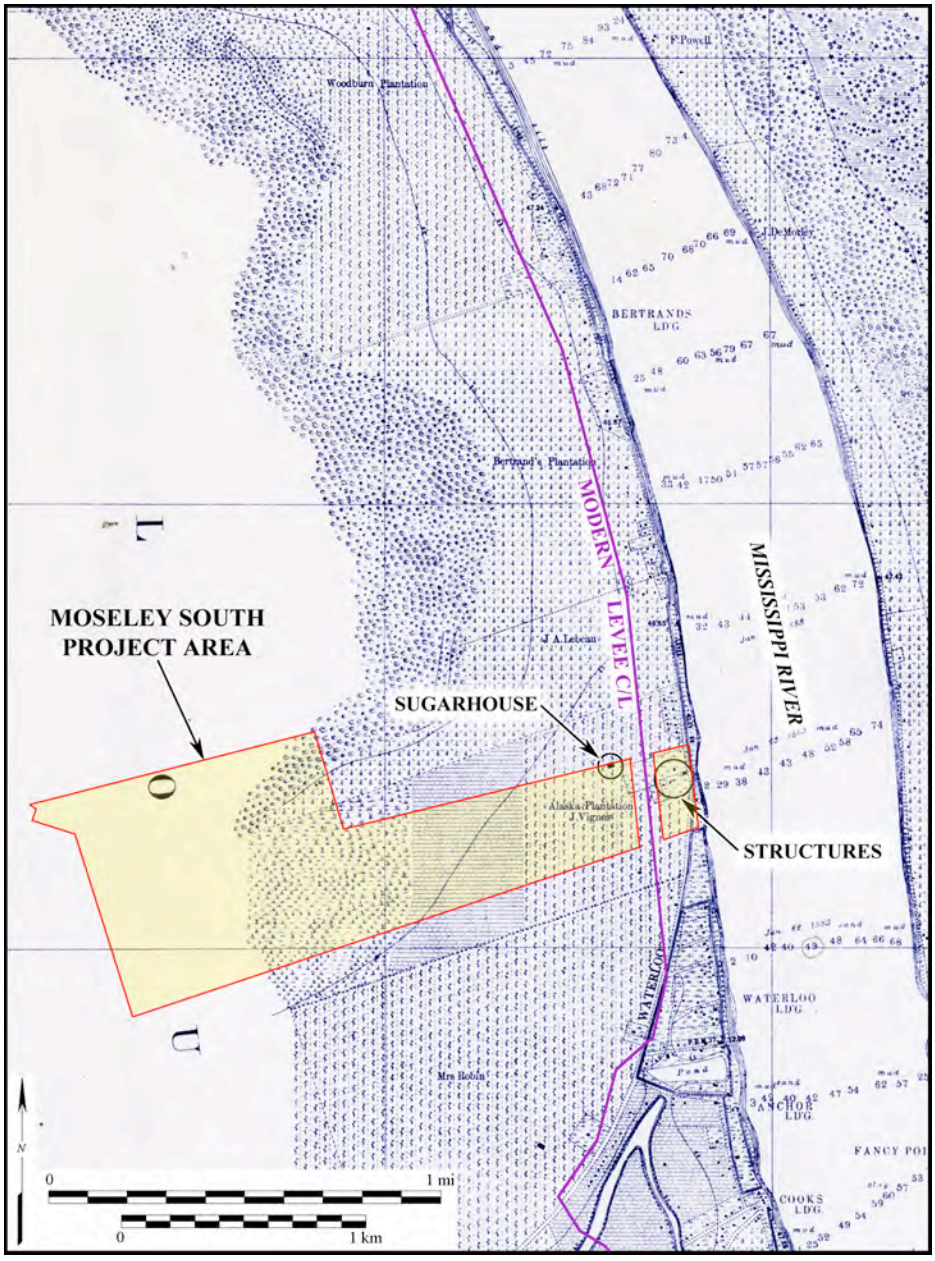
Exhibit FF. Moseley South Site Phase I Cultural Resources Assessment Report

PHASE I CULTURAL RESOURCES SURVEY OF THE 379 AC (153.4 HA) MOSELEY SOUTH TRACT POINTE COUPÉE PARISH, LOUISIANA



FINAL REPORT

SUBMITTED TO

BATON ROUGE AREA CHAMBER
564 LAUREL STREET
BATON ROUGE, LOUISIANA

SUBMITTED BY

COASTAL ENVIRONMENTS, INC.
1260 MAIN STREET
BATON ROUGE, LOUISIANA

APRIL 2015

PHASE I CULTURAL RESOURCES SURVEY OF THE 379 AC (153.4 HA) MOSELEY SOUTH TRACT POINTE COUPÉE PARISH, LOUISIANA

DOA REPORT NO. 22-4926

FINAL REPORT

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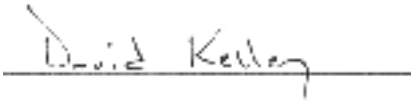

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ABSTRACT

From February to April 2015, Coastal Environments, Inc. (CEI) conducted a Phase I cultural resources survey of the Moseley South Project Area in Point Coupée Parish, Louisiana, for the Baton Rouge Area Chamber (BRAC). The survey was conducted as part of the Louisiana Economic Development Site Certification process. The BRAC project area encompasses approximately 379 ac (153.4 ha). These investigations located two new historic archaeological sites: the Alaska Sugarhouse (16PC124) and Moseley South 1 (16PC125). The Alaska Sugarhouse site (16CP124) contains *in situ* archaeological deposits. It is recommended that 16CP124 be avoided by future construction. If it cannot be avoided, it is recommended that the site be tested for National Register eligibility. The Moseley South 1 site (16PC125) is recommended as ineligible for inclusion on the NRHP, and no additional work is required at the site. In addition, no standing structures currently stand within the Moseley South area of potential effect (APE).

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ACKNOWLEDGEMENTS

CEI would like to thank the people who assisted us in our research and fieldwork, particularly the landowners who provided access to their properties. The Phase I archaeological fieldwork was conducted by Michael Carpenter, Phillip Jungeblut, and Euan Wallace between 26 of February and 15 of April 2015. Dr. David Kelley served as Principle Investigator for this project. Donald Hunter wrote Chapters 2 and 4, Douglas Wells and Thurston Hahn Chapter 3, and Thurston Hahn Chapter 5. Michael Carpenter wrote the remainder of the report text and conducted the artifact analysis. The artifacts were washed, numbered, and catalogued by Philip Jungeblut and Euan Wallace. Carpenter, Hahn and Wells drafted all the maps presented in this report, while Carpenter created the artifact illustrations. Donald Hunter laid out the final report.

CHAPTER 1

INTRODUCTION

From February to April 2015, Coastal Environments, Inc. (CEI) was contracted by the Baton Rouge Area Chamber (BRAC) to conduct cultural resources investigations of the Moseley South project area in Pointe Coupée Parish, Louisiana. The survey was conducted as part of the Louisiana Economic Development Site Certification process. The irregularly shaped project area is located in Sections 10, 12 and 36 of Township 4 South, Range 11 East in the Southeastern District (west bank of the Mississippi River), Louisiana (Figures 1-1 and 1-2). The BRAC project area consists of approximately 379 ac (153.4 ha). Of that area, 29 ac (11.7 ha) previously surveyed by the National Park Service (NPS) in 1982 (Stuart and Greene 1983) (see hashed areas in Figure 1-1). The entire 379 ac (153.4 ha) BRAC project area was examined during the present investigations (see Figures 1-1 and 1-2).

The project area is located off of LA 981 and belongs to Joel R. Moseley and the Trustees of George P. and Brenda B. Roberts. It is located within the historic boundaries of the Lebeau and Alaska plantations. Background research for this project began in February 2015 and continued throughout the course of the project. The archaeological fieldwork for the 350-ac portion of the project area was carried out by a three-member crew, including Michael P. Carpenter, Euan Wallace, and Philip Jungeblut, between 26 of February and 5 of March 2015. The archaeological fieldwork for the 29-ac portion of the portion of the project area was carried out by the same three-member crew on the 15 of April 2015. The goals of these cultural resources investigations were to locate all cultural resources within the project area and to assess their significance in terms of National Register eligibility through guidelines established by the National Park Service (1991).

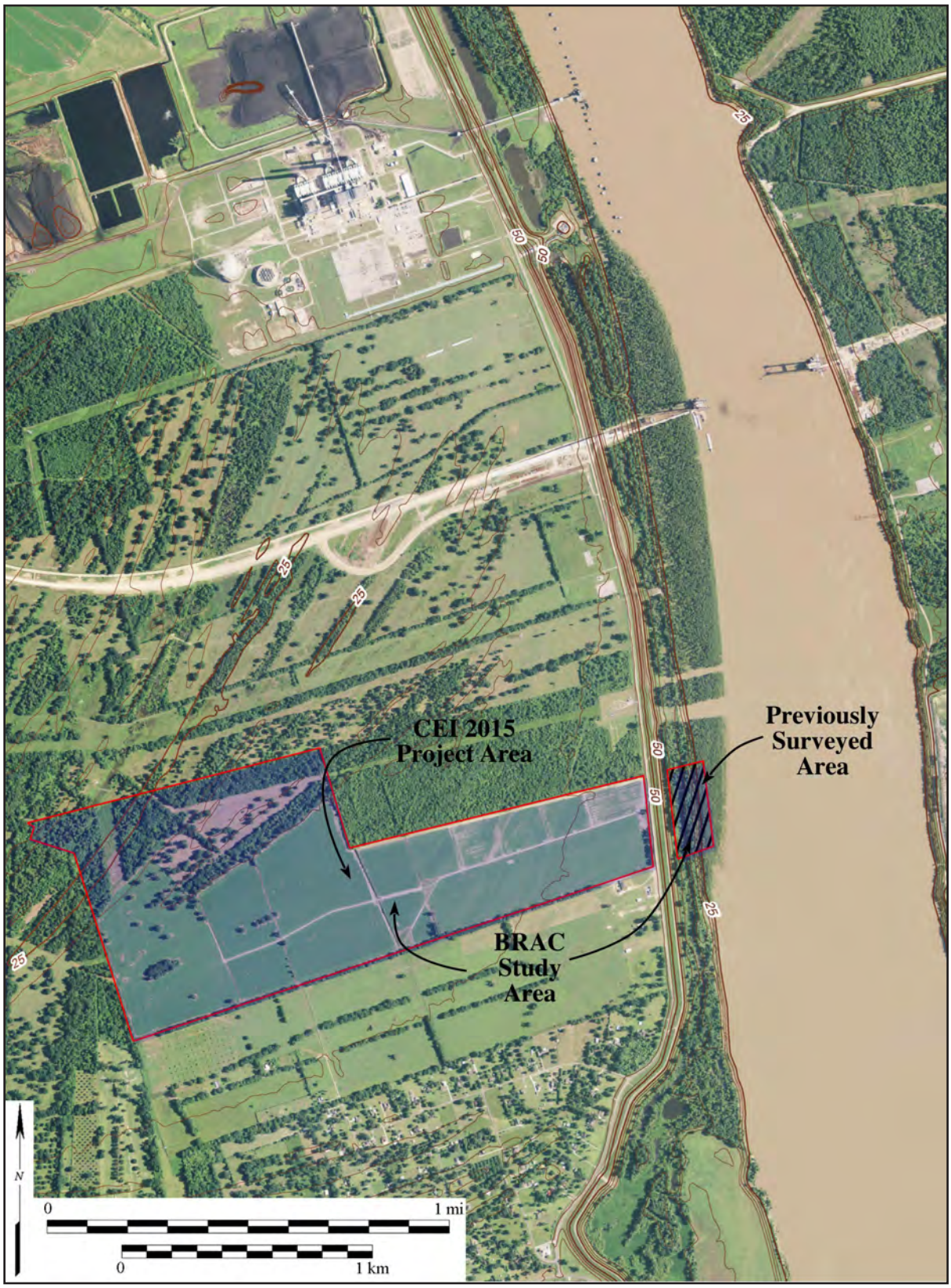

Figure 1-1. **The Moseley South Project Area (USGS 2012a, 2012b). Note that the batture portion of the BRAC study area was surveyed by the National Park Service in 1982 (hashed).**

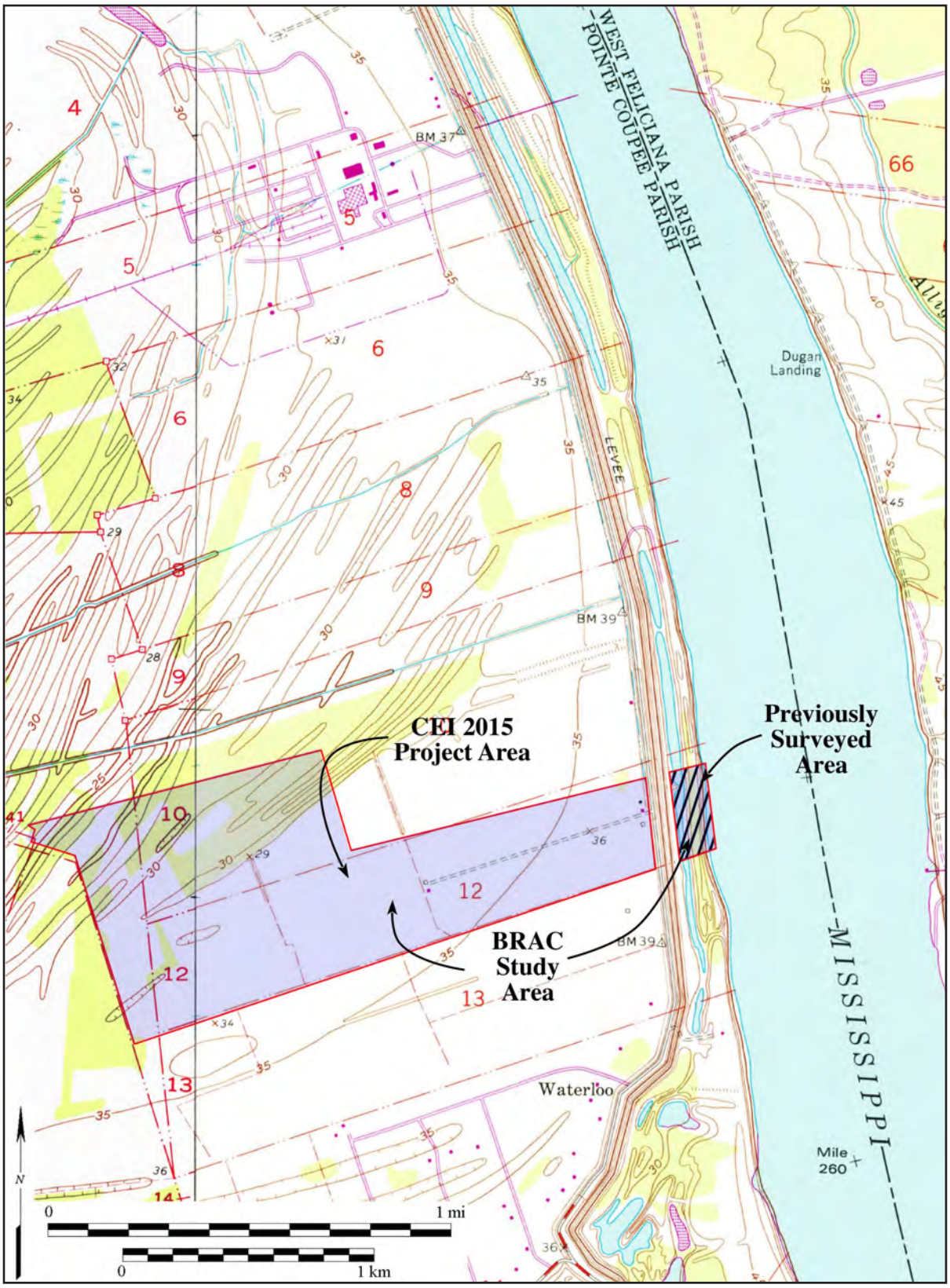

Figure 1-2. The Moseley South Project Area (USGS 1980a, 1980b). Note that the batture portion of the BRAC study area was surveyed by the National Park Service in 1982 (hashed).

The following chapters detail the results of the cultural resources investigations required for the Moseley North project. Chapter 2 provides a synopsis of the geological and environmental setting of the project area. Chapter 3 discusses the region's cultural history in relation to the investigation's findings, while Chapter 4 summarizes the previous research conducted in the area. Chapter 5 details the analytical techniques employed. Chapter 6 presents the cultural resources investigations, and Chapter 7 the conclusions and recommendations resulting from these investigations.

CHAPTER 2

ENVIRONMENTAL SETTING

Geology and Geomorphology

The present study area is located in the alluvial valley of the Mississippi River near its boundary with the deltaic plain (Saucier 1974:12). The Quaternary geology of the Lower Mississippi River Valley has been the subject of considerable research over the past 60 years. Fisk (1944), Saucier (1974), and Autin et al (1991) have synthesized the results of the research both in terms of the nature of the deposits present and their age. Much of Fisk's work has withstood the test of time, but his chronology, developed prior to the advent of radiocarbon dating, has been revised substantially. Saucier's (1974) summary, updated by Autin et al. (1991), and more recently by Saucier (1994) himself, provides the basis of the present chronology.

The alluvial valley of the Mississippi River consists of the Holocene floodplain and a series of Pleistocene terraces that represent earlier floodplains, deltaic plains, or nearshore marine deposits. The present project area lies entirely within the Holocene floodplain of the Mississippi River, which is composed of its current meander belt, portions of relict meander belts, and backswamp areas (Figure 2-1). Each meander belt consists of the landforms created by the river while it occupied a single course. Saucier (1974) identified a sequence of five major meander belts of the Mississippi River extending over the past 9000 years. Autin et al. (1991) have recently renumbered these meander belts (used in this discussion) and refined their ages. Only the two most recent of these (Nos. 4 and 5 of Saucier [1974], No. 1 and 2 of Autin et al. [1991]) are present in the vicinity of the present project area. Meander belt No. 2 began forming approximately 4800 years ago as a result of two major channel diversions from meander belt No. 3 in the area of Memphis, Tennessee (Autin et al. 1991; Saucier 1974:21). These diversions produced two partial-flow courses, one that followed the eastern valley wall and a second that followed the present course of the river to about the latitude of Vicksburg and then flowed west of the modern river. The two courses

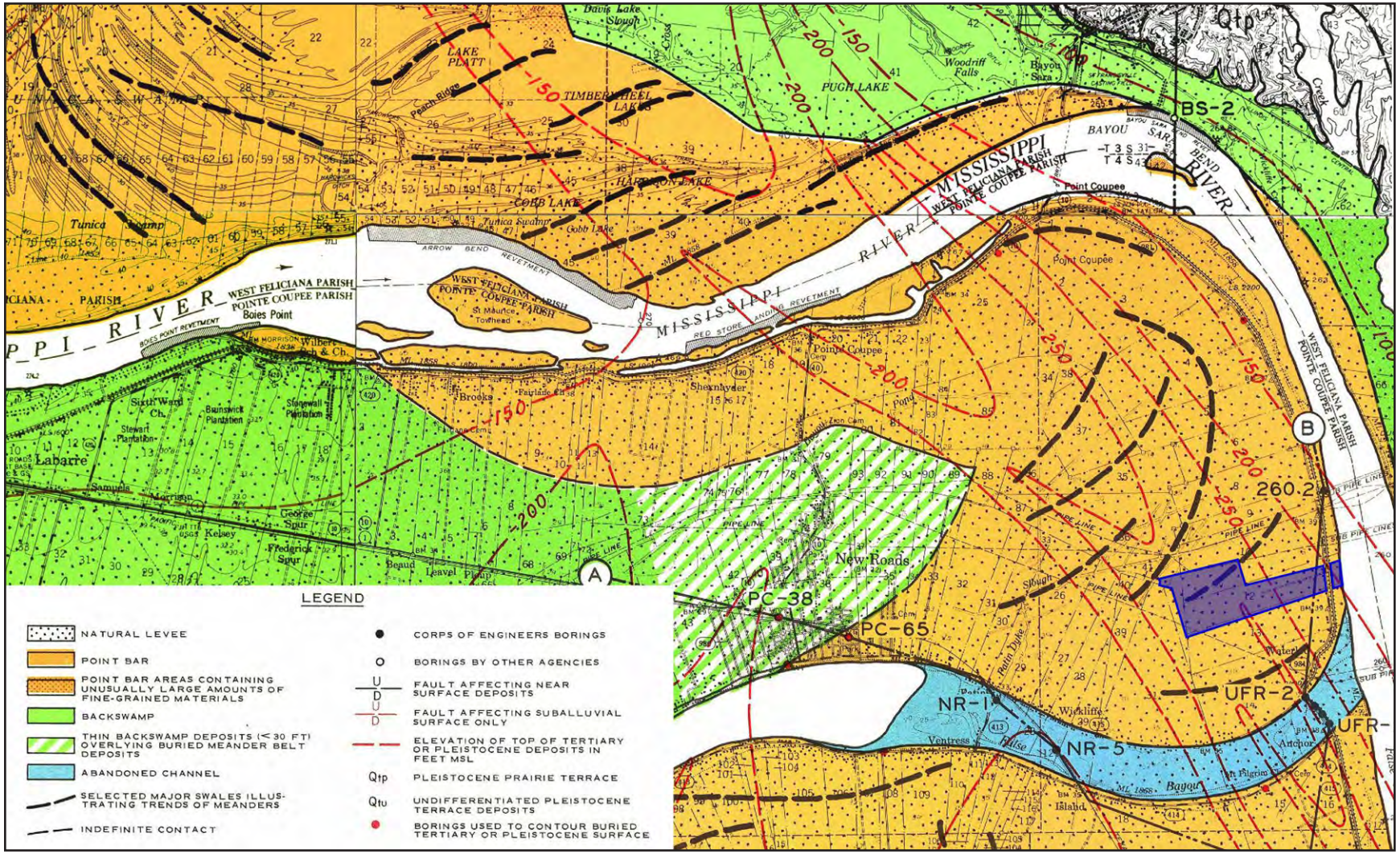

Figure 2-1. Geomorphology of the Moseley South Project Area (after Saucier 1969).

apparently rejoined just below the mouth of the Red River and then followed the modern course south of Baton Rouge. The modern Mississippi River course has formed the St. Bernard and later deltaic complexes in what previously had been estuarine and nearshore Gulf environments (Autin et al. 1991).

At present, remnants of meander belt No. 2 are exposed at the surface along the eastern side of the alluvial valley from Clarksdale, Mississippi, to Vicksburg and west of the modern river from Vicksburg to the mouth of the Red River (Saucier 1974:Figure 1). Downstream from there, in the vicinity of the present project area, they have been mostly buried by deposits of the current meander belt, No. 1, which began forming approximately 2800 years ago (Saucier 1974:22, Autin et al. 1991). Saucier (1969), however, has identified what may be portions of meander belt No. 2 in the project vicinity. Along margins of the current meander belt, they occur within 3 m (9.84 ft) of the surface, but near the present channel of the river, they are buried from 10 to 20 m (32.81 to 65.62 ft) beneath the surface. Therefore, the near-surface deposits in the present project area should be associated with the current meander belt and less than 2800 years old.

Each meander belt contains a variety of depositional environments, including natural levees, point bars, and abandoned channels. Natural levees are low ridges formed by overbank deposits made along an active channel. In the vicinity of the project area, they are composed predominantly of oxidized silts, silty clays, and clays, and may rise 5 to 6 m (16.41 to 19.69 ft) above the adjacent backswamps (see Figure 2-1). They provided, and continue to provide, the highest and best-drained land within the floodplain. The upper 5 to 6 m (16.41 to 19.69 ft) of deposits in the project area consist of natural levee deposits associated with the present channel of the river (Saucier 1969).

Point bars are arcuate deposits that form on the convex side of meanders and as a result of lateral migration of the channel. They consist of alternating sandy ridges and clay-lined swales deposited during high and low stages, respectively. Along much of the Lower Mississippi River Valley, point-bar deposits are extensive, comprising a large portion of the floodplain. Most of the current project area consists of ridge-and-swale topography that marks these point bar deposits (see Figure 2-1) (Saucier 1969).

Abandoned channels are meanders that have been cut off from the river by lateral migration. Initially, they may contain oxbow lakes, but gradually they fill with fine-grained sediments until they are at or near the surrounding floodplain level. False River (see Figure

2-1) is an example of an abandoned channel that was cut off in the early eighteenth century. False River was formed by the Pointe Coupée cutoff, which, according to Le Page de Pratz, occurred in 1715 (see Chapter 3).

Outside of the meander belts are low-lying backswamp areas that slowly fill with fine-grained sediments deposited after flood events. In much of the Lower Mississippi Valley they are relatively limited in area because of the number of relict meander belts present; however, in the present region they are much more extensive (see Figure 2-1) (Saucier 1969).

Since the construction of artificial levees along the active channel of the Mississippi River, another type of deposit has begun to form on the batture or river side of these features. These are overbank deposits that are typically composed of silts, sandy silts, or silty clays and may reach thicknesses of several meters.

The natural levees of the project area consist of Commerce silt loams and silty clay loams (Figure 2-2). These Commerce soils, which comprise the highest elevations, are somewhat poorly drained, with low permeability. These soils occupy the eastern approximate half of the project area and are associated with the modern Mississippi River natural levee. In the western approximate half of the project area, away from the natural levee, poorly-drained Sharkey-Tunica association soils predominate (see Figure 2-2) (Powell et al. 1982). The soils of this association are well-suited for agriculture, and much of the land has been cleared. However, frequent flooding around the turn of the twentieth century made the area more suitable for pasturage, and most of the land in the project area is currently given over to raising cattle.

Lateral bankline movement of the meandering Mississippi River channel has resulted in dramatic land loss in some areas. Upstream from the current project area, an average rate of 3.68 m (12.07 ft) of land per year was lost to erosion over a 150-year period prior to 1980 (Hahn et al. 2003:8-9). The St. Francis of Assisi Church was founded just north of the current project area, along the west bank of the Mississippi River in the mid-eighteenth century. However, the church and the community surrounding it were destroyed by the movement of the river, and their original location is now 350 m (1,148.35 ft) to the north of the current bankline, placing it in the middle of the present Mississippi river course (Costello 2007). However, bank line reconstructions from historic maps dating from 1851 indicate that there has been little land loss in the current project area over the past 164 years (Figure 2-3).

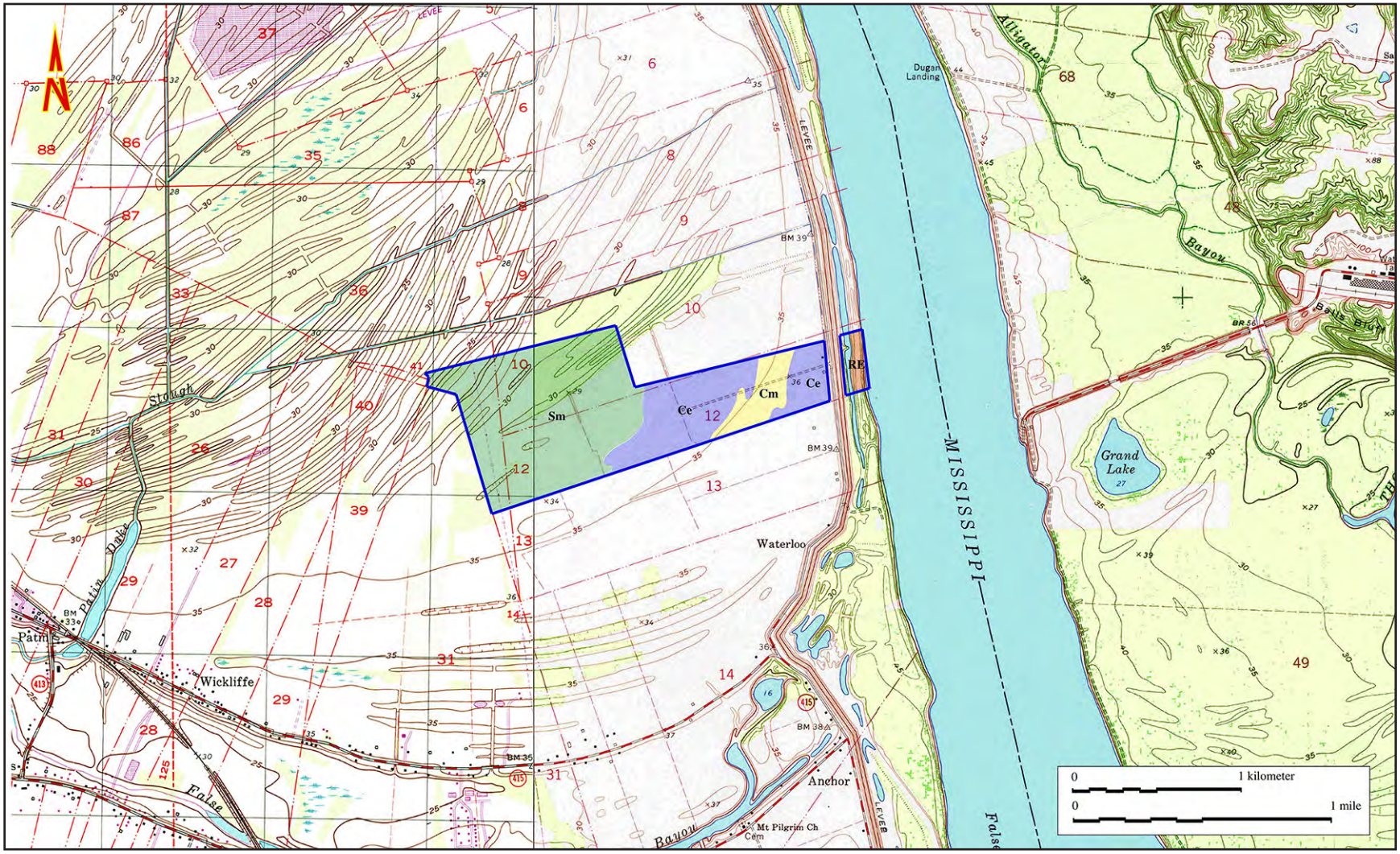

Figure 2-2. Soil types in the Moseley South Project Area (adapted from Powell et al. 1982). Soil Types include: Cm, Commerce silty clay loam; Ce, Commerce silt loam; Sm, Sharkey silty clay loam; and RE, Robinsonville and Commerce soils frequently flooded.

The Mississippi River alluvial valley is prone to seasonal overbank flooding normally during the spring and early summer due to snow melt and excessive rainfall from spring storms in the northern states. Extensive levee construction, commencing in earnest during the middle nineteenth century, limited the flood damage to crops and property with varying degrees of success. Until the early 1930s, there have been numerous major episodes of flooding when the Mississippi River topped or breached the artificial levees during events known as "crevasses." Point Coupée has witnessed several devastating floods during the historic period where most of the parish was covered with from 1 to 20 feet of floodwaters (Costello 2007).

One of the most severe floods to strike Pointe Coupée occurred in 1884. During the extremely high water stages of the Mississippi River that year, a series of crevasses occurred along the river. One of the largest occurred at the town of Waterloo just below the project area (see Figure 2-3). Waterloo served as the port for agricultural products being shipped out of central Pointe Coupée Parish after False River was closed to river traffic. A break in the levee at Waterloo allowed a tremendous amount of floodwater to enter Pointe Coupée and surrounding parishes during that record flood. All of the houses and businesses in that small community flooded, and several were actually lost to the collapsing bankline. Subsequently, the town was abandoned. The scar in the landscape resulting from the crevasse can still be seen on modern U.S.G.S quadrangles (see Figure 2-3) along with the modern set-back levee.

Vegetation

Prior to extensive agricultural clearing during the eighteenth and nineteenth centuries, the Mississippi River floodplain supported a vast bottomland hardwood forest. The forest was characterized by a relatively low species diversity, but it exhibited a complex mosaic of plant communities whose distribution was controlled by slight changes in frequency of inundation and sediment type (Putnam and Bull 1932). Riverbank communities were dominated by willow (*Salix* spp.) and cottonwood (*Populus deltoides*), while the lower slopes of natural levees and the better-drained portions of backswamps included stands of sweetgum (*Liquidambar styraciflua*) and water-tolerant species of oaks (*Quercus pagota*, *Quercus prinus*, and *Quercus nigra*). The higher and better-drained areas supported communities of less water-tolerant oaks (*Quercus alba*, *Quercus stellata*) and hickories (*Carya* spp.). Permanently flooded portions of the backswamp and the margins of oxbow lakes included communities of bald cypress (*Taxodium distichum*) and water tupelo (*Nyssa aquatica*).

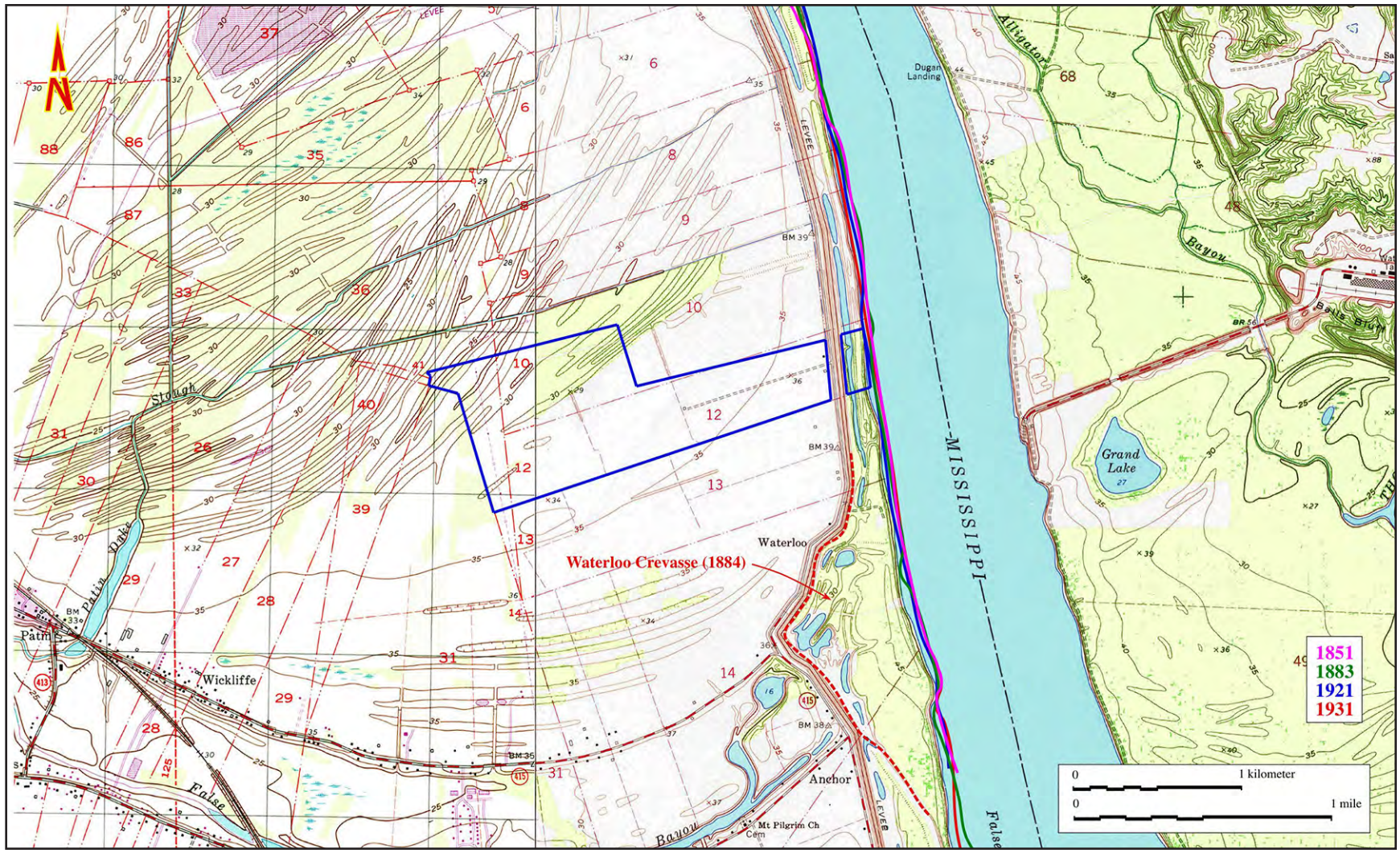

Figure 2-3. Mississippi River bankline movement in the vicinity of the Moseley South Project Area from 1851 to present.

Fauna

A variety of faunal species are found throughout the region. The mammalian population includes white-tailed deer (*Odocoileus virginianus*), squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), rabbit (*Sylvilagus floridanus*), fox (*Urocyon* spp.), opossum (*Didelphis virginiana*), and skunk (*Mephitis mephitis*). Originally, wolf (*Canis rufus*) and black bear (*Euractos americanus*) were probably also present, though they are no longer found in the area. In recent years armadillos (*Dasypus novemcinctus*) have intruded into the region from neighboring western states.

Numerous species of birds occur in the area, both resident and migratory. Some, such as crows (*Corvus brachyrynchos*), owls (Strigidae), hawks (*Buteo* spp.), and vultures (*Cathartes aura*.), are common throughout the area. Others are confined to a particular environmental situation. The upland and marginal grounds feature populations of turkey (*Meleagris gallopavo*) and quail (*Cilinus virginanus*). The backswamp lakes, tributary streams, and relict and active river channels host an abundance of species, including egrets (*Casmerodius albus*) and water turkeys (*Anhinga anhinga*). Migratory ducks (*Anas* spp.) and geese (*Branta* spp.) can be observed in the area from October to March.

The river, lakes, and tributary streams sustain numerous types of aquatic life. Types of fish include gar (*Lepisosteus* spp.), catfish (*Ictalurus* spp.), drum (*Apolodinotus grunniens*), and perches (Percidae). Amphibians are represented by salamanders (*Ambystone texanum*), newts (*Notophthalmus videscens louisianensis*), toads (*Bufo* spp.), tree frogs (*Hyla* spp.), and true frogs (*Rana* spp.). A number of reptilian species are present in the study area, including alligators (*Alligator mississippiensis*), snapping turtles (*Chelydra serpentina*), box turtles (*Terrapene carolina triunguis*), coral snakes (*Micrurus fulvius*), rattlesnakes (*Crotalus* spp.), and various lizards (Lacertilia).

CHAPTER 3

CULTURAL SETTING

Aboriginal Cultural Setting

This section will provide information on our current understanding of the cultural chronology of southeast Louisiana in the prehistoric and contact periods (Figure 3-1). This cultural sequence illustrates developmental cultural growth from early small bands of migratory hunters to agriculturally-based societies that inhabited villages and built temples. Fairly detailed discussions of the southern Louisiana phases can be found in McIntire (1958), Gagliano et al. (1975), Neuman (1984), Davis (1984), and Weinstein and Gagliano (1985). As the earliest surficial landforms within the study area are related to Saucier's (1994) Meander Belt Stage 1 (3000 B.P. to present), the following discussion will begin with the earliest culture period in existence during that time: the Late Archaic.

