

**CULTURAL RESOURCES SURVEY OF THE
POND BRANCH 115kV SUBSTATION,
LEXINGTON COUNTY, SOUTH CAROLINA**



CHICORA RESEARCH CONTRIBUTION 513

CULTURAL RESOURCES SURVEY OF THE POND BRANCH 115kV SUBSTATION, LEXINGTON COUNTY, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive cultural resources survey of a 5 acre substation lot located in southwest Lexington County, South Carolina. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The lot is to be used by Mid-Carolina Electric Cooperative, Inc. for the construction of a 115kV substation. The substation lot borders Ben Franklin Road to the south. The northeast corner of the lot intersects with an existing transmission line.

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) 0.5 mile around the proposed substation was assumed. The proposed undertaking will require clearing of the lot, followed by construction of the poles and other electric equipment (80 feet in height or less). These activities have the potential to affect archaeological and historical sites in the area.

ArcSite was consulted to see if any archaeological or architectural resources had been identified within the 0.5 mile APE. No resources were found.

The archaeological survey of the substation lot incorporated shovel testing at 100-foot intervals along transects placed at 100-foot intervals along Ben Franklin Road. 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 26 shovel tests were excavated for the project.

No sites were found as a result of these

investigations. This may be due to the excessively drained soils, lack of any distinct ridge top, and distance from a permanent water source.

A survey of public roads within 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old that also retained their integrity. No comprehensive architectural survey has been performed for Lexington County, however no structures that even predated 1950 were found within the 0.5 mile APE.

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. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a 5 acre lot to be used for the Pond Branch 115kV Substation in southwestern Lexington County (Figure 1). The substation lot borders Ben Franklin Road to the south.

The proposed lot, as previously mentioned, is intended to be used as a substation. Landscape alteration, primarily clearing and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in

the survey area.

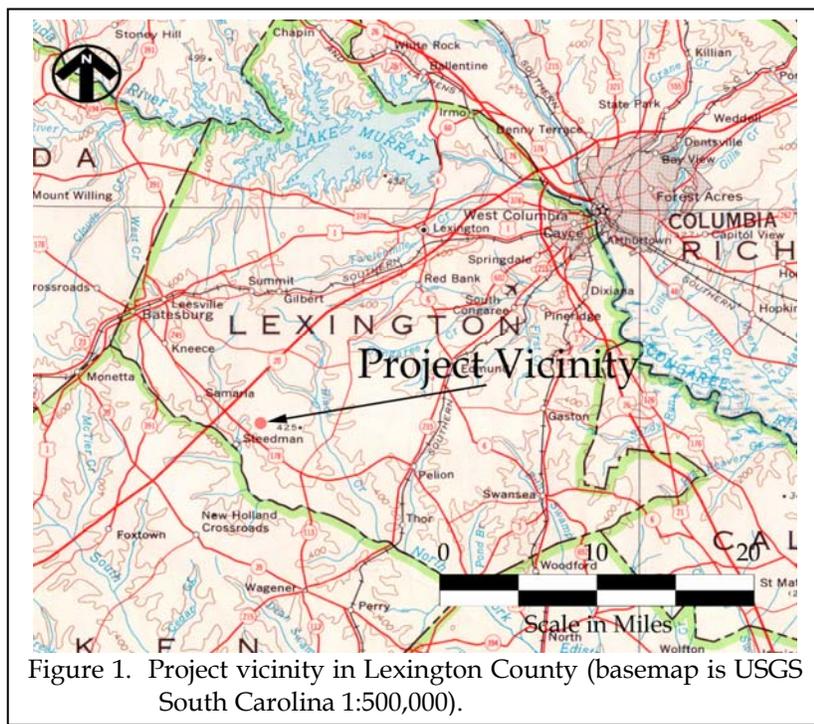
Construction and maintenance of the substation may also have an impact on historic resources in the project area. The project will not directly affect any historic structures (since none are located on the survey property), but the completed facility may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 0.5 mile radius around the proposed survey corridor.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of the substation or any transmission line that might extend off the lot.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct a cultural resources survey for the project on March 2, 2009.

These investigations incorporated a review of ArcSite, which identifies National Register properties, archaeological sites, buildings and structures that are eligible for the National Register, and areas previously surveyed for cultural resources. None of these resources were found in the project APE, however no comprehensive architectural survey has been performed for Lexington County.

