommended not eligible for the National Register of Historic Places. No additional management activity is recommended

pending the review by the lead agency and concurrence by the State Historic Preservation Office.

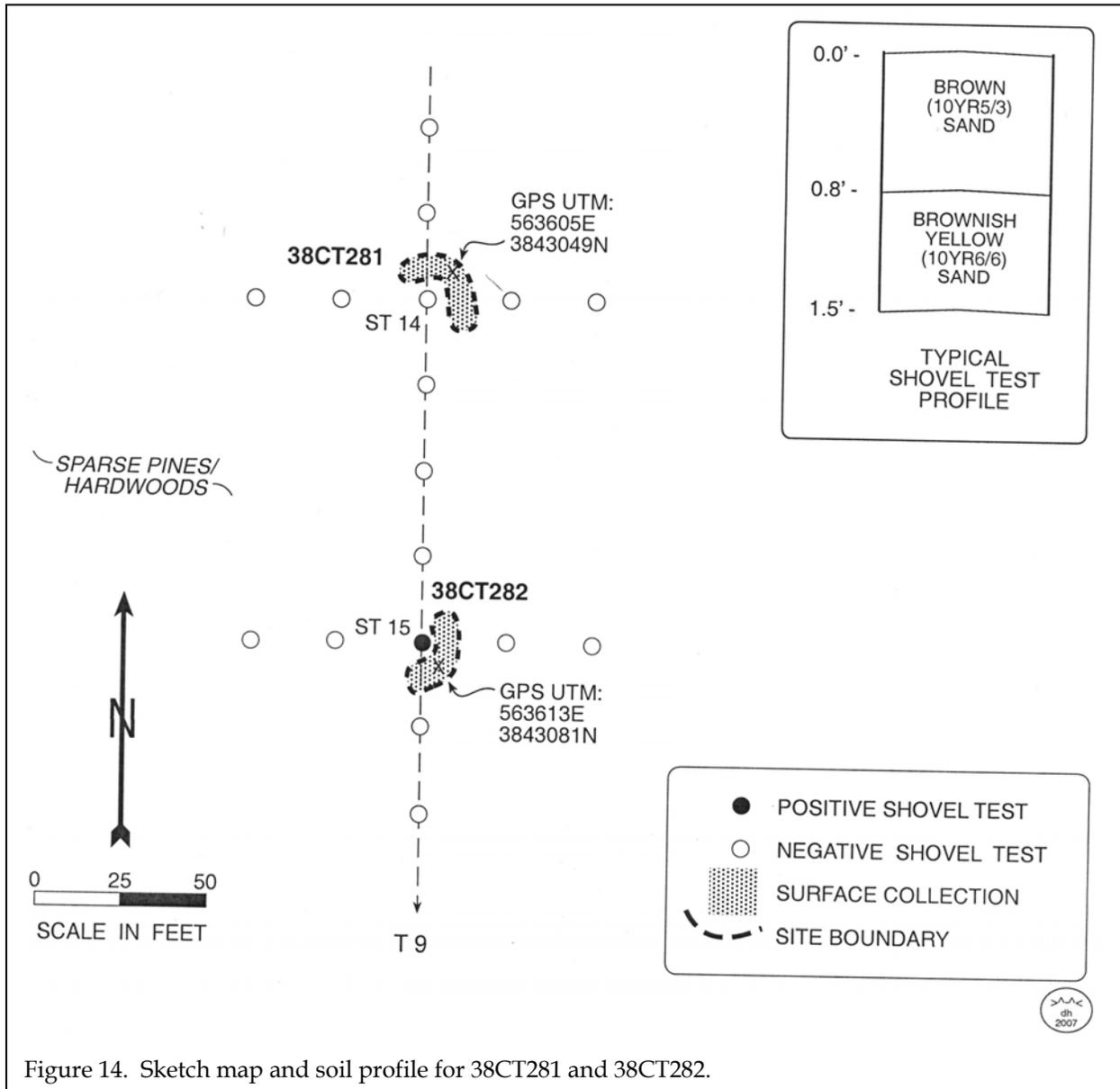


Figure 14. Sketch map and soil profile for 38CT281 and 38CT282.

**38CT281**

Site 38CT281 (Figure 14) is a sparse surface scatter of prehistoric lithics. The site is located on a ridge side slope in a sparse mixed pine and hardwood forest. A central GPS UTM is 563605E 3843049N (NAD27 datum).