Late Archaic Period, 3000–1500 B.C.

Research elsewhere in eastern North America suggests that the Late Archaic period was a time of marked population increases and the beginning of extensive trade networks. The evidence for the former is seen in the appearance of large habitation sites such as Indian Knoll, Kentucky (Webb 1946), while the latter is reflected in the exotic raw materials that occur at some sites. Plant cultivation involving a tropical domesticate, squash, and possibly native North American species also began during this period (Chomko and Crawford 1978).

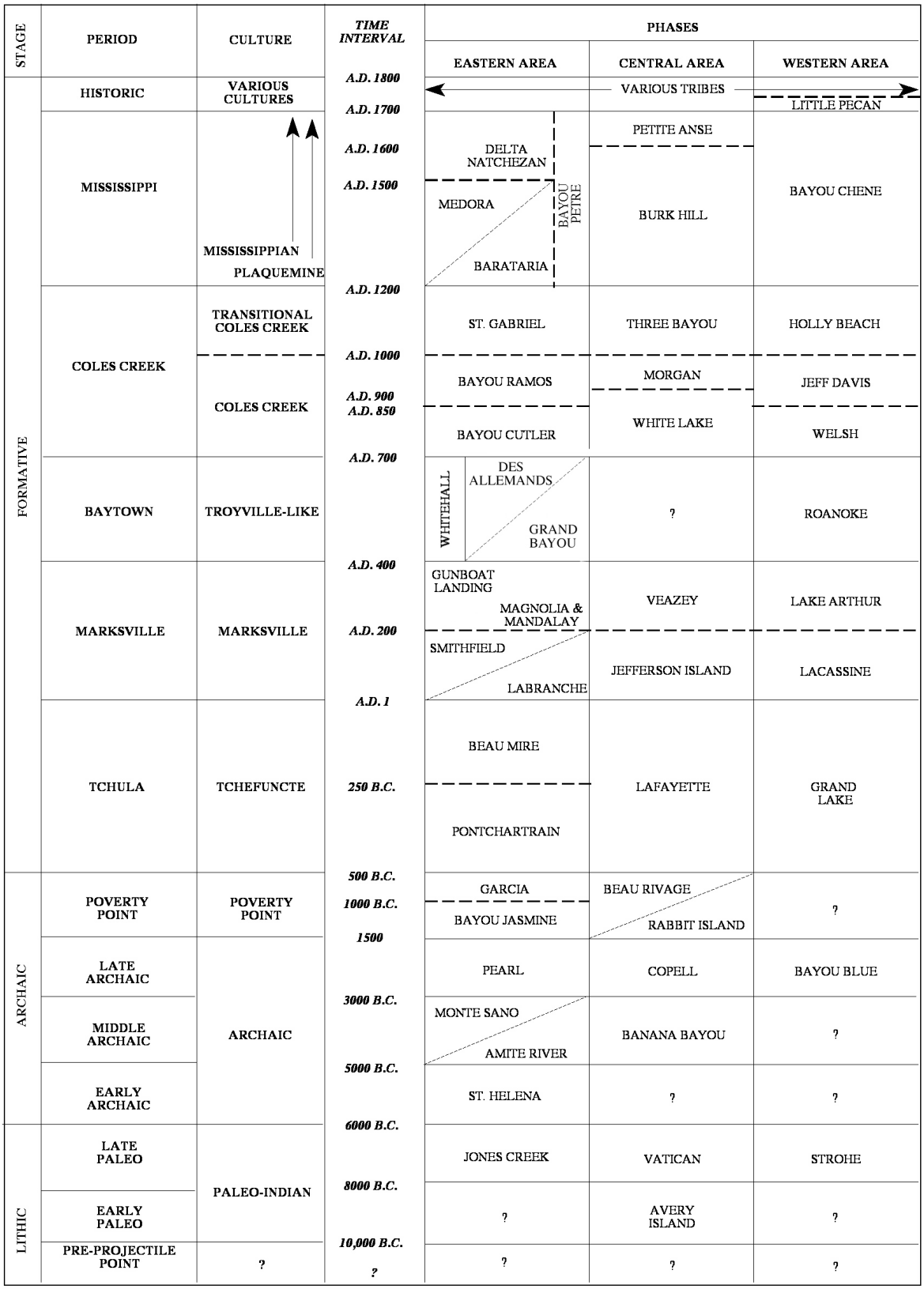

Figure 3-1. Aboriginal culture sequence for south Louisiana (after Weinstein and Kelley 1992).

The only Late Archaic phase identified for southeast Louisiana thus far is Gagliano's (1963:116) Pearl River phase, which is based on a series of oyster shell middens associated with early coastal features. Diagnostic artifacts include Kent, Pontchartrain, Macon, Hale, and Palmillas projectile points and various types of atlatl weights.

Poverty Point Period, 1500–500 B.C.

In much of eastern North America this time interval witnessed a transition from Archaic hunting and gathering cultures to Woodland cultures characterized by food production, pottery manufacture, and mound building (Stoltman 1978:715-717). Current interpretations suggest that these three features have different and possibly unrelated origins. As noted above, tropical domesticates had reached the East prior to 2000 B.C., and there is evidence of native seed-plant cultivation in Kentucky and Ohio by 1000 B.C. (Struever and Vickery 1973). Ceramics probably appeared somewhat earlier than this in the third millennium B.C. along the Atlantic Coast (Stoltman 1978:715), and mound building may have developed independently in several areas by 1000 B.C.

In the Lower Mississippi Valley this transition is marked by the development of the distinctive Poverty Point culture. Among the material characteristics of this culture are baked clay balls or Poverty Point objects, microlith and lapidary industries, and earthworks (Webb 1977). Pottery is not abundant, but fiber-tempered and sand-tempered wares have been found at several sites. Subsistence data are, in general, few, but they suggest a continuation of an Archaic pattern of intensive collecting of wild plants and animals. However, there is some evidence for the cultivation of squash at Poverty Point sites (Ford 1974; Jackson 1986; Shea 1978).

Two temporally distinct Poverty Point phases have been identified in southeast Louisiana. The earlier Bayou Jasmine phase is based largely on data from the Bayou Jasmine site (16SJB2) in St. John the Baptist Parish and the Linsley (16OR40) site in Orleans Parish (Gagliano 1963:116). The succeeding Garcia phase was defined on the basis of collections from the Garcia site (16OR34), also in Orleans Parish.

Tchula Period, 500 B.C.–A.D. 1

This period in the Lower Mississippi Valley is characterized by the integration of food production, pottery manufacture, and mound building into a single cultural system. In the southern portion of the valley these developments are thought to have taken place in an archaeological culture called Tchefuncte. Originally defined in southern Louisiana (Ford and Quimby 1945), Tchefuncte culture is now recognized to extend as far north as the vicinity of Clarksdale, Mississippi, and as far west as northeast Texas. The diagnostic artifacts of this, and most of the succeeding prehistoric cultures of the Lower Mississippi Valley, are the distinctive ceramics. Tchefuncte pottery is characterized by a laminated paste that appears to lack tempering. Replication studies suggest that the laminated texture is simply the result of minimal preparation of the raw material (Gertjejansen 1982), an expected feature of an incipient ceramic technology. Other diagnostic attributes of Tchefuncte ceramics include the use of podal supports and decorative techniques such as jab-and-drag incising.

The evidence for food production in Tchefuncte culture presently comes from one site, Morton Shell Mound (16IB3)—where remains of two tropical cultigens, squash and bottle gourd, and one possible native cultigen, knotweed, were recovered (Byrd and Neuman 1978:11-13). However, Fritz and Kidder (1993:6-7) have reviewed the data from this site and suggested that none of these remains can be accepted as definite evidence of cultivation. Surprisingly, mound construction, well documented for preceding periods, has not been clearly associated with Tchefuncte culture until recently (Kidder 2007; Kidder et al. 2008). Alan Toth (1988:27) has reviewed the evidence for Tchefuncte burial mounds and suggested that they are the result of diffusion of certain aspects of Marksville burial practices among a few late Tchefuncte groups. Further research is required to verify this hypothesis.

Two Tchula period phases have been identified in southeast Louisiana. One, the Pontchartrain phase, is based on Ford and Quimby's (1945) early work at sites around Lake Pontchartrain. It includes occupations that probably span the entire period and eventually should be subdivided. Most of the known components are located southeast of the present region in the Pontchartrain Basin. The other Tchula period phase, Beau Mire, is believed to

date to the latter portion of the period. Components of this phase have been reported at the Kleinpeter (16EBR5), Kuttruff (16AN9), and Beau Mire (16AN17) sites in southeast Louisiana (Weinstein and Rivet 1978).

Marksville Period, A.D. 1–400

In many parts of eastern North America, this period is marked by evidence of extensive interregional contact through a phenomenon labeled the Hopewell Interaction Sphere (Caldwell and Hall 1964). The focal points of this interaction sphere were the Middle Woodland societies of the Ohio and Illinois River valleys that acquired large quantities of exotic raw materials, including obsidian, copper, mica, shark's teeth, and marine shells, in exchange for specialized finished goods such as copper panpipes and ear spools (Stoltman 1978:721). Various theories have been offered to explain the nature of this interaction, some emphasizing socioreligious systems and others pointing to economic networks, but the problem remains unresolved. Within the Lower Mississippi Valley, the culture that participated in this interaction sphere is termed Marksville. Toth (1988:211-213) has argued that Marksville culture developed out of Tchefuncte as a result of intermittent contacts with cultures in the Illinois River Valley area, but he only speculates on the nature of these contacts. He emphasizes that the evidence for Hopewellian interaction is largely limited to the Marksville mortuary system and aspects of ceramic decoration. Other cultural subsystems, such as subsistence and settlement pattern, may have changed very little. Economic data from Marksville sites are extremely limited, but information from contemporary occupations in the Midwest suggests a pattern of intensive collecting of wild plant foods and high density faunal resources, such as fish, supplemented by cultivation of native North American seed plants and a few tropical cultigens (Asch et al. 1979). Present evidence indicates that maize was either not present at this time or of only minor importance.

Most recently, McGimsey (2010) has questioned the chronology traditionally assigned to Marksville phases, based on dates from recent excavations at the type site (16AV1) and the Gold Mine site (16RI13). Pottery from these sites, as well as the Troyville site (16CT7), suggests that the motifs and varieties traditionally associated with early

Marksville components may, in fact, have a much greater lifespan, perhaps extending into chronological territory traditionally reserved for Coles Creek culture at around A.D. 700 or 800 (Lee 2010; McGimsey 2010). It is important to note, however, that the presence of these designs and motifs does not necessarily signal the presence of Marksville culture, at least as it was known during the first four centuries A.D. These traits appear to be holdovers passed down to later societies, and it is worth questioning how much kinship the makers of Marksville period pottery would have seen in Coles Creek or even Baytown period potters.

Two Marksville period phases have been identified in the vicinity, Smithfield and Gunboat Landing. Smithfield is an early Marksville phase established by Toth (1988) on the basis of excavations at the site of that name (16WBR3) in West Baton Rouge Parish. The Gunboat Landing phase is a late Marksville phase proposed by Weinstein et al. (1977) on the basis of Weinstein's (1974) excavations at several sites on the lower Amite River. In the vicinity of the present project area, a component of this phase may be present at 16WF41, one of the sites tested by New World Research (Phillips et al. 1984:30).

Baytown Period, A.D. 400–800

The period following the Hopewellian florescence has been characterized as a time of cultural decline throughout much of eastern North America (Griffin 1967:187). This is certainly implied in Phillips' (1970:901) statement that ceramic decoration was "at a remarkably low ebb" during this period in the Lower Mississippi Valley. Recently, however, a number of researchers have suggested that the apparent decline may not have been as pervasive as previously believed. In the Midwest, Braun (1977) and Styles (1981) have argued that this period, in contrast to earlier interpretations, was a time of population growth and increased regional social integration. Along the Florida Gulf Coast an elaborate culture called Weeden Island developed during this time (Milanich 1994:205-242). Even in the Lower Mississippi Valley, new data indicate that the Baytown period was marked by the appearance of two painted pottery complexes (Belmont and Williams 1981). The earlier complex, termed the Quafalorma horizon, developed during the Troyville subperiod and exhibited striking similarities to early Weeden Island ceramics. The later complex, called the

Woodville horizon, characterized the Deasonville subperiod and was less elaborate. The remainder of the ceramic assemblage of Baytown culture consisted of a large quantity of Baytown Plain and smaller amounts of decorated types such as Mulberry Creek Cord Marked, Salomon Brushed, and Alligator Incised.

Changes were also occurring in the stone tool tradition during this period. Small arrow points began to replace dart points, reflecting a transition from the atlatl to the bow and arrow. Subsistence data from the Lower Mississippi Valley are limited for this period, but in the Midwest, Styles (1981) has identified a pattern of intensive, localized collecting of wild plant and animal resources supplemented by increased cultivation of both North American and tropical cultigens. Mound building continued in the Baytown period, and there are indications that a shift from a mortuary function to a building substructure began toward the end of this time (Rolingson 1982).

A single Baytown period phase, Whitehall, has been identified in southeast Louisiana (Phillips 1970:911-912). Components are present at the Smithfield (16WBR3) and Kleinpeter (16EBR5) sites near the present area.

Coles Creek Period, A.D. 800–1200

Elsewhere in eastern North America, this interval corresponds to the latter portion of the Late Woodland period and the beginning of the Mississippi period. Within the Lower Mississippi Valley, a cultural florescence that shows a marked resemblance to Weeden Island culture of northwest Florida occurs during this period. The precise nature of the relationship of Coles Creek culture to Weeden Island is uncertain, but the similarities in ceramic decoration and community pattern are unmistakable. Both were characterized by the use of incised, stamped, and punctated pottery types in which the decorative zone is largely restricted to a band around the rim of the vessel, and by the construction of small platform mounds around plazas. The latter are generally interpreted as an indication of the development of stratified or ranked social systems during this period, often associated with economies that included the cultivation of maize. However, direct evidence for this is

lacking from sites in the Lower Mississippi Valley, and the consensus has developed that maize did not play a prominent role in Coles Creek economies until after A.D. 1000 (Fritz and Kidder 1993; Kidder and Fritz 1993; Roberts 2006; Roe and Schilling 2010:169; Ryan 2005; Wells 1997, 1998). However, the remains of corn have been recovered from late Weeden Island sites (A.D. 750 to 950) on the Florida Panhandle (Milanich 1994:194) and from contemporary Late Woodland sites in the Midwest (Styles 1981).

Three Coles Creek period phases are presently recognized within southeast Louisiana. The earliest of these is the Bayou Cutler phase (Kniffen 1936; Phillips 1970:920-923). The majority of the identified Bayou Cutler components are located in the Mississippi River deltaic plain and the Pontchartrain Basin. A late Coles Creek Bayou Ramos phase has been established by Weinstein et al. (1978:22-23) on the basis of test excavations at the Bayou Ramos I site (16SMY133) in St. Mary Parish. The majority of the known components are located in that area. The third Coles Creek period phase, St. Gabriel, dates to the very end of the period and is based on Woodiel's (1980) excavations at the site of that name in Iberville Parish. Weinstein (1987:90) has identified additional St. Gabriel phase components in the premound levels at Medora (16WBR1) and at the Bayou Goula site (16IV11) in Iberville Parish.

Mississippi Period, A.D. 1200–1700

The last prehistoric period in eastern North America witnessed the development of chiefdom-level societies based on intensive cultivation of maize, beans, and squash. Perhaps the most dynamic of these societies appeared in the Middle Mississippi Valley between A.D. 900 and A.D. 1050. Referred to as the Mississippian culture, it was characterized by a shell-tempered ceramic industry and a settlement pattern including large mound centers and nucleated habitation sites that were often fortified (Stoltman 1978:725). During the first centuries of the second millennium A.D., this culture spread rapidly along the major river valleys of this portion of the continent. The nature of this expansion, either by movement of people or diffusion of ideas, is still debated. However, by A.D. 1200 Mississippian culture was found as far south as northern Mississippi and as far east as Georgia.

In the Lower Mississippi Valley, Mississippian culture encountered an indigenous non-Mississippian culture, and a hybridization of the two occurred. Phillips (1970) considered the resident culture to have been Plaquemine, an outgrowth of Coles Creek culture that began about A.D. 1000. He viewed the interaction between Mississippian and Plaquemine culture as resulting in gradual changes in the Plaquemine ceramic tradition and settlement pattern. Later in the period, after A.D. 1400, an actual intrusion of Mississippian groups displaced the resident Plaquemine groups. Brain (1978) offered a somewhat different interpretation of this sequence of events. He argued that the Lower Mississippi Valley culture that experienced the initial Mississippian contact about A.D. 1200 was Coles Creek, and that the resulting hybridization produced Plaquemine culture. The remainder of the period saw a gradual increase in Mississippian influence, at least in the Yazoo Basin, until about A.D. 1400, when a full Mississippian cultural pattern was achieved in the Lake George phase (Brain 1978:362). Brain's reinterpretation of the cultural sequence has resulted in a shift in the established chronologies. Phases such as Crippen Point, Gordon, and Preston, which were formerly considered Plaquemine culture manifestations of the early Mississippi period, are now placed late in the Coles Creek culture. The latter now persists until A.D. 1200 and includes a number of changes in ceramic technology that had previously been considered indicators of Plaquemine culture.

While disagreeing somewhat on the origin of Plaquemine culture, all authorities concur that it exhibited numerous continuities with the preceding Coles Creek culture. Several of the Plaquemine ceramic types appear to have been direct outgrowths of Coles Creek types. There were some changes, however, including the addition of small amounts of finely ground shell to some varieties of pottery, and the extension of the decorative field to include the body of the vessel. Mound construction continued on an even greater scale than in the previous period. The mounds were now larger, there were more at each site, and there were more sites (Phillips 1970; Brain 1978; Wells 1997). Intensive agriculture is presumed to have been the economic base on which this florescence was built, but there is little direct evidence of it in the Lower Mississippi Valley.

Two Mississippi period phases, Medora and Delta Natchezan, have been identified in the present region. Medora is an early Plaquemine phase based on Quimby's (1951)

excavations at the type site. Other components are present at the Kleinpeter (16EBR5), Livonia (16PC1), and Rosedale (16IV1) sites (Weinstein 1987:96). The principal ceramic types associated with this phase include Plaquemine Brushed, *var. Plaquemine*, Mazique Incised, *var. Manchac*, L'Eau Noire Incised and Addis Plain, *var. Addis*. Delta Natchezan is a late Plaquemine phase based on Quimby's (1957) excavations at the Bayou Goula site. Weinstein (1987:Figure 11) identifies another component at the Peter Hill site (16IV2). The ceramic markers of the phase include Fatherland Incised, *vars. Fatherland* and *Bayou Goula*, and Addis Plain, *vars. Greenville* and *St. Catherine*.

Brown (1985:Figure 2) also identifies a Bayou Petre phase of Plaquemine culture in the Baton Rouge region that he dates to the middle portion of the Mississippi period. Most authorities associate the Bayou Petre phase with the Pensacola variant of Mississippian culture and do not extend its range this far west (Weinstein 1987:Figure 11). However, ceramics associated with the Bayou Petre phase have been found in the Lafourche Delta (Miller et al. 2000; Wells and McCarthy 2011), and in Iberville Parish (Ryan and Wells 2007).

Historic Cultural Setting

The overview presented below is intended to provide the historical context necessary to understand and evaluate the archaeological remains encountered in the project area. Although the following discussions focus on the present project area, overriding general historical themes are presented as well.

European Exploration, 1543

European exploration of southeast Louisiana began in 1543 when the survivors of the Spanish expedition of Hernando de Soto traveled down the Mississippi River on their way to the Gulf of Mexico. No record, however, was made detailing the presence of Native Americans during their journey through the project area vicinity. After this initial, brief Spanish contact, 140 years passed before Europeans returned to the region (Wall et al. 2002).

French Colonial Period, 1682–1763

It was not until the late seventeenth century that the French took an interest in the lower Mississippi River Valley, and exploration of the region began in earnest. In 1682 an exploring party led by René-Robert Cavalier, Sieur de La Salle, traveled from French Canada down the Mississippi River to its mouth and there laid claim to the entire river valley for France. The party then returned upriver to Canada. Two years later, La Salle attempted to relocate the mouth of the Mississippi from the Gulf of Mexico in order to establish a colony on it. However, he missed the river and landed in Texas instead. The small colony which he founded on Matagorda Bay, however, soon failed (Wall et al. 2002:21-22). La Salle, and later French accounts made by Henri de Tonti in 1686, indicate that there were a number of Native American groups residing along the lower Mississippi River and its western tributaries. These groups came to be collectively referred to by the French as "*les petites nations*," or the "Small Tribes" (Caillot 2013:127; Swanton 1911:299). The principal aboriginal groups encountered by the early European expeditions through the region were the Bayagoula, Chitimacha, Houma, Ofogoula, Okelousa and Tunica.

Several years passed before the French crown was willing to finance another Louisiana expedition. Finally, Pierre Le Moyne, Sieur d'Iberville, and his younger brother, Jean-Baptiste Le Moyne, Sieur de Bienville, were selected to head another colonizing expedition to the Gulf of Mexico in 1698. The following year they arrived in North America and selected a site near present-day Biloxi, Mississippi, for their base (Wall et al. 2002). In February 1699, shortly after his arrival in the colony, d'Iberville, met with the Bayagoula, Mugulasha and Ouacha at Biloxi, Mississippi. The following month, d'Iberville ascended the Mississippi River and encountered two canoes, one filled with Bayagoulas and the other with five Ouacha men and two women near the junction of the Mississippi River and Bayou Lafourche. Two days later, on 15 March 1699, d'Iberville landed at the present-day town of Bayou Goula. There, he found the combined village of the Bayagoula and Mugulasha (Swanton 1911:274, 279-280, 297) (Figure 3-2).

D'Iberville described the Bayagoula/Mugulasha village as one-fourth league (about half a mile) from the river, on a small stream providing fresh water. The village was

Figure 3-2. Detail of Nicolas de Fer's (2010) 1701 *Les Costes aux Environs de la Riviere de Misisipi* depicting the locations of the "Bujogoula" (Bayagoula), "Majoutacha" (Mugulasha) and "Auma" (Houma) villages at the turn of the eighteenth century. Note the absence of Native American occupation in the project area vicinity.

surrounded by a ten-foot-high cane palisade. The community supported two temples, one for each group. D'Iberville was able to inspect one temple, which he described as a dome-shaped building, thirty feet in diameter, with mud-plastered walls. The entrance was protected by a lean-to, eight feet wide and twelve feet long. The houses, which numbered as many as 107, were built similarly and roofed with split cane. As many as 250 male residents lived at the village (McWilliams 1981:62-3).

At the time of his visit, d'Iberville noted the effects of smallpox on the Bayougoula population, remarking that the disease had killed one-fourth of the people (McWilliams 1981:63). The effects of disease, the merging of smaller groups, and pressure by Europeans and larger tribes caused numerous migrations and relocations of regional native groups after the arrival of the Europeans.

After meeting with the Bayagoula and Ouacha in March 1699, d'Iberville proceeded to the area of present-day Angola, West Feliciana Parish, Louisiana. There, he found the Houma residing in dispersed villages (see Figure 3-2). Though the main Houma village was located near Portage de la Croix (Figure 3-3), other Houma settlements stood somewhat further north, one at the juncture of Hunter Creek with the Mississippi River and one near Pond, Mississippi. Both of the latter settlements were located in what is now Wilkinson County. Although La Salle knew of the Houma in 1682, the group did not directly interact with Europeans until Tonti visited them in 1686 (Guevin 1983:57-60; Swanton 1911:189-190, 285-287). Though d'Iberville did not mention any Native Americans residing on the west bank of the river in Pointe Coupée Parish in 1699, it is quite likely that the Houma hunted throughout the region.

After visiting with the Houma in 1699, d'Iberville returned to the village in March 1700 only to find that half of the tribe had died from non-native diseases introduced by European explorers. On that trip, d'Iberville also stopped to visit the Bayagoula on his way up the Mississippi River. Leaving the Bayagoula, d'Iberville stopped at *Istrouma*—present-day Baton Rouge. There he found a red-painted post that marked the boundary between the hunting grounds of the Bayagoula and Houma. André Pénicaut, who accompanied

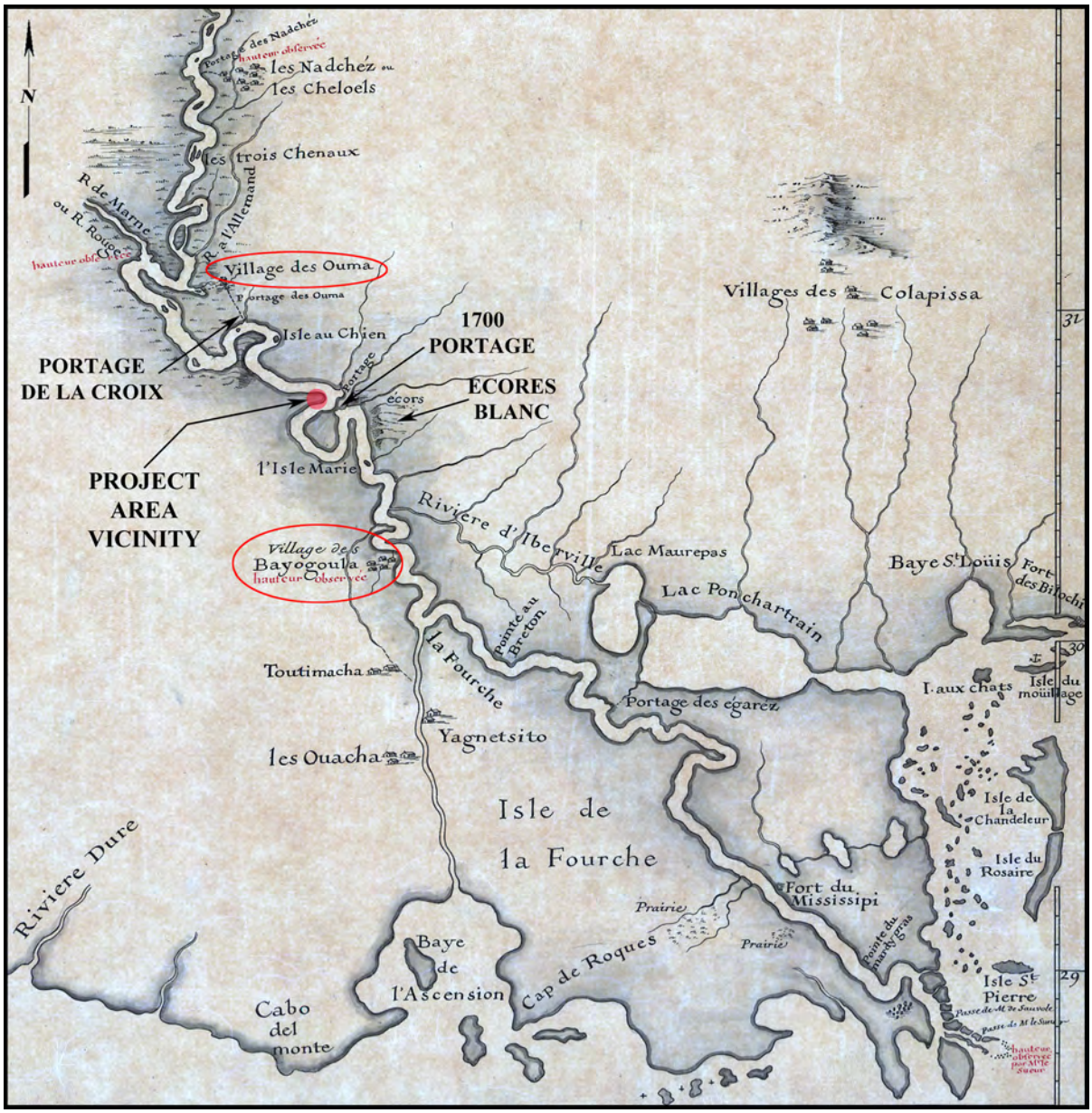

Figure 3-3. Detail of Guillaume de L'Isle's (2010) 1702 *Carte de la Rivière de Mississipi* depicting the locations of the "Village des Ouma" and "Village des Bayogoula." Note the absence of Native American occupation in the project area vicinity.

d'Iberville on that trip, noted that five leagues above (upriver of) *Istrouma* were very high banks of white dirt—known as the Ecores Blanc (see Figure 3-3)—on the east side of the river that extended for three quarters of a league (Pénicaut in McWilliams 1953:23-26). The Ecores Blanc refers to that area along the east bank of the river in the vicinity of Port Hudson, virtually opposite the present project area.

Pénicaut (in McWilliams 1953:26) went on to write in 1723 that:

> *At the end the of them* [the bluffs] *one finds a neck of land that juts far out into the Missicipy* [sic]*, making a bend seven leagues around* [see Figure 3-3]. *To avoid this tedious trip around this bend, M. d'Hyberville had the longboats carried across this neck, which is no more than a gunshot wide, and we were presently on the other side upon the Missicipy* [sic]*, where we launched our longboats once more. For some time the river current has been undermining this neck of land, so that the full stream now passes across it. This is why that neck of land now bears the name Pointe Coupée.*

The Pointe Coupée cutoff, which occurred in about 1715 (du Pratz 1763:II:97), is located a short distance south of the present project area and gave rise to the formation of False River. Since Pénicaut's time, the term "Pointe Coupée" has been expanded to include the entire parish.

The Chitimacha, who still retain their tribal identity, were first mentioned by Bernard La Harpe in August 1702 when he noted that Bienville had learned of a raid on the Chitimacha by a group of Canadians and Indians led by Louis Juchereau de St. Denis (La Harpe 1971:41). This marked the beginning of a long period of hostilities between the Chitimacha and the French. In 1706 a group of Chitimacha, having failed in an attempt to attack the Bayagoula, killed the priest St. Cosme and three other Frenchmen on the Mississippi River (La Harpe 1971:54). Bienville immediately asked the other Indian groups of the region to join in a war on the Chitimacha, and in March of 1707 St. Denis led a party of French Canadians, Bayagoulas, Biloxis, Chaouachas, and Natchitoches against a Chitimacha village. According to Penicaut the village was located on a lake near Bayou Lafourche (McWilliams 1953:71). He further states that 15 Chitimacha were killed and 40 were taken as prisoners.

A few months after d'Iberville and Pénicault passed through the region in 1700, the Bayagoula massacred the Mugulusha amongst them. In 1706, the Taënsa moved in with the Bayagoula, with apparent peaceful intentions. The alliance did not last long, and by August 1706, the Taënsa had massacred their hosts, not unlike the Bayagoula massacre of the Mugulasha in 1700. Taking advantage of their situation, the Taënsa then invited the Chitimacha and Yaguénéchiton to the Bayagoula village so as to share the Bayagoula's grain with them. However, instead of sharing their bounty, the Taënsa attacked the Chitimacha and Yaguénéchiton, taking a number of slaves before ostensibly returning to their own village in the vicinity of present-day Edgard, Louisiana. The few Bayagoula that survived the 1706 Taënsa massacre, meanwhile, fled downriver to seek the protection of the French (Swanton 1911:270, 278). The Bayagoula apparently remained there for only a short period of time before returning upriver to the present-day Donaldsonville area.

When initially contacted by d'Iberville in 1699, the Houma occupied southern Wilkinson County, Mississippi, and the adjacent portion of West Feliciana Parish, Louisiana (Swanton 1911:285; Guevin 1983:49-64). In 1706, however, the Houma moved south from Angola to the Bayou St. John area of present-day New Orleans. The reason for the move is unclear, but may have been due to a Tunica uprising similar to that of the Bayagoula and Mugulasha in 1700 and the Taënsa and Bayagoula six years later. Indeed, Bernard La Harpe described such a fate befalling the Houma at the hands of the Tunica in 1706. There are, however, conflicting accounts, and it is possible that the Houma, decimated by disease, merely abandoned their villages, which were later reoccupied by the Tunica. Regardless, the Houma remained on Bayou St. John for only a short while before moving to present-day Ascension Parish (Figure 3-4). When this move occurred is unknown, but must have taken place by 1712–1713 (Guevin l983:64; Swanton 1911:289-291; Waggoner 2005:131). Indeed, François Le Maire wrote on 15 January 1714 that "sixty leagues inland [*from the mouth of the Mississippi River*], the Oumas consist of a good one hundred families; they had a Jesuit missionary at one time" (Waggoner 2005:131). Le Maire's description places the Houma in present-day Ascension Parish. Staunch French allies, the Houma may have been purposely settled in that area by the French to thwart British incursions into Louisiana. In addition, the new Houma village was strategically placed to provide food to the fledgling French colony.

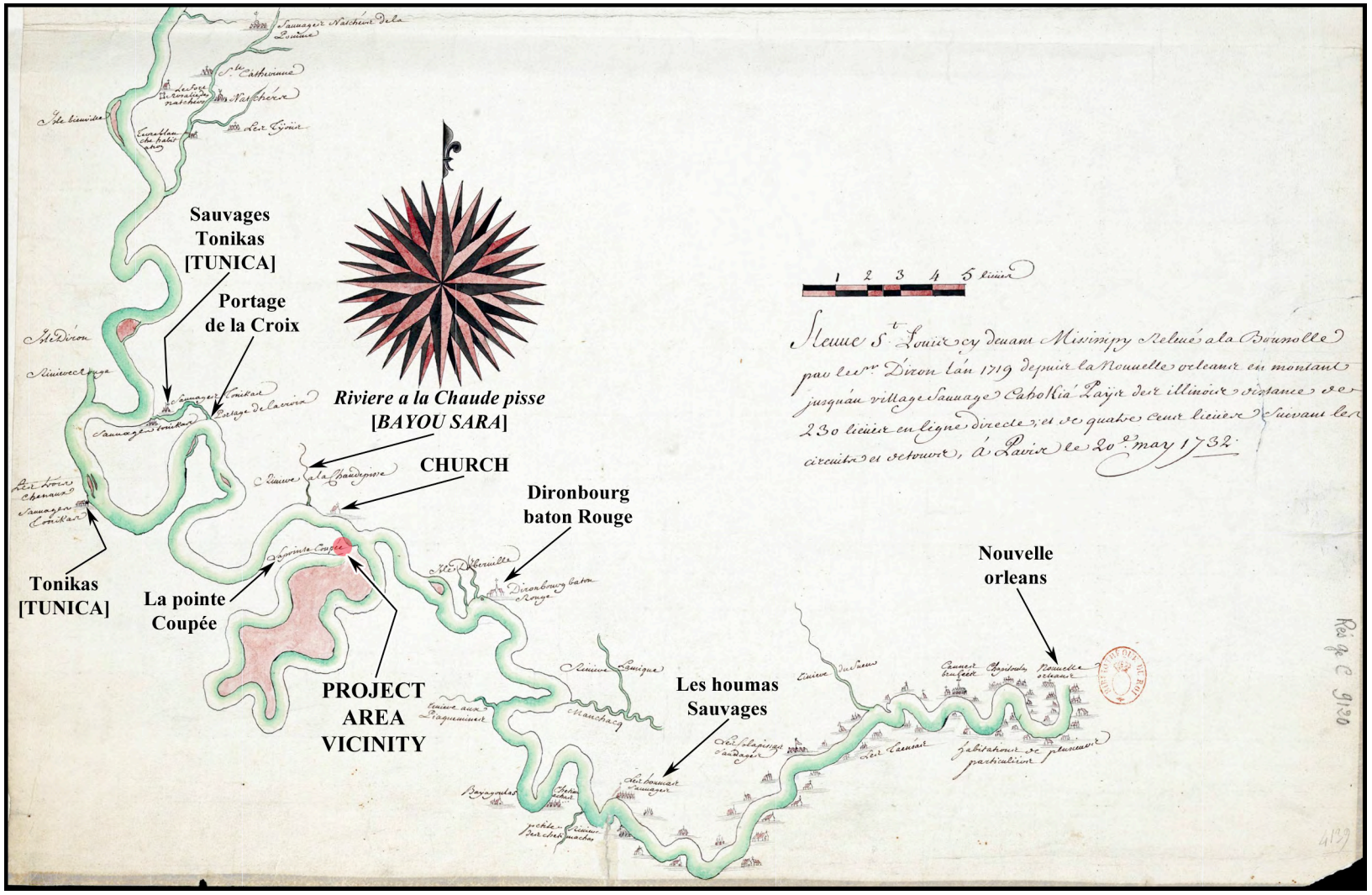

Figure 3-4. Detail of Bernard Diron Dartaguiette's (2009) 1732 manuscript map entitled *Fleuve St Louis cy devant Mississipy relevé à la boussole*. Although dated 1732, the included information is based on Dartaguiette's 1719 observations. Note the apparent church located across the river from the project area and the relative location of Riviere a la Chaude Pisse—present-day Bayou Sara. Also note that False River was not yet completely cut off from the Mississippi River.

Prior to replacing the Houma at Angola, the Tunica had resided in the Lower Yazoo Basin. However, the group left there as they were under pressure from the Chickasaw, who were allied with the British. Seeking the protection of the French, with whom they were allied, the Tunica moved amongst the Houma so that they were more protected from Chickasaw attacks. After the Houma left for New Orleans in 1706, the Tunica settled near the Red River-Mississippi River confluence, an area known as Portage de la Croix (see Figure 3-4). The principal Tunica village was on the east bank of the Mississippi River in present-day West Feliciana Parish, but there was also a small village on the west bank in what is now upper Pointe Coupée Parish (Brain 1988:30-34).

In 1892, The Goodspeed Publishing Company (1892:194) asserted that the first European settlers in the Pointe Coupée area were French Canadian trappers who moved there in about 1708. Louisiana historian Alcée Fortier (1909:II:314-315) went on to write in 1909 that Bienville established a post there in 1717, and that area land grants were issued soon after. Neither, however, provides evidence for these statements (Costello 2010:18-19). It should be noted that the term "Pointe Coupée" was not then synonymous with the present-day parish; it, instead, referred to a region that included both banks of the Mississippi River.

In 1719, Bernard Diron Dartaguiette (2009) recorded his journey up the Mississippi River from New Orleans to Cahokia. Thirteen years later, in 1732, his notes were used to produce a manuscript map of his journey entitled *Fleuve St Louis cy devant Mississipy relevé à la boussole* (see Figure 3-4). Importantly, Dartaguiette indicated that "*La pointe Coupée*" was already cut off in 1719. By then, the upper arm of what is now False River was beginning to silt in. The lower arm, however, was still open to the Mississippi River. On the opposite (east) bank of the river, Dartaguiette depicted an apparent church or habitation about half way between "La pointe Coupée" on the west bank and a small stream labeled "Riviere a la Chaude pisse" on the east bank. A contemporary, literal translation of Riviere á la Chaude pisse would be "river of the hot water or urine," conceivably a metaphor for the color and flow of Bayou Sara. "*Chaude pisse*," however, was also a French colloquialism for gonorrhea (Boyer 1728), for which the stream was actually named. While the events leading to its name have since been lost to history, the stream is now known as Bayou Sara. Perhaps,

the church depicted by Dartaguiette may be evidence of the post that Fortier (1909:II:314-315) mentioned as having been established at Pointe Coupée by Bienville in 1717. As noted above, "Pointe Coupée" then referred to both banks of the Mississippi River and was not limited to just the modern parish.

