

**CULTURAL RESOURCES SURVEY OF THE
COMMONWEALTH 115kV
TRANSMISSION PROJECT,
CHARLESTON COUNTY, SOUTH CAROLINA**



CHICORA RESEARCH CONTRIBUTION 492

CULTURAL RESOURCES SURVEY OF THE COMMONWEALTH 115kV TRANSMISSION PROJECT, CHARLESTON COUNTY, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 3.0 mile corridor in Charleston County, South Carolina, in the town of Mt. Pleasant. 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 corridor is to be used by Central Electric Power Cooperative for the construction of a transmission line, which will connect two existing substations and replace an existing line. The topography is slightly undulating with a mixture of soils from very poorly drained to moderately well drained.

The proposed route will require the removal of the old line, followed by construction of the proposed transmission line. Some areas will also require clearing of vegetation. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission project was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified 24 previously recorded sites (38CH648-650, 38CH927-928, 38CH930-931, 38CH1087-1088, 38CH1145, 38CH1493-1494, 38CH1622-1624, 38CH1690-1696, 38CH1968-1969) in the project APE. A summary of the sites can be found in Table 1.

Of those resources identified at the S.C. Institute of Archaeology and Anthropology, five sites were found eligible, sixteen sites were found not eligible, and three sites were potentially eligible (needing additional work) for the National Register. None of these sites, however, are found

on the project corridor.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. Nine sites (88, 1118, 1119, 1120, 1121, 1141, 1142, 468-0485, and 468-0486) were identified. Site 88 is the National Register property of Oakland Plantation, which also includes the c. 1800 family cemetery (88.04), a c. 1800 slave cemetery (88.05), and a c. 1935 tenant house (88.06); site 1118 is the c. 1873 Isaac Cohen house; 1119 is the c. 1935 Emerson Langley house; 1120 is the c. 1935 Seabrook house; 1120 is the c. 1935 John Gillard house; 1141 is the c. 1915 Sara Wilson house; 1142 is the c. 1875 Thomas Brown house; 468-0485 is a c. 1935 house; and 468-0486 is a c. 1935 house.

As previously mentioned, Oakland Plantation (88) is on the National Register of Historic Places. Sites 1118-1121 and 1141-1142, which were identified during a survey of the town of Mt. Pleasant, are all not eligible for the National Register. Sites 468-0485 and 468-0486, which were recorded during a 1991-1992 architectural survey for Charleston County, were also determined not eligible for the National Register.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the 20-foot right-of-way, which was marked by stakes. All shovel test fill was screened through ¼-inch mesh with a total of 159 shovel tests excavated along the corridor.

As a result of these investigations no sites were identified. This is likely due to the distance from a permanent water source and significant disturbance from other urban activities such as road widening and landscaping. Various underground utilities were also found along the transmission route.

A survey of public roads within a 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 such sites were found. The historic surveys that include Charleston County and the town of Mt. Pleasant are thought to be complete.

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 consists of a 3.0 mile corridor to be used for a 115kV transmission line in Mt. Pleasant, which is in Charleston County (Figure 1). The project runs approximately southwest to northeast between two existing substations and will be replacing an existing transmission line. The majority of the corridor runs along SC 17 (Figure 2).

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing, removal of the old line, and construction, including erection of new poles, will damage the ground surface and any archaeological resources that may be present in the survey area.

Construction and maintenance of the transmission line 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 corridor), 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 this portion of Charleston County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct a cultural resources survey for the project on January 2, 2008.

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, 24 archaeological sites (38CH648-650, 38CH927-928, 38CH930-931, 38CH1087-1088, 38CH1145, 38CH1493-1494, 38CH1622-1624, 38CH1690-1696, 38CH1968-1969) were found within a 0.5 mile area of potential effect (APE). Table 1 provides a summary of these sites.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. Nine sites (88, 1118, 1119, 1120, 1121, 1141, 1142, 468-0485, and 468-0486) were identified. Site 88 is the National Register property of Oakland Plantation, which also includes the c. 1800 family cemetery (88.04), a c. 1800 slave cemetery (88.05), and a c. 1935 tenant house (88.06); site 1118 is the c. 1873 Isaac Cohen house; 1119 is the c. 1935 Emerson Langley house; 1120 is the c. 1935 Seabrook house; 1120 is the c. 1935 John Gillard house; 1141 is the c. 1915 Sara Wilson house; 1142 is the c. 1875 Thomas Brown house; 468-0485 is a c. 1935 house; and 468-0486 is a c. 1935 house.

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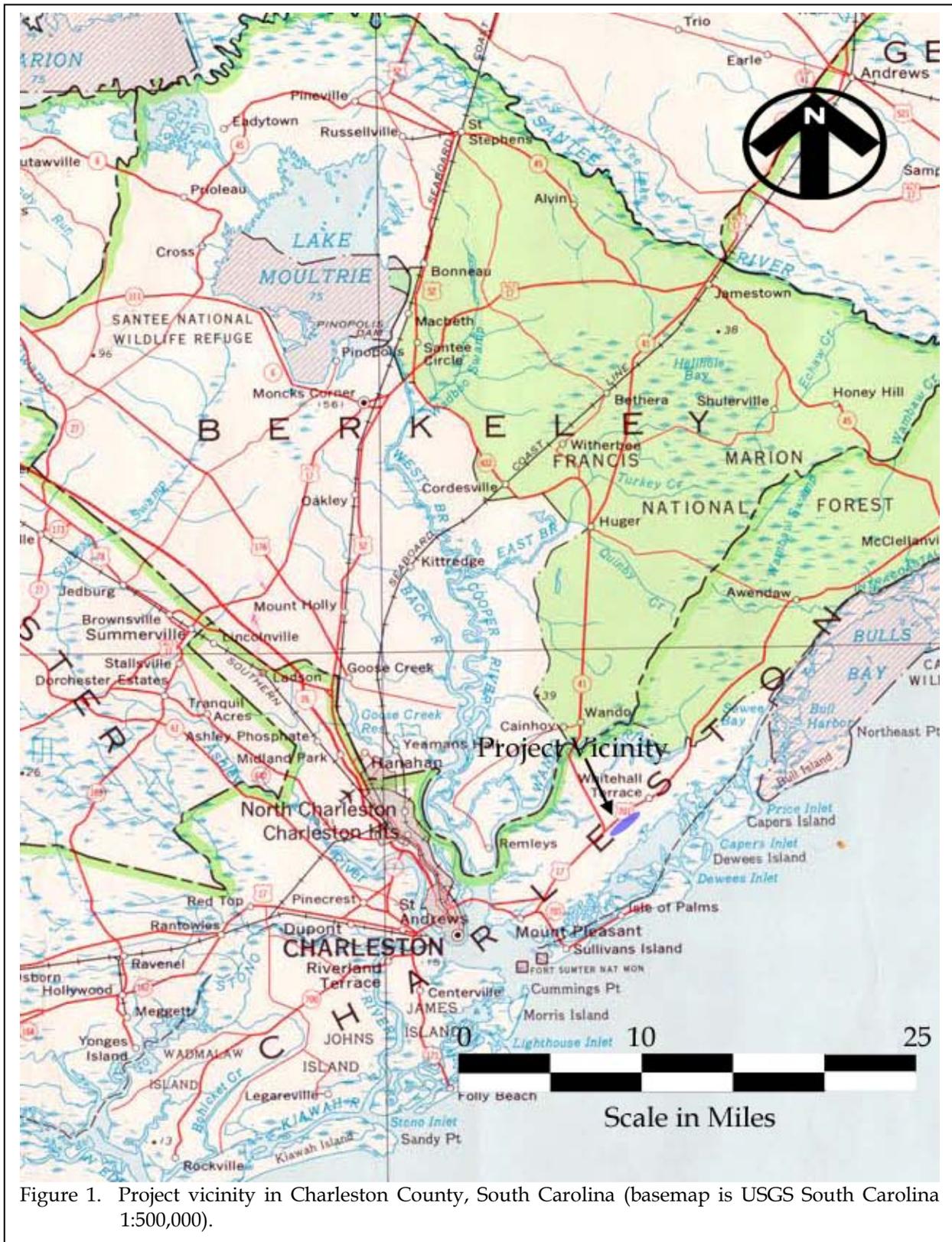


