

PHASE ONE CULTURAL RESOURCES SURVEY

**Exhibit KK. Waterloo Site Phase I Cultural
Resources Assessment Report**

GEISMAR, ASCENSION PARISH, LOUISIANA

Draft Report



for
The Baton Rouge Area Chamber (BRAC)
564 Laurel St.
Baton Rouge, LA 70801

September 2, 2013



Surveys Unlimited Research Associates, Inc.

Archaeology

Historic Preservation

Cultural Resource Management

**PHASE ONE CULTURAL RESOURCES SURVEY
OF 114 ACRES (46.1 HECTARES)
PROPOSED FOR INDUSTRIAL USE
GEISMAR, ASCENSION PARISH, LOUISIANA**

Draft Report

By

**Malcolm K. Shuman, Taylor Gabour, Brandy Kerr, Rebecca Hood and Karl Shuman
SURA, Inc.
P.O. Box 14414
Baton Rouge, LA 70898-4414
(225) 381-8201**

For

**The Baton Rouge Area Chamber (BRAC)
564 Laurel St.
Baton Rouge, LA 70801**

September 2, 2013

ABSTRACT

From July 22 through July 26, 2013, SURA completed a Phase I cultural resources survey of 114 acres (46.1 hectares) to be certified for industrial use under the Sites Certification Program of the Louisiana Department of Economic Development. The survey area is located in Geismar, Ascension Parish, Louisiana. Survey methodology consisted of map research and shovel testing at high probability (HP) intervals. A total of 475 transect shovel tests were excavated.

One archaeological site (16AN57) was updated and its limits expanded. SURA concluded the site held the potential to shed important information on several themes listed in Louisiana's Comprehensive Archaeological Plan and it was recommended that the site either be avoided or that Phase II National Register of Historic Places eligibility testing be undertaken.

ACKNOWLEDGMENTS

The authors are grateful to many people for assistance during this project. The field crew was led by Ms. Taylor Gabour, and field crew consisted of Brandy Kerr, Rebecca Hood, and Karl Shuman. Dr. Malcolm Shuman, the Principal Investigator, made site visits and wrote the report, while Ms. Kerr and Ms. Hood performed lab work. Margaret Shuman assisted in formatting the report. Mr. Jim Cavanaugh, of BRAC, coordinated the project.

TABLE OF CONTENTS

| | |
|---|------------|
| ABSTRACT | ii |
| ACKNOWLEDGMENTS..... | iii |
| TABLE OF CONTENTS..... | iv |
| LIST OF FIGURES | iv |
| LIST OF TABLES | vi |
| CHAPTER ONE: INTRODUCTION | 1 |
| CHAPTER TWO: ENVIRONMENT | 3 |
| CHAPTER THREE: PREHISTORIC CULTURE HISTORY IN VICINITY OF PROJECT AREA | 6 |
| CHAPTER FOUR: HISTORY OF THE AREA | 15 |
| CHAPTER FIVE: PREVIOUS INVESTIGATIONS..... | 22 |
| CHAPTER SIX: METHODOLOGY | 28 |
| CHAPTER SEVEN: RESULTS OF THE SURVEY..... | 29 |
| CHAPTER EIGHT: CONCLUSIONS AND RECOMMENDATIONS | 81 |
| REFERENCES CITED | 83 |
| MAPS | 99 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1. Portion of Carville, La. (1999) 7.5-minute topographic quadrangle, showing project area (Source: USGS)..... | 1 |
| Figure 2. Aerial photograph of project area (Source: Client)..... | 2 |
| Figure 3. Major delta complexes and associated archaeological complexes in the Mississippi River deltaic plain (Adapted from Gagliano 1984:40)..... | 3 |
| Figure 4. Portion of soils map for Ascension Parish, showing soils in project area (Source: USDA 1971). | 4 |
| Figure 5. Prehistoric cultural chronology of southern Louisiana (Source: Weinstein et al. 1986)..... | 7 |
| Figure 6. Persac map (Norman’s Chart) (1858), showing Waterloo Plantation (Source: SURA, Inc.) | 29 |
| Figure 7. MRC Sheet 69 (1883), showing Waterloo Plantation area (Source: www.mvd.usace.army.mil/mrc | 30 |
| Figure 8. MRC Sheet 69 (1913), showing Waterloo Plantation area (Source: www.mvd.usace.army.mil/mrc | 31 |
| Figure 9. MRC Sheet 69 (1935), showing Waterloo Plantation area (Source: www.mvd.usace.army.mil/mrc | 32 |
| Figure 10. Portion of Carville, LA. (1936) 15-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC). | 33 |
| Figure 11. Portion of Carville, La. (1953) 7.5-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC). | 34 |
| Figure 12: Portion of Carville, La. (1974) 7.5-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC). | 35 |
| Figure 13: Portion of Carville, La. (1992) 7.5-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC). | 36 |
| Figure 14: Survey area, as seen T35, ST4, facing east..... | 37 |
| Figure 15: Survey area, as seen T35, ST4, facing NW. | 38 |
| Figure 16: Survey area, as seen T36, ST1, facing NE..... | 39 |
| Figure 17: Survey area, as seen T34, ST3, batture, facing SE..... | 40 |
| Figure 18. Transects followed during survey (Source: Google Earth)..... | 41 |
| Figure 19. Representative negative shovel test profiles. | 42 |
| Figure 20. Portion of 1999 Carville, La. 7.5-minute map showing APE (red) and site 16AN57 (yellow). | 43 |
| Figure 21. Aerial photograph showing APE (red) and site 16AN57 (yellow) (Source: Google Earth). | 44 |
| Figure 22. Aerial photograph showing NW portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth). ... | 45 |
| Figure 23. Aerial photograph showing north-central portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth). | 46 |
| Figure 24. Aerial photograph showing south-central portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth). | 47 |

| | |
|---|----|
| Figure 25. Aerial photograph showing southern portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth). | 48 |
| Figure 26. Banded (Mocha) whiteware, 40S10E, surface, Loc. 1, 16AN57 | 66 |
| Figure 27. Banded (Mocha) whiteware, surface, 30S30E, Loc. 1, 16AN57 | 67 |
| Figure 28. Classic Mocha whiteware, ST20S10W, Loc. 1, 16AN57 | 68 |
| Figure 29. Blue shell-edged whiteware, surface, 50N150W, Loc. 1, 16AN57. | 69 |
| Figure 30. Blue shell-edged whiteware, ST 300S20W, Loc. 2, 16AN57. | 70 |
| Figure 31. Porcelain, ST30S120W, Loc. 1, 16AN57. | 71 |
| Figure 32. Stoneware, surface, 20S20E, Loc. 1, 16AN57. | 72 |
| Figure 33. Transfer pearlware, ST20S10W, Loc. 1. | 73 |
| Figure 34. Creamware, ST230S20W, Loc. 2. | 74 |
| Figure 35. Cut nail, ST30N20W, Loc. 1, 16AN57, T28ST3. | 75 |
| Figure 36. Cut nail, ST0N60E, Loc. 1, 16AN57. | 75 |
| Figure 37. Neck of blown-glass wine bottle, ST at Datum (0N0W), Loc. 1, 16AN57. | 76 |
| Figure 38. Tooth (Probably <i>Bos spp.</i>), ST10N10W, Loc. 1, 16AN57. | 77 |
| Figure 39. Tooth (Probably <i>Equus spp.</i>), ST0N60E, Loc. 1, 16AN57. | 78 |

LIST OF TABLES

| | |
|---|----|
| Table 1. Shovel Test Number Key for 16AN57. | 48 |
| Table 2. Artifacts recovered from 16AN57. | 51 |

CHAPTER ONE: INTRODUCTION

From July 22 through July 26, 2013, SURA completed a Phase I cultural resources survey of 114 acres (ac) (46.1 hectares [ha]) to be certified for use as an industrial site under the Louisiana Department of Economic Development (LED) Site Certification Program. The area of potential effects (APE) is located in Geismar, Ascension Parish, Louisiana, fronting the left descending bank of the Mississippi River (Figures 1 and 2). Survey methodology consisted of map research and shovel testing at high probability (HP) intervals.

The survey consisted of four persons. A total of 475 transect shovel tests were excavated..

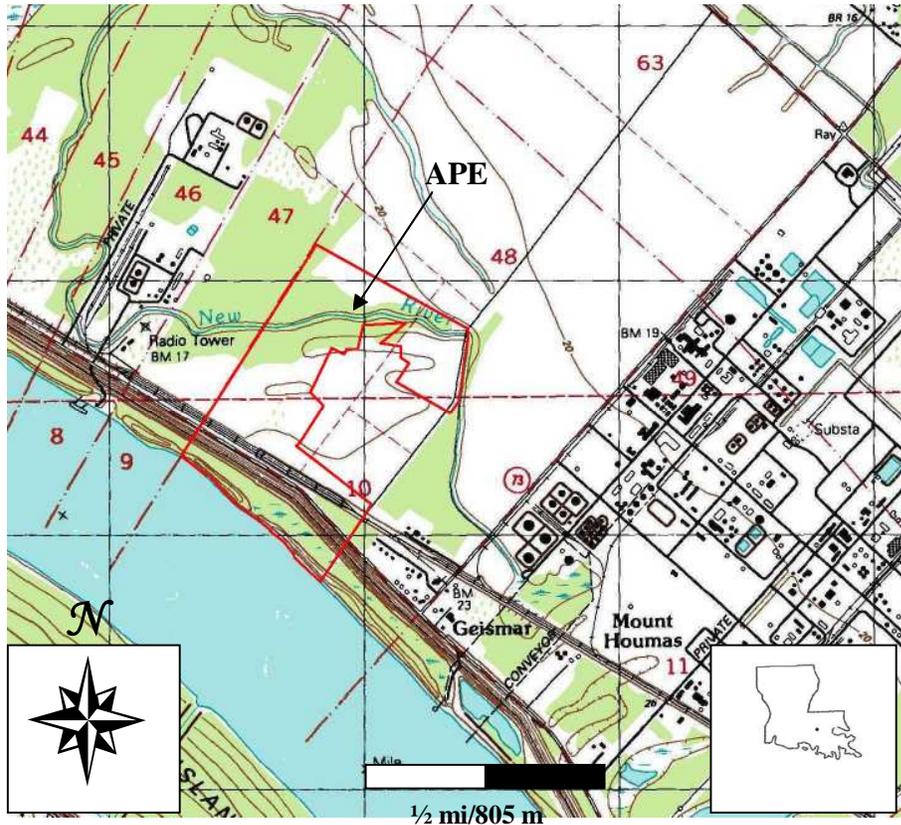


Figure 1. Portion of Carville, La. (1999) 7.5-minute topographic quadrangle, showing project area (Source: USGS).



Figure 2. Aerial photograph of project area (Source: Client).

CHAPTER TWO: ENVIRONMENT

Geomorphology

The most influential factors in determining the natural setting of the project area are the fluvial geomorphological processes associated with the lower Mississippi River. The meandering nature of the river, its associated tributaries and distributaries, the building of natural levees, and crevasses in the natural levee, affected the extent, time, and nature of prehistoric and historic occupations.

The Mississippi River changed abruptly, in geological terms, from a river of braided channels to a meandering stream approximately 12,000 years ago. This change is generally thought to have been caused by a rise in sea level dating from the end of the last Ice Age (Gagliano 1984, Figure 3).

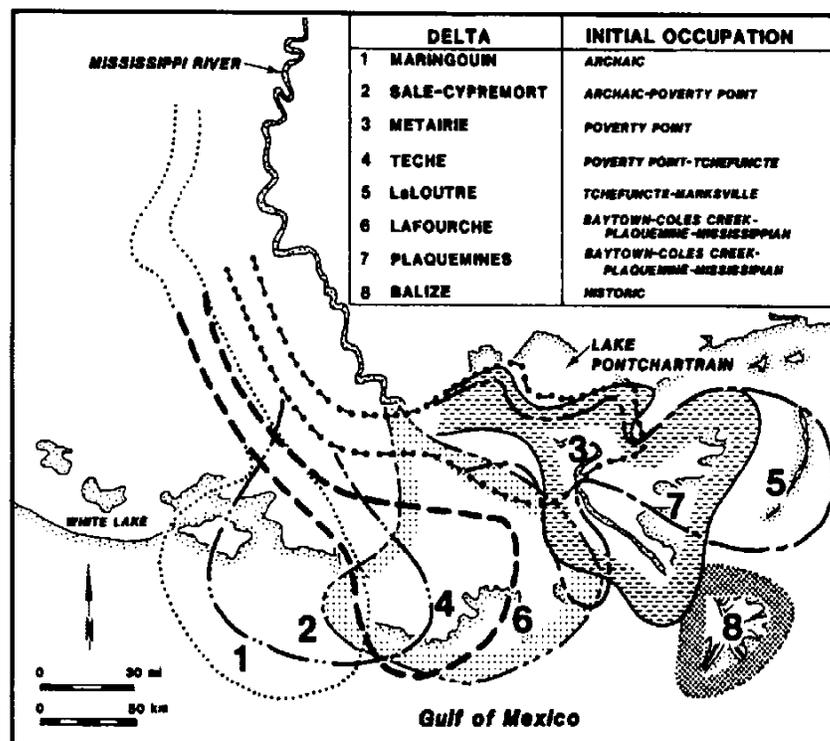


Figure 3. Major delta complexes and associated archaeological complexes in the Mississippi River deltaic plain (Adapted from Gagliano 1984:40).

This geomorphological event may have also coincided roughly with the arrival of man into what is now the Mississippi Valley-Gulf Coast region. In fact, archaeology and geomorphology have aided each other in dating the locations and times of the various shifts

in the Mississippi River and its attendant streams because aboriginal occupations appear to have generally occurred along active stream channels (e.g. Russell 1938, McIntire 1958, Gagliano 1984).

Soils

The soils in the study area are mapped as pertaining to the Sharkey association. Sharkey soils are clays that occur on the lower elevations of natural levees of the Mississippi River (USDA 1971). The soil distribution is shown in Figure 4.

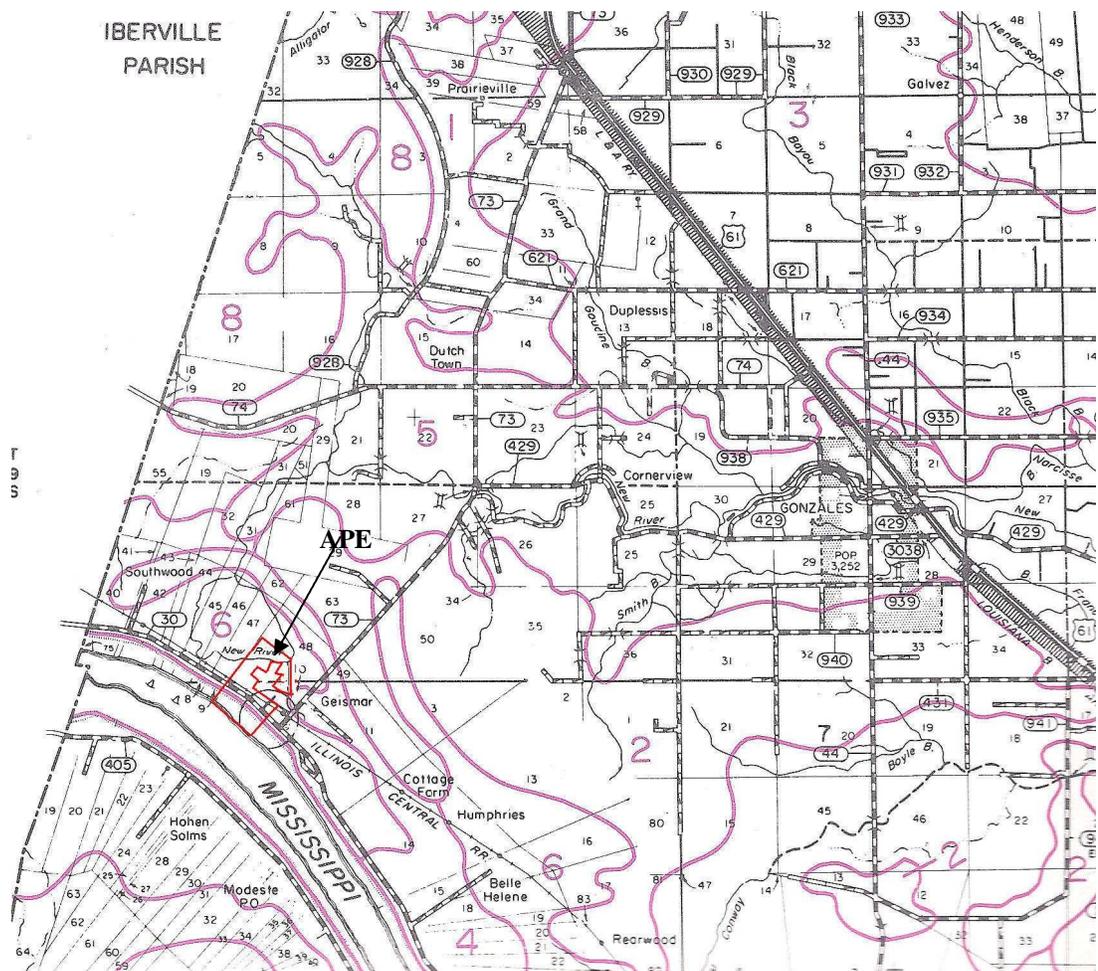


Figure 4. Portion of soils map for Ascension Parish, showing soils in project area (Source: USDA 1971).

Vegetation

In terms of natural vegetation, this region contains a mix of cypress (*Taxodium distichum*) and such hardwood varieties as water oak (*Quercus nigra*), hickory (*Carya spp.*), and hackberry (*Celtis laevigata*). In the areas of lower elevation that are affected by alluviation, species such as palmetto (*Sabal minor*) and water willow (*Salix nigra*) grow in abundance. Other flora are rich and varied and include broomsedges, briars, and poison ivy (Brown 1945).

Fauna

Animal life is likewise diverse and most of the 62 mammal species found in Louisiana may at one time have been found within the area. These include white-tail deer (*Odocoileus virginianus*), cottontail rabbit (*Sylvilagus floridanus*), swamp rabbit (*Sylvilagus aquaticus*), gray squirrel (*Sciurus carolinensis*), fox squirrel (*Sciurus niger*), skunk (*Mephitis mephitis*), black bear (*Euarctos americanus*), raccoon (*Procyon lotor*), mink (*Mustela vison*), beaver (*Castor canadensis*), opossum (*Didelphus virginiana*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*) and red fox (*Vulpes fulva*) (Lowery 1974). Birds include such predators as the great horned owl (*Bubo virginianus*), barred owl (*Strix platypterus*), marsh hawk (*Circus cyaneus*), and many others. Non-predatory types include woodcocks (*Philohela minor*), wood ducks (*Aix sponsa*), bobwhite quail (*Colinus virginianus*), and mourning doves (*Zenaidura macroura*) (Lowery 1955).

Reptile life is particularly diverse, owing to the heterogeneity of habitats in the area. Included are alligators (*Alligator mississippiensis*), several species of snakes, including the cotton mouth (*Agkistrodon contortrix*), and varied species of lizards and turtles. Amphibians include species of salamanders, frogs, and toads (Dundee and Rossman 1989).

Fish life is very prolific in this part of Louisiana and no doubt was likewise prehistorically. Prominent fish species are gar (*Lepisosteus spp*), largemouth bass (*Micropterus salmoides*), and bluegill (*Lepomis macrochirus*), among many others. Brackish water clams (*Rangia cuneata*) are frequently found in archaeological deposits near coastal Louisiana, although there are several archaeological sites in the vicinity of the project area that contain these shells indicating a more brackish water environment than exists currently.

CHAPTER THREE: PREHISTORIC CULTURE HISTORY IN VICINITY OF PROJECT AREA

It is unknown when humans first entered the New World. Some researchers would place this event as early as 40,000 years ago, but more conservative investigators would place the first Americans at no earlier than 23,000 B.P. Whatever the case, by 10,000 years ago Paleoindians were living in caves at the Straits of Magellan, so that their entry into the New World must have occurred several thousand years prior to that, as a minimum (Neuman 1984:58) (See Figure 5).

In Louisiana, there is evidence of Paleoindians, both from a series of surface finds of fluted points, and from excavations (e.g., Webb et al. 1971). Most of these data derive from the northern half of the state; evidence from the Coastal Zone is somewhat more ambiguous. During the 1960s, Sherwood Gagliano carried out a series of investigations at Avery Island, a salt dome island in Iberia Parish (Gagliano 1963; 1967; 1970). The results of these investigations led Gagliano to conclude that Avery Island had been inhabited by a “pre-Clovis” culture associated with a bipolar tool industry. As Neuman has written, however, Gagliano has been unable to point to a single Paleoindian artifact *in situ*, and his bipolar industry could just as easily be Archaic in date, judging from similar assemblages found elsewhere in Archaic contexts. In fact, a radiocarbon date for split cane matting found *beneath* extinct animal bones is Archaic (2310 ± 1590 B.C.), a fact that suggests that some of the important material found by Gagliano had been contextually disturbed (Neuman 1984:63-65). Finds of Dalton, Plainview and San Patrice points at the Blackwater Bayou (16EBR33) and Jones Creek (16EBR13) sites indicates that Paleoindian occupations were present in the region of the current project area (Weinstein et al. 1977).

ARCHAIC PERIOD (6,000 B.C.-1500 B.C.)

This period represents a time of heavy exploitation of wild plant foods and of small game, representing adaptation to an expanding boreal environment (Weinstein and Kelley 1984:32-34). The initial part of this period, the Early Archaic (6000-5000 B.C.), is defined by a series of distinctive projectile points and it has been suggested that society was organized at the band level and focused on a seasonal round of hunting and gathering. The succeeding Middle Archaic period (5000-3000 B.C.) was hallmarked by widespread regional differentiation of cultures and the development of ground stone technology (Weinstein and Kelley 1992:30). This subperiod corresponds to the Hypsithermal Interval, a time of increased warmth and aridity in areas around the Great Plains. It is presently unclear what effect this may have had on the Southeast.

| STAGE | PERIOD | CULTURE | TIME INTERVAL | PHASES | | |
|---------------|----------------------|-----------------------------|----------------------------|-----------------------------------|------------------|--------------|
| | | | | EASTERN AREA | CENTRAL AREA | WESTERN AREA |
| FORMATIVE | HISTORIC | VARIOUS CULTURES | A.D. 1800 | | VARIOUS TRIBES | LITTLE PECAN |
| | MISSISSIPPI | MISSISSIPPIAN PLAQUEMINE | A.D. 1700 | | PETITE ANSE | |
| | | | A.D. 1600 | DELTA NATCHEZAN | BURK HILL | BAYOU CHENE |
| | | | A.D. 1500 | MEDORA BARATARIA | | |
| | COLES CREEK | TRANSITIONAL COLES CREEK | A.D. 1200 | ST. GABRIEL | THREE BAYOU | HOLLY BEACH |
| | | COLES CREEK | A.D. 1000 | BAYOU RAMOS | MORGAN | JEFF DAVIS |
| | | | A.D. 900 A.D. 850 | BAYOU CUTLER | WHITE LAKE | WELSH |
| | BAYTOWN | TROYVILLE-LIKE | A.D. 700 | WHITEHALL | ? | ROANOKE |
| | MARKSVILLE | MARKSVILLE | A.D. 400 | GUNBOAT LANDING | VEAZEY | LAKE ARTHUR |
| | | | A.D. 300 | MAGNOLIA & MANDALAY SMITHFIELD | JEFFERSON ISLAND | LACASSNE |
| A.D. 1 | | | LABRANCHE | | | |
| TCHULA | TCHEFUNCTE | 250 B.C. | BEAU MIRE | LAFAYETTE | GRAND LAKE | |
| ARCHAIC | POVERTY POINT | POVERTY POINT | 500 B.C. | PONTCHARTRAIN | | |
| | LATE ARCHAIC | ARCHAIC | 1000 B.C. | GARCIA | BEAU RIVAGE | |
| | | | 1500 B.C. | BAYOU JASMINE | RABBIT ISLAND | |
| | MIDDLE ARCHAIC | ARCHAIC | 3000 B.C. | PEARL RIVER | COPELL | BAYOU BLUE |
| | 5000 B.C. | | MONTE SANDO AMITE RIVER | BANANA BAYOU | ? | |
| EARLY ARCHAIC | ARCHAIC | 6000 B.C. | ST. HELENA | ? | ? | |
| LITHIC | LATE PALEO | PALEO-INDIAN | 8000 B.C. | JONES CREEK | VATICAN | STROHE |
| | EARLY PALEO | | ? | AVERY ISLAND | ? | |
| | PRE-PROJECTILE POINT | ? | 10,000 B.C. | ? | ? | ? |

Figure 5. Prehistoric cultural chronology of southern Louisiana (Source: Weinstein et al. 1986).

The Middle Archaic is poorly represented in south Louisiana. Weinstein and Kelley (1992:30-31) suggest that components of the Banana Bayou phase may be identified in this area in the future. Banana Bayou (16IB24) is a site on Avery Island where the mound at the site yielded Williams and Pontchartrain points, crude bifaces, lithic debitage and a fairly large number of based clay objects (Brown and Lambert-Brown 1978). Another site of some importance is 16IB101, which is located on the edge of the Prairie Terrace, overlooking the Teche channel, just south of New Iberia. This site contains a Middle Archaic component and “may represent an elevated habitation locale associated with the active Teche-Mississippi” (Weinstein and Kelley 1992:33).