In 1718, the French colony of Louisiana stretched as far east as the Perdido River, where it was bound by Spanish Florida. By the time Dartaguiette passed through the area in 1719, however, the French captured the community of Pensacola, pushing the boundary further east. That same year, the capital of Louisiana was moved from Mobile, Alabama, to Ocean Springs, Mississippi, and in 1720 to Biloxi. Following a 1722 hurricane, the French abandoned both Biloxi and Pensacola and moved their capital to New Orleans, which had been established just four years earlier (Coker 1999:14-15; French 1851:111; Wall et al. 2002:40-41).

Much of the settlement of the colony during these early years was focused on large concessions that were granted along the Mississippi River above (i.e., upriver of) New Orleans. Biloxi remained largely abandoned until the late eighteenth century, and Mobile was supplanted by New Orleans in both size and commercial and political importance. While most settlers in Louisiana during this period were of French or French-Canadian descent, large numbers of Germans and Swiss were settled along the Mississippi River above New Orleans in 1721 (Maduell 1972:61; Wall et al. 2002:41-43). That area soon became known as the Côte Des Allemands and included much of present-day St. Charles and St. John the Baptist parishes.

Antoine Simon Le Page du Pratz, who arrived in Louisiana in 1718, travelled upriver from New Orleans to Natchez, Mississippi, in about 1721 (Arthur 1947). Du Pratz (1758:II:220) observed during his travels that the Houma were the first Native Americans that he met after leaving New Orleans. Their main village, located 20 leagues above the recently established city, was known as the "Grand Houmas," and the general area soon became commonly known as "Les Houmas." Du Pratz did not mention any other native groups between the Houma and Red River's confluence with the Mississippi River, where he found the Tunica (see Figure 3-4).

Between Les Houmas and Portage de la Croix, du Pratz passed through the recently formed Pointe Coupée cutoff. In later years, du Pratz (1763:II:97) wrote:

> *The first time I went up the river* [about 1721]*, its entire body of water passed through this part; and though the channel was only made six years before, the old bed was almost filled with the ooze, which the river had there deposited; and I have seen trees growing there of an astonishing size, that one might wonder how they should come to be so large in so short a time.*

Based upon du Pratz's recollection, the Pointe Coupée cutoff must have occurred in about 1715.

Du Pratz (1975 [1774]:317) also noted that the Okelousa resided "west of and above Pointe Coupée". Beyond this brief reference, however, little is known of the group other than that they were allied with the Ouacha and Chawasha (Swanton 1911:302). Apparently, several of the earliest French settlers in the Pointe Coupée area took Okelousa wives (Claitor's Publishing Division 1975:194). Some question still remains as to their identification as a separate entity from the Opelousas, although Swanton (1911:30) emphatically states that they are a separate tribal entity.

One of the largest grants made in the project area vicinity was the Sainte Reyne concession, located opposite False River in West Feliciana Parish. In January 1720, Jean Daniel Kolly and Francois Mathieu de Vernesobre de Laurieu organized two concessions under the appellation Sainte Reyne Colony (Giraud 1966:197)—one near Thompson Creek in West Feliciana Parish, sometimes referred to as "Ste. Reyne in the Tunicas," and one in Jefferson Parish between the Cannes Brulees and the Tchoupitoulas. These concessions were part of a larger effort begun the previous month by a consortium of French nobility interested in developing the colony of Louisiana. Unlike many concessions that never were settled, Kolly and Vernesobre de Laurieu did develop their West Feliciana concession. Like virtually all of the other concessions, Sainte Reyne met with almost instant financial disaster, the monetary notes issued to fund the colony considerably depreciating within a year of its charter. Kolly, who was also involved with the Ste. Catherine concession at Natchez, appears to have been reluctant to give up on the venture and absorbed most of the losses himself (Giraud 1974:92, 109).

The first *engagées* (indentured servants) bound for the Sainte Reyne Colony embarked upon the *La Loire* in Lorient, France, on 11 August 1720 (11 August 1720 *Liste des passagers embarqués sur le vaisseau La Loire; engagés pour la concession Sainte-Reyne*, Archives Nationales d'Outre-Mer [ANOM], COL G1 464) and would have arrived in the colony that fall. At Ste. Reyne in the Tunicas, Kolly and Vernesobre de Laurieu selected an area opposite the upper arm of present-day False River (Figure 3-5) to establish one of their fledgling colonies. Although the precise location of Sainte Reyne is unknown, based on several contemporary maps, Marcel Giraud (1974:4:251) placed the concession in a location consistent with the area between Grant's Bayou and Thompson Creek in West Feliciana Parish. It is unlikely that the concession was developed immediately adjacent to the river as that area was subject to seasonal flooding then as it is today. Indeed, based upon his late 1721 observations, Pierre F.X. de Charlevoix (1744:III:435) wrote "*Le terrein, sur lequel on a commencé celui-ci, est fort bon, mais il faut bâtir à un quart de lieuë du Fleuve, derrière une Cypriere, dont le fond est marécageux, & dont on pourroit tirer parti en y semant du Ris, & en y faisant des Jardinages.*" Benjamin Franklin French (1851:III:175) translated Charlevoix's passage to mean "The soil on which they have begun this, is very good; but they must build a quarter of a league from the river, behind a cypress wood, which is a marshy ground, and of which they might make advantage in sowing rice and making gardens." The "marshy ground" refers to that area between the bluffs and the river. Hence, the colony was undoubtedly established on the bluffs immediately overlooking the Mississippi River—a location protected from the river's floodwaters, yet within easy access of that vital link of transportation. The only other European development in the area at this early date was the concession of Marquis de Mézières and his wife at Ecores Blanc (see Figure 3-5), in the vicinity of present-day Port Hudson.

It is unclear how many people settled at Sainte Reyne in 1720–1721; however, those that moved there included several individuals of French extraction, indentured servants, and a number of slaves. Kolly and Vernesobre de Laurieu's main concession at the Tchoupitoulas, the main Sainte Reyne concession, had a population of 62 men, 12 women, 5 children, 46 black slaves, and 2 Indian slaves in November 1721 (Conrad 1970:5), and it is likely that the population of the West Feliciana concession was considerably less. When Charlevoix

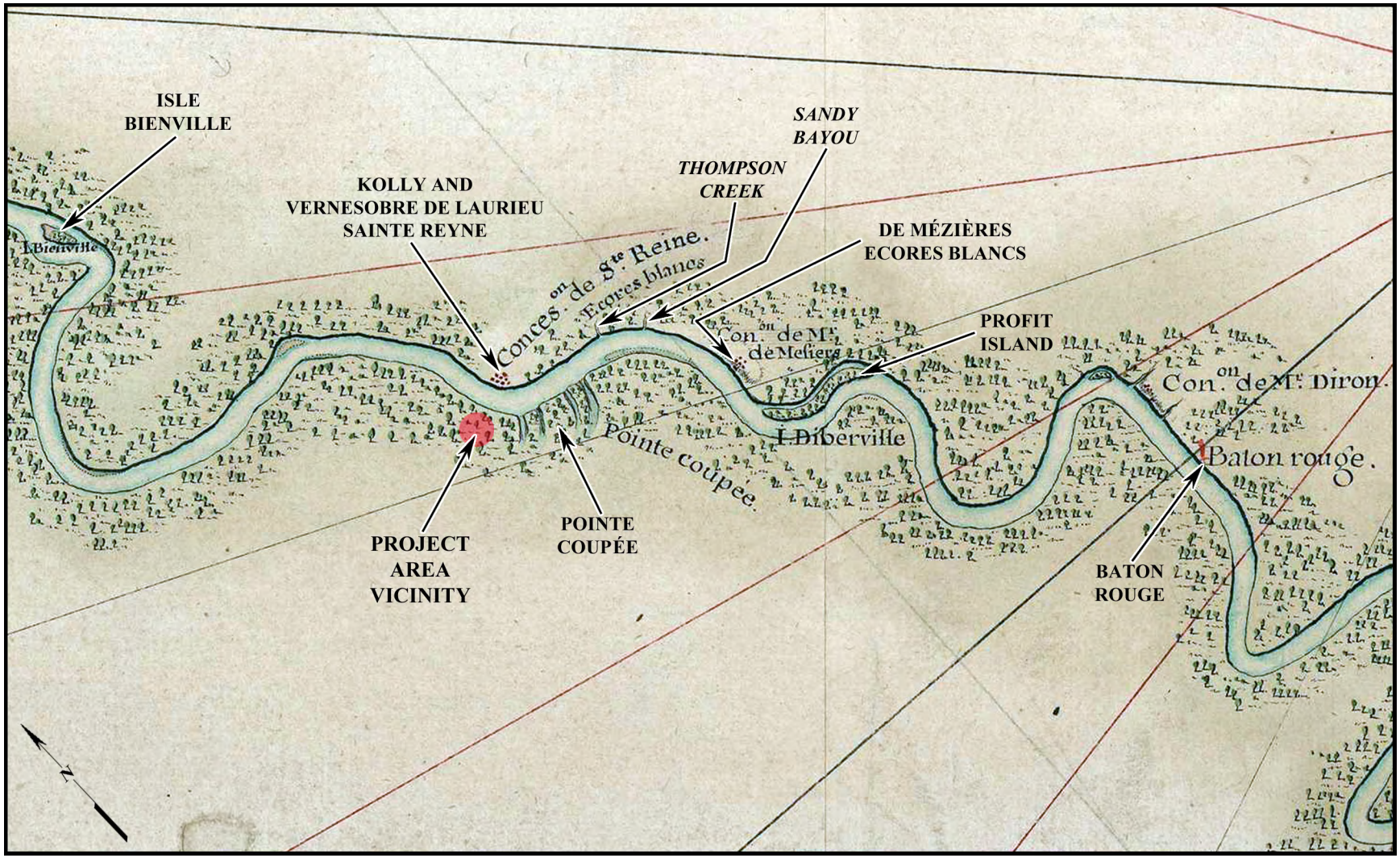

Figure 3-5. Detail of the anonymously drawn circa 1743 *Carte du Cours Fleuve St. Louis depuis les Natchez jusqu'a son Embouchure* (Anonymous 2009). Although dated circa 1743, the map depicts the Pointe Coupée area between 1721 and 1724.

(1744:III:435) visited the Pointe Coupée concession on 30 December 1721, he described the settlement less than glowingly:

> *. . . nous vîmes les foibles commencemens d'une Concession, qui porte le nom de Sainte Reyne , & à la tête de laquelle sont MM. de Coetlogon & Kolli. Elle est située sur un terrein très-fertile, & où l'on n'a point à craindre le débordement du Fleuve; mais avec rien on ne fait rien, surtout quand les Hommes manquent au travail, & l'amour du travail aux Hommes; & c'est l'état, où nous parut cette Concession.*

Benjamin Franklin French (1851:III:175) translated Charlevoix's passage to mean:

> *. . . we saw the weak beginnings of a grant, which bears the name of St. Reyne, and at the head of which are Messrs. de Coetlogon and Kolli. It is situated on a very fertile soil, and there is nothing to fear from the overflowing of the river; but with nothing, nothing can be done, especially when they want men for labor, and men want an inclination for labor; and this seemed to us to be the condition of this grant.*

Charles E. O'Neil1 (1977:163), however, translated the passage as:

> *. . . we saw the feeble beginnings of a grant, called Sainte Reine, belonging to Messrs. Coetlogon and Kolli. It is situated on a very fertile spot, and has nothing to fear from the overflowing of the river; but from nothing, nothing can proceed, especially when the people are not industrious, and in such a situation this settlement appears to be.*

Though similar translations, it is unclear if the Sainte Reyne concession was not doing well because of the lack of laborers (based on French) or because the laborers were lazy (based on O'Neil).

At the same time, Charlevoix (1744:III:435) described de Mézières' Ecores Blanc as "*Quelques Huttes couvertes de feuilles de Lattaniers, & une grande Tente de coutil forment présentement cette Concession*." French (1851:III:175) took this to mean "Some huts covered with the leaves of the lattanier and a great tent of cloth at present form all this grant." "*Feuilles de Lattaniers*" presumably refers to palmetto fronds.

Due to an inability to meet financial expectations and obligations, an increased reliance on slave labor, and a reluctance by Europeans to remain in the harsh physical

conditions present in the area, both Sainte Reyne concessions experienced rapid depopulation in 1721 as many of the French colonists returned home or moved to other concessions (Giraud 1991:160). By May 1722, Kolly and Vernesobre de Laurieu's Tchoupitoulas concession had declined in population to 12 men, 1 woman, 1 child, and 2 black slaves (Conrad 1970:8). In that same year, the Pointe Coupée Sainte Reyne concession had a population of 15 men, 5 women, 2 children, and 19 black slaves. Ecores Blanc, meanwhile, had a population of only 14 men, 6 women, and 3 black slaves (Conrad 1970:8). Kolly, himself, apparently resided on his Tchoupitoulas concession during this period.

The financial status of Sainte Reyne continued its downward slide in 1722 when Louis Victoire Dufaure and his brother-in-law, Jean Baptiste Dureville, both of whom were intimately involved with the concession, were unable to meet their tax obligations for 1722, with the latter giving up the use of his home for a period of five months so that it could be used for a military garrison (Giraud 1974:94). To further add to the difficulties, the British East India Company forbade trade between the concessionaires and English-held St. Dominque, leaving the colonists short of supplies (Giraud 1991:144).

By 1724, the Pointe Coupée concessions were virtually non-extant. Many of the inhabitants of both Sainte Reyne and Ecores Blanc who were unable to return to France (particularly the *engagées* whose repatriation efforts were often blocked) left the concessions and moved into the surrounding area (Giraud 1991:160, 178). This exodus left only ten indentured servants at Sainte Reyne and nine at Ecores Blanc by January 1726. There were, however, four households outside of the Pointe Coupée concessions. These four households were comprised of 6 white males, 3 white females, 8 children, and 4 *engagées*, who between them had cleared a total of 29 arpents (24.54 ac or 9.93 ha) of land (Conrad 1970:27, 32).

Though it is not known precisely where these families resided, they most likely were living in present-day Pointe Coupée Parish. Indeed, by 1727, 29 Europeans, comprising 17 households, are known to have been residing in the parish (Maduell 1972:100-103). Two of those households were supported by African slaves, of whom there were then three individuals in the area. At least some of the Pointe Coupée residents had formerly lived at

Sainte Reyne and/or Ecores Blanc across the river (Costello 2010:19-20). Though some individuals remained there, the Sainte Reyne Concession was abandoned soon after its founding, while the de Mézières Concession was abandoned in 1727 (Broutin 2007 [1731]) (Figure 3-6).

Unfortunately for Kolly, he and his son arrived at the Ste. Catherine concession at Natchez just prior to the Natchez uprising of 1729–1730. The French had established Fort Rosalie among the Natchez in 1716 (de Richebourg in Swanton 1911:203-204). Following the deaths of several pro-French Natchez chiefs between 1725 and 1728, pro-English Native American leaders took control of the tribe. Under their leadership, the Natchez destroyed Fort Rosalie and killed between 200 and 300 settlers and soldiers on 29 November 1729, including many at the nearby Ste. Catherine concession. Most of the 80 women and 150 slaves at Natchez were taken captive to sell to the English or other Natchez allies. In the following weeks, the Natchez were joined by the Yazoo and Koroa (Giraud 1991:398; O'Neil 1977:86; Swanton 1911:225, 229-230). Both Kolly and his son were killed, as was his servant (Conrad 1970:131). Not surprisingly, fear and paranoia swept the colony and many settlers fled for the safety of New Orleans. One result of the war was the establishment of eight protective forts or posts (Casey 1983:161), one of which was located at Pointe Coupée.

In 1731, Ignace François Broutin (2007 [1731]) produced a detailed manuscript map entitled *Carte Particuliere du Cours du Fleuve Missisipy ou St. Louis* that was based upon surveys conducted in 1721, 1726 and 1731 (see Figure 3-6). Broutin's map depicts the locations of both the Sainte Reyne and de Mézières concessions as well as the recently established farmsteads ("*Habitations de la Pointe Coupéee*") scattered along the west bank of the Mississippi River in present-day Pointe Coupée Parish. Near the southern extent of those habitations, Broutin also portrayed a larger structure which he labeled "*Redoute faite guerre de 1729*," or "Redoubt made war of 1729," in reference to a defensive work constructed as a result of the 1729 Natchez uprising. Precisely when the fort was built is unknown, but it was obviously between December 1729 and August 1731 (when Broutin drafted his map).

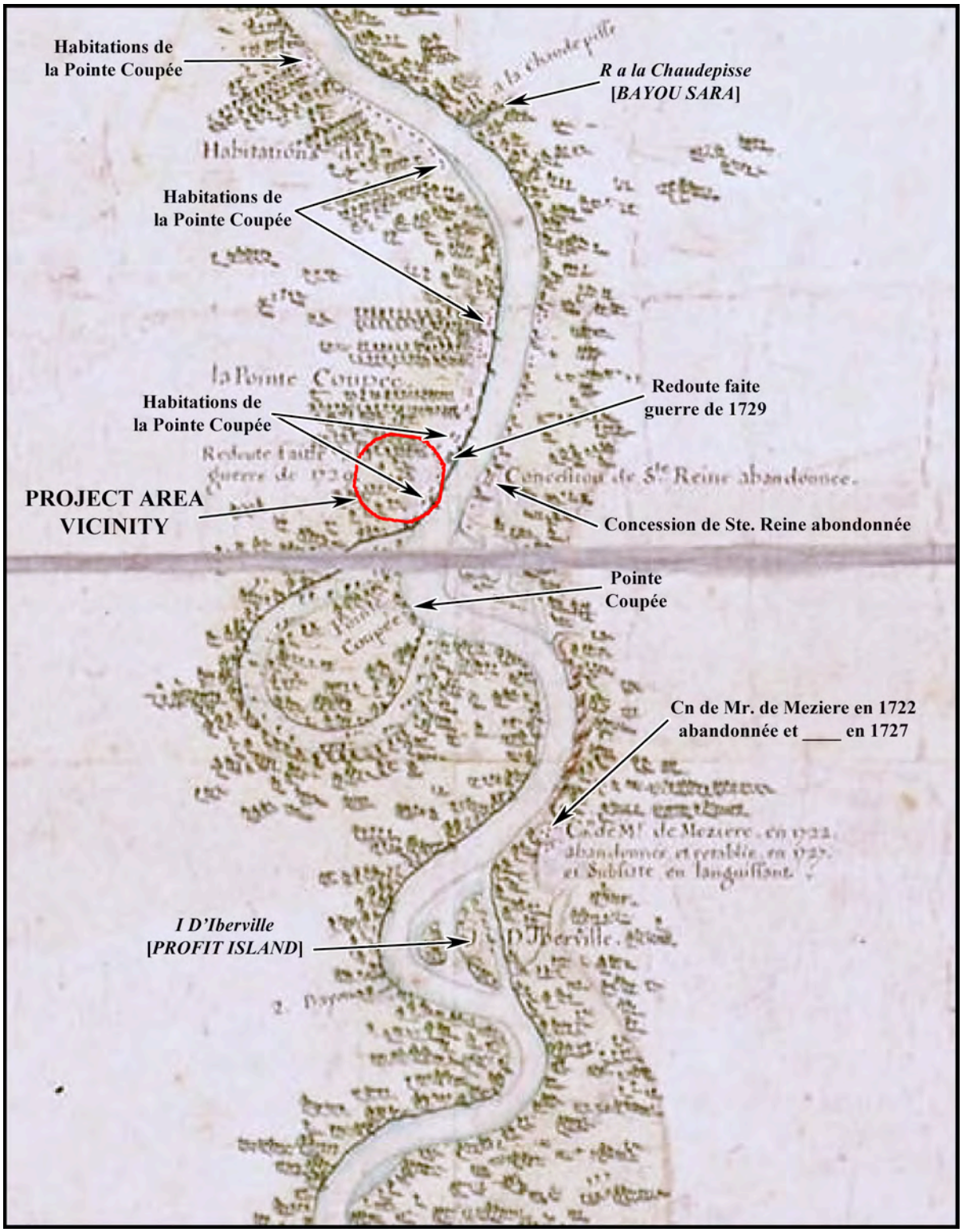

Figure 3-6. Detail of Ignace François Broutin's (2007) 1731 manuscript map entitled *Carte Particuliere du Cours du Fleuve Missisipy ou St. Louis*. Note the scattered French settlements in the area and the location of the circa 1730 redoubt built in response to the 1729 Natchez Massacre.

As noted above, Louisiana historian Alcée Fortier (1909:II:314-315) wrote that Bienville established a post at Pointe Coupée in 1717. His source for that information may have been the 1892 *Biographical and Historical Memoirs of Louisiana* published by The Goodspeed Publishing Company (1892). According to that work, "Governor Bienville heard of the little settlement at Pointe Coupee and on an expedition against the Tunica Indians he stopped there and established a military post about one mile above the present town of Waterloo. In 1840 the ramparts could be seen" (The Goodspeed Publishing Company 1892:194). As there was apparently no European occupation on the west bank of the river at Pointe Coupée until circa 1723, however, Fortier's date of 1717 is somewhat questionable. Perhaps these accounts confused the later circa 1730 redoubt with Bienville's April 1716 construction of a palisade on Isle Bienville (later Natchez Island, which has since merged with Pointe Coupée Parish) (Barnett 2007:67) (see Figure 3-5). As noted above, it is also possible that the earlier settlement may refer to one on the opposite bank of the river (see Figure 3-4).

While the ultimate source of information for the earlier fort remains unknown, the 1892 description places Bienville's fort in the same area as the fort depicted on the Broutin map (see Figure 3-6). Although it is not possible to accurately overlay Broutin's work with later cartographic resources, it is clear that the circa 1730 fort was located in close proximity to the current project area. The Goodspeed Publishing Company (1892:194) does indicate that the fort's ramparts were still visible in 1840 about one mile north of the town of Waterloo. Waterloo was a small community located at the intersection of the upper arm of the old (pre-1715) river channel with the new (Figure 3-7). The one-mile distance provided by The Goodspeed Publishing Company places the fort in Section 10, Township 4 South, Range 11 East, Southeastern District (West of the Mississippi River), very near the present project area. A small rise, evidenced by a contour line, is portrayed in that same area on the 1883 Mississippi River Commission (MRC) map (Figure 3-8). Though circumstantial, the 1883 contour line could mark the site of the circa 1730 fort (if not of the 1717 Bienville fort). The present-day levee (constructed circa 1930) passes over that locality. No physical evidence of the fort is currently visible.

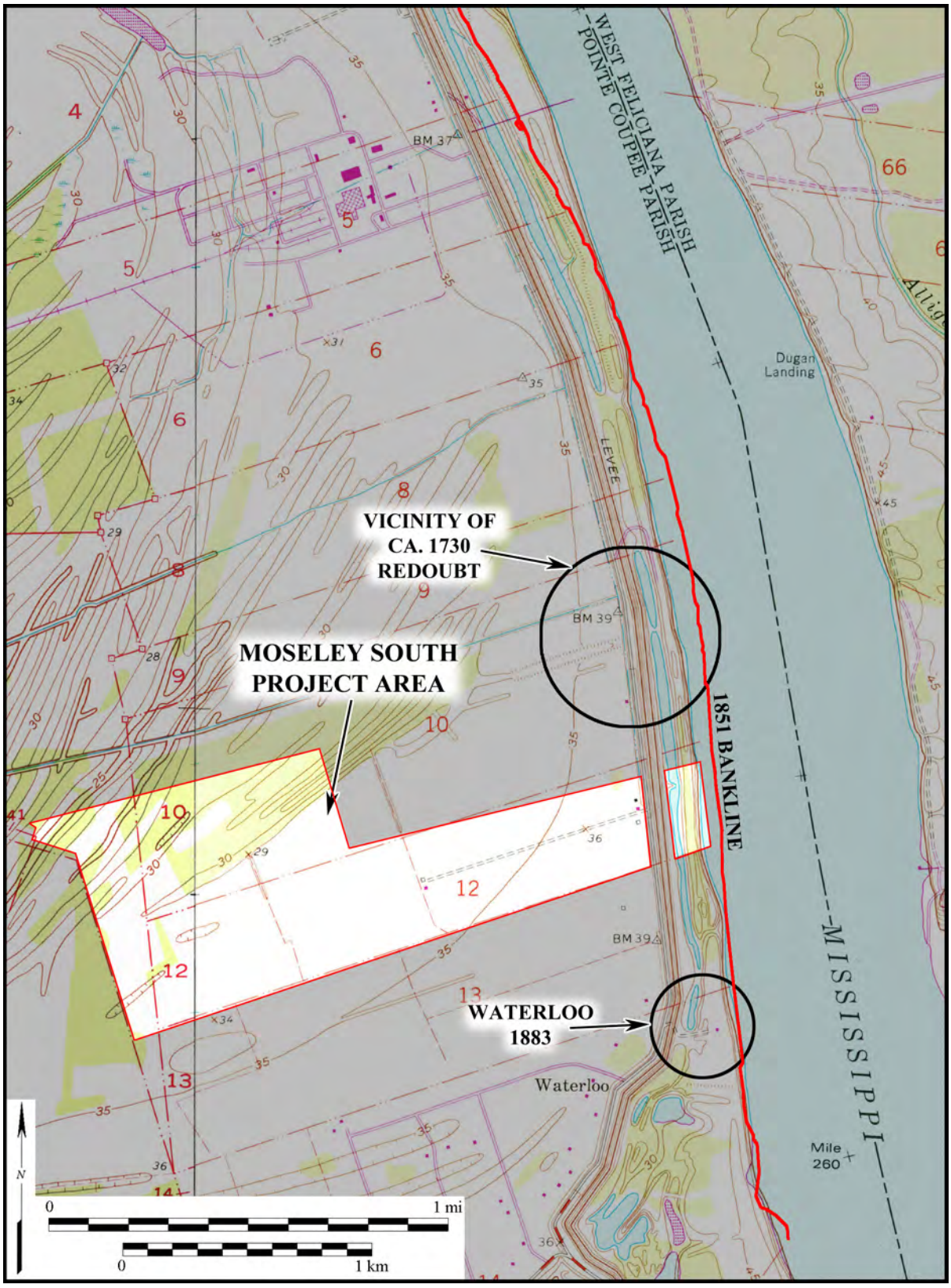

Figure 3-7. Location of the circa 1730 redoubt relative to the present project area (USGS 1980a, 1980b).

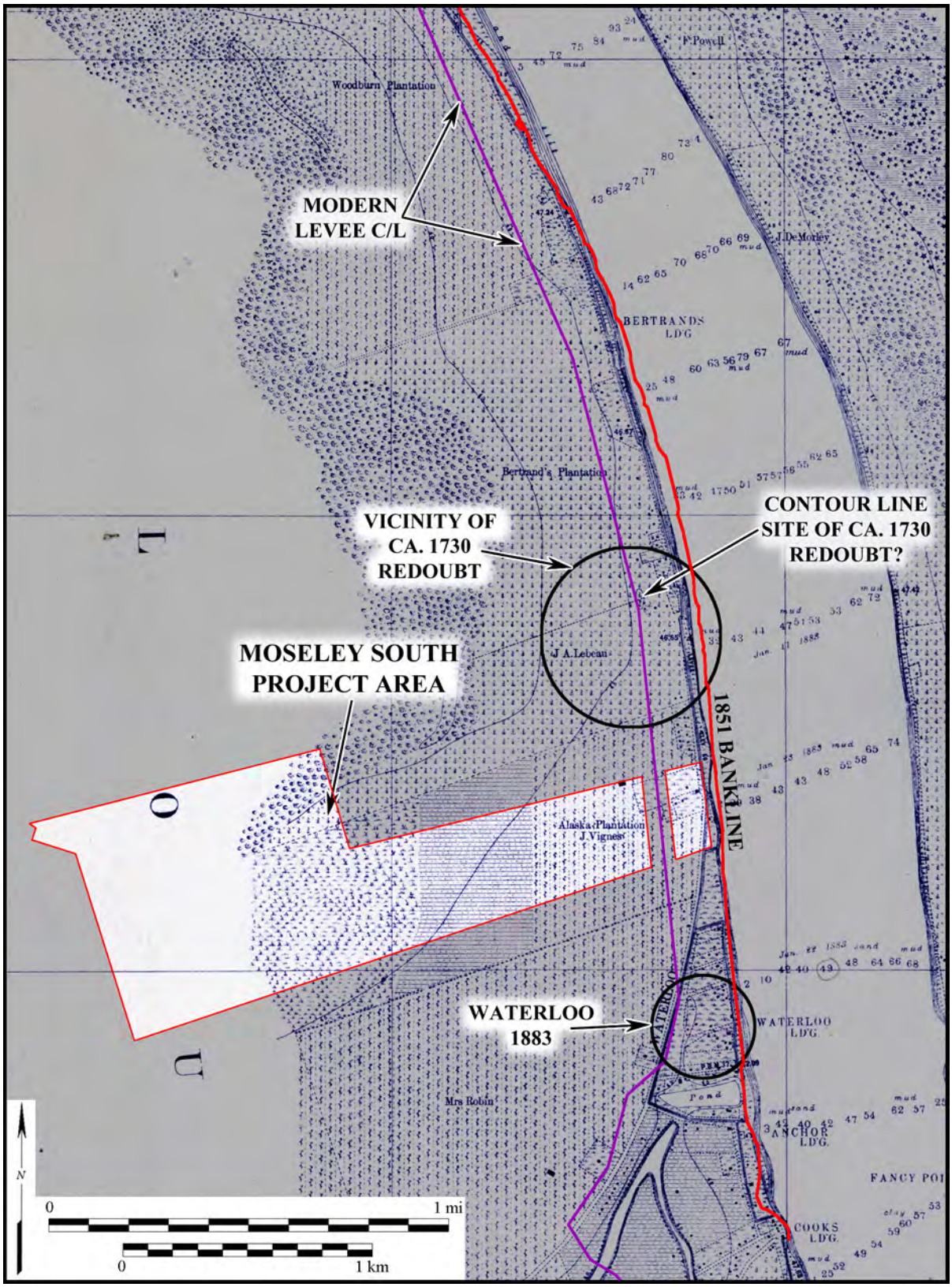

Figure 3-8. Location of the circa 1730 redoubt relative to the present project area (MRC 1883). In 1892, the redoubt was described as being "about one mile above the present town of Waterloo" (The Goodspeed Publishing Company 1892:194).

While the fort was located near, but outside of, the present project area, several habitations fronted the Mississippi River in and adjacent to the project area (see Figure 3-6). Like the fort, those structures closely lined the riverbank. Although there has been relatively little bankline erosion in this area since at least 1851 (see Figure 3-7), there have been several levee setbacks over the years. Associated with those setbacks are extensive borrow pits. Based upon cartographic regression analyses conducted for this project, the 1851 river bank was located over 200 m (656 ft) east of the present levee. Many of these early settlements likely stood within that area or, perhaps, under the levee (like the fort) or River Road (LA 981). The specific identities of those families residing in the project area vicinity remain unknown.

In response to the 1729 Natchez uprising, the French actively sought out and fought the Natchez over the next two years. One confrontation occurred at Sicily Island (Catahoula Parish, Louisiana) in January 1732. Under Governor Étienne Périer, French troops and their native allies left New Orleans on 9 December 1731 to begin their trip up the Mississippi River to Sicily Island (see Charlevoix's account in Swanton 1911:243-247). The trip was cartographically recorded in a 1732 manuscript map entitled *Carte du Cours du Fleuve St. Louis, Depuis son Embouchure Jusqu'au Poste des Natchez, Avec Partie des Rivieres Rouge, Rs. Noire, et des Taença*" (Anonymous 2009 [1732]). Depicting the Mississippi River to its mouth, rather than just to New Orleans, it is clear that the map was based, at least in part, upon earlier resources. It is unlikely, however, that those resources were significantly earlier than 1731. Based upon the 1732 map (Anonymous 2009 [1732]), Périer arrived at the Pointe Coupée settlement on 25 December 1731. By then, there were seven farms at Pointe Coupée. Those seven farms, consisting of 7 white males, 6 white females, 4 children, 2 indentured servants and 13 black slaves, comprised the entire population of the area (Conrad 1970:60). Regardless, the army spent Christmas night there (Anonymous 2009 [1732]), perhaps at the recently constructed redoubt.

After the defeat of the Natchez at Sicily Island, Périer remained concerned about the vulnerability of the Pointe Coupée settlement and had 10 soldiers stationed there at "a simple redoubt built in 1733" (Costello 2010:21-23). Périer's concerns were justifiable, in October

1731 four Pointe Coupée settlers were killed by Native Americans. That attack was followed in early 1732 by a 30-warrior Native American raid on a settlement at the former de Mézières concession.

In 1892, The Goodspeed Publishing Company (1892:194) stated that Bienville's fort was moved in 1722 to a point "four miles up the river in the precise neighborhood of the St. Francis church" where "the trenches are yet visible." If the dates provided by The Goodspeed Publishing Company are correct, Bienville's fort lasted only from 1717 until 1722 and was replaced by another works further upstream. As Broutin clearly indicates the 1729 fort was located near Waterloo and did not depict one further upstream (see Figure 3-6), the 1722 fort would have had to have been short-lived as well, and the earlier 1717 site likely reoccupied. Moreover, the 1729 fort would had to have been replaced by Périer's fort in 1733. Though possible, it is unlikely that four different forts were built at Pointe Coupée over the space of 17 years. As the west bank of the river was not settled until about 1725, and then by only four families, it is more likely that the first fort was not built until 1729, and it was that one which was replaced by Périer's fort in 1733. Indeed, as with the 1717 fort, there is no known record of the 1722 fort in official French correspondence (Casey 1983:1616).

As to the location of the 1733 fort, it may well have been located "in the precise neighborhood of the St. Francis church" (The Goodspeed Publishing Company 1892:194). The first St. Francis of Assisi Church, however, was not consecrated until 16 March 1738 (Baudier 1939:132). While there are numerous mentions of troops garrisoned at the Pointe Coupée fort during the 1730s (Casey 1983:161), neither it nor the church's specific location were noted by the French.

Both the fort and church were replaced in 1760 (Baudier 1939:159; Casey 1983:162), and it is probably these that The Goodspeed Publishing Company (1892:194) was referring to as being "four miles up the river." In late 1765, Lieutenant John Ross completed a survey of the river entitled *Course of the River Mississippi, from the Balise to Fort Chartres; Taken on an Expedition to the Illinois in the latter end of the Year 1765* (Figure 3-9). Ross' map

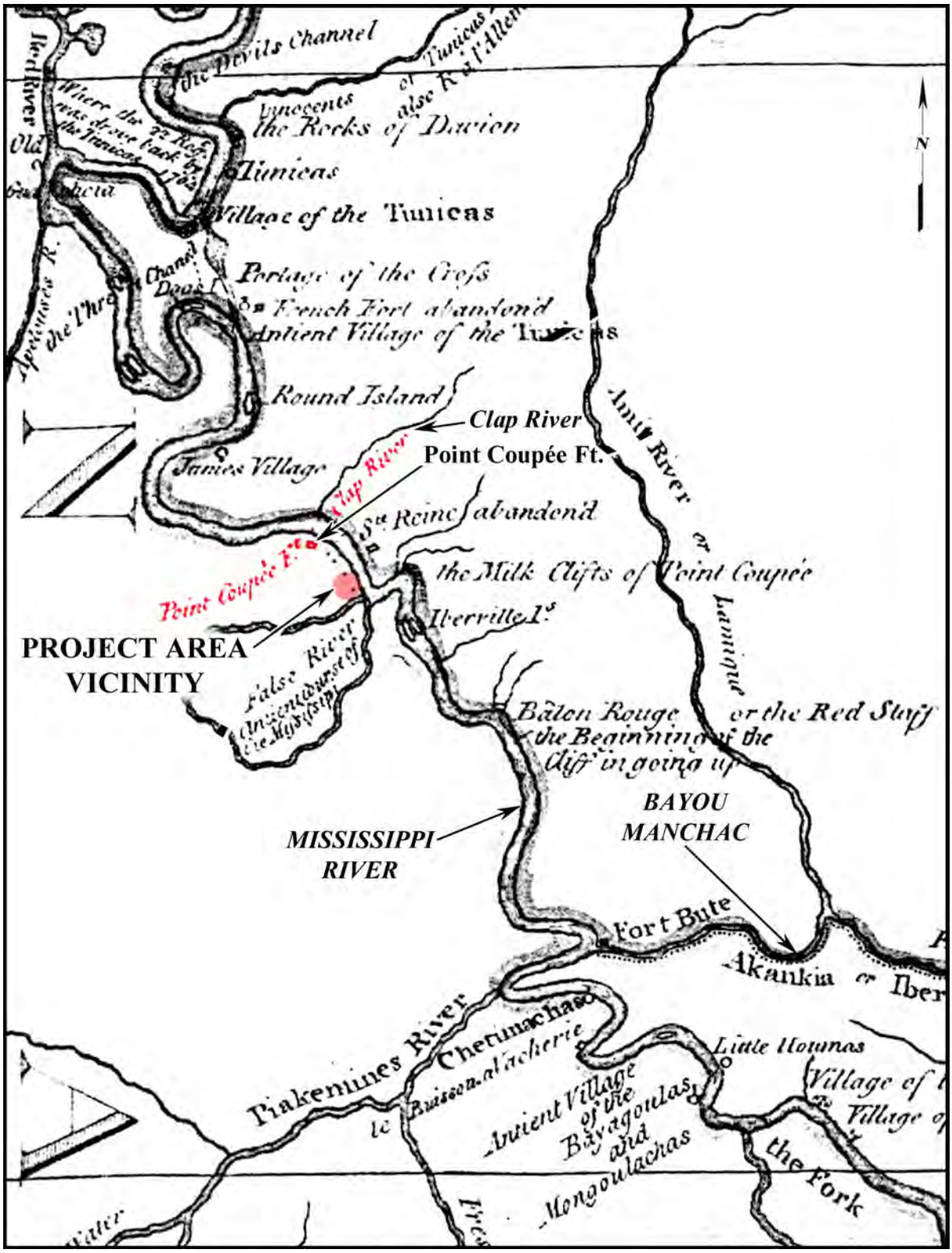

Figure 3-9. The Pointe Coupée area in 1765 as depicted by Lieutenant John Ross' (1772) *Course of the River Mississippi River, from the Balise to Fort Chartres*. Note the location of the abandoned St. Reine concession and the location of the 1760 Pointe Coupée fort. Also note that Bayou Sara was then called the "Clap River."

places the new fort well upstream of the project area, opposite of what was then known as the Clap River—known by the French as the Riviere a la Chaude pisse. About the same time, Philip Pittman (1973 [1770]:34) passed through the area, writing "The fort, which is a quadrangle with four bastions, is built with stockades. . . .. The fort is situated on the side of the Mississippi, about six miles above the lowest plantation. The church is very near the fort . . .." Pittman's accompanying map (Figure 3-10) illustrates the fort as a four-sided works, but does not label it. Immediately upstream of the fort, Pittman included two small circles, neither of which are labeled. These likely represent the church and its associated cemetery, which was established in 1764 (Baudier 1939:159).