Figure 1. Project vicinity in Charleston County, South Carolina (basemap is USGS South Carolina 1:500,000).

INTRODUCTION

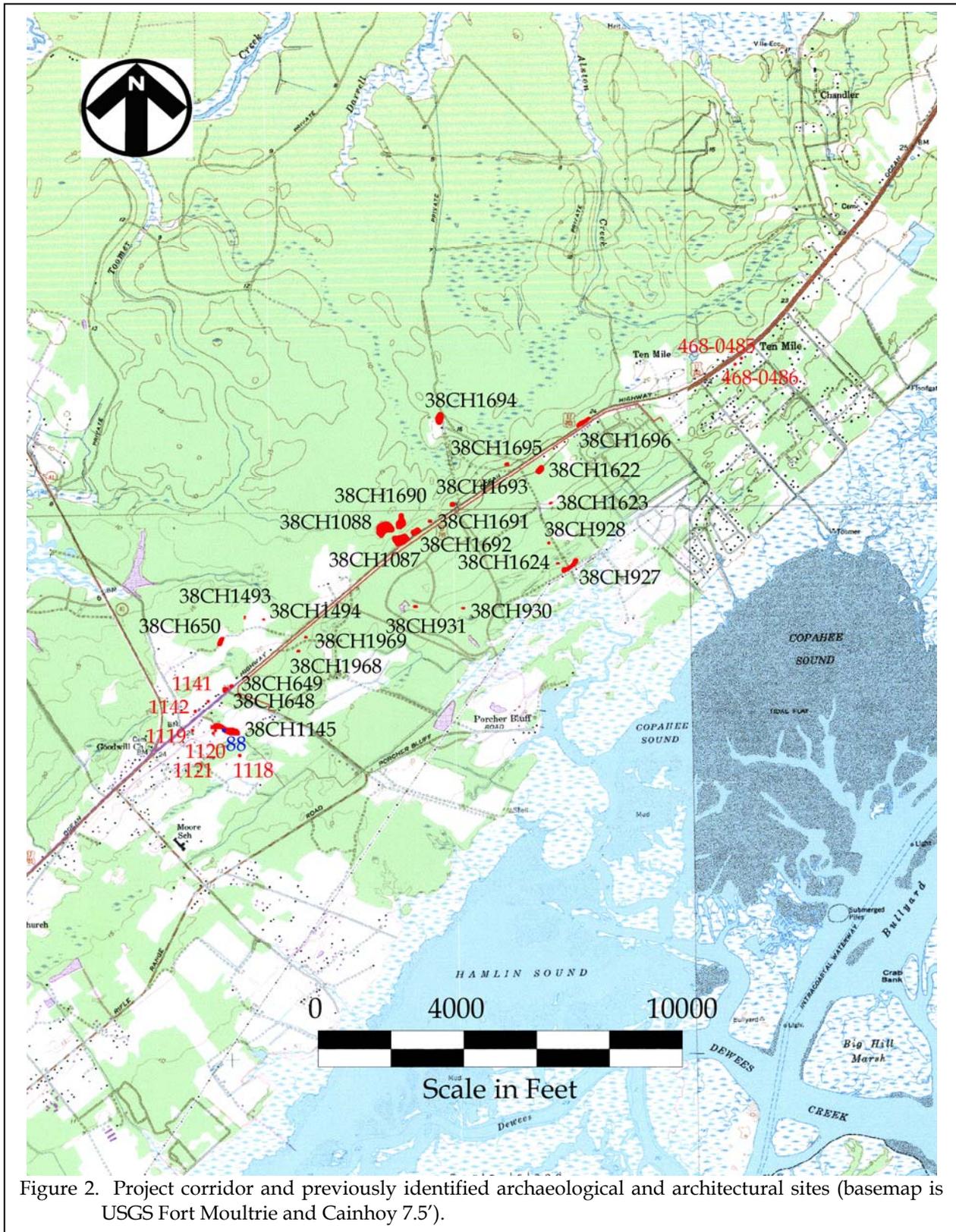


Figure 2. Project corridor and previously identified archaeological and architectural sites (basemap is USGS Fort Moultrie and Cainhoy 7.5').

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

Report production was conducted at Chicora's laboratories in Columbia, South Carolina from March 11-12, 2008. The only photographic materials associated with this project are digital images, which are not archival and will be retained for only 90 days.

The archaeological survey was conducted from February 14-15, 2008 by Ms. Debi Hacker and Ms. Nicole Southerland under the direction of Dr. Michael Trinkley.

Table 1.
Previously Identified Archaeological Sites

SITE	DESCRIPTION	ELIGIBILITY
38CH648	Middle Woodland scatter	Eligible
38CH649	20th Century scatter	Not Eligible
38CH650	Early Woodlan/19th-20th Century scatter	Not Eligible
38CH927	Jervey Plantation (18th-19th Century)	Eligible
38CH928	Prehistoric	Not Eligible
38CH930	Prehistoric	Not Eligible
38CH931	18th-19th Century scatter	Not Eligible
38CH1087	Prehistoric/18th Century scatter	Eligible
38CH1088	18th-19th Century scatter	Eligible
38CH1145	19th-20th Century tenant scatter	Not Eligible
38CH1493	Middle Woodland/19th Century scatter	Not Eligible
38CH1494	Prehistoric/19th Century scatter	Not Eligible
38CH1622	19th-20th Century tenant scatter	Potentially Eligible
38CH1623	Prehistoric	Not Eligible
38CH1624	Prehistoric	Not Eligible
38CH1690	Late Archaic-Mississippian/18th-19th Century	Potentially Eligible
38CH1691	Prehistoric	Not Eligible
38CH1692	Middle Woodland/Historic	Not Eligible
38CH1693	Late Archaic (Thoms Creek)	Eligible
38CH1694	19th-20th Century scatter	Not Eligible
38CH1695	Prehistoric	Not Eligible
38CH1696	Early-Late Woodland	Potentially Eligible
38CH1968	19th Century	Not Eligible
38CH1969	Early-Middle Archaic	Not Eligible

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 only the structures identified during the 1988 Mt. Pleasant survey (Schneider 1988) and the 1992 survey of Charleston County (Fick 1992). No additional structures were identified.