The Late Archaic subperiod (3000-1500 B.C.) was a time of pronounced population increase and the development of extensive trade networks. Three geographically distinct phases have been identified for Coastal Louisiana, but only one of these, the Pearl River Phase, is well known (Gagliano and Webb 1970; Weinstein and Kelley 1992:33). The remaining two phases are the Copell phase, derived from a preceramic cemetery on Pecan Island (Collins 1941), while the Bayou Blue Phase comes from a site (16AL1) in Allen Parish (Coastal Environments, Inc. [CEI] 1977; Gagliano et al. 1982; Weinstein et al. 1977; 1979). Typical diagnostic artifacts include Evans, Palmillas, Ensor, Macon, Gary, and Pontchartrain points and such ground stone implements as winged atlatl weights and tubular pipes (Weinstein and Kelley 1992:33).

The only Late Archaic phase so far identified for southeast Louisiana is the Pearl River phase, suggested by Gagliano on the basis of oyster shell middens associated with early coastal features. Artifacts associated with this phase are Kent, Macon, Hale, and Palmillas projectile points and certain types of atlatl weights (Gagliano 1963).

NEO-INDIAN PERIOD (1500 B.C.-A.D.1500)

The Neo-Indian period saw the introduction of ceramics, the widespread use of cultigens and the importation of the bow-and-arrow. The construction of earthen mounds, while apparently practiced to some extent during the Late Archaic (Gibson 1994, Russo 1994, and Saunders 1994), became highly developed during the Neo-Indian period and the focus of ceremonial, mortuary and political activity (Neuman 1984). A number of cultures flourished during this time span, as detailed below.

Poverty Point Culture (1500 B.C.-500 B.C.)

This culture, named for the gigantic semi-circular earthworks in West Carroll Parish (16WC5), was widespread throughout Louisiana, Arkansas and Mississippi and was closely related to similar cultures in Missouri, Tennessee, Alabama and Florida (Neuman 1984:90). The origins of Poverty Point remain obscure, although Neuman suggests that both local adaptation and influences from Meso-America were involved (Neuman 1984:91). The material culture of Poverty Point featured baked clay balls (Poverty Point Objects),

microlithic and lapidary industries and the construction of earthworks. The presence of pottery is debatable, although Clarence Webb (1982:40-42) discusses a number of cases in which ceramics have been found at Poverty Point sites. Hunting and gathering seem to have been the mainstays of Poverty Point subsistence and squash and chenopodium may have been cultivated during this period (Webb 1982:13).

Other important Poverty Point sites in the region are Jaketown and Teoc Creek, in Mississippi; the Terral Lewis Site (16MA16) and the J.W. Copes Site (16MA36), both in Madison Parish, Louisiana; the Aaron site (16EC39) in East Carroll Parish and the Cowpen Slough (16CT147) and Dragline (16CT36) sites in the Tensas Basin. In South Louisiana, sites with probable Poverty Point components include: Rabbit Island (16SMY8), Cargill Canal (16SMY102) and 16SMY132 (Weinstein and Kelley 1992:34). It should be noted in connection with the latter site, however, that more recent investigations by Kuttruff and Shuman failed to find a Poverty Point component at this site (Kuttruff et al. 1993). By 800 B.C., Poverty Point culture had begun to decline and the extensive trade network that formed a pivotal part of the culture had withered. For several centuries thereafter, prehistoric society in Louisiana centered on small bands of hunters and gatherers.

Tchefuncte Culture (500 B.C.-A.D.1)

The successors of Poverty Point culture were the Tchefuncte people, whose name derives from the site of that name in St. Tammany Parish (16ST1). Smith et al. (1983:163) have defined this period as being characterized by a simpler way of life, similar to the Late Archaic, but with the introduction of a ceramic complex. The Tchefuncte people were hunter-gatherers who also, apparently, possessed horticulture to some degree, cultivating squash and bottle gourd (Byrd 1974). A wide variety of animals were hunted, including deer, raccoon, ducks, muskrat, otter, bear, gray fox, ocelot and alligator. It seems that crustaceans were not eaten.

In south Louisiana, the Tchefuncte culture is especially known for its shell middens, heaps of shells from the brackish water clam, *Rangia cuneata*. These clams were evidently widely eaten although Byrd has shown that their nutritive value is minimal (Byrd 1977; Neuman 1984:118).

The lithic artifact inventory of Tchefuncte people included adzes, drills, hammer stones, knives, scrapers and projectile points. Ground stone artifacts include abraders, atlatl weights, beads, cobble hammer stones, grooved plummets, mortars and pitted stones. Baked clay objects continued to be made, but in less variety and in fewer numbers than at Poverty Point (Smith et al. 1983:163).

Weinstein and Kelley (1992:34-35) suggest that the Tchefuncte people were mound builders, but Neuman (1984:135) writes, "the evidence to support the theory that the Tchefuncte Culture Indians were mound builders is most vague." Significant sites in the

current project area with Tchefuncte components are the Kleinpeter site (16EBR5), the Lee site (I6EBR51), the Sarah Peralta site (16EBR67), and the Beau Mire site (16AN17).

Marksville Culture (A.D. 1-400)

This culture, named for the type site in Avoyelles Parish (16AV1), was closely allied to the Hopewell culture of the Ohio and Illinois river valleys. The Marksville people constructed domed earthen mounds in which they buried their dead leaders, usually with funerary offerings (Neuman 1984). Marksville ceramics are finely made, with characteristic broadly incised lines and rocker stamping. The bird design is a frequent motif. Marksville ceramics are, in fact, often hard to distinguish from those made by Hopewellian peoples, leading to much speculation about the nature of the Marksville-Hopewell interaction. Toth (1988) felt that the main evidence for such an interaction derives from Marksville mortuary practices and the comparison of ceramic types. Other cultural practices, such as subsistence and settlement pattern, may not have been a part of whatever relationship existed between the two groups. It has been speculated that Marksville subsistence was based on hunting and the intensive gathering of wild foods; the evidence for maize agriculture is still weak (Weinstein and Kelley 1992:35).

On the basis of his survey of sites along the Amite River, east of Baton Rouge, Weinstein identified two phases for Marksville (Smithfield and Gunboat Landing) for the eastern part of Louisiana (Weinstein 1974). The Kleinpeter site (16EBR5), located on a terrace overlooking Bayou Fountain, also contains a significant late Marksville component (Jones et al. 1994). Other significant sites in South Louisiana appear to be the Gibson Mounds (16TR5) and Mandalay Plantation (16TR1), both in Terrebonne Parish. Other late Marksville locations are 16TR4, 16TR47, 16TR76 and 16TR77. In addition, Gibson (1978) produced evidence of a late Marksville occupation from a test pit into the Oak Chenier site (16SMY49), near the confluence of bayous Penchant and Chene. This excavation also yielded a flexed human burial. Surveys Unlimited Research Associates (SURA) reported a late Marksville component from two test units south of Mound B at the Broussard Mounds site (16AN1) on New River in Ascension Parish. They were not able to determine, however, if the other two mounds at the site were contemporary with this time period (Shuman et al. 1995).

Baytown Culture (A.D. 400-700)

Baytown (or Troyville) is perhaps the most problematical period in Louisiana prehistory. Partly this owes to the manner of its original definition (Gibson 1982; Belmont 1982). But it is also true that the period has been dealt with differently by different authors. Neuman, for instance, places it with Coles Creek, calling the two “Troyville-Coles Creek.” Some authors, on the other hand, separate it, as a distinct period between Tchefuncte and Coles Creek (Weinstein and Kelley 1992:36-37). Weinstein and Kelley (1992:36) suggest that the development of Baytown in the Lower Mississippi Valley is associated with the

appearance of Quafalorma and Woodville painted pottery, along with Mulberry Creek cord-marked, Salomon Brushed, and Alligator Incised ceramics. The attempt to devise phases for South Louisiana has been difficult. For example, the Whitehall Phase, named for a site on the Amite River (16LV19), is the only representative of its phase in the vicinity of the project area (Weinstein and Kelley 1992:36).

Even so, Baytown components have been found at several locations in south Louisiana. These include, again, 16EBR5; 16EBR51; 16EBR67; The Gibson Mounds (16TR5), investigated by Weinstein et al. (1978); and Richeau Field (16TR82), a low mound on the Teche-Mississippi natural levee just southwest of Gibson (Weinstein et al. 1978). Finally, there is likely a Baytown component at 16IB3, the Morton Shell mound, of which its excavator writes...“Although there were no unequivocal occurrences of funerary accompaniments with the Morton Shell Mound burials, the shell midden matrix did contain sherds attributable to late Marksville and Troyville-Coles Creek times” (Neuman 1984:200).

Coles Creek Culture (A.D. 700-1200)

The Coles Creek culture represents a cultural florescence in the Lower Mississippi Valley. The settlement pattern involved hamlets and small villages, centered around one or more pyramidal earthen mounds. These mounds served as platforms for temples and the houses of leaders. Coles Creek culture was widespread in Louisiana and Mississippi and appears to have been related to the very similar Weeden Island culture of northwest Florida (Weinstein and Kelley 1992:37).

Ceramic decoration in Coles Creek time centered around incised, stamped and punctated designs that usually were restricted to a band around the rim of the vessel (Weinstein and Kelley 1992:37; Neuman 1984:186). The economic basis of Coles Creek society is not clear. It has been widely assumed that maize was important to these people (e.g., Smith et al. 1983:182), but it has been impossible to demonstrate this due to a lack of *Zea mays* in securely dated Coles Creek contexts (Weinstein and Kelley 1992:37).

South Louisiana contains an abundance of Coles Creek sites, several of which (e.g., 16IV6, 16VM9, 16AS35, 16SMY1 and 16EBR5) have been at least partially excavated. From this several temporally distinct phases have been developed. These are the Bayou Cutler, Bayou Ramos and St. Gabriel Phases. Bayou Cutler derives from the work of Kniffen (1938), and was refined by Phillips (1970), who utilized data on 74 sites in the lower reaches of the Lower Mississippi Valley. The Bayou Ramos phase was developed by Weinstein in St. Mary Parish at Bayou Ramos I (16SMY133). And the St. Gabriel Phase was defined at a site in Iberville Parish (16IV128) excavated by Woodiel (1993).

Mississippi Period (A.D. 1200-1700)

The Mississippi period in the Southeastern United States is a time when cultural influences from the Central Mississippi Valley increasingly influenced the indigenous cultures of the region. In Louisiana, this is reflected both in the Plaquemine culture, an outgrowth of the preceding Coles Creek, and the Mississippian culture proper. It is represented by vast complexes of truncated earthen pyramids and the use of shell temper in ceramics, as well as in distinctive ceramic forms, such as effigy vessels. Mississippian culture sites were often fortified (Stoltman 1978:725). During this period, social and political organization appears to have centered on a chiefdom and subsistence was based on the triad of maize, beans and squash.

Mississippian culture seems to have radiated from the Cahokia mounds group in Illinois, with its influence eventually extending both down the Mississippi River and along the Gulf Coast. In Louisiana, Plaquemine culture is represented at such sites as the Medora site (16WBR1), the Kleinpeter Site (16EBR5), the Bayou Goula Site (16IV11), Pritchards Landing (16CT14) the Fitzhugh Site (16MA1) and many others (Smith et al. 1983:197; Jones et al. 1994).

The nature of the relationship between Plaquemine and Mississippian culture is as yet unclear. Phillips (1970), for example, considered Plaquemine culture to have evolved by about A.D. 1000 and to have thereafter been steadily influenced by the Mississippians until about A.D. 1400, when Mississippian groups actually displaced the indigenous Plaquemine peoples. Brain (1978), however, would place Coles Creek as lasting until approximately A.D. 1200, when it was influenced so heavily by Mississippian culture that it evolved into Plaquemine, which is, in his view, a hybrid.

Based on information developed largely from ceramic analyses, three regional phases have been suggested for early Plaquemine culture in this general area. The first is the Medora Phase, based on the work of Quimby (1951) at the Medora Site (16WBR1) in West Baton Rouge Parish. The second is the Baratavia Phase, based largely on work at the Fleming Site (16JE36) (Holley and DeMarcay 1977), and the third is Burk Hill, which derives from the work of Brown (1982) at the Burk Hill site (16IB100) on Cote Blanche Island. It was also during early Plaquemine times that material relating to the "Southern Cult" appears. This term is used to denote a complex of traits that first appears around A.D. 1000 and reaches its zenith about A.D. 1500. This complex is associated especially with Mississippian culture proper but it crossed cultural boundaries in the eastern United States (Neuman 1984:276). The complex focuses on an art style involving certain specific motifs, such as the cross, the sun, a bi-lobed arrow, the circle, the forked eye, the open eye, the barred oval, the hand and eye, and death motifs (Neuman 1984:277).

Perhaps the preeminent Plaquemine site near the study area is the Kleinpeter site (16EBR5), a location consisting of six mounds and extensive midden areas. The site appears

to have been abandoned prior to the arrival of the first Europeans, probably at some time during the Delta Natchezan phase (Jones et al. 1994).

PROTOHISTORIC CULTURES AND GROUPS

The first Europeans to see this area were probably the survivors of the De Soto expedition, who passed down the Mississippi River en route to the Gulf in 1542. The beginning of sustained contact with whites, however, was the La Salle exploration of 1682. This party, led by Rene Robert Cavelier, Sieur de La Salle, sailed all the way from Canada to the mouth of the Mississippi and claimed the entire area for France before returning to Canada. Two years later La Salle attempted to relocate the mouth of the river from the Gulf and to establish a colony in the new land. Unfortunately, he missed the mouth of the river and landed in Texas, where he was eventually murdered by his men. It would not be until 1698 that another French expedition was sent.

This time the leaders were Pierre le Moyne, Sieur d'Iberville, and his brother, Jean-Baptiste Le Moyne, Sieur d'Bienville. That year, after landing near Biloxi, Iberville led an exploring party up the Mississippi to the mouth of the Red River (McWilliams 1981). During his trip, Iberville encountered a number of aboriginal groups. These included the Bayougoula, Quinapissa, Houma and the Mugulasha. The Bayougoula and Mugulasha lived in a single village on the west bank of the Mississippi above Bayou Lafourche (Swanton 1911:274). The Houma lived just north of them, their main village being in Wilkinson County, Mississippi or West Feliciana Parish, Louisiana (Swanton 1911:285; Guevin 1983 :49-64). The dividing line between the territories of the two nations was just above Baton Rouge (McWilliams 1981). The Quinapissa lived in seven villages "eight days' travel overland east-northeast of (the Bayougoula) village."

Iberville, who wished to visit the Quinapissa, found that they and the Bayougoula "are not on visiting terms because of some pique between the two chiefs" (McWilliams 1981:56). Apparently, the Quinapissa were not on very good terms with the Houma either, for Iberville writes that "The Bayougoula told me that the Ouma were the ones that had destroyed the village of the Tangibao, which was one of the Quynypyssa's seven villages and that now they are only six, as the Ouma carried off the remnant families of Tangibao and brought them to their village...(McWilliams 1981:61)." After proceeding upstream into the territory of the Houma, Iberville turned back and made his way to his ships in the Gulf via the short-cut of Bayou Manchac (McWilliams 1981).

The continued arrival of Europeans in the Lower Mississippi Valley and the Southeast throughout the eighteenth century set in motion a chain of major population upheavals among the native Americans. The Houmas, for instance, after an attack by the Tunicas, moved south to the vicinity of New Orleans in 1706 and then, in 1709, to Ascension Parish. In Ascension they built two, or possibly three, villages. One village, the Grand Village of the Houmas, was located near Burnside; Guevin has identified the Grand Village as site 16AN35 (Guevin 1983). The second village may be associated with site 16AN3 near

Geismar (D'Anville 1732). Charlevoix visited this village in 1722 and mentioned that there were French houses associated with it (Charlevoix 1976:165). The Houma lived in Ascension parish until the late eighteenth century, finally selling their land and moving to Terrebonne Parish (Swanton 1911:290-291). The Bayougoula, in 1706, allowed the Taensa to come live with them, but seven years later the latter rose up and slew their hosts (Swanton 1946). The remainder of the Bayougoula fled to Plaquemine Parish. By the 1730s they seem to have merged with the Houma (Guevin 1990:13).

CHAPTER FOUR: HISTORY OF THE AREA

This chapter presents a broad overview of historic patterns in the vicinity of the project area. In addition, there are descriptions of several specific places, events, or organizations in the area.

EARLY EUROPEAN EXPLORATION AND SETTLEMENT

European explorers, lured by prospects of gold, began exploring the southeast United States within decades after Columbus' arrival in the New World. Early exploration efforts, however, ignored much of Louisiana. The Spaniard Cabeza de Vaca, a member of the ill-fated Panfilo de Narvaez expedition, sailed along the coast of southwest Louisiana in 1527 on his way to Texas, but did not travel into the interior. In 1541, Hernando de Soto became the first European interloper into what is now Louisiana. Hernando de Soto's men followed the Mississippi River to the Gulf of Mexico in 1542. This early Spanish claim to Louisiana was tenuous, as no Spanish settlers moved in to maintain the claim (Louisiana Work Projects Administration 1941:37-43).

The French were more successful in establishing a right to Louisiana. During the seventeenth century, the French began scouting the major waterways. Traveling down the Mississippi River in 1682, French explorer Robert Cavelier, Sieur de la Salle, claimed Louisiana and named it for the French King, Louis XIV. But to maintain that claim, there would have to be a French presence. In 1698, Pierre le Moyne, Sieur d'Iberville led a French expedition to establish settlement in Louisiana. Upon reaching the Gulf Coast in early 1699, d'Iberville followed the coast westward to the mouth of the Mississippi River and moved upriver. He came across several Indian villages as he moved upstream, and from the Bayogoulas he learned about Bayou Manchac or the Ascantia River that provided an alternate route between the Gulf coast and the Mississippi River. By following Bayou Manchac, a Mississippi River tributary, eastward to Lake Maurepas, then through Pass Manchac into Lake Pontchartrain, travelers could get to the gulf easily and bypass the long and difficult trip down the Mississippi River. Europeans initially referred to the waterway as the Iberville River (Wall 1990: 15-27; McWilliams 1981:64-65).

As they continued up the Mississippi, the Iberville party came to an area of higher ground with a red stick in the soil. This "baton rouge" marked the boundary between the Bayogoulas and the Oumas. The settlement later founded on this spot was named for the red stick. Iberville returned to his camp at Biloxi by way of Bayou Manchac, cutting days off his trip. Although the passage required many portages, he believed that it could be cleared for easier travel (McWilliams 1981:25, 64-8 1).

France quickly recognized the potential of Louisiana, and established settlements along the Mississippi, Red, and Ouachita Rivers during the early eighteenth century in order to maintain their claim to the territory. British settlements in the interior of North America spurred the French on to more actively promote settlement. In 1712, Louis XIV contracted with Antoine Crozat, and in 1717 with John Law, to establish trade and colonize Louisiana. Law's Company of the West granted land to willing settlers. Those settlers founded New Orleans in 1718 (Williamson and Goodman 1939:9-28; Louisiana Work Projects Administration 1941:37-43).

Captain Bernard Diron Dartaguet also established a settlement at the first permanently dry high ground on the Mississippi River, at what is now Baton Rouge, in 1718. The settlement was abandoned a few years later (Albrecht 1945:59-62). By 1740, there were French people living along the navigable waterways in Louisiana, but political events in Europe changed the course of settlement. In 1762, France ceded Louisiana to Spain under the Treaty of Fontainebleau. But in 1763 with the Treaty of Paris, Spain relinquished to Great Britain the territory of West Florida in exchange for Havana. West Florida included the land east of the Mississippi River and west of the Apalachicola River, but north of Bayou Manchac and Lakes Maurepas and Pontchartrain. The British immediately began efforts to settle the Florida Parishes by conferring land grants to British officers and soldiers. The amounts of land varied according to military rank, from 5,000 acres for field officers, to 300 acres for privates (Williamson and Goodman 1939:9-28; Louisiana Work Projects Administration 1941:37-43; Arthur 1935:12-15).

Unfortunately for Great Britain, Spain continued to control the mouth of the Mississippi River and New Orleans, both of great strategic importance. In 1779, Spain declared war against Great Britain. Due to its strategic location between Natchez and New Orleans, Spain reclaimed West Florida. Upon recapturing West Florida in 1779, Don Bernardo de Galvez encouraged settlement by giving out large land grants to settlers loyal to the Spanish crown. Spain recognized the agricultural potential of Louisiana as well, and in return for Spanish land grants, settlers were required to clear land for agriculture and to build and maintain levees (Williamson and Goodman 1939:9-28; Louisiana Work Projects Administration 1941:37-43; Arthur 1935:12-15).

As a result, Spanish, English and French immigrants moved into the region. Acadian refugees, fleeing political and religious persecution from the British in Canada, also settled in south Louisiana. The first Acadians settled near Fausse Point in 1765, but Acadians or Cajuns dispersed throughout southern Louisiana.

In 1800, after nearly four decades of Spanish rule, the Treaty of San Ildefonso returned control of most of Louisiana to France. The Florida Parishes remained under the control of Spain. Shortly after the actual restoration in 1803, France sold Louisiana to the United States. West Florida, including East Baton Rouge Parish, was in an area disputed by the United States and Great Britain, but held by Spain (Padgett 1938:1-3).

In 1810, residents of West Florida, including leaders John Rhea, John H. Johnson, and William Barrow, rebelled against Spain, established the Republic of West Florida, adopted a constitution, and elected Fulwar Skipwith governor. St. Francisville was initially made the capital, but it was later moved to Baton Rouge. Later that same year, the United States claimed and took possession of West Florida, which it held illegally until the Adams-Onís Treaty in 1819 gave all of Florida to the United States (Butler 1980:94-99; Padgett 1938:1-3).

AMERICAN ACQUISITION

After the United States purchased Louisiana from France in 1803, President Thomas Jefferson recognized the need to scientifically explore the area west of the Mississippi River. In the interest of exploration, settlement, and natural science, Jefferson sent two expeditions into Louisiana to report on the natural flora, fauna, and physical geography of the Red and Ouachita Rivers, but the expeditions did not explore south Louisiana which was better known (Flores 1984:3-45, 99).

Louisiana was admitted to the Union in 1812, although the Florida Parishes (those that were the part of West Florida west of the Pearl River) were not added to the state for several months (Wall 1990:102-108). Louisiana's capital was originally in New Orleans, but voters preferred a different location. In 1825 Donaldsonville, the seat of Ascension Parish, was made the capital, although it wasn't until 1830 that the legislature actually moved to Donaldsonville, and they quickly moved back to the more exciting New Orleans. Baton Rouge became the state capital in 1846. The seat of state government moved around during the Civil War and Reconstruction, but was returned to Baton Rouge in 1879 (Marchand 1936:85-94; Wall 1990: 125-126).

THE CIVIL WAR

The Union Army sought to dominate the Mississippi River, and early in the war gained control of New Orleans and Baton Rouge. If the Union Army controlled the lower Mississippi Valley, they would control access to the mouth of the Red River and points west. The Confederate Army recognized the danger in August 1862 and constructed a bastion at Port Hudson, north of Baton Rouge. Union Admiral David G. Farragut and General Nathaniel P. Banks did gain control of the Mississippi River, including Port Hudson, in 1863 (Hewitt 1987 :x-xiv; Spedale 1986 :ix-xv).

The Union Army established a stockade at Doyal's Mount Houmas plantation at Geismar, but in 1864 it was captured by the Confederate Army. Major S.P. Remington of the Union Army reported on the incident, and mentioned some of the facilities at or near Mount Houmas, such as a telegraph station. Equipment and stock were taken from Mount Houmas as well as from John Minor's Waterloo Plantation adjoining (Marchand 1936:161-2).

ASCENSION PARISH

After their expulsion from Canada in the mid-eighteenth century, many of the Acadian French immigrated to southern Louisiana, some settling in what became Ascension Parish. By 1772, the settlement acquired a resident priest, Father Angelus de Reuillagodos, who named the Catholic parish “Ascension” (Marchand 1936:1).

In 1806, William Donaldson purchased the land on the Mississippi River at the head of Bayou Lafourche from Mrs. Marguerite Allain and established the town of Donaldsonville, originally known as Donaldson Town. Donaldsonville was strategically located for commerce because Bayou Lafourche (earlier referred to as Riviere des Chetimaches) provided seasonal access to the Attakapas region of Louisiana from the Mississippi River. Donaldson himself continued to reside in New Orleans for a couple of years before moving to the town he founded. The town was incorporated in 1813 (Marchand 1936:16-20, 25, 37, 55)

The political unit Ascension Parish was established in 1807, when the United States began organizing the territory that would become the State of Louisiana, and was named after the ecclesiastical district. Donaldsonville is the parish seat. In 1808, Ascension Parish got a post office, in Donaldsonville (Louisiana Legislative Council 1964:281, 283; Marchand 1936:24)

By 1827, the wealthiest planters in the state lived between New Orleans and Baton Rouge in what were known as the Acadian and German coasts, according to the origin of the predominant settlers. Sugar was the dominant crop, generating yet another appellation for the area: the “Golden Coast” (Marchand 1936:67).

In 1860, Ascension Parish was the fourth largest sugar producing parish in Louisiana with four large scale sugar refineries and several small ones. The parish had about 125,000 acres, of which 85,000 were uncultivated, 20,000 were in sugar cane, 17,000 were planted in corn, and less than 500 were planted in cotton. The population was about 15,000; nearly one-half were slaves (Prichard 1938:1122-25).

In the decades following the Civil War, Ascension Parish’s population has waxed and waned. Entering the 20th century, the petrochemical industry has created employment and Ascension Parish has become part of the Baton Rouge metropolitan area, with a population of 76,627 in 2000, growing to 107,215 in 2010 (Calhoun 2012).