Archival and historical research was limited to a review of secondary sources available in the



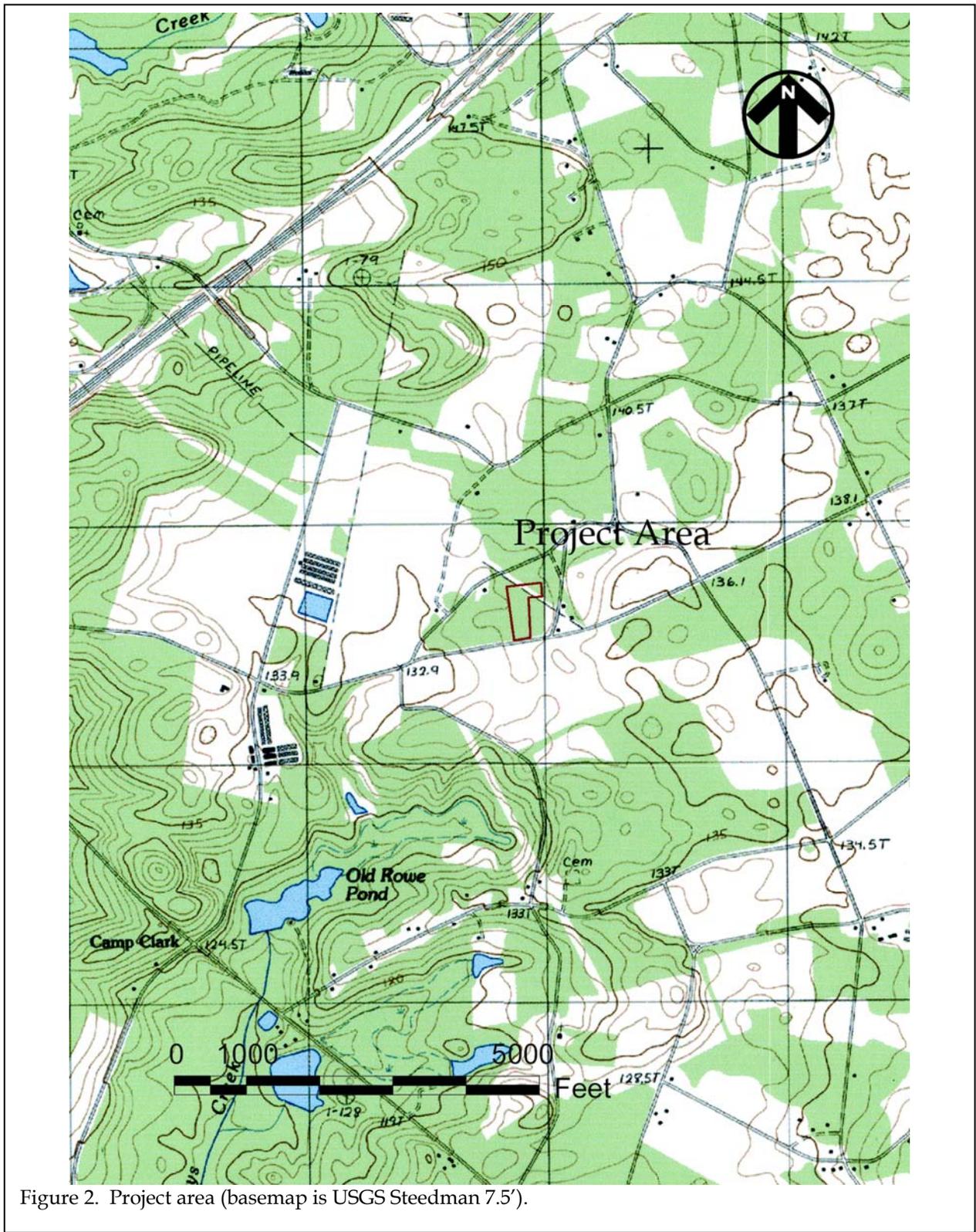


Figure 2. Project area (basemap is USGS Steedman 7.5').

INTRODUCTION

Chicora Foundation files.

The archaeological survey was conducted on April 14, 2009 by Ms. Nicole Southerland and Ms. Ashley Guba under the direction of Dr. Michael Trinkley and failed to reveal any archaeological sites.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and were potentially eligible for the National Register of Historic Places revealed no such structures. No houses that predate 1950 were found in the area.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina from April 15-16, 2009. The only photographic materials associated with this project are digital images, which are not archival, and will be retained for only 90 days.

NATURAL ENVIRONMENT

Physiographic Province

The project area is located in Lexington County, which is situated in central South Carolina. Lexington is bounded to the north by Newberry County, to the east by Richland and Calhoun counties, to the south by Orangeburg County, and to the west by Aiken and Saluda counties.

