Cultural Resources Phase I Survey for the Osborne Creek Environmental Restoration Project Prentiss County, Mississippi

Brockington and Associates, Inc.
Atlanta Charleston Raleigh

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Whitney Olvey and C. Scott Butler

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US Army Corps of Engineers, Mobile District
PO Box 2288
Mobile, Alabama 36628-0001

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From 21 to 25 January 2002, Brockington and Associates, Inc., conducted an intensive Phase I cultural resources survey of the Osborne Creek Project Corridor in Prentiss County, Mississippi. The project corridor parallels both sides of Osborne Creek between Wheeler Road and Mississippi Highway 362 and includes a total of approximately 2.6 km (1.6 mi). The project was carried out under contract with the US Army Corps of Engineers (USACE), Mobile District, in compliance with Section 404 of the Clean Water Act of 1976, as amended and Section 106 of the National Historic Preservation Act. During field survey, we recorded three archaeological sites, 22PS603, 22PS604, and 22PS605 adjacent to Osborne Creek. All three sites are described as prehistoric artifact scatters. Collected materials include lithics from all stages of reduction, several tools, animal bone fragments, red ochre, and a few ceramic sherds. All artifacts were recovered from the ground surface within a fallow cornfield (22PS603), a personal garden plot (22PS604), and a fallow cotton field (22PS605). No positive shovel tests were excavated. However, due to the recent flooding of the area combined with the clayey nature of the local sediments, shovel testing was not an effective method for assessing the vertical deposits of the sites. The three archaeological sites we recorded, 22PS603, 22PS604, and 22PS605, are recommended potentially eligible for the NRHP based on the quantity of observed artifacts, the presence of prehistoric tools and the sites' current submerged setting. It is possible that these sites contain intact buried deposits that may contribute to our knowledge of the prehistoric occupation of the area. Additional archaeological testing, during the dry season, is therefore recommended to sufficiently assess these sites.

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Under the authority of the National Historic Preservation Act (NHPA),
and the Archaeological Resources Protection Act (ARPA),
this report is not for public release due to the specific site locations included.

Cultural Resources Phase I Survey for the Osborne Creek Environmental Restoration Project Prentiss County, Mississippi

Prepared for
US Army Corps of Engineers, Mobile District

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Prepared by:

Whitney Olvey
Archaeologist

under the direction of

C. Scott Butler
Principal Investigator

Brockington and Associates, Inc.
Atlanta Charleston Raleigh
July 2002

Management Summary

From 21 to 25 January 2002, Brockington and Associates, Inc., conducted an intensive Phase I cultural resources survey of the Osborne Creek Project Corridor in Prentiss County, Mississippi. The project goal was to record all cultural resources in the area of potential effect (APE) which might be impacted by the proposed modifications and improvements to the environmental setting of Osborne Creek. The project corridor parallels both sides of Osborne Creek between Wheeler Road and Mississippi Highway 362 and includes a total of approximately 2.6 km (1.6 mi). The project was carried out under contract with the US Army Corps of Engineers (USACE), Mobile District, in compliance with Section 404 of the Clean Water Act of 1976, as amended and Section 106 of the National Historic Preservation Act, 36 CFR Part 800, as amended, and its associated regulations.

Project tasks included background research and field survey. Background research was designed to provide insight into the history of the area and to identify all previously recorded cultural resources. Research was conducted at the Mississippi Department of Archives and History, Historic Preservation Division, in Jackson, the Prentiss County Chamber of Commerce, the Booneville Public Library, and the Natural Resources Conservation Service of the United States Department of Natural Resources. Field survey was designed to delineate and assess any cultural resources present within the APE.

Background research confirmed that no National Register of Historic Places (NRHP) resources, properties, or archaeological sites have been recorded within a 0.8 km (.5 mi) of the project corridor. During field survey, we recorded three archaeological sites, 22PS603, 22PS604, and 22PS605 adjacent to Osborne Creek. All three sites are described as prehistoric artifact scatters. Collected materials include lithics from all stages of reduction, several tools, animal bone fragments, red ochre, and a few ceramic sherds. All artifacts were recovered from the ground surface within a fallow cornfield (22PS603), a personal garden plot (22PS604), and a fallow cotton field (22PS605). No positive shovel tests were excavated. However, due to the recent flooding of the area combined with the clayey nature of the local sediments, shovel testing was not an effective method for assessing the vertical deposits of the sites.

The three archaeological sites we recorded, 22PS603, 22PS604, and 22PS605, are recommended potentially eligible for the NRHP based on the quantity of observed artifacts, the presence of prehistoric tools and the sites' current submerged setting. It is possible that these sites contain intact buried deposits that may contribute to our knowledge of the prehistoric occupation of the area. Additional archaeological testing, during the dry season, is therefore recommended to sufficiently assess these sites.

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Chapter 1. Introduction

Between 21 and 25 January 2002, Brockington and Associates, Inc., conducted an intensive Phase I cultural resources survey of the Osborne Creek Project Corridor in Prentiss County, Mississippi (Figure 1). This report summarizes the project scope and effect, environmental and cultural context, previous cultural resources surveys in the area, current field methods, results, research potential, and recommendations.

The project was carried out under the direction of the US Army Corps of Engineers (USACE), Mobile District, in compliance with Section 404 of the Clean Water Act of 1976, as amended and Section 106 of the National Historic Preservation Act of 1966, as amended, and with regulations implementing this legislation (36 CFR Part 800: Protection of Historic Properties).

The project corridor extends along both banks of Osborne Creek and includes a total of approximately 2.6 km (1.6 mi). The corridor is located in Prentiss County in the northeastern corner of Mississippi. Osborne Creek is a tributary of Twentymile Creek which is part of the Tombigbee River system. As part of the Tombigbee River Tributaries Flood Control Project of 1958, the identified portion of Osborne Creek will undergo environmental restoration. This will include rehabilitation of the riparian habitat and maintenance of natural vegetation through channel stabilization and stream bank erosion control.

Our project goal was to record all cultural resources in the APE that might be impacted from the proposed environmental restoration which is expected to disturb both surface and subsurface soils. The APE is defined laterally as a 15.25 meters (50 ft) buffer from the top of the creek bank along the approximate 2.6 km (1.6 mi) length on each side of

Osborne Creek. Since the undertaking does not include construction of any tall, standing structures (e.g., towers) there is no potential for visual effects to historic properties in the vicinity. Therefore, only physical, direct, ground-disturbing impacts are considered potential.

The project corridor is comprised of fallow farmland (cotton and cornfields), a small amount of grassy lawn, and a fallow garden plot. No previous archaeological surveys have been conducted in the immediate vicinity. No historic resources have been recorded within a 0.8 km (.5 mi) of the corridor.

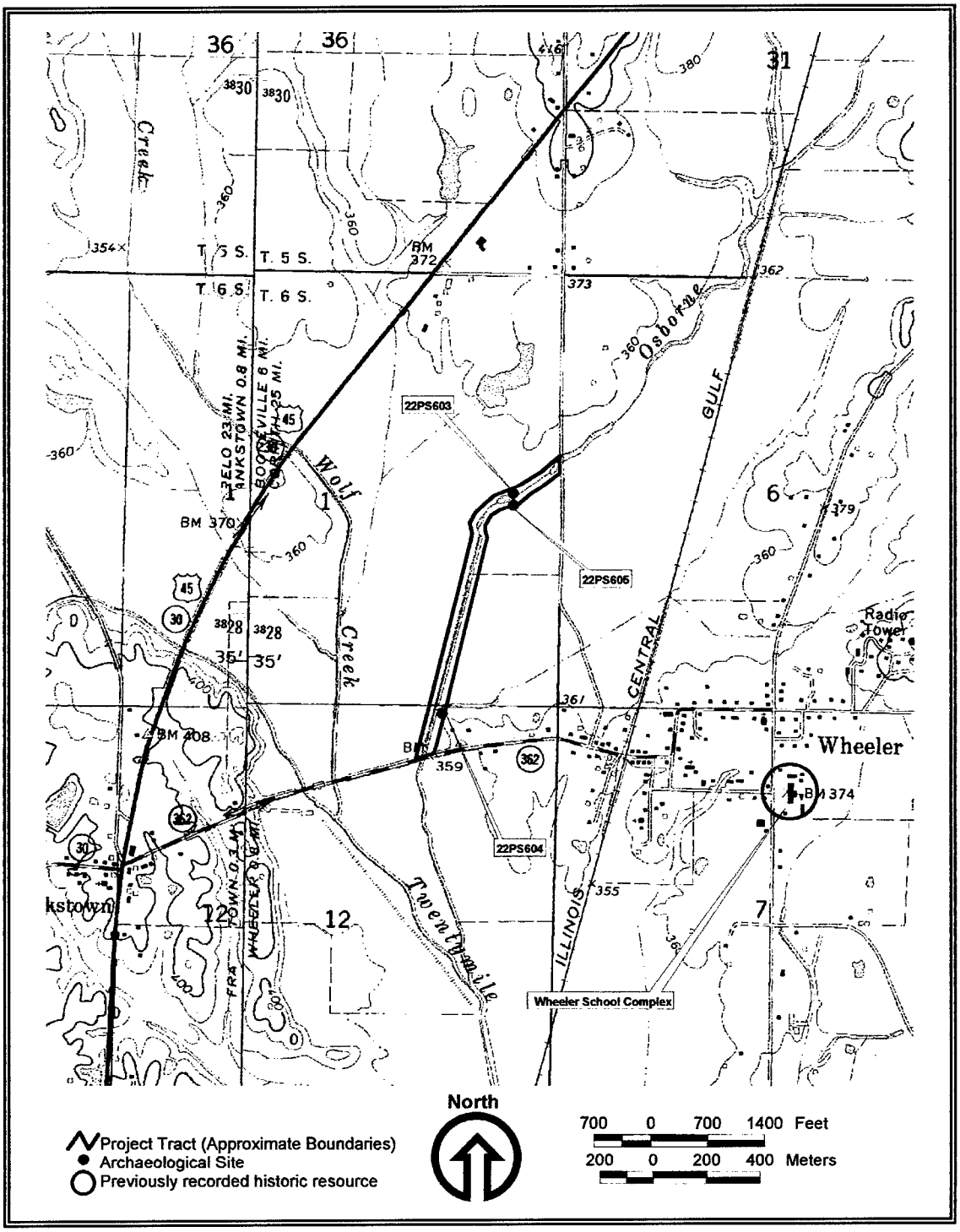

Figure 1. Osborne Creek Project Corridor and recorded archaeological sites (1973 *Wheeler, MS* 7.5' USGS topographic quadrangle).

Chapter 2. Environmental Context

The project corridor is located in the northeast corner of Mississippi in Prentiss County near the small community of Wheeler. The corridor follows the course of Osborne Creek and is bounded on the south by Mississippi Highway 362 and on the north by Wheeler Road. The vast majority of the area is now cultivated farmland. The project corridor lies near the junction of the Black Prairies and the Tombigbee Hills physiographic provinces. The corridor is less than 32 km (20 mi) from the Whitten (Bay Springs) Lock and Dam of the Tennessee-Tombigbee Waterway (Divide Section). Summary of environmental conditions are based on Robards et al. (1997).

Climate

Prentiss County averages greater than 152 cm (60 in) of precipitation annually. The average winter daily temperature is around 5°C (41°F). Average summer daily temperature falls around 26°C (78°F). The lowest recorded temperature is -22°C (-8°F). The highest is 42°C (108°F). Both records occurred in Booneville, the county seat.

Prentiss County averages 140 cm (55 in) of precipitation annually, predominately between April and September. This is characterized as the growing season, which averages over 194 frost-free days. Average daily humidity is moderate, usually around 55 percent in the afternoon, but reaches around 90 percent at dawn. Snowfall averages 9 cm (3.6 in) a year.

Topography

Prentiss County has very low relief in the topography, generally between only 0-2 percent slope, and ranges in elevation from 110 meters (360 ft) to 244 meters (800 ft) above mean sea level. About 22 percent of the county is classified as flat flood plain. The county

is bounded on the east by Tishomingo County, along the Tennessee-Tombigbee Waterway, on the north by Alcorn County, on the West by Tippah and Union counties, and on the south by Lee and Itawamba counties. The topography consists principally of nearly level, broad flood plains, with somewhat poorly drained loamy and clayey soils. The flood plains are bisected by perennial, intermittent creeks and man-made channels (Robards et al. 1997:12). All of the creeks and streams in the county empty into one of a series of tributaries that ultimately empty into the Tennessee-Tombigbee Waterway. Since the flood plains are subject to occasional flooding and seasonal wetness, this area is best suited for farming rather than urban development.

Soils

Soils along the creeks of southwestern Prentiss County consist predominantly of loams and clays from the Leeper-Marietta-Catalpa Association. The stratigraphy generally includes moderately well to poorly drained soils that range from brown to gray in color. The loamy and clayey soils typically developed from alluvium on flood plains. These soils are best suited for crop cultivation, especially row crops, truck crops and small grains. Numerous farming techniques, such as terracing, tilling, planting, and contouring, are used in the flood plains to control erosion (Robards et al. 1997: 67).

The majority of the project corridor is comprised of Leeper silty clay. The northern-most section may contain some portions of Marietta fine sandy loam and a small amount of Savannah fine sandy loam. Savannah soils, which form on terraces and gentle slopes, are better drained than Leeper and Marietta types; however, all three are occasionally flooded, and percolate and dry slowly. Leeper loam is especially sticky when wet. Robards et al. (1997:46) describe Leeper and Marietta soils as: subject to flooding following heavy, prolonged rains during winter and early spring, generally before crops are planted. Most areas are near enlarged, deepened, or straightened channels.

Vegetation and Wildlife

Prentiss County contains a large percentage of cultivated cropland and hay pastures. Farming, the main industry of the county, focuses on soybean, sorghum, corn, cotton, and grain. In areas with Leeper soils, the most common in the project corridor, cotton crops average 750 pounds per acre. Corn crops average 80 pounds per acre. Where woodland environments are preserved, bottomland hardwoods dominate. In the project corridor vicinity, trees may include American sycamore, cherrybark oak, eastern cottonwood, sweetgum, green ash, Nuttall oak, water oak, and yellow poplar. The characteristic understory may include Pinehill bulestem, longleaf uniola, panicum, and beaked and spreading panicum.

Pine trees are planted in the higher, more terraced areas of the county. Species include loblolly and shortleaf. However, seasonal wetness limits the use of heavy machinery during part of the year, and extensive maintenance must be undertaken. In the project corridor vicinity, the soils are poorly suited for pine cultivation due to the alkaline reaction in the soil and plant competition.

Abundant small game animals live in this portion of Prentiss County. Most commonly seen are cottontail rabbits, squirrels, mourning doves, bobwhite quail, raccoons and opossums. Lower populations of white-tail deer and turkey occur as well as a few animals associated with riverine environments, such as waterfowl, beaver, muskrat, mink, and fishes (Robards et al. 1997: 88). In addition to human activities, soil types limit the variety of animals in an area by determining what types of foods will grow.

Chapter 3. Cultural Context

Prehistoric Overview

The prehistoric occupation of the southeastern United States can be described best in terms of changes in social systems. Typically, archaeologists tend to refer to cultural divisions by the manner in which prehistoric people acquired food, and maintained social relationships. Further divisions are based on spatial distributions of ceramic or lithic artifact types. During much of the past, early prehistoric cultures followed a lifestyle which focused on acquiring locally available wild resources (hunting and gathering). The hunting-gathering lifestyle emphasized a social structure based on small mobile groups. These family units intensively exploited geographically or socially bounded territories. During times of economic stress, secondary resources or related groups could be relied upon for survival.

The culture historical periods most associated with this particular lifestyle are the Paleoindian (10000 - 8500 BC) and the Archaic (8500 - 1000 BC). These periods are further subdivided into subperiods based on the particular resource procurement strategies, their intergroup relations, and the projectile point typologies which have been developed through the years.

Paleoindian (10000 - 8000 BC)

The earliest evidence of human settlement in the project area region, the Upper Tombigbee River drainage, dates from the Paleoindian period. This period has generally been interpreted as a time when roaming hunter-gathers pursued megafauna of the late Pleistocene; in addition, the collection of wild foods was also practiced. The climate was colder and drier than present, and the vegetation of the region was probably dominated by

a spruce-pine forest (Davis 1976; Watts 1971; Wright 1971). The highly mobile social organization of the Paleoindians is inferred from the small dispersed Paleoindian sites.

The Paleoindian material culture is characterized by well-made fluted projectile points early in the period, and semi-fluted points later. The knappers of this time preferred high quality cryptocrystalline material, e.g., cherts, (Gardner 1977), and their quarries have been posited as the foci of their movements (Goodyear 1979).

A settlement model first suggested by Neill (1964) but expanded on by Dunbar and Webb (Dunbar 1991; Webb et al. 1984) theorizes that Paleoindian settlement focused on "oases" or more properly the concentration of wildlife in and around streams, springs and karstic sinks. A significant amount of material, including associated Paleoindian points and Pleistocene faunal remains, suggests that the theory has a great deal of merit (Milanich 1994:37-45).

By the end of the Paleoindian period prehistoric populations were shifting from small highly mobile bands to larger aggregates of increasingly localized basecamps. Large, heavy, lanceolate projectile points were gradually replaced by generally smaller corner- or side-notched types (Bullen 1975). Bolen, Morrow Mountain, Eva, and Florida Archaic Stemmed point styles became common. This reflected not only a change in technological innovation but a shift in focus to smaller prey.

In the Upper Tombigbee River drainage, all previously located Paleoindian sites consist of surface finds of diagnostic projectile point types (Mahan 1956; McGahey 1987) or as isolated artifacts found during the excavation of larger sites (Alexander 1983; Bense 1983). The Early Paleoindian period is characterized by the Clovis horizon and given an estimated date of prior to 10000 BC; the Middle Paleoindian period is indicated by the

Cumberland/Redstone horizon, and given an estimated date of prior to 10000 to 9000 BC; and the Late Paleoindian period is indicated by unfluted lanceolates such as Quad, Beaver Lake, or others, and is given a date of 9000 to 8000 (Futato 1989).

Early Archaic (8000 - 6000 BC)

Archaic period basecamps were selected primarily for repeated access to hunted and gathered resources. Prior to the development of horticulture these resources were prey species, wild plants, and lithics. Natural barriers to movement prevented colonization in some instances, but groups were also aggregated according to complex territorial arrangements. Territories probably evolved early and shrunk considerably as populations increased or seasonal rounds developed based on smaller prey species (Anderson and Joseph 1988). Following the Paleoindian period, larger and more numerous water sources were available, thereby promoting longer occupations and larger populations during the Archaic period (Milanich 1994).