The site was identified while performing shovel testing with Transect 9, Shovel test 14 near the site. Although the shovel test was negative,

the surface lithics were observed and close interval testing was performed at 25-foot intervals in the cardinal directions in an attempt to locate any subsurface remains. A total of nine shovel tests were excavated, but they were all negative.

The soils in the area resembled the Alpin Series, which has an A horizon of brown (10YR5/3) sand to a depth of 0.8 foot over a brownish yellow (10YR6/6) sand to a depth of 2.3 feet. All the artifacts, however, were found on the

surface in an area measuring about 20 feet north-south by 20 feet east to west.

The site was extremely sparse, producing only four quartz flakes. Although producing enough artifacts to be considered a site, the artifacts were not diagnostic and they lack the quantity to be able to address significant research questions about prehistoric lifeways. With all the artifacts located on the surface of an area that has been previously logged, the site also lacks integrity.

Site 38CT281 is recommended not eligible for the National Register of Historic Places. No



Figure 15. View of house to the west of the project area.

additional management activity is recommended pending the review by the lead agency and concurrence by the State Historic Preservation Office.

### 38CT282

Site 38CT282 (Figure 14) is a surface and subsurface scatter of prehistoric lithics located on a ridge side slope in a sparse mixed pine and hardwood forest. The area had good surface visibility. A central GPS UTM for the site is 563613E 3843031N (NAD27 datum).

The site was originally identified through shovel testing with Transect 9, Shovel test 15 positive, producing a quartz flake. A small surface scatter was also observed next to the shovel test. Additional close interval testing was performed at 25-foot intervals in the cardinal directions with a total of nine shovel tests excavated in the site area. Only the original shovel test (Transect 9, Shovel test 15) was positive.

Soils in the site area resembled the Alpin Series, which has an A horizon of brown (10YR5/3) sand to a depth of 0.8 foot over a brownish yellow (10YR6/6) sand to a depth of 2.3 feet. The subsurface flake was found in the upper 0.8 foot of soil.

The surface collection produced an additional three quartz flakes. The total site area measures approximately 20 feet north-south by 15 feet east-west.

The site lacks the quantity and quality of remains needed to address significant research questions about prehistoric lifeways. In addition, the site has low integrity given

the logging in the area.

Site 38CT282 is recommended not eligible for the National Register of Historic Places. No additional management activity is recommended pending the review by the lead agency and concurrence by the State Historic Preservation Office.

### Architectural and Other Historic Resources

There are no previously recorded

National Register buildings, districts, structures, or objects in the 1.0 mile APE. In addition, the GIS failed to identify any historic structures in the APE.

The 1950 *General Highway and Transportation Map of Chesterfield County* (see Figure 7) shows a structure to the west of the project area, across Shrine Pond Road. This house has been visibly altered by the addition of vinyl siding and storm windows (Figure 15). In addition, the house lacks any distinctive characteristics that may have made it eligible for the National Register of Historic Places.

No additional structures were identified in the APE that may be potentially eligible for the National Register.



## CONCLUSIONS

This study involved the examination of approximately 160 acres of land in western Chesterfield County be used for a sand mine. This work, conducted for Mr. Jason Conner of Hedrick Industries examined archaeological sites and cultural resources found on the proposed project area and is intended to assist this company in complying with their historic preservation responsibilities.

As a result of this investigation, three archaeological sites, 38CT280-282, were identified. All three sites are prehistoric lithic scatters that are recommended not eligible for the National Register of Historic Places for their inability to address significant research questions about prehistoric lifeways.

A survey of public roads within 1.0 mile

of the project area failed to identify any architectural structures that may be potentially eligible for the National Register of Historic Places.

It is possible that 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) or brick rubble 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