The Saluda and Congaree rivers drain the eastern portion of the county, and the north fork of the Edisto River drains the western portion. Numerous smaller streams (such as Carneys Creek and Mill Creek) are found throughout the county and generally flow either northward into the Saluda or eastward into the Congaree.

The county lies in two physiographic provinces: the Piedmont Plateau to the northwest of the "fall line" and the Sandhills to the southeast. In the vicinity of the Fall Line, dividing the Piedmont and Coastal Plain, major physiographic and geologic subdivisions occur which likely influenced human occupation. On major drainages, such as the Congaree River, the occurrence of rapids could interfere with water travel and the location of early historic occupation on the Fall Line reflects this concern (Jones 1971; Mills 1972 [1826]:157). The Fall Line also strongly

influenced prehistoric occupation since its location between two major ecotones could allow exploitation of a greater diversity of resources.

Geology and Soils

The project falls within the Sandhills region. The geology of the Sandhills is characterized by unconsolidated marine-deposited sediments.

Relief is gently rolling and slopes in the 2 to 15% range are common. Like the Piedmont, there are a number of small streams that dissect the Sandhills while their floodplains are generally narrow. Elevation in the project area is about 450 feet AMSL.

Only one soil series, Lakeland, is found in the project area. This excessively drained soil has an A horizon of very dark grayish brown



Figure 3. View of pine and hardwood forest found in the survey area.

(10YR3/2) crushed and rubbed sand to 0.2 foot over a yellowish brown (10YR5/4) sand that can extend to 0.9 foot in depth.

Floristics

Vegetation in the Sandhills region is characterized by two major forest types: the longleaf and loblolly pine communities (Frothingham and Nelson 1944:19-21). These communities consist primarily of pine with several species of hardwoods including gum and oak (Braun 1950: 285-286). Currently, the vegetation in the surrounding area consists of mixed pine and hardwood with a light to moderate understory of vegetation. In 1826, Robert Mills stated that the quality of lumber in the district was excellent:

It is no uncommon thing to find trees of this description girthing six or seven feet. Besides the poplar, walnut, maple, and various species of the oak, there are the mock-orange, evergreen, elm, hickory, ash, gum, &c. Of the fruit trees there are, the peach, plum, cherry, pear, quince, and apple; besides the native grapes, and various nuts and melons (Mills 1972[1826]:617).

During the South Carolina Erosion Survey, the Piedmont to the north of the project area exhibited moderate sheet erosion with occasional gullies (Lowry 1934). The Sandhills, while exhibiting some steep slopes were not as severely damaged.

Climate

The climate is temperate and is usually characterized by mild winters and warm summers. Rainfall measures from 46 to 48 inches a year. The annual distribution indicates that July is the wettest month with October and November are the driest. Summers are warm and long with temperatures reaching 90° or higher on an average

of 49 days, and they reach 100° or more two or three days a year. Winters are mild and temperatures are as low as 32 degrees on 60% of the days. In 1826 Mills describes the climate as:

mild and salubrious, except immediately bordering on the water-courses; what few diseases prevail are mostly confined to the bilious remittent fevers (Mills 1972 [1826]:621).

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Archaeological Investigations

Previous archaeological investigations in Lexington County include studies by Anderson (1974a, 1974b, 1979), Anderson et al. (1974), Drucker (1977), Goodyear (1975), Harmon (1980), Michie (1970; 1971), Trinkley (1974, 1980) and Wogaman et al. (1976). The vast majority of these studies are associated with surveys of the Twelfth Street extension project or the Southeastern Beltway, although a number of sewer surveys have also been conducted. Others have focused on testing or excavation at sites such as the Manning site and the Thom's Creek site. Michie's work identifying Fort Congaree stands as a major research contribution for the area (Michie 1989). In addition, a number of smaller highway department surveys (a number of which are referenced in Derting et al. 1991:309-310, 315,317-319), transmission line right of way surveys (see, for example Adams 1994a and 1994b) and small parcel surveys (for example, Adams and Trinkley 1991) have been performed in the area. Drucker (1977) examined a 100-foot wide corridor on the north side of Twelvemile Creek, followed in an additional survey by Chicora Foundation in 1996 (Trinkley 1996).