New River

The New River, a Mississippi River distributary in Ascension Parish served as a transportation link to the Mississippi River for several plantations near Geismar. A thriving community developed along the New River, and a landing near it on the Mississippi River. In the mid-nineteenth century, the community of New River had a post office, a newspaper, and a Presbyterian Church (Puncky 1960, Prichard 1938:1124-25).

To get from the New River to the Mississippi River, settlers ascended the New River until they got to the property of Joseph Laurent Favre, then by land to what became known as “New River Landing” on the Mississippi River. Favre’s property became Mount Houmas Plantation (not to be confused with Houmas House, further downstream) and was sold to Henry Doyal. The Mount Houmas plantation was on land that had been settled by the Houmas Indians prior to European settlement, and was named Mount Houmas perhaps due to the number of Indian mounds in the area, even though the mounds were not built by the Houmas tribe. In 1836, a post office was established at New River, near present day Geismar. In 1848, a better road, called New River Lane (now State Highway 73), was built linking the New River and the Mississippi River, between John Minor’s Waterloo Plantation and Henry Doyal’s plantation below it at Mount Houmas. The parish police jury continued to be concerned with roads in the New River area, and took advantage of the current routes across one of the Tillotson’s New River Bridges (Marchand 1936:106, 132-136, 149; Marchand 1949:50-52).

Economic Base

Agriculture served as the primary economic base for these parishes since permanent settlement in the mid-seventeenth century. Proximity to the Mississippi River, slaveholding, and large landholdings contributed to a prosperous economy during the colonial and antebellum period.

The most important agricultural export of the lower Mississippi Valley in the colonial period was indigo. Although Louisiana’s indigo crop may have been of a lower quality, it easily sold in Europe. Indigo was a labor intensive crop that was also expensive to cultivate, so only wealthy planters with a large number of slaves were able to raise it (Dalrymple 1978:4-6).

During the early nineteenth century, sugar became an important cash crop throughout the South. In the colonial period, some sugar was grown and converted into rum, but it wasn’t until technological changes in the processing of sugar made the crop economically successful. In 1795, Etienne de Bore developed a commercial process for granulating sugar, thus making it a more valuable crop. Further improvements in the refining process occurred during the next half century (Louisiana Work Projects Administration 1941:221-223).

In addition, steamboat service began on the Mississippi River in 1811, further increasing commercial traffic for planters along the river. William Donaldson, founder of Donaldsonville and a member of a committee appointed by Governor William C. Claiborne to oversee steamboats, inspected the first steamboat to travel down the Ohio and Mississippi Rivers. Subsequently, the Louisiana legislature gave Robert Fulton and Robert Livingston exclusive right to use steamboats in south Louisiana for a limited time (Marchand 1936:32).

William Edwards Clement wrote about his experiences growing up on a sugar plantation in Iberville Parish in the late nineteenth century. When he was a child, the plantation ground and processed its own sugar cane, but eventually the plantation took its sugar cane to a larger mill for processing. This probably reflects the general trend in sugar cane farming in the last 100 years. Clement described the sugar harvest and processing. Cane was harvested during the last three months of the year. After grinding at the steam-powered or horse-drawn mill, the cane juice was boiled in “big old-fashioned boilers” over large wood fires. Once the cane juice had reached the right consistency for molasses, it was poured into homemade barrels, although some cane juice was processed into soft brown sugar. Sugar products were then shipped downriver to New Orleans. Clement’s family’s plantation did not have enough wood to fuel the sugar processing, so uprooted trees were collected from the Mississippi River during periods of high water. The wood was dried out and later used as fuel (Clement 1952:13-15).

Slave labor for agricultural production gradually became more and more important to the economy of the parishes. Some cotton and indigo were grown in the area, but sugar remained the dominant crop. Cotton was important, but it was usually grown inland, away from the Mississippi River. Sugar cane was very lucrative, but because it required a greater capital investment, it was usually grown nearer to the Mississippi River on more valuable tracts of land. Because sugar cane required intensive labor, most planters had slaves to work in the fields. As the white population and number of acres under cultivation increased, so did the slave population (Prichard 1938:1124).

According to Joseph Karl Menn, in his book, *The Large Slaveholders of Louisiana*, in 1860 West Baton Rouge Parish had about 3700 slaves, East Baton Rouge Parish had about 3000, Ascension Parish had about 5600, and Iberville had about 7300. Of those, most belonged to 176 large slaveholders who owned 50 or more slaves each (Menn 1964:120-126, 138-150, 237-249).

For many decades, Ascension Parish had a thriving cypress timber and lumber industry. In 1807, William Donaldson, founder of Donaldsonville, built the first sawmill in Iberville Parish, on the Mississippi River just south of Bayou Manchac. More sawmills followed, and by the turn of the century, nearly 5,000 people were employed in the timber industry in Iberville Parish alone. By the late 1930s, most of the old cypress had been logged out (Grace 1946:91-94). Though sugar remains an important part of the economy of parishes along the Mississippi River south of Baton Rouge, the petrochemical industry has emerged as

a major force in this area.

Geismar

Benjamin Louis Geismar was born in 1857 in Alsace, but immigrated to the United States in 1879. He arrived at New River Landing expecting a metropolis, but finding a small village. Unable to find a job, he took the \$500 his parents had given him and opened a small store to serve the New River community. He married Seraphine Ileymann in 1884, and established a partnership with his brother-in-law, Leon Picard. Picard and Geismar purchased Waterloo Plantation and began growing sugar cane, rice, and cotton (Postal 1976:350-353).

The Yazoo and Mississippi Railroad came through the settlement in the 1880s, fueling more growth in the community. In 1893, the financial panic that hit the rest of the country affected the Picard and Geismar partnership, but the crevasse in the Mississippi River levee that washed out many fields did more damage. The setback was only temporary. New levees were built and in 1898 Geismar built a new store facing the river. The building was relocated to face the railroad. About the turn of the century, the community changed its name to Geismar, the name of the post office and railroad station. The partnership of Picard and Geismar did not weather the Great Depression as well as it did the Panic of 1893. The partnership went bankrupt and sold its landholdings for about \$14/acre (Postal 1976:3 50-353).

One of Louis Geismar's sons, Minel, served as postmaster for thirty years. It was Louis Geismar's nephew from Alsace, Leon Geismar, who took over the business name. In 1931, Leon Geismar opened the Progressive Stores in Gonzales, as well as the Geismar store in Geismar. Although the community of Geismar has historically been tied to the agricultural economy, the coming of the petrochemical industry in 1953 caused a small boom for the area (Postal 1976:350-353).

CHAPTER FIVE: PREVIOUS INVESTIGATIONS

EARLY ARCHAEOLOGICAL STUDIES

The first interest in the archaeology of this area may be traced back to Henry Marie Brackenridge who, in 1813, wrote to Thomas Jefferson about the Indian mounds along the Mississippi and Ohio Rivers. In this communication, Brackenridge listed a number of mounds, including the great Monk's mound at Cahokia, Illinois, the mound at Troyville (now Jonesville) (16CT7), Louisiana, since destroyed, and mounds "at Baton Rouge, and on the Manchac" (Brackenridge 1818).

Several decades later, Judge Carrighan, of Baton Rouge, writing in De Bow's Review, mentions that "...on the plantations of the Messrs. McHattons, near the Higland (sic) road, about two miles from the town, are two other large mounds...and several more are to be found on the Messrs. Daigle, Kleinpeter and Bexler" (Carrighan 1851:611). Clearly, the McHatton mounds are the pair of conical structures on the campus of Louisiana State University (16EBR6). The other mounds may have been located on the lands of the several plantation owners mentioned, although, as Jones et al. (1994:35) make clear, the Kleinpeter mounds referred to are not to be confused with the mound site (16EBR5) of that name.

The first true archaeological investigation of this area may be attributed to Clarence B. Moore, who examined a number of sites in Iberville Parish in 1912 (Moore 1913). He did not, however, cross the Mississippi into Ascension Parish. Following Moore, there was apparently little archaeological activity in the area until Dr. Fred B. Kniffen arrived at Louisiana State University in the late 1920s. Kniffen set out to make a number of cultural, archaeological, and geomorphological studies. In 1935, for instance, he visited 16EBR5 and gave the location the name Kleinpeter, after the nearest settlement (Kniffen, personal communication 1990). He went on to describe the site and to list other mounds in nearby Iberville Parish in a Louisiana Geological Survey bulletin (Kniffen 1938).

Kniffen, however, was primarily a geographer, and his archaeological work consisted largely of identifying sites and suggesting their temporal placement. Others of his contemporaries carried out more explicitly archaeological investigations. Among these, special mention should be made of the work of George Quimby. Working under WPA auspices, Quimby excavated the mound site (16WBR1) on Medora Plantation in West Baton Rouge Parish and gave Southeastern archaeology the concept of Plaquemine culture (Quimby 1951). He also carried out investigations at the Bayou Goula site (16IV11), in Iberville Parish, providing insight into what is now considered the protohistoric Delta Natchezan phase (Quimby 1957). Notwithstanding the inevitable refinements and challenges

of later investigators, a great deal of our understanding of late prehistoric and protohistoric groups in this area derives from Quimby's two studies.

Although Quimby published these two monographs in the 1950s, the excavations themselves were carried out in the late 1930s and early 1940s. Nevertheless, the 1950s and 1960s were a time during which important original research was done in this area. McIntire performed an investigation of Mississippi delta prehistoric settlement patterns and, while his study focused on the coastal zone, much of what he wrote is still applicable (McIntire 1958). Saucier published a monograph on the recent geomorphic history of the Pontchartrain Basin, dating many of the geomorphic features he described through the ages of known archaeological sites (Saucier 1963). Finally, Gagliano published a compendium of information on known Archaic sites in the region (Gagliano 1963). It should be mentioned that these three scholars published only after several years of formal and informal field explorations, which caused the list of known archaeological sites in the area to expand dramatically.

THE MODERN ERA (1970-PRESENT)

Beginning with the 1970s, most of the archaeological work done in the study area and its environs has been the result of contract archaeologists carrying out research pursuant to Section 106 of the National Historic Preservation Act of 1966. Work during this period has included highway and road surveys (e.g., Rivet 1974; 1976), levee surveys for the U.S. Corps of Engineers (e.g., Castille 1979; Gagliano 1977; Stuart and Greene 1983; Goodwin et al. 1985; 1989; Hinks et al. 1993; Rader 1978; Lee et al. 1996; Wheaton et al. 1997; George et al. 2000a,b); pipeline surveys (e.g., Bryant 1985; Heartfield, Price and Green, Inc. [HPG] 1985; McIntire 1976, 1981; Madden 1985; Neuman 1978; Price 1977, 1987; Skinner et al. 1995; Davies et al. 1998; Smith et al. 2001); surveys for sewer projects (e.g., Neuman 1977; Landry et al. 1980; Robblee et al. 1997a,b; Robblee and Davis 1997); studies for industrial expansion projects (e.g., Carpenter et al. 1981; Coastal Environments, Inc. (CEI) 1977; Guevin 1990; McCloskey et al. 1981; South and Maygarden 2000a,b); a survey for a proposed fiber-optic cable (Jackson et al. 2000); a proposed railroad right-of-way (Shuman et al. 1997) and literature searches (e.g., Goodwin et al. 1990). Establishment of a regional archaeology program headquartered at Louisiana State University in Baton Rouge has led to state-sponsored archaeology in this area since the early 1990s (Hays 1996, 1997, 1998, 1999, 2000, Mann 2001). In addition, since 1970, grant funded projects, student theses, and papers given at professional meetings have provided valuable information on this area. These sources will be summarized below.

Our knowledge of the Paleoindian era has been advanced by a paper given by Weinstein, Burden and Gagliano, who have proposed a Jones Creek phase on the basis of Plainview, Dalton and San Patrice projectile points at the Jones Creek (16EBR13) and Blackwater Bayou (16EBR33) sites. The same authors have proposed an Early Archaic St. Helena phase for the Florida parishes, based on finds of Kirk and Palmer points (Weinstein et al. 1977). Other data on the Archaic period derives from a coring project at the Louisiana

State University mounds (16EBR6) (Homburg 1988; Neuman 1988), although Jones (1993) has questioned the validity of their radiocarbon dates. Other Archaic radiocarbon dates, however, have come from the Monte Sano mounds (16EBR17), in the northern portion of the parish (Haag 1993). While these investigations were in East Baton Parish, they are applicable to that part of Ascension Parish that is Pleistocene Prairie terrace,

The early ceramic cultures are better attested than the preceramic ones. In his Master's thesis, Richard Weinstein drew together an impressive amount of information about sites along the Amite River and proposed several refinements of the prehistoric sequence in this area (Weinstein 1974). A few years later, Weinstein and Rivet (1978) synthesized and analyzed data from the Beau Mire site (16AN17) and suggested the concept of the Tchula phase, a late Tchefuncte manifestation (Weinstein and Rivet 1978). Further data on the Tchefuncte culture derives from work at the Lee site (16EBR51), located on the edge of the Pleistocene terrace overlooking Bayou Fountain (Weinstein et al. 1985). While the site was occupied from Tchefuncte through Coles Creek times, the Tchefuncte or Tchula component was the most marked. Near the Lee site is the Sarah Peralta site (16EBR67), a prehistoric, multicomponent midden that extended from Tchefuncte through late Coles Creek times. This location was excavated by Perrault and her coworkers, who found the Tchefuncte component to be the most significant element and the site has subsequently been placed on the National Register of Historic Places (Perrault et al. 1994). Finally, Jones and his colleagues excavated a Tchefuncte trash pit containing ceramics and a Kent type projectile point at the Kleinpeter site (16EBR5), but found that the Tchefuncte component was apparently less significant at that location than later cultures (Jones et al. 1994). Marksville culture was also represented at the Kleinpeter site, both in the Smithfield and Gunboat Landing phases (Jones et al. 1994:197). These phase names, it should be mentioned, derive from Weinstein's survey along the Amite in the early 1970s (Weinstein 1974).

Several projects have investigated sites of the succeeding Baytown and Coles Creek cultures. Notable was the emergency excavation of the St. Gabriel mound (16IV128), by Woodiel (1993). This location consisted of a single platform mound that had a circular structure in a pre mound context. The ceramics recovered from this site placed it in a period transitional between Coles Creek and Plaquemine. She called this the St. Gabriel phase. The mound was destroyed by the construction of Hunt Correctional Institute. The Kleinpeter site (16EBR5), mentioned above, provided more information relative to the St. Gabriel phase, notably another circular structure at the base of a low platform mound. From the artifacts recovered, it would appear that the Kleinpeter site thrived during late Coles Creek and Plaquemine times. It is unclear when prehistoric peoples ceased to live there (Jones et al. 1994). The protohistoric period of this area is represented by a study made by Brian Guevin of the 16AN35 site, location of the Grand Houmas Indian village (Guevin 1983).

The historic era in this portion of Ascension Parish is best represented by investigations at Ashland-Belle Helene Plantation (16AN26). Ashland-Belle Helene (16AN26) has been studied by three groups of researchers. R. Christopher Goodwin and Associates, Inc. (RCG), conducted limited investigations in 1984 and 1989 as part of two

revetment projects for the U. S. Army Corps of Engineers (Goodwin et al. 1985, 1989). A more detailed study of the plantation proper was carried out by Babson and Orser (1989) and consisted of testing the foundations of an outbuilding to the main plantation house and a portion of the slave quarters. Thirteen test units were excavated and nearly 23,000 artifacts were recovered, confirming the importance of this plantation to our understanding of ante- and post-bellum plantation life in the South. Five years later, Earth Search, Inc. (ESI), undertook data recovery operations at the site. They gridded an area of 102 ac (41.3 ha) and placed shovel tests at 98.4 ft (30 m) intervals. A portion of the site that was designated an impact area for development was gridded and shovel tested at 49.2 ft (15 m) intervals. In addition, trenches were placed across cabin sites and 89 1 m x 1 m test units were excavated at two cabin sites. As a result of these operations, eighteen slave/worker cabins were identified, at least 15 of which were double cabins. Archaeological evidence suggested that the cabins had been in continuous use from about 1840 until the turn of the century, when they were abandoned. Over 50,000 artifacts were recovered and 5,500 bone fragments were also salvaged (Yakubik et al. 1994).

CEI conducted a survey of a proposed extension of the Liquid Carbonics Plant in Geismar. The survey did not reveal any cultural resources in the project area (Guevin 1990).

Further studies in this area were made by Jones and Shuman in 1987 as part of a grant-funded project. They mapped all known Indian mounds in Ascension, Iberville, Pointe Coupee, St. James, and West Baton Rouge Parishes. During their project they visited and mapped the Broussard mounds (16AN1) and found that Mound B, which lies directly under high power lines, is the site of an antebellum cemetery related to the Tillotson family. The cemetery had been badly damaged, but inscriptions on tombstones were still legible. Mound A they found to be in good condition albeit with an abandoned ranch-style house on top. The third mound, on property belonging to another landowner, was in good condition but had been slightly eroded by cattle. These mounds were then considered to probably belong to the Coles Creek or a later period (Jones and Shuman 1987).

In 1995, SURA surveyed the proposed route of a liquid hydrogen pipeline (Shuman et al. 1995). This study recorded six cultural resource locations, including the Broussard Mounds Site (16AN1). Testing at this site showed prehistoric midden in an area extending 100 feet (ft)(30.5 meters [m]) south of Mound B. As a consequence, the pipeline was rerouted further to the southwest from the prehistoric deposits. The midden itself contained prehistoric Marksville artifacts as well as materials dating from the establishment of Mound (later Riverside) Plantation, in the late 18th or early 19th century. An adjacent route was proposed for an Exxon pipeline in 1998. SURA archaeologists again conducted test excavations at 16AN1, this time near the base of Mound B (Jones et al. 1998). Once more they found intact deposits from the Marksville period and upon the recommendation of the State Archaeologist, Exxon elected to avoid the site by directionally drilling beneath it.

In further work at 16AN1, Benjamin Goodwin, as his M.A. thesis at Louisiana State University, attempted to apply remote sensing techniques to further explore the site. His

results were equivocal, though in an attempt to ground truth the remote sensing he did carry out limited excavations that led him to believe that Mound B was associated with the early Marksville Smithfield phase (Goodwin 2003).

PROJECTS NEAR THE CURRENT STUDY AREA

Several cultural resources projects have been conducted near the current project area. In 1980, HPG carried out a survey for the proposed IT Ascension Parish hazardous waste management facility and reported seven sites and nine spot finds. None of the cultural resources, however, were considered to be in danger from the proposed development (HPG 1980). A notable research project, which formed the basis of an M.A. thesis, was Guevin's study of historic Houma village sites, including the Grand Houmas Village (Guevin 1983).

In a 1985 project, RCG surveyed five levee locations, one of which is about 1 mi (1.6 km) downstream from the current APE. They recorded three non-significant sites in the New River Bend area (Goodwin et al. 1985). The following year, RCG surveyed the Burnside Revetment area along the Mississippi River. This work, which covered 14,255.1 ft (4,345 m), did not record any cultural properties (Goodwin et al. 1986). The following year the Louisiana Department of Transportation & Development surveyed a 160 ac (64.8 ha) tract for an airport but recorded no cultural resources (Ducote 1987). In the same year, 1987, HPG surveyed a proposed 50-mi (80.8 km) pipeline route and found one site (16AN40), which was considered to lack the integrity necessary for NRHP inclusion (Price 1987). Of some interest was a CEI survey of proposed telephone cable routes in Ascension and Livingston parishes. In the course of their survey, they found that 26 previously recorded archaeological sites and one historic town were in the vicinity of the project right-of-way. One new site (16AN38) was found outside the project right-of-way. Three of the sites investigated (16AN39, 16AN41 and 16LV41) were sufficiently close to the right-of-way to justify a recommendation of monitoring. Three other sites (16AN2, 16AN3 and 16AN13) were also investigated during the CEI project. The first, the Geismar mounds, could not be relocated. The second, Mount Houmas, the location of the Petit Houmas village, was destroyed by industrial activity in 1974 (CEI 1987). The last site, 16AN13, was reported by Haag in 1965 to be "on SE edge of Bluff Swamp where Jim Bayou enters swamp" and to consist of a midden 3,000 ft (91.4 m) long (DOA n.d.). CEI, however, was unable to relocate it (CEI 1987).

The year 1989 saw RCG test three features on the batture at Ashland-Belle Helene Plantation (16AN26). None of these features were found to be significant (Goodwin et al. 1989). In 1990, CEI did a survey for a liquid carbonic plant extension just southeast of the current APE, but no cultural resources were recorded (Guevin 1990). The year 1995 saw AR Consultants survey a pipeline that ran from Cameron Parish to Ascension Parish. No cultural properties were found in the current APE (Skinner et al. 1995). That same year SURA surveyed the route of a proposed pipeline that ran along the western boundary of the current APE; two historic sites on adjacent Waterloo Plantation were recorded (Shuman et al. 1995).

In 1997, RCG surveyed a proposed effluent force main line for the City of Gonzales and recommended 16AN60 (The Houmas Central Sugar Factory) for National Register testing (Robblee et al. 1997a). Later that year, RCG conducted National Register testing of a portion of 16AN60. Backhoe trenching and unit excavation brought to light 80 features and three structures. Additional work was recommended (Robblee and Davis 1997). Also in that year, SURA, Inc. surveyed the route of a proposed railroad line but reported no cultural properties (Shuman et al. 1997). In 2005 CH2M Hill surveyed a proposed pipeline route running from Garyville to Port Hudson, but found no cultural properties in or near the current APE (Durio and Calvit 2005). In 2012 SURA conducted a survey of 225 acres (91.1 hectares) near Geismar and recorded two sites, neither of which was significant (Hoyt and Shuman 2012). Finally, two recent projects, a transmission line survey by CRC, LLC (Gabour et al. 2013) and a cultural resources survey of two nearby areas on Highway 30, by SURA, Inc., produced negative results (Shuman 2013; Shuman et al 2013).

The SURA 1995 survey (Shuman et al. 1995) alluded to above is the most relevant project for the current undertaking, as it reported one site (16AN57) that falls within the current APE.

CHAPTER SIX: METHODOLOGY

The methodology employed in the project consisted of two phases. Initially, historic maps and aerial photographs at the Louisiana State University Cartographic Information Center (LSUCIC) were consulted in order to determine what structures and roads might have existed on the property in the 20th century. In addition, the site files and report library of the Louisiana Division of Archaeology (LDOA) were examined to determine what archaeological sites had been reported for this area by previous investigators. Due to the facts that sites such as 16AN1 lay in the general vicinity and that the New River had once been an avenue of travel, the field methodology decided upon was a high probability (HP) protocol.

The second phase, fieldwork, consisted of shovel tests excavated each 98.4 ft (30 m) along transects 98.4 ft (30 m) apart. The rights-of-way of highways were not surveyed, due to excessive disturbance. Survey transects usually began at fence lines, which mark where the proposed development will occur. Survey procedure was to have the crew form a skirmish line at one boundary and move along straight transects to the opposite boundary. All shovel tests were excavated to what appeared to be sterile soil and material recovered from the shovel tests was screened using .25 inch hardware cloth. When shovel tests are positive, site definition is carried out, with shovel tests being excavated at 32.8 ft (10 m) intervals in a grid oriented to the cardinal directions.

Recovered materials are taken to the SURA laboratory, where they are cleaned, identified, and catalogued.

Curation Statement

All artifacts collected are returned to the SURA laboratory, washed, analyzed and catalogued. They, as well as documents pertaining to the survey, are then deposited with the Louisiana Division of Archaeology for curation, at:

LDOA Curation/CRT
Central Plant North Building 2nd Floor
1835 North Third St.
Baton Rouge, LA 70802

CHAPTER SEVEN: RESULTS OF THE SURVEY

Topographic Research

Historic maps, including the relevant Mississippi River Commission (MRC) charts from the U.S. Army Corps of Engineers (USACE) and the historic topographic map for this area at the Louisiana State University Department of Geography & Anthropology Cartographic Information Center (LSUCIC), were reviewed. The earliest was the 1858 Persac Map (Norman's Chart), which clearly shows the APE, which is located on what was once Waterloo Plantation (Figure 6).