The Early Archaic represents a time of adaptation to the early Holocene environment. The climate was moister and warmer, and the northern forest retreated as the oak-hickory forest was established (Watts 1971; Whitehead 1973). The Early Archaic is distinguished from the preceding Paleoindian period on the basis of the technological change from large fluted projectile points to simpler, smaller and more diverse point types. The general density of populations increased, but the patterns of subsistence may have been largely unchanged. Material manifestations of this period in the Upper Tombigbee River drainage area include Dalton, Big Sandy, and Kirk Corner Notched projectile points. Cherts remained a popular raw material, but locally outcropping materials were also utilized.

The only major Dalton component reported for the Upper Tombigbee River drainage region is the Hester site in Monroe County (Brookes 1979; Futato 1989). Investigations at

the Hester site revealed a Dalton component stratigraphically separated from overlying horizons (Futato 1989). A number of Big Sandy and Kirk Corner Notched components have been encountered in the basal levels of midden mounds and also an many smaller sites.

Middle Archaic (6000 - 3000 BC)

The shift towards more diverse and complex Middle Archaic populations took place gradually. The Middle Archaic appears to show an increase in more permanent settlement, particularly in the large river valleys and along the coast. This is perhaps most indicative of increasing territorial subdivision by discrete tribal, or family units. During this period settlement is characterized by seasonality and continual seasonal rounds within restricted territories. This trend expanded in the Late Archaic. During this period there is also an increase in heat treating of lithic materials which seems to correlate with the utilization of silicified coral (Austin and Ste. Claire 1982, Daniel and Wisenbaker 1987).

In the Upper Tombigbee River drainage area, midden mounds are identified as primarily a Middle Archaic phenomenon and investigations at these sites have resulted in the recognition of several distinct cultural horizons. The Middle Archaic horizons and dates described for the area include Cypress Creek (6000 to 5000 BC); Eva/Morrow Mountain (5000 to 4000 BC); and Benton (4000 to 3000 BC). The Sykes/White Springs horizon is also prominent in the local Middle Archaic but, at present, its chronological position is unclear; evidence from some sites suggests that the Sykes/White Springs horizon may lie between Morrow Mountain and Benton (Futato 1989).

The midden mounds are taken to be riverine basecamps for large groups of persons; hickory nut shell and some seed recovered from these sites suggest a spring through fall occupation, although a winter occupation cannot be ruled out. A large number of upland sites

are present (generally smaller than the riverine sites) and likely represent a range of special purpose camps occupied at differing times throughout the year (Futato 1989).

Late Archaic (3000 - 1000 BC)

The Late Archaic is characterized by a continuing trend toward localized adaptation and sedentism, and the development of interregional trade. The Late Archaic horizon most often recognized in the Upper Tombigbee River drainage area is Little Bear Creek, although Pickwick/Ledbetter and Wade/Cotaco Creek assemblages are also often present (Futato 1989).

Bense (1987) reports a change in midden mound occupation during the Late Archaic from intensive to more generalized (Futato 1989). She suggests that during the Late Archaic, focus was shifted away from the flood plain to an intensive utilization of upland areas. In contrast, Johnson (1981) reports an increased emphasis on flood plain settlement at Yellow Creek during this time (Futato 1989).

Rafferty (1985) interpreted the Late Archaic settlement pattern for the region from the Yellow Creek perspective on the Tennessee-Tombigbee Waterway (Futato 1989). According to Rafferty, the Yellow Creek sites may represent part of a settlement system which includes portions of the Tennessee Valley, while a similar settlement within in the Upper Tombigbee River area focused on the Tombigbee River midden mounds (Futato 1989). O'Hear (1978) suggested five basic Late Archaic site types for the region: (1) flood plain basecamps; (2) terrace edge basecamps; and small, short-term occupation camps located in the (3) flood plain, (4) terraces, or (5) uplands.

Early Woodland (1000 BC - 100 BC)

By the time that ceramics were developed, subsistence began to focus to a larger degree on domesticated resources, such as maize, beans and squash, or initially much larger quantities of native domesticates. Non-native crops were probably introduced from Mexico and supplemented the locally derived domesticates before displacing them during the Mississippian (Yarnell 1993). Planting and maintaining plots of land, initially through slash and burn horticulture, but eventually through more sophisticated crop management techniques, helped select for the development of more stable settled societies (Binford 1968, Bender 1978). Increased sedentism was probably a factor leading to higher rates of reproductive fertility, and subsequent population increases.

Evidence of differential access to exotic trade goods and the social demands of craft specialization are ways in which the archaeological record reveals the development of social diversity. A system evolved in the Southeast where more complex societies participated in regional interaction and developed centers of political influence (Marshall 1987; Barker and Pauketat 1992; Anderson 1994). The culture historical periods in which these characteristics developed and reached their greatest degree of complexity are usually identified as the Woodland (1000 BC - 900 AD) and the Mississippian (900 - 1600 AD). Each of these can be divided into finer classifications based on particular pottery typologies and the presence/absence of public or symbolic architecture, usually identified as subperiods.

The Early Woodland is correlated with increasing intra- and extra-regional trade (exemplified by more exotic items), developing social hierarchies, technological innovations in ceramics as well as hunting strategies (the bow and arrow), and a presumed increase in political superstructures. Dwellings become more permanent, are situated in denser concentrations and are extended as part of more continuous settlements. The trend increases throughout the Middle and Late Woodland subperiods with the addition of mound building

and the extension of greater emphasis on sedentary agriculture. In the Tombigbee drainage, the years between 1000 and 100 BC witnessed developments attributable to the Middle and Late periods of the Gulf Formational stage (Jenkins and Krause 1986: 49).

Middle Woodland (100 BC - AD 600)

The Middle Woodland represents a time of population growth and increased cultural complexity. Characteristics of Middle Woodland include: increased site size and density; the appearance of large earthen mounds containing elaborately furnished graves; the emergence of agriculture; and the development of ceremonialism and a complex interregional trade network. In the Tombigbee Valley, the Middle Woodland is marked by the appearance of fabric marked pottery.

There are two Middle Woodland phases recognized in the Tombigbee drainage area: Miller I (100 BC to AD 300) and Miller II (AD 300 to 600). Archaeological evidence suggests that Miller I peoples moved into the area from the north, bringing with them material culture of a new lifestyle built around the manipulation of externally derived forms of durable wealth and the management of labor committed to preparing for public mortuary ceremonies (Jenkins and Krause 1986: 49; Jenkins 1982: 69). The ceramic assemblage for this phase initially included Saltillo Fabric Marked and Baldwin Plain. Later, Furrs Cord Marked wares were added to the ceramic inventory, as the integration of local groups into the Hopewell Interaction Sphere became widespread (Jenkins and Krause 1986: 49). When the percentage of cord marked wares increases to the majority ceramic type, the assemblage is considered Miller II (Futato 1989: 114). The predominate projectile point types of the Middle Woodland were the lanceolate-expanded Mud Creek projectiles and Bradley-type lanceolate spike points.

The Hopewell Interaction Sphere resulted in a "list of exact similarities in funerary usages and mortuary artifacts over great distances" (Caldwell 1964: 138). In the Tombigbee drainage, there are many burial mounds containing non-local items like silver-plated panpipes, galena, copper, platform pipes, greenstone celts, trade pots, and projectile points of foreign manufacture (Jenkins and Krause 1986; Bohannon 1972; Cotter and Corbett 1951; Jennings 1941). There is an extensive Miller I occupation in the Upper Tombigbee River drainage area (Futato 1989). Miller I site types include basecamps, mortuary mound complexes, and small temporary camps.

The Pharr Mounds site, which straddles the boundary between Prentiss and Itawamba counties, has undergone extensive data recovery excavations (Bohannon 1972). Even though materials ranging from the Archaic through the Mississippian have been recovered, the main period of occupation has been dated to the Miller I. This designation is based on percentage distributions of certain types of Miller sequence ceramics compared to those at the similar Bynum Mound site (Bohannon 1972). The Pharr Mounds site contains eight large mounds, a domestic habitation area, a possible crematory facility, a several empty graves. Bohannon (1972) theorizes that the people who built the mounds lived here only intermittently to exploit seasonally available food resources and to conduct mortuary rites.

Late Woodland (AD 600 - 1050)

The expansion of Woodland populations during the Middle Woodland had stabilized by around AD 650, by which time the region was well peopled. Contact with Hopewellian people had all but collapsed (Jenkins and Krause 1986: 52). The Late Woodland in the Upper Tombigbee River drainage area is defined as Miller III (AD 600 to 1050). The Miller III ceramic assemblage is comprised of Mulberry Creek Cord Marked and Baytown Plain. There are comparatively few Miller III sites of any type in the Upper Tombigbee River drainage

area (Futato 1989). Miller III sites are more common to the south; it is interpreted that the Upper Tombigbee area became depopulated during this time.

Mississippian (AD 1050 - 1550)

In general, the Mississippian throughout the Southeast is interpreted as a time of permanent settlements, increased religious and social complexity, and greater dependency on agricultural practices. The Mississippian culture originated in the central Mississippi River valley after about AD 800. From there, it spread to three distinct but related centers: Cahokia in the central Mississippi River valley; the Caddoan area of eastern Oklahoma, Texas, and Louisiana, with a major center at Spiro; and the Tennessee-Cumberland drainage, with major centers at Moundville and Etowah (Jenkins and Krause 1986; Walthall 1980). The most dramatic characteristics of this period are observed in the construction of large fortified villages, and flat-topped earthen mounds utilized in political and religious functions. Mississippian settlements were primarily located along major streams or rivers on large alluvial flood plains.

Overall, artifact assemblages become more complex during this time. Shell-tempered pottery becomes more diversified than during previous cultural periods; there are clear functional differences of form and quality. Plain cooking bowls and storage containers are the most common forms, but polished and decorated vessels are also present. Lithics consist primarily of small triangular projectile points. Trade goods during the Mississippian include Coastal Plain shell, chert, copper, wood, and salt (Griffin 1967; Stoltman 1978).

For the Upper Tombigbee River drainage area, however, the Mississippian period follows a trend of depopulation that began in the Late Woodland. Johnson and Sparks (1986) note that 50 of 56 identified Mississippian components in the area are located in the Black Belt. For the most part, Mississippian components at sites in this region tend to be small and

sparse (Futato 1989: 116). Karwedsky (1980: 56-57) notes that cultivation and erosion may have removed most evidence of an intensive Mississippian occupation at the Pharr village site in Prentiss County, Mississippi. Futato (1989: 117) further suggests that, while Mississippian sites may indeed be relatively scarce in the Upper Tombigbee River drainage, cultivation, soil erosion, and the leaching of shell-tempered sherds in the acid soils of the region may all contribute to poor preservation and recognition of the sites that are present.

Numerous Mississippian village sites have been recorded along the Natchez Trace, which stretches from the northeast corner diagonally across the state to the southwest corner (Crutchfield 1985). These include several mound sites that were occupied during the Woodland period, e.g., Bear Creek Mound and Pharr Mound, as well as several sites with large, flat-topped mounds, e.g., Emerald Mound, Mound Bottom, Mound City, West Harpeth site, and Old Town (Crutchfield 1985). However, with the arrival of the first Europeans, the southeastern polities began to break up (Peebles 1986; Anderson 1994).

Protohistoric (AD 1550 - 1700)

This period begins with the arrival of the first Europeans in the Southeast. European contact brought about dramatic alteration of Native American technology. Metal tools and firearms greatly affected economic patterns within native cultures, and also made these cultures dependent upon trade with Europeans. Shifts in subsistence and trade, as well as displacement from wars (with other native groups and with European Americans), forced movements of populations and concentration of formerly widely-spaced groups. Disease introduced by contact with Europeans dramatically decreased population size and altered its structure. The early reduction of population size, combined with economic dependence and defeat in war, and finally displacement from their lands, caused the loss of political self-control that characterized this period.

Few Protohistoric sites have been encountered in the Upper Tombigbee River drainage. Johnson and Sparks (1986) note that, like Mississippian settlements, Protohistoric settlements in the region are restricted almost exclusively to the Black Belt (Futato 1989: 118). Unlike Mississippian settlements, however, Protohistoric sites tend to occur on the soils along upland second-order streams, instead of on thick bottomland soils along third order (or higher) streams in alluvial valley settings (Futato 1989). Indian groups living in the region have not been identified with certainty, however the Chickasaw claimed most of northern Mississippi, western Tennessee and Kentucky (Crutchfield 1985). Cushman (1999) claims that Hernando de Soto invaded Chickasaw land during his 1540 expedition. Atkinson (1987) suggests that the Alibamu were present in the southwestern portion of the Upper Tombigbee River drainage area and were one of the several groups in the region encountered by De Soto.

The Chickasaws centered their villages around the Tupelo area, and were related linguistically (Muskhogean) to the other two major tribes of the state: the Choctaws and the Natchez (Crutchfield 1985). The Choctaws and Chickasaws were warring tribes throughout their existence, a fact which was intensified during the time after European contact.

Historic Overview

The following brief overview of the history of northeastern Mississippi provides a background for the development of the area surrounding the Upper Tombigbee River. The context is based on extensive historical and geographical research conducted by James Doster and David Weaver, and funded by the US Army Corps of Engineers, Mobile District, which resulted in the publication of two technical reports (Doster and Weaver 1981; Weaver and Doster 1982). These reports define the historical and geographical research design for the Tennessee-Tombigbee Waterway archaeological investigations.

Spanish Exploration (1540-1701)

The first European explorer to move through the Tombigbee River region was Hernando de Soto in 1540 through 1541. The *Final Report of the United States DeSoto Expedition Commission* states that the main body of De Soto's troops crossed the Tombigbee River at Morgan's Ferry near Aberdeen, while a group of 30 mounted horsemen simultaneously crossed near the later location of Cotton Gin Port (Swanton 1939). However, more recent researchers (Hudson and Tessar 1994: 89) have placed the De Soto crossing further south at two possible locations near present-day Columbus, Mississippi. De Soto found the ancestors of the Chicksaw Indians already permanently based in the prairie of the Tupelo-Pontotoc area (Doster and Weaver 1987: 29). He seized stored corn supplies, held local chiefs for hostage, and introduced Old World diseases to the local populations.

Regardless of exactly where De Soto's army crossed the Tombigbee, his expedition had a profound impact on the native peoples in the region. The usurpation of authority by the Spaniards, coupled with devastating diseases that they introduced, significantly contributed to destruction of the native Mississippian culture. The full extent of the impacts De Soto inflicted on the native peoples is not yet fully known, but early-eighteenth-century explorers who ascended the Mississippi and Tombigbee rivers found a substantially less complex and more egalitarian culture than the one De Soto's chroniclers had recorded (Doster and Weaver 1987:29).

French Occupation (1701-1763)

A French settlement was established at Mobile in 1701 by the Sieur de Bienville, and trade with Indian groups in the interior began almost immediately (Doster and Weaver 1981:30). The French, intent on expanding trade with the Creek, moved inland and established Fort Toulouse in 1717 at the confluence of the Coosa and Tallapoosa rivers. Using overland trails from South Carolina, the British and their Chickasaw Indian allies soon seriously competed with French trade in the region. The trade competition seriously disrupted

the French control of the area. Spurred on by requests for military assistance from the French-allied Choctaws, the Sieur de Bienville led a punitive expedition of approximately 600 men against the Chickasaws in 1736.

The expedition moved up the Tombigbee River from Mobile, entered the Upper Tombigbee at present day Demopolis, Alabama, and established Fort Tombeckbe in 1736. Fort Tombeckbe was located at Jones Bluff, near the present site of Epes, Alabama. From there, Bienville's forces moved up the river in boats to Plymouth Bluff, to the mouth of Tibbee Creek. After receiving assistance from their Choctaw allies, the French expedition continued upriver and reached the head of navigation on the Upper Tombigbee (adjacent to the early-nineteenth-century town of Cotton Gin Port, Mississippi) on 22 May 1736. Approximately 700 Choctaw Indians joined the French expedition at this location. Bienville ordered a temporary fortification built as a base of operations at this "last portage...situated on a fine bluff ten leagues from the villages of the Chickasaw Indians."

The combined French-Indian force worked on the fortification for two days; about 600 piles "the size of a man's thigh" were cut for the palisade. On May 24, Bienville assigned 35 men to guard the fort and moved the rest of the expedition north to destroy the Chickasaw villages near present Pontotoc. The Chickasaws, however, had received arms and ammunition, with advice on fortifications from the English and had already defeated a smaller French force from Illinois settlements led by Pierre d'Artaguett on March 25 at the Battle of Ogoula Tchetoka. As before, the Chickasaws soundly defeated the French and Choctaws at the Battle of Ackia, and Bienville was forced to hastily fall back to the fort and depart with his boats. A second campaign in 1739 through 1740 was also unsuccessful. In the middle eighteenth century, much of the Upper Tombigbee River region was a buffer zone between the Chickasaws in the north and the Choctaws and French in the south. Skirmishes between

the French/Choctaws and Chickasaws continued for a number of years, although historic records for this period are scanty.

In 1754, the continuing conflict between the French and English and their Indian allies fully escalated to the worldwide conflict which later became known as the French and Indian War (or in Europe, the Seven Years War). The English resoundingly won the war in 1763. As a result of their defeat, the French were forced to cede all claims east of the Mississippi River (to 32° 28" north latitude, or to the mouth of the Black Warrior River). The Upper Tombigbee River drainage to the north, including the project corridor, remained the province of the Choctaws and Chickasaws.

British Colonial Era (1763 - 1776)

Many of the Indian groups which had been closely allied with the French were not happy with the British control of the continent. British efforts to stabilize relationships with Native American groups in the Southeast began with the signing of a series of treaties. These treaties defined boundaries between tribes and established trade regulations (DeVorsey 1961). Treaties were negotiated and signed with the Creeks and Cherokees at Augusta in 1763, and with the Choctaws and Chickasaws at Mobile in 1765. Following these treaties, English traders were sent into the Indian territories from the new base at Mobile. Treaty conditions were enforced through occupation of several abandoned French forts: British troops were sent to reestablish Fort Tombeckbe as (1) "a base for trade with the Choctaws, and the Chickasaws," and (2) "supporting the subtle efforts of agents [of the Indian Superintendent] to keep a war going between the Choctaws and the Creeks to discourage the latter from attacking the English" (Doster and Weaver 1981:34). In an attempts to avoid a growing conflict between the Choctaws and English, Fort Tombeckbe was abandoned in 1767.