During an archaeological survey of the Southeastern Beltway, Anderson et al. (1974) found that prehistoric sites occurring near the confluence of Congaree Creek and the Congaree River occurred on slightly elevated dry knolls or ridges within broad, flat, low-lying fields which overlook swamps (Anderson et al. 1974:4-5). Wogaman and his colleagues, based on additional highway survey in this same area, suggest that most sites will be found in the floodplain terraces and upland terraces associated with the floodplains, with relatively few sites being found in the Sandhills (Wogaman et al. 1976). Drucker's

work on Twelvemile Creek found that while Early Archaic sites were found on the terraces adjacent to the creek, Middle and Late Archaic sites were not only found on the terraces, but also on the adjacent side slopes. Woodland occupation was found on alluvial terraces (Drucker 1977:48-50).

Very little historical archaeology has been performed in the Sandhills region of the state. However, work by Brooks and Crass (1991) at the Savannah River site provide some guidance to potential locations for historic sites in the region. During the colonial period, settlement was concentrated along major water courses on well drained, elevated soils. However, during the late eighteenth century, settlement had progressed up larger creeks. This pattern continued up through the mid-nineteenth century. During the postbellum and modern periods, settlement had shifted away from water courses and became more road oriented.

Brief Prehistoric Synopsis

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 Anderson 1994 and Sassaman 1993). 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. 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 project area. For those desiring a more general synthesis, perhaps

Dates	Period	Sub-Period	Regional Phases		
			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		
A.D.	WOODLAND	MIDDLE	Wilmington	Sand Tempered Wilmington?	Uwharrie
B.C.			Deptford	Deptford	Yadkin
300		EARLY		Refuge	Badin
1000	ARCHAIC	LATE	Thom's Creek Stallings		
2000			Savannah River Halifax		
3000	MIDDLE		Guilford Morrow Mountain Stanly		
5000					
8000	EARLY		Kirk Palmer		
10,000			Hardaway		
12,000	PALEOINDIAN		Cumberland	Clovis	Simpson

Figure 4. Generalized cultural sequence for South Carolina.

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 4 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 1968). The Paleoindian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989:36-38).

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 (see Service 1966), 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.¹, 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,

¹ 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.

exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

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 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. Phelps (1983:25) notes that the gradual increase from Paleoindian to Archaic in the Coastal Plain seems to peak during the Middle Archaic Morrow Mountain phase.

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 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 that 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 that 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 (Braley 1990; cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. (1995) 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).

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.

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 5000 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 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 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44).

Although fiber-tempered pottery has been known from South Carolina since at least the late 1950s, it remains relatively uncommon in the interior reaches of the state. Where found, the pottery is typically associated with Savannah River Stemmed points, steatite pottery or disks, and grooved axes.

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 that 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.

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.

In the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.² 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 more is known about the makers of the Badin pottery as is known about those who made New River wares.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. The Middle Woodland is best understood in the context of Deptford, which has been carefully described by DePratter (1979:118-119, 123-127), who suggests two divisions with check stamping and cord marking gradually being supplemented by complicated stamping. The introduction of clay or grog tempered Wilmington wares follows on the heels of the Deptford phase.

We do not, however, mean to imply that the origin of the Middle Woodland is well

² 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.

understood. In fact, Sassaman takes some pains to emphasize that the transition from Refuge to Deptford is not well understood:

the Refuge-Deptford problem is the result of numerous regional processes that converge in the Savannah River region between 3000 and 2000 B.P. The sociopolitical entities that existed on the coast and in the interior during the fourth millennium dissolved after about 2400 B.P., resulting in the dispersal of small populations across the region. . . . Pottery designs changed from highly individualistic punctuation and incision to the (seemingly) anonymous use of dowels for stamping. . . . the use of a carved paddle for simple stamping should mark the "blending" of Refuge and Deptford culture, or, more accurately, reflect the subsumption of Refuge culture by the expanding Deptford complex.

To complicate matters, the tradition of cord-wrapped paddles makes its way into the South Carolina area sometime after 2500 B.P. (Sassaman 1993:118-119).

The work by Milanich (1971) and Smith (1972), coupled with the considerable additional site-specific research (see, for example, DePratter 1991; Sassaman 1993:110-125; Thomas and Larsen 1979) provides an exceptional background for this particular phase. Milanich's (1971) interpretation of a coastal-estuarine settlement model with interior occupation limited to short-term extractive activities, while still useful, has been modified through the discovery of a number of interior base camps. In fact, there seems to be evidence for a number of interior seasonal or perhaps even permanent base camps, although there is as yet no convincing evidence of

horticulture. Anderson (1985:48) provides a brief overview of some very significant concerns. He notes that Milanich's interpretation that the interior river valleys were used by small, residentially mobile foraging groups that dispersed from large coastal villages is clearly not correct. In fact, just the opposite appears more likely, with coastal use and settlement being seasonal (Anderson 1985:48-49).