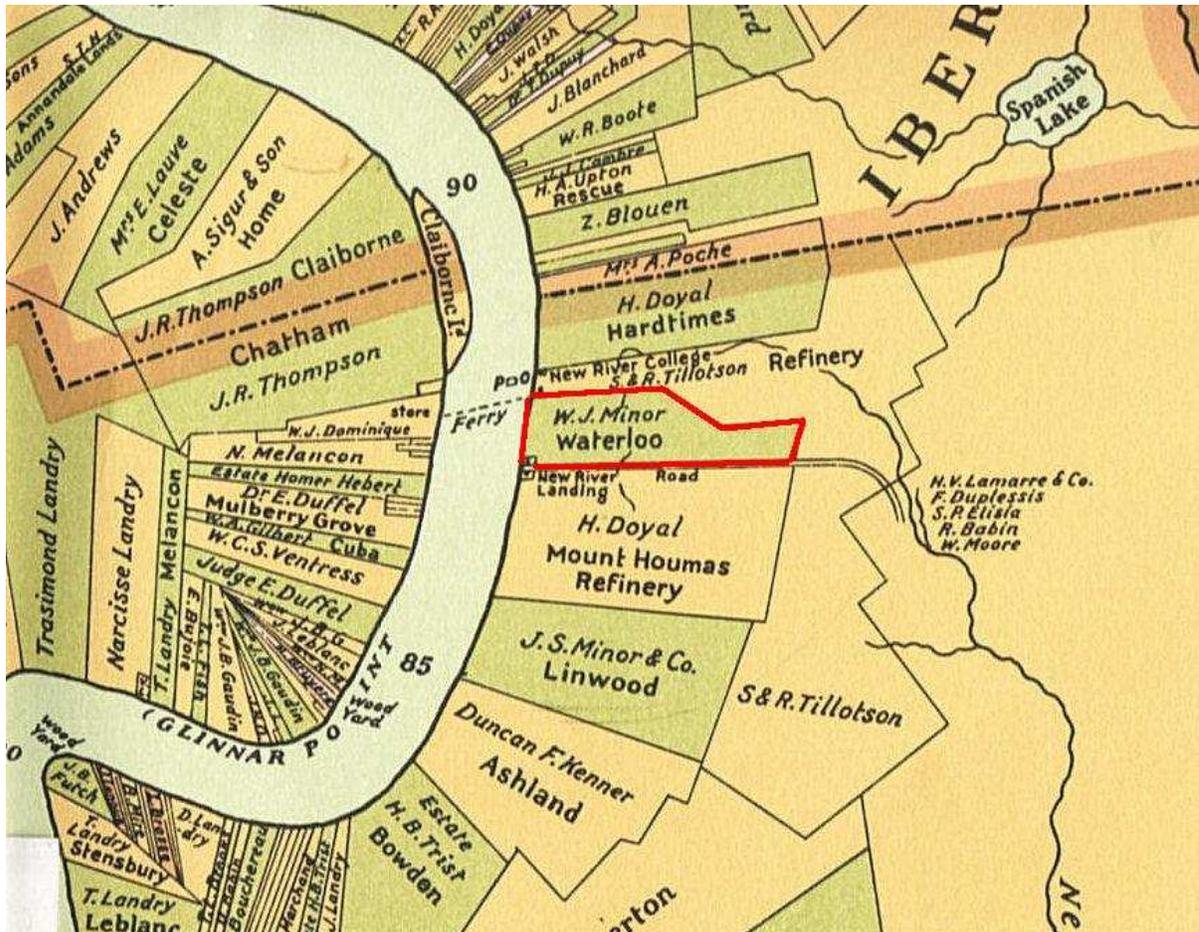


Figure 6. Persac map (Norman's Chart) (1858), showing Waterloo Plantation (Source: SURA, Inc.)

The 1883 Mississippi River Commission map shows Waterloo Plantation, with several structures on the river-side of the railroad tracks and at least one structure in the upper right hand (NE) corner of the property, on the NW side of the entrance road (Figure 7).

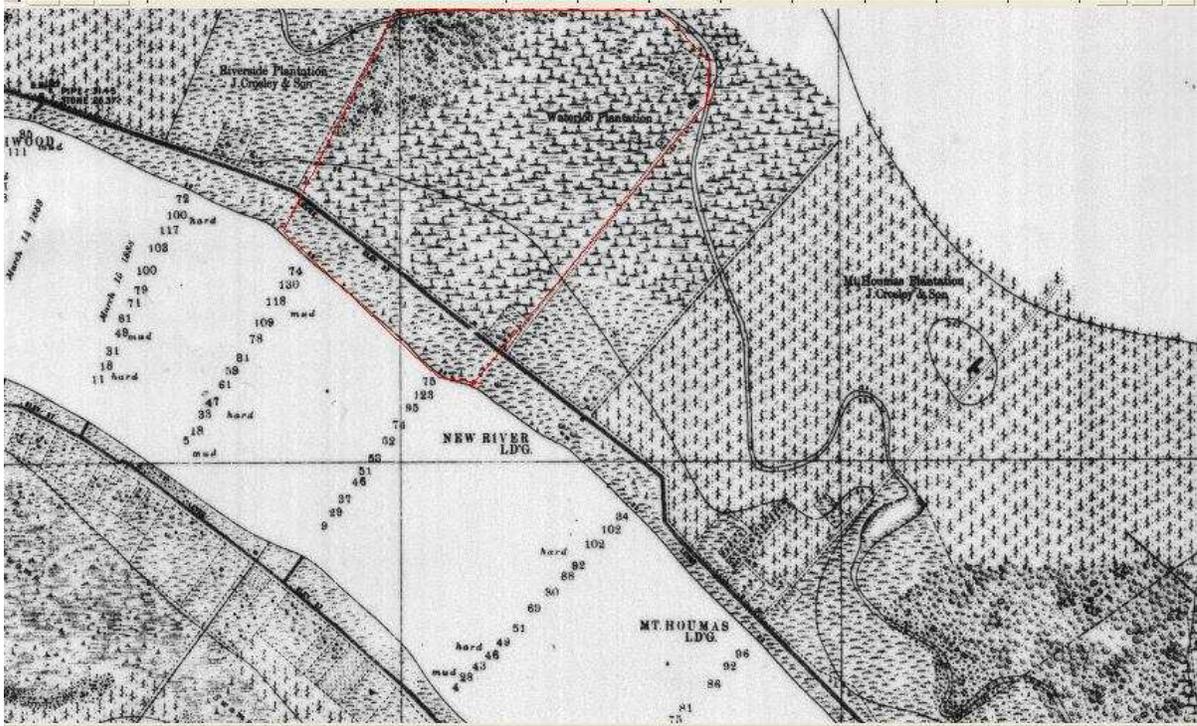


Figure 7. MRC Sheet 69 (1883), showing Waterloo Plantation area (Source: www.mvd.usace.army.mil/mrc)

Sheet 69 (1913) is somewhat hard to make out, due to pixilation, but clearly some structures are indicated in the northern part of the APE (Figure 8).

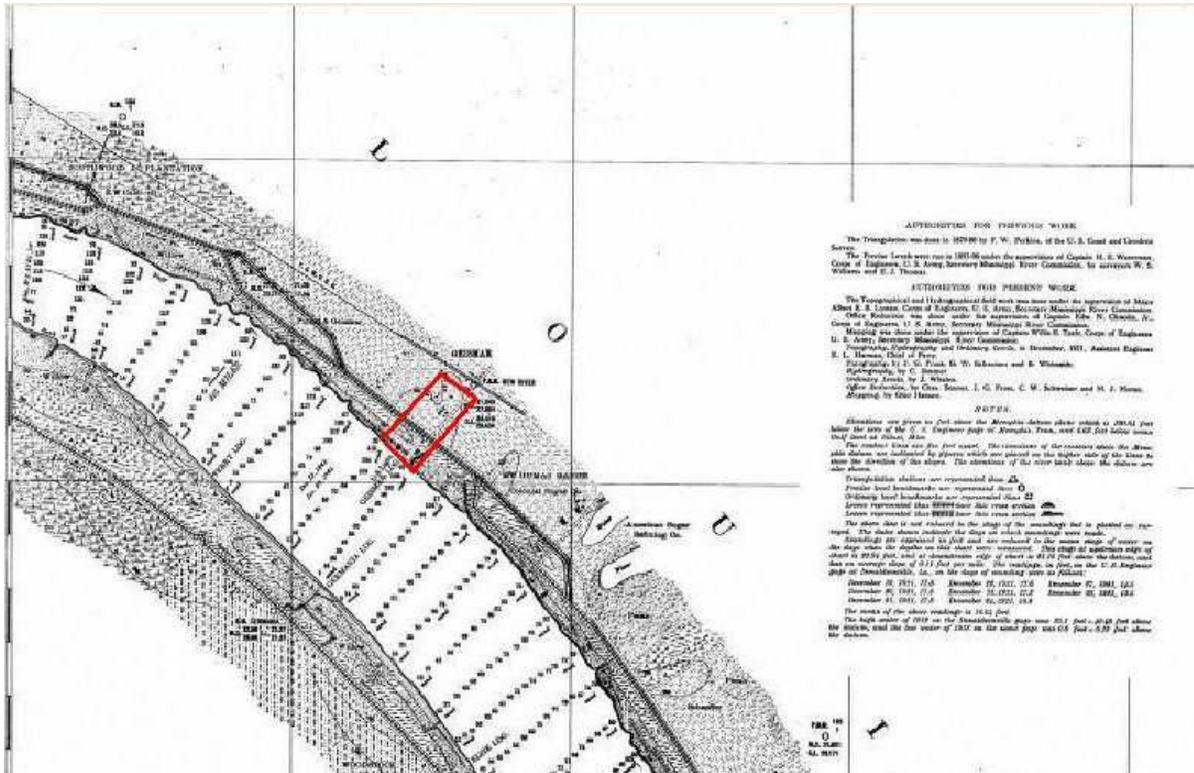


Figure 8. MRC Sheet 69 (1913), showing Waterloo Plantation area (Source: www.mvd.usace.army.mil/mrc)

The 1935 sheet is clearer and shows definite buildings in the APE (Figure 9).

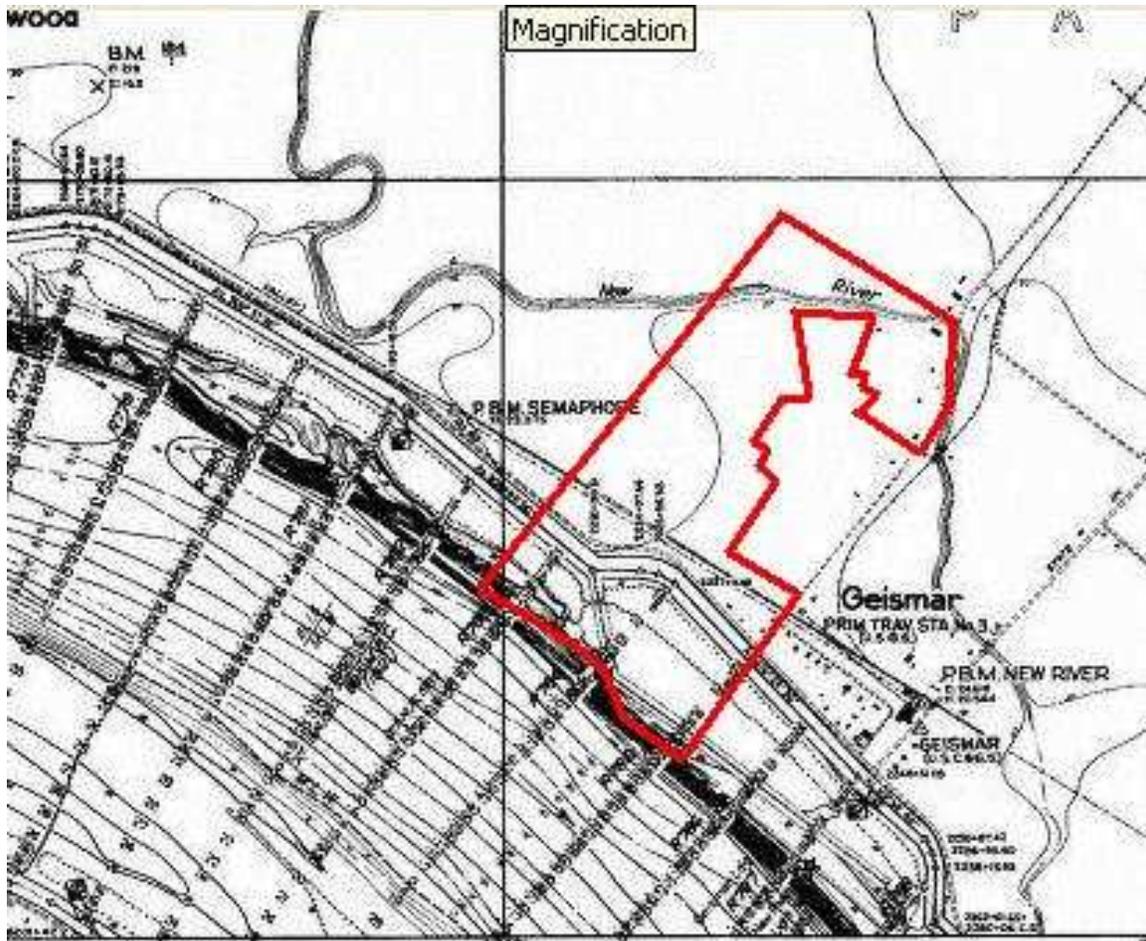


Figure 9. MRC Sheet 69 (1935), showing Waterloo Plantation area (Source: www.mvd.usace.army.mil/mrc)

The first topographic map reviewed was the 1936 Carville, La. 1936 quad (Figure 10). Like the 1935 MRC map, it also shows structures in the northeastern part of the APE.

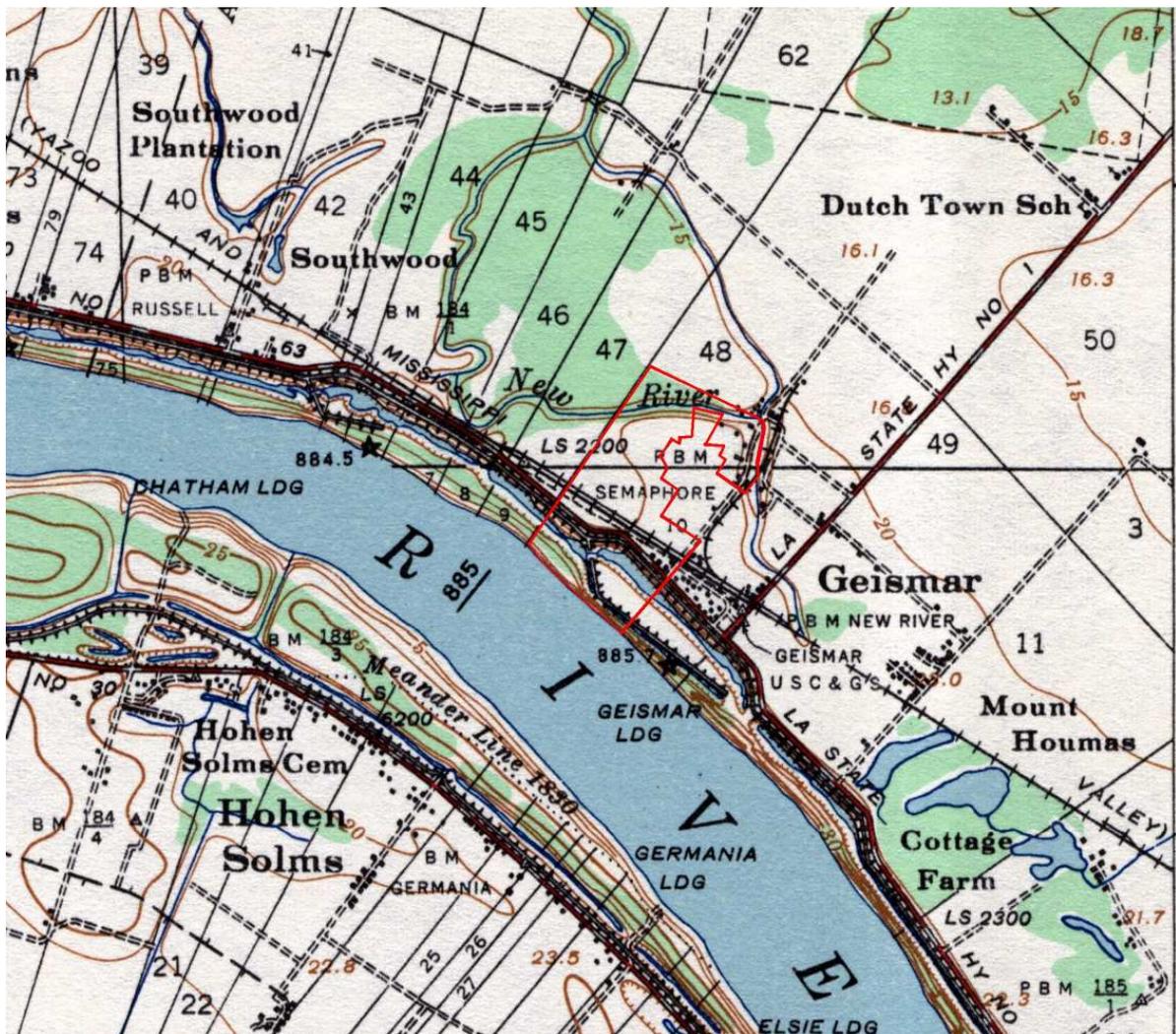


Figure 10. Portion of Carville, LA. (1936) 15-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC).

By 1953, there seem to be only three structures left in the NE portion of the APE (Figure 11).

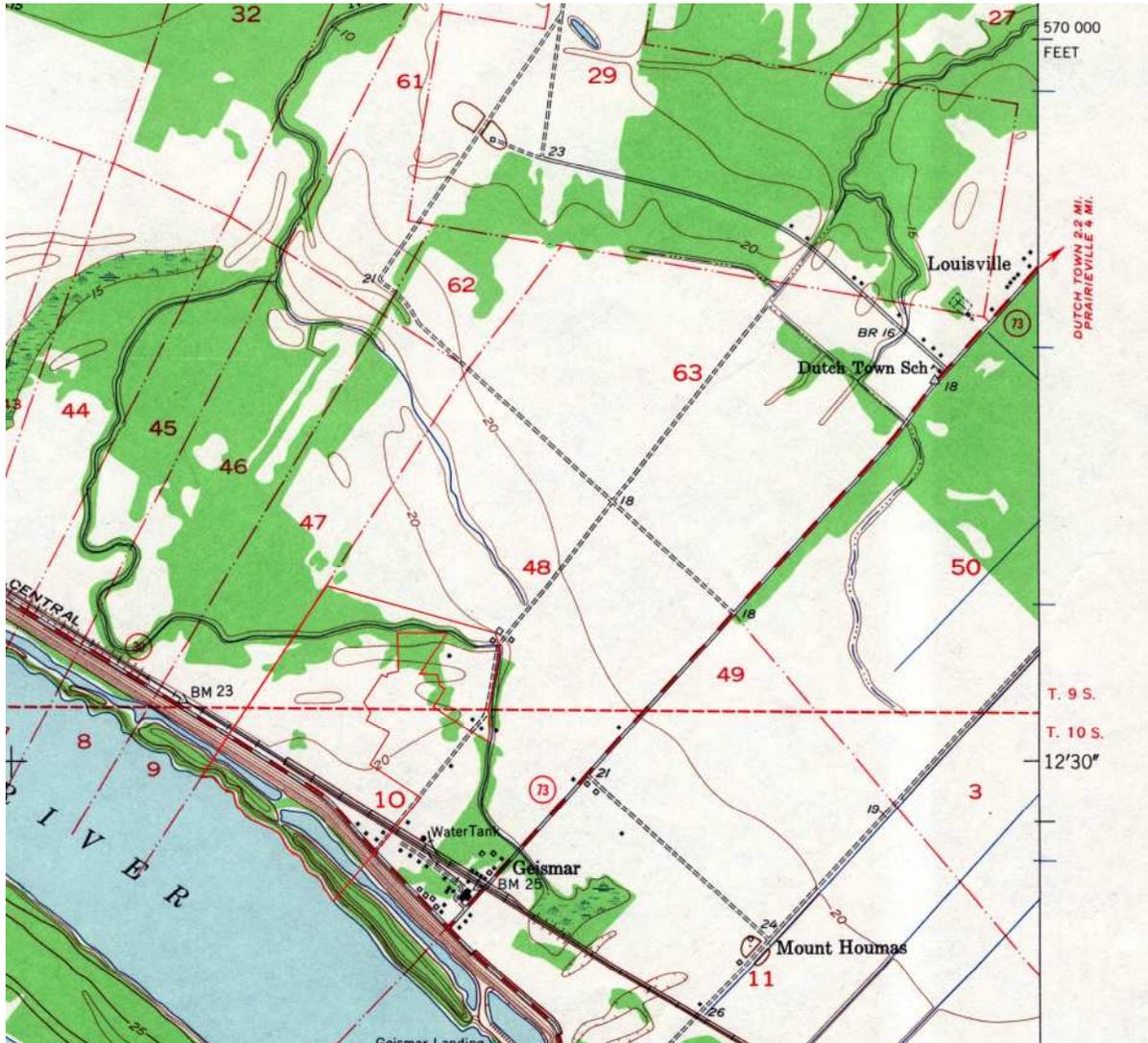


Figure 11. Portion of Carville, La. (1953) 7.5-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC).

In the 1974 and subsequent maps, these structures have all vanished (Figures 12 and 13).

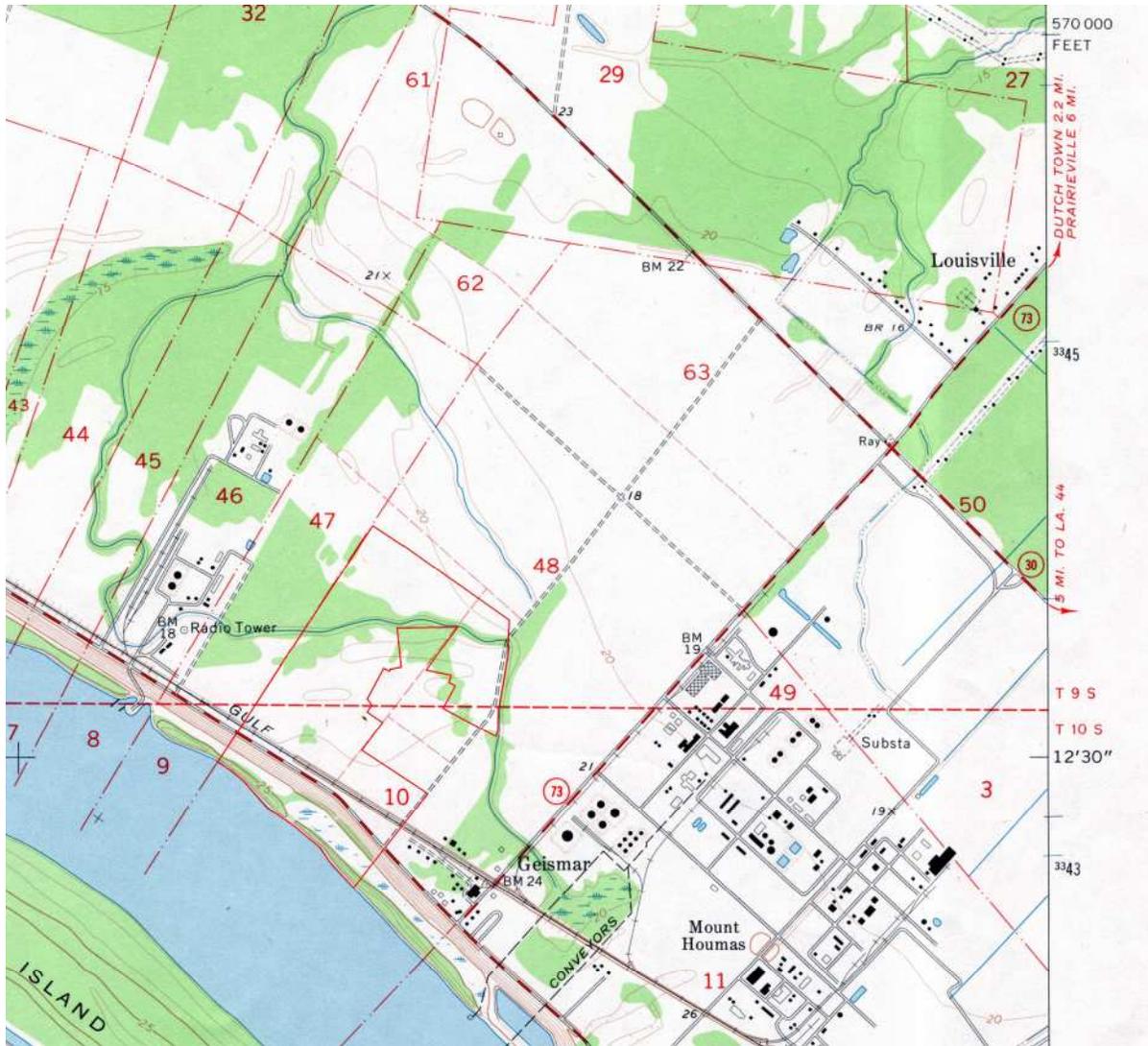


Figure 12: Portion of Carville, La. (1974) 7.5-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC).