- 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.
- Anderson, David G., Kenneth E. Sassaman, and Christopher Judge
- 1992 *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective.* Council of South Carolina Professional Archaeologists, Columbia.
- Barker, Donnie B.
- 1990 *An Archaeological Reconnaissance Survey of the Proposed Golf Course at Cheraw State Park.* Research Series 3. S.C. Department of Parks, Recreation and Tourism, Columbia.
- Barry, John M.
- 1980 *Natural Vegetation of South Carolina.* University of South Carolina Press, Columbia.
- Bense, Judith A.
- 1994 *Archaeology of the Southeastern United States: Paleoindian to World War I.* Academic Press, 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, Atlanta.
- Cable, John S. and Charles E. Cantley
- 1979 *An Intensive Archaeological Survey of the South Carolina 151 Highway Widening Project.* Prepared for the S.C. Department of Highways and Public Transportation, 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-an-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.
- Coe, Joffre  
1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society 54(5).
- Colquhoun, Donald J.  
1965 *Geomorphology of the Lower Coastal Plain of South Carolina*. Division of Geology, Columbia, South Carolina
- Cooke, C. Wythe  
1936 *Geology of the Coastal Plain of South Carolina*. Bulletin 867. U.S. Geological Survey, Washington, D.C.
- Derting, Keith M., Sharon L. Pekar, and Charles J. Rinehart  
1991 *A Comprehensive Bibliography of South Carolina Archaeology*. Research Manuscript Series 211. S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Ferguson, Leland G.  
1971 *South Appalachian Mississippian*. Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.
- Glatthaar, Joseph T.  
1985 *The March to the Sea and Beyond*. New York University Press.
- Goodyear, Albert C., III and Glen T. Hanson  
1989 *Studies in South Carolina Archaeology: Essays in Honor of Robert L. Stephenson*. Anthropological Studies 9. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Gregg, Alexander  
1867 *History of the Old Cheraws*. Richardson and Company, New York.
- 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.
- Michie, James L.  
1977 *The Late Pleistocene Human Occupation of South Carolina*. Unpublished Honor's Thesis, Department of Anthropology,

---

SOURCES CITED

---

- University of South Carolina, Columbia. Research Series 7. Chicora Foundation, Inc., Columbia.
- Mills, Robert  
 1972 [1826] *Statistics of South Carolina*. Hurlbut and Lloyd, Charleston, South Carolina. 1972 facsimile ed. The Reprint Company, Spartanburg, South Carolina.
- Morton, Ronald  
 1995 *Soil Survey of Chesterfield County, South Carolina*. Soil Conservation Service, U.S. Department of Agriculture, Washington, D.C.
- Norris, Sean  
 2007 *Cultural Resources Survey of Approximately 108 Acres at the Sandhills Mine*. TRC Associates, Columbia.
- 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.
- Oliver, Billy L., Stephen R/ Claggett, and Andrea Lee Novick  
 1986 Lithic Analysis. In *Indian and Freedmen Occupation at the Fish Hall Site (38BU805), Beaufort County, South Carolina*, edited by Michael Trinkley, pp. 183-207.
- Phelps, David S.  
 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, Department of Cultural Resources, Raleigh.
- Ryan, Thomas M.  
 1972 *Archaeological Survey of the 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.  
 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.
- 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

CULTURAL RESOURCES SURVEY OF THE JORDAN/F.T. WILLIAMS TRACT

- 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. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl  
 1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts.* Bulletin 36. National Park Service, National Register of Historic Places, Washington, D.C.
- Trinkley, Michael  
 1976 *A Typology of Thom's Creek Pottery from the South Carolina Coast.* Unpublished Master's thesis. Department of Anthropology, University of North Carolina, Chapel Hill.
- 1980 *Additional Investigations at Site 38LX5.* South Carolina Department of Highways and Public Transportation, Columbia.
- 1982 *Archaeological Investigation of the Pageland By-Pass Borrow Pit, Chesterfield County.* South Carolina Department of Highways and Public Transportation, Columbia.
- Trinkley, Michael and Nicole Southerland  
 2001 *Cultural Resources Survey of Piedmont Sand, Chesterfield County, South Carolina.* Chicora Research Contribution 326. 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.
- Vivian, Daniel J.  
 n.d. *South Carolina Statewide Survey of Historic Properties.* S.C. Department of Archives and History, 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 Whites Creek: The Second Time Around. *South Carolina Antiquities* 15:63-65.
- 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.

## SOURCES CITED

---

White, Frank, Jr.

1972 *Chesterfield County: The Reconstruction Years, 1865-1876.* University of South Carolina, Columbia.

Williams, Stephen B.

1965 The Paleoindian era: Proceedings of the 20th Southeastern Archaeological Conference. *Southeastern Archaeological Conference Bulletin 2.*

Wright, Newell O.

1978 *Carolina Sandhills National Wildlife Refuge: A Cultural Resources Survey.* Report of Investigations No. 1, Archaeological Research Associates, Inc.

Yohe, Robert M., II

1996 Analysis of Flaked Stone Artifacts. In *Archaeological Laboratory Methods: An Introduction*, edited by Mark Q. Sutton and Brooke S. Arkush, pp. 39-68. Kendall/Hunt Publishing, Dubuque, Iowa.



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