Built in 1760, the second church remained standing until 1892 (Costello 2010:27). Though it was likely setback at least once during its 132 year lifespan (due to the encroaching river), the church was probably never moved laterally (i.e., along the river frontage) and remained on the same property throughout its lifespan. Fortuitously, an 1860 land grant placed the church and its cemetery in Section 23 and/or Section 24, Township 4 South, Range 10 East, Southeastern District (West of the Mississippi River) (Casey 1983:162), approximately 2 km (1.24 mi) above Bayou Sara. The 1760 fort would have been located immediately downstream. Both were located well outside of the project area.

Nearer the project area, the surrounding lands would have almost certainly been under private ownership by the mid eighteenth century. While the project area itself was likely farmed during the early French colonial period, most property improvements (i.e., dwellings, barns, outbuildings, etc.) would have been located very close to the Mississippi River and would now lie in the river or under the levee and its batture, at least in the project area vicinity. Cash cops during this period consisted primarily of tobacco and indigo, though poultry, squared timber and staves were also important products (Pittman 1973 [1770]:34).

Spanish Colonial Period, 1763–1803

As a result of the Seven Years' War (also known as the French and Indian Wars), the secret 1762 Treaty of Fontainebleau and the subsequent 1763 Treaty of Paris, Great Britain

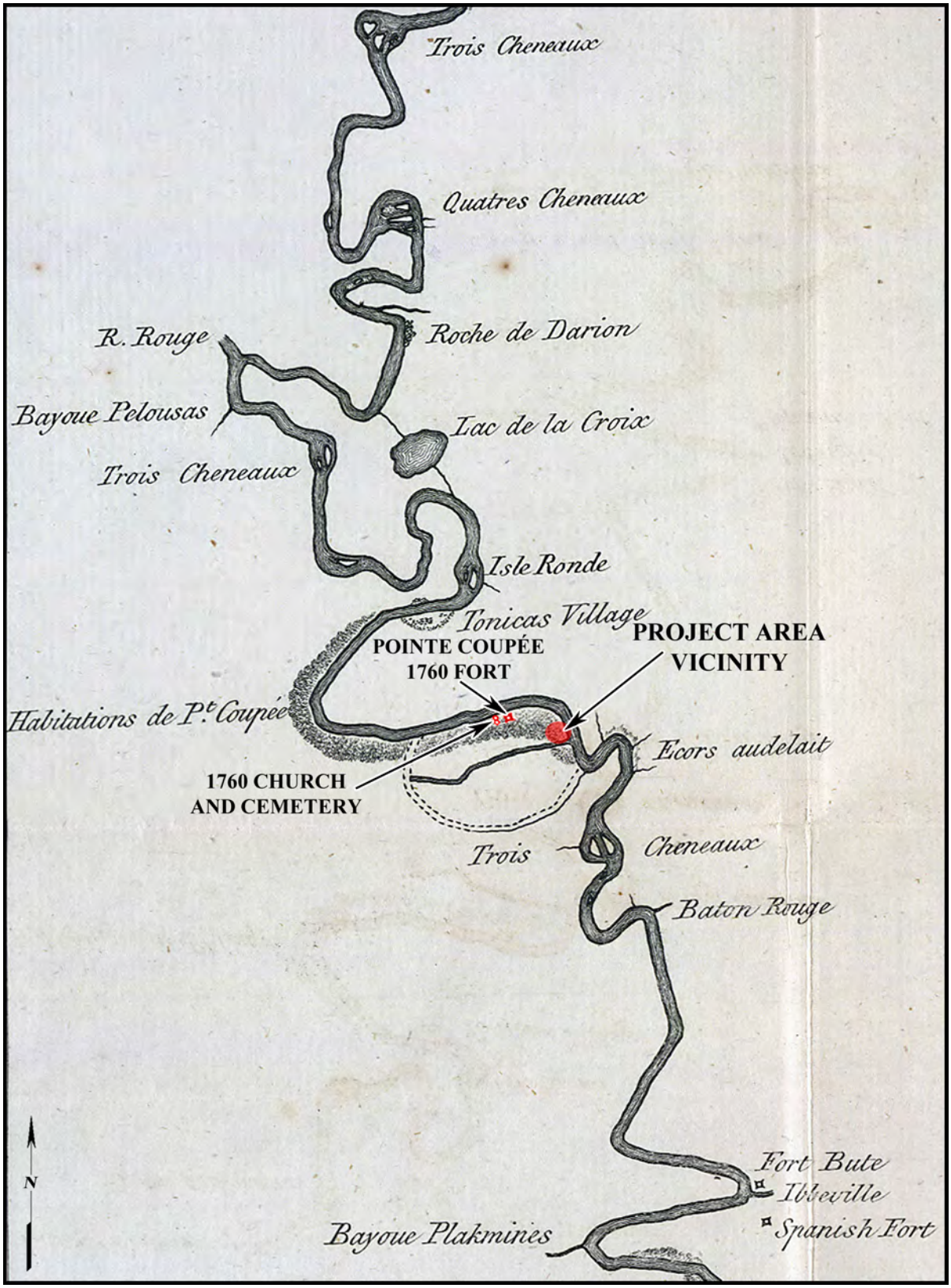

Figure 3-10. Detail of Philip Pittman's (2010) 1770 *A Draught of the Missisippi* [*sic*] *River*, which was based upon his 1764–1767 observations. Note the locations of the 1760 Pointe Coupée fort and church.

acquired the colony of Florida as well as that part of Louisiana located north of the Isle d'Orleans and east of the Mississippi from France. For her part, Spain received title to the remainder of Louisiana, including the Isle d'Orleans and the present project area. Separating the new Spanish and English colonies were the Mississippi River and Bayou Manchac (see Figure 3-9). Governance of Great Britain's new holdings in present-day Louisiana was made through Pensacola, the British capital of West Florida. The Spanish colonial capital, meanwhile, was in New Orleans (Wall et al. 2002:57-58).

Spain was slow to take possession of Louisiana. In fact, it was not until 1766 that the first Spanish governor, Don Antonio Ulloa, arrived there. Unable to enforce Spanish rule on his French subjects, Ulloa had very little real control over Louisiana, and in October 1768 the Superior Council of Louisiana ordered Ulloa to leave the colony. Spanish control was not firmly established in the colony until the arrival of General Alejandro O'Reilly in August 1769, largely because O'Reilly arrived in New Orleans with a force of about 2,000 soldiers (Wall et al. 2002). After quelling the resistance to Spanish rule, O'Reilly turned over control of the colony to Governor Luis de Unzaga y Amezaga and returned to Cuba. Following the arrival of O'Reilly, 169 residents of Pointe Coupée, presumably all male land holders, signed an oath of allegiance to the Spanish crown (Costello 2010:28). The Pointe Coupée settlements and the French fort located there, which was subsequently occupied by the Spanish, were referred to by the Spanish as "Punta Cortada" (Casey 1983:162).

As Point Coupée was already densely settled by the mid-eighteenth century (at least by colonial standards), few new arrivals moved into the area during this period. Those that did were generally of French extraction. Though under Spanish rule, very few Spaniards moved into the area during the late eighteenth century. Even fewer Acadians moved there following their 1765 arrival in the colony. As such, Pointe Coupée maintained its strong French heritage through the Spanish colonial period (Costello 2010:35-38).

By 1777, Louisiana was becoming increasingly involved in the American Revolution. While the Spanish government sympathized with the Americans and secretly provided a base of supply for them in New Orleans, Spain did not enter the conflict until 1779. That fall

Bernardo de Galvez captured the British fort at Baton Rouge, and with it received the surrender of the fort at Natchez (Wall et al. 2002). Participating in the attack was the Pointe Coupée militia (Costello 2010:41). The following spring Galvez captured Mobile, and in the spring of 1781 he added the last of the major British forts in West Florida—Pensacola. As a result of the 1783 Treaty of Paris, which ended the American Revolution, Spain gained control of West Florida. With this, the Mississippi River ceased to be an international boundary at Point Coupée.

While Spain maintained the 1760 French fort through the 1770s and 1780s, it was not necessarily kept in good repair. It fell into increasing disrepair after 1779 as Spain had then acquired control over West Florida on the opposite bank of the Mississippi River. Indeed, by 1783 the fort was already said to be in ruins. Later, French General Victor Collot wrote that scarcely a trace of the fort remained in 1796 (Casey 1983:162-163).

Though the French never specified the precise location of their 1733 fort, a February 1789 report noted that the Spanish fort included eight buildings that had been "erected about fifty years ago" (Casey 1983:163). Hence, it would seem that the Spanish fort incorporated the earlier 1733 fort, which may or may not have also been incorporated into the 1760 fort.

When cartographer George Gauld (2012 [1778]) completed his *A Plan of the Coast of Part of West Florida & Louisiana: Including the River Mississippi from its Entrances as high up as the River Yazous* (Figure 3-11) based on information that he gathered in 1774, he depicted a "Post" and church on the west bank of the Mississippi River a short distance upriver of the mouth of "Clapboard Creek." As noted above, the French Riviere a la Chaude pisse became the English Clap River, which then became Clapboard Creek (see Figures 3-4, 3-9 and 3-12) before finally being renamed Bayou Sara. Gauld's 1774 placement of the church, and fort, matches the 1860 property description very well, though it is slightly upstream of that depicted by Ross based on his 1765 observations (compare Figures 3-9 and 3-12). Presuming that the 1789 description did indeed refer to the 1733 fort and that Gauld's 1774 placement was correct, it would seem that the Pointe Coupée fort and church were

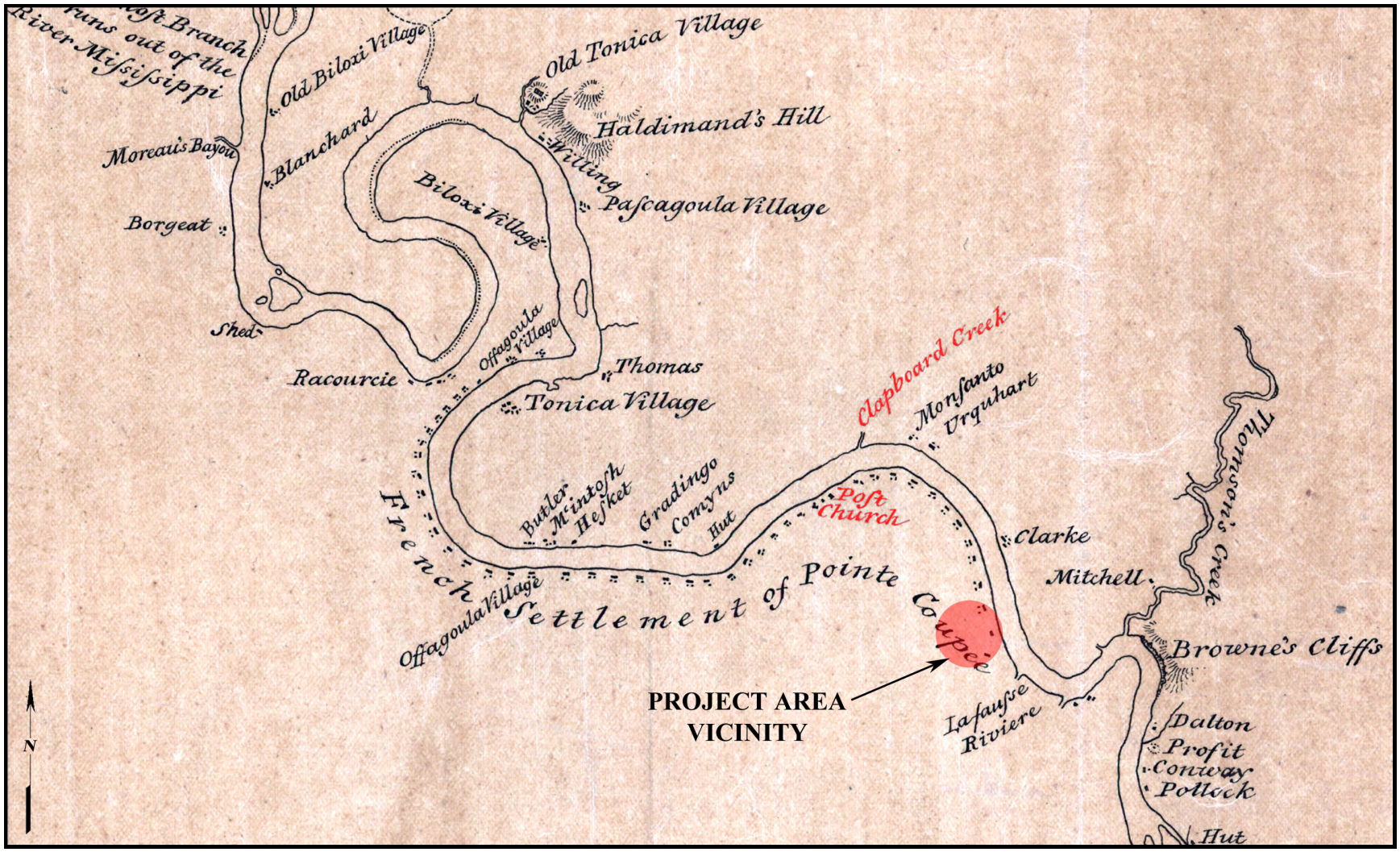

Figure 3-11. Detail of George Gauld's (2012) 1778 *A Plan of the Coast of Part of West Florida & Louisiana*, which was based upon his 1774 observations. Note the relative locations of the 1760 Pointe Coupée fort and church.

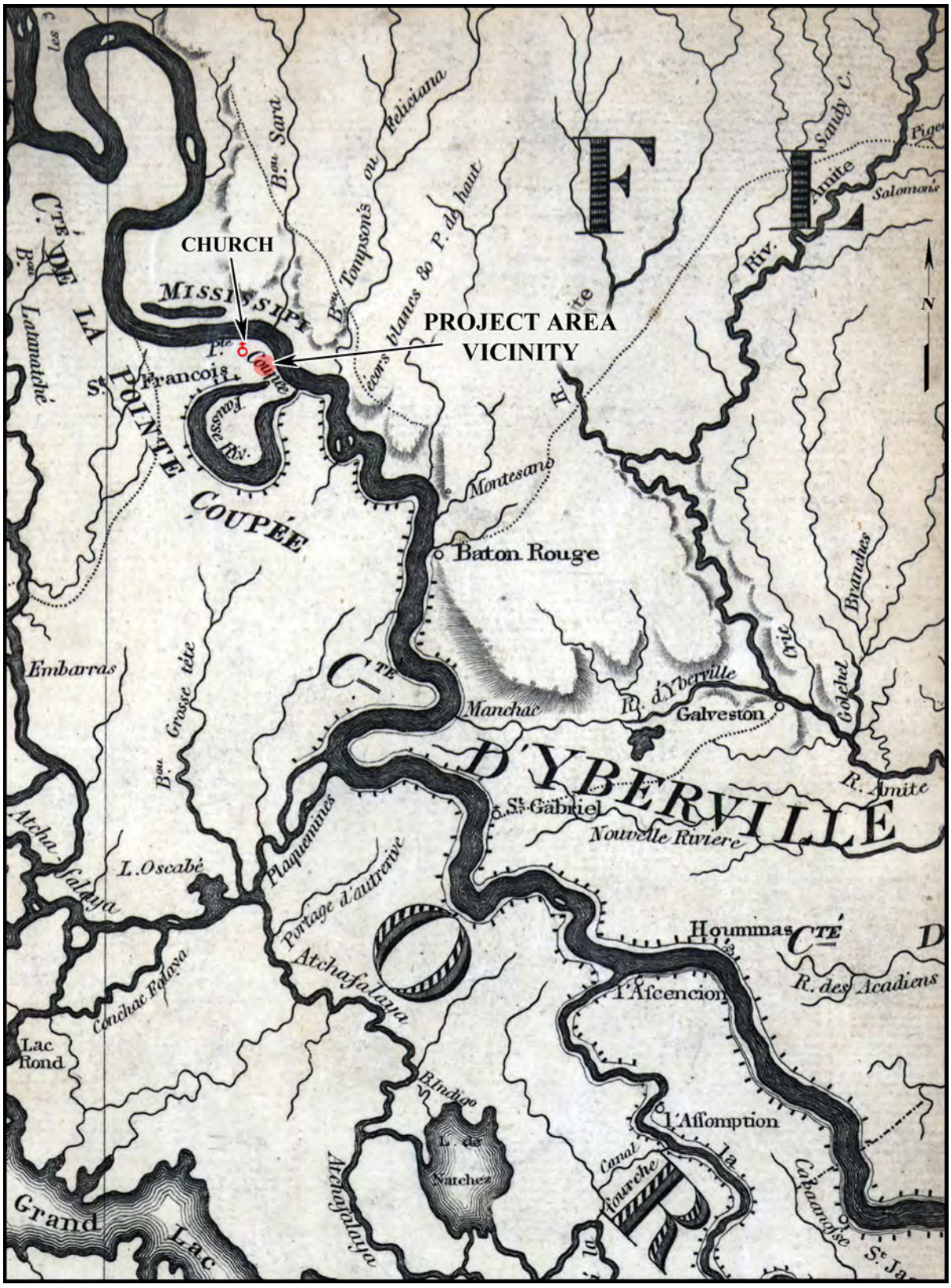

Figure 3-12. Detail of Barthélémy Lafon's (2010) 1806 *Carte Généerale du Territoire d'Orléans Comprenant aussi la Floride Occidentale et une Portion du Territoire du Mississip*i depicting the project area environs.

located a short distance upriver of Bayou Sara throughout that period, well outside of the project area.

Further upstream, Gauld (2012 [1778]) noted the presence of two "Offagoula" villages on the Mississippi River, just upstream from the Pointe Coupée settlements (see Figure 3-11). The Ofogoula (Ofo) were one of the *petites nations* closely tied to the French during colonial times. At the time of initial contact in the late 1600s, they were found in southern Illinois, from whence they were driven down the Mississippi Valley by hostile Iroquoian groups. At the time of the 1729 Natchez massacre, they resided in the Yazoo Basin, but refused to aid the Yazoo and Koroa in attacks on the French. Fearing reprisals, they subsequently moved downriver to live near their allies, the Tunica (see Figure 3-11), and to be closer to the protection of the French. The Ofogoula were eventually absorbed into the Tunica in the Marksville area. Their presence in the Lower Mississippi Valley was never strong, and numbered between 12 and 15 warriors in the middle to late 1700s (Swanton 1946:165-166).

Tobacco and indigo remained important crops in Point Coupée during this period. Crop failures due to disease and insect infestations, combined with falling prices during the 1790s, however, led to the abandonment of indigo in favor of cotton and sugarcane (Fortier 1909:I:589). All of these cash crops required slave labor for their successful harvest. In 1795, rumors of a planned slave revolt led to the hanging of 23 to 26 slaves; others were sentenced to hard labor (Holmes 1970). Protecting both lives and property in Pointe Coupée was a continuous man-made levee, which extended from the vicinity of present-day Morganza downriver beyond New Orleans by 1796 (Collot 1826:II:71). This early levee would certainly have passed through the frontage of the present project area.

Spain retained possession of Louisiana until October 1800 when the colony was ceded back to France under the secret Treaty of San Ildefonso. News of the transfer was not immediately made public, however, and Spanish officials remained in control of the colony until 30 November 1803 when it was formally transferred to French Governor Pierre-Clemént de Laussat. Before Laussat even confirmed France's control of Louisiana, however,

news of France's sale of the colony to the United States began reaching New Orleans. Laussat's governorship was a brief one as he transferred Louisiana to the United States on 20 December 1803, only 20 days after the colony's transfer to France. Although neither treaty included specific boundaries, it was ultimately determined that Louisiana consisted of all of France's colony west of the Mississippi River and the Isle of Orleans. Spanish West Florida, meanwhile, remained under Spanish control until 1810. As a result, the Mississippi River at Point Coupée once again became an international boundary. Despite Spain's 37 year rule, Louisiana's culture was still predominantly French—though with some traits contributed by other, largely assimilated, groups (Laussat 1978:78-88; Wall et al. 2002:85-87).

American Period, 1803–DATE

The Antebellum Years, 1803–1861

The newly arrived American administration brought many changes to Louisiana. In March 1804, Congress established the Territory of Orleans, which encompassed all of the present state of Louisiana west of the Mississippi River. That portion of the former French colony north of the thirty-third parallel, meanwhile, became the District of Louisiana. A superior court having three judges was formed, and a legislative council was designated. Among the many acts passed before the first legislative council in April 1805 was one that divided the territory into twelve counties—Natchitoches, Rapide, Opelousas, Attakapas, Ouachita, Pointe Coupée, Orleans, Côte des Allemandes, Côte d'Acadie, Lafourche, Concordia, and Iberville (Whittington 1970:49-51). With the exception of the County of Concordia, none had specific boundaries. In March 1807, the territorial legislature reorganized the 12 counties of the Territory of Orleans into 19 civil parishes, which were largely based on Spanish colonial era ecclesiastical parishes. While the new parishes were used to fulfill judicial purposes, the 12 original counties were maintained for legislative and taxation functions (Calhoun and McGovern 2007:224).

In 1804, Pointe Coupée slave owners feared that area slaves were plotting an uprising. In response, they asked Orleans Territory Governor W.C.C. Claiborne to station troops there, which was soon accomplished. The 30 soldiers remained there, however, only until 1806 when they were removed, at which time the American fort was turned over to resident Charles Morgan. The American fort was likely located at or very near the site of the earlier Spanish fort (Casey 1983:163). The most detailed map of the area drawn during this period is Barthélémy Lafon's (2010 [1806]) 1806 *Carte Généerale du Territoire d'Orléans Comprenant aussi la Floride Occidentale et une Portion du Territoire du Mississipi*, (Figure 3-12). While depicting the church, Lafon's map does not depict the American fort.

Chafing under Spanish control, unrest among the American settlers residing across the river in Spanish West Florida came to a head in 1810. In the early morning hours of 23 September 1810, 75 members of the revolutionary West Florida militia quietly entered Fuerte San Carlos in Baton Rouge by following a cow path up from the river, passing through an opening in the palisade, and thence onto the parade ground without being challenged by Spanish sentries. After a short skirmish, the revolutionaries captured Spanish Governor Carlos de Hault de Lassus and the garrison of the fort without any losses to themselves (Meyers 1976:93-94).

Upon the fall of the fort, the rebels proclaimed West Florida as an independent republic. The sovereignty of the republic was short lived for arrangements were immediately made for the new republic to become part of the United States. On 7 December 1810, the four hundred men of the army of West Florida marched out of the fort and were replaced by U.S. troops under the command of Colonel Leonard Covington (Casey 1983:18). With this, the United States acquired all of Spanish West Florida, which soon became known as the County of Feliciana. Two years later, Louisiana joined the United States as the eighteenth state of the Union (Calhoun and McGovern 2007:112; 225). Hence, the Mississippi River was no longer an international boundary, and there was no reason to maintain defensive works there.

With the transfer of the colony of Louisiana to the United States in December 1803, it became necessary for landowners to prove legal title to their property. Over the following

years and decades, surveyors tried to determine the limits of each parcel and who actually owned the property when the colony was acquired by the United States. In many cases, this was quite difficult as many properties had been divided, subdivided, and put back together again over the years between 1803 and when the properties were finally surveyed. This was particularly true when the property was passed down through families as these transfers were seldom recorded during the colonial period. Pointe Coupée was no exception.

The initial surveys of Pointe Coupée were conducted in 1805 (Costello 2010:54). Examination of original claims documents and area plat maps, housed at the Louisiana State Land Office in Baton Rouge, indicate that the first surveys conducted in the project area vicinity were completed in 1806. Others were not made until 1812. Based upon these initial claims and surveys (Figure 3-13), Section 6 was claimed by François Barras; Section 7 (which was later subsumed into Section 8) was determined to be a public lot and was claimed by Collins and Connelly; Sections 8 and 10 were claimed by Vincent Porche; Section 9 by Hypolite Porche; Section 11 (which was later subsumed into Section 10) was claimed by Simon Porche; Section 12 by Jean Joseph Patin; and Section 13 by Jean François Porche (Claim Papers, South Eastern District—West of River, Large Book #2, Louisiana State Land Office, Baton Rouge, Louisiana; Claim Papers, South Eastern District—West of River, Small Book #3, Louisiana State Land Office, Baton Rouge, Louisiana; Rightor 1829). All of these properties are within Township 4 South, Range 11 East, Southeastern District (West of the Mississippi River).

Among the early French settlers at Pointe Coupée was Vincent Porche, who married Marie Françoise Poche there in November 1745. Among their many children were Marie Augustine Porche (born 6 November 1750), Jean François Porche (born 13 February 1756), Vincent Porche (born 26 April 1761), Simon Porche (born 18 July 1758), Genevieve Porche (born 23 August 1766) and Hypolite Porche (born 13 September 1769). On 1 August 1769, Marie Augustine Porche married Jean Joseph Patin, and on 29 September 1796, her sister Genevieve Porche married François Barras (Diocese of Baton Rouge 1980:602, 2002:144-146).

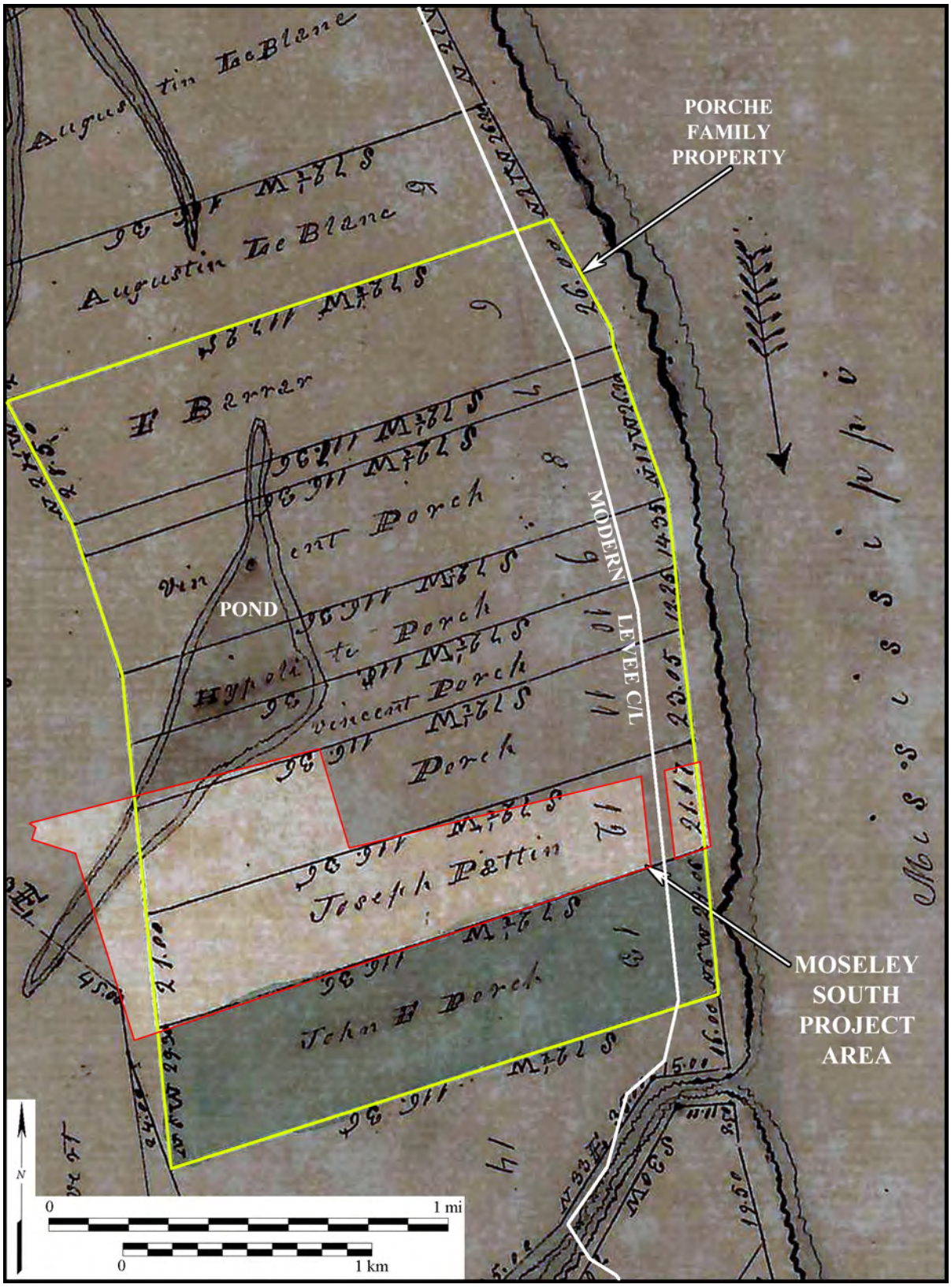

Figure 3-13. Property owners in the Moseley South project area in circa 1803 (Rightor 1829). Note that the project area makes up only a small part of the Porche family holdings.

Hence, all of the landowners in the project area vicinity were siblings or in-laws, with the exception of Collins and Connelly. As such, it is likely that all of these properties were once owned by Vincent Porche, the progenitor of the Porche family, who eventually subdivided his property among his children. When Porche may have acquired the approximately 57.5-arpent (one arpent is the equivalent of 191.83 ft or 58.47 m) front property is unknown, but it was presumably about the time of his 1745 marriage to Marie Françoise Poche.

As initially surveyed, the Moseley South project area would have included portions of Sections 10, 11 and 12 (see Figure 3-13). It was soon determined, however, that Sections 10 and 11 were subdivided subsequent to the 1803 Louisiana Purchase. As a result, Section 11 was subsumed by Section 10 and accorded to Simon Porche (Figure 3-14). Section 12, meanwhile, was assigned to Porche's sister Marie Augustine Porche, the widow of James Patin (de Culloh 1858). Simon Porche's property had a frontage of 14 arpents, his sister's property had a frontage of 7 arpents and 3 perches (Lowrie 1834:II:303, 305).

Not surprisingly, as the property had been privately held since at least the mid eighteenth century, most of Sections 10 and 12 had been placed under cultivation by 1829 (de Culloh 1858). At the back of both properties, however, were ridges and swales. Those areas were characterized in 1829 as "Lakes" (see Figure 3-14) and were not amenable for cultivation. What the Porches may have been growing at this date is unknown, though their brother Vincent Porche on nearby Section 8 began raising sugarcane by at least 1828. The following year, Vincent Porche produced 22 hogsheads of sugar (Degelos 1892:65). Simon and Marie Augustine (or their heirs), meanwhile, may have been growing cotton and other crops. Alternatively, they may have been processing their sugarcane at Vincent's sugarhouse. Any improvements made to either property by that early date were undoubtedly limited to that area nearest the contemporary Mississippi River levee. The levee has since been setback in this area, and most of their improvements probably lay between modern-day River Road (LA 981) and the Mississippi River.

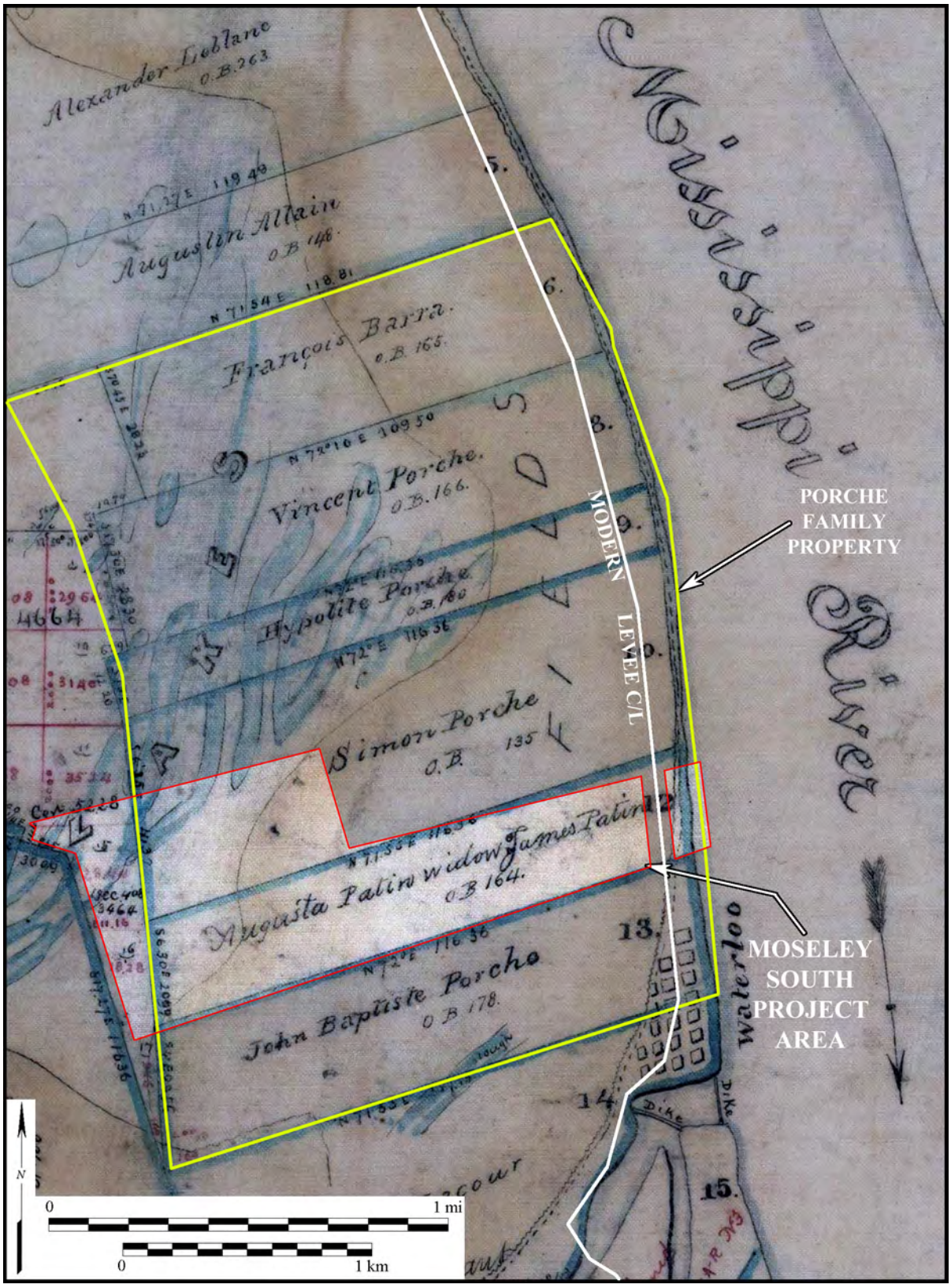

Figure 3-14. Corrected plat map of the Moseley South project area and vicinity (de Culloh 1858). Note that only the frontage the project area had been placed under cultivation.

While sugarcane had been grown in Louisiana for many years, it had been used primarily for the production of syrup and taffia (a type of low-grade rum). It was not until a successful technique for granulation was introduced in about 1795 that it became economically attractive to cultivate cane (Rehder 1971). By 1800, at least 75 planters in the New Orleans area were engaged in sugar planting (Schmitz 1977:13), and over the next several years the cultivation of sugar spread over much of the alluvial lands in the southern part of the state. Sugarcane production was given a considerable boost in 1803 when Louisiana was acquired by the United States. Unlike Spain and France, the United States had no other colonies or territories that produced sugar, and the expanding country provided an enormous market for Louisiana sugar. The high price of sugar, coupled with a high tariff, lured many potential planters into the sugar industry and, hence, to Louisiana (Rehder 1971:66-67). Favorable soils and climate, combined with close proximity to the market in New Orleans via the Mississippi River, offered an ideal environment for sugarcane production in the study region.

Still, the earliest sugarcane stock was not sufficiently hardy to endure the cooler winters north (upriver) of New Orleans, thus rice, as well as cotton, dominated the area until the 1820s. Much of the expansion in sugar cultivation occurred after 1817 with the introduction of a new sturdier strain of cane from Georgia by John J. Coiron. This new variety, known as Ribbon cane, withstood cold better and required less care in cultivation than had the Malabar, Otheite, and Creole strains which were then being grown (Schmitz 1977:13). By the late 1820s, the sugar region came to include the lands along the Mississippi River from Plaquemines Parish to Point Coupée Parish, as well as the areas along the natural levees of Bayous Barataria, Teche and Lafourche. Hence, Vincent Porche's Pointe Coupée sugar plantation was among the earliest sustained sugar plantations in that area. Indeed, it is possible that he began growing cane as early as 1816 as a "Porche" in the vicinity of Waterloo is known to have attempted sugar production at that early date. As it is not clear which Porche near Waterloo grew cane in 1816, however, it is possible that that honor belongs to Vincent's brother Jean François Porche (Costello 2010:60) in neighboring Section 13 (see Figure 3-14).

By the 1840s, the lower half of Section 10 and the upper portion of Section 12 had passed from Marie Augustine (Porche) Patin to the Lebeau family (Champomier 1846; Humphreys and Abbott 1858). Although the Lebeaus did not immediately begin growing sugarcane, or at least processing any cane that they may have grown there, a Mrs. A. Lebeau planned on producing sugar herself during the 1846–1847 season. Although uncertain, "Mrs. A. Lebeau" may have been Marie Louise Langlois, the wife of Alexis Amable Lebeau (Diocese of Baton Rouge [DOBR] 1980:457).

If Mrs. A. Lebeau was indeed successful in making sugar, she did not profit from it for very long, as operation of the sugarhouse was taken over by Mrs. F. Lebeau and René Porche by 1849 (Champomier 1850). "Mrs. F. Lebeau" refers to Francis Lebeau, whose plantation was valued at $30,000 in 1850. Residing with her at the time was her son Leon Lebeau. Though residing in the same home, it was noted that his portion of the plantation was valued at $12,000. René Porche, meanwhile, owned the adjoining plantation to the south on Section 12 (Figure 3-15). It was valued at $10,000 in 1850 (Bureau of the Census, United States of America [Census Bureau] 1850; Humphreys and Abbott 1858). During the 1849–1850 season, Lebeau produced 25 hogsheads of sugar and Porche another nine (Champomier 1850). Although owning separate properties (Sections 10 and 12), both planters used Lebeau's sugarhouse to grind sugar. This arrangement lasted only through 1851. By the 1851–1852 season, only Mrs. Lebeau is credited with producing sugar with her steam-powered grinder. In that year, she produced 82 hogsheads of sugar (Champomier 1851, 1852).