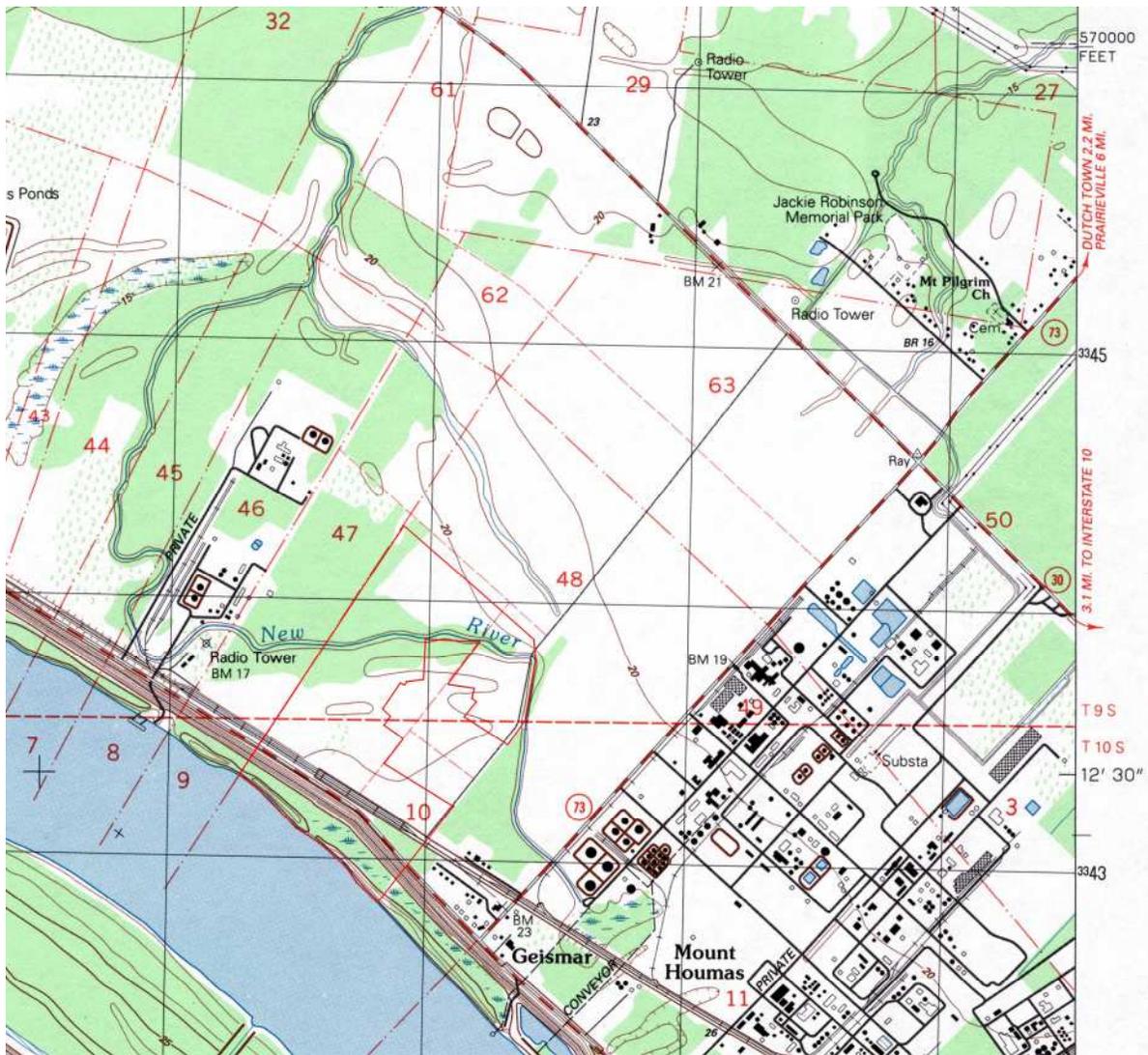


Figure 13: Portion of Carville, La. (1992) 7.5-minute topographic quadrangle, showing project area (red lines) (Source: LSUCIC).

Fieldwork

The fieldwork methodology has already been described. The area surveyed varied from woodland to close-cropped lawn-like grass areas (Figures 14-16). The batture side of the Mississippi River was heavily overgrown (Figure 17).



Figure 14: Survey area, as seen T35, ST4, facing east.



Figure 15: Survey area, as seen T35, ST4, facing NW.



Figure 16: Survey area, as seen T36, ST1, facing NE.



Figure 17: Survey area, as seen T34, ST3, batture, facing SE.

Figure 18 is an aerial photograph showing the transects followed.

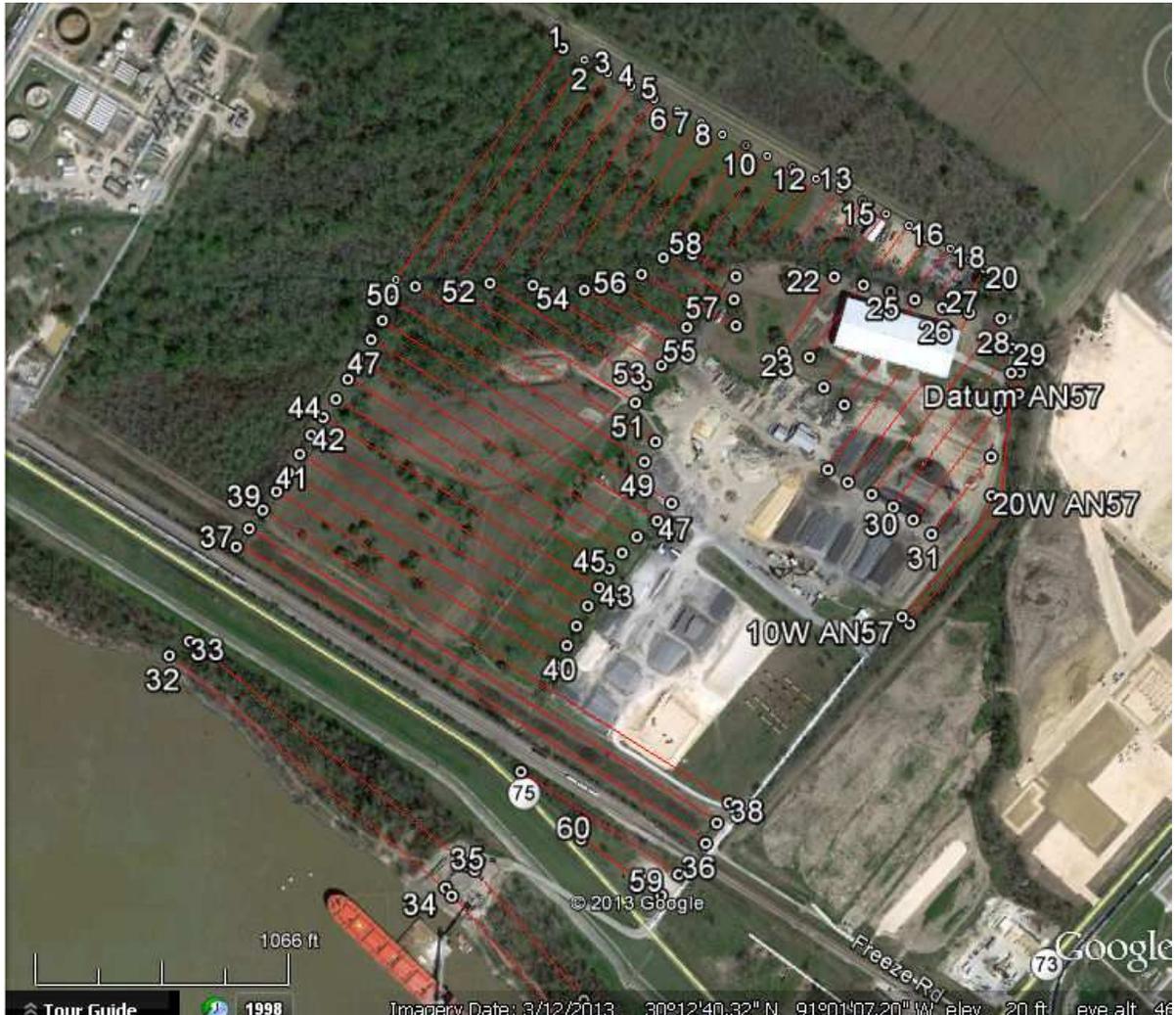


Figure 18. Transects followed during survey (Source: Google Earth).

A total of 475 shovel tests were excavated, not counting 53 that were excavated during site definition of 16AN57. Representative profiles of the negative shovel tests are provided in Figure 19.

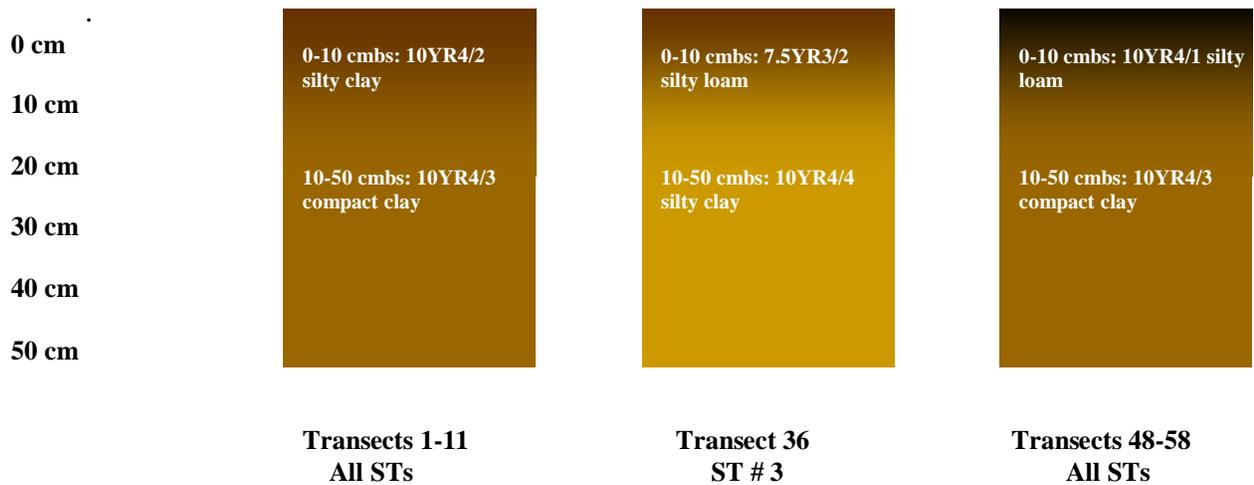


Figure 19. Representative negative shovel test profiles.

In the course of the survey, one cultural resource was located. That was an historic site that was adjacent to the previously reported site, 16AN57. Accordingly, the new materials were considered to be a part of the expanded 16AN57. Figure 20 locates this site on the relevant topographic map. The rectangular area with the X is a prefab building that is a part of a lease site not included in the APE. The dashed yellow lines show the boundary of the site NW of Waterloo Road as it was recorded in 1995; today, there are dirt piles in that area and much of the area is paved. Figure 21 is a Google Earth aerial photograph showing the same.

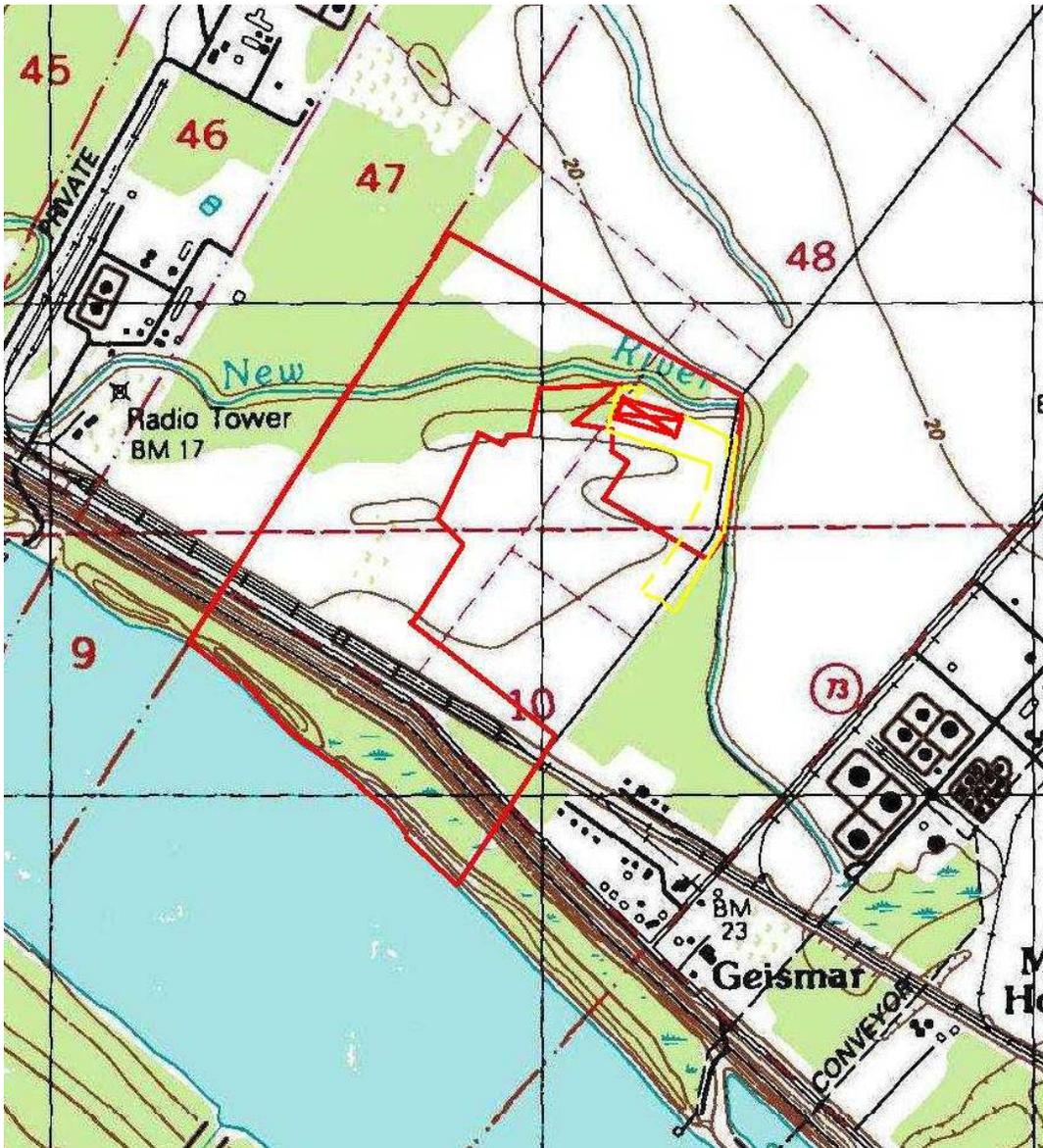


Figure 20. Portion of 1999 Carville, La. 7.5-minute map showing APE (red) and site 16AN57 (yellow).



Figure 21. Aerial photograph showing APE (red) and site 16AN57 (yellow) (Source: Google Earth).

More detailed photographs showing the locations of shovel tests are presented in Figures 22-25. Shovel tests are given numbers on the aerial photographs; Table 1 relates these numbers to grid locations. Positive shovel tests are marked red, negative shovel tests are white; blue marks surface finds at shovel test locations.

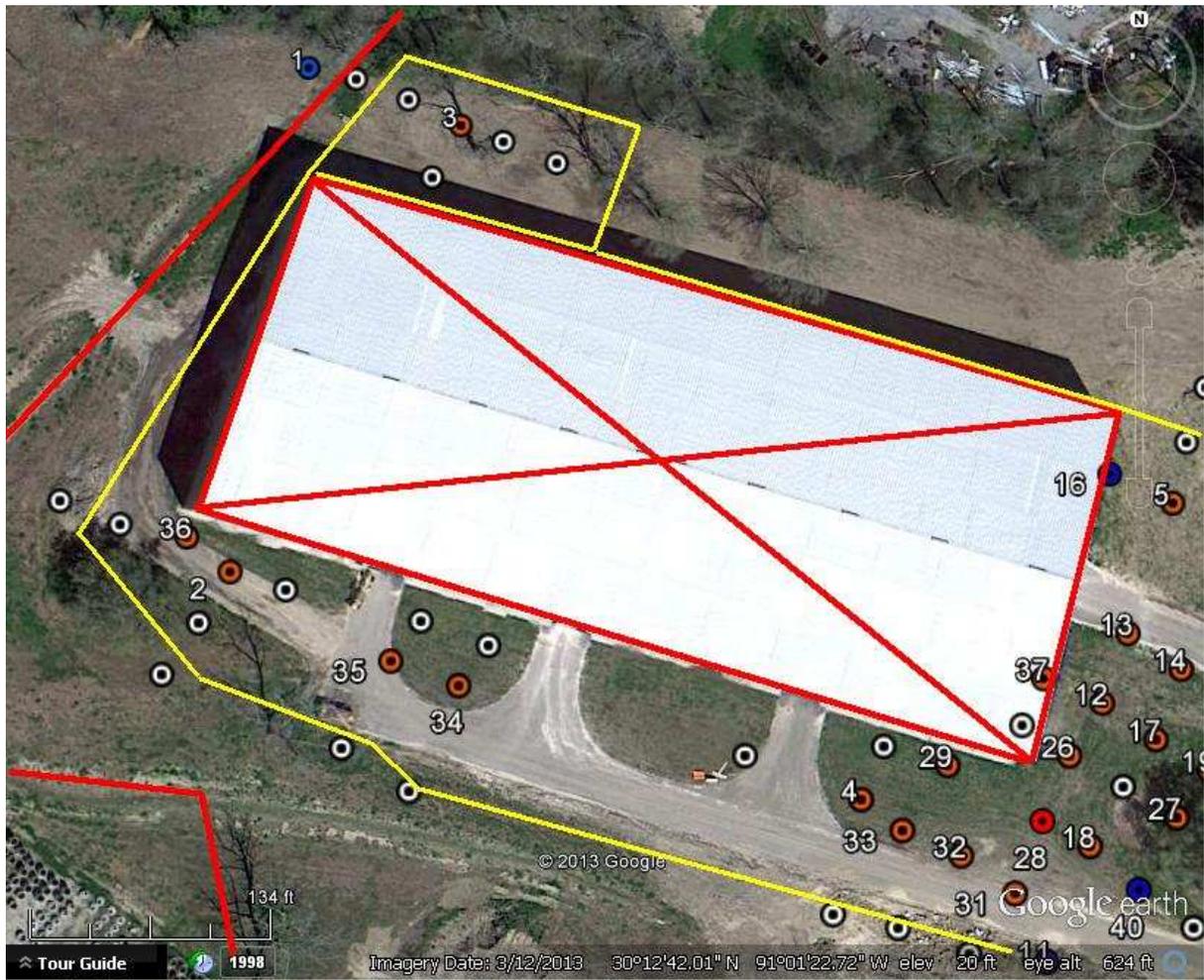


Figure 22. Aerial photograph showing NW portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth).

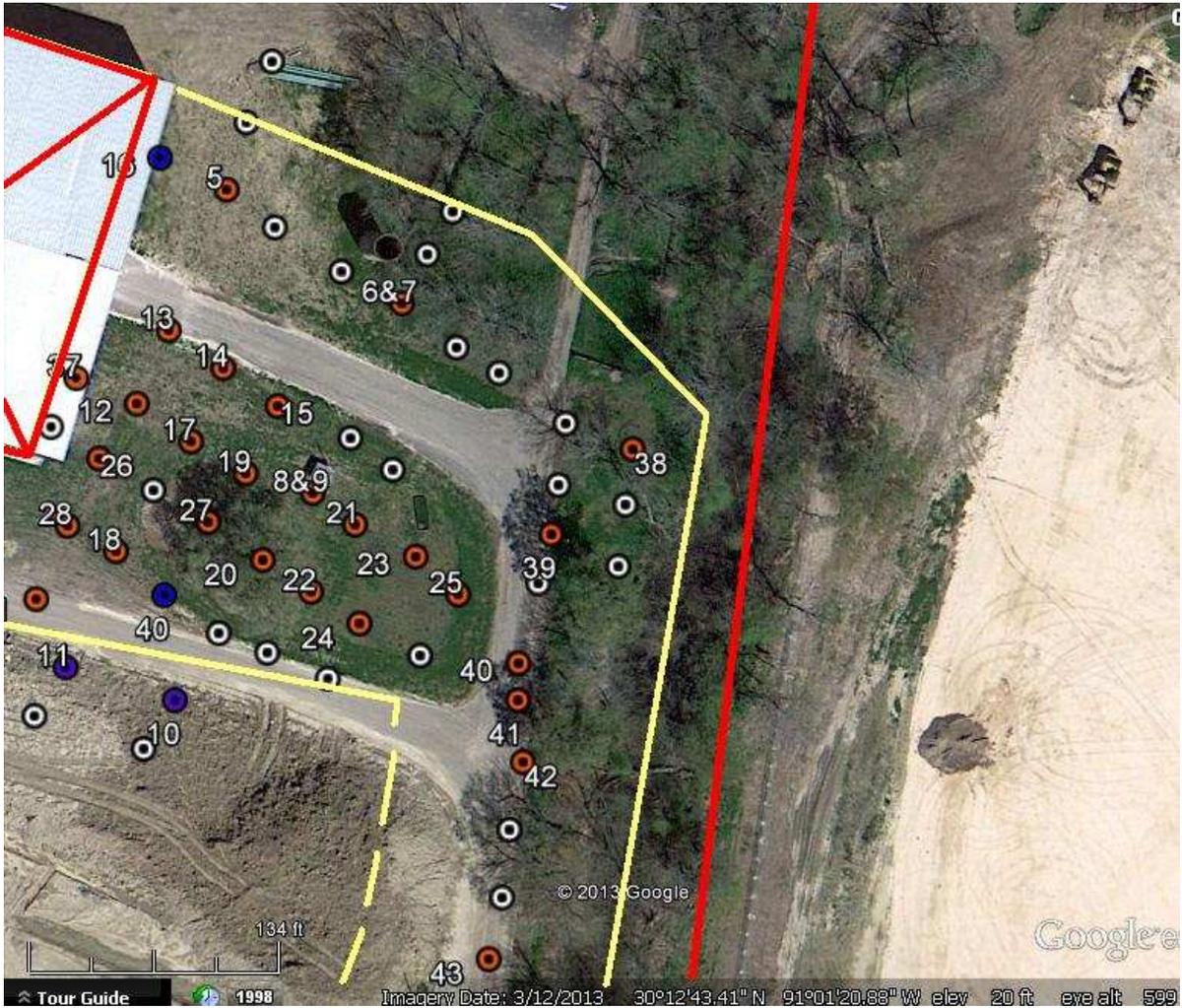


Figure 23. Aerial photograph showing north-central portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth).



Figure 24. Aerial photograph showing south-central portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth).

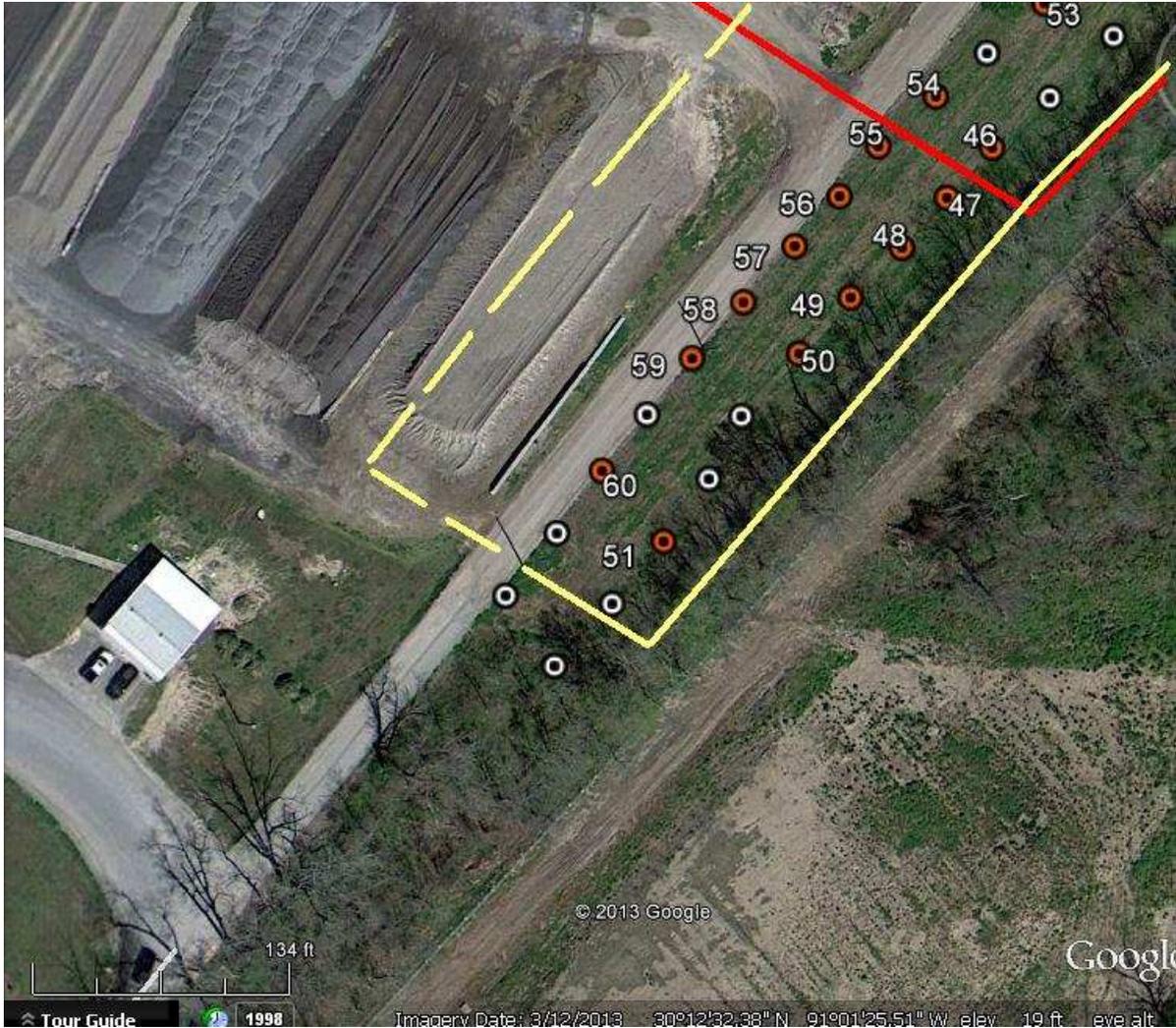


Figure 25. Aerial photograph showing southern portion of APE (red) and site 16AN57 (yellow), with positive shovel tests (red) and negative shovel tests (white) (Source: Google Earth).

Table 1. Shovel Test Number Key for 16AN57.