NATURAL ENVIRONMENT

Physiography

Charleston County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the east by the Atlantic Ocean and a series of marsh, barrier, and sea islands (Mathews et al. 1980:133). Elevations in the County range from sea level to about 70 feet above mean sea level (AMSL).

Seven major drainages are found in Charleston County. Four of these, the Wando, Ashley, Stono, and North Edisto, are dominated by tidal flows and are saline. The Wando forms a portion of the County's interior boundary northeast of Charleston, while the Ashley flows west of the peninsular city of Charleston. The three with significant freshwater flow are the Santee, which forms the northern boundary of the County; the South Edisto, which forms the southern boundary; and the Cooper, which bisects the County.

Because of the low topography, many broad, low gradient interior drains are present as either extensions of the tidal rivers or as flooded bays and swales. Extensions included Hobcaw, Rathall, Foster, Horlbeck, Boone Hall, Wagner, Toomer, and Allston creeks that flow west, north, or northeast into the Wando.

Elevations in the project area range from about 10 to 40 feet AMSL.

Geology and Soils

Coastal Plain geological formations are unconsolidated sedimentary deposits of very recent age (Pleistocene and Holocene) lying unconformably on ancient crystalline rocks (Cooke 1936; Miller 1971:74). The Pleistocene sediments are organized into topographically distinct, but lithologically similar, geomorphic units, or terraces, parallel to the coast. The sites are located in an area identified by Cooke (1936) as part of the Pamlico terrace, which includes the land between the recent shore and an abandoned shore line about 25 feet AMSL. Cooke (1936:7) notes that evidence of ancient beaches and swales can still be seen in the Pamlico formation and this likely contributed to the ridge and trough topography present in some areas.

Within the coastal zone the soils are Holocene and Pleistocene in age and were formed



Figure 3. View of corridor with the existing transmission line, landscaping, and underground utilities.

from materials that were deposited during the various stages of coastal submergence. The formation of soils is affected by this parent material (primarily sands and clays), the temperate climate, the various soil organisms, topography, and time.

The mainland soils are Pleistocene in age and tend to have more distinct horizon development and diversity than the younger soils of the sea and barrier islands. Sandy to loamy soils predominate in the level to gently sloping mainland areas. The island soils are less diverse and less well developed, frequently lacking a well-defined B horizon. Organic matter is low and the soils tend to be acidic. The Holocene deposits typical of barrier islands and found as a fringe on some sea islands, consist almost entirely of quartz sand, which exhibits little organic matter. Tidal marsh soils are Holocene in age and consist of fine sands, clay, and organic matter deposited over older Pleistocene sands. The soils are frequently covered by up to 2 feet of saltwater during high tides. Historically, marsh soils have been used as compost or fertilizer for a variety of crops, including cotton (Hammond 1884:510) and Allston mentions that the sandy soil of the coastal region "bears well the admixture of salt and marsh mud with the compost" (Allston 1854:13).

As the colony was being settled and promoted, the soils were described simply. John Norris told his readers in 1712:

the Soil is generally Sandy, but of differeing Colours, under which, Two or Three Foot Deep, is Clay of which good Bricks are made (Greene 1989:89).

In the last quarter of the eighteenth century, William DeBrahm's *Report* provides little more information, stating only that, "the Land near the Sea Coast is in general of a very sandy Soil" and noting that this soil "along the Coast has as yet not been able to invite the industrious to reap Benefit of its Capacity" (DeVorse 1971:72).

By the nineteenth century, Robert Mills in his *Statistics of South Carolina* provides slightly more information concerning the current understanding of the soils:

Lands here [in Charleston District] may be viewed under six divisions in respect to quality; 1st, Tide swamp, 2^d, Inland swamp; 3^d, High river swamp (or low ground commonly called second low grounds); 4th, Salt Marsh; 5th, Oak and hickory high lands; and 6th, Pine barren. The tide and inland swamps are peculiarly adapted to the culture of rice and hemp; they are very valuable, and will frequently sell for \$100 an acre; in some instances for more. The high river swamps are well calculated for raising hemp, indigo, corn, and cotton; and where secured from freshets, are equally valuable with the tide lands. The oak and hickory highlands are well suited for corn and provisions, also for indigo and cotton. The value of these may be stated at from ten to twenty dollars per acre. The pine barrens are not worth more than one dollar an acre (Mills 1972:442-443[1826]).

Even the detail of this account, however, fails to provide a very clear picture of the soils in Christ Church where the sands were low and commonly interspersed with galls or small inland swamps. Here the property, even the supposedly good hickory and oak lands, was poorly drained.

A number of period accounts discuss the importance of soil drainage. Seabrook, for example, explained in 1848:

Subsoil so close as to be impervious to water; so that the excess of the rains of winter

cannot sink. Nor can it flow off, because of the level surface The land thereby is kept thoroughly water-soaked until late in the spring. The long continued wetness is favorable only to growth of coarse and sour grasses and broom sedge . . . acid and antiseptic qualities of the soil . . . sponge-like power to absorb and retain water . . . is barren, (for useful crops) from two causes - excessive wetness and great acidity. The remedies required are also two; and neither alone will be of the least useful effect, with the other also. Draining must remove the wetness - calcareous manures the acidity (Seabrook 1848:37).

A somewhat similar account would still be provided by Hammond in the postbellum:

Drainage . . . has of necessity always been practiced to some extent. The remarkably high beds on which cotton is planted here, being from 18 inches to 2 feet high, subserve this purpose. The best planters have long had open drains through their fields. These were generally made by running two furrows with a plow and afterward hauling out the loose dirt with a hoe, thus leaving an open ditch, if it be so termed, a foot or more in depth (Hammond 1884:509).

The number of drainages still found offers mute testimony to the problems planters encountered on these soils and their efforts to make the land productive. These problems have also been briefly mentioned by Hilliard, who comments that soils in the region were, "seldom well enough drained for most crops" (Hilliard 1984:11).

Five soil types are found along the survey corridor including the moderately well drained Chipley Series, the excessively drained Lakeland Series, the somewhat poorly drained Scranton Series, the poorly drained Rutlege Series, and the very poorly drained Stono Series.

Chipley soils have an A horizon of very dark gray (10YR3/1) loamy fine sand to a depth of 0.5 foot over a yellowish brown (10YR5/4) loamy fine sand to 0.9 foot in depth.

The Lakeland Series has an A horizon of very dark grayish brown (10YR3/2) sand to 0.6 foot in depth over a dark yellowish brown (10YR4/4) sand to 1.1 feet in depth.

Scranton soils have an Ap horizon of black (10YR2/1) loamy fine sand to 0.8 foot in depth over a dark grayish brown (10YR4/2) loamy fine sand to a depth of 1.3 feet. Rutlege soils have an Ap horizon of black (10YR2/1) loamy fine sand to 0.7 foot over a very dark brown (10YR2/2) loamy fine sand to 1.7 feet in depth.