Cartographic regression analyses places the Lebeau sugarhouse in the upper extremity of Section 12, immediately outside of the present project area (see Figure 3-15). Indeed, the only known structures in the project area at the time were Porche's home and its associated kitchen(?). Both were located near the then contemporary levee. Relative to today's landscape, Porche's home would lie on the river batture of Section 12. However, a borrow pit excavated to construct the current levee likely destroyed any remains associated with that structure. Madame Lebeau's home, as well as those of her slaves, were also located on the

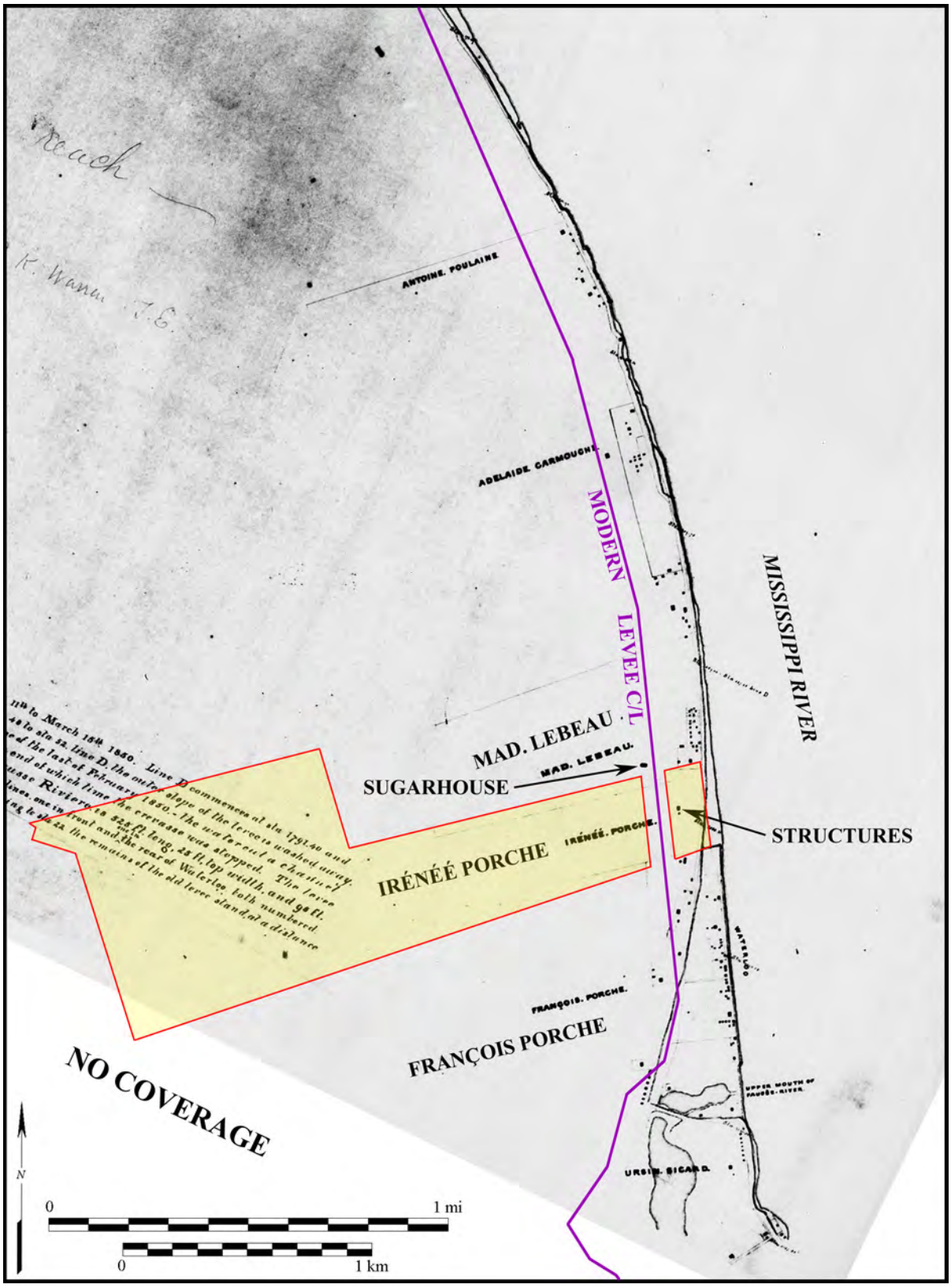

Figure 3-15. Detail of Humphreys and Abbot's (1858) 1851 *Mississippi River from Red River Landing to Carrollton* depicting the project area vicinity. Note the sugarhouse.

Mississippi River batture. Though those structures were located in Section 10, all lay outside of the present project area (see Figure 3-15).

By the 1853–1854 season, Mrs. Lebeau was joined by her sons, presumably Leon and Achilles. Together, they produced 76 hogsheads of sugar that season. For unknown reasons, the Lebeaus did not produce any sugar during the 1855–1856 season and only five hogsheads the following season. In about 1857, however, the Lebeaus partnered with James Vignes to grind sugar, and the new partners produced 75 hogsheads for the 1857–1858 season (Champomier 1854, 1856, 1857, 1858, 1859). Vignes, was in fact, more than a partner. He had married Marie Josephine Lebeau, Francis Lebeau's daughter, in 1852 (Census Bureau 1850; *The Daily Picayune* 1905).

Production at the Lebeau-Vignes plantation increased dramatically to 175 hogsheads for the 1858–1859 season (Champomier 1859). By this time, the property included all of Section 12 and the lower over eight arpents of Section 10 (Figure 3-16) (Persac 1858; Powell 1859). The fact that the Lebeaus did not produce any sugar in 1856 and very little in 1857 and then produced substantial quantities in circa 1858 suggests that the plantation's sugarhouse may have been significantly upgraded or replaced during that period.

Civil War, 1861–1865

Outside events were to strongly affect Louisiana in the mid nineteenth century. In 1860, Abraham Lincoln was elected President of the United States. In January 1861, Louisiana Governor Thomas Overton Moore led a special legislative session in Baton Rouge, at the conclusion of which the state seceded from the Union. Moore quickly took over all federal property within the state and rapidly allied Louisiana with the Confederate States of America (Wall et al. 2002:188).

On 12 April 1861, less than three months after Louisiana seceded from the Union, Confederate forces under the command of Louisiana native Brigadier General Pierre Gustave Toussaint Beauregard opened fire on Fort Sumter in South Carolina. The Union garrison surrendered two days later (Hearn 1995:29). A week later, President Abraham Lincoln

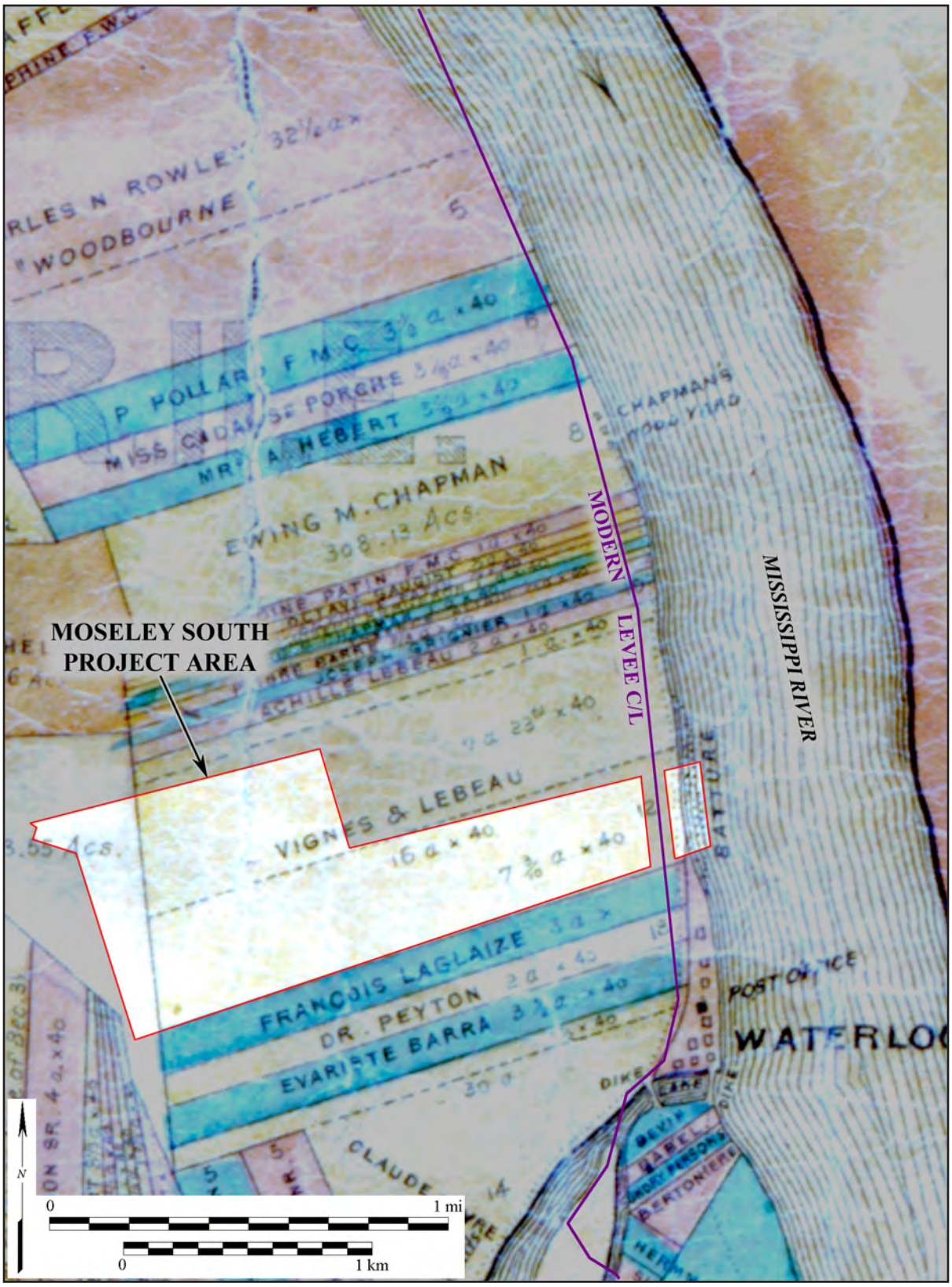

Figure 3-16. Detail of Andrew Powell's 1859 *Map of the Parishes of Pointe Coupée, West Baton Rouge and Iberville Including Parts of the Parishes of St. Martins and Ascension, Louisiana* depicting the project area vicinity. Note the wood yard in Section 8.

ordered blockades to be enforced around southern ports, including New Orleans (Blume 2002:241).

Despite the importance of New Orleans to the Confederacy, it was not until October of 1861 that Major General Mansfield Lovell was sent to New Orleans to organize the city's defenses. Lovell, though capable, was hampered by Jefferson Davis' insistence that the naval fleet at New Orleans was not under his command. When Lovell arrived in New Orleans on 17 October 1861, he found that the city had been virtually stripped of all war materiel. With Union forces tightening their control on the river, Lovell found it very difficult to resupply his stores. Further hampering his defense efforts, construction of the Confederate ironclads *Louisiana* and *Mississippi* at Algiers was behind schedule. In addition, Lovell was ordered to send Louisiana's troops to surrounding states, troops he desperately needed to defend the Crescent City. Not provided command of the Confederate Navy fleet, Lovell was, instead, ordered to seize 14 steamboats for the formation of the River Defense Fleet in January 1862. Despite Lovell's efforts, Flag Officer David Glasgow Farragut led the Union Navy past Forts Jackson and St. Phillip in Plaquemines Parish on 24 April 1862 (Dufour 1982:257, 265, 268-269; Hearn 1995:123). Farragut arrived in New Orleans on 25 April and wrote that "The levee of New Orleans was one scene of desolation, ships steamers, cotton, coal, etc. were all in one common blaze" (Dufour 1982:270).

By 1860, Vignes had taken over full control of the Lebeau-Vignes sugar operations. His management of the sugar plantation yielded spectacular results. In the 1861–1862 season alone, Vinges produced 502 hogsheads of sugar, among the largest crops in the immediate area (Champomier 1862). With such a large output, it is quite likely that cane grown on both Sections 10 and 12, and possibly other area plots, was ground at Vignes' sugarhouse (see Figure 3-16). This dramatic increase in output between 1856 and 1862 strongly suggests that Vignes made major improvements to the plantation during that period.

Despite the fact that nearby Port Hudson was the site of one of the pivotal battles of the Civil War (Figure 3-17), there was only limited action in Pointe Coupée Parish. In proximity to the project area, Bayou Sara, in West Feliciana Parish across the river, probably

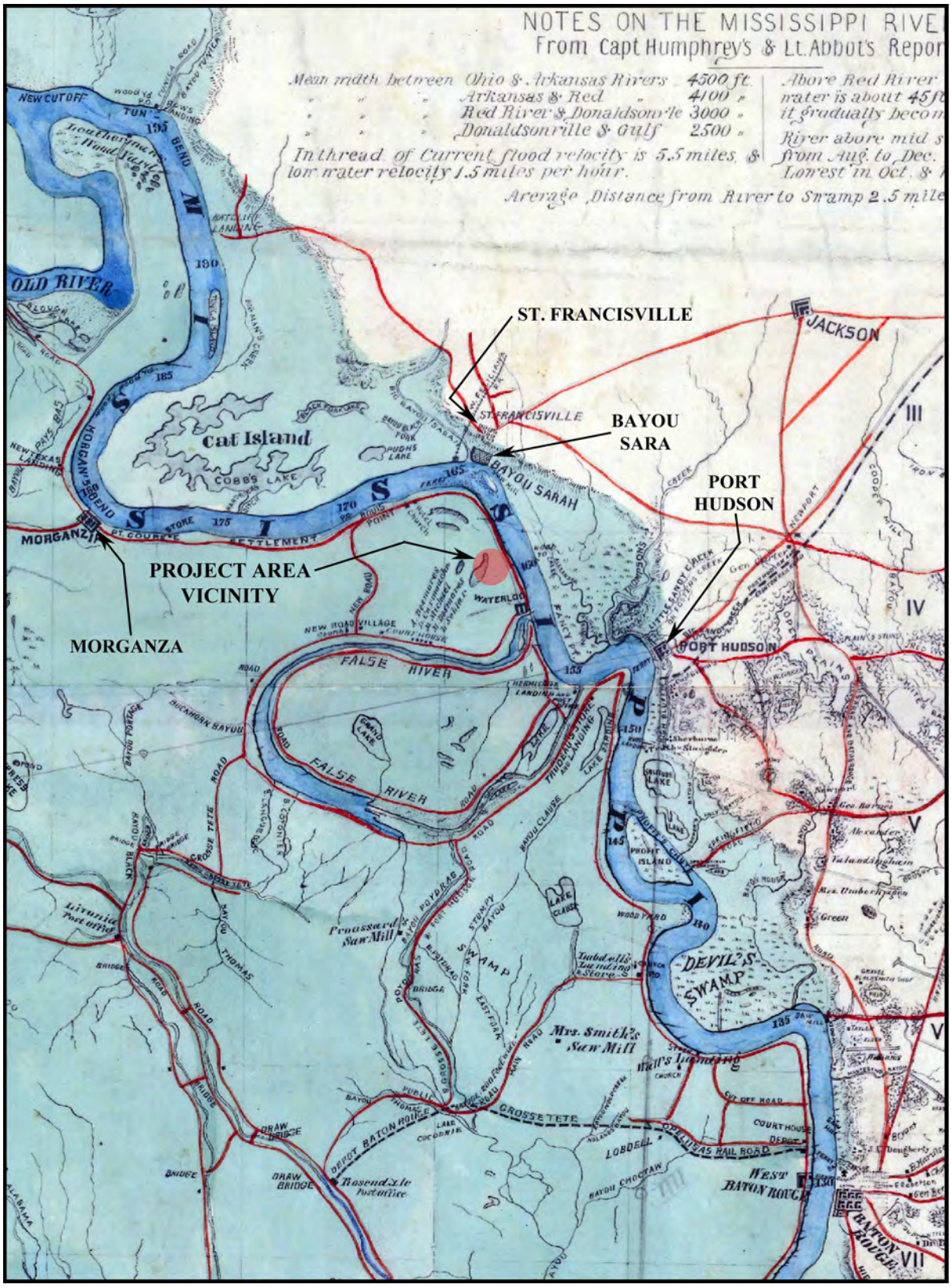

Figure 3-17. Detail of Henry L. Abbot's (2010) 1863 map entitled *Atchafalaya Basin*. Civil War engagements were fought at nearby Bayou Sara, Port Hudson and St. Francisville.

saw the most conflict. On 10 August 1862, the U.S. gunboat *Essex* shelled the town while a small landing party set it ablaze. The Union navy continued to harass Bayou Sara for a period of two weeks, during which time the U.S. ram *Sumter* was burned (14 August), and Bayou Sara was shelled and burned (23 and 24 August 1862). Nine months later, on 22-23 May 1863, Federal troops under the command of Nathaniel P. Banks crossed the Mississippi River at Bayou Sara on their way to lay siege to Port Hudson (Howell 1989:33-34). By that time, Bayou Sara was virtually leveled from shelling by Union gunboats (Winters 1963:241). Located only a short distance downstream from Bayou Sara, residents of the project area and vicinity undoubtedly clearly heard the sounds of battle.

On 16 June 1863, the U.S. gunboat *Albatross* shelled the town of St. Francisville. Two weeks later the town was shelled again, during which time several houses were damaged. On 16 January 1864, St. Francisville was shelled once again, this time by the gunboat *Lafayette*. Confederate troops remained in the area until late in the war, firing on the steamers *White Cloud* and *Henry Chouteau* from Bayou Sara on 29 August 1864 (Howell 1989:33-36). During the following months, several skirmishes occurred at Bayou Sara and in the St. Francisville vicinity, none of which could be considered as major actions.

Pointe Coupée itself saw comparatively little action during the Civil War. During March 1863, Federal troops under the command of Captain J.M. Magee raided the area and burned or otherwise destroyed a variety of stores, buildings, and crops. Two months later, Union troops under the command of Nathaniel P. Banks transited the Mississippi River from Pointe Coupée to Bayou Sara on their way to lay siege at Port Hudson (Howell 1989:33-34) (see Figure 3-17). Although several skirmishes occurred in the area throughout the remainder of the war, particularly around the Union encampment at Morganza, none were particularly destructive. The most notable was a Union raid under the command of Colonel Morgan H. Chrysler to drive Confederate guerillas out of the area. Rather than driving the Confederates out, however, Chrysler was subjected to a variety of guerilla tactics and lost five men captured and one wounded. By comparison, the Confederates lost one killed and two captured (Winters 1963:412).

Reconstruction and the Late Nineteenth Century, 1865–1900

With the abolishment of slavery in 1865, many small and large sugar planters in Southern Louisiana struggled to make a profit or even retain their land holdings following the war. However, many planters along the Mississippi River were quick to transform the economic makeup of their plantations. For sugar and even rice growers in Louisiana, securing a reliable source of labor became one of the most difficult tasks. Although some African-Americans remained on the sugar plantations following the war, many immigrated to cities, especially those in the northeast and west, to search for a better life. Area planters throughout the region experimented with several labor options, including using Chinese workers in the sugar fields (Swanson 1975:96). Other planters, following a more racially motivated notion, abdicated for the use of Portuguese, Italians, and Germans on sugar estates. Despite these efforts, the importation of Chinese and other immigrant groups proved to be unsuccessful, and African-Americans remained the predominate source of labor for the majority of sugar estates in south Louisiana (Swanson 1975:96).

Another means that planters used to overcome the labor shortage was by using the "Share System" or sharecropping. In this case, the planter would furnish seeds, tools, and land, while the workers furnished their labor, food, and clothes. When the crop was sold, a percentage of the profits would go to expenses, a percentage would go to the laborers, and a percentage would go to the planter (Bouchereau 1872:xii). However, one clear problem with this system was that during a bad crop year, loyal laborers who had toiled in the fields for an entire season received very little or nothing in return. Furthermore, unlike in the wage system, the laborers' profits were not paid until the end of the growing season, thus making living expenses for poor laborers difficult to come by and often forcing the laborers to use extensive credit to maintain their well being. Regardless of the labor system employed following the Civil War, many African-Americans laborers, though no longer held in legal bondage, found their economic circumstances little improved.

Not surprisingly, sugar production fell off dramatically throughout the region during the Civil War and Reconstruction as planters lost their financial resources and their labor

force (Ginn 1940:34). In response to these difficulties, some area sugar planters turned their attention to rice cultivation, as it was less expensive and less labor intensive than sugar cultivation. The rice industry expanded so quickly during the early post-bellum years that it rapidly became the most important cash crop in the state.

Like the rest of the South, Pointe Coupée was in very poor economic condition following the cessation of hostilities. The land had been devalued, the labor force had been lost, squatters occupied many areas, the levees were destroyed, and there was little or no capital to effect any changes of those conditions. By instituting tenancy and share cropping, planters were able to salvage some of their previous holdings and cotton, sugarcane, corn, pecans, and cowpeas became the dominant cash crops. Diversified settlement led to the development of areas that previously saw little or no occupation, and even the low lying backswamps were inhabited.

Despite these economic hardships and a lack of labor, Vignes managed to retain possession of his plantation and was able to produce 48 hogsheads of sugar from the 1868–1869 cane crop. At the time, Vignes' steam-powered sugarhouse was described as being of brick construction and having a shingle roof. Like most of his neighbors, Vignes still employed an open kettle train to produce sugar at what was by then known as Lebeau Plantation. While Vignes did not grow rice on the plantation, he did grow corn. In 1869 alone, Vignes harvested 900 bushels of corn (Bouchereau 1869, 1870).

Although Vignes lived until 1905 (*The Daily Picayune* 1905), credit for sugar production at Lebeau Plantation was shifted to his wife in 1874. With this change, Lebeau Plantation became known as Alaska Plantation. Sugar production remained relatively modest on the plantation during the early 1870s; only 68 hogsheads were made in 1874. In 1875, however, production on Alaska Plantation jumped to 108 hogsheads. By 1876, however, it dropped back to 76 hogsheads (Bouchereau 1874, 1875, 1876). A full economic recovery in the area was evasive, however, as floods destroyed crops throughout the period. Particularly problematic was the levee at Morganza. The Morganza levee broke in 1874,

1882, 1884 and 1890 (Costello 2007) and was not satisfactorily repaired until the twentieth century. How these floods may have affected the project area remains unknown.

Sugar production at Alaska Plantation fluctuated somewhat, but remained relatively modest through the late 1870s. The largest crop after the war was produced during the 1880–1881 season when 118 hogsheads were ground. By the following season, however, only 73 hogsheads were produced. None was made in 1883 (Bouchereau 1877, 1878, 1879, 1880, 1881, 1882, 1883). By then, sugar cultivation within the project area had been greatly diminished and was limited to just the frontage of the property (Mississippi River Commission [MRC] 1883) (Figure 3-18). At the time, the middle third of the property was fallow while the rear was apparently given over to rice. At the very back were woods. Alaska's sugarhouse was then located near the northeast corner of the project area. It was then the only structure located landside of the Mississippi River levee within the Moseley South project area. On what is now the river batture were several structures, presumably including the Vignes' house. All of those buildings were removed when the current levee was constructed in circa 1930, the borrow pit for which would have destroyed their remains (MRC 1883, 1921, 1934; USGS 1931a, 1931b).

Though not producing any sugar in 1883, 34,500 pounds were made at Alaska Plantation in 1891. By then, the plantation was back in James Vignes' name. It was, however, the last year that sugar was made there (Bouchereau 1892, 1893, 1895, 1898). The following year, Vignes may have switched to growing cotton. His attempts were apparently meager, however, as he planted only one acre in cotton (George 1895:433).

Twentieth Century and Beyond, 1900–DATE

By the turn of the twentieth century, timbering, facilitated by the railroads, had largely overtaken sugarcane cultivation in much of South Louisiana. Largely focused on cypress trees found in the region's backswamp, the industry underwent rapid decline once the major tracts of cypress had been cut. Along the river, sugarcane cultivation was still

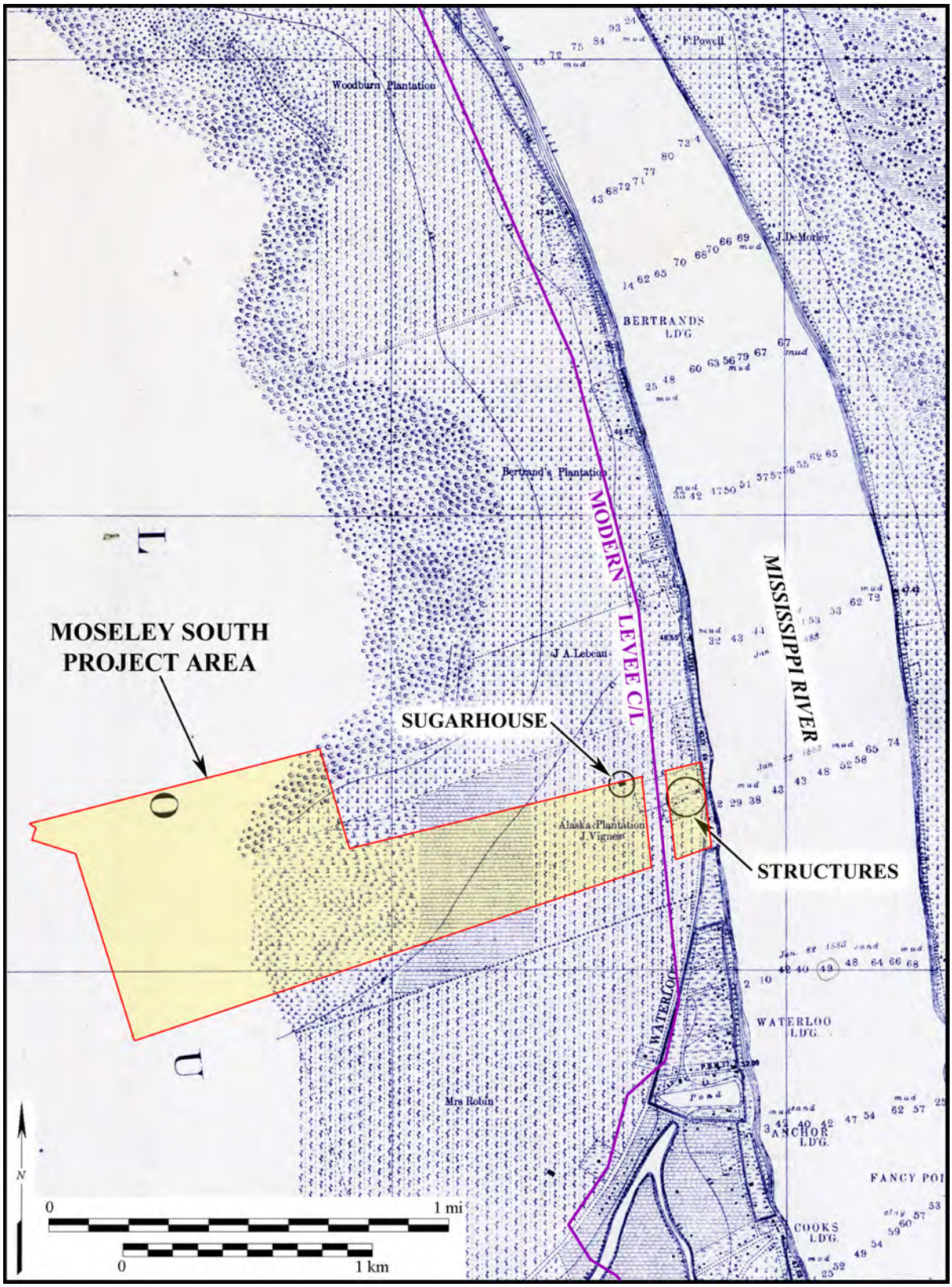

Figure 3-18. Detail of the Mississippi River Commission's (1883) 1883 *Survey of the Mississippi River* depicting the project area, most of which then formed part of Alaska Plantation.

widespread, but not to the extent that it had once been grown, and the ranching of cattle became more commonplace (Maygarden 1995:74).

Following James Vignes death in 1905 (*The Daily Picayune* 1905), Alaska Plantation was taken over by the Clover Leaf Planting Company and became known as Waterloo Plantation (Figure 3-19). Waterloo Plantation, owned by B.E. Perkins, incorporated most of the current project area, though Edwin Vignes, presumably James' son, owned a small portion along the northern extreme of the property. Upriver of the younger Vignes land in the 1920s was Le Beau Plantation (MRC 1921), a name which had formerly been applied to Waterloo Plantation.

Within the current project area, most of the property had been relegated to rice production by the 1920s (see Figure 3-19) (MRC 1921). Although a small levee setback had recently been made along the river front of the project area, most, if not all, of the earlier buildings on the property were still extant. The one major exception was the sugarhouse, which was apparently no longer standing by 1921. When the sugarhouse was demolished is uncertain, but it was likely leveled between 1904 and 1921 (MRC 1921; USGS 1943).

The existing Mississippi River levee was built sometime between 1927 and 1931. That levee required the excavation of a large borrow pit on the batture side of the new levee, destroying any archaeological remains that might have been located there. Unlike on many other occasions, the buildings that had been located there were not simply setback to allow room for levee construction. Instead, they were removed from the property altogether. As a result, there were only two structures in the immediate project area vicinity in 1930–1931 and none within it (Figure 3-20). Between 1931 and 1934, however, one structure was erected along present-day LA 981 within the limits of the current project area (Figure 3-21). It was the only known structure in the project area at that time. Over the next decade, three new buildings were added to the property (Figure 3-22). One of these was likely a dwelling, the others sheds or barns. One of the latter structures was located at the site of the old Lebeau-Alaska Plantation sugarhouse. While it is possible that a building was indeed erected there during the 1940s, it is possible that the remains of the sugarhouse were still extant and

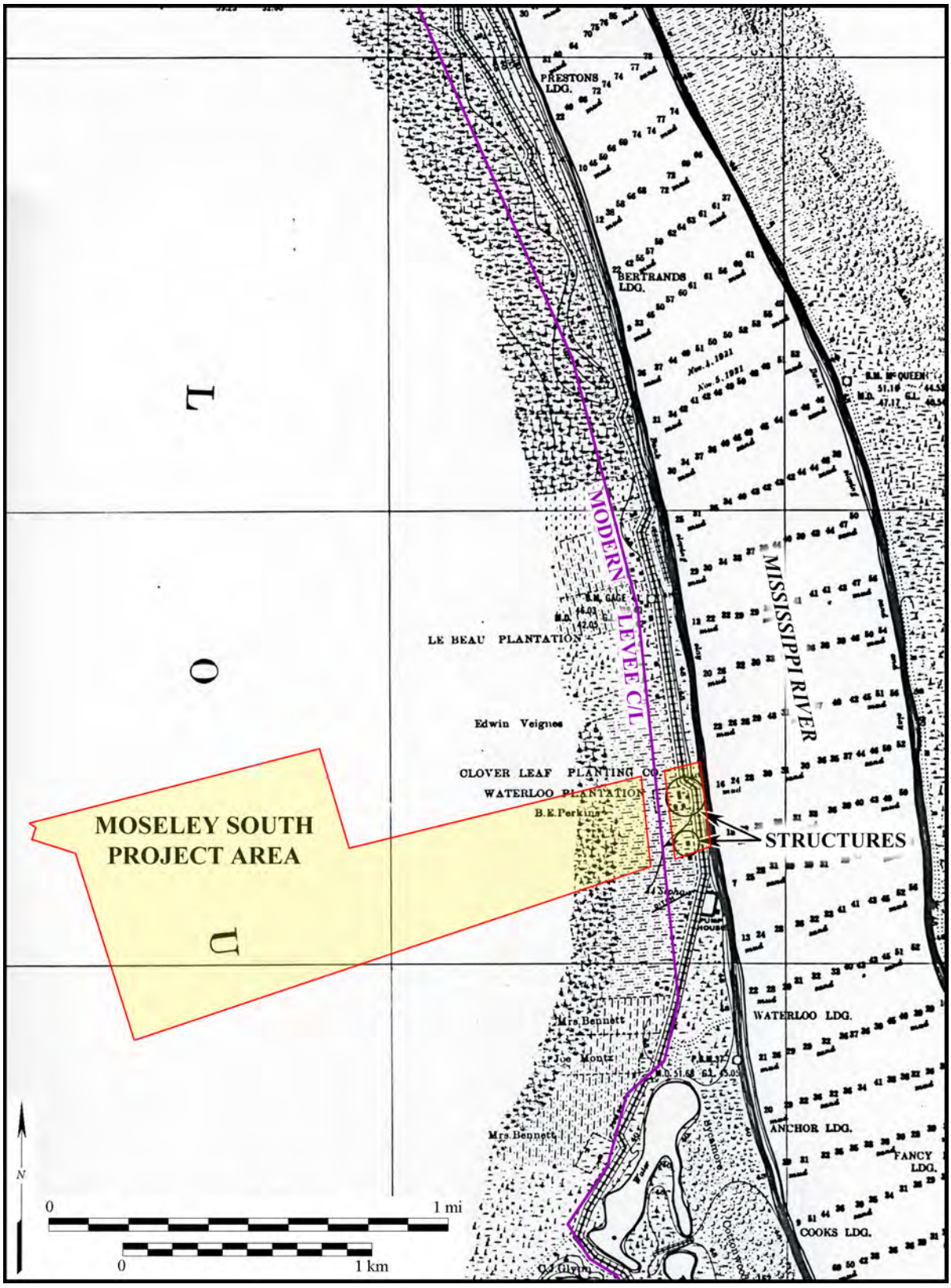

Figure 3-19. Detail of the Mississippi River Commission's (1921) 1921 *Survey of the Mississippi River* depicting the project area. Note that the Mississippi River levee has since been set back.

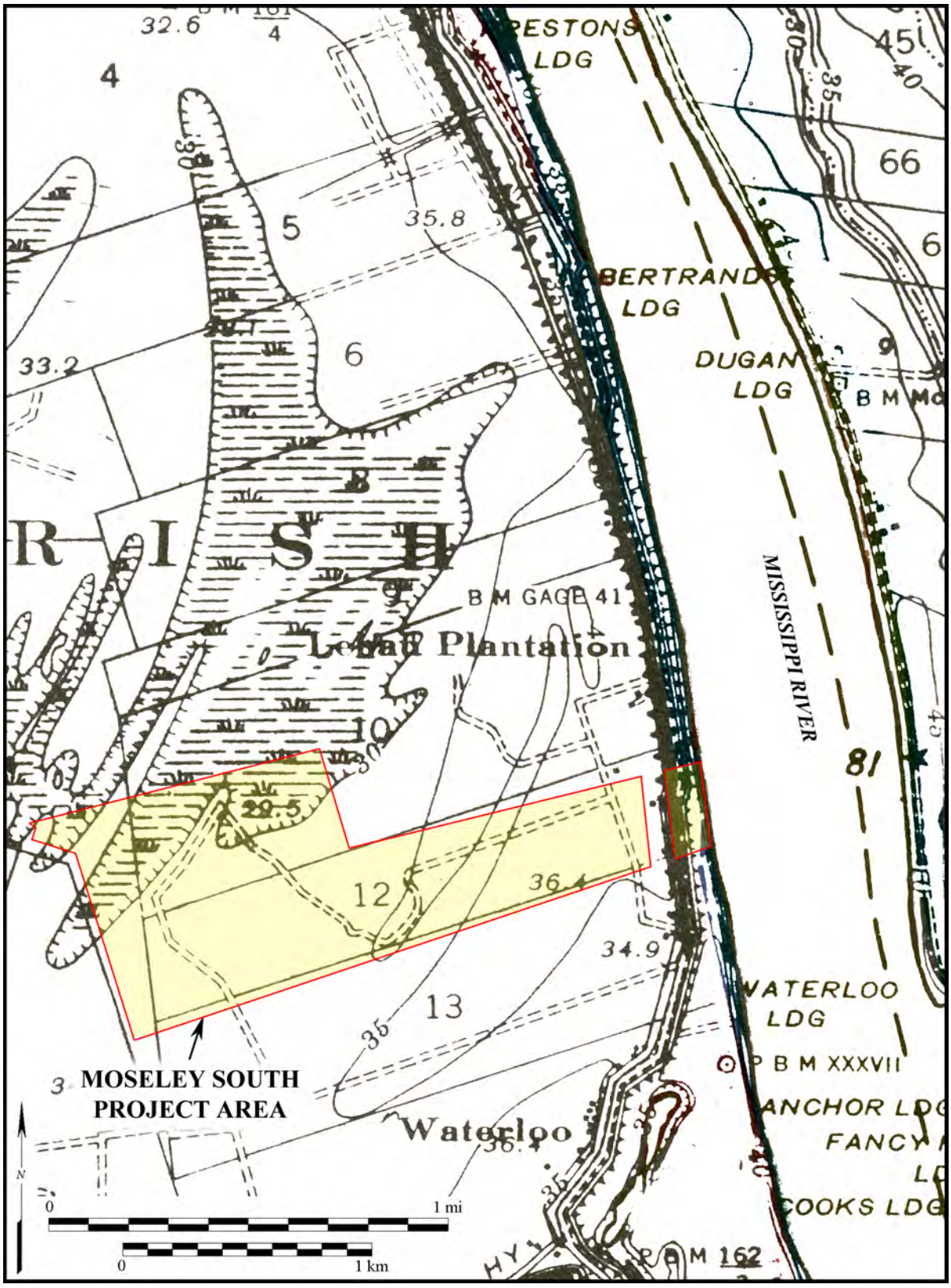

Figure 3-20. The Moseley South project area and vicinity in 1931 (USGS 1931). Note the lack of any improvements within the project area.