Locus 1 (Expanded Site)

| Catalog Number | Provenience | |
|----------------|-------------|----------------------|
| | Unit | Level, Feature, etc. |
| 1 | At 50N 150W | Surface |
| 2 | In 30S 120W | |
| 3 | In 50N 120W | |
| 4 | In 30S 30W | |
| 5 | In 30NOW | |
| 6 | In 30N 30E | |
| 7 | At 30N 30E | Surface |
| 8 | In 0N30E | |
| 9 | At 0N30E | Surface |
| 10 | At 30S 30E | Surface |
| 11 | At 40S 10E | Surface |
| 12 | Datum (0N0W | |
| 13 | In 10NOW | |
| 14 | In 10N 10E | |
| 15 | In 10N 20E | |
| 16 | At 30N 10W | Surface |
| 17 | In 0N10E | |
| 18 | In 10E 20S | |
| 19 | In 0N20E | |
| 20 | In 10S30E | |
| 21 | In 0N40E | |
| 22 | In 10S40E | |
| 23 | In 0N50E | |
| 24 | In 10S50E | |
| 25 | In 0N60E | |
| 26 | In 10S0W | |
| 27 | In 10S 20E | |
| 28 | In 20S0W | |
| 29 | In 20S 10W | |
| 30 | At 20S 20E | Surface |
| 31 | In 30S0W | |
| 32 | In 30 S 10W | |
| 33 | In 30S 20W | |
| 34 | In 30 S 90W | |
| 35 | In 30S 100W | |
| 36 | In 40S 130W | |
| 37 | In 0N10W | |

Table 1b. Shovel Test Number Key for 16AN57.

Locus 2 (Previously Reported Site)

| | | |
|----|------------|--|
| 38 | Datum | |
| 39 | In 20S10W | |
| 40 | In 40S10W | |
| 41 | In 50S10W | |
| 42 | In 60S10W | |
| 43 | In 90S10W | |
| 44 | In 100S10W | |
| 45 | In 160S10W | |
| 46 | In 230S10W | |
| 47 | In 240S10W | |
| 48 | In 250S10W | |
| 49 | In 260S10W | |
| 50 | In 270S10W | |
| 51 | In 300S10W | |
| 52 | In 180S20W | |
| 53 | In 210S20W | |
| 54 | In 230S20W | |
| 55 | In 240S20W | |
| 56 | In 250S10W | |
| 57 | In 260S20W | |
| 58 | In 270S20W | |
| 59 | In 280S20W | |
| 60 | In 300S20W | |

Tables 2 is a list of the materials recovered both from the newly expanded area of 16AN57 (Locus 1) and from the previously reported area, on the east side of Waterloo Road (Locus 2). Figures 26-39 illustrate materials recovered from the surface and from shovel tests.

Table 2. Artifacts recovered from 16AN57.

| LOCUS 1 | Surface at 50N150W | In 30S120W | In 50N120W | In 30S30W | In 30N0W | In 30N30E | Surface at 30N30E | In 0N30E | Surface at 0N30E | Surface at 30S30E | Surface at 40S10E | Datum |
|------------------|-------------------------------|-----------------------|-----------------------|----------------------|---------------------|----------------------|----------------------------------|---------------------|---------------------------------|----------------------------------|----------------------------------|--------------|
| Ceramics | | | | | | | | | | | | |
| Whiteware | | | | | | | | | | | | |
| Plain | | 1 | | | | | 1 | 1 | | 4 | 8 | |
| Decorated | | | | | | | | | | | | |
| Hand-painted | | | | | | | | | | | | |
| Annular | | | | | | | | | | | | |
| Blue Shell Edged | 1 | | | | | | 1 | | | | | |
| Mocha | | | | | | | | | | 3 | 1 | |
| Porcelain | | | | | | | | | | | | |
| Plain | | 1 | | | | | | | | | 1 | |
| Blue-edged | | | | | | | | | | | | |
| Stoneware | | | | | | | | | | | | |
| Plain | | 1 | | | | | | | | | 1 | |
| Decorated | | | | | | | | | | | | |
| Yellow | | | 1 | | | | | | | | | |
| Bristol Glaze | | | | | | | | | | | | |
| Salt Glaze | | | | | | | | | | | 1 | |
| Ironstone ware | | | | | | | | | | | | |
| Plain | | | | | | | | 1 | 1 | | 1 | |
| Pearl Ware | | | | | | | | | | | | |
| Plain | | | | | | | | | | | 2 | |
| Decorated | | | | | | | | | | | | |
| Embossed | | | | | | | | | | | | |
| Mocha | | | | | | | | | | | | |
| Transfer | | | | | | | | | | | | |
| Cream Ware | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | |
| Clay Marble | | | | | | | | | | | | |

| LOCUS 1 | Surface at 50N150W | In 30S120W | In 50N120W | In 30S30W | In 30N0W | In 30N30E | Surface at 30N30E | In 0N30E | Surface at 0N30E | Surface at 30S30E | Surface at 40S10E | Datum |
|-----------------------|---------------------------|-------------------|-------------------|------------------|-----------------|------------------|--------------------------|-----------------|-------------------------|--------------------------|--------------------------|--------------|
| Glass | | | | | | | | | | | | |
| Bottle (Curved) | | | | | | | | | | | | |
| Partial | | 1 | | | | | | 1 | 4 | | 3 | 2 |
| Whole Bottle | | | | | | | | | 1 | | | |
| Window (Flat) | | | | | | | | | | | | |
| Milk glass | | | | | | | | | | | | |
| Plain | | | | | | | 1 | | | | | |
| Decorated--Blue | | | | | | | | | | | | |
| Child's Marble | | | | | | | | | | | | |
| Metal | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | |
| Fasteners | | | | | | | | | | | | |
| Nails | | | | | | | | | | | | |
| Wire | | 1 | | | 1 | | | 2 | | | 2 | 2 |
| Cut | | 2 | | 1 | | | | | | | | |
| Unknown Fast. | | | | | | | | | | | | |
| Spike | | | | | | | | | | | | |
| Hook | | | | | | | | | | | | |
| Unknown Iron | | | | | 1 | | 1 | | | | | |
| Brass Tube | | | | | | | | | | | | |
| Construction Material | | | | | | | | | | | | |
| Brick | | 1 | | | 1 | 1 | 1 | | | | | |
| Concrete | | | | | 2 | | | | | | | |
| Aggregates | | | | | | | | | | | | |
| Stone Debitage | | | | | 1 | 2 | | 2 | | | | |

| LOCUS 1 | Surface at 50N150W | In 30S120W | In 50N120W | In 30S30W | In 30N0W | In 30N30E | Surface at 30N30E | In 0N30E | Surface at 0N30E | Surface at 30S30E | Surface at 40S10E | Datum |
|----------------|---------------------------|-------------------|-------------------|------------------|-----------------|------------------|--------------------------|-----------------|-------------------------|--------------------------|--------------------------|--------------|
| Bone | | | | | | | | | | | | |
| Unknown Animal | | | | | | | | | | | | |
| Teeth | | | | | | | | | | | | |
| Animal | | | | | | | | | | | | |
| Coal | | | | | | | | | | | | |
| Shell | | | | | | | | | | | | |
| Rangia cuneata | | 2 | | | 1 | 2 | | 2 | | | | |
| | | | | | | | | | | | | |
| TOTAL | 1 | 10 | 1 | 1 | 7 | 5 | 5 | 9 | 6 | 7 | 20 | 4 |

Table 2. 16AN57 (continued)

| LOCUS 1 | In 10N0W | In 10N10E | In 10N20E | In 30N10W | In 0N10E | In 20S10E | In 0N20E | In 10S30E | In 0N40E | In 10S40E | In 0N50E | In 10S50E | In 0N60E |
|----------------|-------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Ceramics | | | | | | | | | | | | | |
| Whiteware | | | | | | | | | | | | | |
| Plain | | 2 | | 2 | 1 | | | 1 | | | 1 | 1 | |
| Decorated | | | | | | | | | | | | | |
| Hand-painted | | | | | | | | | | | | | |
| Annular | | | | | | | | | | | | | |
| Blue Shell | | | | | | | | | | | | | |
| Edged | | | | | | | | | | | | | |
| Mocha | | | | 1 | | | | | | | | | |
| Porcelain | | | | | | | | | | | | | |
| Plain | | | 2 | | | | | | | | 1 | | |
| Blue-edged | | | | | | | | | | | | | |
| Stoneware | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | | |
| Decorated | | | | | | | | | | | | | |
| Yellow | | | | | | | | | | | | | |
| Bristol Glaze | | | | | | | | | | | | | |
| Salt Glaze | | | | | | | | | | | | | |
| Ironstone ware | | | | | | | | | | | | | |
| Plain | 1 | | | | | | | | | | | 2 | |
| Pearl Ware | | | | | | | | | | | | | |
| Plain | | | | | | | | 1 | | | | 1 | |
| Decorated | | | | | | | | | | | | | |
| Embossed | | | | | | | | | | | | | |
| Mocha | | | | | | | | | | | | | |
| Transfer | | | | | | | | | | | | | |
| Cream Ware | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | | |
| Clay Marble | | | | | | | | | | | | | |

| LOCUS 1 | In 10N0W | In 10N10E | In 10N20E | In 30N10W | In 0N10E | In 20S10E | In 0N20E | In 10S30E | In 0N40E | In 10S40E | In 0N50E | In 10S50E | In 0N60E |
|-----------------------|---------------------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| Glass | | | | | | | | | | | | | |
| Bottle (Curved) | | | | | | | | | | | | | |
| Partial | 1 | 3 | 2 | | 1 | | | | 1 | | | 4 | 1 |
| Whole Bottle | | | | | | | | | | | | | |
| Window (Flat) | | | | | | | | | | | | 1 | |
| Milk glass | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | | |
| Decorated--Blue | | | | | | | 1 | | | | | | |
| Child's Marble | | | | | | | | | | | | | |
| Metal | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | |
| Fasteners | | | | | | | | | | | | | |
| Nails | | | | | | | | | | | | | |
| Wire | | | 2 | | | | | | | 1 | | 2 | 1 |
| Cut | | 3 | | | 1 | | 1 | | | | | | 1 |
| Unknown Fast. | | | | | | | | | | | | | |
| Spike | | | | | | | | | | | | | |
| Hook | | | | | | | | | | | | | |
| Unknown Iron | | | | | | | | | | | | | 1 |
| Brass Tube | | | | | | | | | | | | | |
| Construction Material | | | | | | | | | | | | | |
| Brick | 3 | 1 | 6 | | | 1 | | | | | 1 | 2 | 1 |
| Concrete | 1 | | | | | | | | | | | | |
| Aggregates | | | | | | | | | | | | | |
| Stone Debitage | | | 3 | | | | 1 | | | | | | |

| LOCUS 1 | In 10N0W | In 10N10E | In 10N20E | In 30N10W | In 0N10E | In 20S10E | In 0N20E | In 10S30E | In 0N40E | In 10S40E | In 0N50E | In 10S50E | In 0N60E |
|-------------------|-------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Bone | | | | | | | | | | | | | |
| Unknown Animal | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Teeth | | | | | | | | | | | | | |
| Animal | | | | | | | | | 1 | | | | 1 |
| | | | | | | | | | | | | | |
| Coal | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Shell | | | | | | | | | | | | | |
| Rangia cuneata | | 1 | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTAL | 6 | 10 | 15 | 3 | 3 | 1 | 3 | 2 | 2 | 1 | 3 | 13 | 6 |

Table 2. 16AN57 (continued)

| LOCUS 1 | In 10S0W | In 10S20E | In 20S0W | In 20S10W | In 20S20E | In 30S0W | In 30S10W | In 30S20W | In 30S90W | In 30S100W | In 40S130W | In 0N10W |
|----------------|----------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|------------|------------|----------|
| Ceramics | | | | | | | | | | | | |
| Whiteware | | | | | | | | | | | | |
| Plain | | 1 | | 1 | | | 1 | | | 1 | 1 | |
| Decorated | | | | | | | | | | | | |
| Hand-painted | | | 1 | | | | | | | | | |
| Annular | | | | | | | | | | | | |
| Blue Shell | | | | | | | | | | | | |
| Edged | | | | | | | | | | | | |
| Mocha | | | | 1 | | | | | | | | |
| Porcelain | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | |
| Blue-edged | | | | | | | | | | | | |
| Stoneware | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | |
| Decorated | | | | | | | | | | | | |
| Yellow | | | | | | | | | | | | |
| Bristol Glaze | | | | | 1 | | | | | | | |
| Salt Glaze | | | | | | | | | | | | |
| Ironstone ware | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | |
| Pearl Ware | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | |
| Decorated | | | | | | | | | | | | |
| Embossed | | | | | | | | | | | 1 | |
| Mocha | | | | | | | | | 1 | | | |
| Transfer | | | | 1 | | | | | | | | |
| Cream Ware | | | | | | | | | | | | |
| Plain | | | | | | | 1 | 1 | | | | |
| Clay Marble | | | | | | | | | | | | |

| LOCUS 1 | In 10S0W | In 10S20E | In 20S0W | In 20S10W | In 20S20E | In 30S0W | In 30S10W | In 30S20W | In 30S90W | In 30S100W | In 40S130W | In 0N10W |
|-----------------------|---------------------|----------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|---------------------|
| Glass | | | | | | | | | | | | |
| Bottle (Curved) | | | | | | | | | | | | |
| Partial | | | 1 | | 2 | | | 1 | | | 2 | |
| Whole Bottle | | | | | | | | | | | | |
| Window (Flat) | | | 1 | | | | | | | | | |
| Milk glass | | | | | | | | | | | | |
| Plain | | | | | | 1 | | | | | | |
| Decorated--Blue | | | | | | | | | | | | |
| Child's Marble | | | | | | | | | | | | |
| Metal | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | |
| Fasteners | | | | | | | | | | | | |
| Nails | | | | | | | | | | | | |
| Wire | | | | | 3 | 1 | | | | | 2 | |
| Cut | | | | | | 3 | 1 | 1 | 2 | 1 | 1 | |
| Unknown | | | | | | | | | | | | |
| Fast. | 1 | | | | | | | | | | | |
| Spike | | | | | | | | | | | | |
| Hook | | | | | | | | | | | | |
| Unknown Iron | 3 | | | | | | 1 | | 1 | | | 2 |
| Brass Tube | | | | | | | | | | | | |
| Construction Material | | | | | | | | | | | | |
| Brick | | | 3 | 1 | 4 | 2 | | 1 | 2 | | 2 | 1 |
| Concrete | | | 1 | | | 1 | | | | | | |
| Aggregates | | | 1 | | | | | | | | | |
| Stone Debitage | 1 | | | | 1 | 1 | | | | | | |

| LOCUS 1 | In 10S0W | In 10S20E | In 20S0W | In 20S10W | In 20S20E | In 30S0W | In 30S10W | In 30S20W | In 30S90W | In 30S100W | In 40S130W | In 0N10W |
|-----------------------|---------------------|----------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|---------------------|
| Bone | | | | | | | | | | | | |
| Unknown Animal | | | | | | | | | 1 | | | |
| Teeth | | | | | | | | | | | | |
| Animal | | | | 1 | | | | | | | | |
| Coal | | | | | | 2 | | 1 | | | | |
| Shell | | | | | | | | | | | | |
| <i>Rangia cuneata</i> | | | 1 | 1 | 1 | 2 | | | | | | 1 |
| TOTAL | 5 | 1 | 9 | 6 | 12 | 13 | 4 | 5 | 7 | 2 | 9 | 4 |

Table 2b. Artifacts recovered from 16AN57

| LOCUS 2 | Datum by Road | In 20S10W | In 40S10W | In 50S10W | In 60S10W | In 90S10W | In 100S10W | In 160S10W | In 230S10W | In 240S10W | In 250S10W | In 260S10W | In 270S10W |
|------------------|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Ceramics | | | | | | | | | | | | | |
| Whiteware | | | | | | | | | | | | | |
| Plain | | | | | 1 | | | | | 1 | | 1 | 1 |
| Decorated | | | | | | | | | | | | | |
| Hand-painted | | | | | | | | | | | 1 | | |
| Annular | | | | | | | | | | | | | |
| Blue Shell Edged | | | | | | | | | | | | | |
| Mocha | | | | | | | | | | | | | |
| Porcelain | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | 3 | |
| Blue-edged | | | | | | | | | 1 | | | | |
| Stoneware | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | | |
| Decorated | | | | | | | | | | | | | |
| Yellow | | | | | | | | | | | | | |
| Bristol Glaze | | | | | | | | | | | | | |
| Salt Glaze | | | | | | | | | | | | | |
| Ironstone ware | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | | |
| Pearl Ware | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | | |
| Decorated | | | | | | | | | | | | | |
| Embossed | | | | | | | | | | | | | |
| Mocha | | | | | | | | | | | | | |
| Transfer | | | | | | | | | | | | | |
| Cream Ware | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | 1 | |
| Clay Marble | | | | | | | | | | | | | |

| LOCUS 2 | Datum by Road | In 20S10W | In 40S10W | In 50S10W | In 60S10W | In 90S10W | In 100S10W | In 160S10W | In 230S10W | In 240S10W | In 250S10W | In 260S10W | In 270S10W |
|-----------------------|----------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Glass | | | | | | | | | | | | | |
| Bottle (Curved) | | | | | | | | | | | | | |
| Partial | | | | 1 | | | | | | 1 | 2 | 2 | |
| Whole Bottle | | | | | | | | | | | | | |
| Window (Flat) | | | | | | | | | | | | | |
| Milk glass | | | | | | | | | | | | | |
| Plain | | | | | | | | | | | | | 1 |
| Decorated--Blue | | | | | | | | | | | | | |
| Child's Marble | | | | | | | | | | | 1 | | |
| Metal | | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | | |
| Fasteners | | | | | | | | | | | | | |
| Nails | | | | | | | | | | | | | |
| Wire | | | | | 1 | | | 2 | | | 2 | | |
| Cut | | | | | | | | | | | 1 | | |
| Unknown Fast. | | | | | | | | | | | | | |
| Spike | | | | | | | | | | | | | |
| Hook | | | | | | | | | | | | | |
| Unknown Iron | 1 | | | | | | | | | | | | |
| Brass Tube | | | | | | | | | | | | | |
| Construction Material | | | | | | | | | | | | | |
| Brick | | 2 | 3 | 1 | | 2 | 4 | | | | | | |
| Concrete | | | | | | | | | | | | | |
| Aggregates | | | | | | | | | | | | | |
| Stone Debitage | | | | | | | | | | | | | |

| LOCUS 2 | Datum by Road | In 20S10W | In 40S10W | In 50S10W | In 60S10W | In 90S10W | In 100S10W | In 160S10W | In 230S10W | In 240S10W | In 250S10W | In 260S10W | In 270S10W |
|-----------------------|------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Bone | | | | | | | | | | | | | |
| Unknown Animal | | | | | | | | | | | | | |
| Teeth | | | | | | | | | | | | | |
| Animal | | | | | | | | | | | | | |
| Coal | | | | | | 1 | | | | | | | |
| Shell | | | | | | | | | | | | | |
| <i>Rangia cuneata</i> | | | | | | | | | | | | | |
| TOTAL | 1 | 2 | 3 | 2 | 2 | 3 | 4 | 2 | 1 | 2 | 7 | 7 | 2 |

Table 2. AN1657 Locus 2 (continued)

| | In 300S10W | In 180S20W | In 210S20W | In 230S20W | In 240S20W | In 250S20W | In 260S20W | In 270S20W | In 280S20W | In 300S20W | TOTAL |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Ceramics | | | | | | | | | | | 0 |
| Whiteware | | | | | | | | | | | 0 |
| Plain | 1 | | | | | 1 | 1 | | 1 | | 36 |
| Decorated | | | | | | | | | | | 0 |
| Hand-painted | | | | | | | | | | | 2 |
| Annular | | | | | | | | | | 1 | 1 |
| Blue Shell Edged | | | | | | | | | | 1 | 3 |
| Mocha | | | | | | | | | | | 6 |
| Porcelain | | | | | | | | | | | 0 |
| Plain | | | | | | | | | | | 8 |
| Blue-edged | | | | | | | | | | | 1 |
| Stoneware | | | | | | | | | | | 0 |
| Plain | | | | | | | | 1 | | | 3 |
| Decorated | | | | | | | | | | | 0 |
| Yellow | | | | | | | | | | 1 | 2 |
| Bristol Glaze | | | | | | | | | | | 1 |
| Salt Glaze | | | | | | | | | | | 1 |
| Ironstone ware | | | | | | | | | | | 0 |
| Plain | | | | | | | | | | | 6 |
| Pearl Ware | | | | | | | | | | | 0 |
| Plain | | | | | | | | | | | 4 |
| Decorated | | | | | | | | | | | 0 |
| Embossed | | | | | | | | | | | 1 |
| Mocha | | | | | | | | | | | 1 |
| Transfer | | | | | | | | | | | 1 |
| Cream Ware | | | | | | | | | | | 0 |
| Plain | | | | 1 | | | | | | | 4 |
| Clay Marble | | | | | | 1 | | | | | 1 |

| | In 300S10W | In 180S20W | In 210S20W | In 230S20W | In 240S20W | In 250S20W | In 260S20W | In 270S20W | In 280S20W | In 300S20W | TOTAL |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Glass | | | | | | | | | | | 0 |
| Bottle (Curved) | | | | | | | | | | | 0 |
| Partial | 2 | 1 | 1 | | 5 | 6 | 2 | 1 | | 2 | 56 |
| Whole Bottle | | | | | | | | | | | 1 |
| Window (Flat) | | | | | | | | | | | 2 |
| Milk glass | | | | | | | | | | | 0 |
| Plain | | | | | | | | | | | 3 |
| Decorated--Blue | | | | | | | | | | | 1 |
| Child's Marble | | | | | | | | | | | 1 |
| | | | | | | | | | | | 0 |
| Metal | | | | | | | | | | | 0 |
| Iron | | | | | | | | | | | 0 |
| Fasteners | | | | | | | | | | | 0 |
| Nails | | | | | | | | | | | 0 |
| Wire | 2 | | | | | 3 | 1 | | | 1 | 32 |
| Cut | 5 | | 4 | 1 | 6 | 2 | | | | | 37 |
| Unknown | | | | | | | | | | | |
| Fast. | 1 | | | | | | | | | | 2 |
| Spike | 1 | | | | | | | | | | 1 |
| Hook | | | | | | | | | | | 0 |
| Unknown Iron | | | | | | 1 | | 1 | | | 13 |
| Brass Tube | | | | | | | 1 | | | | 1 |
| | | | | | | | | | | | 0 |
| Construction Material | | | | | | | | | | | 0 |
| Brick | | | | | | | | | | | 47 |
| Concrete | | | | | | | | | | | 5 |
| Aggregates | | | | | | | | | | | 1 |
| Stone Debitage | | | | | | | | 1 | | | 13 |

| | in 300S20W | in 180S20W | in 210S20W | in 230S20W | in 240S20W | in 250S20W | in 260S20W | in 270S20W | in 280S20W | in 300S20W | TOTAL |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Bone | | | | | | | | | | | 0 |
| Unknown Animal | | | | | | | | | | | 1 |
| | | | | | | | | | | | 0 |
| Teeth | | | | | | | | | | | 0 |
| Animal | | | | | | | | | | | 3 |
| | | | | | | | | | | | 0 |
| Coal | | | | | | | | | | | 4 |
| | | | | | | | | | | | 0 |
| Shell | | | | | | | | | | | 0 |
| <i>Rangia cuneata</i> | | | | | | | | | | | 14 |
| | | | | | | | | | | | 0 |
| TOTAL | 12 | 1 | 5 | 2 | 11 | 14 | 5 | 4 | 1 | 6 | 320 |