Moving to the Piedmont the dominant Middle Woodland ceramic type is typically identified as the Yadkin series (which is also frequently identified at Sandhill sites in North and South Carolina). 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.

It seems that South Carolina, just like Georgia and North Carolina, is struggling to comprehend, and deal with, a broad array of Middle Woodland cord marked pottery.

Although Deptford and Yadkin pottery are usually well recognized, the associated lithic technology is not. From a broad range of sites and contexts come "medium-sized triangular" points, Yadkin-like triangular points, and even a range of small triangular points.

The Middle Woodland cannot be fully appreciated without reference to Hopewellian influences, whether the presence of coastal sand burial mounds and their evidence of status differences (e.g., Thomas and Larsen 1979) or the presence of occasional exchange goods. Sassaman et al. note that while there is a lack of "obvious" Hopewellian influence in the Savannah area, there is nevertheless evidence of a "higher order of sociopolitical complexity" (Sassaman et al. 1990:14). They note that the broad similarities in ceramic design evidence the movement of ideas, or "interprovincial integration," not seen in the

Early Woodland. The presence of coastal shells found at interior sites demonstrates the movement of goods.

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 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).

Along the coast the St. Catherines pottery is viewed by many archaeologists as an important aspect in the gradual progression from Deptford to Savannah wares. Perhaps the most succinct summary of the Georgia Late Woodland St. Catherines phase is that offered by DePratter and Howard (1980:16-17). Significantly, they note that most of the Georgia data comes from burial mound excavations, "because only limited village [and presumably shell midden] excavations have been conducted" (DePratter and Howard 1980:16). Even with burials there is a limited range of artifact types -- shell beads, worked whelk shell bowls or drinking cups, bone pins, and triangular projectile points. Not only is little known about village life, nothing is known concerning residential structures and there is no good evidence of agricultural crops. Once again, the Late Woodland is presented as little more than an extension of the previous Middle Woodland lifeways.

Moving inland from the coast our understanding of the Late Woodland is uneven, giving the impression that broad expanses of the Inner Coastal Plain and perhaps even the

Sandhills were largely ignored by prehistoric people. Sites, where found, appear to focus on edge areas, such as the terraces overlooking swamps or the sandy ground around Carolina bays.

Moving into the Piedmont the Late Woodland is typically associated with small triangular points such as Uwharrie, Caraway, Pee Dee, and Clarksville (Coe n.d., 1964:49; Oliver 1985; South 1959:144-146). The characteristic pottery is the Uwharrie series, which contains crushed quartz (one characteristic of which is its tendency to protrude through the wall of the pottery). This series included cord-marked and net-impressed surface treatments. The ware was described by Coe in the unpublished Poole site report (Coe n.d.).³ This pottery appears to represent an evolution from the earlier Yadkin wares (Coe 1995:156). Of equal interest is a radiocarbon date of A.D. 1610, suggesting that this pottery lasted well into the protohistoric.

South Appalachian Mississippian

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 1640 is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease.⁴ The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers.

In the Upper Piedmont, Mississippian pottery includes the Pisgah and Qualla series.

³ This study was intended to be published under a monograph series entitled, *University of North Carolina Laboratory of American Archaeology Publications*, but was never completed. The work was conducted in 1936, although the ensuing report is undated.

⁴ Small pox was a major cause of death to a large number of Native Americans during the historic period. The smallpox epidemics of 1734 and 1783 reportedly killed half of the Cherokee population (Hatley 1993).

Pisgah ceramics are tempered with unmodified river sand, although some earlier examples contain both river sand and crushed quartz. It is decorated with complicated stamping, check stamping and ladder-like rectilinear patterns (Dickens 1970; Holden 1966). It should be noted that the Qualla series extends well into the historic period (ca. 1500-1908) and is characterized by complicated stamping and bold incising. Other

examination of evidence for political change at Mississippian sites in the Savannah River Valley and should be consulted for more information.

Excavations at large Mississippian sites in the Piedmont include work at the I.C. Few site, which was examined as a part of the Keowee-Toxaway Reservoir project sponsored by Duke Power Company (Grange 1972). Simpson's Field (38AN8) on the Savannah River was also investigated during the Richard B. Russell Reservoir studies (Wood et al. 1986). Work at the Chauga site (38OC47) in nearby Oconee County evidenced occupation in the Early and Late Mississippian period. Ten stages of mound building were found at the site along with burials and palisades. There is evidence for increasing impoverishment of the residents through time, since burials associated with the latest phases of mound building contained fewer grave goods than earlier phases in both the occupation during the Early Mississippian and Late Mississippian (Anderson 1994:303-305). Homes Hogue Wilson (1986) examined burials from the Warren Wilson site in western North Carolina and provided some

preliminary conclusions regarding social structure based on location of burials according to age and sex. For instance, she found more males than females were buried under structure floors. These males included primarily those under 25 or over 35 years old. She also found that individuals buried inside of structures were more likely to have burial goods than those buried in public areas. Burial feature types included pit burials, side-chambered burials, and central-chambered burials. Studies such as this can give great insight into the social organization of prehistoric societies.