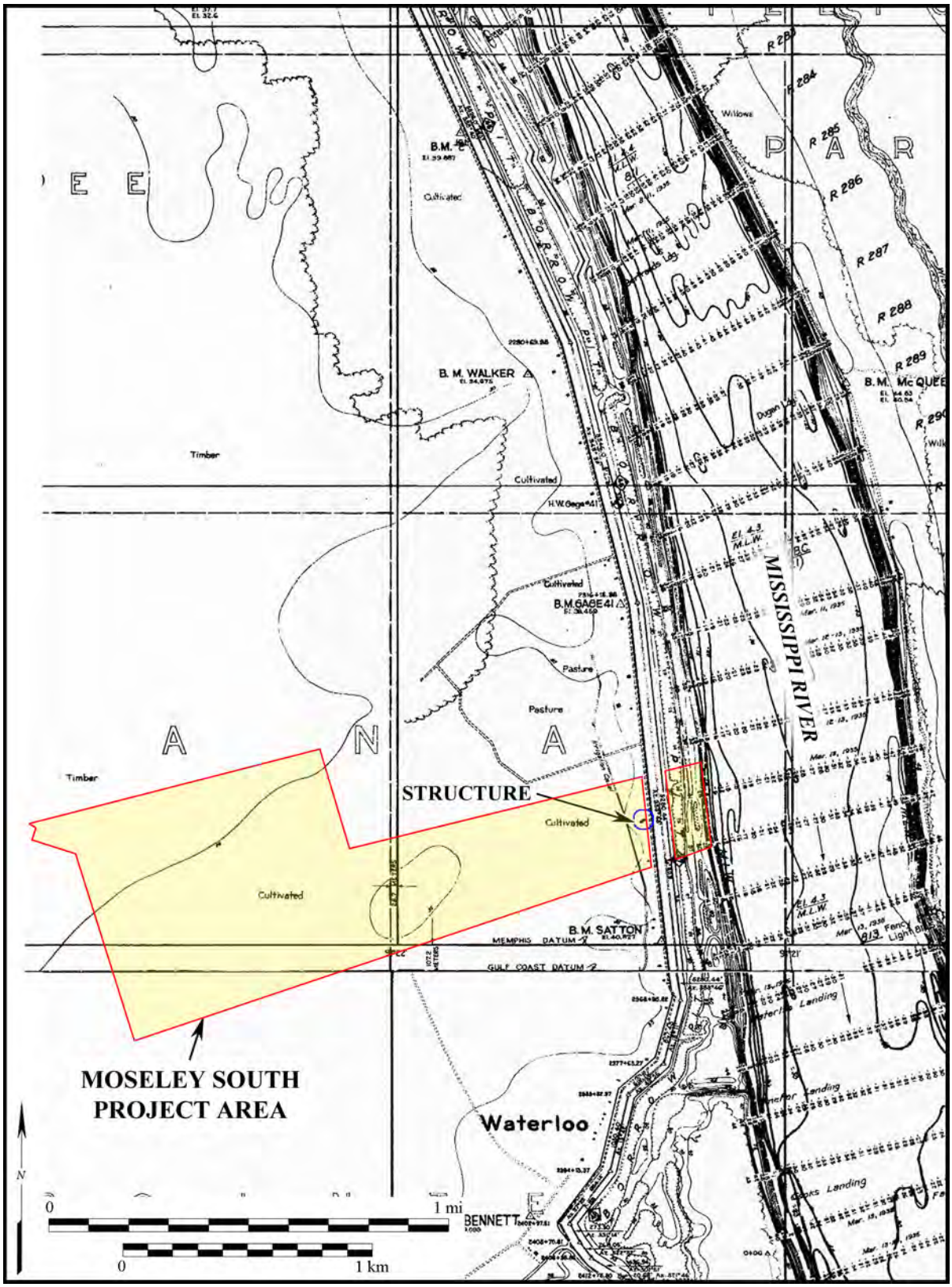

Figure 3-21. The Moseley South project area and vicinity in 1934 (MRC 1934). One structure was built in the project area between 1931 and 1934.

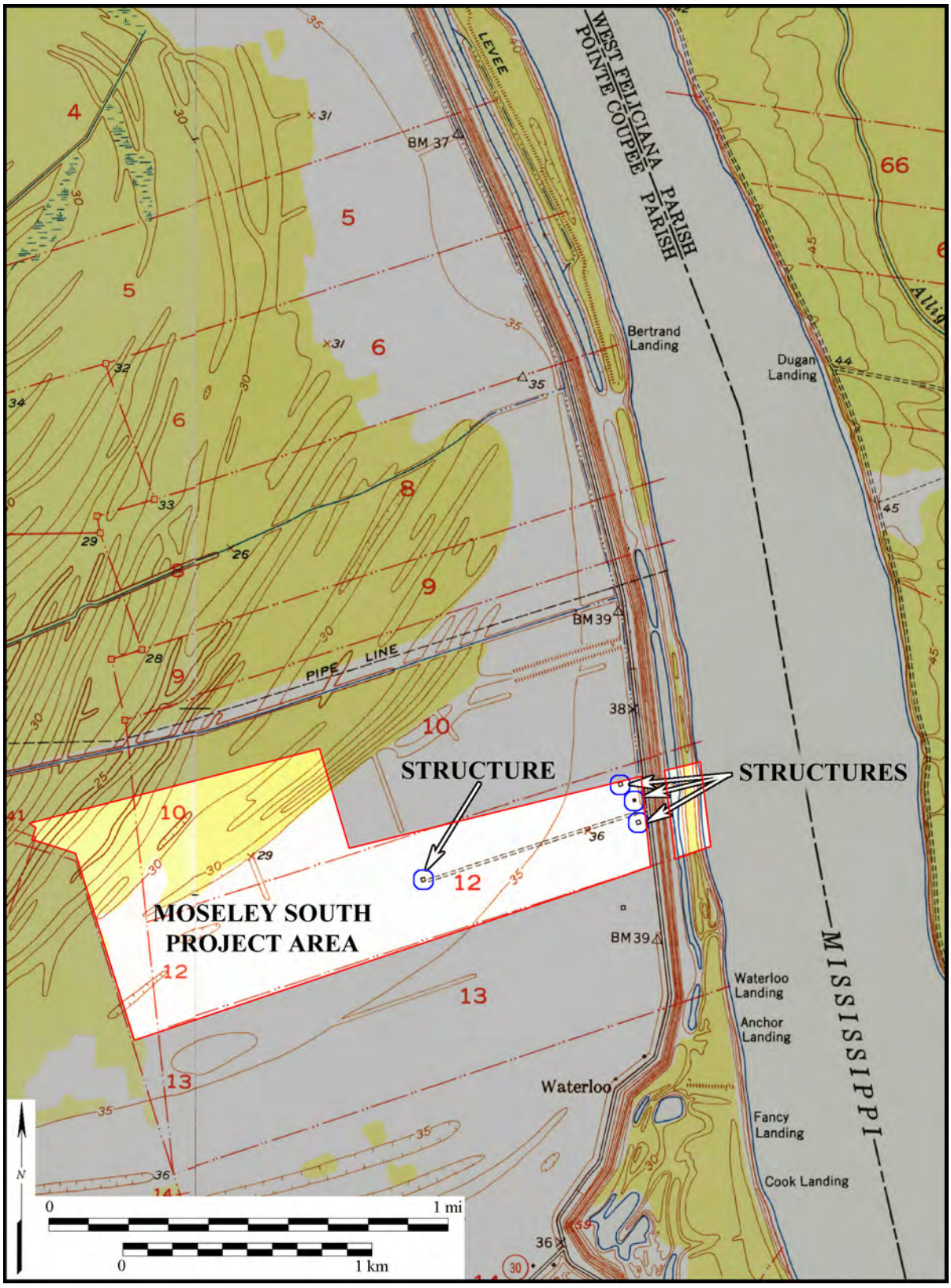

Figure 3-22. The Moseley South project area and vicinity in 1953–1954 (USGS 1953, 1954). By 1954, several improvements had been added to the property.

that they were simply mapped as a barn or outbuilding. This is likely the case for no structures were recorded there in the early 1960s. The remaining three structures, including the apparent dwelling, remained standing through the 1960s (see Figure 1-1). Of these three, one was located near the center of the property, at the end of a long field road; it remained standing into the 1980s. The apparent 1940s residence was located near the intersection of the field road and LA 981. It too remained in place until at least the 1980s. Opposite the field road, and to the south of it, was the circa 1932 structure. It may have remained standing until the 1980s as well. By 2012, however, the entire property was vacant (MRC 1921, 1934; USGS 1931a, 1931b, 1953, 1954, 1962, 1963, 1980a, 1980b, 2012a, 2012b).

Sugarcane remains the predominant cash crop of Pointe Coupée Parish, while pecans constitute a large proportion of the lesser crops. Although the parish's economy is still largely agriculturally based, tourism, focused around False River, has grown in importance. New Roads, the parish seat, and the town of Morganza are the only incorporated towns in the parish.

CHAPTER 4

PREVIOUS RESEARCH

Over the past four decades, several cultural resources investigations have been conducted within a one-mile radius of the project area. The earliest was a survey of the Colonial Pipeline route from East Feliciana Parish, Louisiana, to Orange County, Texas, performed by Coastal Environments, Inc. (CEI) (Gagliano et al. 1976). A segment of that survey corridor passed through the extreme southwestern corner of the present project area. CEI's survey located the remains of the abandoned river town of Waterloo (16PC31) on the west bank of the Mississippi River just south of the current project area (Figure 4-1; Table 4-1). Foundations and artifact-bearing deposits were identified at the site, and avoidance or mitigation was recommended. Subsequent test excavations for a proposed borrow pit near Waterloo were conducted in 1978 (Gagliano et al. 1979). No features, material concentrations, or midden areas were noted in the test units or backhoe trenches excavated there. Therefore, borrow pit construction was allowed to proceed.

In 1980, William McIntire (1980) conducted a survey of the 75-foot-wide Texas Eastern Pipeline corridor from Beauregard Parish to the Mississippi River near New Roads. The eastern terminus of the survey corridor was approximately 1 mile north of the current project area. Shovel testing was conducted at stream crossings and in the high-probability areas of the natural levee of the Mississippi River, but no archaeological sites were located.

An additional study was undertaken in the 1980s for the Pointe Coupée to Arbroth Levee Enlargement Project (Stuart and Greene 1983a). A portion of that construction corridor included the batture along the eastern margin of the current project area, which only received a 20-percent reconnaissance coverage at that time. Most of the batture along the

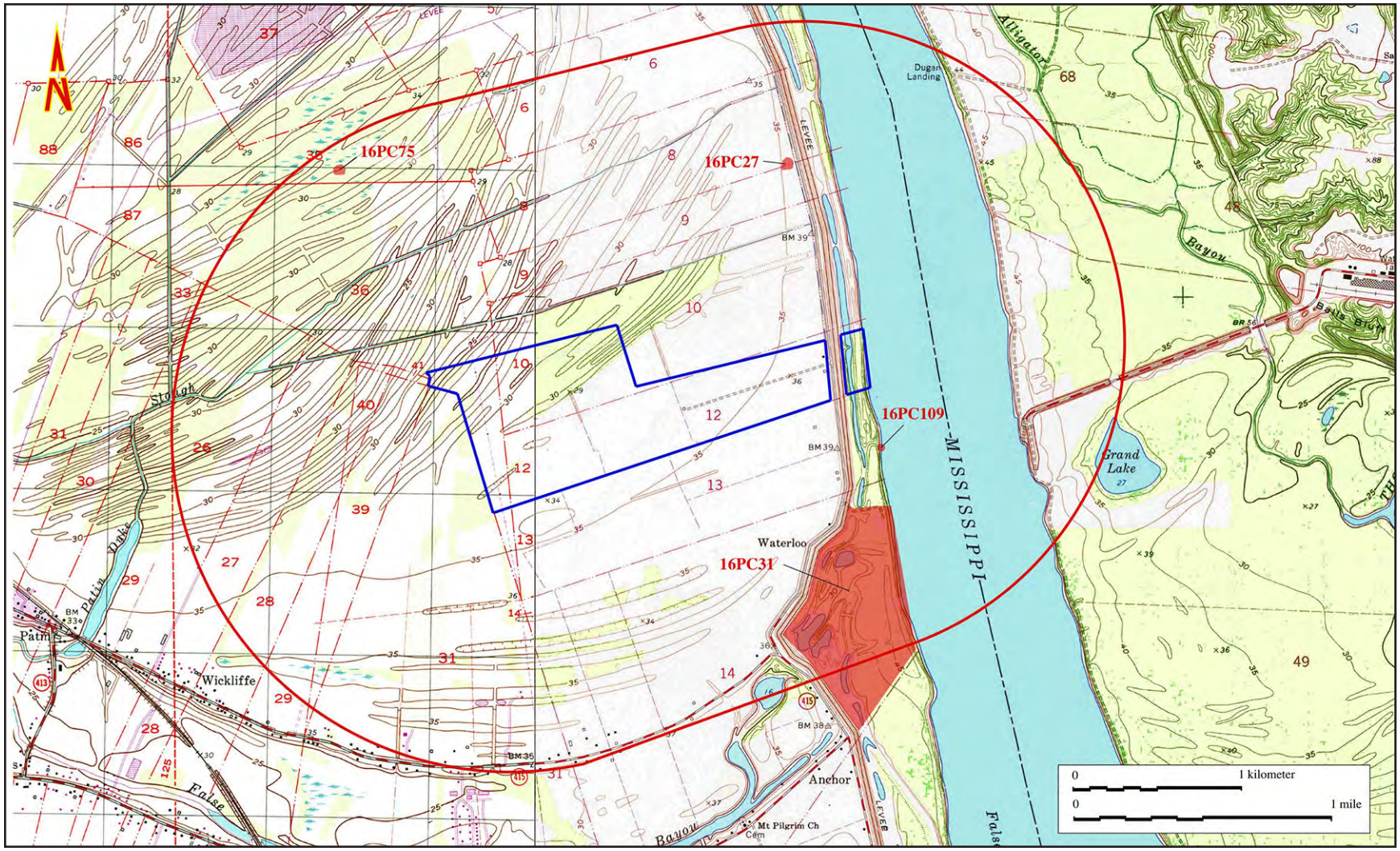

Figure 4-1. Previously recorded archaeological sites within a one-mile radius of the Moseley South Project Area.

Table 4-1. Previously Recorded Archaeological Sites Within a One-mile Radius of the Moseley South Project Area.

Number	Name	Eligibility	Cultural Affiliation	Recorded By	Date
16PS31	Waterloo	Undetermined	Mid.-19th- to Early-20th-Century Town & Steamboat Landing	Weinstein (CEI)	1976
16PC109	Waterloo Barge	Undetermined	Early-20th-Century Barge	Saltus , Williams, and Collins	2012
16PC75	Swamp House	Ineligible	Late-19th- to Early-20th Century Residential	Hahn & Cramer (CEI)	2002
16PC27	West Bank Pipeline Crossing	Undetermined	Prehistoric (Mississippi Period); Late-19th- to Early-20th-Century Euro American	Hopkins (CEI)	1991

river appeared heavily disturbed, and no new sites were noted. That portion of the current project area examined in 1983 was included in the present survey, as it had not been completely surveyed.

Stuart and Greene (1983b) also conducted an archaeological survey of the proposed Bayou Sara Revetment along the eastern edge of the Mississippi River opposite the current project area. No discussion was made regarding the methods employed or the extent of coverage for the fieldwork. No cultural resources were recorded during those investigations.

Also in 1983, New World Research, Inc., carried out a survey of the Transcontinental Gas Pipe Line Corporation pipeline right-of-way for EMANCO, Inc., north of the present project area (Swanson 1983). Shovel testing and visual surface inspection revealed no archaeological sites near the current project area.

The following year, New World Research, Inc. (1984), conducted an archaeological survey, also for EMANCO, Inc., of two impact areas for a proposed pipeline crossing on the Mississippi River. That portion on the east side of the river was visually inspected by two persons who walked transects spaced at 30 m intervals with systematic shovel testing where there was restricted surface visibility. Because the impact area on the west side of the river was regarded as being heavily disturbed, only a reconnaissance was made. The pipeline crossing was also north of the current project area. Regardless, no cultural resources were located.

That same year, New World Research, Inc., conducted a cultural resources survey for a proposed Transcontinental Gas Pipe Line Corporation Main Line Expansion in East and West Feliciana Parishes, Louisiana (Phillips et al. 1984). The western terminus of that survey corridor was approximately 1/2 mile above the current project area on the east bank of the river. Although eight sites were recorded, none were located within one mile of the current project area.

In 1991, CEI conduced a survey for the Transcontinental Gas Pipe Line Corporation Mississippi River Crossing Project in Pointe Coupée and West Feliciana parishes, Louisiana (Kelley and Hopkins 1991). Two areas that would be used to directionally drill a 36-inch-diameter pipeline under the river were examined. The one on the west side of the river in Pointe Coupée Parish was about 1/2 mile north of the current project area. One small Mississippi period (Medora Phase, Plaquemine Culture) site (16CP27) was located and tested (see Figure 4-1; Table 4-1). Those investigations revealed intact archaeological deposits, and the site was recommended as eligible for listing on the National Register of Historic Places.

In 1994 and 2001-2002, CEI conducted archaeological surveys for the proposed St. Francisville Bridge Project for HNTB Corporation and the Louisiana Department of Transportation and Development (DOTD) (Hahn et al. 2003). One of the survey corridors ran north of the current project area. One archaeological site was recorded within one mile of the current project area in 2002. The Swamp House site (16PC75) consisted of a scatter of late-nineteenth- to early-twentieth-century residential debris (see Figure 4-1; Table 4-1). As surface collections and shovel testing produced few artifacts, the site was recommended as ineligible for NRHP listing. The Louisiana Division of Archaeology concurred with this recommendation.

In 1997, R. Christopher Goodwin & Associates, Inc., conducted Phase II testing in a portion of the Waterloo site (16PC31), known as Cook's Landing. This work was conducted for the U.S. Army Corps of Engineers, New Orleans District, relative to a proposed levee revetment project. The fieldwork included bankline pedestrian survey, magnetometer survey, backhoe trenching, and unit excavation. No intact archaeological deposits were encountered within the portion of the site examined (Robblee et al. 1998).

More recently, Allen Saltus recorded the remains of a wooden barge partially exposed along the west bank of the Mississippi River just south of the current project area. Designated the Waterloo Barge (16PC109) (see Figure 4-1; Table 4-1), the remaining portions of the hull measured 71 feet long and 18 feet wide. The remains were interpreted as belonging to a work barge constructed around 1920. The wreck was evaluated as warranting

no additional investigations, although its research potential was not determined. The recording of this wreck was apparently not associated with any published cultural resources investigations (Division of Archaeology Site Files).

In addition to the four sites discussed above, a review of the site files maintained by the Louisiana Division of Archaeology revealed that no other archaeological sites have been recorded within a one-mile radius of the current project area (see Figure 4-1; Table 4-1). Because few previously recorded archaeological sites in this general area, it appears that the current project locale has a low probability for containing archaeological sites.

CHAPTER 5

ANALYTICAL TECHNIQUES

This discussion presents the descriptive typology used in the analysis of the artifactual material recovered during the course of this study. This typology is intended to provide basic descriptive, and, by extension, temporal information for recovered artifacts. Three main classes of historic artifacts are considered here: historic ceramics, glass and metal. Each of these classes is described more fully below.

Historic Ceramic Analysis

There are a number of historic ceramic types, each with a variety of possible decorative techniques. Five major categories of ceramics were developed for this study—coarse earthenwares, semi-refined earthenwares, refined earthenwares, stoneware, and porcelain. Although not every type of ceramic ware was necessarily encountered during the course of this project, all are discussed here so that the reader can attain a broader understanding of those that were recovered.

Coarse Earthenwares

Coarse earthenware is a broad category that encompasses low-fired ceramics employed primarily as utilitarian vessels. Because of the porosity of the body of these wares, they were normally covered with impermeable glazes and/or slips to make them usable as containers for liquids. Lead-glazed coarse earthenwares frequently occur as hollowware (i.e., bottles, bowls, jugs, jars, shallow pans, etc.). Archaeologists currently know little about the

precise chronology of lead-glazed earthenwares since they were in use from the sixteenth through the nineteenth centuries (Noël Hume 1969:102).

The glazes of tin-enameled coarse earthenwares are actually lead glazes that have been combined with a tin oxide. These wares typically have a thick white to bluish-white glaze that crazes easily and often exfoliates from the body of the wares. They were produced throughout Europe and parts of the New World and called Faience, Majolica, or Delft, depending on their place of origin. In French dominated South Louisiana, Faience from France is by far the most common tin-enameled coarse earthenware. In English occupied territories, however, Delft tends to be the more common ware. Majolica, meanwhile, is most often found in northwest Louisiana, near the Texas border. Tin-enameled wares were sometimes left undecorated but were often decorated through hand-painting or other means.

Semi-Refined Earthenwares

Semi-refined earthenwares consist primarily of high-fired redwares and yellowwares and are typically used for utilitarian purposes (i.e., bowls, chamber pots). Semi-refined redwares exhibit a red, semi-vitrified paste of a texture not dissimilar to refined earthenwares. Redwares of this category are typically lead glazed and undecorated, though the interiors are sometimes slipped white. Yellowware is so named because of its clear lead-glazed yellow paste. These wares, often decorated with annular motifs, were manufactured between circa 1830 and 1900 (Abernathy n.d.; Liebowitz 1985).

Refined Earthenwares

Refined earthenwares are fine-paste wares that are particularly valuable for dating late-eighteenth- and nineteenth-century sites because of relatively rapid advances in ceramic technology during this period. There are three basic types of refined earthenwares: creamware, pearlware, and whiteware. Although these terms meant little, if anything, to the potters who produced the wares (Miller 1980), they are useful to archaeologists wishing to better understand the chronology of a site.

Creamware

Creamware, the earliest refined earthenware, features a molded, cream-colored body and a cream to yellowish-green lead glaze. First produced in England during the mid 1700s, creamware became the most common tableware in Britain and her colonies during the last quarter of the eighteenth century (South 1972:125). Most of the creamwares found in archaeological sites are undecorated; however, hand-painted, transfer-printed, and annular decorated types infrequently occur. The lack of decoration on creamwares is largely a function of the technology of the period—early potters did not have access to pigments that were stable at the temperatures necessary for glazing the vessels. However, it was possible, though infrequent, to apply the decoration to the vessel after it was glazed. Decorations of this type were expensive to produce and easily wore off. Consequently, they were not particularly popular.

Pearlware

Experiments with ceramic clays and glazes during the last three decades of the eighteenth century led to the development of whiter, refined earthenwares, commonly referred to as "pearlwares." Pearlware, manufactured from about 1780 to 1840 (Loftstrom 1976), differs from creamware in that the Derbyshire cherts used in the ceramic paste produced a whiter body. Additionally, the lead glaze of pearlware was lightly tinted with cobalt to whiten the yellowness of the clear glaze. Because of the latter factor, pearlwares exhibit a light-bluish cast in the glaze, particularly in glaze puddles found at basal rings or at handle attachments. It should be noted here, however, that turn-of-the-nineteenth-century glaze and body experimentation also led to the development of a number of creamware/pearlware transitional pieces. These wares have a more greenish glaze than typically found on creamware pieces, but not the greenish-blue of true pearlwares. Although accurate dates have not been established for these transitional wares, late creamwares likely date from about 1780 to 1820.

George Miller (1980:15-16) suggests that pearlware was developed to take advantage of the declining creamware market and to produce a ware that better resembled porcelain,

which at that time had a bluish cast. The success of this ware was insured by high tariffs on imported porcelain and the rights gained in 1775 to use Cornish china clay in wares other than porcelain (Miller 1980:15, 16). To further promote the sale of pearlware, potters relied heavily on the decoration of their ware (Miller 1980:16) and the growing popularity of blue-painted and transfer-printed decorations (Noël Hume 1972:240). Simply speaking, blue decorative motifs appeared more attractive on bluish pearlwares than on yellowish creamwares. Pearlwares generally replaced creamwares around 1810, although creamware was produced for about another 10 years. As pearlware began to be favored over creamware by 1810, pearlware is the most common ceramic type found on early-nineteenth-century Euro-American sites. Pearlwares host a variety of decorative treatments, including annular, hand-painted, and transfer-printed designs. Although small sherds may contain no decoration, pearlware vessels are seldom undecorated (Miller 1980:16).

To further complicate understanding of early nineteenth century ceramic production, some ceramics have a deep blue cast without the green tingeing found on pearlware, but with the same decorative treatments. Considerably darker than early whitewares (see below), these wares may be late pearlwares; conversely, they may represent better efforts at matching early imported porcelains. If the latter is true, these wares most likely date between 1780 and 1815.

Early Whiteware

During the first quarter of the nineteenth century, bone china became favored over earlier porcelains that had a bluish cast (Miller 1980:17). As preference grew for white porcelain, so did the desire to produce a white earthenware. By the early 1830s, pearlwares were replaced by large quantities of improved whitewares. As the name implies, whitewares have a white body and a clear, lead glaze that does not display the bluish tint found on pearlwares. Many of the early whitewares have forms and decorations similar to those found on pearlwares. Because of this, and the fact that whitewares grew out of continued experimentation with pearlware pastes and glazes, it is often difficult to distinguish late pearlwares from early whitewares (Miller 1980:16). Indeed, even the potters themselves did

not make a distinction between the two types of wares (Miller 1980). As a result, many archaeologists present these transitional refined earthenwares as a separate type, labeled "early whiteware." Early whiteware, which has an overall white cast and blue puddling, most commonly dates from about 1820 to about 1840. Moir (1987a:102) argues that these wares may date as late as 1865, although he has found that most examples date from the 1830s to the 1850s. Price (1982:14) likewise suggests that, while the pearlware-to-whiteware change occurred in 1820 or 1830, whitewares with blue puddling were produced as late as the 1860s.

Transfer-printed wares were particularly popular in the second quarter of the nineteenth century. Though also found on pearlwares and white improved earthenwares, the period of popularity of transfer-printed decorations closely corresponds with the production of early whitewares, and these types of wares are commonly recovered from 1830–1850 deposits. There has been growing interest in the identification of transfer-printed wares as both collectors and archaeologists have come to realize that otherwise unattributable and undateable wares could be specifically associated with a manufacturer through pattern recognition.

Whiteware, Ironstone, and Ivory-Tinted Whiteware

Mid-nineteenth-century whitewares generally exhibit high frequencies of decorated types, including annular, hand-painted, and transfer-printed decorations. As the nineteenth century progressed, there was a growing tendency for decorated whitewares to be replaced by undecorated whitewares. One variety of whiteware, termed ironstones, were seldom decorated, with the exception of designs molded into their bodies. Ironstone, with dates of manufacture ranging between 1840 and 1910, may exhibit a blue tint to its glaze. The bluish tinted ironstones possess a "cold blue" tint that is different from the "soft" blue tint that is found on earlier refined earthenwares. Ironstone has a harder and heavier paste than other types of whitewares and, because its glaze and paste are of similar composition, ironstone glazes often do not craze as do other refined earthenwares. Ivory-tinted whiteware, most popular from around 1900 to 1930, possesses an off-white to a cream-colored tint similar to

creamware, but due to the lack of lead in the glaze this ware is not easily mistaken for creamware in that the hue and the crazing are noticeably different (Moir 1987a:102).

Plain wares were in vogue for only a very short period, and by the 1890s the demand for decorated wares began to increase. Light repoussé floral and geometric patterns, gilted, and decalcomania designs became common decorative techniques used on both whitewares and ivory-tinted whitewares of the very late nineteenth and early twentieth centuries. By the late nineteenth century, however, most hollowware vessels made of ironstone were decorated with a heavy relief-molded design. Ironstone flatwares, meanwhile, continued to be undecorated. The majority of all whiteware sold in the United States prior to 1880 was produced in England. Tariffs placed on imported ceramics during the 1880s and early 1890s, however, made domestic wares a viable alternative to consumers. The McKinley Tariff Act of 1891 was particularly helpful in making American ceramics competitive with their English counterparts (Kovel and Kovel 1986:202). The result of these tariffs was that by the late 1890s, the vast majority of ceramics purchased in the United States were produced domestically.

Stoneware

Stoneware was generally used for the production of utilitarian vessels, such as crocks, jars, and butter churns. Utilitarian stonewares are distinguished by their thick, fine-grained body, ranging in color from light gray or buff to dark gray or brown, depending on the materials and manufacturing technique used. Stonewares were sometimes left unglazed but were most often glazed with salt, natural slips, or chemical slips (e.g., Bristol). Although volcanic ash and alkaline glazes were also used, the three former glazes were far more popular in most areas of the United States.

Domestic utilitarian stoneware was produced throughout the nineteenth century and well into the twentieth. The production and popularity of stoneware decreased dramatically after about 1910, as it was replaced by other types of containers, especially metal and glass. Stoneware, in and of itself, is not a very good temporal indicator, as it generally reflects the

heavy usage of the ware in the last half of the nineteenth century. The glazes used on stonewares, however, are often useful temporal indicators, particularly in the very late nineteenth century. After the turn of the twentieth century, however, the usefulness of stoneware glazes as temporal markers decreases dramatically, as few changes were made to manufacturing techniques after that date.

Not all stonewares served utilitarian functions. Indeed, many decorative wares of the late eighteenth and early nineteenth centuries were dry-bodied stonewares. Aside from Jasperwares, one of the most common types of dry-bodied stonewares was Black Basalt. Similar in form to the refined earthenwares of the day, these highly-refined, black-bodied wares were often used as table serving pieces (e.g., tea pots, sugar boxes, etc.) and for elegant decorative pieces (e.g., vases, bulbpots). Partly out of function and partly because of aesthetics, Black Basalt wares were seldom glazed. Relatively expensive to produce and treated as special display pieces, they are not often recovered from archaeological settings. Introduced to the consumer market in 1768, Basalt wares were particularly popular between 1785 and 1795 (Edwards 1994:25, 89). Although the popularity of these wares waned considerably after 1820, they are still produced today.

Porcelain

Porcelain was first produced in China in about the seventh century; however, it was not until about 1600 that Chinese porcelain fully entered the European market. Porcelain, though expensive, quickly gained favor among Europe's elite, and potters there began trying to duplicate those wares. While the first European porcelain was produced in Italy during the late sixteenth century, wide scale production did not begin in Europe until the early eighteenth century. English porcelain, meanwhile, was not manufactured until 1744. Chinese porcelain continued to be imported into Europe through the mid and late eighteenth century, but the popularity of Chinese porcelain began to wane as the new English wares came into favor during the 1770s. Protected by high tariffs, English porcelains soon overwhelmed sales of Chinese porcelain, and bulk importation of the Chinese wares into England ceased in the 1790s. At the same time, Chinese import porcelains were brought directly to the United States by American merchants as early as 1784 (Battie 1990:55, 63-65,

86-88). Although not as popular as European (and later American) porcelains, Chinese export porcelain was available in the United States through most of the nineteenth century.

The first English porcelains were not true porcelains and had a soft paste of white clay and ground glass fired to a temperature of only 1100°C. Hard paste porcelain, a mixture of kaolin and china rock fired to 1400°C, was not produced in Europe until 1768. Although hard paste porcelain was preferred over soft paste, both continued to be produced until the early nineteenth century. Indeed, almost all English porcelain produced prior to 1780 was soft paste porcelain. In about 1794, bone china, comprised of kaolin and bone ash, was developed by Spode Pottery in England. With a stable, pure white body, bone china quickly gained favor with the public and largely replaced the earlier porcelain types by 1812 (Battie 1990:109, 116, 144; Miller 1980:17). Parian, a type of unglazed biscuit porcelain, was first manufactured in England in 1845 (Battie 1990:197) and is used primarily for sculptural figurines.

Porcelains were often left plain or were hand painted (enameled) and/or transfer printed both over and under the glaze. Hand painted porcelains were produced very early in China and both it and transfer printing were used on English porcelains soon after those wares were developed. Because of the long production history of these wares and the difficulty in identifying fragmented archaeological collections, porcelains are often not particularly useful in dating nineteenth or twentieth century deposits.

Glass Analysis

Flat Glass

Glass may be divided into two classes, flat and non-flat. Flat glass, or more specifically, window glass analysis represents a relatively new analytical approach in dating historic sites to obtain mean occupation dates (Ball 1979; Chance and Chance 1976; Cinadr and Brose 1978; Grosscup 1972; Grosscup and Miller 1969; Hanson and Hsu 1975; Janzen 1981; Moir 1987b; Orser 1983; Orser et al. 1987; Roenke 1978; Rothman 1980, 1981; Walker 1971; Whelan and Pearson 1988). These studies suggest that during the nineteenth

century flat glass increased in thickness through time. Flat glass samples are of greatest value in dating structures with which they were associated. A multimodal thickness distribution within a sample can suggest either repairs or additions to an existing building, or new construction on an old site.

Roenke (1978) was one of the first investigators to develop a replicable method by which the mean flat glass date could be determined. He carefully stated the assumptions underlying his study (Roenke 1978:43):

1. buildings constructed at one point in time will exhibit a single mode of windowpane thickness;

2. window glass orders originated from large glass houses that used the most economical method of window glass manufacture; and

3. any new construction at the site under study would be reflected by a second mode of flat glass thickness.

This last assumption may be expanded as the basis for determining periods of repair, as well as periods of new construction, at a site. A number of explicit assumptions in addition to those stated by Roenke, underlie this analysis, and are basically those presented by Grosscup and Miller (1969) and Orser (1983):

4. with no evidence to the contrary, all clear and lightly colored, flat glass represents window glass;

5. all of the windows installed in a newly constructed building or addition were of the same approximate thickness;

6. replacement windows installed in an existing building would be thicker than the original windows; and

7. not all of the windows in a structure would be broken and replaced at one time.

Studies by Rothman (1980, 1981), Ball (1979), and Orser et al. (1987:529) have documented the regional nature of the flat glass model and temporal patterns suggested by Roenke (1978:117). Based on the assumption that the southeastern U.S. can be identified as

a region, the flat glass dates Orser derived from his analysis of Millwood Plantation on the South Carolina-Georgia border are used in this analysis.

The formula developed by Orser for determining the median manufacture date of a given class of flat glass has no natural termination point. It can be shown, however, that by the early 1920s at the latest, flat glass thickness had been standardized. From 1850 until circa 1905, all window glass produced in the U.S. was made by hand-blowing. In 1903 J.H. Lubbers invented a machine for blowing glass cylinders. Lubbers' machine could produce glass tubes 30 inches in diameter and 40 ft long. Just prior to the outbreak of World War I, Emile Fourcault perfected a glass sheet-drawing machine at the Damprenvy glass works in Belgium. In America, Irving Colburn had been working on a sheet-drawing machine since 1900. The Colburn machine was finally perfected by the Libby-Owens Sheet Glass Company in 1916. The sheet-drawing process produced a more standardized glass than did either hand or machine blowing. Sheet-drawn glass was of more even thickness and greater strength, although variations within a single sheet still existed (Diamond 1953; Scoville 1948). With the advent of the machine-blown cylinder technique and sheet-drawing processes, flat glass manufacture became standardized, eliminating the increase in thickness through time. Although not yet documented, it is possible that standardization had occurred as early as the 1870s, as suggested by Ball (1979:133).

The validity of the flat-glass dating technique increases with the sample size. Although it is possible to use flat glass as a dating technique with only a few sherds as a database, dates ascertained in such a manner should be considered only in light of other temporal analysis. Additionally, this dating technique makes the basic assumption that the thickness of window glass increased through the nineteenth century at a linear or curvilinear progression (Orser 1983; Roenke 1978). At the present time no documentary evidence of such an increase in thickness has been presented. Since all cylinder flat glass produced during the 1800s was hand blown, differences in thickness may be attributed to individual blowers or a product of different manufacturers. Until more historical information is known about the manufacturers, suppliers, and basic production standards of flat glass, the validity

of this dating technique should be considered only in light of other dating techniques and the artifact assemblage as a whole.

Non-Flat Glass

Non-flat glass refers to all glass that is not from windows, picture frames, mirrors, and the like. Hence, glass plates, insulators, lamp glass, bottles, jars, etc., fall into this class. Of these, bottles and, to a lesser extent, jars are the most valuable for dating purposes. Bottles are particularly useful in dating late-nineteenth- and early-twentieth-century sites because of a rapid sequence of technological improvements in the bottle manufacturing industry between about 1850 and 1940.

Bottles are particularly useful in dating late-nineteenth and early-twentieth-century sites because of a rapid sequence of technological improvements in the bottle manufacturing industry between about 1850 and 1940. One difficulty with using glass-bottle manufacturing techniques for dating sites is that initial and terminal dates for several of the manufacturing techniques are often imprecisely known. An associated problem is that some nineteenth and early-twentieth-century techniques continue up to the present day. Although the occurrence of lingering techniques is negligible in view of the quantity of bottles produced, it must be taken into consideration when dating a site.

At the beginning of the nineteenth century, the two most common techniques of producing bottles were the free-blown and the dip-molded methods. The production of free-blown glass required the use of a blow-pipe to expand the glass to the desired shape, and the pontil rod, which, when attached to the base of the bottle, permitted neck finishing. Free-blown bottles are asymmetrical and seamless, and often bear a rough pontil mark or scar, on the base.

Dip-mold bottles were blown into a tapered mold and finished by hand. These bottles were more symmetrical than free-blown products. Hand finishing required the use of a pontil rod, resulting in a pontil scar on the base of the bottle. The mold often leaves a horizontal

mold seam around the body of the bottle near the shoulder. Most popular between 1790 and 1810, dip molds continued in use, particularly for wine bottles, well into the nineteenth century (Lorrain 1968; Toulouse 1969a).

The next major development in bottle technology was the introduction of the three-piece mold, of which there were two types: one was simply a dip mold with a hinged mold on top which finished the neck area; the second consisted of three hinged pieces set approximately 120 degrees apart. The latter type, called a three-piece leaf mold, left three vertical mold seams on the vessel's sides and was generally reserved for highly decorated bottles or art glass (Toulouse 1969b). There is some disagreement concerning the appearance date of the three-piece mold. Jones (1971) credits the development to the H. Ricketts Company of Bristol in 1821, whereas Lorrain (1968) writes that it appeared around 1810 but was replaced in the 1840s. However, Toulouse (1969b) has stated that the three-piece mold was in common use between 1870 and 1910.

With the introduction of hinged molds in the nineteenth century, bottom molds became common. There were two types of bottom molds, post bottom and cup, the former being the earlier of the two. The cup-bottom mold was more common on machine-made bottles, although it appeared on molded bottles around 1880 (Munsey 1970:249). The post-bottom mold plate has a raised central platform called the post, which forms the ring seam on the bottom of the bottle. For the cup-bottom mold, the entire bottom of the bottle is formed by the mold plate, which is shaped as a slight depression or cup (Toulouse 1969b). Post-bottom mold bottles have side seams that continue onto the base of the bottle where they join the ring seam. Cup-bottom mold bottles have no seams at or on the bottom, rather they have a horizontal seam just above the heel.

Two varieties of a two-piece hinged mold came into use around 1840. The hinged-bottom mold, which appears to be the older, had its two halves hinged at the bottom. It produced a seam that ran straight across the bottom of the bottle. Introduced as early as the 1750s in England (Jones 1971), this mold continued in use into the 1880s. The side-hinged

mold was the second variety. It produced bottles with either a cup-bottom or post-bottom mold and side seams that extended from the bottom mold seam to the neck.