The very poorly drained Stono soils have an Ap horizon of black (10YR2/1) fine sandy loam to a depth of 0.8 foot over a black (10YR2/1) fine sandy loam to 1.4 feet in depth.

Climate

The weather was all important in Colonial society, affecting the crops that in turn affected trade and wealth. Just as importantly, the Carolina climate affected, usually for the worse, the planter's health. Greene notes that:

the prospects of obtaining wealth with ease . . . meant little in a menacing environment, and both Nairne and Norris took pains to minimize the unpleasant and dangerous features that already had combined to give South Carolina an ambiguous reputation. They had to admit that throughout the summer

temperatures were “indeed troublesome to Strangers.” But they contended that settlers had quickly found satisfactory remedies in the form of “open airy Rooms, Arbours and Summer-houses” constructed in shady groves and frequent cool baths and insisted the discomforts of the summers were more than offset by the agreeableness of the rest of the seasons. [They also suggested] that ill-health was largely limited to newcomers before they were seasoned to the climate, to people who insisted in living in low marshy ground, and to those who were excessive and careless in their eating, drinking, and personal habits. “If temperate,” they asserted, those who lived on “dry healthy Land,” were “generally very healthful” (Greene 1989:16).

While making for good public relations, the reality was far different. Roy Merrens and George Terry (1989) found that in Christ Church Parish, 86% of all those whose births and deaths are recorded in the parish register, died before the age of twenty. Equally frightening statistics have been compiled by John Duffy (1952), who found that the average European could expect to live to the age of about 30 in South Carolina during the first quarter of the eighteenth century. Yellow fever, smallpox, diphtheria, scarlet fever, malaria, dysentery all were at home in Carolina. Using the Society for the Propagation of the Gospel (SPG) records, Duffy found that from 1700 to 1750, 38% of the missionaries either died or were compelled to resign because of serious illness within the first five years of their arrival. Within 10 years of their arrival, 52% had died or resigned because of their health. After 15 years in the colony, the combined death toll and resignations from sickness reached 68% -- two out of every three missionaries.

African Americans fared no better. Frank Klingberg (1941:154), using SPG records found that in a single four month period over 400 slaves died of “distemper.” William Dusiinberre, exploring rice plantations along the Carolina coast, entitled one of his chapters “The Charnel House” - a reference to the extraordinary morbidity of African Americans on rice plantations. He reports that on some plantations the child mortality rate (to age sixteen) was a horrific 90% (Dusiinberre 1996:51), while the probable average for rice plantations was around 60% (Dusiinberre 1996:239). Cotton plantations - that were probably most numerous in Christ Church - were healthier, but even there fully a third of all slave children did not live to see their sixteenth birthday.

Beginning in the last third of the eighteenth century the life expectancy began to increase. Merrens and Terry suggest that this was the result of the occupants beginning to understand the cause of malaria:

During the middle of the eighteenth century South Carolinian’s perception of the wholesome environment of the lowcountry swamps began to change. People no longer preferred these areas on the score of health as a place of summer residence. Instead, residents began to view the lowcountry as fostering both mosquitoes and death (Merrens and Terry 1989:547).

Perhaps most importantly it is about this time when we also see the planter move his residence from the swamp edge (where he could easily oversee both slaves and crops) to higher, sandier locations. Slave settlements, too, appear to move to somewhat drier and healthier environs.

The Charleston climate, with its moderate winters and long, hot summers, affected not only the health of the populations and the crops grown,

it also influenced the politics of Carolina. The summer climate of Carolina, while causing the Barbadian immigrants to feel that they had resettled in the tropics, also convinced most that slavery was inevitable. Not only was slavery the accepted order to the planters from Barbados, Jamaica, Antigua, and St. Kitts, it seemed impossible for white Englishmen to work in the torrid heat - making African American slaves that much more essential (Donnan 1928). Even in the Christ Church parish, which in 1720 had a very low settlement compared to other parishes, slaves, comprised 85.6% of the populations.

Floristics

The survey area exhibits one major ecosystem: the maritime forest ecosystem, which consists of the upland forest areas (Sandifer et al. 1980:7-9).

The maritime forest ecosystem has been found to consist of five principal forest types, including the Oak-Pine forests, the Mixed Oak Hardwood forests, the Palmetto forests, the Oak thickets, and other miscellaneous wooded areas (such as salt marsh thickets and wax myrtle thickets).

Of these, the Oak-Pine forests are most common, constituting large areas of Charleston's original forest community. In some areas palmetto becomes an important sub-dominant. Typically these forests are dominated by the laurel oak with pine (primarily loblolly with minor amounts of longleaf pine) as the major canopy co-dominant. Hickory is present, although uncommon. Other trees found are the sweet gum and magnolia, with sassafras, red bay, American holly, and wax myrtle and palmetto found in the understory.

Mills, in the early nineteenth century, remarked that:

South Carolina is rich in native and exotic productions; the varieties of its soil, climate, and geological positions, afford plants of rare, valuable, and medicinal qualities; fruits of a luscious, refreshing, and nourishing nature; vines and shrubs of



Figure 4. View of remaining vegetation surrounding a shopping complex.

exquisite beauty, fragrance, and luxuriance, and forest trees of noble growth, in great variety (Mills 1972:66).

The loblolly pine was called the "pitch or Frankincense Pine" and was used to produce tar and turpentine; the longleaf pine was "much used in building and for all other domestic purposes;" trees such as the red bay and red cedar were often used in furniture making and cedar was a favorite for posts; and live oaks were recognized as yielding "the best of timber for ship building;" (Mills 1972:66-85). Mills also observed that:

in former years cypress was much used in building, but the

difficulty of obtaining it now, compared with the pine, occasions little of it to be cut for sale, except in the shape of shingles; the cypress is a most valuable wood for durability and lightness. Besides the two names we have cedar, poplar, beech, oak, and locust, which are or may be also used in building (Mills 1972:460).

The "Oak and hickory high lands" according to Mills were, "well suited for corn and provisions, also for indigo and cotton" (Mills 1972:443). The value of these lands in the mid-1820s was from \$10 to \$20 per acre, less expensive than the tidal swamp or inland swamp lands (where rice and, with drainage, cotton could be grown).

Today, virtually all of the corridor's higher ground evidences some form or another of disturbance. Several developments and commercial properties are located along the edge of the project corridor (Figure 4).

PREHISTORIC AND HISTORIC BACKGROUND

Previous Research

Numerous projects have taken place in vicinity with at least two projects covering a portion of the current project corridor (Baluha et al. 2003; Trinkley 1996). Most of the surveys are the result of compliance projects (see Poplin and Wolf 1999; Wayne and Dickinson 1996; and Trinkley et al. 2002).

There are, of course, a number of other previously published archaeological studies available for the Charleston area to provide background (see Derting et al. 1991 for references).