Despite use of the Alabama and Tombigbee rivers by the French as trade routes, the English primarily used land routes. Travel by canoe and keelboat on the upper portions of the Tombigbee River was hampered by seasonal flooding or low water and natural obstructions. During the late eighteenth century, river travel by larger boats on the Tombigbee River was only attempted to approximately 25 miles north of the Tombigbee-Alabama River confluence, near the present town of Jackson, Alabama. Packhorses, following ridge top trails parallel to the river, were considered to be more practical means of transporting goods.

Doster and Weaver (1981:37) indicate limited evidence of Historic period Native American occupation in the Upper Tombigbee River drainage. The area appears to have been disputed by at least three Indian groups in the eighteenth century. Lands claimed by the Chickasaws extended from the uppermost portions of the Tombigbee River into western Tennessee. The Choctaws claimed central and southern Mississippi, including lands on both sides of the Tombigbee. According to Doster and Weaver (1981:39) the Choctaws "seem to have had no permanent settlements on or east of the Black Prairie." The Creeks claimed territory which overlapped with the Choctaws, extending from Georgia west to the Tombigbee River.

American Independence and United State Expansion (1776 - 1814)

As in the French and Indian War, Indian alliance was sought by principals in the Revolutionary War. Because they relied on extensive English trade, the Creeks, Chickasaws, and Choctaws remained loyal to the British, to varying degrees, throughout the war. The Spanish entered the war in 1779 as supporters of the Americans, and captured British-held Natchez, Mobile, and Pensacola. As a result of these victories, the Spanish were able to disrupt established relationships between the British and Choctaws. Following the war and

according to the Treaty of Paris (1783), Spain retained the majority of British West Florida and East Florida.

With the British defeat, Native American groups found it prudent to develop trade relationships with both the Spanish and Americans. The Choctaws and Chickasaws signed a treaty with the Spanish in 1783 at Mobile; the Creeks signed a similar agreement the following year at Pensacola. However, the Spanish were caught somewhat unprepared by the Indian demand for European goods; the Spanish relied upon established British traders to handle these newly formed trading relationships. At the same time, American influence slowly extended from the east and north.

Claims by the newly formed United States of America for the portion of West Florida north of 31° were "resolved by Thomas Pinckney's Treaty of San Lorenzo in 1795 in favor of the United States" (Doster and Weaver 1981:38). Following the Pinckney Treaty, Spanish involvement in Indian trade gradually lessened. In 1799, Spain gave her New World holdings lying north of the Rio Grande River to France. In turn, Napoleon Bonaparte offered the Louisiana Territory to the United States to help finance his military campaigns in Europe and the Caribbean. The 1803 Louisiana Purchase doubled the size of the United States, providing expansion and settlement opportunities.

After the Revolution, several treaties were signed between the United States and Indian groups. These agreements included the Hopewell treaties of 1785 and 1786 with the Choctaws, Chickasaws, and Cherokees, and the 1790 Treaty of New York with the Creeks (Kappler 1904). Primary points in these treaties were the establishment of boundaries and regulation of trade between American settlers and Native Americans.

In order to gain a foothold on trade in the west, the United States negotiated separate treaties with the Choctaws and Chickasaws in 1801 to survey and construct a road (the Natchez Trace) connecting the towns of Nashville (on the Cumberland River, in Tennessee) and Natchez (on the Mississippi River). In addition, the federal government established a number of trading centers, called factories, among the Indians.

The War of 1812 was the final conflict over territory in the Southeast involving a European power (the English). English attempts to unite Indians against the Americans culminated in Andrew Jackson's victory over the Creek in March 1814 at the Battle of Horseshoe Bend, on the Coosa River. Although fighting continued sporadically until the end of that year, this battle ultimately resulted in the opening of central and southern Alabama to American settlement.

Antebellum Period (1814-1861)

Initial settlement of European Americans in eastern Mississippi began early in the nineteenth century. In 1817, one year after Choctaw and Chickasaw land cessions east of the Tombigbee River, the Mississippi Territory (including most of present-day Alabama) was divided into two parts, Mississippi and Alabama. After the removal of the Indians, towns on the Tombigbee River developed quickly. The population of the Mississippi Territory had grown enough by 1817 to qualify for statehood. Mississippi was admitted as a state in December 1817; Alabama was admitted March 1819 (McLemore 1981:250; Smith 1980:23).

In the summer of 1817, Congress granted land to French Bonapartist exiles who had arrived at Philadelphia (Rogers et al. 1994:63). The land grant consisted of four townships near the confluence of the Tombigbee and Warrior rivers. The French settlers, primarily aristocratic officers from Napoleon's army, first traveled to Mobile and then ascended the Tombigbee River to the location selected for them. At first the French used the common

name of White Bluff for their new settlement, but soon renamed it Demopolis, a Greek word meaning "city of the people" (Rogers et al. 1994). Most of the French settlers abandoned the settlement for city life in Mobile and New Orleans by the late 1820s (Griffith 1987:73).

Native Americans had previously established farmsteads west of the Upper Tombigbee River and had proven the land to be good for cultivating a variety of staple crops, including cotton. White settlers arriving at the expanding towns along the east side of the river were eager to appropriate this land for themselves. The Choctaw and Chickasaw were pressured into granting a series of large land cessions. By 1832, the new state of Mississippi reached its present geographical size and all Indians were forced west.

With the exception of the hapless French exiles, most of the early settlers in Mississippi were transplanted members of the planter society. These settlers came from North Carolina, Tennessee, Georgia, eastern and central Alabama, and Virginia. They recognized the agricultural potential of the land, and had the personal finances to purchase whole or multiple land sections from the government or land speculators. Decreases in cotton prices during the 1830s and the early 1840s (from an average of 11.5 cents per pound in the early 1830s to 5.25 cents per pound in 1845) may have convinced planters that larger landholdings might be required for profitable plantation operations (Jordan 1987:10-13). By the late 1840s, many of the planters with larger landholdings realized that more adequate transportation and marketing facilities were required. The Tombigbee River offered "a natural transportation system which had its primary focus in the port and commercial center of Mobile" (Doster and Weaver 1981:61).

By the early 1850s, despite the development of improvements of steamboats and attempts to improve the Tombigbee River channel (and its tributaries), plantation production had outgrown the carrying capacity of river transport. In 1856, Mississippi extended its road improvement legislation to include improvement of navigable streams; overseers were

ordered to "cause all logs and overhanging timber and other obstructions to navigation to be removed as far as their work permits" (Doster and Weaver 1981:66-67).

Beginning in the 1830s, emerging systems in the Southeast offered options for commercial expansion beyond the limits of river transport. In 1834, the Louisiana legislature authorized the New Orleans and Nashville Railroad Company to begin construction of a rail line to connect those cities (Doster and Weaver 1981:97). In 1852, the New Orleans, Jackson, and Great Northern Railroad was completed to Aberdeen, Mississippi. Another railroad company, the Memphis and Charleston, constructed a line from Memphis, Tennessee, across southern Tennessee and northern Mississippi to Chattanooga, to connect with lines to the Atlantic coast. In 1861, the Mobile and Ohio Railroad, connecting Mobile and Columbus, Kentucky (on the Mississippi River), was completed. The Mobile and Ohio Railroad passed through eastern Mississippi, roughly paralleling the Tombigbee River. The main line was always more than 10 miles from the river to avoid crossing major tributary streams. As the rail line passed through small upland communities, each exhibited an unprecedented surge in commercial activity (Doster and Weaver 1981:98).

Civil War (1861 - 1865)

No military operation occurred within the project corridor during the Civil War, however the Battle of Brice's Crossroads took place near the Prentiss and Union county boundaries, about 10 miles southwest of the project corridor. General Nathan Bedford Forest, considered "the most feared calvary leader of the Confederacy" (Gentry 1963), was progressing toward Tennessee to cut General Sherman's supply and communication lines, i.e., the Nashville and Chattanooga Railroad, that connected middle Tennessee and Georgia.

On 10 June 1864, General Forest's troops met Union calvary and infantry under General Samuel D. Sturgis. Even though Forest was outnumbered, his sometimes unorthodox

strategies were successful. He counted on the muddy roads (nine days of rain preceded the battle) and the heat and humidity to slow down and exhaust the Union troops while he moved into position at Brice's Crossroads (Gentry 1963). Numerous skirmishes took place on the roads, creek crossings, and small settlements (Old Carrollville) near the main battlefield as General Sturgis retreated. General Forest pursued Sturgis for one day and two nights as he retreated back to Memphis (Gentry 1963). The Confederacy claimed the abandoned surplus of weapons, caissons, wagons, and medical supplies as the victors.

Other prominent Federals who assisted Sturgis and were also defeated during this battle included General Grierson, Colonels. McMillen, Wilkin, Waring, and Winslow; thus adding to Sherman's humiliation (Gentry 1963). Nonetheless, this battle did occupy General Forest and divert his attention from Sherman's supply and communication lines, effectively shortening Sherman's wait to claim Atlanta.

The Civil War had major social and economic impacts on the region. Landholders with a large number of slaves were able to maintain crop production during the war, but the small non-slave-holding farms were run by women, children, and men too old to join the army. The battles at Corinth, Mobile, and Vicksburg, as well as intermittent raids and guerilla activities caused complete disruption of former lifeways; food, seed, and livestock were taken or destroyed, and slaves were set free.

Two Tombigbee River steamboats, the *Cuba* and *Alice Vivian*, were converted into blockade runners during the Civil War. They were strengthened to withstand the waves in the Gulf of Mexico, and were used to run contraband into Mobile from Cuba. They each made one successful round-trip to Cuba, then the *Cuba* was run aground and the *Alice Vivian* was captured (Doster and Weaver 1981:104).

Postbellum Period (1866 - 1900)

The Civil War caused a demise of the slave/plantation system. The loss of slave labor force, combined with severe financial setbacks throughout the South, necessitated changes in the overall economic system. Prunty (1955) attributes the development and growth of the tenant/sharecropper system to these major changes in sources of labor and capital availability. The reorganization resulted in the broad dispersion of smaller, individual farmsteads (sharecroppers and tenant farmers) within the former plantation boundaries. Former slaves (and non-landholding whites) ultimately became a part of this new system wherein farmland was rented on credit until crops were harvested and sold.

In 1862 and again in 1864, Union raids had severely damaged portions of the Mobile and Ohio Railroad in northern and central Mississippi. Although the railroad was repaired and service was restored by 1867, planters in the area continued to ship cotton raised by tenants and hired hands down the Tombigbee River to Mobile. Steamboat traffic was common until about the 1880s, but the railroad eventually surpassed the river as a transportation route. Even though shipping by steamer was cheaper than using the railroad, the railroad had the advantage of being in service year-round, while the steamers could not be used north of Columbus except for periods of high water. Doster and Weaver (1981:151) report that "by 1889 few steamboats were venturing above Vienna," located south of the project corridor in Alabama.

Twentieth Century (1900 - present)

By the beginning of the twentieth century, most of the small river ports were practically deserted. Good roads from those towns to the railroads might have kept them in business, but there were no improved roads in the area of the project corridor until after World War I. Money was appropriated during the 1920s to gravel the roads which connected the various county seats and larger commercial areas.

The Great Depression of the 1930s had a negative effect on the economy of the region. It was not until World War II, when there were more jobs than men to full them, that the economy began to recover. Labor intensive industries began to relocate to towns in the rural South during this time. However, the local economy suffered another blow after World War II, when the development of mechanized cotton planters and pickers decreased the job market for agricultural workers in the region. Many of the local residents were displaced by mechanization, causing unemployment to rise. Jobs were available in the larger cities of Mississippi and Alabama for those willing to relocate, and many people moved to these cities or to northern urban centers, such as Chicago or Detroit. Today, the region supports a largely rural farming population with some industry near the Tennessee-Tombigbee Waterway.

Prentiss County was established in 1870 from portions of Tishomingo, Tippah, and Itawamba counties, which were acquired through a land treaty with the Chickasaws in 1836 (Houston 1997-2000). Tishomingo was in fact the name of a Chickasaw chief who was a frequent visitor to Old Carrollville. Founded in 1834, Carrollville (near the town of Baldwyn) is the oldest settlement in the county, and was an important trade center (Prentiss County Historical Association 1984). Prentiss County was named for Sergeant Smith Prentiss, a Mississippi statesman, jurist, and orator (Houston 1997-2000). The county was settled by farmers from nearby states, such as Georgia, Alabama, the Carolinas, and Virginia (Houston 1997-2000). Booneville, incorporated in 1861 and named after a prominent family of early settlers, the Boones, is the county seat (Booneville Chamber of Commerce 2001).

The town of Wheeler was first known as Five-Mile Crossing when a railroad (presumably the Mobile & Ohio) stop was established sometime prior to the Civil War (Prentiss County Historical Association 1984). The town was situated in the "richest farming lands of Prentiss County" (Berry et al. n.d.). The name Wheeler was adopted after the name of a 1880s small political party, the Wheeler's, came to mean anyone residing in the farming community of Five-Mile Crossing (Prentiss County Historical Association 1984). The

Wheeler's began in response to the growing Farmer's Movement of America since the entire region was based on agriculture, principally two crops at the time: corn and cotton (Berry et al. n.d.). In 1909, the recently incorporate Wheeler contained "four stores, a bank, cotton gin, sawmill plant, broom factory, and a graded high school" (Berry et al. n.d.).

Previous Archaeological Research

In 1968 the Mississippi Department of Archives and History began long-term archaeological surveys and salvage projects along the Tennessee-Tombigbee Waterway area. These investigations have contributed substantial information regarding the prehistoric and historic occupation of the region. Several reports chronicle much of the excavations along the waterway, e.g., Connaway 1981; McGahey 1971. The cumulative information gained from these studies had been summarized in Futato's (1989) archaeological overview of the Tombigbee River basin. Much of this information was synthesized into a popular report for the general public (Brose 1991). Weaver and Doster's (1982) technical reports also contributed substantially to the historical and geographical research of the region.

Following the initial surveys, numerous other projects (additional surveys, archaeological testing and excavations) have been undertaken prior to, during, and after construction of the waterway. The following is a partial list of sources not previously mentioned: Atkinson 1974, 1978a, 1978b, Atkinson and Elliot 1978; Bense 1981 and 1982; Blakeman 1975; Butler 1997; Caldwell 1974; Chewning 1979; Dye and Watrin 1985; Jenkins 1978; Jenkins and Ensor 1981; Moore 1901; Neilsen and Moorehead 1972; Peterson 1980; Prout 1973; Rucker 1974; Sonderman et al. 1981; Southerlin et al. 1995; Thorne 1976; US Army Corps of Engineers 1983, 1986; and Willis 1981.

The northeastern region of Mississippi was intensively surveyed during the Natchez Trace Parkway work (Jennings 1944). The majority of archaeological sites around the

Natchez Trace are attributed to the Mississippian era. In Penman's (1980) summary of additional surveys of reservoirs and water channels sponsored by the Soil Conservation Service, several sites in Prentiss County in the Tuscumbia River watershed are described. These sites indicate that the area has been continuously inhabited, albeit at varying intensities, since the Early Archaic. Archaic and Woodland sites are the most dominant. Based on the lithic material types, the prehistoric populations gathered resources during seasonal migrations and traded for items with groups in the Mississippi Valley as well as utilizing locally occurring elements.

Some of the early work along the waterway included archaeological survey in Prentiss County, and a few sites were either recorded, tested, and/or excavated near the project corridor (McGahey 1970). Several other archaeological projects have been conducted in Prentiss County in the vicinity of the corridor. Gibbens (1981) inspected the eroding banks of Twentymile, Wolf, and Osborne creeks south of the project corridor. Although there are some discrepancies in the exact location of the inspections, one map shows the project area as including the Mississippi Highway 362 bridge that crosses Osborne Creek. No archaeological resources were recorded during this investigation This area was included in our project corridor.

The Mississippi State Highway Department conducted multiple cultural resources surveys for the relocation and realignment of US Highway 45 (US 45) in Prentiss County (Hyatt 1990, 1988a and 1988b). The closest portion of the realigned highway is located about a mile northwest of the project corridor. A small borrow pit area adjacent to the realigned US 45, also northwest of the project corridor was also inspected (Johnson 1990). A number of archaeological sites were defined during these surveys for US 45, but none will be impacted by the proposed restoration project since all are beyond a 0.8 km (.5 mi) of the project corridor. The recorded sites do however provide insight into the prehistoric occupation of the region.

Chapter 4. Methods

Archival Research

Archival research focused on documenting previously recorded cultural resources and their locations near the project corridor. Specifically, we reviewed all previous investigations conducted within an approximately 8 km (5 mi) radius around the project corridor. Research was also useful in developing prehistoric and historic contexts for the project corridor. Our preliminary research included review of the records (site forms, maps, reports, documents, manuscripts, letters, historic resource forms, etc.) maintained by the Mississippi Department of Archives and History in Jackson.

Once we began fieldwork, it became obvious that many valuable archival resources are available in the towns, communities, and parks near the project corridor. We visited the Prentiss County courthouse, various local bookstores, the Booneville Chamber of Commerce, the Booneville public library, the Natural Resources Conservation Service of the US Department of Agriculture (Booneville), and the Natchez Trace Parkway visitor's center (Tupelo). We also contacted members of local genealogical and historical societies to discuss publications about the area.

Field Survey

Field investigation focused on identifying and evaluating all cultural resources within the project corridor. Since the environmental restoration project does not include construction of any large standing structures (e.g., towers), there is no potential for visual effects on historic properties in the vicinity. Therefore, only physical, direct, ground-disturbing impacts are considered as potential impacts. The APE is defined laterally as a

15.25 meters (50 ft) buffer from the top of the creek bank along the approximate 2.6 km (1.6 mi) length on both sides of Osborne Creek.

Historic structures survey consisted of visually inspecting the area near the project corridor to identify any standing buildings, structures, houses, or foundations over 50 years old. Since no visual effects are predicted, no viewshed was defined and our inspection was limited to the area immediately surrounding the corridor.

Archaeological survey consisted of comprehensive, systematic, pedestrian walkover of the project corridor where potential impacts from the proposed stream bank stabilization are predicted. This included an inspection of the ground surface, beneath the puddles, where visibility allowed, and the excavation of 30 by 30 cm (12 by 12 in) shovel tests to examine subsurface deposits. All removed soil was screened through 1/4 inch mesh hardware cloth and all cultural items were collected. Shovel tests were aligned along both sides of Osborne Creek and were spaced at 30 meters (98 ft) intervals within the APE.

The standard 30 meter (98 ft) interval falls within a range which has been determined appropriated for effectively locating a variety of archaeological sites in local topographic and vegetational settings throughout the eastern United States (Kintigh 1988; Lynch 1980; Nance 1979; Nance and Ball 1986). In areas where ground surface visibility was greater than 50 percent (e.g., cultivated fields, tilled gardens), shovel tests were supplemented or replaced by surface inspection.