Brief Historic Synopsis

General accounts of Lexington County history are presented by Anderson (1975), Gay (1974), Goodyear (1975), Meriwether (1940),

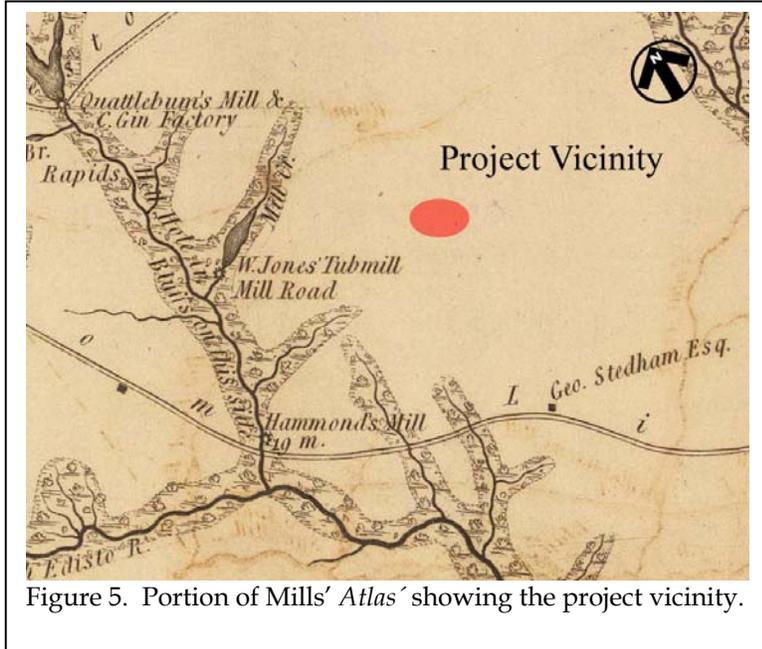


Figure 5. Portion of Mills' Atlas showing the project vicinity.

types described by Egloff (1967) include burnished, plain, check stamped, cord marked, and corncob impressed. At Tuckasegee brushed examples were also identified (Keel 1976). Other artifacts associated with the Mississippian period include triangular projectile points, flake scrapers, microtools, graters, perforators, drills, ground stone objects (celts, pipes, and discoidals), and worked shell and mica (Keel 1976).

Very little evidence of Mississippian period occupation was found in the Laurens-Anderson inter-riverine survey area, which is not surprising given the focus on riverine resources during this time period. Very little evidence of Mississippian occupation has been documented at the Savannah River Plant and no formal settlement-subsistence model has been created for this area (Sassaman et al. 1990:317). However,

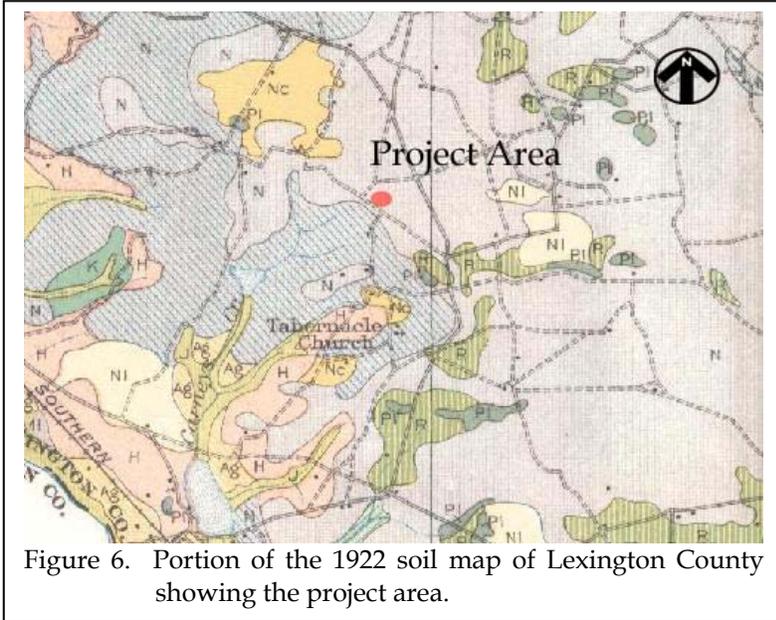


Figure 6. Portion of the 1922 soil map of Lexington County showing the project area.