Prehistoric Synopsis

The Paleoindian period, lasting from 12,000 to perhaps 8,000 B.C., is evidenced by basally thinned, side-notched 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. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

The Archaic period, which dates from 8000 to about 1000 B.C., 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. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with relatively little modification to the South Carolina coast. Archaic period assemblages, characterized by corner-notched and broad stemmed projectile points, are rare in the Sea Island region, although the sea level is anticipated to have been within 13

feet of its present stand by the beginning of the succeeding Woodland period (Lepionka et al. 1983:10).

To some the Woodland period begins, by definition, with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast. To others, the period from about 2500 to 1000 B.C. falls into the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of the terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber-tempered) and Thom's Creek (sand or non-tempered) series pottery.

The subsistence economy during this early period on the coast of South Carolina was based primarily on deer hunting, fishing, and shellfish collection, with supplemental inclusions of small mammals, birds, and reptiles. Various calculations of the probable yield of deer, fish, and other food sources identified from shell ring sites such as Lighthouse Point on James Island to the west, also in Charleston County on James Island, indicate that sedentary life was not only possible, but probable.

Toward the end of the Thom's Creek phase there is evidence of sea level change, and a number of small, non-shell midden sites are found along the coast. Apparently the rising sea level inundated the tide marshes on which the Thom's Creek people relied.

The succeeding Refuge phase, which dates from about 1100 to 500 B.C., suggests fragmentation caused by the environmental changes (Lepionka et al. 1983; Williams 1968). Sites are generally small and some coastal sites evidence no shellfish collection at all (Trinkley

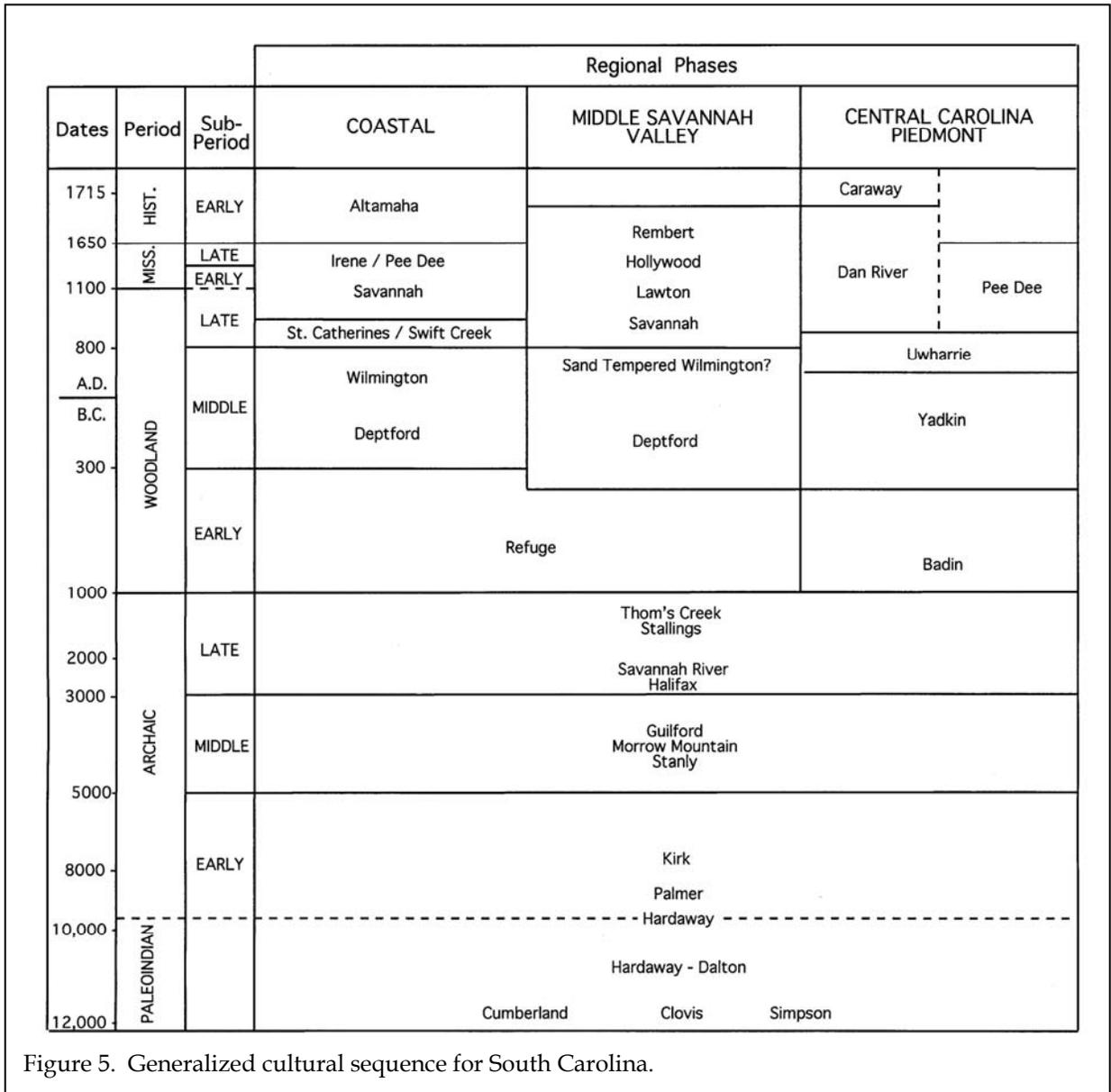


Figure 5. Generalized cultural sequence for South Carolina.

1982). Peterson (1971:153) characterizes Refuge as a degeneration of the preceding Thom's Creek series and a bridge to the succeeding Deptford culture.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. Also present are quantities of cord marked, simple stamped, and occasional fabric impressed pottery. During this period there is a blending of the Deptford ceramic

tradition of the lower Savannah with the Deep Creek tradition found further north along the South Carolina coast and extending into North Carolina (Trinkley 1983).

The Middle Woodland period (ca. 300 B.C. to A.D. 1000) is characterized by the use of sand burial mounds and ossuaries along the Georgia, South Carolina, and North Carolina coasts (Brooks et al. 1982; Thomas and Larsen 1979; Wilson 1982). Middle Woodland coastal plain sites continue the Early Woodland Deptford

pattern of mobility. While sites are found all along the coast and inland to the fall line, sites are characterized by sparse shell and few artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. In many respects the South Carolina Late Woodland period (ca. A.D. 1000 to 1650 in some areas of the coast) may be characterized as a continuum of the previous Middle Woodland cultural assemblage.

The Middle and Late Woodland occupations in South Carolina are characterized by a pattern of settlement mobility and short-term occupations. On the southern coast they are associated with the Wilmington and St. Catherines phases, which date from about A.D. 500 to at least A.D. 1150, although there is evidence that the St. Catherines pottery continued to be produced much later in time (Trinkley 1981). On the northern coast there are very similar ceramics called Hanover and Santee.