Records of each shovel test were kept in field notebooks, including information on content (i.e., presence or absence of artifacts, artifact descriptions) and context (i.e., soil color and texture descriptions, depth of definable levels, observed features). Distinct location information describing surface collection numbers was recorded on each acid-free resealable

artifact collection bag. Positive surface find areas were flagged, clearly labeled for later relocation, and plotted on USGS 7.5 minute topographic quadrangles using a Garmin 12 GPS handheld recorded. All shovel tests were backfilled upon completion.

Archaeologists and cultural resource managers utilize a variety of definitions for *sites* and *isolated finds*. Since no subsurface artifacts were encountered during this survey, *sites* were defined as five or more contemporaneous surface artifacts, within 30 meters of each other. Typically, the boundaries of sites are defined by the excavation of additional close interval (10-15 meter) shovel tests and/or surface finds. However, since the entire project corridor was flooded, shovel testing was not effective in recovering buried materials at that time. *Isolated finds* are defined as those locations with five or fewer artifacts, not containing features or ruins. Isolated finds are recorded during archaeological surveys in the same manner as sites, i.e., locational and environmental data are recorded.

Laboratory Analysis and Curation

We transported all recovered cultural materials to the Atlanta facilities of Brockington and Associates, Inc., where they were washed, cataloged, analyzed, and stored as appropriate. Lab personnel assigned internal site proveniences for each location within a site (e.g., shovel test, surface scatter, etc.). The lab staff classified all remains within each provenience into types based on observable stylistic and technological attributes. Likewise, they assigned each class or type of material within each provenience a separate catalog number within that provenience. Appendix A is the artifact catalog. Provenience numbers correspond to those appearing on the site plan map. All artifacts, field notes, and maps are temporarily stored at the Atlanta facilities of Brockington and Associates. Permanent curation will be at the Erskine Ramsay Archaeological Repository at Moundville, Alabama.

Lithic materials were classified by a compilation of specific attributes that include general shape, percentage of cortex present on the dorsal surface, flake curvature, presence of additional flake scars, and flake thickness. Debitage, the by-product of core reduction and stone tool production, classifications are described in Table 1. Flakes, debitage with a discernable striking platform, were classified according to a modified version of the triple cortex typology described by Andrefsky (1998).

Table 1. Lithic Materials Classification.

Description	Characteristics
Core	Raw material from which flakes have been removed
Primary	25 % or greater cortex present
Secondary Core Reduction Flake	25 % or less cortex, 90° or greater angle of ventral curvature, thick body, generally flat shape
Secondary Bifacial Reduction Flake	25 % or less cortex, less than 90° angle of ventral curvature, thin body, generally curved shape
Tertiary Core Reduction Flake	No cortex present, 90° or greater angle of ventral curvature, thick body, generally flat shape
Tertiary Bifacial Reduction Flake	No cortex present, less than 90° angle of ventral curvature, thin body, generally curved shape
Flake Fragment	No striking platform or no bulb of percussion present
Thinning Flake	Presence of complex striking platform/edge of biface (lipping), no cortex present, less than 90° angle of ventral curvature, thin body, generally curved shape
Shatter	No striking platform or discernable ventral and dorsal surfaces
Retouched Flake	Flake that has been deliberately flaked/sharpened on edge
Utilized Flake	Flake that shows evidence of use on flake edges but no deliberate flaking/sharpening
Biface	Evidence of retouching and tertiary reduction on both dorsal and ventral surfaces.

National Register of Historic Places (NRHP) Evaluation

A primary goal of this project was to determine whether cultural resources identified during these investigations are significant. The sites discovered were evaluated relative to their eligibility for the NRHP; the project contract allowed for sites to be recommended as eligible, potentially eligible, or ineligible. Sites which need additional work to make final NRHP assessments are usually recommended potentially eligible. According to the Department of Interior Regulations, 36 CFR Part 60.4 (Criteria for evaluation), cultural resources (referred to as properties in the regulations) can be defined as significant (i.e., eligible for the NRHP) if they "possess integrity of location, design, setting, materials, workmanship, feeling, and association." Table 2 outlines the criteria for NRHP evaluation.

Table 2. Criteria for NRHP Eligibility (36 CFR Part 60.4).

Criterion a	Are associated with events that have made a significant contribution to the broad pattern of history; or
Criterion b	Are associated with the lives of persons significant in the past; or
Criterion c	Embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
Criterion d	Have yielded, or may be likely to yield, information important in prehistory or history.

Archaeological properties (or sites) are usually evaluated relative to Criterion d. As locations of human activities which include physical remains of those activities, archaeological sites are potential sources of important information. The National Park Service defines two requirements for archaeological sites to be eligible under NRHP Criterion d (Savage and Pope 1998:21).

(1) The site must have, or have had, information to contribute to our understanding of human history or prehistory, and
(2) The information must be considered important.

The National Park Service provides clarification for the first requirement by stating that an archaeological site is eligible for the NRHP if that site "has been used as a source of data *and* contains more, as yet unretrieved data" (Savage and Pope 1998:21; emphasis added).

There is no set of easily defined attributes which represent eligible or ineligible sites. Instead, through the years, sites have been evaluated for their potential to contribute, their significance, or (most recently) their ability to add to our theoretical and substantive knowledge of archaeology in the site's regional setting (Butler 1987). Regardless of the exact terminology or citation, there is a consensus among cultural resource managers that each site must be individually evaluated relative to similar site types of the region, and with full awareness of the research needs of the region. The draft version of *National Register Bulletin 36* (Townsend et al. 1993) reiterates the need to tie eligibility or ineligibility to local research needs.

There has been much discussion on the applicability of various approaches in determining research potential (Butler 1987). At Brockington and Associates, the attributes first defined by Glassow (1977) are applied, but not in the manner prescribed by Glassow. The overall management scheme proposed by Glassow is not seen as tenable, and is furthermore best applied to broad, regional survey. However, the attributes defined by Glassow (*clarity, integrity, artifact frequency, and artifact diversity*) are useful in linking a site's condition to its ability to address regionally relevant research questions.

Clarity refers to the ability or inability to relate specific strata or features to a specific component. Research questions of intrasite settlement, subsistence, refuse disposal, and patterns of material culture require that an assemblage and its features can be isolated.

Integrity refers to both the degree of organic preservation and the degree of disturbance. However, because "archaeological sites, in particular, do not exist today exactly as they were formed"(Savage and Pope 1988:46), and information potential relies less on overall condition of the site, location (depositional placement of artifacts) and association (relationship between site's data/information and research questions) are the most important aspects of integrity for archaeological sites. *Artifact frequency* and *diversity* both determine the feasibility of various material culture studies. For example, a collection of 20 small eroded Native American sherds is not well suited for a detailed ceramic technology study.

The challenge of properly determining eligibility is to link the site's attributes to its potential to contribute to meaningful and relevant research. That is, information from any particular resource should be sufficient to address specific questions concerning the interpretation of the cultural history of a region. Given that a well documented site is clearly delineated (i.e., its clarity, integrity, artifact frequency, and artifact diversity), and given a regional research context, it is relatively straightforward to determine a site's potential to make a meaningful contribution. Butler's (1987) approach to demonstrating eligibility or ineligibility is most readily pursued when a state or regional management context/plan has been developed.

In general, archaeological sites that have the ability to address topics such as *cultural chronology, artifact assemblage*, and *subsistence patterns* have potential to contribute significant information. *Cultural chronology* refers to the ability of a site to contribute information about the sequence of human events in a region, especially through radiocarbon dating and stratigraphy. For a site to have significant cultural chronology research potential, it must minimally demonstrate: (1) preservation of organic remains from good contexts that would provide reliable radiocarbon dating samples; or (2) horizontal or vertical separation of cultural components with associated temporally or culturally diagnostic artifacts.

Artifact assemblages are comprised of all items (including features) at a site which "exhibit physical attributes that can be assumed to be the result of human activity" (Dunnell 1971). The patterning of assemblages reflects behavior patterns or shared activities of a total community. It is this patterning of contemporary collections of artifacts and features that is used to interpret the lifeways of a site's occupants. The composition and distribution of artifact assemblages provides valuable information about site structure, activities, and function(s). Comparisons of assemblages from the same time period (synchronic) or from different time periods (diachronic) require that each assemblage is placed within a regional culture chronology.

Subsistence reconstruction relies on plant (botanical) and animal (faunal) remains from archaeological contexts to deduce dietary patterns. This topic includes determination of species use, relative dietary significance of individual species, and procurement strategies (Reitz 1990; Wagner 1995; Wing and Brown 1979). The primary limitation to paleoethnobotanical and zooarchaeological analyses is context. Preserved biological remains from contexts that are not associated with distinct cultural horizons or features, or cannot be directly or relatively dated, do not provide reliable information.

Mississippi has not completed a state archaeological context. However, previous researchers (listed in Chapter 3) have conducted archaeological overviews of the region. By examining these overviews and contexts for the region, we developed a series of research realms to assist in linking site attributes with the ability to contribute to meaningful regional research.

We evaluated each discovered site for its potential to address the research realms presented in Table 3. A site will not have to hold the potential to address all or most of the research realms to be recommended eligible. We emphasize that a site's potential must be evaluated relative to other sites of similar temporal and functional identity; it is not

reasonable to compare a small scatter of Paleoindian lithic tools and debitage with an artifact rich Middle Archaic workshop for their potential to address questions of lithic technology. Likewise, a Mississippian isolated farmstead will have lower artifact frequency and density than a Mississippian village, yet both may be eligible for the NRHP, and cross-functional comparisons should not be made during the recommendation process.

Lastly, a site must be evaluated for its potential to contribute substantive knowledge beyond the level of the already completed research. While almost all sites have some potential to contribute to our knowledge of prehistoric, contact period, or historic settlement and land use, such potential is often fully achieved at the survey or testing level, and further research would add little meaningful information.

Table 3. Eligibility Indicators, Prehistoric Sites.

Prehistoric
Plant diet
Faunal diet
Faunal/Floral seasonality
Intrasite settlement
Structure form and proxemics
Activity areas
Feature analysis/site function
Burial ritual
Osteological characterization
Ethnic relationships
General health
Osteological diet study
Use of European American goods (Historic period Indians only)
Ceramic technology
Intrasite stylistic variation
Vessel form analysis
Lithic reduction patterns
Lithic raw material patterns
Lithic use and reuse
Culture history sequence
Ceramic typology/chronology
Culture history direct dating
Extraction/processing: steatite/clay/lithic material
Assemblage variation/site function
Feature analysis/site function
Site use intensity through time
Native American group determinable (Historic period Indians only)

Chapter 5. Results

Archival Research

Historic structures survey had been conducted for portions of Prentiss County prior to our investigation. Only one historic resource was recorded within a 1.6 km (1 mi). The Wheeler High School (Resource #117-BNV-5004) is located about 1.2 km (.75 mi) east of the project corridor in the Wheeler community. The old Wheeler school was built around 1915 and demolished in 1942 when the new school building was constructed. Several other buildings are included in the resource complex: cafeteria (ca. 1950), vocational building (ca. 1945), gymnasium (ca. 1941), and the teacherage (ca. 1945). The Wheeler High School complex is not a registered NRHP historic property at this time, and no formal evaluation has been completed. Since no visual impacts are anticipated for the present undertaking, the Wheeler High School will not be affected.

No archaeological resources have been recorded within the project corridor. However, recorded sites in the vicinity (about a five mile radius) of the corridor indicate that this area has been continuously utilized by people since the Archaic period. Sites recorded during the Tennessee-Tombigbee waterway surveys of the early 1970s include a burial mound, a shell mound, a multicomponent artifact scatter with materials from the Archaic and Woodland, and a scatter of artifacts of unknown Aboriginal affiliation (McGahey 1970).

During the realignment and relocation of US 45, sites were recorded with artifacts affiliated with the Archaic, Gulf Formational, Woodland, and Mississippian cultural periods (Hyatt 1988a, 1988b, and 1990). The majority of these sites have been destroyed by continued cultivation of the area. Even though none of the previously recorded

archaeological resources will be impacted by the current undertaking, they provide insight into the accumulated knowledge of the prehistoric use and occupation of the region.

Gibbens' (1981) letter report states that cultural resources and environmental evaluations were made at three bridge locations on Mississippi Highway 362 (MS 362) over Twentymile, Wolf, and Osborne creeks. It seems likely that the bridge over Osborne Creek marked the southern terminus of our project corridor. Although no cultural resources were reported during the investigation, the 1981 environmental evaluation may have been the impetus for the currently proposed stream bank stabilization.

Archaeological Survey

We recorded three archaeological sites during our field investigation (22PS603, 22PS604, and 22PS605). All three sites were defined by surface scatters of prehistoric artifacts and are discussed individually. All three sites are recommended NRHP potentially eligible for several reasons (1) a complete NRHP evaluation could not be completed at the time of our survey, (2) the sites may contain intact buried deposits, and (3) the sites may provide information relative to local and regional research topics, discussed below. Table 4 describes the lithic assemblages collected from each site and site locations are shown on Figure 1. Appendix A contains the artifact catalog and copies of the Mississippi site cards are included in Appendix B.

Our field investigation was conducted between 23 and 25 January 2002, during a flash flood warning, which are not uncommon during this time of year for northeastern Mississippi. The entire project corridor was covered with about 2 inches of standing water, and was somewhat deeper in the fallow corn and cotton rows. The only area not completely

Table 4. Lithic Assemblages

Site Number	22PS603		22PS604				22PS605		
Material	General Chert	Heat Treated Yellow Chert	General Chert	Metavolcanic	Chalcedony	Heat Treated Yellow Chert	General Chert	Metavolcanic	Heat Treated Yellow Chert
Core						1			
Primary Flake	3		10			4	3		5
Secondary Flake (Core Reduction)	1	1	2						1
Secondary Flake (Biface Reduction)	2		3			1			3
Tertiary Flake (Core Reduction)	3		5			1			2
Tertiary Flake (Biface Reduction)	5	2	6			2	2		1
Thinning Flake	13		23		1	9	7		6
Shatter	4		6	1		1	1		
Flake Fragment	4	5	30			4	3	1	9
Retouched Flake	1								1
Utilized Flake	1					3	1		2
Biface fragment			2						
Projectile Point						1*	1**		
Drill									1
Total	37	8	87	1	1	27	18	1	31

* untyped
** mid-section

inundated was an exposed garden plot near a residence at the MS 362 bridge. This plot was instead covered with saturated red clay. Figures 2 and 3 show typical views of the project corridor. Figure 2 is a view across Osborne Creek toward site 22PS603. Note the extremely eroded stream bank just below the tree line where site deposits are possible. Figure 3 clearly illustrates the flooded state of the project corridor at the time of our survey.

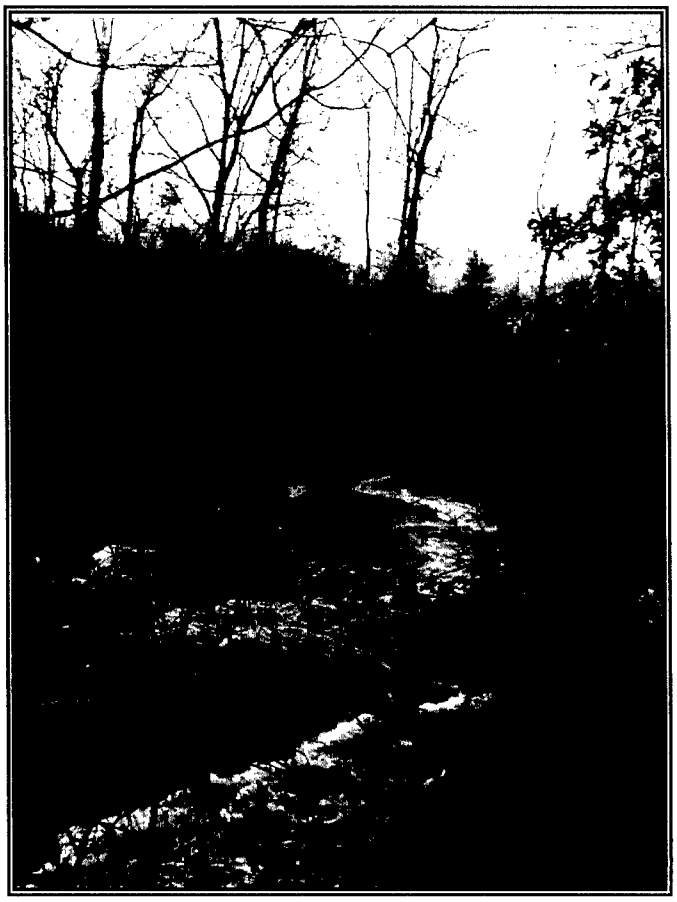

Figure 2. View toward 22PS603 across Osborne Creek, facing north.

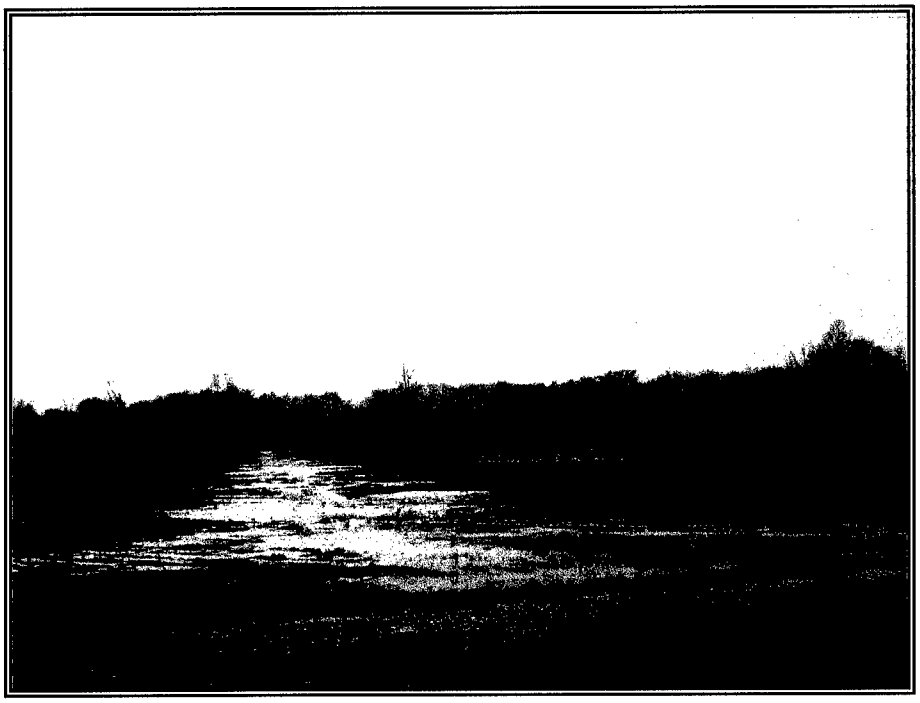

Figure 3. General view of flooded project corridor, facing southwest.