Michie (1989), and Trinkley (1974).

Lexington County was first occupied by Europeans who built a fortified military garrison (Fort Congaree) in 1718 on the site of a former Congaree Indian village. A second fortification was established 22 miles north after attacks by Iroquois from the Ohio Valley upon settlers in the late 1740s. These two forts were significant in the defense of the Carolina Back Country (Central Midlands Regional Planning Council 1974:132).

The first large trading post in central South Carolina was built near the old Congaree fort site in 1733. This post was an exchange center between Charles Town and the western settlements. During this year the area received political identity as Congaree District. Two years later it was renamed Saxe Gotha in an attempt to bring immigrants from Germany and Switzerland to the piedmont. Most of these early settlers were small farmers while the more prosperous ones operated stores, trading posts, saw and grist mills.

When the wagon road

between the town and Augusta was opened in 1754, river traffic increased. A ferry operation began over the Congaree, and the village moved towards the ferry site where Granby Village was established sometime before 1774. As the head of navigation on the Congaree River, Granby became an important commercial center. Indigo, cotton, manufactured ropes, Indian corn, beeswax, and other goods from Saxe Gotha and the up country were transported to Charles Town where they were exchanged for salt, fabrics and other merchandise needed in the interior (Central Midlands Regional Planning Council 1974:134).

During the American Revolution Fort Granby, below the present town of Cayce, was the major outpost for British regulars in the area. In 1785, Lexington County was established in the Orangeburg District. With the development of Columbia, across the river, Granby Village declined in importance. The county seat was then moved from Granby Village to the town of Lexington (Central Midlands

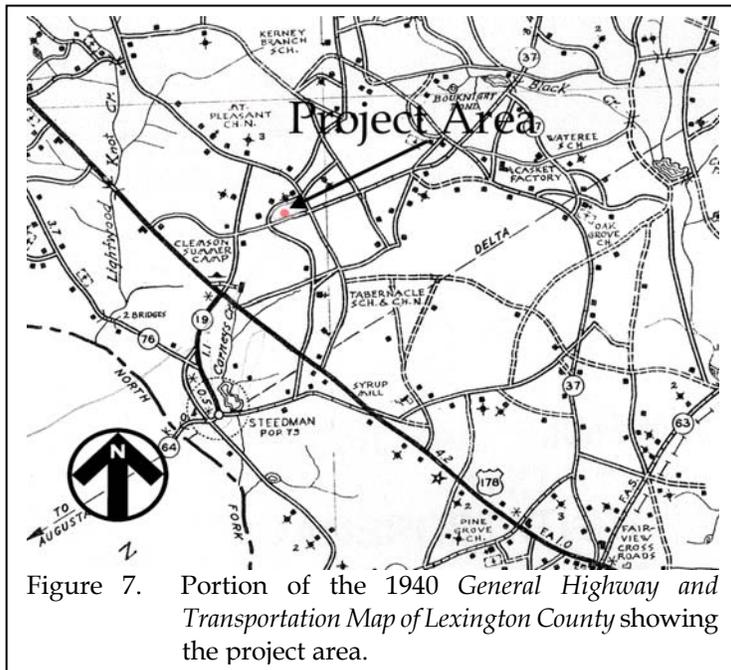


Figure 7. Portion of the 1940 General Highway and Transportation Map of Lexington County showing the project area.

Regional Planning Council 1974:135-136).

Mills' Atlas (1972 [1826]) shows the project area as containing no subscribers within the survey area (Figure 5). There are, however, several mills in the vicinity of the project area located on what is today known as Lightwood Knot Creek (Hell Hole Creek on the 1826 map), to the west.

By 1860 the county contained 73 saw mills, one cotton and wool mill, eight carriage and wagon makers, one sash and blind factory, two boot and shoe makers, one tannery, one blacksmith, one turpentine distillery, one printing establishment, and one wooden bucket factory. Also, Guignard Brickworks, established in 1804, was a prospering business. The largest single pre-war industry by far was the Saluda Factory on the Congaree (see Trinkley 1989).

During the Civil War Union forces invaded Lexington County and shelled the city of Columbia from the west bank of the Congaree.