The South Appalachian Mississippian period (ca. A.D. 1100 to 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. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest coastal phases are named Savannah and Irene (A.D. 1200 to 1550). Sometime after the arrival of Europeans on the Georgia coast in A.D. 1519, the Irene phase is replaced by the Altamaha phase. Altamaha pottery tends to be heavily grit tempered, the complicated stamped motifs tend to be rectilinear and poorly applied, and check stamping occurs as a minority ware. Further north, in the Charleston area, the Pee Dee or Irene ware is replaced by pottery with bolder designs, thought to be representative of the protohistoric and historic periods (South 1971).

Although there has been very little archaeological exploration of historic period Native American groups in the Charleston area, South has compiled a detailed overview of the ethnohistoric sources (South 1972).

Early Settlement and Economic Development

The English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lord Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop which would provide great wealth through its distribution in the mercantile system.

By 1680 the settlers of Albemarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers. This new settlement at Oyster Point would become modern-day Charleston. The move provided not only a more healthful climate and an area of better defense, but:

[t]he situation of this Town is so convenient for public Commerce that it rather seems to be the design of some skillful Artist than the accidental position of nature (Mathews 1954:153).

Early settlers came from the English West Indies, other mainland colonies, England, and the European continent. It has been argued that those from the English West Indies were the most critical to the future of the colony, as they brought with them a strong agrarian concept, involving both staple crops and, especially, slave labor (Sirmans 1966).

Early agriculture experiments that involved olives, grapes, silkworms, and oranges were less than successful. Ironically, it was often the climate that precluded successful results. While the Indian trade was profitable to many of the Carolina colonists, it did not provide the proprietors with the wealth they were expecting from the new colony. Ranching offered quick, and relatively easy, cash, but again the proprietors resisted such efforts, realizing that the profits they would reap were far smaller than possible from

the mercantile system. Consequently, the cultivation of cotton, rice, tobacco, and flax were stressed as these were staple crops whose marketing the proprietors could easily monopolize.

Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time it not only provided the proprietors with an economic base the mercantile system required, but it was also to form the basis of South Carolina's plantation system (Carpenter 1973). Over production soon followed, with a severe decline in prices during the 1740s. This economic down swing encouraged at least some planters to diversify and indigo was introduced (Huneycutt 1949:33). Indigo complemented rice production since they were grown in mutually exclusive areas. Both, however, were labor intensive and encouraged the large scale introduction of slaves.

Although four counties, Berkeley, Craven, Colleton, and Granville, were created by the Proprietors between 1682 and 1685, the Anglican parishes, established in 1706, became the local unit of political administration.

South Carolina's economic development during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By 1710 slaves outnumbered free people in South Carolina. According to Fick (1992:14), by the year 1720 the St. Andrews Parish had 210 taxpayers and 2,493 slaves, a ratio of 1:12. By the 1730s slaves were beginning to be concentrated on a few, large slave-holding plantations. At the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). While over half of eastern South Carolina's white population held slaves, few held very large numbers. The Charleston area had a slave population greater than 50% of the total population by 1790. This imbalance between the races, particularly on remote plantations, may have led to greater "freedom" and mobility (Friedlander in Wheaton et al. 1983:34). By the

antebellum period this trend was less extreme.

The area was the scene of relatively little economic development during the late colonial period. Zierden and Calhoun note that:

Charleston was the economic, institutional and social center of the surrounding region. The necessity of transacting business in Charleston drew planters eager to transform their crops into cash or goods . . . it [was] virtually imperative for a planter interested in society to reside in Charleston at least occasionally (Zierden and Calhoun 1984:36).

They argue that Charleston provided an opportunity for conspicuous consumption, a mechanism that allowed the display of wealth accumulated from the plantation system (with this mechanism continuing through the antebellum period). Scardaville (in Brockington et al. 1985:45) notes that the plantation system, which brought prosperity through the export of staple crops, also "made the colony . . . highly vulnerable to outside market and political forces."

The most obvious example of this is the economic hardship brought on by the American Revolution. Not only was the Charleston area the scene of many military actions, but Charleston itself was occupied by the British for over 22 years between 1780 and 1782. The loss of royal bounties on rice, indigo, and naval stores caused considerable economic chaos with the eventual "restructuring of the state's agricultural and commercial base" (Brockington et al. 1985:34).

Antebellum Charleston, Cotton Production, and the Civil War

One means of "restructuring" was the emergence of cotton as the principal cash crop. Although "upland" cotton was available as early as 1733, its ascendancy was ensured by the industrial revolution, the invention of the cotton gin in 1794,

and the availability of slave labor. While "Sea Island" cotton was already being efficiently cleaned, the spread of cotton was primarily in the South Carolina interior. Consequently, Charleston benefitted primarily through its role as a commercial center.

residences in Charleston throughout the antebellum era and "great" planters began to spend increasing amount of time in Charleston (Zierden and Calhoun 1984:44).

Cotton provided about 20 years of economic success for South Carolina. During this period, South Carolina monopolized cotton production with a number of planters growing wealthy (Mason 1976). The price of cotton fell in 1819 and remained low through the 1820s, primarily because of competition from planters in Alabama and Mississippi. Friedlander, in Wheaton et al. (1983:28-29) notes that cotton production in the inland coastal parishes fell by 25% in the years from 1821 to 1839, although national production increased by 123%. Production improved dramatically in the 1840s in spite of depressed prices and in the 1850s the price of cotton rose.

In spite of this appearance of grandeur, Charleston's dependence on cotton and ties to an

Mills' *Atlas* of 1825 shows the survey corridor running along the existing road. No settlements, however, are shown directly on the road in the project area.

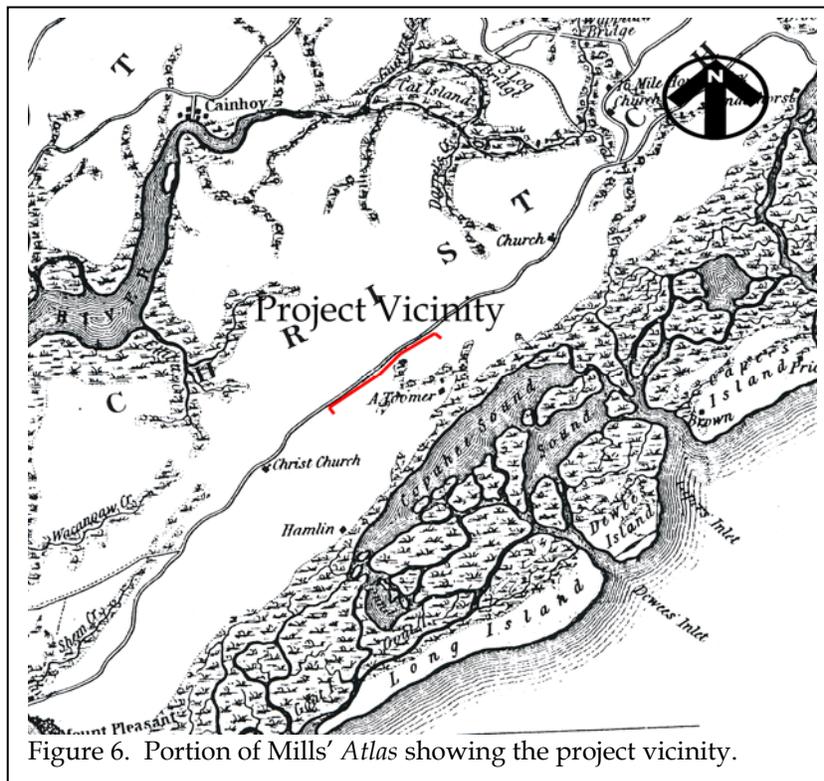


Figure 6. Portion of Mills' *Atlas* showing the project vicinity.