All of the above manufacturing techniques required the lip finish to be performed by hand. Hand finishing required the use of a pontil rod, to hold the vessel while the lip was modified. The pontil rod was generally replaced after 1857 with the invention of the snap case, an instrument of four curved, padded arms that were clamped around the bottle. The use of the snap case can safely be assumed when a bottle has a hand-finished lip and seams, but no pontil mark (Lorrain 1968). It should be noted that the pontil rod continued to be used for some time after the introduction of the snap case in 1857 (Riordan 1981), although its frequency of use gradually declined. Until about 1870, lip finishes were limited to folding the glass neck over or by placing a "string" of glass around the mouth of the bottle. About 1820 a tool was developed in England to form the lip of the bottle into a variety of lip types. Lipping tools, however, were not extensively used in the United States until the 1850s. These two developments enabled glass blowers to produce a "clean," attractive bottle much more easily than had been previously possible.

The next major development in glass-bottle technology did not appear until the 1880s, when a workable, semi-automatic, bottle-making machine was introduced (Miller and Sullivan 1984:85). The "semi-automatic" designation refers to the fact that glass had to be brought to the machine by hand. A portion of the gathered glass was severed by a pair of shears. The first semi-automatic machines appeared as early as 1882. They were not functional for large-scale production, but did allow the production of machine-made bottles. Michael J. Owens developed the first commercial automatic bottle machine in 1903, and by 1904 was installing his machine in several factories (Walbridge 1920:67-71). Machine-made bottles did not immediately replace all mold-made bottles, as the latter continued to be made for over a decade following the introduction of Owens' machines. By 1917, however, 90 percent of all glass vessels were made by machine (Miller and Sullivan 1984:88, 89).

Although glass color may also be used for dating, wide date ranges for the various colors often do not permit useful analyses to be made. For instance, olive and olive-amber

colored glass was used throughout the eighteenth and nineteenth centuries, even though both began to fall out of favor in the 1870s. It should be noted, however, that clear glass was not in common usage until after 1870 when food processors began to use glass vessels for their products and did not want tinted glass to affect the visual impact of their product. It was at that time that manganese was added as an oxidant to glass. Although the addition of manganese to the glass allowed the production of clear vessels, sustained exposure to sunlight of those vessels produces a clear-purple tint. Manganese was used as an oxidant until World War I when it became a strategic war material and had to be replaced by another oxidant—selenium. Like manganese, the addition of selenium yielded clear glass. Also like manganese, when exposed to sunlight, selenium vessels become solarized and become yellow-tinted. Selenium was used as an oxidant until the 1930s. Finally, milk glass was first produced in France in the 1820s. Quite successful, milk glass was at its peak popularity in the United States from 1895 until 1910 (Newbound and Newbound 1995:7). First produced in white, milk glass was eventually manufactured in a variety of colors, including blue, brown, and green.

Metal Analysis

Metal artifacts are subdivided by the type of metal and include brass, lead, and iron. Iron is, by far, the most common kind of metal found on archaeological sites. Although iron is encountered in a variety of forms, including bolts, cans, and pop tops, nails generally provide the most viable chronological information. Common nails have been shown to be a valuable tool for dating archaeological sites (Nelson 1968; Noël Hume 1969). Nails can be divided into three basic categories: hand forged, machine cut, and wire. The earliest nails were completely hand wrought (Types 1 and 2). Alone, they are not reliable dating tools, as their use began circa 1720 and continued into the early nineteenth century, when they continued to be selected for their clinching abilities and esthetics (Nelson 1968; Edwards and Wells 1993).

Machine-cut nails (Types 3-10) are good chronological indicators, as certain characteristics (i.e., direction of grain, burrs, pinching of the neck) allow those types of nails

to be more accurately dated. Production of machine-cut nails began circa 1790 and continued until 1896. The early machine-cut nails were cut from rolled sheets of iron, and their heads were hand forged (Type 3). Later machine-cut nails (Types 6-10) were cut from a sheet of rolled stock and had machine made heads. These later machine-cut nails can be more precisely dated by determining the direction of the metal grain, whether burrs are on the same side or diagonal sides, if the heads are irregular (early) or regular (modern), and if the nail was face or side pinched (Edwards and Wells 1993).

Wire nails were first produced as early as 1877 (Type 11), but were more expensive than, and inferior to, machine-cut nails. This was because American machinery used to produce wire nails was not perfected until the 1860s and 1870s, and wire nails produced prior to that time were primarily in smaller sizes for use in items such as cigar boxes (Nelson 1968:10). However, by about 1890, it was possible to produce a cheaper and better quality wire nail (Type 12), which soon replaced machine-cut nails. Because of this, wire nails for architectural purposes were not widely produced until after about 1892. Although some builders continued to utilize cut nails well into the twentieth century for special applications, their use for residential construction was negligible after about 1896.

Brick Analysis

Common Brick

Although whole bricks, particularly marked bricks, can be well dated in some areas of the country, brick fragments generally are not particularly useful in dating historic sites. In general, antebellum bricks were made by hand and fired at relatively low temperatures. Using clays with a relatively high water content of 20 to 30 percent, the bricks of this period were formed by hand compacting the raw material into molds. This process became known as the soft-mud method and typically resulted in relatively soft bricks. However, brick hardness ultimately depended upon the placement of a particular brick relative to the kiln fire. As a result, bricks manufactured during the antebellum period sometimes display a wide range of hardness and density. Though brick dimensions did change through this period,

wide variations in their manufacture makes it difficult to date bricks by their size without the benefit of a sufficiently large sample.

By the 1860s, numerous, high-volume and reliable brick-making machines had been developed in the U.S. and Western Europe (Gurcke 1987; Kelly and Kelly 1977:84; McKee 1973). These early machines basically duplicated hand-made bricks of the soft-mud method. However, whenever possible, bricks continued to be made by hand on site during the postbellum period due to the low cost. Full-scale mechanization of the American brick industry did not become widespread until about 1890 (Ryan and Duplantis 2001:50). With mechanization came standardization, and in 1893 the National Brick Manufacturers Association adopted a standard size for common building brick (Richardson 1905:81). Ideally, all such brick was to measure 8-1/2 by 4 by 2-1/4 inches, with some variations due to shrinkage. As small brick operations gave way to industrial corporations in the late nineteenth century, the quality of bricks increased as well, because the corporations had greater assets with which to pursue the latest brick-making technologies. As a result, bricks of the late nineteenth century are typically harder and more uniform than earlier types.

Despite improved technologies, soft-mud bricks remained the predominant type made in this country until about 1890. However, by the turn of the twentieth century, dry-pressed bricks became very popular (Morrison 1890:7-8). Unlike earlier hand-molded bricks, dry-pressed bricks were formed by mechanically molding clay with a moisture content of less than 10 percent under extremely high pressure. Mechanically formed under high pressure, dry-pressed bricks are distinguishable from soft-mud bricks in that they are typically denser, heavier, have much sharper edges, and sometimes have impressed marks. However, soft-mud bricks were sometimes repressed prior to firing to create a denser finished product with sharp edges (Ryan and Duplantis 2001:39). As a result, repressed soft-mud bricks are often indistinguishable from dry-pressed bricks.

Though dry-pressed bricks were more uniform and considerably stronger than soft-mud bricks, more man and machine power was required to mold dry-pressed bricks than any other kind (Searle 1931:69-71). Dry-pressed bricks typically contain 12 ounces more clay

than other bricks (Crary 1890:9-12) and are so dense that they generally require 5 to 10 percent more drying time in the kiln. Both the extra material and the extra fuel needed for the kiln added to the cost of producing dry-pressed bricks. The extra costs, combined with the growing popularity of continuous kilns, led to a general decline in dry-pressed brick manufacture in favor of stiff-mud bricks in about 1920.

Stiff-mud bricks, unlike soft-mud and dry-pressed bricks, are not formed in a mold. Instead, stiff-mud bricks are formed by extruding clay with a moisture content of 12 to 15 percent into a column or bar which is then mechanically cut with wire. Because they are cut by a wire, bricks made by the stiff-mud method are sometimes distinguishable by the presence of striations on either face. However, like soft-mud bricks, stiff-mud bricks were sometimes repressed to make them denser and more sharply defined (Ryan and Duplantis 2001:38-39). As a result, repressed, stiff-mud bricks do not possess striations and are not distinguishable from dry-pressed bricks. Furthermore, the presence of striations does not necessarily mean that the brick was made by the stiff-mud method as soft-mud bricks often exhibit striations from when the brick mold was scraped smooth with a board and/or the green bricks were cut from the mold with a wire.

Because about four times more stiff-mud brick could be produced in a day than dry-pressed brick, at 60 percent of the cost, stiff-mud brick manufacture predominated the market through the remainder of the twentieth century and into the twenty-first. That is not to say that other manufacturing processes were abandoned. Soft-mud bricks are still made today, though usually only for specialty applications (Polychromatic Brickwork 2000; Searle 1931:69-71).

One of the greatest changes to occur in brick technology came about as a result of the 1906 San Francisco earthquake. Devastated by the earthquake and resulting fire, San Francisco desperately needed building materials. Brick was particularly in demand because of the desire to reconstruct with fireproof materials. Outside suppliers began to try to expand their markets into the San Francisco area. One such individual was Harry H. Walters, superintendent of the Hydraulic Press Brick plant in Indiana. Walters sought to supply the

bricks for the facing of San Francisco's Palace Hotel, but found that the freight costs for shipping brick from Indiana was so high that his prices were not competitive. By piercing three holes in each of his bricks, he was able to reduce his freight weight, and hence cost, enough that he was able to successfully bid on the job. By 1927, architects and builders had discovered that the holes in the brick actually held mortar better and made for a much stronger structure. By that time, manufacturers were selling pierced or "bored brick" to hundreds of customers (Brick and Clay Record 1927:212).

Though most pierced bricks possess three circular perforations, four and five hole bricks were also common, depending on the length of the brick. Other pierced bricks exhibit square holes in varying numbers of perforations. Consistent with the technology of the period, pierced bricks are manufactured by the stiff-mud method.

Firebrick

Fire or refractory bricks are more resistant to heat than common brick and must be made from fire clay. Unlike conventional brick-making clay, fire clay is mined at depth and usually found as a seatearth, or layer of sedimentary rock underlying a coal seam. Also known as underclay, flint clay, or ganister, fire clay contains a high percentage of silicon and aluminum oxides and a low percentage of sodium, potassium, and calcium oxides (Wikipedia 2010a, 2010b). Firebricks are needed for manufacturing processes that require great heat, such as the smelting and coking industries, and the manufacture of Portland cement, common brick, and pottery (Wikipedia 2010a, 2010b). They are also used to build boiler furnaces and housings. Sandstone blocks were used for furnace linings before firebrick became available (Ries and Leighton 1909:39). Firebricks are large-grained, very dense, and can be red, yellow or tan in color. Many have impressed maker's marks and were presumably made via pressing and/or re-pressing in the nineteenth century.

The first firebrick made in the United States was manufactured in New Jersey after the War of 1812 (Ries and Leighton 1909:39, 138). By 1816 fire clay from Woodbridge, New Jersey was being shipped to Boston, Massachusetts to be made into firebrick. Firebrick

made in Florida was shipped to New Orleans in 1827. Other plants commenced in New Jersey through the 1820s and 1830s and then expanded into West Virginia (1832), Pennsylvania (1836), Maryland (1837) and New York (1839). Missouri's first firebrick factory was founded in St. Louis in 1846. With markets in the central and southern states, St. Louis soon became an important center of the firebrick industry. Additional manufacturers were founded in Ohio in the 1850s and 1860s. Illinois began making firebrick in 1857 and Bath, South Carolina, on a small scale, in 1862. The industry expanded west to Colorado in 1866, but had stiff competition from Mississippi Valley producers. Fire clay from Kentucky was shipped to Cincinnati to be made into brick by 1871. Kentucky did not get its own manufacturer until 1895. Meanwhile, West Virginia began producing firebrick in 1876. By 1880 the industry was strongest in Ohio, Pennsylvania, New York, New Jersey, Indiana, and Missouri. A small works appeared in Holly Springs, Mississippi in 1882. Clays around Athens, Texas were mined for firebrick by 1890, and the industry expanded into New Mexico in 1894. Only in the first decade of the 1900s did firebrick manufacture begin in Utah, Montana, and South Dakota. By 1909, the incorporation of the Harbison-Walker Refractories Company of Pittsburg controlled a large number of works in Pennsylvania, plus some in Ohio and Kentucky, and produced a large percentage of all the firebrick made in the eastern United States (Ries and Leighton 1909:39-42, 138, 153, 207).

Curation Statement

Recovered artifacts were cataloged and analyzed in accordance with current professional standards. Following the completion of all analyses, reconstructed vessels were placed in archival, 2-mil poly bags if vessel size permitted. All remaining artifacts were placed in archival, 2-mil poly bags labeled with the appropriate provenience information and boxed accordingly. All artifacts, records, photographs, and field notes will be curated with:

State of Louisiana
Department of Culture, Recreation, and Tourism
Division of Archaeology
P.O. Box 44247
Baton Rouge, Louisiana 70804-4247
(225) 342-8170

in the curation facility at:

Louisiana Division of Archaeology
Office of Cultural Development
1835 N. River Road
Baton Rouge, Louisiana 70802
(225) 342-4475

CHAPTER 6

FIELD SURVEY RESULTS

Methodology

Prior to the initiation of field investigations, a brief archaeological and historical background study was conducted to determine what types of cultural resources might be encountered during the survey. Archaeological site forms on file at the Division of Archaeology and historic standing structure forms on file at the Division of Historic Preservation (both of the Louisiana Department of Culture, Recreation and Tourism) were consulted to determine how many known archaeological sites or historic standing structures fell within, or immediately adjacent to, the proposed project area. Previous cultural resource reports and other pertinent regional literature were reviewed.

The goals of these cultural resource investigations were to locate all cultural resources within the proposed project area and to assess their significance in terms of National Register eligibility through guidelines established by the National Park Service (1991). The significance of an historic property is expressed in terms of whether it meets one or more of several criteria:

> The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. that are associated with the lives of persons significant in our past; or

C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. that have yielded, or may be likely to yield, information important in prehistory or history. [National Park Service 1991:2]

A property is considered eligible for nomination to the National Register if it meets at least one of these four criteria by "being associated with an important historic context and retaining historic integrity of those features necessary to convey its significance" (National Park Service 1991:3). Additionally, properties normally have to be greater than 50 years old to be considered eligible for nomination to the National Register. Those archaeological sites that have been totally excavated, looted, or disturbed to a point where the remaining artifacts are out of their original context and will not provide meaningful information are not normally considered eligible. The archaeological significance of a site is most commonly assessed in relation to Criterion D, or its ability to yield "information important in prehistory or history" (National Park Service 1991:2).

Archaeology

The Phase I field survey consisted of a pedestrian examination of the project area. The 200-m-wide region fronting LA 981 was considered to have a high potential for containing archaeological deposits, while, the remainder of the project area was deemed to have a low potential. Shovel tests were excavated at 30-m intervals on transect spaced 30 m apart in the high-probability zone, and at 50-m intervals on transects spaced 50 m apart in the low-probability zone. Each shovel test measured approximately 30 cm (11.7 in) in diameter, and was excavated to sterile soil, generally 30 to 50 cm below surface. In addition, all clearings, tree falls, and exposed ground surfaces were visually examined for cultural remains. All artifacts recovered during the investigation were washed, sorted, analyzed and catalogued at CEI's Baton Rouge laboratory.

Standing Structures

Prior to the field survey, CEI conducted a records search at the Division of Historic Preservation (DHP), Department of Culture, Recreation and Tourism. The DHP maintains Louisiana Historic Resource Inventory (LHRI) and NRHP files for the State of Louisiana. Each recorded standing structure over fifty years of age is assigned a binomial number (e.g., 58-1000 [Parish Number + Structure Number]) by the DHP. The DHP maintains USGS 7.5-minute and 15-minute quadrangle maps and the DOTD city maps depicting the location of each recorded structure, as well as LHRI forms and corresponding reports. No previously recorded standing structures or National Register listed properties occur within the project area.

Archaeology

Between 26 February and 5 March, and on 15 April 2015, CEI conducted a Phase I cultural resources survey of the Moseley South Project Area for BRAC in Point Coupée Parish, Louisiana, as part of an industrial site assessment. The Moseley South Project Area belongs to Joel R. Moseley and the Trustees of George P. and Brenda B. Roberts. The BRAC study area measures approximately 379 ac (153.4 ha). However, 29 ac (11.7 ha) were previously surveyed by the National Park Service (NPS) in 1982 (Stuart and Greene 1983). CEI examined the unsurveyed, 350-ac (141.6-ha) portion of the BRAC project area in February and March, and reexamined the 29-ac (11.7-ha) portion in April 2015. These investigations are detailed below.

The 350-ac Survey Area

Most of the project area consisted of open pastureland and agricultural fields, with a small portion covered by secondary-growth forest. A crew of three conducted visual and shovel test survey of the project area on transects spaced 30 m or 50 m apart. In total, 60 shovel tests were excavated at 30-m intervals, and 531 at 50-m intervals along these transects, respectively. Shovel tests were excavated to 50 cmbs or to sterile subsoil. A

typical shove test in the project area consisted of 20 cm of a very dark grayish brown (10YR 3/2) silty clay loam overlying at least 30 cm of a dark grayish brown (10YR 4/2) silty clay with oxidation.

Two archaeological sites (16PC124 and 16PC125) and two spot finds were identified during the course of the survey. An additional 104 shovel tests were excavated at 10 to 20-m intervals off of each positive shovel test within the boundaries of these newly recorded sites. Nineteen shovel tests were also excavated at 10-m intervals at the locations of the two isolated finds. These sites and spot finds are discussed below.

Alaska Sugarhouse (16PC124)

The Alaska Sugarhouse (16PC124) site, located on the eastern edge of the project area, measures approximately 300 by 90 m. The site is situated in Section 12, Township 4 South, Range 11 East, in the Southeastern District (west bank of the Mississippi River), Louisiana (Figures 6-1 and 6-2). Its limits were determined to the east, west, and south. To the north, the site extends outside the project area for an unknown distance (Figure 6-3). Surface artifacts and a probable millpond were noted immediately north of the project area's northern boundary (see Figure 6-3). Surface visibility at the site was good to moderate as sparse to thick grass covered the ground (Figure 6-4). In total, 83 shovel tests were excavated to delineate the site, 38 of which contained artifacts (see Figure 6-3). The typical shovel test profile consisted of 30 cm of a very dark grayish brown (10YR 3/2) silty clay loam overlying a least 20 cm of dark grayish brown (10YR 4/2) silty clay with oxidation (Figure 6-5). Some 259 artifacts were recovered from the shovel tests, and an additional 32 artifacts from the ground surface (Table 6-1). The artifact assemblage consists of historic ceramics, glass, metal, charcoal, animal bone, oyster shell, tar, brick, and mortar. In addition to artifacts, two intact subsurface brick features were identified at the Alaska Sugarhouse site.

Among the 13 ceramic sherds recovered are a white-slipped interior and green-glazed exterior redware dating from 1700–1800 (Figure 6-6a) (Yakubik 1990:225-226); three sherds

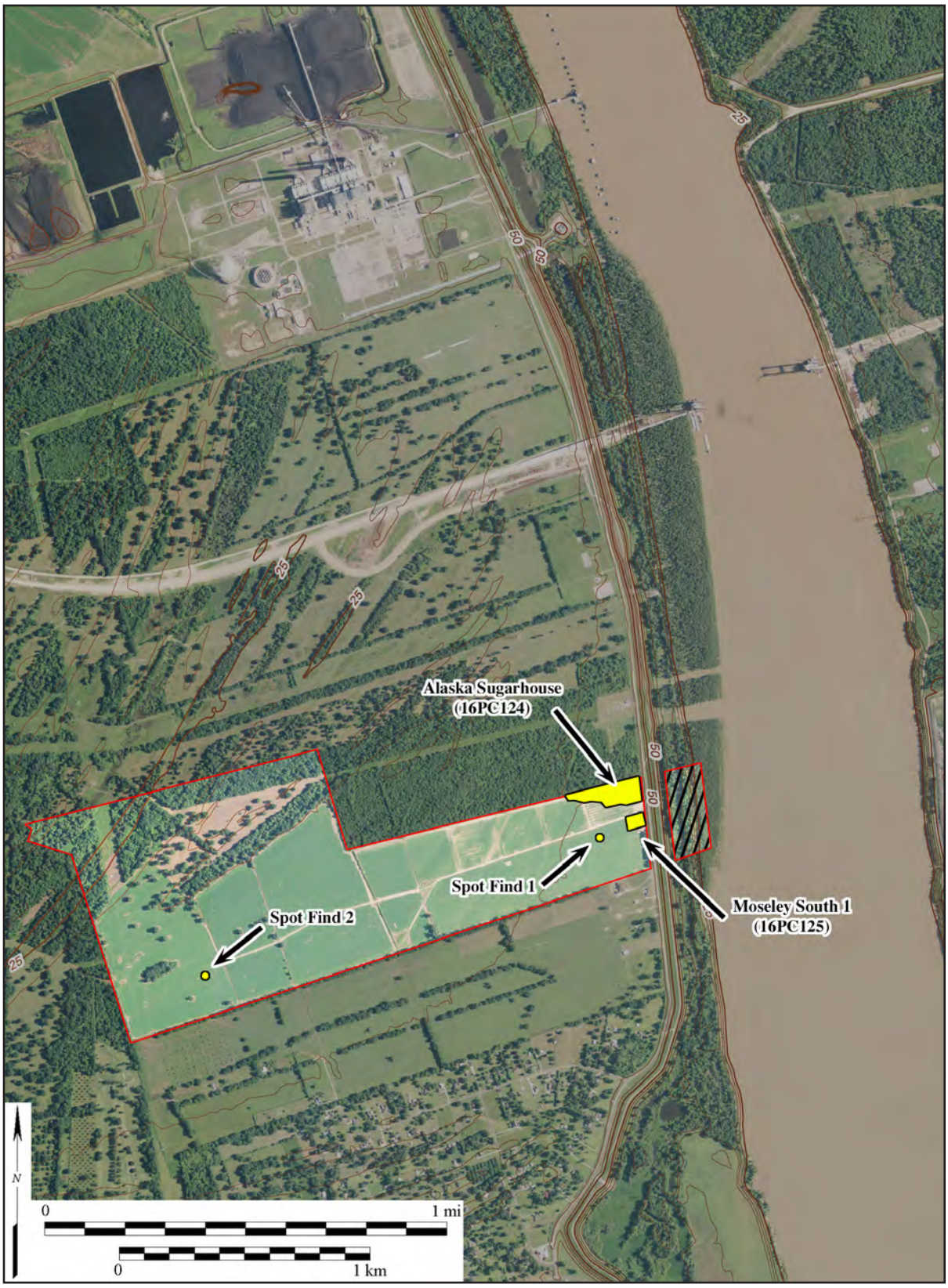

Figure 6-1. The locations of the Alaska Sugarhouse (16PC124) and Moseley South 1 (16PC125) sites and Spot Finds 1 and 2 within the Moseley South Project Area (USGS 2012a, 2012b).

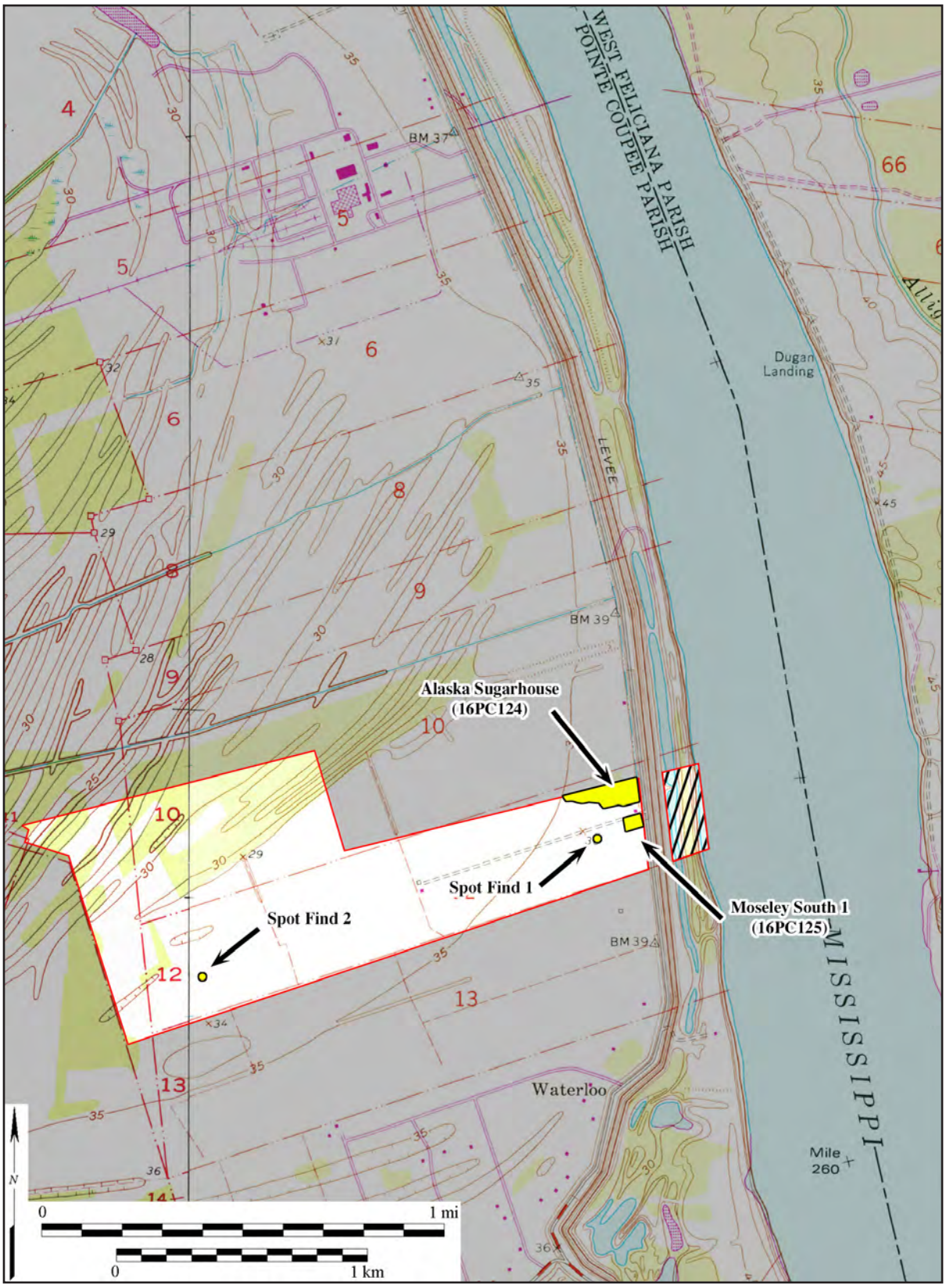

Figure 6-2. The locations of the Alaska Sugarhouse (16PC124) and Moseley South 1 (16PC125) sites and Spot Finds 1 and 2 within the Moseley South Project Area (USGS 1998a, 1998b).

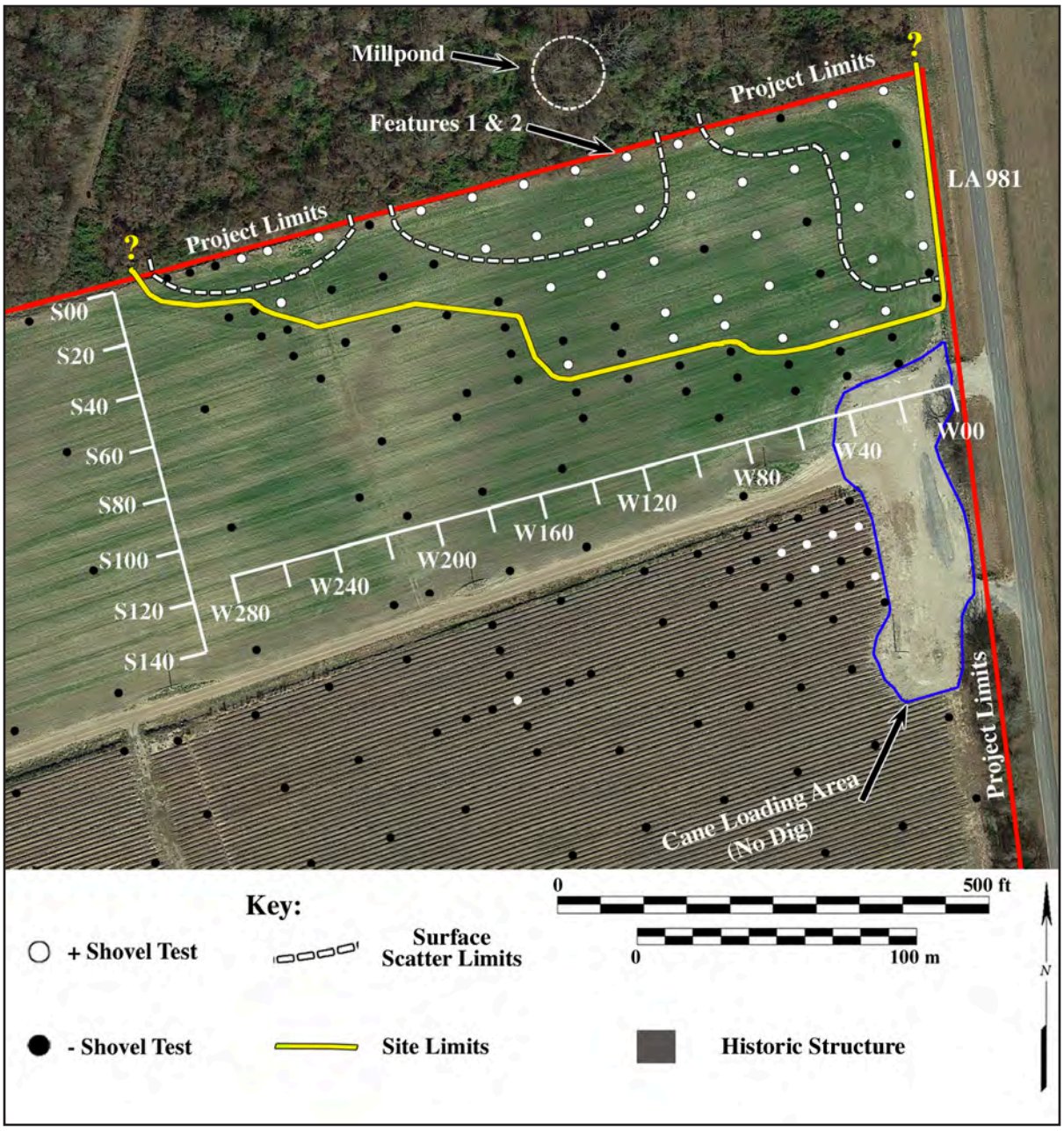

Figure 6-3. Sketch map of the Alaska Sugarhouse site (16PC124) (Google Earth 2015). Note the possible location of the millpond north of the Project Area.

Figure 6-4. View of the Alaska Sugarhouse site (16PC124). View to the west. Date: 4/15/15. Note the thick grass covering the site.

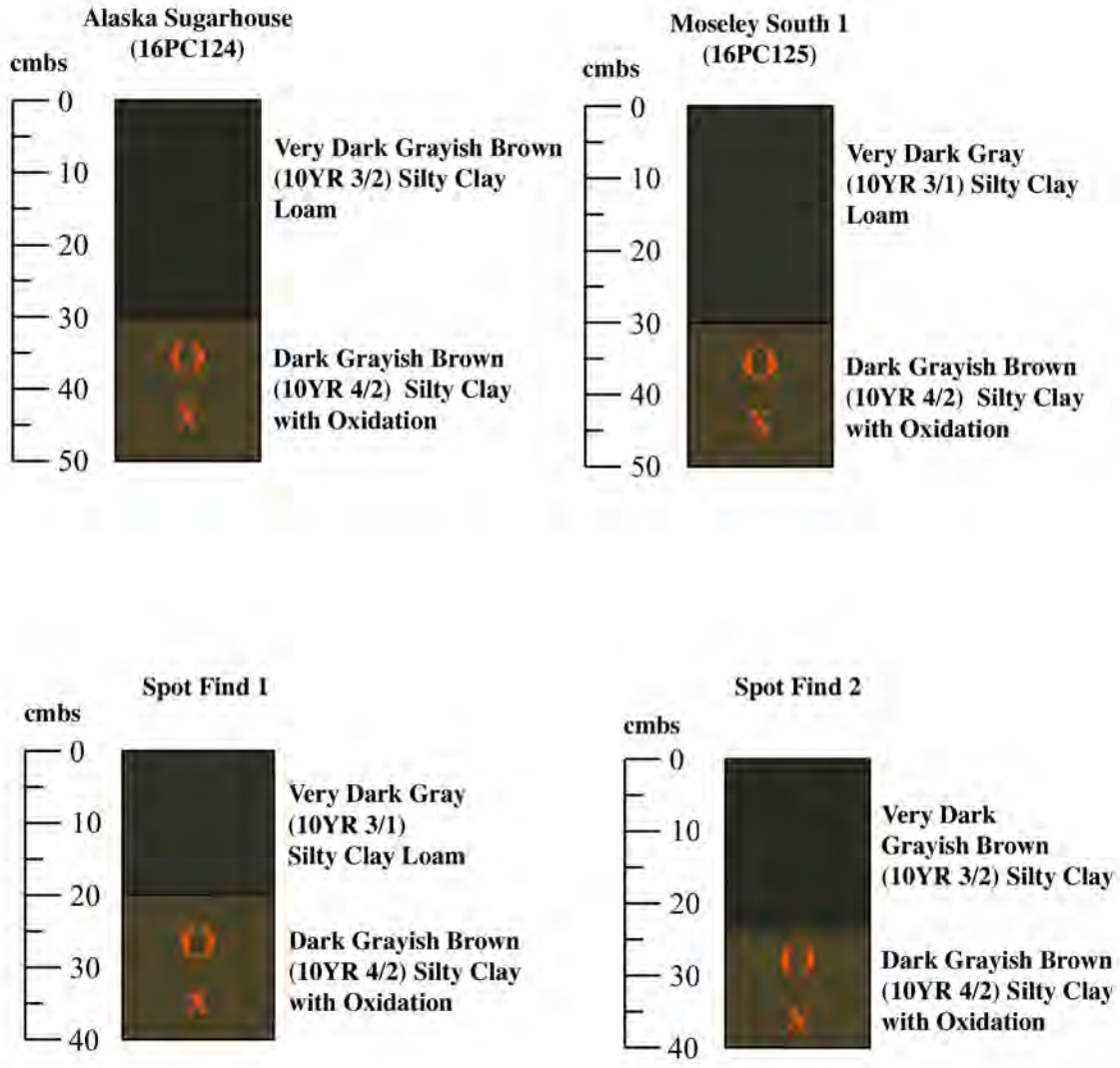

Figure 6-5. Typical shovel test profiles from the Moseley South Project Area.

Table 6-1. Artifacts Recovered From 16PC124.

	GENERAL SURFACE	S00W100 STRAT 1	S00W100 STRAT 2	S00W120 STRAT 1	S00W140 STRAT 1 & 2	S00W160 STRAT 1	S00W160 STRAT 2	S00W180 STRAT 1 & 2	S00W20 STRAT 1	S00W220 STRAT 2
CERAMIC										
Coarse Earthenware										
White-slipped interior and green-glazed exterior redware										
Undecorated										
hollowware	1	—	—	—	—	—	—	—	—	—
Refined Earthenware										
Pearlware										
Annular										
Banded										
brown and green										
hollowware	1	—	—	—	—	—	—	—	—	—
Transfer printed (Underglaze)										
blue										
unidentified	1	—	—	—	—	—	—	—	—	—
Undecorated										
unidentified	1	—	—	—	—	—	—	—	—	—
Early Whiteware										
Annular										
Banded										
blue										
hollowware	1	—	—	—	—	—	—	—	—	—
Roulette										
dark brown and blue										
hollowware	—	—	—	—	—	—	—	—	—	—
Edged										
Unscalloped rims with impressed lines										
blue										
flatware	1	—	—	—	—	—	—	—	—	—
Transfer printed (Underglaze)										
blue										
unidentified	1	—	—	—	—	—	—	—	—	—
White Improved Earthenware										
Undecorated										
unidentified	2	—	—	—	—	—	—	—	—	—
Stoneware										
Bristol Glazed (int.)/Bristol Glazed (ext.)										
Undecorated										
bottle	1	—	—	—	—	—	—	—	—	—
Porcelain										
Semi-Porcelain										
Undecorated										
blue										
tile	2	—	—	—	—	—	—	—	—	—
GLASS										
Machine Made										
Owens Machine Made										
clear green										
soft drink bottle	1	—	—	—	—	—	—	—	—	—
modern green										
bottle	1	—	—	—	—	—	—	—	—	—
screw top										
clear										
bottle	1	—	—	—	—	—	—	—	—	—
Unidentified Machine Type										
clear										
bottle	1	—	—	—	—	—	—	—	—	—
vessel	—	—	—	—	—	—	—	—	—	—
clear green										
bottle	1	—	—	—	—	—	—	—	—	—
modern green										
bottle	1	—	—	—	—	—	—	—	—	—
Unidentified Manufacture										
Not applicable										
clear green										
window	—	94	—	—	—	—	—	—	—	—
screw top										
clear										
vessel	—	—	—	1	—	—	—	—	—	—
Unid. lipping technique										
brown										
vessel	—	—	—	1	—	—	—	—	—	—
clear										
vessel	1	2	—	—	—	—	—	—	—	—
clear green										
vessel	—	1	—	—	—	—	—	—	—	—
cobalt										
bottle	—	—	—	—	—	—	—	—	—	—
METAL										
Aluminum										
cap	—	1	—	—	—	—	—	—	—	—
Cupreous										
Copper										
unidentified	—	—	1	—	—	—	—	—	—	—
Ferrous										
Cast-Iron										
unidentified	1	—	—	—	—	—	—	—	—	—
Iron										
fence staple	—	—	—	—	—	—	—	—	—	—
pintle	—	1	—	—	—	—	—	—	—	—
ring	1	—	—	—	—	—	—	—	—	—
unidentified	—	1	—	—	—	—	—	—	—	—
Type 8 nail										
nail	—	1	—	—	—	—	—	—	—	—
Type 11-12 nail										
nail	—	—	—	—	—	—	—	—	—	—
Type 7 nail										
nail	—	1	—	—	—	—	—	—	—	—
Type 7–8 nail										
nail	—	2	—	—	—	—	—	—	—	—
FAUNA										
Invertebrate										
Shell										
oyster	1	—	—	—	—	—	—	—	—	—
Vertebrate										
Nonhuman										
bone	—	—	1	—	—	—	—	—	—	—
FLORA										
Charcoal										
charcoal	—	—	6	—	—	—	—	—	—	—
BRICK										
Firebrick										
brick	8	1	—	—	—	—	—	1	—	—
Handmade										
brick	1	—	—	—	—	—	—	—	—	—
Unidentified Manufacture										
brick	—	7	7	6	4	1	1	1	1	6
MORTAR										
Lime										
mortar	—	3	—	1	—	—	—	—	—	—
Portland										
mortar	—	—	—	—	—	—	—	—	—	1
PETROLEUM BYPRODUCT										
Asphaltum										
tar	1	—	—	—	—	—	—	—	—	—
Total	32	115	15	9	4	1	1	2	1	7

(continued)

Table 6-1. (continued).