After the war most families were left destitute. Economic recovery was slow, aggravated by lack of capital and heavy reliance on an unproductive agricultural economy (Central Midlands Regional Planning Council 1974:136-137).

Early twentieth century maps such as the 1922 soil map of Lexington County (Figure 6) and the 1940 *General Highway and Transportation Map of Lexington County* (Figure 7) show that the County was still rural. No structures are shown in the project area.

METHODS AND FINDINGS

Archaeological Field Methods and Findings

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

All soil would be screened through ¼-inch mesh, with each test numbered sequentially from the south to the north. Transects ran from west to east. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.5 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 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 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.

These proposed techniques were implemented with no significant modifications.

Sites would 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 agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

Analysis of collections would follow professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

Nevertheless, the archaeological survey of the tract failed to identify any remains. This is likely due to the excessively drained soils, lack of



Figure 8. View of project tract on Ben Franklin Road with adjacent property containing a mobile home.

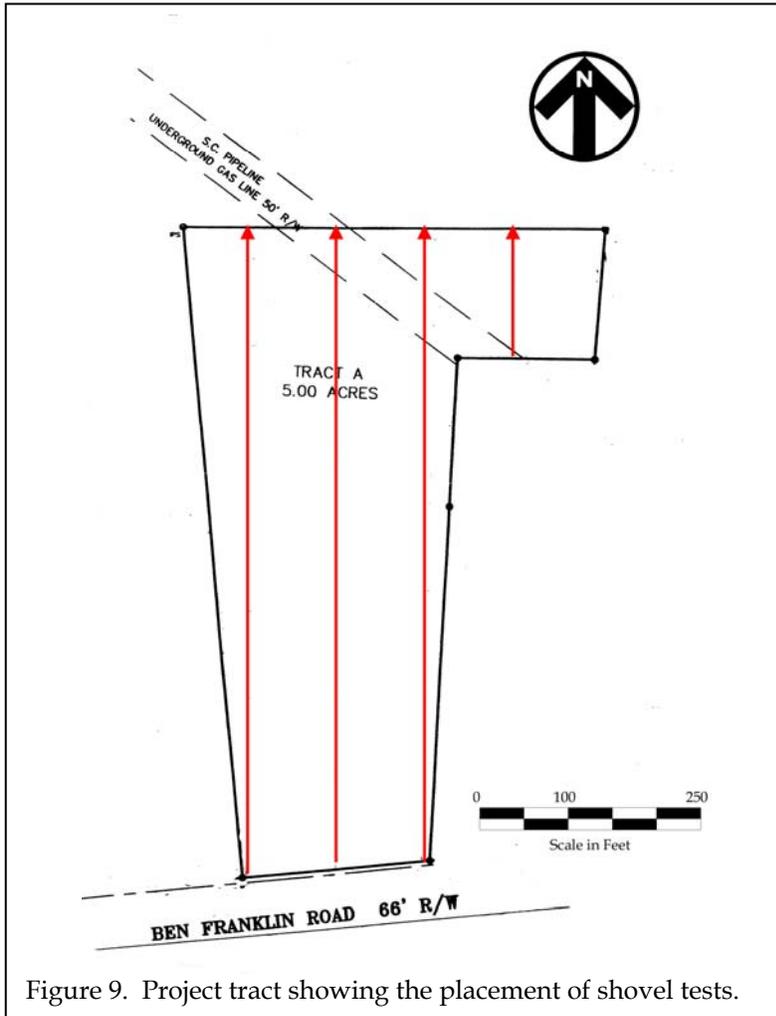


Figure 9. Project tract showing the placement of shovel tests.

any distinct ridge top, and the distance from a permanent water source.

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 would record only those which has 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 would be 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 and Findings

Archaeological sites would 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

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.



Figure 10. Shovel testing in the project area.

lack of eligibility. Briefly, these steps are:

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

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.

The survey, however, failed to identify any structures that were in the APE which contain enough integrity to be eligible for the National Register of Historic Places. In fact, the only structures within the APE were mobile homes.

CONCLUSIONS

This study involved the examination of approximately 5 acres of land for a substation in southwest Lexington County. This work, conducted for Mr. Tommy L. Jackson of Central Electric Power Cooperative examined archaeological sites and cultural resources found on the proposed project tract and is intended to assist Mid-Carolina Electric Cooperative in complying with their historic preservation responsibilities.

As a result of this investigation no sites were identified. This is likely the result of the excessively drained soils, lack of any distinct ridge tops, and the distance from a permanent water source.

A survey of public roads within 0.5 mile

revealed no structures that retain the integrity 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).

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**Archaeological
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