The Charleston area did not participate directly in the agricultural activity of the state. Scardaville (in Brockington et al. 1985:35) notes, "the Charleston area, as a result of a large urban market and a far-reaching trade and commercial network, had carved out its own niche in the state's economic system." Zierden and Calhoun remark that:

international market created an economy vulnerable to fluctuation over which the merchants and planters had no control.

[c]ountry merchants, planters, and strangers "on a visit of pleasure" flocked to Charleston. Planters continued to establish

The development of the railroad, which encouraged trade to the upcountry, brought a revived Charleston economy. By 1857, St. Andrews received a rail line that ran to Savannah, further impacting the commercial economy (see Fick 1992:27).

The increase in commercial activity, however, was short lived. The Civil War not only destroyed the architecture of the city, but it destroyed the economic order that was once so

important in Charleston.

An appropriate summary is provided by Zierden and Calhoun:

[t]he economic decline of Charleston occurred as the city was growing increasingly defensive of its "peculiar institution." The city sullenly withdrew into itself, eschewing the present and glorifying its past. The great fire of 1861 devastated much of downtown Charleston. The War between the States . . . set the seal on a social and economic era (Zierden and Calhoun 1984:54).

Postbellum Period

After the Civil War Charleston and the surrounding countryside lay in waste. Plantation houses were destroyed, the city was in near ruins, the agricultural base of slavery was destroyed, and the economic system was in chaos. Rebuilding after the war involved two primary tasks: forging a new relationship between white land owners and black freedmen, and creating a new economic order through credit merchants. General sources discussing the changes in South Carolina include Williamson (1975), Goldenwieser and Truesdell (1924), and more recently, Zuczek (1996). Scardaville (Brockington et al. 1985:43-48), however, provides information on the changing labor patterns specifically in the study area.

The nearby Christ Church Agricultural Society, organized in 1882. The Society's membership, like that of other organizations of the period, consisted of the remnants of the Southern planting aristocracy. The organizations, founded to encourage and promote the return of the "agrarian south," were concerned with a vast range of issues, including planting practices, the prices offered for various crops, the transportation of crops at reasonable prices on the new railroads, and resolving what were considered constant

labor problems, i.e., the control of "Negroes."

For example, as late as 1909 the members of the Christ Church Agricultural Society agreed to a list of labor rules closely resembling antebellum slavery, including:

- no laborer shall be taken who is in debt, without payment of such debt.
- no laborer who has been discharged for insubordination shall be taken during the current year or within six months.
- that all tenants shall agree to give there [sic] spare time to their landlords when called on (South Carolina Historical Society, Christ Church Agricultural Society Minute Book, 34-197).

The society's constant interest in agricultural prices and conditions is shown by a 1902 report:

unusually fine corn crops planted in the parish, and also find the acreage a large one, which gives promise of a large yield. Peas and potatoes have not been neglected and, on the whole, the crops generally are up to the standard. The committee found the asparagus crops in good condition and some of the crops of young asparagus above the average. No complaints were made of rust Labor is abundant, but getting more and more inefficient each year Until we cease employing labor that has been discharged for cause, inefficiency, etc. . . . so long will we make the labor more and more worthless. We pay from 40 to 50 cents per day for our labor and I doubt if, under

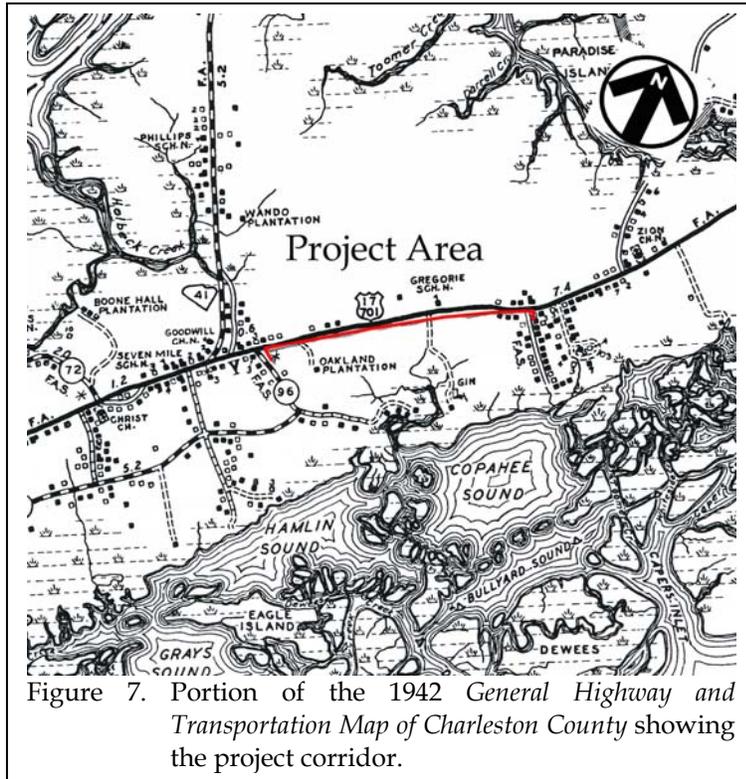


Figure 7. Portion of the 1942 *General Highway and Transportation Map of Charleston County* showing the project corridor.

the best management, we receive 20 to 25 cents value for it The prices obtained for truck, during the past year have not been remunerative, more stuff being shipped and less money realized; in some instances the falling off amounting to 30 percent (South Carolina Historical Society, Christ Church Agricultural Society Minute Book, 34-197).

As Scardaville notes (Brockington et al. 1985:52), it is very difficult to use the agricultural schedules for economic analyses after 1870. The 1880 schedule seriously under-represents Charleston District, the 1890 schedules were destroyed by fire, all subsequent schedules are provided only on a county level (the individual parish and farm level information being destroyed under authority of Congress), and vital information is missing from the 1900 census. At a county-wide level, however, it is clear that between 1870 and 1910 Charleston's agricultural

production gradually increased, the labor system stabilized, and prosperity returned.

In terms of relative importance, cotton and livestock were the two most important agricultural activities in Charleston County, followed by truck farming and grain production. During the late postbellum tenancy increased dramatically throughout South Carolina, except for several coastal areas where Scardaville suggests black farmers were able to purchase small tracts. Where tenancy did exist, it was largely cash rental, not sharecropping, and Scardaville argues that this formed the vital link allowing black ownership (Scardaville in Brockington et al. 1985:62).