The vast majority of the project corridor is comprised of cultivated fields, much of which is currently fallow. At the time of our survey, surface visibility was excellent (about 80% in the crop rows). In areas with such a high percentage of surface visibility, pedestrian reconnaissance is usually an adequate method for survey; however, since we found such high densities of artifacts on the ground surface, shovel testing seemed appropriate to fully assess the NRHP potential by determining if intact site deposits exist. Obviously, the field survey conditions were not ideal for shovel testing. In fact, shovel testing proved to be an inefficient method of testing for subsurface deposits since water immediately filled the holes as we excavated; not to mention the challenge of screening the removed wet, thick, clayey sediment. Archaeologists have found it beneficial to also explore the banks of creeks and rivers, where erosion often exposes midden deposits, features, and artifacts. However, this was not possible during our field investigation due to the extremely slippery mud on the

steep, exceptionally eroded creek banks, coupled with the increased velocity of the water from the ongoing floods. We determined that inspection of the cut banks should be postponed until the drier season.

22PS603, the Cornfield Site

Site Type: Lithic and ceramic scatter	NRHP Recommendation: Potentially eligible
Cultural Affiliation: Unknown Aboriginal	Elevation: 110 meters (360 ft)
UTM Coordinates: E 351498; N3828654 (Zone 16)	Landform: Low rise in cultivated field
Site Dimensions: 60 x 40 meters (197 x 131 ft)	Vegetation: Dead corn plants (flooded)

Site 22PS603 (Figures 2, 4 and 5) is located in a fallow cornfield on the north side of Osborne Creek (see Figure 1), on a slight rise (less than 1 meter [3.3 ft] above the surrounding field). Since this site is located in the portion of Osborne Creek that does not seem to have been channelized, the low rise might be natural topography that has not been razed. A low terrace (about 50 cm [20 in] high) is situated on the north side of the low rise, and appears to be artificially, rather than naturally occurring, based on its straight alignment relative to the rise. Site 22PS603 is a surface scatter of prehistoric artifacts identified by the presence of 43 chert flakes, 8 of which are heat treated; 1 utilized flake; 1 retouched flake; 1 fragment of animal bone; and 4 residual sherds. The collection of chert artifacts contains items from all stages of lithic reduction (tool manufacture) as well as evidence of flake utilization and sharpening (tool use). Table 4 describes the types of lithic materials recovered.

The surface scatter is moderately large (approximately 60 by 40 meters), and appears to be eroding out of the low rise described above. We attempted to excavate shovel tests in the woods on the south edge of the surface scatter. The treeline parallels Osborne Creek and

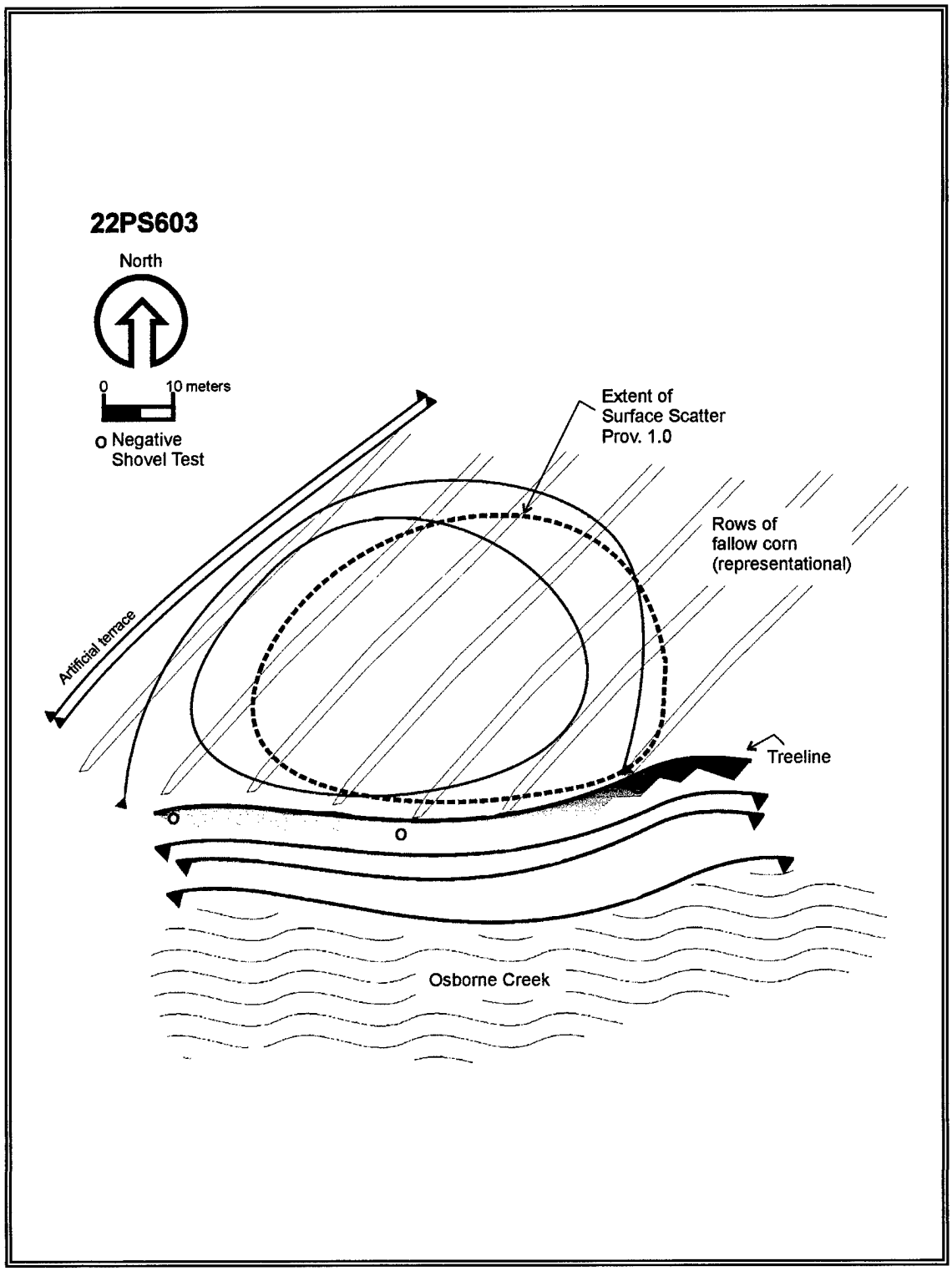

Figure 4. Plan map of 22PS603 at Osborne Creek.

Figure 5. General view of 22PS603, facing west.

is approximately 3 meters (10 ft) wide. Trees include hardwoods and pines, with dense briers and vines as understory above the steep cut bank. No artifacts were recovered in the shovel tests; however, field conditions were a limiting factor. As stated previously, shovel testing during a flood was not an effective method of testing the site's potential for buried intact deposits. Shovel testing, in conjunction with Phase II testing, should resume once the area has dried. The stream bank should also be inspected for artifacts and features during the dry season since it is quite likely that the site extended into the area which has been severely eroded.

Site 22PS603 is recommended potentially eligible for the NRHP. Additional subsurface testing and more intensive surface inspections, preferably during the dry season, are recommended to fully assess the site. The research potential for this site is discussed more extensively in Chapter 6.

22PS604, the Garden Site

Site Type: Lithic and ceramic scatter	NRHP Recommendation: Potentially eligible
Cultural Affiliation: Unknown Aboriginal	Elevation: 110 meters (360 ft)
UTM Coordinates: E351244; N3827825 (Zone 16)	Landform: Flat, fallow, personal garden plot
Site Dimensions: 20 x 50 meters (66 x 164 ft)	Vegetation: Few grasses on exposed red clay (flooded)

Site 22PS604 (Figures 6 and 7) is located in the fallow personal garden plot of the residence at the MS 362 bridge. The site is situated on the east side of Osborne Creek, just south of a constructed irrigation canal (see Figure 1). Site 22PS604 is a surface scatter of prehistoric artifacts. We collected only a sample of the materials present: 117 flakes and flake fragments, 23 of which are heat treated; 1 core; 3 utilized flakes; 2 biface fragments; 1 fragment of animal bone; 3 residual sherds; 1 eroded body sherd with shell temper; and 1 projectile point (non-diagnostic). The artifact assemblage contains items from all stages of lithic reduction (tool manufacture), evidence of flake utilization, lithic raw material type, and complete tools. Table 4 describes the types of lithic materials recovered.

The surface scatter is long and narrow (approximately 20 by 50 meters), but was more than likely restricted by surface visibility. The entire garden plot was covered with exposed and saturated red clay, with patches of standing water. The site may extend into the wooded area about 30 meters (98 ft) southeast of the garden where more natural deposits may exist; however, since this area was beyond the area of potential effect, no shovel tests were excavated there. We attempted to excavate shovel tests in the garden plot, but the extremely dense nature of the clay coupled with its saturation, made screening impossible. No artifacts were recovered in the shovel tests; however, field conditions were the limiting factor. As stated previously, shovel testing during a flood was not an effective method of testing the

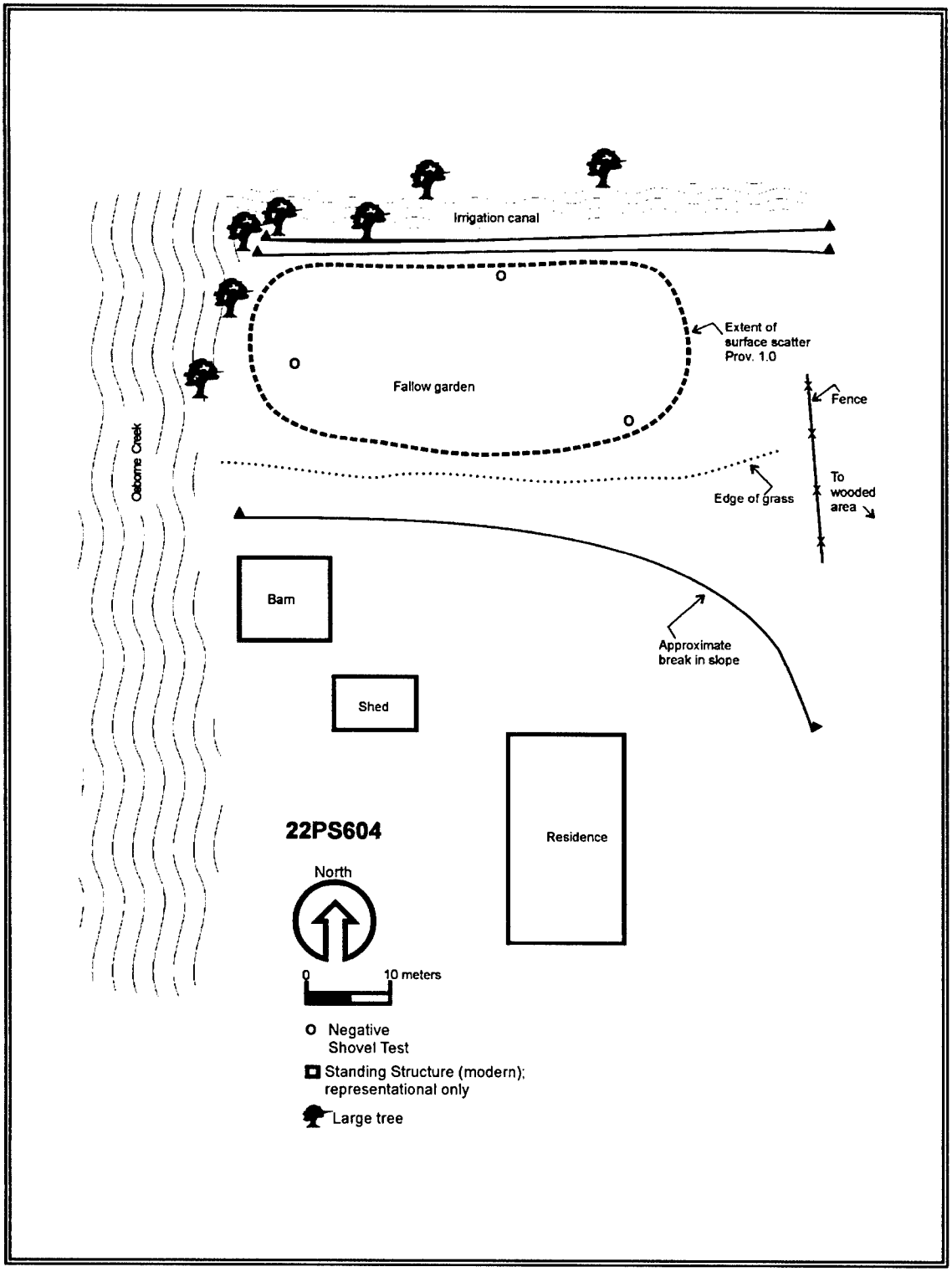

Figure 6. Plan map of 22PS604 at Osborne Creek.

Figure 7. General view of 22PS604, facing northwest.

site's potential for buried intact deposits. Shovel testing, as part of Phase II testing, should resume, particularly in the wooded area, once the area has dried. The stream and channel banks should also be inspected for artifacts and features during the dry season since it is quite likely that the site extended into the area which has been severely eroded.

Site 22PS604 is recommended potentially eligible for the NRHP. Additional subsurface testing and more intensive surface inspections, preferably during the dry season, are recommended to fully assess the site. The research potential for this site is discussed more extensively in Chapter 6.

22PS605, the Cotton Field Site

Site Type: Lithic scatter	NRHP Recommendation: Potentially eligible
Cultural Affiliation: Unknown Aboriginal	Elevation: 110 meters (360 ft)
UTM Coordinates: E351500; N3828610 (Zone 16)	Landform: Flat, fallow cotton field
Site Dimensions: 20 x 20 meters (66 x 66 ft)	Vegetation: Dead cotton plants (flooded)

Site 22PS605 (Figures 8 and 9) is located in a fallow cotton field on the south side of Osborne Creek (see Figure 1). Since this site is located in the portion of Osborne Creek that does not seem to have been channelized, there may exist natural sediment deposits in the area. Site 22PS605 is a surface scatter of prehistoric artifacts identified by the presence of 44 flakes and flake fragments, 27 of which are heat treated; 3 utilized flakes; 1 retouched flake; 1 fragment of ochre; 1 projectile point mid-section, and 1 drill (non-diagnostic). A large (about 10 cm [4 in] in diameter) metavolcanic cobble that appeared to have been battered and possibly used as a chopper or hammerstone was observed, but not cataloged. The artifact assemblage contains items from all stages of lithic reduction (tool manufacture), at least two material types, evidence of flake utilization and sharpening (tool use), evidence of resource procurement and processing (chopper), and evidence pigmentation use (colored ochre). Table 4 describes the types of lithic materials recovered.

The surface scatter is small (approximately 20 by 20 meters), and is situated within the flooded rows of cotton. A particularly narrow row of shrubs parallels Osborne Creek, but is only about 1 meters (3 ft) wide and is perched at the top of a very steep and extremely eroded creek bank. Therefore, we attempted to excavate shovel tests in the field, but encountered the same thick clayey soils that were impossible to screen effectively. No artifacts were recovered in the shovel tests; however, field conditions were a limiting factor.

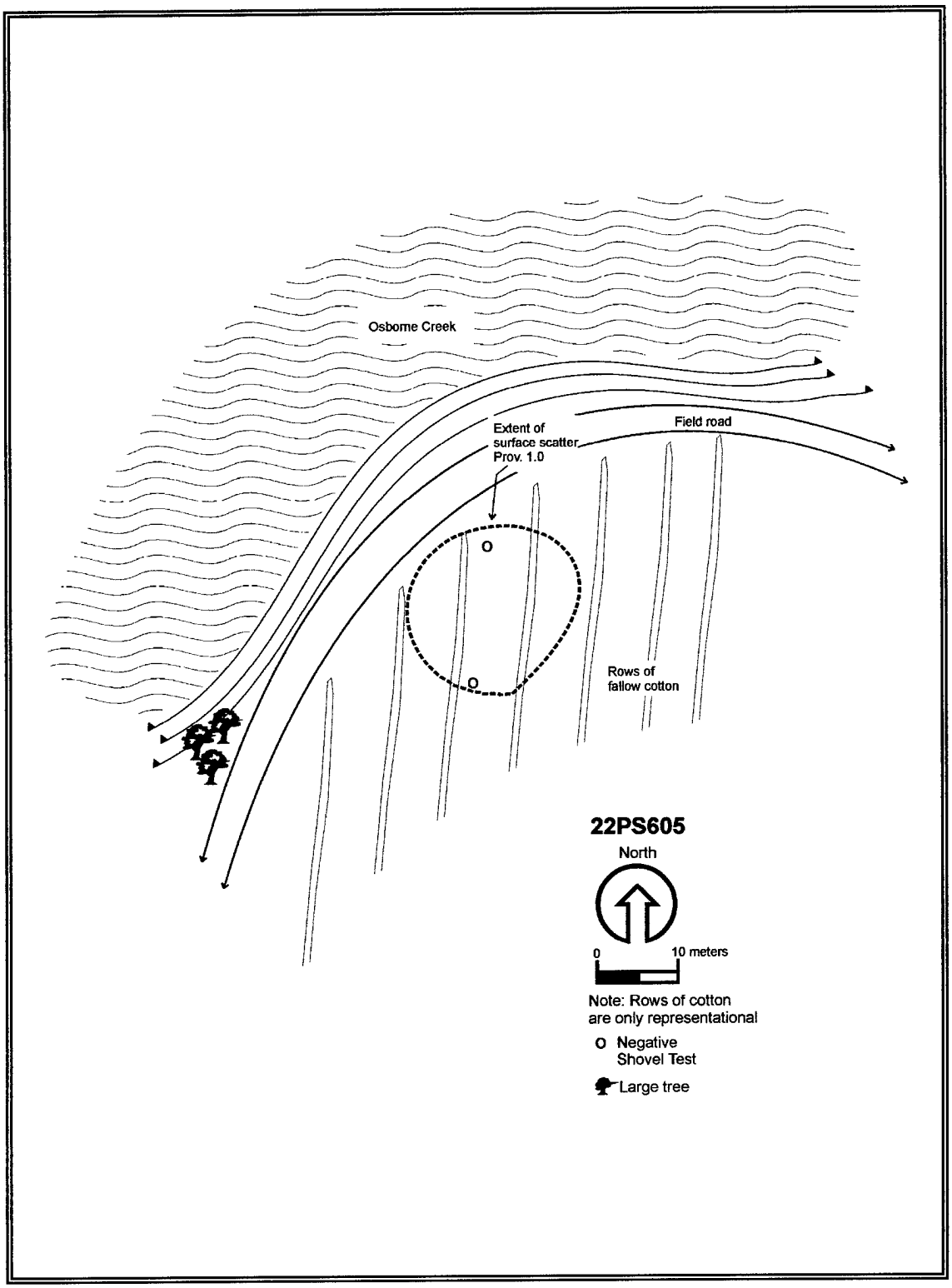

Figure 8. Plan map of 22PS605 at Osborne Creek.