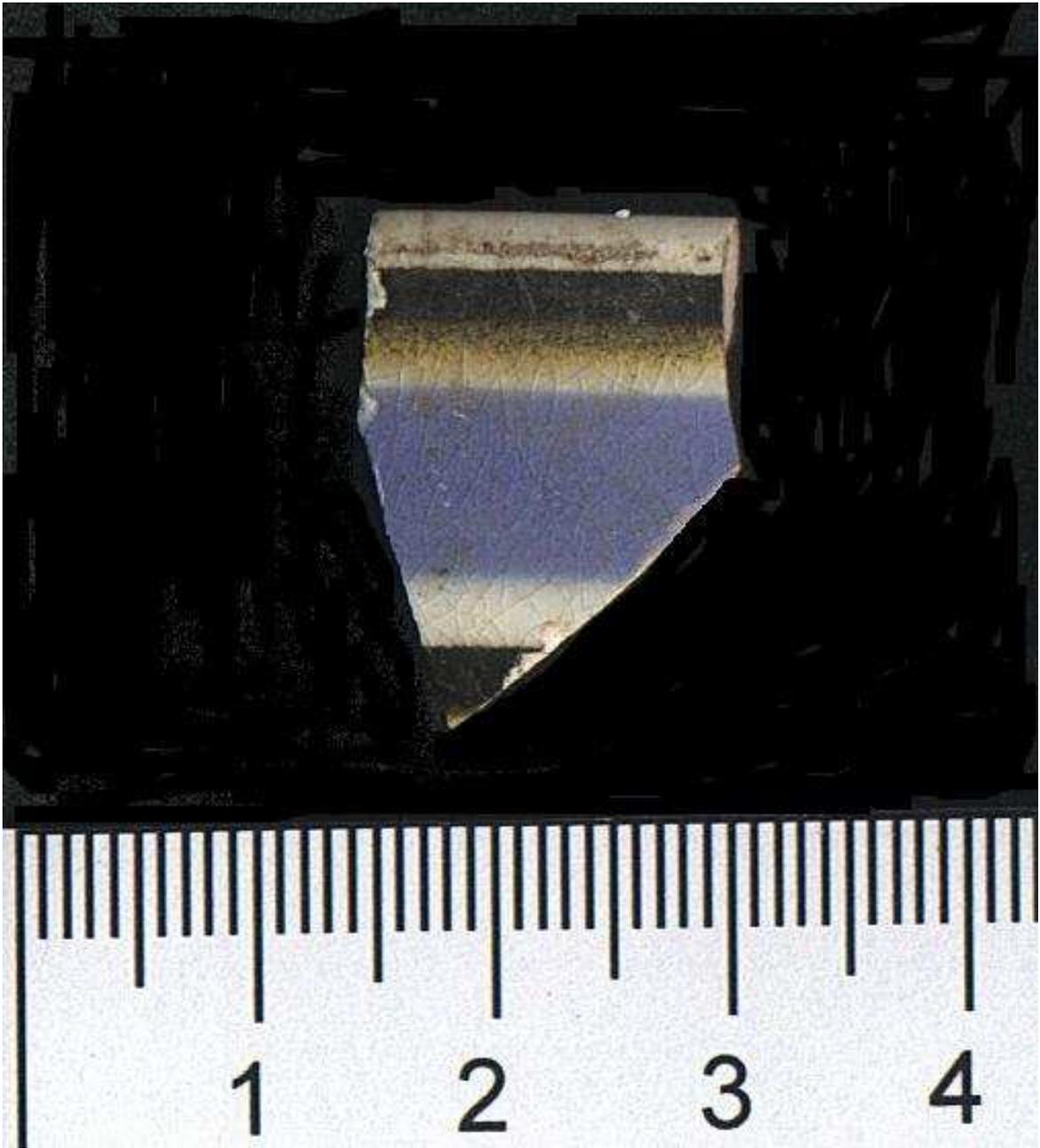


Figure 26. Banded (Mocha) whiteware, 40S10E, surface, Loc. 1, 16AN57

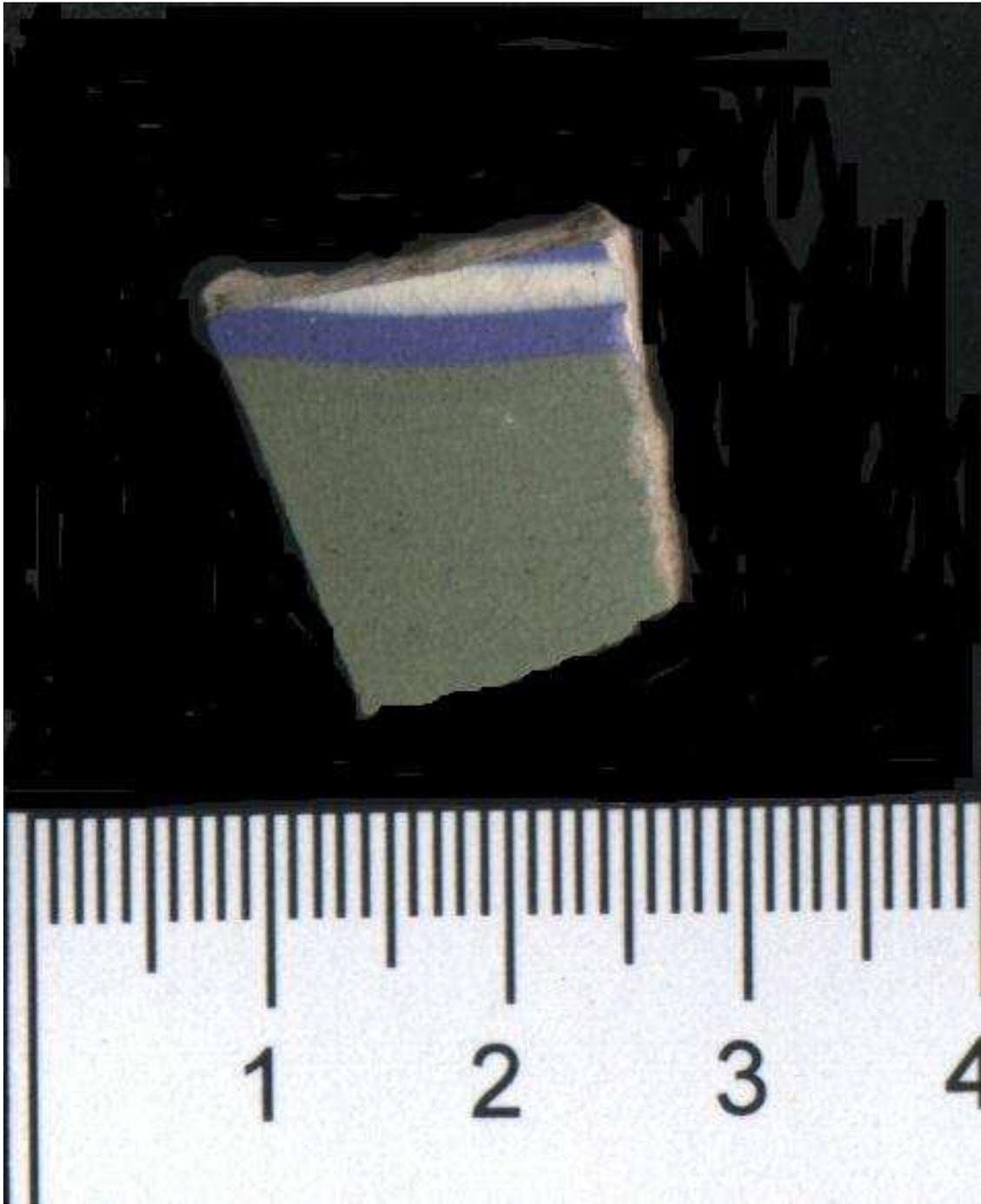


Figure 27. Banded (Mocha) whiteware, surface, 30S30E, Loc. 1, 16AN57



Figure 28. Classic Mocha whiteware, ST20S10W, Loc. 1, 16AN57



Figure 29. Blue shell-edged whiteware, surface, 50N150W, Loc. 1, 16AN57.

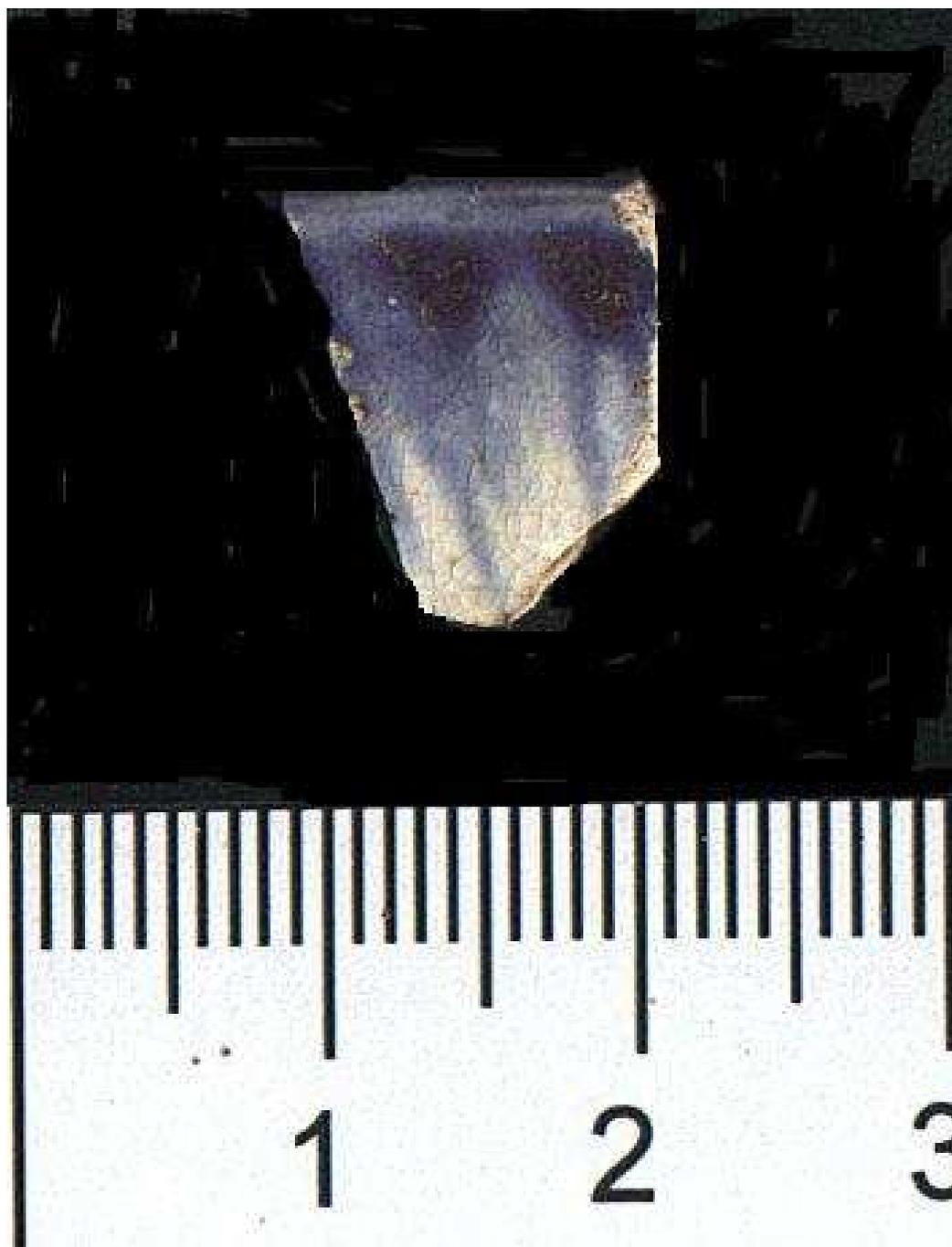


Figure 30. Blue shell-edged whiteware, ST 300S20W, Loc. 2, 16AN57.



Figure 31. Porcelain, ST30S120W, Loc. 1, 16AN57.

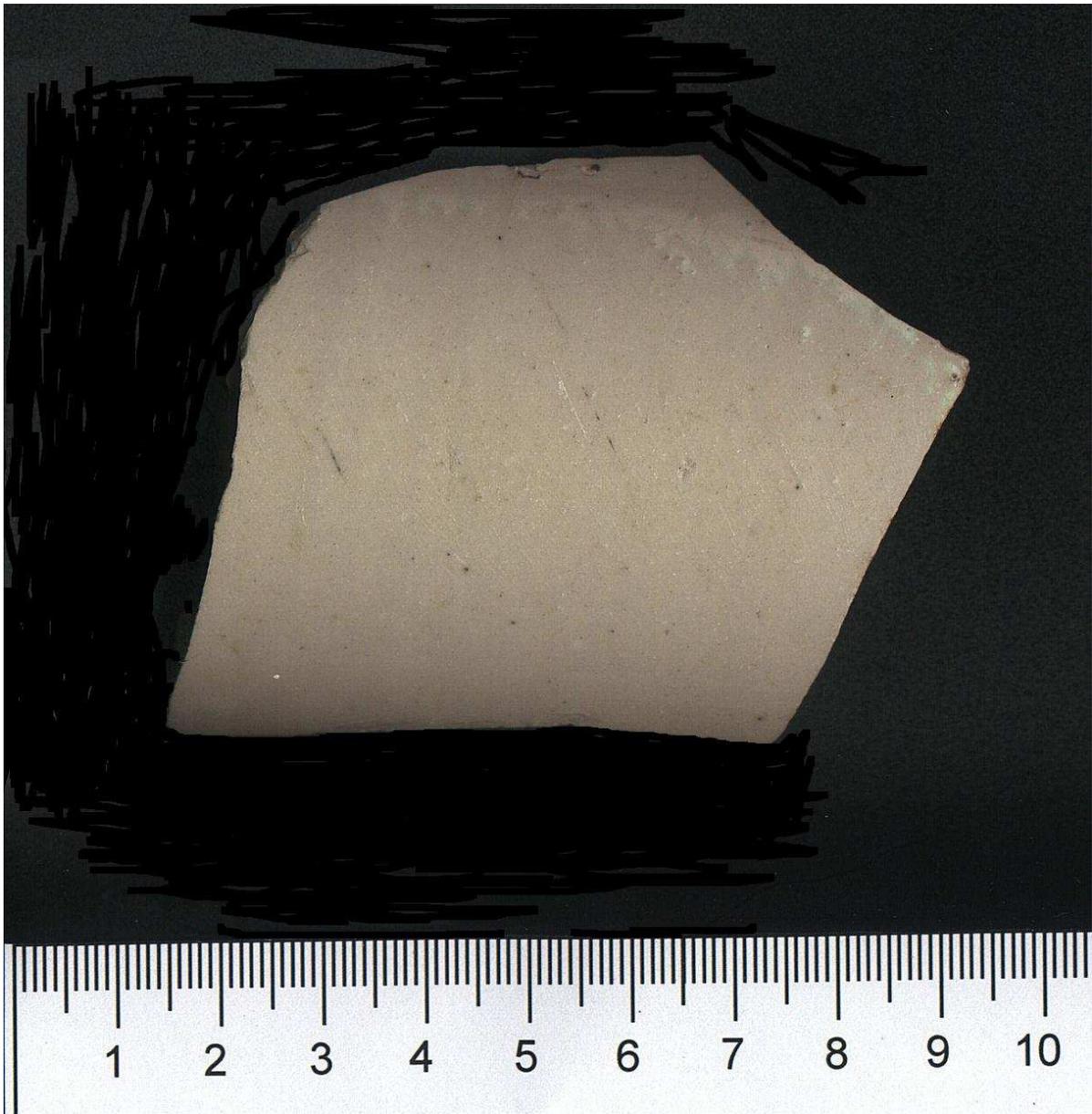


Figure 32. Stoneware, surface, 20S20E, Loc. 1, 16AN57.



Figure 33. Transfer pearlware, ST20S10W, Loc. 1.



Figure 34. Creamware, ST230S20W, Loc. 2.



Figure 35. Cut nail, ST30N20W, Loc. 1, 16AN57, T28ST3.



Figure 36. Cut nail, ST0N60E, Loc. 1, 16AN57.



Figure 37. Neck of blown-glass wine bottle, ST at Datum (0N0W), Loc. 1, 16AN57.



Figure 38. Tooth (Probably *Bos spp.*), ST10N10W, Loc. 1, 16AN57.



Figure 39. Tooth (Probably *Equus spp.*), ST0N60E, Loc. 1, 16AN57.

Figure 40 presents representative shovel test profiles for 16AN57.

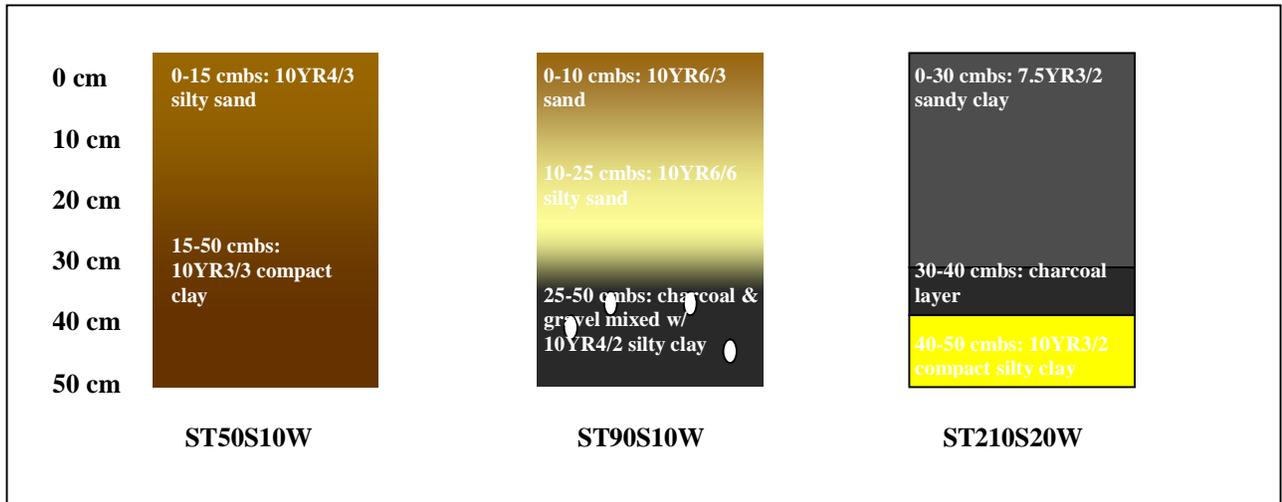


Figure 40. Representative shovel test profiles for 16AN57.

Discussion

Site 16AN57 was the only archaeological site recorded in the APE. This site consists of materials found along the east side of Waterloo Road and items recovered from just northwest of the north terminus of Waterloo Road, on the south side of New River.

Historic maps show structures in these locations in 1913, but of the 320 items recovered, many suggest an earlier date. For example, there are two sherds of polychrome hand-painted whiteware (1840-1860), one sherd of annular whiteware (1830-1860), three of blue shell-edged whiteware (1830-1860) and six sherds of Mocha whiteware (ca. 1800-1860). Pearlware is also represented, with four plain pieces (1780-1830), one mocha-decorated (ca. 1800), and one transfer-printed (1810-1830). Finally, four pieces of creamware were also found (1762-1820) (See Hahn and Castille 1988:C-1-2; Noel Hume 1969:131). Stoneware was poorly represented with one Bristol glazed specimen and one salt-glazed exemplar, as well as an odd yellow-glazed piece. About all that can be said for these is that they probably post-date 1820 (Hahn and Castille 1988: C-2).

Nails included 32 wire nails and 37 cut nails. Wire nails began to be made after the patenting of the first American wire-nail machine in 1877; for most of the 19th century cut-nails were the norm (Edwards and Wells 1993:18). Thus, the nails suggest a long span of construction, from the 19th through the 20th centuries.

The 47 brick fragments saved testify to the fact that structures were once present in these locations.

In summary, the materials from 16AN57 reflect the existence of a widespread deposit of 19th and 20th century materials. A significant number of the 19th century materials antedate the Civil War, when New River was an important avenue of commerce. Further investigation of this site may very well shed light on settlement patterns and commerce along the Mississippi River in the antebellum and reconstruction periods. For this reason, site 16AN57 is considered of unknown (but potential) NRHP eligibility.

CHAPTER EIGHT: CONCLUSIONS AND RECOMMENDATIONS

Conclusions

A survey was conducted of 114 ac (46.1 ha) to be certified for industrial use, in Geismar, Ascension Parish, Louisiana. A total of 475 transect shovel tests were excavated and one archaeological site, 16AN57, was updated and its lateral extent expanded.

Site 16AN57 yielded materials indicative of antebellum and later 19th century, as well as 20th century, occupation.

According to the *National Register of Historic Places Bulletin* 16 (NPS 1991:1, 36):

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association are potentially eligible for the *National Register of Historic Places*. In order to evaluate this significance, four criteria have been developed:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in history or prehistory.

Archaeological sites are usually assessed under Criterion D.

It is considered, based on the lateral extent of 16AN57, and the antiquity of the materials recovered, that further investigation of this site holds the potential to provide significant information on settlement patterns and commerce on the Mississippi River during the 19th century. This reflects the themes of Plantation Archaeology, the Steamboat Era, and the Influence of the Mississippi River on Historic Settlement, as articulated in Louisiana's Comprehensive Archaeological Plan (Smith et al. 1983:252).

Recommendations

Other than the area designated as being occupied by 16AN57, the survey area is considered to be unlikely to contain National Register of Historic Places-eligible properties and it is recommended that the proposed development be allowed to proceed as planned. As for 16AN57, it is recommended that this site be considered of unknown, but potential, NRHP eligibility and that the area of the site either be avoided or be subjected to Phase II NRHP eligibility testing.

REFERENCES CITED

Albrecht, Andrew C.

- 1945 The Origin and Early Settlement of Baton Rouge, Louisiana. *Louisiana Historical Quarterly* 28:5-68.

Arthur, Stanley Clisby

- 1935 *The Story of the West Florida Rebellion*. St. Francisville *Democrat*, St. Francisville, Louisiana.

Babson, David W. and Charles E. Orser, Jr.

- 1989 *Pillars on the Levee. Archaeological Investigations at Ashland-Belle Helene Plantation, Geismar, Ascension Parish, Louisiana*. Unpublished report of grant project submitted to the Division of Archaeology and on file with that office.

Belmont, John S.

- 1982 The Troyvile Concept and the Gold Mine Site. *Louisiana Archaeology* 9:63-96.

Brackenridge, Henry Marie

- 1818 *On the Population and Tumuli of the Aborigines of North America*. In a letter from H. H. (sic) Brackenridge, Esq. to Thomas Jefferson. Read Oct. 1, 1813. *Transactions of the American Philosophical Society (New Series)*, Vol. I, No. 7, pp. 151-159.

Brain, Jeffrey P.

- 1978 Late Prehistoric Settlement Patterning in the Yazoo Basin and Natchez Bluffs Regions of the Lower Mississippi Valley. In *Mississippian Settlement Patterns*, ed. by Bruce D. Smith, pp. 331-368. Academic Press, New York.

Brown, Clair

- 1945 *Louisiana Trees and Shrubs*. Bulletin 1. Louisiana Forestry Commission, Baton Rouge.

Brown, Ian W.

- 1982 The Southeastern Check Stamped Pottery Tradition: A View from Louisiana. Special Paper No. 4. *Mid-Continental Journal of Archaeology*, Kent, OH.

- Brown, Ian W. and Nancy Lambert-Brown
 1978 *Archaeological Investigations at the Banana Bayou Mound (33-1-6)*.
 Research Notes No. 5. Petit Anse Project, Lower Mississippi Survey, Peabody
 Museum, Harvard University, Cambridge, MA
- Bryant, D. Douglas
 1985 *A Cultural Resources Survey of the Proposed Shell Pipeline Between Station
 9030+7 and Station 9863+45, Jiberville and Ascension Parishes, Louisiana*.
 Unpublished report submitted to Shell Pipeline Corporation and on file with
 the Louisiana Division of Archaeology.
- Butler, W.E.
 1980 *Down Among the Sugar Cane: The Story of Louisiana Sugar Plantations and
 their Railroads*. Moran Publishing Corporation, Baton Rouge.
- Byrd, Kathleen Mary
 1974 *Tchefuncte Subsistence Patterns, Morton Shell Mound, Iberia Parish, Louisiana*.
 Unpublished M.A. thesis submitted to the Department of Geography &
 Anthropology, Louisiana State University. Baton Rouge.
- 1977 The Brackish Water Clam (*Rangia Cuneata*): A Prehistoric 'Staff of Life' or a
 Minor Food Resource. *Louisiana Archaeology* 3:23-31.
- Carpenter, Vickie, Jill-Karen Yakubik, Marco I. Giardino, and Dave D. Davis
 1981 *Level I Cultural Resources Survey and Assessment for the Proposed Peabody
 Coal Terminal, St. James Parish, Louisiana*. Unpublished report by Tulane
 University, Department of Anthropology, New Orleans, submitted to
 Waldemar S. Nelson & Co., Inc., and on file with the Louisiana Division of
 Archaeology.
- Carrighan, Judge John
 1851 Historical and Statistical Sketches of Louisiana. *DeBow's Review* 11:611-
 617.
- Castille, George J., III
 1979 *Survey and Evaluation of the St. Alice Revetment, St. James Parish,
 Louisiana*. Unpublished report by Coastal Environments, Inc., submitted to
 New Orleans District, Corps of Engineers, and on file with the Louisiana
 Division of Archaeology.
- Charlevoix, Pierre F. X.
 1976 *Charlevoix's Louisiana--Selections from the History and the Journal*. Edited
 by Charles E. O'Neill, Louisiana American Revolution Bicentennial
 Commission: Louisiana State University Press, Baton Rouge.

Clement, William Edwards

1952 *Plantation Life on the Mississippi*. Pelican Publishing Co., New Orleans.

Coastal Environments, Inc. (CEI)

1977 *Cultural Resources Survey of Proposed Scallan Brothers Borrow Pit 493 +00-508+ 00, East Bank, Mississippi River, East Baton Rouge Parish*. Unpublished report submitted to Scallan Brothers Construction Company and on file with the Louisiana Division of Archaeology.

1987 *A Level I Cultural Resources Survey of Proposed Telephone Cable Routes in Ascension and Livingston Parishes, Louisiana*. Unpublished report submitted to Certified Engineering, Inc., and on file with the Louisiana Division of Archaeology.

Collins, Henry B.

1941 Relationships of an Early Indian Cranial Series from Louisiana. *Journal of the Washington Academy of Science*, 31:145-155.

Dalrymple, Margaret Fisher (editor)

1978 *The Merchant of Manchac: The Letterbooks of John Fitzpatrick, 1768-1790*. Louisiana State University Press, Baton Rouge.

D' Anville, Jean Baptiste Bourguignon

1752 *Map of Louisiana, originally drawn in 1732*. Cartographic Information Center, Louisiana State University. Baton Rouge.

Davies, Christopher, Roger Saucier, Susan B. Smith, Julienne Crawford, Paul Heinrich and Dave Davis

1998 *Phase I Cultural Resources Survey and Inventory of the Proposed Bridgeline Gas Distribution Acadian Extension 6.625 In O.D. Pipeline Project, Ascension and St. James Parishes, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Ducote, Gregory J.

1987 *Cultural Resources Survey, Ascension-St. James Airport, Ascension Parish*. Unpublished report by the Louisiana Department of Transportation & Development, and on file with the Louisiana Division of Archaeology, Baton Rouge.

Dundee, Harold A. and Douglas A. Rossman

1989 *The Amphibians and Reptiles of Louisiana*. Louisiana State University Press, Baton Rouge.

Durio, Lori and Elizabeth Calvit

- 2005 *Cultural Resources Inventory Report, Bengal Pipeline Route in the Mississippi River Valley, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Edwards, Jay D. and Tom Wells

- 1993 *Historic Louisiana Nails: Aids to the Dating of Old Buildings*. The Fred B. Kniffen Cultural Resources Laboratory Monograph No. 2. Geoscience Publications, Department of Geography and Anthropology, Louisiana State University. Baton Rouge.