Beginning shortly after the Civil War, truck farming became one of the primary agricultural activities of area farmers. The combination of soil fertility, climate, and proximity gave truck farming an edge in the effort to supply Charleston with produce. As early as 1873 it was noted:

the cultivation of garden produce for export in the neighborhood of Charleston, was not pursued as an occupation previously to the years 1865 or 1866. [Recently,] there are a large class of farmers & planters in St. Andrew's and Christ Church Parishes . . . who, in connection with a crop of Sea Island cotton, grow vegetables for export (Charleston Chamber of Commerce 1873:32-33).

As a result many blacks were employed as wage laborers. Produce increased from about one-quarter of the county's agricultural production in 1890 to over three-quarters by 1930 (Scardaville in Brockington et al. 1985:74). Much of this prosperity, however, disappeared during the

Great Depression, when trucking in Charleston County declined by 75%.

As agriculture production declined during the depression, beef and dairy farming gained ground (Fick 1992:51). In St. Andrews Parish, Coburg Dairy was founded in 1920 and by 1969 Coburg was the “largest independent dairy in the state” (Fick 1992:51).

The 1942 *General Highway and Transportation Map of Charleston County* (Figure 7) shows a series of structures toward the eastern portion of the corridor, however modern development appears to have destroyed any footprint of the sites.

RESEARCH METHODS AND FINDINGS

Archaeological Field Methods and Findings

The initially proposed field techniques for the project corridor incorporated shovel testing along the center line of the corridor, which had a right-of-way of 20 feet.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially. 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 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.

A total of 159

shovel tests were excavated along the corridor.

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 transmission corridor failed to identify any remains. This is most likely due to the distance from a permanent water source and high level of ground disturbance through landscaping, underground utilities, and the existing transmission line.

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,

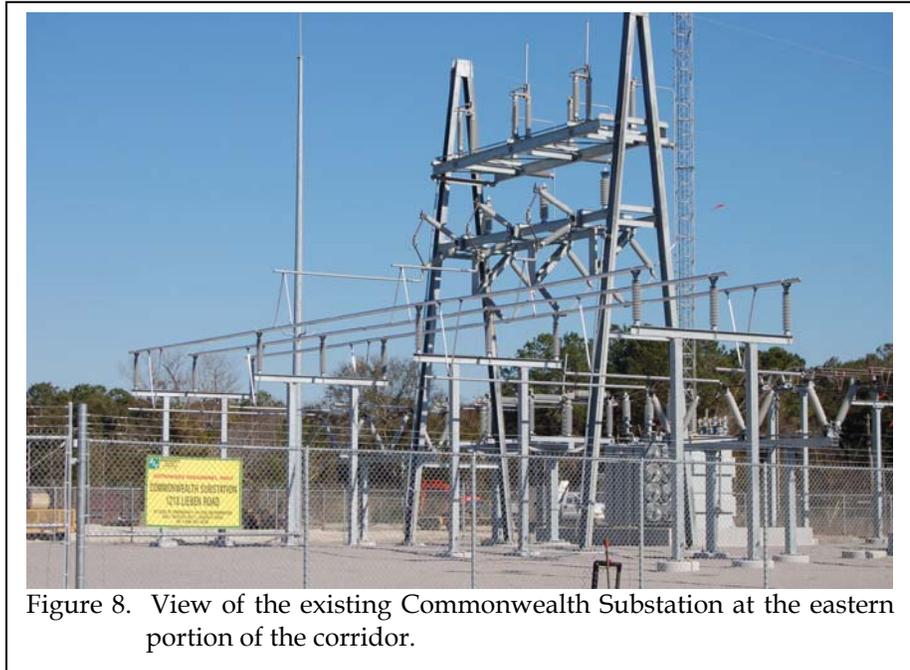


Figure 8. View of the existing Commonwealth Substation at the eastern portion of the corridor.

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.

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

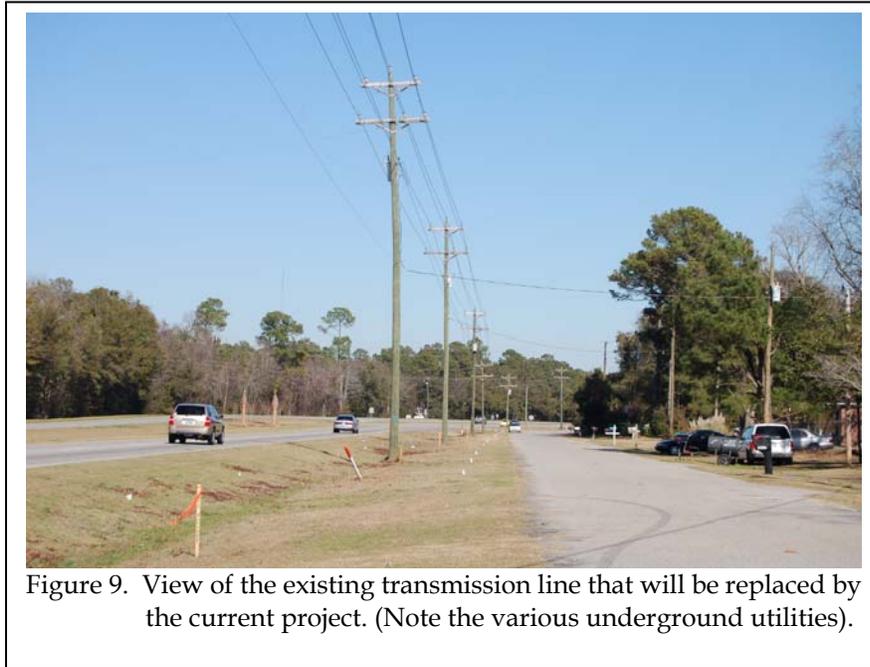


Figure 9. View of the existing transmission line that will be replaced by the current project. (Note the various underground utilities).

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 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

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.

This area of Charleston County has been subjected to two architectural surveys, including one for the county (Fick 1992) and one for the town of Mt. Pleasant (Schneider 1988). A total of six structures (1118-1121 and 1141-1142) from the Mt. Pleasant survey and two structures (468-0485 and 468-0486) from the Charleston County survey were identified and found not eligible for the National Register of Historic Places. Site 88, or Oakland Plantation, which was also identified in the Mt. Pleasant survey, is on the National Register. No portion of this property, however, can be seen from the project corridor. Modern construction activities, including a large Wal-Mart shopping center, have already affected the



Figure 10. View of shovel testing on the corridor.

integrity of this site. No additional historic properties were found during this survey.

CONCLUSIONS

This study involved the examination of a 3.0 mile corridor for a transmission line in Charleston County, in the town of Mt. Pleasant. This work, conducted for Mr. Tommy L. Jackson of Central Electric Power Cooperative examined archaeological sites and cultural resources found on the proposed project corridor and is intended to assist this company in complying with their historic preservation responsibilities.

As a result of this investigation, no archaeological sites were found in the survey area. This is likely the result of the distance from a permanent water source and the disturbance of soils through landscaping, underground utilities, and road widening projects.

A survey of public roads within 0.5 mile revealed no structures that retain the integrity for the National Register of Historic Places beyond

the one resource, 88 - Oakland Plantation, which is on the National Register of Historic Places. This resource, however, cannot be seen from the survey corridor and will not be affected by the current undertaking.

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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