Figure 9. General view of 22PS605, facing south-southwest.

As stated previously, shovel testing during a flood was not an effective method of testing the site's potential for buried intact deposits. Shovel testing, as part of Phase II testing, should resume once the area has dried. The stream bank should also be inspected for artifacts and features during the dry season since it is quite likely that the site extended into the area which has been severely eroded.

Site 22PS605 is recommended potentially eligible for the NRHP. Additional subsurface testing and more intensive surface inspections, preferably during the dry season, are recommended to fully assess the site. The research potential for this site is discussed more extensively in Chapter 6.

Chapter 6. Summary and Recommendations

Project Summary

Our archaeological field survey effort, which included only about 20 acres, resulted in the discovery and documentation of three previously unidentified archaeological sites (22PS603, 22PS604, and 22PS605). All three sites are prehistoric artifact scatters which are recommended potentially eligible for the NRHP. The sites merit the *potentially eligible* status for several reasons (1) a complete NRHP evaluation could not be completed at the time of our survey due to severe flooding, (2) the sites may contain intact buried deposits, and (3) the sites may provide information relative to local and regional research topics, discussed below.

Research Potential

All three sites 22PS603, 22PS604, and 22PS605 have the potential to address several of the prehistoric research realms in Table 3, even though the presence of intact subsurface archaeological features has not yet been determined. Additional investigation is necessary to address these research topics. These include: lithic reduction patterns, lithic use and reuse, lithic extraction and processing studies, lithic raw material patterns, ceramic technology, site function, definition of activity areas, culture history sequence, and artifact assemblage variations.

In the realm of lithic analysis, numerous analyses are possible and are dependent on the particular assemblage or group of assemblages under scrutiny. Andrefsky (1998) summarizes the driving forces of stone tool research that may be applied to sites 22PS603, 22PS604, and 22PS605 during future investigations:

> The sequence from tool-stone procurement to stone tool discard is decided by cultural influences, situational constraints, and raw-material accessibility. These factors contribute to the dynamic character of stone tool types. Lithic tool morphology must be understood as it reflects short-term changes (the result of production and use), as well as long-term changes (the result of cultural and/or behavioral differences).

Studies of lithics (flaked stones) focus on tools, such as projectile points, knives, utilized flakes, bifaces, hammerstones, etc., as well as the by-products of stone tool production and core reduction, termed debitage. Debitage refers to the detached bits and pieces of stone that are discarded during tool manufacture, modification, and material testing. Very few lithics can be attributed to a specific culture or time period. The most diagnostic of these are projectile points and other specific tools, but debitage is generally the most numerous artifact type found at lithic scatter sites. By studying the forms and morphological characteristics of lithic materials from a site or group of sites, it can be determined what type of tool was being processed and what type of parent material was being used (Andrefsky 1998). These analyses are generally included in the sturdy of lithic reduction patterns.

Questions concerning stone tool use and reuse can be addressed through analyses of retouched, utilized, and sharpened flakes and tools, biface production and morphology, hafting element comparisons, use wear patterning, and projectile point/knife typology. The functions of these tools can then be inferred (sometimes) by their typologies and manufacturing techniques. Tool types can also be a useful indicator of the settlement system preferred by the manufacturers. For example, multiple function tools are more easily transportable for mobile group, whereas sedentary groups would not necessarily need easily transportable tools (Andrefsky 1998).

An additional type of analysis involves the processing of lithics. Parent material can also be analyzed. Processes may include heat treating (thermal alteration) and grinding to

modify a stone's properties, various knapping techniques used (percussion, pressure, bifacial, bipolar), and tool types used during knapping (hammerstones, antlers, bones, etc.). Different processes result in differences in flake morphology, shape, curvature, lipping, and material structure and color. For example, yellow chert is a naturally occurring river gravel in northern Mississippi and is the most common chipped stone material recovered (Penman 1980). The yellow chert turns pink to red when heat treated; therefore the term "heat treated yellow chert" is favored over "red chert" to avoid confusing material types (McGahey 1974).

Lithic analysis can also focus on parent material types at a site or group of sites to determine if the prehistoric occupants of the area were utilizing locally available materials or were transporting materials from some other area or possibly trading for prized stones. By assessing the variety of materials present, it can also be hypothesized if these resources were abundant or sparse. Lithic material type studies can also provide insight into which stone types were preferred for particular types of tools. Extraction techniques may also be addressed, such as the removal of desired materials from boulders, quarries, cobbles, veins, gravels, or other sources.

Table 4 contains a summary of the lithics recovered from 22PS603, 22PS604, and 22PS605. As evidenced from this preliminary analysis of the materials, it is obvious that a great deal of variability is present in the assemblages. It seems likely that core and bifacial reduction, use and reuse of lithic materials, and tool production, modification, and use were all happening at sites 22PS603, 22PS604, and 22PS605. It is likely that an expansion of the assemblages will result from additional archaeological investigations. Then, with more intensive analysis of the debitage, e.g., measurements of size, direction of flaking, specific chert types and sources, etc., some of the above mentioned research questions can be addressed as well as any unanticipated topics.

Questions concerning site function and defining activity areas seem straightforward. What were the prehistoric occupants doing at these sites? Was the site occupied continuously throughout the year or was it visited seasonally? Where were various activities taking place? Are there distinct activity zones? Can specific areas be attributed to gender based activities? What cultural and temporal periods are represented in the artifact assemblage? How, if at all, does one site's artifact assemblage vary from that of the other two? Comparisons with other archaeological excavations at sites along tributaries of the Upper Tombigbee River may also provide interesting insight into the prehistoric use of the area and its resources.

Since the vast majority of artifacts collected from the sites were lithics, it is logical that research questions related to lithic analysis would be most likely addressed in future work. However, a few ceramics were found and more may be present at the sites. Interpretations of particular ceramics types, manufacturing technologies, and vessel form varieties may be possible. One piece of red ochre was recovered from 9PS605, possibly indicating that the inhabitants were using it for pigmentation. During future investigations, ochre stained or painted items may be encountered and could lead to research concerning its use. If features are encountered, studies of ethnobotanical and faunal remains may be possible. By delving into these various research themes, archaeologists can develop a complete picture of the sites and their inhabitants.

Management Recommendations

As is the case is so many states, one of the major problems in Mississippi archaeology is that of site destruction. As Connaway (1981) states while introducing the Mississippi Archaeological Survey:

> Many thousands of village and campsites, as well as mounds of various types, have been destroyed over the years by soiling, along with highway or road construction, industrial and housing development, land clearing, and other forms of land alteration.

This threat is, of course, a continuing possibility for every ground-disturbing undertaking. However, what is often the culprit in site destruction is not the undertaking itself, but rather the secondary impacts that result from the undertaking, e.g., driving heavy machinery across site deposits, inadvertently bulldozing or clearing, or establishing easy access to the site for potential vandals. Even though the proposed streambank stabilization and erosion control undertakings may not in themselves impact site deposits, there is a substantial threat from inadvertent impacts since access routes to the creek banks may stretch across and through the site boundaries.

Brockington and Associates, Inc., recommends additional archaeological testing for sites 22PS603, 22PS604, and 22PS605 in order to complete NRHP eligibility assessment. Testing may include the excavation of additional shovel tests and formal excavation units, as well as additional intensive surface collection and stream bank inspection. The additional testing may be followed by more intensive laboratory analysis, principally focusing on specific research topics related to lithic assemblages, as well as to any previously unanticipated themes. The site interpretations may then allow for a comparison within local and regional settings to contribute to the accumulating knowledge. Specific areas of the sites can be examined as time and finances permit. However, care should be taken to ensure that all access routes across and through site boundaries as well as the creek banks adjacent to the sites be tested and evaluated before any proposed earth-disturbing activities, whether direct or inadvertent.

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APPENDIX A: ARTIFACT CATALOG

Artifact Catalog

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

Table of Contents

SITE NUMBER: 22PS603

PROVENIENCE NUMBER: 1 . 0 Transect 1, West side

Catalog #	*Count*	*Weight (in g)*	*Artifact Description*	*Comments*
1	4		residual sherd	
2		0.70	faunal remains	
3	3		chert primary flake	
4	13		chert thinning flake	
5	1		heat treated chert secondary core reduction flake	heat treated yellow chert
6	1		chert secondary core reduction flake	
7	3		chert tertiary core reduction flake	
8	2		chert secondary bifacial reduction flake	
9	5		chert tertiary bifacial reduction flake	
10	2		heat treated chert tertiary bifacial reduction flake	heat treated yellow chert
11	4		chert flake fragment	
12	5		heat treated chert flake fragment	heat treated yellow chert
13	4		chert shatter	
14	1		chert utilized flake	
15	1		chert retouched flake	

SITE NUMBER: 22PS604

PROVENIENCE NUMBER: 1 . 0 Transect 2, East side

Catalog #	*Count*	*Weight (in g)*	*Artifact Description*	*Comments*
1	1		milkglass canning jar lid liners	
2	3		residual sherd	
3	1		eroded body sherd, shell temper	
4		0.20	faunal remains	
5	1		heat treated chert bifacial core	heat treated yellow chert, fragment
6	2		chert biface fragment	
7	4		heat treated chert flake fragment	heat treated yellow chert

Site Number:	22PS604			
8	30		chert flake fragment	
9	9		heat treated chert thinning flake	heat treated yellow chert
10	23		chert thinning flake	
11	1		chalcedony thinning flake	
12	1		heat treated chert tertiary core reduction flake	heat treated yellow chert
13	5		chert tertiary core reduction flake	
14	2		heat treated chert tertiary bifacial reduction flake	heat treated yellow chert
15	6		chert tertiary bifacial reduction flake	
16	2		chert secondary core reduction flake	
17	1		heat treated chert secondary bifacial reduction flake	heat treated yellow chert
18	3		chert secondary bifacial reduction flake	
19	4		heat treated chert primary flake	heat treated yellow chert
20	10		chert primary flake	
21	1		heat treated chert shatter	heat treated yellow chert
22	1		metavolcanic shatter	
23	6		chert shatter	
24	3		heat treated chert utilized flake	heat treated yellow chert
25	1		heat treated chert projectile point	untyped, heat treated yellow chert

SITE NUMBER: 22PS605

PROVENIENCE NUMBER: 1 . 0 Transect 2, East side

Catalog #	*Count*	*Weight (in g)*	*Artifact Description*	*Comments*
1	3		chert primary flake	
2	5		heat treated chert primary flake	heat treated yellow chert
3	1		heat treated chert secondary core reduction flake	heat treated yellow chert
4	2		heat treated chert tertiary core reduction flake	heat treated yellow chert
5	3		heat treated chert secondary bifacial reduction flake	heat treated yellow chert
6	2		chert tertiary bifacial reduction flake	
7	1		heat treated chert tertiary bifacial reduction flake	heat treated yellow chert
8	6		heat treated chert thinning flake	heat treated yellow chert
9	7		chert thinning flake	
10	1		chert shatter	
11	2		heat treated chert utilized flake	heat treated yellow chert
12	1		chert utilized flake	
13	1		heat treated chert retouched flake	heat treated yellow chert
14	1		chert projectile point mid-section	
15	3		chert flake fragment	
16	1		metavolcanic flake fragment	
17	9		heat treated chert flake fragment	heat treated yellow chert
18	1		heat treated chert drill	untypable, heat treated yellow chert
19		8.40	ochre	red

APPENDIX B: MISSISSIPPI SITE CARDS

Mississippi Department of Archives and History

SITE NAME: Cotton Field Site SITE NO: 22PS605 OTHER NOS: _____ 7.5 QUAD: Wheeler

COUNTY: Prentiss SEC: 1 TWN: 6S RNG: 6E UTM DATA: zone 16 E 351500 N 3828610

OWNERSHIP: private [X] state [ ] county [ ] city [ ] federal [ ]

NAME OF OWNER: unknown RECORDER: Whitney Olvey DATE: 1·24·02

NATIONAL REGISTER POTENTIAL: eligible [ ] ineligible [ ] unknown [X] NATURAL SETTING: bluff [ ] bluff shelter [ ] chenier [ ] dune [ ]

floodplain [X] first terrace [ ] knoll on terrace [ ] upland (ridge) [ ] estuary [ ] natural levee [ ] backswamp [ ]

VEGETATION COVER: active cultivation [ ] fallow field [X] pasture [ ] orchard [ ] pine forest [ ] hardwood forest [ ] denuded [ ] garden [ ] other [ ]

ESTIMATION OF GROUND COVER: (estimate %) 20% DEGREE OF DISTURBANCE (estimate %) 20%

TYPE OF DISTURBANCE: cultivation [X] natural [ ] scientific excavation [ ]

unscientific excavation [ ] extensively collected [ ] construction [ ] land levelled [ ] buried site [ ]

redeposited site [ ] forestry [ ] periodic flooding [X] indefinitely flooded [ ] unknown [ ] other [ ]

SCS SOIL TYPE: _____ SCS SOIL CODE: _____

ARTIFACT DENSITY: heavy [X] medium [ ] light [ ] single artifact [ ]

INSTITUTION WHERE ARTIFACTS CURATED: _____

SURFACE AREA (sq.m.): _____ max length 20m max width 20m ELEVATION (ft): 360'

DEPOSIT DEPTH (m.): unknown CHRONOLOGY: Paleo Indian [ ]

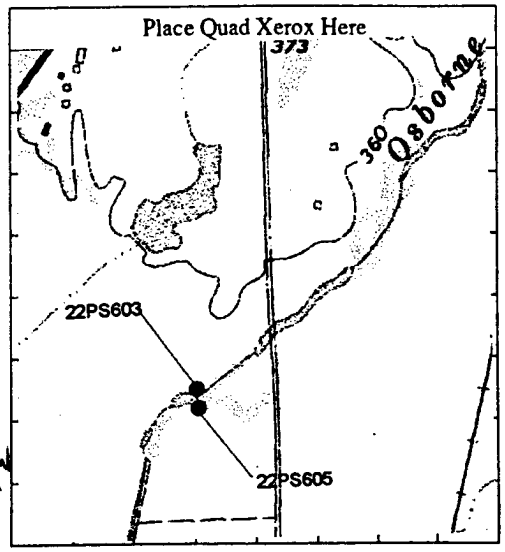
Archaic [ ] early [ ] middle [ ] late [ ] Woodland [ ] early [ ] middle [ ] late [ ]

Miss. [ ] early [ ] middle [ ] late [ ] Protohistoric [ ] Historic Indian [ ]

Unknown Aboriginal [X] Historic [ ] - specify _____

REPORT REFERENCE: Cultural Resources Phase I Survey Osborne Creek Environmental Restoration

MDAH REPORT NO: _____ USE REVERSE SIDE FOR ADDITIONAL INFORMATION



Mounds (0)
conical [ ]
pyramidal [ ]
indeterminate [ ]

earthworks [(0)]

material identified:
44 chert flakes (27 heat treated, 1 metavolcanic)
1 utilized flake, 1 retouched flake,
1 projectile point mid-section, 1 drill,
84g red ochre

component -- diagnostics

comments:

Site is recommended potentially eligible. Initial survey was during flash flooding; therefore, shovel testing was not effective method for testing vertical deposits. Additional investigation is recommended.

other references:

MDAH USE ONLY

Physiographic Region:
YB[ ], LH[ ], FW[ ], PR[ ], BP[ ], TH[ ], JP[ ], LLPB[ ], CPM[ ], NCH[ ]
National Register Status: NRL [ ], date _____, criteria _____
DOE [ ], date _____, criteria _____
NHL [ ], date _____, criteria _____
Mississippi Landmark [ ], date _____

Mississippi Department of Archives and History

SITE NAME: Corn Field Site SITE NO: 22PS603 OTHER NOS: _____ 7.5 QUAD: Wheeler

COUNTY: Prentiss SEC: 1 TWN: 6S RNG: 6E UTM DATA: zone 16 E 351498 N 3828654

OWNERSHIP: private [X] state [ ] county [ ] city [ ] federal [ ]

NAME OF OWNER: unknown RECORDER: Whitney Olvey DATE: 1.24.02

NATIONAL REGISTER POTENTIAL: eligible [ ] ineligible [ ] unknown [X] NATURAL SETTING: bluff [ ] bluff shelter [ ] chenier [ ] dune [ ]

floodplain [X] first terrace [X] knoll on terrace [ ] upland (ridge) [ ] estuary [ ] natural levee [ ] backswamp [ ]

VEGETATION COVER: active cultivation [ ] fallow field [X] pasture [ ] orchard [ ] pine forest [ ] hardwood forest [ ] denuded [ ] garden [ ] other [ ]

ESTIMATION OF GROUND COVER: (estimate %) 20% DEGREE OF DISTURBANCE (estimate %) 20%

TYPE OF DISTURBANCE: cultivation [X] natural [ ] scientific excavation [ ]

unscientific excavation [ ] extensively collected [ ] construction [ ] land levelled [ ] buried site [ ]

redeposited site [ ] forestry [ ] periodic flooding [X] indefinitely flooded [ ] unknown [ ] other [ ]

SCS SOIL TYPE: _____ SCS SOIL CODE: _____

ARTIFACT DENSITY: heavy [X] medium [ ] light [ ] single artifact [ ]

INSTITUTION WHERE ARTIFACTS CURATED: _____

SURFACE AREA (sq.m.): _____ max length 60m max width 40m ELEVATION (ft): 360'

DEPOSIT DEPTH (m.): unknown CHRONOLOGY: Paleo Indian [ ]