	S00W240 STRAT 1	S00W250 STRAT 1	S00W60 STRAT 1 & 2	S00W80 STRAT 1	S20W100 STRAT 1	S20W120 STRAT 1	S20W140 STRAT 1	S20W160 STRAT 1	S20W20 STRAT 1	S20W240 STRAT 1
CERAMIC										
Coarse Earthenware										
White-slipped interior and green-glazed exterior redware										
Undecorated										
hollowware	—	—	—	—	—	—	—	—	—	—
Refined Earthenware										
Pearlware										
Annular										
Banded										
brown and green										
hollowware	—	—	—	—	—	—	—	—	—	—
Transfer printed (Underglaze)										
blue										
unidentified	—	—	—	—	—	—	—	—	—	—
Undecorated										
unidentified	—	—	—	—	—	—	—	—	—	—
Early Whiteware										
Annular										
Banded										
blue										
hollowware	—	—	—	—	—	—	—	—	—	—
Roulette										
dark brown and blue										
hollowware	—	—	—	—	1	—	—	—	—	—
Edged										
Unscalloped rims with impressed lines										
blue										
flatware	—	—	—	—	—	—	—	—	—	—
Transfer printed (Underglaze)										
blue										
unidentified	—	—	—	—	—	—	—	—	—	—
White Improved Earthenware										
Undecorated										
unidentified	—	—	—	—	—	—	—	—	—	—
Stoneware										
Bristol Glazed (int.)/Bristol Glazed (ext.)										
Undecorated										
bottle	—	—	—	—	—	—	—	—	—	—
Porcelain										
Semi-Porcelain										
Undecorated										
blue										
tile	—	—	—	—	—	—	—	—	—	—
GLASS										
Machine Made										
Owens Machine Made										
clear green										
soft drink bottle	—	—	—	—	—	—	—	—	—	—
modern green										
bottle	—	—	—	—	—	—	—	—	—	—
screw top										
clear										
bottle	—	—	—	—	—	—	—	—	—	—
Unidentified Machine Type										
clear										
bottle	—	—	—	—	—	—	—	—	—	—
vessel	—	—	—	—	—	—	—	—	—	—
clear green										
bottle	—	—	—	—	—	—	—	—	—	—
modern green										
bottle	—	—	—	—	—	—	—	—	—	—
Unidentified Manufacture										
Not applicable										
clear green										
window	—	—	—	—	—	—	—	—	—	—
screw top										
clear										
vessel	—	—	—	—	—	—	—	—	—	—
Unid. lipping technique										
brown										
vessel	—	—	—	—	—	—	—	—	—	—
clear										
vessel	—	—	—	—	—	—	—	—	—	—
clear green										
vessel	—	—	—	—	1	—	—	—	—	—
cobalt										
bottle	—	—	—	—	—	—	—	—	1	—
METAL										
Aluminum										
cap	—	—	—	—	—	—	—	—	—	—
Cupreous										
Copper										
unidentified	—	—	—	—	—	—	—	—	—	—
Ferrous										
Cast-Iron										
unidentified	—	—	—	—	—	—	—	—	—	—
Iron										
fence staple	—	—	—	—	—	—	—	—	—	—
pintle	—	—	—	—	—	—	—	—	—	—
ring	—	—	—	—	—	—	—	—	—	—
unidentified	—	—	—	—	—	—	—	—	—	—
Type 8 nail										
nail	—	—	—	—	—	—	—	—	—	—
Type 11-12 nail										
nail	—	—	—	—	—	—	—	—	—	—
Type 7 nail										
nail	—	—	—	—	—	—	—	—	—	—
Type 7–8 nail										
nail	—	—	—	—	—	—	—	—	—	—
FAUNA										
Invertebrate										
Shell										
oyster	—	—	—	—	—	—	—	—	—	—
Vertebrate										
Nonhuman										
bone	—	—	—	—	—	—	—	—	—	—
FLORA										
Charcoal										
charcoal	—	—	—	—	—	—	—	—	—	—
BRICK										
Firebrick										
brick	—	—	—	—	1	—	—	—	—	—
Handmade										
brick	1	1	—	—	—	—	—	—	—	—
Unidentified Manufacture										
brick	3	2	4	8	3	2	2	2	1	2
MORTAR										
Lime										
mortar	1	—	—	—	—	—	—	—	—	—
Portland										
mortar	—	—	—	—	—	—	—	—	—	—
PETROLEUM BYPRODUCT										
Asphaltum										
tar	—	—	—	—	—	—	—	—	—	—
Total	5	3	4	8	6	2	2	2	2	2

(continued)

Table 6-1. (continued).

	S20W40 STRAT 1	S20W60 STRAT 1	S20W80 STRAT 1	S40W00 STRAT 1	S40W100 STRAT 1	S40W120 STRAT 1	S40W140 STRAT 1	S40W20 STRAT 1	S40W60 STRAT 1	S60W00 STRAT 1
CERAMIC										
Coarse Earthenware										
White-slipped interior and green-glazed exterior redware										
Undecorated										
hollowware	—	—	—	—	—	—	—	—	—	—
Refined Earthenware										
Pearlware										
Annular										
Banded										
brown and green										
hollowware	—	—	—	—	—	—	—	—	—	—
Transfer printed (Underglaze)										
blue										
unidentified	—	—	—	—	—	—	—	—	—	—
Undecorated										
unidentified	—	—	—	—	—	—	—	—	—	—
Early Whiteware										
Annular										
Banded										
blue										
hollowware	—	—	—	—	—	—	—	—	—	—
Roulette										
dark brown and blue										
hollowware	—	—	—	—	—	—	—	—	—	—
Edged										
Unscalloped rims with impressed lines										
blue										
flatware	—	—	—	—	—	—	—	—	—	—
Transfer printed (Underglaze)										
blue										
unidentified	—	—	—	—	—	—	—	—	—	—
White Improved Earthenware										
Undecorated										
unidentified	—	—	—	—	—	—	—	—	—	—
Stoneware										
Bristol Glazed (int.)/Bristol Glazed (ext.)										
Undecorated										
bottle	—	—	—	—	—	—	—	—	—	—
Porcelain										
Semi-Porcelain										
Undecorated										
blue										
tile	—	—	—	—	—	—	—	—	—	—
GLASS										
Machine Made										
Owens Machine Made										
clear green										
soft drink bottle	—	—	—	—	—	—	—	—	—	—
modern green										
bottle	—	—	—	—	—	—	—	—	—	—
screw top										
clear										
bottle	—	—	—	—	—	—	—	—	—	—
Unidentified Machine Type										
clear										
bottle	—	—	—	—	—	—	—	—	—	—
vessel	—	—	—	—	—	—	—	—	—	—
clear green										
bottle	—	—	—	—	—	—	—	—	—	—
modern green										
bottle	—	—	—	—	—	—	—	—	—	—
Unidentified Manufacture										
Not applicable										
clear green										
window	—	—	—	—	—	—	—	—	—	—
screw top										
clear										
vessel	—	—	—	—	—	—	—	—	—	—
Unid. lipping technique										
brown										
vessel	—	—	—	—	—	—	—	—	—	—
clear										
vessel	—	—	—	—	—	—	—	—	—	1
clear green										
vessel	—	—	—	—	—	—	—	—	—	—
cobalt										
bottle	—	—	—	—	—	—	—	—	—	—
METAL										
Aluminum										
cap	—	—	—	—	—	—	—	—	—	—
Cupreous										
Copper										
unidentified	—	—	—	—	—	—	—	—	—	—
Ferrous										
Cast-Iron										
unidentified	—	—	—	—	—	—	—	—	—	—
Iron										
fence staple	—	—	—	—	—	—	—	—	—	—
pintle	—	—	—	—	—	—	—	—	—	—
ring	—	—	—	—	—	—	—	—	—	—
unidentified	—	—	—	—	—	—	—	—	—	—
Type 8 nail										
nail	—	—	—	—	—	—	—	—	—	—
Type 11-12 nail										
nail	—	—	—	—	—	—	—	—	—	—
Type 7 nail										
nail	—	—	—	—	—	—	—	—	—	—
Type 7–8 nail										
nail	—	—	—	—	—	—	—	—	—	—
FAUNA										
Invertebrate										
Shell										
oyster	—	—	—	—	—	—	—	—	—	—
Vertebrate										
Nonhuman										
bone	—	—	—	—	—	—	—	—	—	—
FLORA										
Charcoal										
charcoal	—	—	—	—	—	—	—	—	—	—
BRICK										
Firebrick										
brick	—	—	—	—	—	—	—	—	—	—
Handmade										
brick	—	—	—	—	—	—	—	—	—	—
Unidentified Manufacture										
brick	10	6	6	4	3	1	2	6	1	2
MORTAR										
Lime										
mortar	—	—	2	—	—	—	—	—	—	—
Portland										
mortar	—	—	—	—	—	2	—	—	—	—
PETROLEUM BYPRODUCT										
Asphaltum										
tar	—	—	—	—	—	—	—	—	—	—
Total	10	6	8	4	3	3	2	6	1	3

(continued)

Table 6-1. (concluded).

	S60W100 STRAT 1	S60W20 STRAT 1	S60W60 STRAT 1	S60W80 STRAT 1	S70W140 STRAT 1	S80W20 STRAT 1	S80W40 STRAT 1	S80W60 STRAT 1	Total
CERAMIC									
Coarse Earthenware									
White-slipped interior and green-glazed exterior redware									
Undecorated									
hollowware	—	—	—	—	—	—	—	—	1
Refined Earthenware									
Pearlware									
Annular									
Banded									
brown and green									
hollowware	—	—	—	—	—	—	—	—	1
Transfer printed (Underglaze)									
blue									
unidentified	—	—	—	—	—	—	—	—	1
Undecorated									
unidentified	—	—	—	—	—	—	—	—	1
Early Whiteware									
Annular									
Banded									
blue									
hollowware	—	—	—	—	—	—	—	—	1
Roulette									
dark brown and blue									
hollowware	—	—	—	—	—	—	—	—	1
Edged									
Unscalloped rims with impressed lines									
blue									
flatware	—	—	—	—	—	—	—	—	1
Transfer printed (Underglaze)									
blue									
unidentified	—	—	—	—	—	—	—	—	1
White Improved Earthenware									
Undecorated									
unidentified	—	—	—	—	—	—	—	—	2
Stoneware									
Bristol Glazed (int.)/Bristol Glazed (ext.)									
Undecorated									
bottle	—	—	—	—	—	—	—	—	1
Porcelain									
Semi-Porcelain									
Undecorated									
blue									
tile	—	—	—	—	—	—	—	—	2
GLASS									
Machine Made									
Owens Machine Made									
clear green									
soft drink bottle	—	—	—	—	—	—	—	—	1
modern green									
bottle	—	—	—	—	—	—	—	—	1
screw top									
clear									
bottle	—	—	—	—	—	—	—	—	1
Unidentified Machine Type									
clear									
bottle	—	—	—	—	—	—	—	—	1
vessel	—	—	—	—	—	—	—	1	1
clear green									
bottle	—	—	—	—	—	—	—	—	1
modern green									
bottle	—	—	—	—	—	—	—	—	1
Unidentified Manufacture									
Not applicable									
clear green									
window	—	—	—	—	—	—	—	—	94
screw top									
clear									
vessel	—	—	—	—	—	—	—	—	1
Unid. lipping technique									
brown									
vessel	—	—	—	—	—	—	—	—	1
clear									
vessel	—	—	—	—	—	—	—	—	4
clear green									
vessel	—	—	—	—	—	—	—	—	2
cobalt									
bottle	—	—	—	—	—	—	—	—	1
METAL									
Aluminum									
cap	—	—	—	—	—	—	—	—	1
Cupreous									
Copper									
unidentified	—	—	—	—	—	—	—	—	1
Ferrous									
Cast-Iron									
unidentified	—	—	—	—	—	—	—	—	1
Iron									
fence staple	—	—	1	—	—	—	—	—	1
pintle	—	—	—	—	—	—	—	—	1
ring	—	—	—	—	—	—	—	—	1
unidentified	—	—	—	—	—	—	—	—	1
Type 8 nail									
nail	—	—	—	—	—	—	—	—	1
Type 11-12 nail									
nail	—	—	1	—	—	—	—	—	1
Type 7 nail									
nail	—	—	—	—	—	—	—	—	1
Type 7–8 nail									
nail	—	—	—	—	—	—	—	—	2
FAUNA									
Invertebrate									
Shell									
oyster	—	—	—	—	—	—	—	—	1
Vertebrate									
Nonhuman									
bone	—	—	—	—	—	—	—	—	1
FLORA									
Charcoal									
charcoal	—	—	—	—	—	—	—	—	6
BRICK									
Firebrick									
brick	—	—	—	—	—	—	—	—	11
Handmade									
brick	—	—	—	—	—	—	—	—	3
Unidentified Manufacture									
brick	2	1	2	6	3	1	2	1	122
MORTAR									
Lime									
mortar	—	—	—	—	—	—	—	—	7
Portland									
mortar	—	—	—	1	—	—	—	—	4
PETROLEUM BYPRODUCT									
Asphaltum									
tar	—	—	—	—	—	—	—	—	1
Total	2	1	4	7	3	1	2	2	291

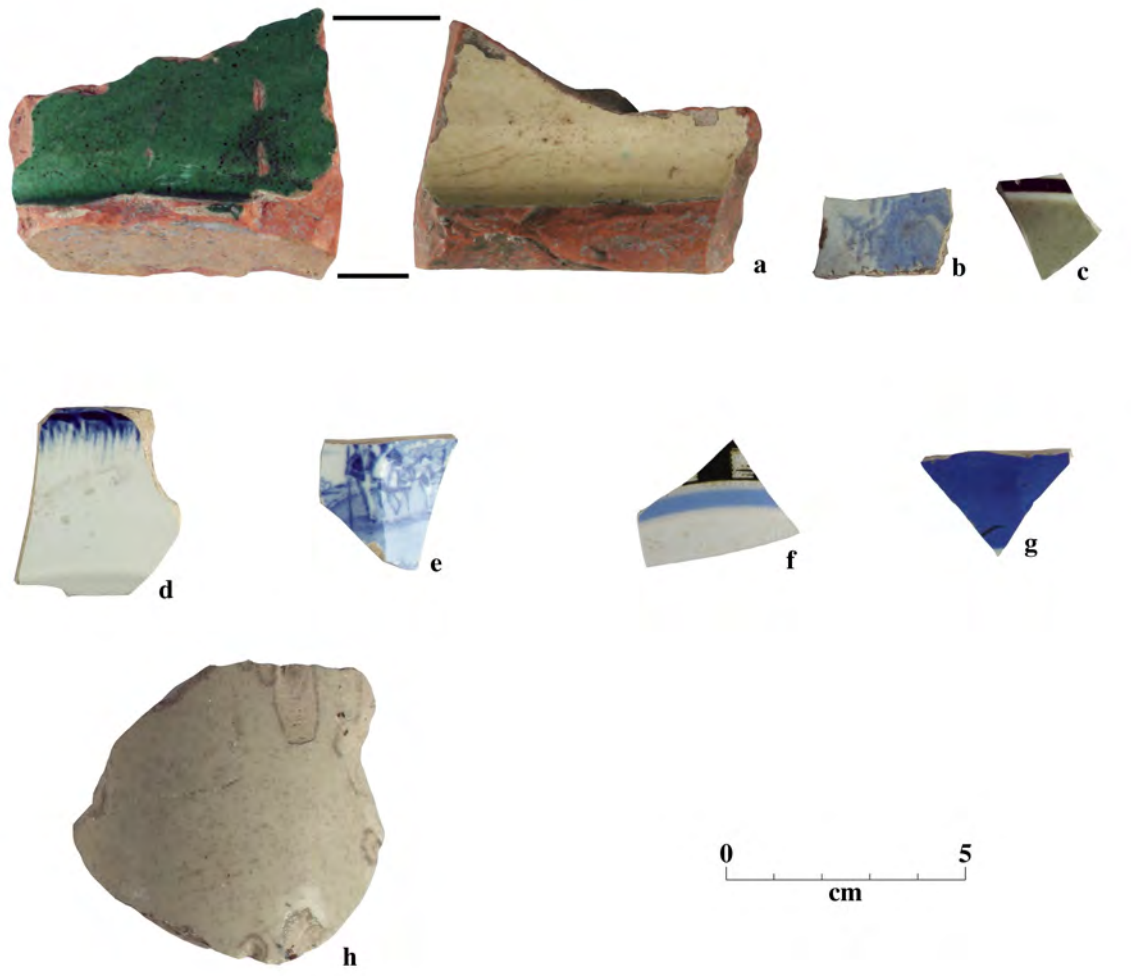

Figure 6-6. Ceramics recovered mostly from the surface of 16PC124: a) white-slipped interior and green-glazed exterior redware; b) blue transfer-printed pearlware; c) annular banded pearlware; d) unscalloped blue edged early whiteware; e) blue transfer-printed early whiteware; f) annular rouletted early whiteware (ST S20W100); g) annular banded early whiteware); h) Bristol-glazed stoneware.

of pearlware dating from 1780–1830 (Figure 6-6b-c) (Lofstrom 1976:3–4); four sherds of early whiteware dating from 1828–1860 (Figure 6-6d-g) (Moir 1987a:102; Price 1982:14); and one sherd of Bristol-glazed stoneware dating after 1835, though most popular in the 1890s (Figure 6-6h) (Greer 1981:264; Noel Hume 2001:324). Two sherds of undecorated whiteware and two of semi-porcelain tile were also recovered (see Table 6-1). Whiteware was generally produced from 1828 to 1895(1910) (Lofstrom 1976; Moir 1987:102), while the tile is twentieth century in date.

Over 85 percent of the glass found at 16PC124 is clear green window glass. The thickness of this glass suggests it was manufactured between 1818 and 1952 (Table 6-2). However, most (*n*=90) of the 94 window glass fragments were likely made between 1835 and 1918, and over half of them (*n*=57) between 1868 and 1902 (see Table 6-2). The site yielded relatively little vessel glass (*n*=16), almost half of which is machine made. Three shards have applied-color labels, a process not commercially available until after 1934 (Sweeney 2002:4). Two bottles were manufactured by the Brockway Machine Bottle Company after 1925, and the Owens Illinois Glass Company after 1955 (Toulouse 1972:59, 403). The glass of unidentified manufacture is brown, clear, clear green, and cobalt in color.

Almost half (46.7 percent) of the artifacts collected from 16PC124 are brick and brick rubble (see Table 6-1). Among the former are nine marked and imported firebricks. Seven were made in Hancock County, West Virginia, one by Bigham, Stewart, and Harper between 1846 and 1861 (Figure 6-7a) (Newton et al. 1879:423), and six by Thomas Anderson & Sons between 1869 and 1891 (Figure 6-7b-c) (Newton et al. 1879:437; R.L. Polk & Co. 1891:270). William Hancock & Co. of Buckley, Wales, in operation from 1792 to 1956, produced the last two marked bricks (Figure 6-7d) (Sallery 2014).

The remaining 11 percent of the 16PC124 assemblage includes metal, mortar, animal bone, and oyster shell (see Table 6-1). Most of the metal is ferrous, although an aluminum screw cap and an unidentified fragment of cupreous metal also occur. One of the ferrous metal finds is cast. Among the remainder are a ring, pintle, fence staple, and five nails. Four nails are cut (Type 7-8) and likely produced between 1834 and 1885, while one is wire (Type

Figure 6-7. Marked firebricks recovered from the surface of 16PC24: a) Bigham, Stewart, and Harper 1846–1861; b-c) Thomas Anderson and Sons 1869–1891; d) William Hancock and Co. 1792–1956.

Table 6-2. Thickness of Window Glass Recovered From 16PC124.

Glass Thickness (mm)	**Date Range** (Moir 1987)	**No. Fragments**
1.25–1.449	1818–1835	2
1.45–1.649	1835–1852	13
1.65–1.849	1852–1868	10
1.85–2.049	1868–1885	27
2.05–2.249	1885–1902	30
2.25–2.449	1902–1918	10
2.45–2.649	1919–1935	1
2.65–2.849	1935–1952	1
TOTAL		**94**

11–12). Wire nails were first introduced in 1877, but were not widely produced until after about 1892 (Edwards and Wells 1993). Both lime-sand and Portland cement mortar were identified. Portland cement became a major mortar component in the United States around 1880 (McKee 1973:69).

Two intact brick features were encounter, between 5 and 55 cmbs, in Shovel Test S00W100. Both were made of common brick bound with a lime-sand mortar. Feature 1 consisted of six courses of brick and Feature 2 of two courses (Figure 6-8). A ferrous metal pipe ran between the two features. Neither feature was exposed enough to identify its function. However, numerous brick features and metal piping have been identified at other sugarhouse sites that have been extensively excavated (Ryan 2009; Ryan et al. 2011). One marked firebrick, all the window glass, and all but one of the ferrous metal finds from 16PC124, came from this shovel test. These types of artifacts (coupled with a relative lack of ceramics and vessel glass) are also characteristic of sugarhouse site assemblages (Ryan 2009; Ryan et al. 2011).

Archival evidence suggests that two distinct historic occupations occurred at the Alaska Sugarhouse site. The earlier occupation is associated with a structure depicted on the 1883 Mississippi River Commission (MRC) map (see Figure 3-18). Its large size, isolation, and location, well back from the river and surrounded by cane fields, indicates that it served as a sugarhouse–likely the sugarhouse built in circa 1857, when the Lebeaus partnered with James Vignes to grind sugar (see Chapter 3). This sugarhouse processed cane through 1891, and was likely leveled between 1904 and 1921 (see Figure 3-19) (Bouchereau 1892; MRC 1921; USGS 1943). The second occupation at 16PC124 is associated with two structures erected on the site between 1934 and 1954 (see Figure 3-22). One was likely a residence and the other equipment shed or other type of outbuilding. These buildings were no longer extant by 1980 (MRC 1934; USGS 1954, 1980).

The artifacts found at 16PC124 reflect these same two periods of occupation. All the ceramics, window glass, marked firebricks, and most of the metal, date to the sugarhouse occupation (mid-nineteenth to early-twentieth centuries). Most indicative of the second, mid-twentieth century, occupation is the bottle glass recovered from the site. A few of the site's ceramics, particularly the redware and pearlware, hint at occupation in the early nineteenth century. If so, the 1857-1891 Alaska sugarhouse may be the same facility as the 1846-1857 Lebeau sugarhouse, depicted on the 1851 Humphries and Abbot map as lying

Figure 6-8. Features 1 and 2 at 16PC124. View to the northwest. Date: 2/26/15.

outside the project area (see Figure 3-15). Errors in building placement on the Humphries and Abbot map have been documented at other sugarhouse sites (e.g. Ryan 2009:111; Ryan et al. 2011:211).

Moseley South 1 (16PC125)

The Moseley South 1 site (16PC125), also located in the eastern edge of the project area, measures approximately 70 by 50 m. It is situated in Section 12, Township 4 South, Range 11 East in the Southeastern District (west bank of the Mississippi River), Louisiana, (see Figures 6-1 and 6-2). The site's limits were determined using archaeological data and historic maps (Figure 6-9). Surface visibility was good at 16PC125, as the site is located in a harvested cane field (Figure 6-10). Shovel testing was conducted on a 10 to 20-m grid. However, a compacted cane-loading area, paved with crushed granite and gravel, prevented the excavation of shovel tests east of the plowed fields (see Figure 6-9). In total, 21 shovel tests were excavated to delineate the site, six of which contained artifacts (see Figure 6-9). The typical shovel test profile consisted of 20 cm of very dark gray (10YR 3/1) silty clay overlying a least 30 cm of dark grayish brown (10YR 4/2) silty clay with oxidation (see Figure 6-5). Eleven artifacts were recovered from the shovel tests, and an additional 42 artifacts from the ground surface (Table 6-3). The artifact assemblage consists of historic ceramics, glass, metal, and brick.

The 11 ceramics collected at 16PC125 include whiteware (*n*=1), ivory-tinted whiteware (*n*=3), stoneware (*n*=2), and porcelain (*n*=5) (see Table 6-3). The whiteware is undecorated and dated from 1828 to 1895(1910) (Loftstrom 1976; Moir 1987:102). The ivory-tinted whiteware recovered includes a polychrome airbrushed sherd (Figure 6-11a) and one decorated with decalcomania and repoussé (Figure 6-11b). Ivory-tinted whiteware generally postdates 1930, while decalcomania and repoussé decoration on the ware indicates manufacture between 1930 and 1950 (Moir 1987a:102, 104). One of the porcelain sherds found at the site also bears decalcomania decoration and was likely produced between 1880 and 1920 (Majewski and O'Brien 1987:147). One stoneware sherd has a slip-glazed interior and a salt-glazed exterior (Figure 6-11c), while the other is Bristol glazed (Figure 6-11d). The former generally dates from 1850 to 1900 (Greer 1981:197, 200). Bristol glaze first

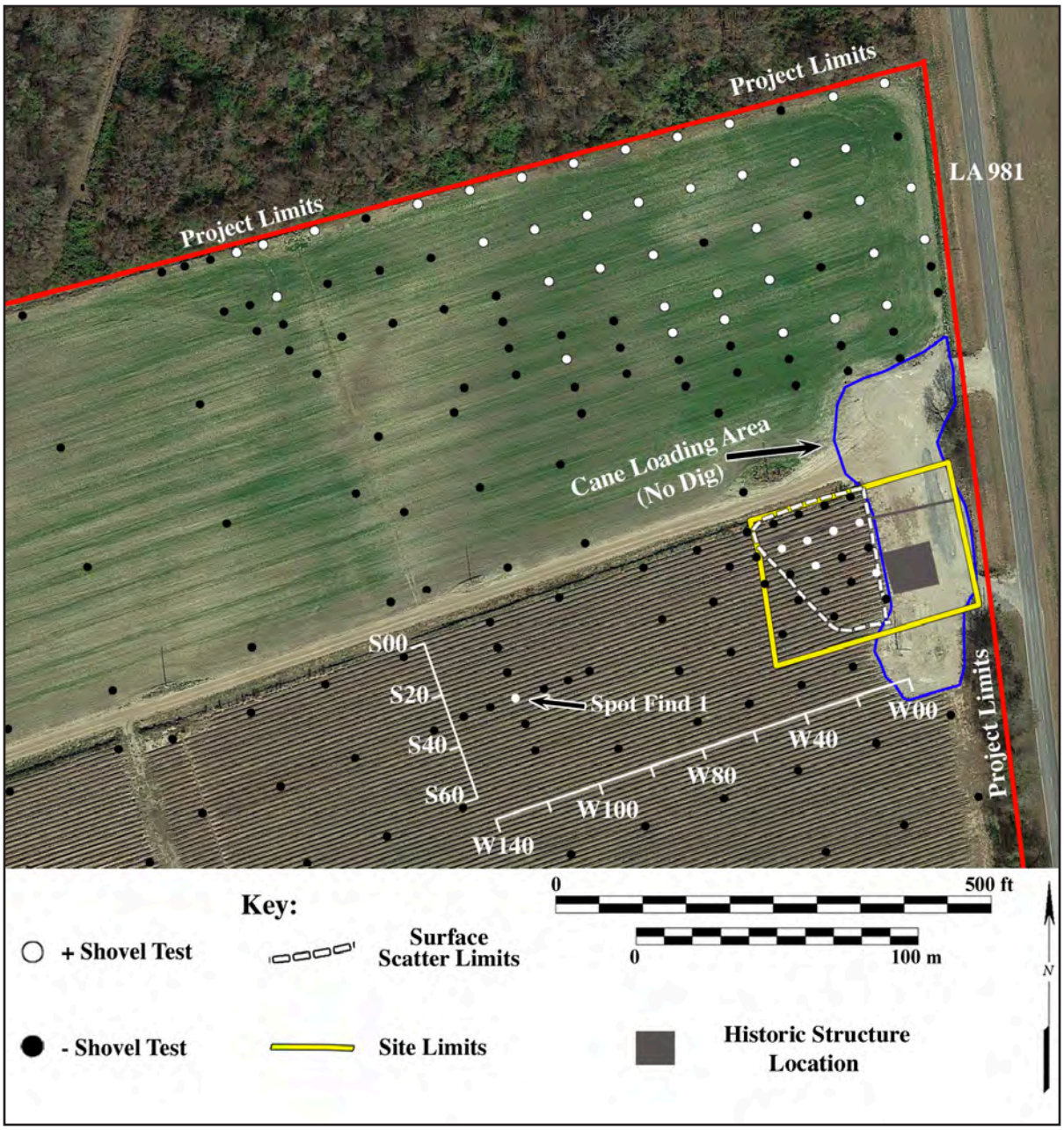

Figure 6-9. Sketch map of the Moseley South 1 site (16PC125) (Google Earth 2015; NETR 2011a; NETR 2011b). Note the possible location of the millpond north of the Project Area.

Table 6-3. Artifacts Recovered From 16PC125.

	GENERAL SURFACE	S10 W00 STRAT 1	S10 W10 STRAT 1	S10 W20 STRAT 1	S10 W30 STRAT 1	S20 W20 STRAT 1	S30 W00 STRAT 1	Total
CERAMIC								
Refined Earthenware								
White Improved Earthenware								
Undecorated								
unidentified	1	—	—	—	—	—	—	1
Ivory-Tinted Whiteware								
Airbrushed								
polychrome								
flatware	1	—	—	—	—	—	—	1
Repoussé and decalcomania								
polychrome								
flatware	1	—	—	—	—	—	—	1
Undecorated								
cup	1	—	—	—	—	—	—	1
Stoneware								
Albany Slip Glazed (int.)/Salt Glazed (ext.)								
Undecorated								
hollowware	1	—	—	—	—	—	—	1
Bristol Glazed (int.)/Bristol Glazed (ext.)								
Undecorated								
unidentified	1	—	—	—	—	—	—	1
Porcelain								
Hard Paste								
Decalcomania								
fugitive								
unidentified	2	—	—	—	—	—	—	2
Undecorated								
unidentified	3	—	—	—	—	—	—	3
GLASS								
Pressed								
Not applicable								
clear								
vessel	1	—	—	—	—	—	—	1
Machine Made								
Owens Machine Made								
aqua								
vessel	1	—	—	—	—	—	—	1
brown								
bottle	3	—	—	—	—	—	—	3
clear								
bottle	7	—	—	—	—	—	—	7
clear green								
soda water bottle	1	—	—	—	—	—	—	1
vessel	1	—	—	—	—	—	—	1
Unidentified Manufacture								
Unid. lipping technique								
aqua								
vessel	1	—	—	—	—	—	—	1
brown								
vessel	3	—	—	—	—	—	—	3
clear								
bottle	1	—	—	—	—	—	—	1
clear pink								
vessel	1	—	—	—	—	—	—	1
cobalt								
vessel	2	—	—	—	—	—	—	2
modern green								
bottle	2	—	—	—	—	—	—	2
vessel	1	—	—	—	—	—	—	1
olive								
vessel	—	—	—	—	—	—	1	1
vaseline green								
vessel	1	—	—	—	—	—	—	1
white milk								
vessel	1	—	—	—	—	—	—	1
GLASS AND METAL								
Machine Made and Ferrous								
Owens Machine Made and iron								
modern green								
jar	1	—	—	—	—	—	—	1
METAL								
Ferrous								
Iron								
Type 11-12 nail								
nail	2	—	—	—	—	—	—	2
BRICK								
Firebrick								
brick	1	—	1	—	—	—	—	2
Unidentified Manufacture								
brick	—	4	1	1	1	1	1	9
Total	**42**	**4**	**2**	**1**	**1**	**1**	**2**	**53**

Figure 6-10. View of the Moseley South 1 site (16PC125). View to the south. Date: 3/3/15. Note the field road in the foreground and cane loading area to the left.

Figure 6-11. Artifacts recovered from the surface of 16PC125: a) airbrushed ivory-tinted whiteware; b) decal-comania and repoussé decorated ivory-tinted whiteware; c) slip-glazed (interior) and salt-glazed (exterior) stoneware; d) Bristol-glazed stoneware; e-f) machine-made glass vessels made by the Owens Illinois Glass Company.

appeared around 1835, but did not gain popularity until the 1890s (Greer 1981:264; Noel Hume 2001:324).

Pressed (*n*=1) and machine-made (*n*=13) vessels, as well as those of unidentified manufacture (*n*=13), make up the glass assemblage from 16PC125. Three of the machine-made vessels, one jar with a metal screw cap (Figure 6-11e), one medicine bottle (Figure 6-11f) and one unidentified bottle, were made by the Owens Illinois Glass Company in 1938, 1953, and after 1954, respectively (Toulouse 1972:403). The embossed lettering on the medicine bottle reads "…100 MILS/ …75 MILS/ …50 MILS/ …25 MILS." Other bottle makers identified are the Laurens Glass Works (after 1913), Alexander H. Kerr & Company (after 1944), and T.C. Wheaton & Company (after 1888) (Toulouse 1972:44, 324, 527). The two bottles made by Wheaton & Company are clear in color, indicating that they were probably manufactured after World War I.

Two wire nails and brick constitute the remainder of the 16PC125 artifact assemblage. Wire nails were generally used for construction after 1892 and had largely replaced cut nails by 1896 (Edward and Wells 1993). The common brick is of unidentified manufactured. The firebrick may have been borrowed from the nearby Alaska Sugarhouse (16PC124) site.

The Moseley South 1 site (16PC125) is likely associated with a structure depicted on the 1934 Mississippi River Commission (MRC) map (see Figure 3-20). The structure was likely built between 1931 and 1934 and was no longer extant by the 1980s (MRC 1934; USGS 1931, 1980, 1989). The dates of occupation provided by the cartographic research corroborate those provided by the artifact analysis.

Spot Find 1

Spot Find 1 is a partial firebrick encountered in a shovel test excavated approximately 100 m west of 16PC125, and south of a field road. It is situated in Section 12, Township 4 South, Range 11 East in the Southeastern District (west bank of the Mississippi River), (see

Figures 6-1, 6-2 and 6-9). Shovel testing was conducted at 10-m intervals off the positive shovel test, but no additional cultural material or deposits were encountered. The stratigraphy in the one positive shovel test consisted of 20 cm of very dark gray (10YR 3/1) silty clay overlying a least 20 cm of dark grayish brown (10YR 4/2) oxidized silty clay (see Figure 6-5). Spot Find 1 likely came from the nearby Moseley South 1 site and was transported to its current location by plowing.

Spot Find 2

Spot Find 2 is a sherd of stoneware found in a shovel test excavated in the western portion of the project area in Section 12, Township 4 South, Range 11 East, in the Southeastern District (west bank of the Mississippi River) (see Figures 6-1; and 6-2). Shovel testing was conducted at 10-m intervals off the positive shovel test, but no additional cultural material or deposits were encountered. The stratigraphy in the one positive shovel test consisted of 20 cm of very dark grayish brown (10YR 3/2) silty clay overlying a least 20 cm of dark grayish brown (10YR 4/2) oxidized silty clay (see Figure 6-5). The stoneware sherd has an Albany-glazed interior and unidentifiable exterior finish. Albany slips generally date from 1850 to 1900 (Greer 1981:197, 200). As historic maps show no structures in the vicinity of Spot Find 2, the sherd may have been transported to the area from elsewhere on the property.

The 29-ac Survey Area

This 29-ac (11.7-ha) survey area is located on the batture side of the levee (see Figures 6-1 and 6-2). A crew of three conducted a visual survey of the entire area and shovel tested where the ground surface was not flooded. A single transect of 13 shovel tests, spaced 30 m apart, was placed along the riverside toe of the levee. A typical shovel test consisted of 30 cm of very dark gray (10YR 3/1) silty clay overlying a least 20 cm of dark gray (10YR 4/1) oxidized silty clay. Shovel tests could not be excavated on the remainder of the batture, because it was completely flooded by the Mississippi River (Figures 6-12 and 6-13). No cultural material or deposits were encountered in the 29-ac survey area.

Figure 6-12. The batture portion of the Moseley South Project Area. View to the east. Date: 4/15/15.

Figure 6-13. Pipeline corridor just north of the Moseley South Project Area showing the extent of flooding at the time of survey. View to the northeast. Date: 4/15/15.

Standing Structure Survey

There are no current plans to develop the Moseley South Project Area. Therefore, the APE for indirect effects for this study has been limited to the project area footprint. No standing structures were recorded within the portion of the Moseley South Project Area previously surveyed in 1982. Likewise, no standing structures were recorded by CEI during the 2015 survey of the remaining 379-ac (153.4-ha) of the Moseley South Project Area.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

Between 26 February and 5 March, and on 15 April 2015, CEI conducted a Phase I cultural resources and standing structure survey of the Moseley South Project Area in Point Coupée Parish, Louisiana, for the Baton Rouge Area Chamber (BRAC) as part of an industrial site assessment. The BRAC project area encompassed approximately 379 ac (153.4 ha). Some 29 ac (11.7 ha) were previously surveyed by the National Park Service (NPS) in 1982 (Stuart and Greene 1982). The entire 379 ac (153.4 ha) BRAC project area was examined during the present investigations.

No previously recorded archaeological sites or historic standing structures occur within the portion of the BRAC study area surveyed in 1982. Two archaeological sites and no standing structures were recorded in the newly surveyed portion of the BRAC project area.

The Alaska Sugarhouse site (16PC124) reflects two historic-period occupations, one dating from the 1850s to 1910s and the other from the 1940s through 1980s. Archival evidence indicates that the Alaska Sugarhouse was constructed in circa 1857 and was abandoned after 1891. It was likely demolished between 1904 and 1921 (see Figure 3-19). The site's second component is associated with two structures erected between 1931 and 1934 and no longer extant by 1989 (see Figure 3-21). The site contains two known, *in situ* brick features that are associated with the site's earlier component. With at least two intact features and numerous nineteenth-century artifacts present, CEI recommends that Phase II

testing for National Register eligibility be conducted at the Alaska Sugarhouse site (16PC124) if it cannot be avoided by future construction.

The Moseley South 1 site (16PC125) is a small historic artifact scatter associated with a structure erected between 1931 and 1934 and removed by 1989 (see Figures 3-20 and 3-21) (MRC 1934; USGS 1931, 1989). As no *in situ* cultural deposits were encountered at this site, it is deemed to have little research potential. Therefore, 16PC125 is recommended as ineligible for inclusion on the NRHP, and no additional investigations are required there.

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