Flores, Dan L. (editor)

- 1984 *Jefferson and Southwestern Exploration: The Freeman and Custis Accounts of the Red River Expedition of 1806*. University of Oklahoma Press, Norman, Oklahoma.

Gagliano, Sherwood M.

- 1963 A Study of Preceramic Occupations in Portions of South Louisiana and South Mississippi. *Florida Anthropologist* 16(4): 105-132.

- 1967 *Occupation Sequence at Avery Island*. Coastal Studies Institute, Coastal Studies Series, Report No. 22. Louisiana State University, Baton Rouge.

- 1970 *Archaeological and Geological Studies at Avery Island, 1968-1970*. Coastal Studies Institute, Louisiana State University, Baton Rouge.

- 1977 *Cultural Resources Survey of Scallan Brothers Construction Company Proposed Borrow Pit, Manchac Bend Levee Project, Mississippi River, Iberville Parish, Louisiana*. Unpublished report submitted to Scallan Brothers Construction Company and on file with the Louisiana Division of Archaeology.

- 1984 Geoarchaeology of the Northern Gulf Shore. *Perspectives on Gulf Coast Prehistory*. Edited by Dave D. Davis. University Presses of Florida, Florida State Museum, Gainesville, Louisiana.

Gagliano, Sherwood M., Charles E. Pearson, Richard A. Weinstein, Diane E. Wiseman, and Christopher M. McClendon

- 1982 *Sedimentary Studies of Prehistoric Archaeological Sites: Criteria for the Identification of Submerged Archaeological Sites of the Northern Gulf of Mexico Continental Shelf* Unpublished report submitted to the Division of State Plans and Grants, National Park Service. U.S. Department of the Interior. Washington, D.C.

George, David, Roger Saucier, Susan Barrett Smith, Jeremy Pincoske, William Hayden, Rebecca Johnson, Ryan Crutchfield, William Barr and William P. Athens

2000a *Cultural Resources Study Supporting Supplement I to the Final Environmental Impact Statement, Mississippi River Main Line Levee*. Unpublished report on file in the Louisiana Division of Archaeology, Baton Rouge.

George, David R., Kari Krause, Katy Coyle, Jeremy Pincoske and William P. Athens

2000b *Cultural Resources Survey and Archaeological Inventory of the Alhambra to Hohen-Solms and Hohen-Solms to Modeste Project Items, Ascension and Iberville Parishes, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Gibson, Jon L.

1978 *Archaeological Survey of the Lower Atchafalaya Region, South Central Louisiana*. Report No. 5. Center for Archaeological Studies, University of Southwestern Louisiana, Lafayette.

1982 The Troyvile-Baytown Issue. *Louisiana Archaeology* 9:29-62.

1994 Before Their Time? Early Mounds in the Lower Mississippi Valley. *Southeastern Archaeology* 13:162-186.

Goodwin, Benjamin S.

2003 *Remote Sensing at the Broussard Mounds Site: A Prehistoric Multi-Mound Site Located in the Lower Mississippi Valley*. M.A. thesis for the degree of Master of Arts in Anthropology, Louisiana State University, on file electronically in the Louisiana State University Library, Baton Rouge.

Goodwin, R. Christopher, Stephen Hinks, Jennifer A. Cohen, Paul C. Armstrong, Sylvia L. Favret, Lawrence L. Hewitt and William P. Athens

1989 *Significance Assessment of 16AN26 New River Bend Revetment*. Unpublished report by R. Christopher Goodwin and Associates submitted to New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.

Goodwin, R. Christopher, Stephen Hinks, William P. Athens, Lawrence L. Hewitt, and William A. Morgan

1990 *Literature Search and Research Design, Amite River and Tributaries Project, Ascension, East Baton Rouge, and Livingston Parishes, Louisiana*. Unpublished report submitted to the New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.

- Goodwin, R. Christopher, Jill-Karen Yakubik, Debra Stayner and Kenneth Jones
 1985 *Cultural Resources Survey of Five Mississippi River Revetment Items*. Unpublished report submitted to the New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.
- Goodwin, R. Christopher, Jill-Karen Yakubik, Peter A. Gendel and Herschel A. Franks
 1986 *Cultural Resources Survey of the Burnside Revetment Item, Ascension and St. James Parishes, Louisiana*. Unpublished report submitted to the New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.
- Grace, Albert L.
 1946 *The Heart of the Sugar Bowl: The Story of Iberville*. Published by the Heirs of Albert L. Grace, Plaquemine, Louisiana.
- Guevin, Bryan L.
 1983 *The Ethno-Archaeology of the Houma Indians*. Unpublished M.A. thesis submitted to the Department of Geography & Anthropology, Louisiana State University. Baton Rouge.
 1990 *Archaeological Survey of the Geismar Liquid Carbonic Plant Extension, Ascension Parish, Louisiana*. Unpublished report submitted to Liquid Carbonics Gas Specialty Corporation, and on file with the Louisiana Division of Archaeology, Baton Rouge.
- Haag, William G.
 1993 *The Monte Sano Site*. Paper presented at the Annual Meeting of the Louisiana Archaeological Society, Lafayette, Louisiana.
- Hahn, Thurston H. G., III and George J. Castille, III
 1988 *Archaeological Investigation of the Maronge-Laine Site on Acadia Plantation, Lafourche Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.
- Hayes, Christopher
 1996 *1996 Annual Report for Management Units IV and V, Regional Archaeology Program, Museum of Natural Science, Louisiana State University*. Report on file with the Louisiana Division of Archaeology, Baton Rouge.
 1997 *Fort Butler and Other Projects: Regional Archaeology in Southeast Louisiana*. Report on file with the Louisiana Division of Archaeology, Baton Rouge.

- 1998 *Site Survey in the Florida Parishes and Along Bayou Lafourche: Regional Archaeology in Southeast Louisiana*. Report on file with the Louisiana Division of Archaeology, Baton Rouge.
- 1999 *Ceramics in Louisiana from 1300 B.C. to A.D. 1300: Regional Archaeology in Southeast Louisiana*. Report on file with the Louisiana Division of Archaeology, Baton Rouge.
- 2000 *2000 Annual Report for Management Units IV and V, Regional Archaeology Program, Museum of Natural Science, Louisiana State University*. Report on file with the Louisiana Division of Archaeology, Baton Rouge.

Heartfield, Price, and Greene, Inc. (HPG)

- 1985 *Cultural Resources Investigations of a Proposed United Gas Pipeline Replacement in East Baton Rouge and Ascension Parishes, Louisiana*. Unpublished Report submitted to United Gas Pipeline Company and on file with the Louisiana Division of Archaeology

Hewitt, Lawrence Lee

- 1987 *Port Hudson, Confederate Bastion on the Mississippi*. Louisiana State University Press, Baton Rouge.

Hinks, Stephen, Paul V. Heinrich, Ralph Draughon, Jr., Jennifer Cohen and William P. Athens

- 1993 *Supplemental Cultural Resources Investigations and Site Testing for the Pointe Coupee to Arbroth Levee Enlargement and Seepage Control Project, West Baton Rouge Parish, Louisiana*. Unpublished report submitted to the New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.

Holley, George R. and Gary B. DeMarcay

- 1977 *Preliminary Report on the Prehi story of Barataria*. Paper presented at the third annual meeting of the Louisiana Archaeological Society, New Orleans.

Homburg, Jeffrey A.

- 1988 Archaeological Investigations at the LSU Campus Mounds. *Louisiana Archaeology* 15:31-204.

Hoyt, Jon M. and Malcolm K. Shuman

2012 *Phase I Cultural resources Survey of 225 Acres (91.1 hectares) Proposed for Industrial Use, Geismar, Ascension Parish, Louisiana.* Unpublished report on file with the Louisiana Division of Archaeology.

Jackson, Paul D., Rebecca Saunders, and Joesetta LeBoeuf

2000 *Phase IA Cultural Resources Investigation for a Proposed Fiber-Optic Line Through the Southern Portions of Louisiana.* Unpublished report on file with the Louisiana Division of Archaeology.

Jones, Dennis C.

1993 *Archaic Mounds in Louisiana: The Case of the LSU Campus Mounds Report.* *Louisiana Archaeology* 20:169-178.

Jones, Dennis C. and Malcolm K. Shuman

1987 *Archaeological Atlas and Report of Prehistoric Indian Mounds in Louisiana. Vol. II: Ascension, Iberville, Pointe Coupee, St. James and West Baton Rouge Parishes.* Unpublished report of grant project submitted to the Louisiana Division of Archaeology and on file with that office.

Jones, Dennis, Carl Kuttruff, Malcolm Shuman and Joe Stevenson

1994 *The Kleinpeter Site (16EBR5): The History and Archaeology of a Multicomponent Site in East Baton Rouge Parish, Louisiana.* *Louisiana Geological Survey Anthropological Study No. 5.* Baton Rouge, Louisiana.

Jones, Dennis C., Malcolm K. Shuman, Tom Wells and Ben Goodwin

1998 *Cultural Resources Survey of the Proposed Route of a Pipeline in Ascension, East Baton Rouge, Iberville, St. James, and West Baton Rouge Parishes, Louisiana.* Unpublished report submitted to Exxon Pipeline Company and on file with the Louisiana Division of Archaeology.

Kniffen, Fred B.

1938 *The Indian Mounds of Iberville Parish.* Department of Conservation. *Louisiana Geological Survey Bulletin* 13:189-267.

Kuttruff, Carl, Paul V. Heinrich, and Melissa Wiedenfeld

1993 *Archaeological Testing of the North Bend Site (16SMY132) and Survey of the Todd Area Levee, St. Mary Parish, Louisiana.* Report submitted to New Orleans District, Corps of Engineers by the Louisiana Geological Survey and on file with the Louisiana Division of Archaeology.

Landry, Laura A., Kathleen McCloskey, Reinaldo W. Barnes and William H. Spencer

1980 *Rapidan Plantation.* Unpublished report submitted to Pyeburn & Odom Engineers and on file with the Louisiana Division of Archaeology.

Lee, Aubra, Jill-Karen Yakubik and Benjamin D. Maygarden

- 1996 *Site Testing at Darrow (16AN54), Marchand to Darrow Levee Enlargement and Concrete Slope Pavement, Mississippi River Levees, Ascension Parish, Louisiana*. Unpublished report submitted to the U.S. Army Corps of Engineers, New Orleans District, and on file with the Louisiana Division of Archaeology, Baton Rouge.

LDOA (Louisiana Division of Archaeology)

N.D. Archaeological site files.

Louisiana Legislative Council

- 1964 *The History and the Government of Louisiana*. Louisiana Legislative Council, Baton Rouge, Louisiana.

Louisiana Works Projects Administration

- 1941 *Louisiana: A Guide to the State*. Hastings House Publishers, New York

Lowery, George H.

- 1955 *Louisiana Birds*. Louisiana State University Press, Baton Rouge.

- 1974 *The Mammals of Louisiana and its Adjacent Waters*. Louisiana State University Press, Baton Rouge

LSUCIC (Louisiana State University Cartographic Information Center)

- n.d. Department of Geography and Anthropology, Louisiana State University, Baton Rouge,

Madden, Michael R.

- 1985 *Cultural Resources Investigations of a Proposed United Gas Pipeline Replacement in East Baton Rouge and Ascension Parishes, Louisiana*. Unpublished report submitted to United Gas Pipeline Company and on file with the Louisiana Division of Archaeology.

Mann, Rob

- 2001 *2001 Annual Report for Management Units IV and V, Regional Archaeology Program, Museum of Natural Science, Louisiana State University*. Report on file with the Louisiana Division of Archaeology, Baton Rouge.

Marchand, Sidney A.

- 1936 *The Flight of a Century (1800-1900) in Ascension Parish, Louisiana*. Published by author, Donaldsonville, Louisiana.

- 1949 *Across the Years*. Published by author, Donaldsonville, Louisiana.

McCloskey, Kathleen G., Charles E. Pearson, and George J. Castille, III

- 1981 *Cultural Resources Reconnaissance of a Proposed Coal Transfer Facility at River Mile 174, Ascension Parish, Louisiana*. Unpublished report by Coastal Environments, Inc., submitted to Miller Coal Systems, Inc., and on file with the Louisiana Division of Archaeology.

McIntire, William G.

- 1958 *Prehistoric Indian Settlements of the Changing Mississippi River Delta*. Coastal Studies Series 1. Louisiana State University Press, Baton Rouge.
- 1976 *Archaeological and Historical Sites. Appendix A*. In *Environmental Assessment of 10-in Ethylene Line from Norco to Sorrento, Louisiana*. Submitted to Shell Pipeline Company and on file with the Louisiana Division of Archaeology.
- 1981 *Cultural Resources Survey, Louisiana Section of Proposed Pipeline Corridor from Weeks Island to Mississippi Border*. Unpublished report submitted to Dames and Moore, Inc., and on file with the Louisiana Division of Archaeology.

McWilliams, Richebourg Gaillard, ed.

- 1953 *Fleur de Lys and Calumet: Being the Penicault Narrative*. Louisiana State University Press, Baton Rouge.
- 1981 *Iberville's Gulf Journals*. University of Alabama Press, Alabama University.

Menn, Joseph Karl

- 1964 *The Large Slaveholders of Louisiana-1860*. Pelican Publishing, New Orleans.

Moore, Clarence B.

- 1913 Some Aboriginal Sites in Louisiana and Arkansas. *Academy of Natural Sciences of Philadelphia Journal* 16(1): 1-98.

NPS (National Park Service)

- 1991 *How to Complete the National Register Registration Form*. National Register of Historic Places Bulletin 16. National Park Service, Department of the Interior, Washington, D.C.

Neuman, Robert W.

- 1977 *An Archaeological Survey of Ascension Sewage Districts, Numbers 2,3 and 4*. Unpublished report on file with the Louisiana Division of Archaeology.

- 1978 *An Archaeological Survey of the Proposed Bayou Choctaw to St. James 36 in. Crude Oil Pipeline, Louisiana*. Unpublished report submitted to the U.S. Department of Energy and on file with the Louisiana Division of Archaeology.
- 1984 *An Introduction to Louisiana Archaeology*. Louisiana State University Press, Baton Rouge.
- 1988 Report on the Soil Core Borings Conducted at the LSU Campus Mounds Site (16EBR6). East Baton Rouge Parish, Louisiana. *Louisiana Archaeology* 15:1-30.

Noel Hume, Ivor

- 1969 *A Guide to Artifacts of Colonial America*. Alfred A. Knopf, New York.

Padgett, James A.

- 1938 The West Florida Revolution of 1810, as Told in the Letters of John Rhea, Fulwar Skipwith, Reuben Kemper, and Others. *Louisiana Historical Quarterly* 21:1-129.

Perrault, Stephanie, Richard A. Weinstein, David R. Kelley and Kam-Bui Liu

- 1994 *National Register Eligibility Testing at the Sarah Peralta Site, East Baton Rouge Parish, Louisiana*. Unpublished report of grant project submitted to the Louisiana Division of Archaeology and on file with that office.

Phillips, Philip

- 1970 *Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955*. Peabody Museum of Archaeology and Ethnology, Paper No. 60. Harvard University, Cambridge.

Postal, Bernard

- 1976 The Story of Geismar. *Judaica Post* 4:350-353

Price, G. R. Dennis

- 1977 *A Cultural Resource Survey and Evaluation of the Big Three Industries Pipeline Corridor, Geismar to Norco, Louisiana*. Unpublished report submitted to Gulf Interstate Engineering and on file with the Louisiana Division of Archaeology, Baton Rouge.
- 1987 *A Cultural Resource Survey of a Proposed 24-Inch Diameter United Gas Pipeline Company Pipeline in Ascension, St. Charles, St. James and St. John the Baptist Parishes*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Prichard, Walter (editor)

1938 A Tourist's Description of Louisiana in 1860. *Louisiana Historical Quarterly* 21:1110-1214.

Puncky, Claire

1960 New River's Water Flow Past Historic Plantations. *Times-Picayune* 28 August 1960.

Quimby, George I., Jr.

1951 The Medora Site, West Baton Rouge Parish, Louisiana. *Field Museum of Natural History Anthropological Series*, Vol. 24, No. 2.

1957 The Bayou Goula Site, Iberville Parish, Louisiana. *Fieldiana: Anthropology* 47 (2):91-170.

Rader, Burt F.

1978 *Cultural Resources Survey of Aben Revetment, Ascension Parish, Louisiana*. Unpublished report submitted to New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.

Rivet, Philip G.

1974 *An Archaeological Survey of the Reserve Relief Canal Turnaround and Interchange and its Junction with I-10 Junction U.S. 61*. Unpublished letter report submitted to the Office of Highways, Louisiana Department of Transportation and Development, and on file with the Louisiana Division of Archaeology.

1976 *Cultural Resources Survey of Donaldsonville to New Orleans Highway and LA 3127 to La 18 Route*. Unpublished letter report submitted to the Office of Highways, Louisiana department of Transportation and Development, and on file with the Louisiana Division of Archaeology.

Robblee, Patrick and Dave D. Davis

1997 *Phase II Archaeological Assessment of Site 16AN60, Ascension Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Robblee, Patrick, Gary Gordon, Ralph Draughon, Jr., and William P. Athens

1997a *Phase I Cultural Resources Survey and Inventory of the Proposed 24 In. O.D. Force Main Line, Ascension Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Robblee, Patrick, Gary Gordon, James Allen Greene, Jr., Ralph Draughon, Jr., and William P. Athens

1997b *Phase I Cultural Resources Survey and Inventory of the Proposed City of Gonzales Facilities Improvement 24" Effluent Force Main Line, Ascension Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Russell, Richard Joel

1938 Physiography of Iberville and Ascension Parishes. In *Reports on the Geology of Iberville and Ascension Parishes*, pp. 3-86. Department of Conservation, Louisiana Geological Survey, New Orleans.

Russo, Michael

1994 A Brief Introduction to the Study of Archaic Mounds in the Southeast. *Southeastern Archaeology* 13:89-92.

Saucier, Roger T.

1963 *Recent Geomorphic History of the Lake Pontchartrain Basin, Louisiana*. Louisiana State University, Coastal Studies Institute Report 9. Baton Rouge.

Saunders, Rebecca

1994 The Case for Archaic Period Mounds in the Southeast. *Southeastern Archaeology* 13:118-133.

Shuman, Malcolm K.

2013 *Cultural Resources Survey of Two Lots near Geismar, Ascension Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Shuman, Malcolm K., Dennis C. Jones, Melissa Wiedenfeld and John Lindemuth

1995 *Cultural Resources Survey of the Proposed Route of a Liquid Hydrogen Pipeline in Ascension, East Baton Rouge, Iberville, and West Baton Rouge Parishes, Louisiana*. Unpublished report by Surveys Unlimited Research Associates, Inc., submitted to R-S-H Engineering, Inc., and on file with the Louisiana Division of Archaeology, Baton Rouge.

1997 *Phase I Cultural Resources Survey of Portions of a Proposed Railroad Line in Ascension Parish, Louisiana*. Unpublished report submitted to Kansas City Southern Railroad and the Surface Transportation Board, and on file with the Louisiana Division of Archaeology., Baton Rouge

Shuman, Malcolm K., Jason Foust, Karl Shuman

2013 *Phase I Cultural Resources Survey of 83 Acres Near Geismar*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Skinner, S. Alan, Brenda B. Whorton and Lance K. Trask

1995 *A Cultural Resources Survey from Sorrento, Louisiana to Mont Belvieu, Texas*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Smith, Rhonda L., Benjamin Maygarden, Jill-Karen Yakubik, D. Ryan Gray, Jeffrey Treffinger, Mary Beth Weed and Axia L. Wilson

2001 *Intensive Cultural Resources Survey: Proposed Enterprise Products Company Pipeline, Ascension, Assumption and Iberville Parishes, Louisiana*. Unpublished report by Earth Search, Inc., on file with the Louisiana Division of Archaeology, Baton Rouge.

Smith, Steven D., Philip G. Rivet, Kathleen M. Byrd and Nancy W. Hawkins

1983 *Louisiana's Comprehensive Archaeological Plan*. Public document on file with the Louisiana Division of Archaeology.

South, Barry and Benjamin Maygarden

2000a *Cultural Resources Survey: Dutchtown, Ascension Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology.

2000b *Phase II Archaeological Investigations: Dutchtown, Ascension Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology.

Spedale, William A.

1986 *Where Bugles Called and Rifles Gleamed*. Land and Land, Baton Rouge.

Stoltman, James B.

1978 *Temporal Models in Prehistory: An Example from Eastern North America*. *Current Anthropology* 19:703-746.

Stuart, David R. and Jerome A. Greene

1983a *An Archeological Survey of the Proposed Plaquemine Bend Revetment (M 204.9to 201-R), Iberville Parish, Louisiana*. Unpublished report by the National Park Service, Denver Service Center, submitted to the New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.

Swanton, John R.

1911 *Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of Mexico*. Smithsonian Institution Bulletin 43, Bureau of American Ethnology, Washington, D.C.

1946 *The Indians of the Southeastern United States*. Smithsonian Institution Bulletin 137, Bureau of American Ethnology, Washington, D.C.

Toth, Edwin Alan

1988 *Early Marksville Phases in the Lower Mississippi Valley: A Study of Culture Contact Dynamics*. Mississippi Department of Archives and History, Archaeological Report 21. Jackson, Mississippi.

USDA (United States Department of Agriculture)

1971 Parish General Soil Maps: Ascension Parish. Alexandria, La.

Wall, Bennett H. (editor)

1990 *Louisiana: A History*. Forum Press, Arlington Heights, Illinois.

Webb, Clarence H., Joel L. Shiner and E. Wayne Roberts

1968 The Extent and Content of Poverty Point Culture. *American Antiquity* 33:297-321.

1971 The John Pearce Site (16CD56): A San Patrice Site in Caddo Parish. *Bulletin of the Texas Archaeological Society* 42:1-49.

Weinstein, Richard A.

1974 *An Archaeological Survey of the Lower Amite River, Louisiana*. Unpublished MA. thesis for the Department of Geography & Anthropology, Louisiana State University, Baton Rouge.

Weinstein, Richard A. and Philip G. Rivet

1978 *Beau Mire: A Late Tchula Period Site of the Tchefuncte Culture, Ascension Parish, Louisiana*. Louisiana Archaeological Survey and Antiquities Commission, Anthropological Report No. 1. Department of Culture, Recreation and Tourism, Baton Rouge.

Weinstein, Richard and David Kelley

1984 *Cultural Resources Investigations in the Terrebonne Marsh, South-Central Louisiana*. Submitted by coastal Environments, Inc. to the New Orleans District of the U. S. Army Corps of Engineers, New Orleans.

1992 *Cultural Resources Investigations Related in the Terrebonne Marsh, South-*

Central Louisiana. Unpublished report submitted to New Orleans District, Corps of Engineers, and on file with the Louisiana Division of Archaeology.

Weinstein, Richard A., Eileen Burden, and Sherwood M. Gagliano

1977 *Archaeological Phases--Coastal Louisiana*. Paper presented at the Annual Meeting of the Louisiana Archaeological Society, New Orleans, Louisiana.

Weinstein, Richard A., Diane E. Wiseman, Laura A. Landry, and Wayne P. Glander

1979 *Environment and Settlement on the Southwestern Louisiana Prairies: A Cultural Resources Survey of the Bayou Mallet Watershed*. Unpublished report submitted to the Interagency Archeological Services Division, National Park Service, Department of the Interior, and on file with the Louisiana Division of Archaeology.

Weinstein, Richard A., David B. Kelley and Frederick M. Wiseman

1985 *Archaeological Investigations at the Lee Site, East Baton Rouge Parish, Louisiana*. Unpublished report of a grant project submitted to the Louisiana Division of Archaeology and on file with that office.

Wheaton, Thomas R., Susan Travis, Denise Messick, Lisa O'Steen and Leslie Raymer

1997 *Archaeological Data Recovery at Darrow (16AN54)*. Unpublished report for the U.S. Army Corps of Engineers, New Orleans District, and on file with the Louisiana Division of Archaeology, Baton Rouge.

Williamson, Frederick William and George T. Goodman (editors)

1939 *Eastern Louisiana: A History of the Ouachita River and the Florida Parishes*. 3 vols. The Historical Record Association, Louisville, Kentucky.

Woodiel, Deborah

1993 The St. Gabriel Site: Prehistoric Life on the Mississippi. *Louisiana Archaeology* 20:1-136.

Yakubik, Jill-Karen, Carrie A. Leven, Kenneth R. Jones, Benjamin Maygarden, Shannon Dawdy, Donna K. Stone, James Cusick, Catheren Jones, Rosalinde Mendez, Herschel A.

Franks and Tara Bond

1994 *Archaeological Data Recovery at Ashland-Belle Helene Plantation (16AN26), Ascension Parish, Louisiana*. Unpublished report submitted to Shell Chemical Company and on file with the Louisiana Division of Archaeology.

MAPS

MRC (Mississippi River Commission)

1883 Sheet 69. USACE, New Orleans.

1913 Sheet 69. USACE, New Orleans.

1935 Sheet 69. USACE, New Orleans.

USDA (United States Department of Agriculture)

1971 Parish *General Soil Maps: Acension Parish*. United States Department of Agriculture, Soil Conservation Service. Alexandria, La.

U.S. Geological Survey.

1936 Carville, La. 15-minute topographic quadrangle.

1953 Carville, La. 7.5-minute topographic quadrangle.

1974 Carville, La. 7.5-minute topographic quadrangle.

1992 Carville, La. 7.5-minute topographic quadrangle.

1999 Carville, La. 7.5-minute topographic quadrangle.