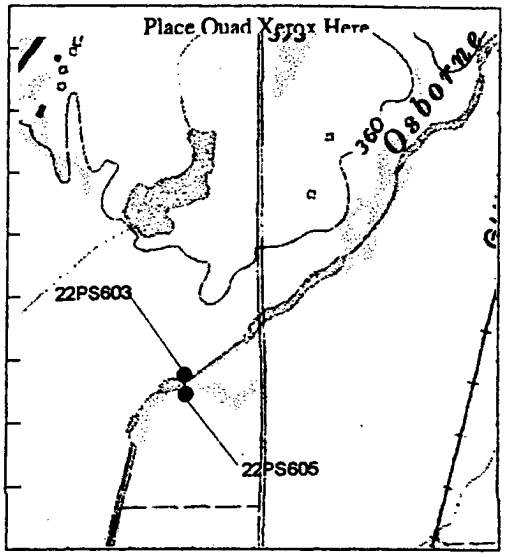
Archaic [ ] early [ ] middle [ ] late [ ] Woodland [ ] early [ ] middle [ ] late [ ]

Miss. [ ] early [ ] middle [ ] late [ ] Protohistoric [ ] Historic Indian [ ]

Unknown Aboriginal [X] Historic [ ] - specify _____

REPORT REFERENCE: Cultural Resources Phase I Survey Osborne Creek Environmental Restoration

MDAH REPORT NO: _____ USE REVERSE SIDE FOR ADDITIONAL INFORMATION



Mounds ϕ
conical [ ]
pyramidal [ ]
indeterminate [ ]

earthworks [ϕ]

material identified:
43 chert flakes (8 heat treated), 1 utilized flake, 1 retouched flake, 4 residual sherds, 7g faunal remains

component -- diagnostics

comments:

Site is recomended potentially eligible. Initial survey was during flash flooding; therefore, shovel testing was not effective method for testing vertical deposits. Additional investigation is recommended.

other references: ϕ

MDAH USE ONLY

Physiographic Region:
YB[ ], LH[ ], FW[ ], PR[ ], BP[ ], TH[ ], JP[ ], LLPB[ ], CPM[ ], NCH[ ]
National Register Status: NRL [ ], date _____, criteria _____
DOE [ ], date _____, criteria _____
NHL [ ], date _____, criteria _____
Mississippi Landmark [ ], date _____

Mississippi Department of Archives and History

SITE NAME: Garden Site SITE NO: 22PS604 OTHER NOS: _____ 7.5 QUAD: Wheeler

COUNTY: Prentiss SEC: 12 TWN: 6S RNG: 6E UTM DATA: zone 16 E 351233 N 3827833

OWNERSHIP: private [X] state [ ] county [ ] city [ ] federal [ ]

NAME OF OWNER: Moore RECORDER: Whitney Olvey DATE: 1-24-02

NATIONAL REGISTER POTENTIAL: eligible [ ] ineligible [ ] unknown [X] NATURAL SETTING: bluff [ ] bluff shelter [ ] chenier [ ] dune [ ]

floodplain [X] first terrace [ ] knoll on terrace [ ] upland (ridge) [ ] estuary [ ] natural levee [ ] backswamp [ ]

VEGETATION COVER: active cultivation [ ] fallow field [ ] pasture [ ] orchard [ ] pine forest [ ] hardwood forest [ ] denuded [ ] garden [X] other [ ]

ESTIMATION OF GROUND COVER: (estimate %) 10% DEGREE OF DISTURBANCE (estimate %) 20%

TYPE OF DISTURBANCE: cultivation [X] natural [ ] scientific excavation [ ]

unscientific excavation [ ] extensively collected [ ] construction [ ] land levelled [ ] buried site [ ]

redeposited site [ ] forestry [ ] periodic flooding [X] indefinitely flooded [ ] unknown [ ] other [ ]

SCS SOIL TYPE: _____ SCS SOIL CODE: _____

ARTIFACT DENSITY: heavy [X] medium [ ] light [ ] single artifact [ ]

INSTITUTION WHERE ARTIFACTS CURATED: _____

SURFACE AREA (sq.m.): _____ max length 50m max width 20m ELEVATION (ft): 360'

DEPOSIT DEPTH (m.): unknown CHRONOLOGY: Paleo Indian [ ]

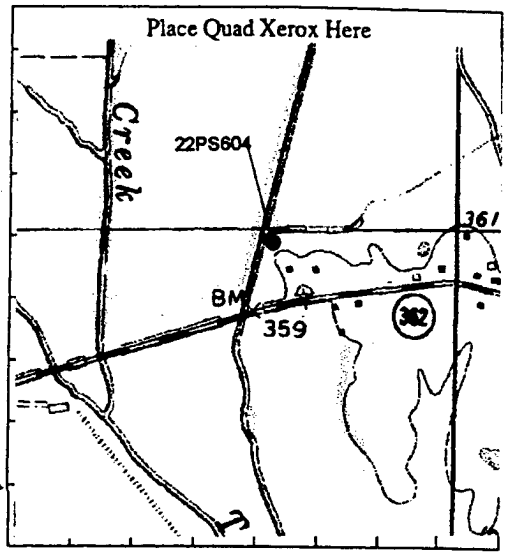
Archaic [ ] early [ ] middle [ ] late [ ] Woodland [ ] early [ ] middle [ ] late [ ]

Miss. [ ] early [ ] middle [ ] late [ ] Protohistoric [ ] Historic Indian [ ]

Unknown Aboriginal [X] Historic [ ] - specify _____

REPORT REFERENCE: Cultural Resources Phase I Survey Osborne Creek Env. Restoration

MDAH REPORT NO: _____ USE REVERSE SIDE FOR ADDITIONAL INFORMATION



Mounds ϕ

conical [ ]

pyramidal [ ]

indeterminate [ ]

earthworks [ϕ]

material identified:

109 chert flakes (23 heat treated, 1 chalcedony, 1 metavolcanic)
3 utilized flakes, 1 core, 2 bifaces,
1 projectile point (untyped)
3 residual sherds, 1 body sherd (shell temper)

component -- diagnostics

comments:

Site is recomended potentially eligible.
Initial survey was during flash flooding, therefore, shovel testing was not effective method for testing vertical deposits.
Additional investigation is recommended.

other references: ϕ

MDAH USE ONLY

Physiographic Region:

YB[ ], LH[ ], FW[ ], PR[ ], BP[ ], TH[ ], JP[ ], LLPB[ ], CPM[ ], NCH[ ]

National Register Status: NRL [ ], date _____, criteria _____

DOE [ ], date _____, criteria _____

NHL [ ], date _____, criteria _____

Mississippi Landmark [ ], date _____

APPENDIX C: VITA OF PRINCIPAL INVESTIGATOR

Christopher Scott Butler

Brockington and Associates, Inc.
6611 Bay Circle, Suite 220
Norcross, Georgia 30071
(770) 662-5807 Fax (770) 662-5824
scottbutler@brockington.org

Professional Position (1990-Present)

Senior Architectural Historian, Senior Archaeologist, Senior Historian

Areas of Specialization

Cultural Resources Management, Architectural Survey and Documentation, Archaeological Investigations, Historic Records Research, and Military History

Education

Master of Historic Preservation (MHP), University of Georgia, 1992
Bachelor of Science (BS), Archaeological Sciences, University of Georgia, 1988

Professional Society Membership

National Trust for Historic Preservation
Georgia Trust for Historic Preservation
Society of Architectural Historians, Southeastern Chapter
Society for Historical Archaeology
Georgia Council for Professional Archaeologists
Society for Georgia Archaeology

Experience

2001- Principal Investigator, Archaeological Investigations at the Resaca Civil War Battlefield, Gordon County, Georgia. Prepared for the State of Georgia, Department of Parks and Recreation.

2000- Principal Investigator, Archaeological Investigation of the Aluminum Recycling Technologies Tract, Greene County, Tennessee.

2000- Co-Principal Investigator, Archaeological Investigations at the Eutaw Springs Revolutionary War Battlefield, Orangeburg County, South Carolina.

2000- Principal Investigator, Phase III Data Recovery Investigations at Richmond Plantation (9BN44 and 9BN177), Bryan County, Georgia.

2000- Principal Investigator, Phase I Archaeological Survey of Separable Lands, Tennessee-Tombigbee Wildlife Mitigation Project, Itawamba, Monroe, and Neshoba Counties, Mississippi.

2000- Principal Investigator, Historic Resources Survey of the Proposed Buena Vista Road Phase Two Improvements Corridor, Muscogee County, Georgia.

2000- Principal Investigator, Phase I Cultural Resources Survey for the Stones River Greenway, Davidson County, Tennessee.

2000- Principal Investigator, Cultural Resources Investigations of the Five Acre Skidaway Institute of Oceanography Tract, Chatham County, Georgia.

1999- Principal Investigator, Phase I Cultural Resources Survey and Phase II Archaeological Evaluation for the Murfreesboro Commerce Center, Rutherford County, Tennessee.

1999- Principal Investigator, Cemetery Delineation for the Hickory Log Cemetery, Cherokee County, Georgia.

1999- Principal Investigator, Archival Research and Archaeological Reconnaissance of the Georgian Resort Tract, Paulding County, Georgia.

1999- Principal Investigator, Historic Resources Survey of the proposed McGinnis Ferry Road Widening Corridor, Fulton and Forsyth Counties, Georgia.

1999- Historian and Architectural Historian, Historic Overview and Historic Resources Survey for the proposed Eisenhower Parkway Extension, Bibb County, Georgia.

1999- Principal Investigator, Archaeological Investigations at the Dill Tract, James Island, Charleston County, South Carolina.

1999- Principal Investigator, Archaeological Testing and Data Recovery Excavations at Bulloch Hall (9FU255), Fulton County, Georgia.

1998- Principal Investigator, Archaeological Reconnaissance of the Jackson Hill Tract, City of Rome, Floyd County, Georgia.

1998- Principal Investigator, Historic Resources Survey for the Ford Plantation Development, Bryan County Georgia.

1998- Principal Investigator, Archaeological Reconnaissance of the Augusta State University, Richmond County, Georgia.

1998- Principal Investigator, Archival Research and Cultural Resources Reconnaissance for the proposed I-64 and I-895 Connector, Henrico County, Virginia.

1998- Principal Investigator, West Cobb Survey of Historic and Archaeological Resources, Cobb County, Georgia.

1998- Principal Investigator, Archaeological Survey of the Carolina Bays Parkway, Horry County, South Carolina.

1997- Principal Investigator, Cultural Resources Planning for the 96th Regional Support Command, Fort Douglas, Utah.

1997- Principal Investigator, Large Format Photo Documentation of the Carmichael Complex, Cobb County, Georgia.

1997- Principal Investigator, Archaeological Survey of the Roxboro Road Widening Corridor, Fulton County, Georgia.

1997- Principal Investigator, Cultural Resources Survey of the Breckenridge Boulevard Connector, Gwinnett County, Georgia.

1997- Principal Investigator, Archaeological and Historic Resources Surveys of the Post Oak Tritt Road Widening Corridor, Cobb County, Georgia.

1997 - Principal Investigator, Cultural Resources Survey of the Proposed Whitefield Tract Development, Cobb County, Georgia.

1997- Principal Investigator, Large Format Photo Documentation, 3041 Stone Mountain Street, DeKalb County, Georgia.

1997 - Principal Investigator, Cultural Resources Survey of the Proposed K-Mart Retail Tract, Bibb County, Georgia.

1997 - Principal Investigator, Historic and Archaeological Resources Protection (HARP) Plan, Key West Naval Air Station, Monroe County, Florida.

1997 - Principal Investigator, Archaeological Survey of the Gray-Newton Tract, Cobb County, Georgia.

1997 - Principal Investigator, Archaeological Reconnaissance of the JDN Development Tract, Gwinnett County, Georgia.

1997 - Principal Investigator, Boundary Delineation of the Lyles Cemetery, Walton County, Georgia.

1996 - Principal Investigator, Reconnaissance Survey of Eastern Wharf Lots 3-6 and Cotton Warehouse Tract, Lamar Ward, Savannah, Georgia.

1996 - Principal Investigator, Archaeological Survey of Key West Naval Air Station, Monroe County, Florida.

1996 - Principal Investigator, Cultural Resources Survey of Separable Lands, Tennessee-Tombigbee Wildlife Mitigation Project, Alabama and Mississippi.

1996 - Principal Investigator, Cultural Resources Reconnaissance of the Lower Alabama River Study Area, Alabama.

1995 - Principal Investigator and Field Director Archaeologist, Historic Resources Survey of Historic Cemeteries, Allatoona Lake, Georgia.

1995 - Principal Investigator, Archaeological Potential and Land Use History of the Techwood/Clark Howell Urban Revitalization Tract, Atlanta, Georgia.

1995 - Principal Investigator, Architectural Survey of U.S. 1/S.R. 4, Toombs and Emanuel Counties, Georgia.

1995 - Principal Investigator, Architectural Historian, and Field Director Archaeologist, Archaeological and Architectural Survey of the U.S. 21 Business Improvements and Fort Mill Bypass, York County, South Carolina.

1995 - Principal Investigator, Cultural Resources Survey of the Hiram Road Bridge Replacement, Cobb County, Georgia.

1995 - Historian, Data Recovery Investigations at 38BU165, Bloody Point, Daufuskie Island, Beaufort County, South Carolina.

1995 - Architectural Historian, Historian, and Field Director Archaeologist, Archaeological Reconnaissance and Architectural Survey, Carolina Bays Parkway, Georgetown and Horry Counties, South Carolina.

1994 - Field Director Archaeologist, Data Recovery Excavations at 38BU950, Eigleburger Tract, Daufuskie Island, Beaufort County, South Carolina.

1994 - Field Director Archaeologist, Archaeological Survey and Testing of the Martschink Development Tract, Secessionville, Charleston County, South Carolina.

1994 - Field Director Archaeologist, Archaeological Survey for Four Bridge Replacements, Cobb County, Georgia.

1994 - Architectural Historian and Field Director Archaeologist, Archaeological Reconnaissance and Architectural Survey of the Williston Bypass, Barnwell County, South Carolina.

1994 - Architectural Historian and Field Director Archaeologist, Archaeological and Architectural Survey of the proposed I-26 Widening Improvements, Charleston and Berkeley Counties, South Carolina.

1994 - Field Director Archaeologist, Cultural Resources Survey of Shore Drive Housing and Development Tract and Cemetery, Chatham County, Georgia.

1993 - Historian, Research Design: Antebellum Sites Research of Parris Island Marine Corps Recruit Depot, Beaufort County, South Carolina.

1993 - Architectural Historian and Field Director Archaeologist, Cultural Resources Survey of the Proposed Western Corridor Roadway, Greenville County, South Carolina.

1993 - Architectural Historian, Archaeological Survey and Evaluation of a 26 mile Segment of the Outer Perimeter Corridor, Gwinnett, Newton, Rockdale, and Walton Counties.

1993 - Co-Field Director Archaeologist and Architectural Historian, Intensive Cultural Resources Survey of the Argent Tract, Beaufort and Jasper Counties, South Carolina.

1993 - Field Director Archaeologist and Architectural Historian, Cultural Resources Survey of Daniel Island, Berkeley County, South Carolina.

1993 - Architectural Historian, Intensive Archaeological Evaluation and Historical Research, Site 16AV48, Avoyelles Parish, Louisiana.

1993 - Architectural Historian, Archaeological Reconnaissance and Architectural Survey of the Proposed S.C. 118 Bypass, Aiken County, South Carolina.

1992 - Architectural Historian, Archival Research and Architectural Survey of the Proposed Anderson-Abbeville Connector, Anderson and Abbeville Counties, South Carolina.

1992 - Architectural Historian, Archival Research and Architectural Survey of the Proposed SC 28 Bypass, Abbeville County, South Carolina.

1992 - Field Director Archaeologist, Archaeological Survey and Testing of the 361 Acre Calhoun Falls Northwest Tract, Abbeville County, South Carolina.

1992 - Architectural Historian, Archaeological Survey of the 11.94 Acre Holbrook Tract, Hart County, Georgia.

1992 - Field Director Archaeologist, Cultural Resources Reconnaissance Survey of Three Alternate Corridors for U.S. 70 Clayton Bypass, TIP R-2552, Wake and Johnston Counties, North Carolina.

1992 - Architectural Historian, Archival Research and Architectural Survey of Proposed Anderson Bypass, Anderson County, South Carolina.

1992 - Architectural Historian, Archival Research and Architectural Survey of Proposed U.S. Highway 78 Improvements, Elko to Bamberg, South Carolina.

1992 - Field Director Archaeologist, Cultural Resource Survey of the Waterford Tract, York County, South Carolina.

1992 - Architectural Historian, Cultural Resource Survey and Site Testing, Rio de la Plata Flood Control Project, Puerto Rico.

1992 - Field Director Archaeologist and Architectural Historian, Cultural Resource Survey of the Folly Island Coast Guard Station, Charleston County, South Carolina.

1992 - Field Director Archaeologist, Archaeological Survey of the Transco/Hartwell II Tract, Hart County, Georgia.

1991 - Field Director Archaeologist and Architectural Historian, Cultural Resource Survey of S.C. 161 Highway Improvements, York County, South Carolina.

1991 - Architectural Historian, Cultural Resource Survey of U.S. Highway 521 Widening and Alternates, Andrews, Georgetown, and Williamsburg Counties, South Carolina.

1991 - Field Director Archaeologist and Architectural Historian, Cultural Resource Survey of U.S. 25 Improvements, Greenville County, South Carolina.

1991 - Architectural Historian, Cultural Resource Survey of the Cope Power Plant Site, Orangeburg County, South Carolina.

1991 - Field Director Archaeologist, Cultural Resource Survey of S.C. 161 Extension, York County, South Carolina.

1991 - Field Director Archaeologist, Archaeological Survey and Testing of the Laona to Goodman Pipeline Corridor, Forest County, Wisconsin.

1991 - Field Director Archaeologist, Archaeological Survey and Testing of the Wood and Portage Counties ANR Gas Pipeline, Wood and Portage Counties, Wisconsin.

1991 - Architectural Historian, Architectural Survey for U.S. Highway 78 Improvements, Aiken to Elko, South Carolina.

1991 - Architectural Historian, Archival Research for U.S. Highway 78 Improvements, Aiken to Elko, South Carolina.

1991 - Field Director Archaeologist and Architectural Historian, Cultural Resource Survey of the Conway Waterfront, Horry County, South Carolina.

1990 - Field Director Archaeologist, Archaeological Survey and Testing of Devil's Fork State Park, Oconee County, South Carolina.

1990 - Architectural Historian, Phase I Research and Reconnaissance of Greenville Western Corridor Roadway, Greenville County, South Carolina.

Projects, Publications, and Papers

2001 with Mike Reynolds
Historic Resources Survey of the Proposed Buena Vista Road Phase Two Improvements Corridor, Muscogee County, Georgia. Prepared for the Georgia Department of Transportation.

2000 with Bill Jordan
Archaeological Investigation of the Aluminum Recycling Technologies Tract,Greene County, Tennessee. Prepared for Traditional Enterprises, Inc.

2000
Phase I Archaeological Survey of Separable Lands, Tennessee-Tombigbee Wildlife Mitigation Project, Itawamba, Monroe, and Neshoba Counties, Mississippi. Prepared for the U.S. Army Corps of Engineers, Mobile District.

2000
Phase I Cultural Resources Survey of the Stones River Greenway, Davidson County, Tennessee. Prepared for Lose and Associates, Inc.

2000
Cultural Resources Investigations of the Five Acre Skidaway Institute of Oceanography Tract, Chatham County, Georgia. Prepared for the Board of Regents of the University System of Georgia Hussey, Gay, Bell, and DeYoung, Inc.

2000
Phase I Cultural Resources Survey and Phase II Archaeological Evaluation for the Murfreesboro Commerce Center, Rutherford County, Tennessee. Prepared for the City of Murfreesboro and Lose and Associates, Inc.

1999
Cemetery Delineation for the Hickory Log Cemetery, Cherokee County, Georgia. Prepared for Bright-Sasser Canton L.L.C.

1999
Historic Resources Survey of the Proposed McGinnis Ferry Road Widening Corridor, Forsyth and Fulton Counties, Georgia. Prepared for HDR Engineering, Inc.

1999
Military Occupation at Fort Barrancas (8ES64), Pensacola, Florida. Paper presented to the Southeastern Archaeological Conference, Pensacola, Florida.

1999
Cultural Resources Overview of the Proposed Eisenhower Parkway Extension, Bibb, Houston, Jones, and Twiggs Counties, Georgia. Prepared for the Georgia Department of Transportation and HDR Engineering, Inc.

1999
Archaeological Investigations at the Dill Tract, James Island, Charleston County, South Carolina. Prepared for the City of Charleston Parks and Recreation Department.

1999
Historic Resources Survey of the Proposed Eisenhower Parkway Extension Alternative Links, Bibb and Jones Counties, Georgia. Prepared for the Georgia Department of Transportation and HDR Engineering, Inc.

1999
Archival Research, Archaeological Reconnaissance, and Cemetery Delineation for the Georgian Resort Development Tract, Paulding County, Georgia. Prepared for Grand Cypress Development Company, L.L.C.

1999
Archaeological Testing and Data Recovery Excavations at Bulloch Hall (9FU255), Fulton County, Georgia. Prepared for the City of Roswell and the Friends of Bulloch Hall.

1998
Archaeological Reconnaissance of the Jackson Hill Tract, City of Rome, Floyd County, Georgia. Prepared for the City of Rome.

1998
Historic Resources Survey for the Ford Plantation Development, Bryan County, Georgia. Prepared for the Ford Plantation, L.L.C.

1998
Archaeological Reconnaissance of the Proposed Classroom Building, Augusta State University, Richmond County, Georgia. Prepared for the Board of Regents of the University System of Georgia and Brown and Caldwell, Inc.

1998 with William R. Jordan and Alex Sweeney
West Cobb Survey of Historic and Archaeological Resources, Cobb County, Georgia. Prepared for the Cobb County Planning Division.

1998
Archaeological Survey and Evaluation of the Carolina Bays Parkway, Horry County, South Carolina. Prepared for the LPA Group, Inc., The Horry County Higher Education Commission, The South Carolina Department of Transportation, and The Federal Highway Administration.

1998
Archival Research and Cultural Resources Reconnaissance for the proposed Interstate 64 and Interstate 895 Connector, Henrico County, Virginia. Prepared for The LPA Group Inc.

1997
Cultural Resources Planning for the 96th Regional Support Command, Fort Douglas, Utah. Prepared for the U.S. Army Reserve and the U.S. Army Corps of Engineers, Savannah District.

1997 with David Diener
Large Format Photograph Documentation of the Carmichael House Complex, Cobb County, Georgia. Prepared for John Wieland Homes, Inc., Atlanta, Georgia.

1997 with William R. Jordan
Archaeological Survey of the Roxboro Road Widening Corridor, Fulton County, Georgia. Prepared for Edwards-Pittman Environmental, Inc., Marietta, Georgia.

1997 with William R. Jordan
Cultural Resources Survey of the Breckenridge Boulevard Connector, Gwinnett County, Georgia. Prepared for Jordon, Jones, and Goulding, Inc., Atlanta, Georgia.

1997 with Caleb Smith
Archaeological and Historic Resources Surveys of the Post Oak Tritt Road Widening Corridor, Cobb County, Georgia. Prepared for Greenhorne and O'Mara Inc., Marietta, Georgia.

1997
Cultural Resources Survey of the Proposed Whitefield Tract Development, Cobb County, Georgia. Prepared for Flagship Group Inc., Atlanta and the U.S. Army Corps of Engineers, Savannah District.

1997
The Gunters- Migration of a Georgia Pottery Family. Paper presented to the Society of Historic Archaeology, Atlanta, Georgia.

1997 with David Diener
Large Format Photo Documentation, 3041 Stone Mountain Street, Lithonia, Georgia. Prepared for United Consulting and the U.S. Postal Service, Atlanta, Georgia.

1997 with Dawn Reid
Cultural Resources Survey of the Proposed K-Mart Retail Tract, Bibb County, Georgia. Prepared for JDN Development Company and the U.S. Army Corps of Engineers, Savannah District.

1996
Reconnaissance of Eastern Wharf Lots 3-6 and Cotton Warehouse Tract, Lamar Ward, Savannah, Georgia. Prepared for Thomas Hutton Engineering, Inc. and the U.S. Army Corps of Engineers, Savannah District.

1996
Cultural Resources Survey of the Proposed Neeson Tract Development, Cobb County, Georgia. Prepared for Metro Brokers Reality, Marietta, and the Cobb County Planning Division.

1996
Archaeological Survey of Key West Naval Air Station, Monroe County, Florida. Prepared for the U.S. Army Corps of Engineers, Mobile District.

1996
Chattahoochee River Defense Line Preservation Plan, Cobb County, Georgia. Prepared for the Cobb County Planning Division and National Park Service, Washington, D.C.

1996
Cultural Resources Survey of Separable Lands, Tennessee-Tombigbee Wildlife Mitigation Project, Alabama and Mississippi. Prepared for the U.S. Army Corps of Engineers, Mobile District.

1996 with Marian Roberts
Cultural Resources Reconnaissance of the Lower Alabama River Study Area, Alabama. Prepared for the U.S. Army Corps of Engineers, Mobile District.

1995 with Marian Roberts, Joseph Sanders, and William Jordan
Cultural Resources Survey of Historic Cemeteries, Lake Allatoona, Georgia. Prepared for the U.S. Army Corps of Engineers, Mobile District.

1995
Research Design for the Techwood/Clark Howell Urban Revitalization Tract, Atlanta, Georgia. Prepared for The Albert Kahn and Schervish Vogel Collaborative, Detroit, Michigan and the Housing Authority for the City of Atlanta.

1995 with William R. Jordan
Architectural Survey of U.S. 1/S.R. 4, Toombs and Emanuel Counties, Georgia. Prepared for the Georgia Department of Transportation, Atlanta.

1995
Archaeological and Architectural Survey of the U.S. 21 Business Improvements and Fort Mill Bypass, York County, South Carolina. Prepared for the South Carolina Department of Transportation, Columbia.

1995 with Linda Kennedy and Marian Roberts
Data Recovery Excavations at 38BU165, Bloody Point, Daufuskie Island, Beaufort County, South Carolina. Prepared for the Melrose Company, Inc., Hilton Head, South Carolina.

1995
Archaeological Reconnaissance and Architectural Survey, Carolina Bays Parkway, Georgetown and Horry Counties, South Carolina. Prepared for the LPA Group Inc., Columbia.

1994
Archaeological Survey and Testing of the Martschink Development Tract, Secessionville, Charleston County, South Carolina. Prepared for Special Properties Inc., Charleston, South Carolina.

1994
Archaeological Survey for Four Bridge Replacements, Cobb County, Georgia. Prepared for Cobb County Department of Transportation, Marietta, Georgia.

1994
Archaeological Reconnaissance and Architectural Survey of the Williston Bypass, Barnwell County, South Carolina. Prepared for RUST Environmental Services, Inc., Raleigh, North Carolina.

1994
Archaeological and Architectural Survey of the proposed I-26 Widening Improvements, Charleston and Berkeley Counties, South Carolina. Prepared for Piedmont Olsen Hensley, Inc., Raleigh, North Carolina.

1994 with Jeffrey W. Gardner and William R. Jordan
Cultural Resources Survey of Shore Drive Housing and Development Tract and Cemetery, Chatham County, Georgia. Prepared for Richard A. Fitzer II, Savannah, Georgia.

1993 with Christopher T. Espenshade
Research Design: Antebellum Sites Research, Parris Island Marine Corps Recruit Depot, Beaufort County, South Carolina. Prepared for Conley & Hardy, Inc., Memphis, Tennessee and Gulf Engineers & Consultants, Inc., Baton Rouge, Louisiana.

1993 with Paul E. Brockington, Jr.
Cultural Resources Survey of the Proposed Western Corridor Roadway, Greenville County, South Carolina. Prepared for LPA Group, Inc., Columbia, South Carolina.

1993 with Jeffrey W. Gardner, M. Virginia Markham, and Marian Roberts
Archaeological Survey and Evaluation of a 26 mile Segment of the Outer Perimeter Corridor, Gwinnett, Newton, Rockdale, and Walton Counties, Georgia. Prepared for the Georgia Department of Transportation, Atlanta, Georgia.

1993 with Elsie I. Eubanks and Eric C. Poplin
Intensive Cultural Resources Survey of the Argent Tract, Beaufort and Jasper Counties, South Carolina. Prepared for the Del Webb Corporation, Phoenix, Arizona.

1993 with Paul E. Brockington, Jr. and Marian Roberts
Cultural Resources Survey of Daniel Island, Berkeley County, South Carolina. Prepared for the Daniel Island Development Company, New York, New York.

1993 with Christopher T. Espenshade and Marian Roberts
Intensive Archaeological Evaluation and Historical Research, Site 16AV48, Avoyelles Parish, Louisiana. Prepared for Grand Casinos, Inc. and the Tunica-Biloxi Indians of Louisiana.

1993 with Paul E. Brockington, Jr.
Archaeological Reconnaissance and Architectural Survey of the Proposed 118 Bypass, Aiken County, South Carolina. Prepared for BAKK Engineers, Inc., Raleigh, North Carolina.

1992
Archival Research and Architectural Survey of the Proposed Anderson-Abbeville Connector, Anderson and Abbeville Counties, South Carolina. Prepared for Campco Engineering, Inc., Rock Hill, South Carolina.

1992
Archival Research and Architectural Survey of the Proposed SC 28 Bypass, Abbeville County, South Carolina. Prepared for Campco Engineering Inc., Rock Hill, South Carolina.

1992 with Marian D. Roberts and Christopher T. Espenshade
Archaeological Survey and Testing of the 361 Acre Calhoun Falls Northwest Tract, Abbeville County, South Carolina. Prepared for Kenneth B. Simmons Associates, Inc., Columbia, South Carolina.

1992 with Jeffrey W. Gardner
Archaeological Survey of the 11..94 Acre Holbrook Tract, Hart County, Georgia. Prepared for Transco Energy Ventures Company, Houston, Texas.

1992 with Marian D. Roberts and A. Lee Novick
Cultural Resources Reconnaissance Survey of Three Alternate Corridors for U.S. 70 Clayton Bypass, TIP R-2552, Wake and Johnston Counties, North Carolina. Prepared for Greenhorne & O'Mara, Inc., Raleigh, North Carolina.

1992
Archival Research and Architectural Survey of the Proposed Anderson Bypass, Anderson County, South Carolina. Prepared for Campco Engineering Inc., Rock Hill, South Carolina.

1992
Archival Research and Architectural Survey of Proposed U.S. 78 Improvements, Elko to Bamberg, South Carolina. Prepared for BAKK Engineers Inc., Raleigh, North Carolina.

1992 with Paul E. Brockington, Jr.
Cultural Resources Survey of the Waterford Tract, York County, South Carolina. Prepared for the City of Rock Hill, South Carolina.

1992 with Christopher T. Espenshade, Nowl Ramirez Talavera, and Ethel Schlafer-Roman
Archaeological and Architectural Evaluation of Five Sites and Archaeological Survey of the Rio De Plata Flood Control Project, Puerto Rico. Prepared for the United States Army Corps of Engineers, Jacksonville District.

1992 with Christopher T. Espenshade, Ashely A. Chapman, and James B. Legg
Phase 1 Cultural Resource Survey, The United States Coast Guard Facility on Folly Island, Charleston County, South Carolina. Prepared for The United States Coast Guard and Army Corps of Engineers, Savannah District.

1992 with Ashley A. Chapman
Archaeological Survey of the Proposed Sycamore-Bamberg Electric Transmission Line, Bamberg and Allendale Counties, South Carolina. Prepared for Santee-Cooper Public Service Authority, Moncks Corner, South Carolina.

1992 with Paul E. Brockington, Jr.
Cultural Resources Background Study of the Proposed Dave Lyle Extension Area, York and Lancaster Counties, South Carolina. Prepared for LPA Group, Inc./Campco Engineering, Inc., Columbia and Rock Hill, South Carolina.

1992
Archaeological Survey of the Transco/Hartwell II Tract, Hart County, Georgia. Prepared for Transco Energy Ventures Company, Houston, Texas.

1991
Archaeological and Architectural Survey of the Proposed S.C. 161 Highway Improvements, York County, South Carolina. Prepared for LPA Group, Inc./Campco Engineering, Inc., Columbia and Rock Hill, South Carolina.

1991 with B.G. Southerlin, Marian D. Roberts, and Paul E. Brockington, Jr.
A Cultural Resource Survey of Proposed Widening Corridors Along U.S. Highway 521 and a Reconnaissance of Proposed Routes Bypassing Andrews, Georgetown, and Williamsburg Counties, South Carolina. Prepared for LPA Group, Inc., Columbia, South Carolina.

1991
Archaeological Reconnaissance and Architectural Survey of the Proposed U.S. 25 Improvements, Greenville County, South Carolina. Prepared for LPA Group, Inc., Columbia, South Carolina.

1991 with Carl Steen and Paul E. Brockington, Jr.
An Archaeological Survey of the Cope Power Plant Site, Orangeburg County, South Carolina. Prepared for Duke/Flour Daniel, Charlotte, North Carolina.

1991
Archaeological and Architectural Survey of the Proposed S.C. 161 Highway Extension, York County, South Carolina. Prepared for LPA Group, Inc./Campco Engineering, Inc,, Columbia and Rock Hill, South Carolina.

1991
Archaeological Survey and Testing of the Proposed Route Modifications, Laona to Goodman Pipeline Corridor, Forest County, Wisconsin. Prepared for American Natural Resources, Detroit, Michigan.

1991
Archaeological Survey and Testing of the Proposed American Natural Resources Gas Pipeline, Wood and Portage Counties, Wisconsin. Prepared for American Natural Resources, Detroit, Michigan.

1991 with Lawrence E. Abbott, Jr., Ashley A. Chapman, Christopher T. Espenshade, Jeffrey W. Gardner, Marian D. Roberts, and Matthew T. Wilkerson.
Inspection, Evaluation and Testing of Historic Sites Located at Falls Lake, Wake, Durham, and Granville Counties, North Carolina. Two Volumes. Prepared for U.S. Army Corps of Engineers, Wilmington District.

1991
Architectural Survey for U.S. Highway 78 Improvements, Aiken to Elko, South Carolina. Prepared for BAKK Engineers, Charlotte, North Carolina.

1991
Archaeological Survey and Testing of the Proposed Orange County Jail Facility, Echo Lake, New York. Prepared for Orange County, New York.

1991 with Eric C. Poplin
Archival Research for U.S. Highway 78 Improvements, Aiken to Elko, South Carolina. Prepared for BAKK Engineers, Charlotte, North Carolina.

1991
Harricane Multiple Resource National Register of Historic Places Nomination, Wake County, North Carolina. Prepared for U.S. Army Corps of Engineers, Wilmington, North Carolina.

1991
B.W. Wells House Individual National Register of Historic Places Nomination, Wake Forest, North Carolina. Prepared for U.S. Army Corps of Engineers, Wilmington, North Carolina.

1991
Architectural and Archaeological Survey of the Proposed Conway Waterfront, Conway, South Carolina. Prepared for the City of Conway, South Carolina.

1991
Technological and Stylistic Changes of Windows in Georgia, 1733-1945. Masters Thesis, University of Georgia.

1990
Archaeological Survey and Testing of the Proposed Devil's Fork State Park, Lake Jocassee, Oconee County, South Carolina. Prepared for Duke Power Company, Charlotte, North Carolina.

1990
Phase I Background Research and Reconnaissance of the Greenville Western Corridor Roadway, Greenville County, South Carolina. Prepared for LPA Group , Columbia, South Carolina.

1990
A Survey Survey: A Review of Architectural Surveys Throughout the Southeast. Independent Study, University of Georgia.

1989 with William Chapman
Stephens County Architectural Survey Report. Prepared for the State Historic Preservation Office, Atlanta, Georgia.

1988
Archaeological Investigations at the Walker/Richter House: Madison, Georgia. Senior Thesis, University of Georgia.

APPENDIX D: MISSISSIPPI DEPARTMENT OF ARCHIVES AND HISTORY COMMENTS

Dottie

Mississippi Department of Archives and History

Historic Preservation Division

PO Box 571 • Jackson, MS 39205-0571 • 601 / 359-6940 • Fax 601 / 359-6955 • mdah.state.ms.us

Established 1902

April 12, 2002

Mr. Hugh A. McClellan
Chief, Environment and Resources Branch
Mobile District, Corps of Engineers
Post Office Box 2288
Mobile, Alabama 36628-0001

Dear Mr. McClellan:

RE: Cultural Resources Phase I Survey for the Osborne Creek Environmental Restoration Project, Prentiss County, Report # 02-090

We have reviewed the 2002, cultural resources survey report of Brockington and Associates, Inc. for the above referenced undertaking pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. We concur that sites 22Ps603, 604, and 605 are of unknown eligibility for listing in the National Register of Historic Places. If the sites are to be in any way impacted by the proposed project, we concur that additional testing would be necessary to establish their eligibility.

If you need further information, please let us know.

Sincerely,

Elbert R. Hilliard
State Historic Preservation Officer

Thomas H. Waggener

BY: Thomas H. Waggener
Review and Compliance Officer

cc: Clearinghouse for Federal Programs