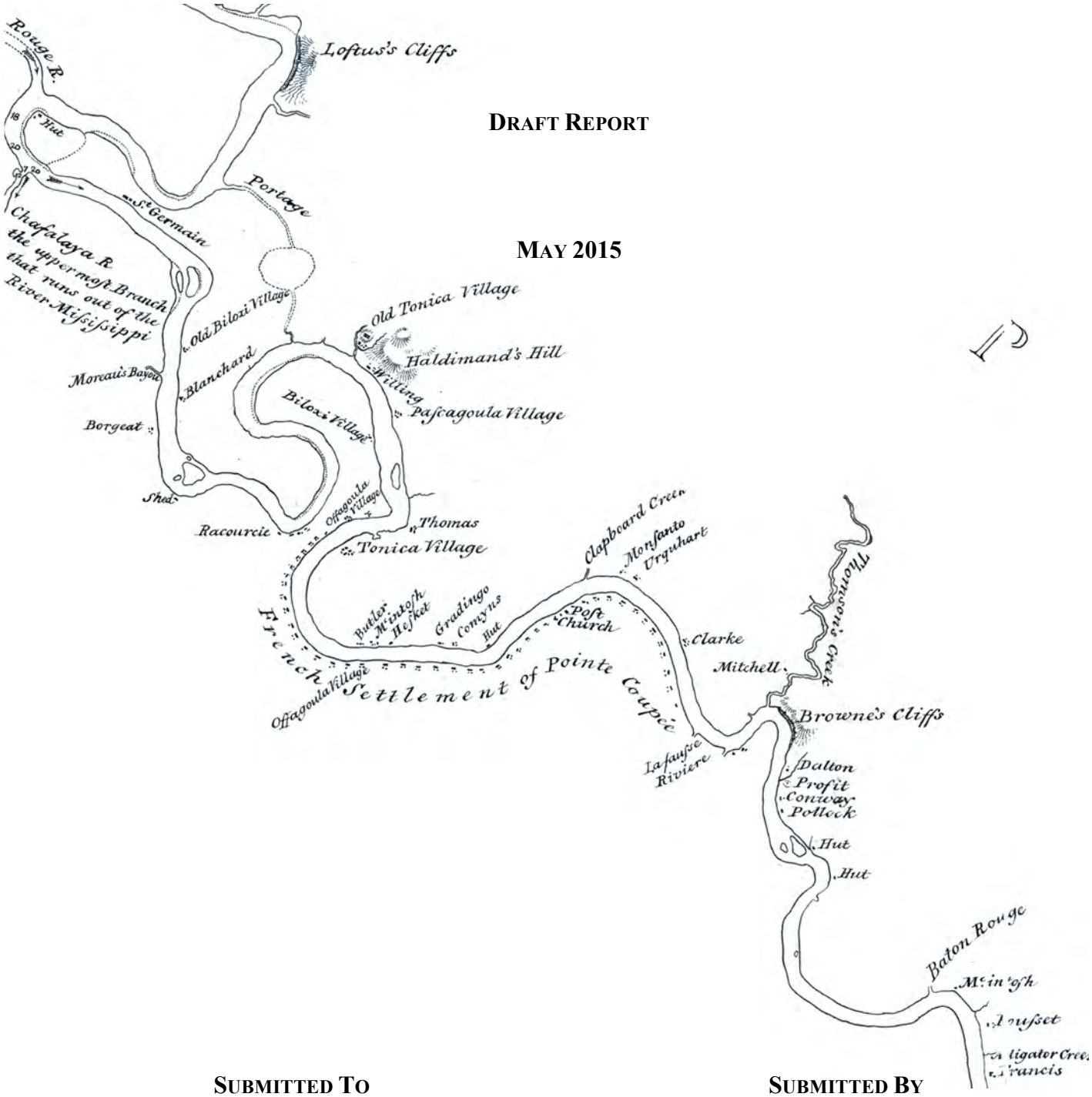
Exhibit FF. Angel Ranch Site Partial Phase I Cultural Resources Assessment Report

PHASE I CULTURAL RESOURCES SURVEY OF THE 81 AC (32.8 HA) ANGEL RANCH TRACT POINTE COUPÉE PARISH, LOUISIANA



DRAFT REPORT

MAY 2015

SUBMITTED TO

BATON ROUGE AREA CHAMBER
564 LAUREL STREET
BATON ROUGE, LOUISIANA

SUBMITTED BY

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

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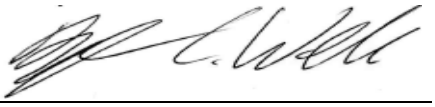
PREPARED BY

MICHAEL CARPENTER
AND
DOUGLAS C. WELLS



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ABSTRACT

In April 2015, Coastal Environments, Inc. (CEI) conducted a Phase I cultural resources and standing structure survey of the Angel Ranch Project Area in 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 Angel Ranch Project Area encompasses back-swamp regions on the west bank of the Mississippi River and encompasses approximately 81 ac (32.8 ha). These investigations located one previously unrecorded archaeological site, Angel Ranch 1 (16PC126), dating to the turn of the twentieth century. Site 16PC126 is recommended as ineligible for inclusion on the National Register of Historic Places (NRHP), and no additional work is required at the site. In addition, no historic standing structures currently stand within the Angel Ranch Area of Potential Effect (APE), which is coterminous with the cultural resources survey area.

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ACKNOWLEDGEMENTS

CEI would like to thank the people who assisted us in our research and fieldwork, particularly the proprietors of Angel Ranch, Bob and Mary Goodyear, who provided access to their property. The Phase I archaeological fieldwork was conducted by Katie Baker, Michael Carpenter, and Phillip Jungeblut on 29 and 30 April 2015. Dr. Douglas Wells served as Principle Investigator for this project, and contributed the majority of the background chapters. 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 Katie Baker. Carpenter and Wells drafted all the non-historic maps presented in this report, while Carpenter created the artifact illustrations.

CHAPTER 1

INTRODUCTION

In April 2015, Coastal Environments, Inc. (CEI) was contracted by the Baton Rouge Area Chamber (BRAC) to conduct cultural resources investigations of the Angel Ranch 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 25 and 85 of Township 4 South, Range 10 East in the Southeastern District (west bank of the Mississippi River), Louisiana (Figure 1-1). The BRAC project area consists of approximately 81 ac (32.8 ha). Of that area, 5.9 ac (2.4 ha) was previously surveyed by CEI (Hahn et al. 2003) in 1994 and 2002 (see cross-hatched area in Figure 1-1). The unsurveyed portion of the project area, constituting 75.1 ac (30.4 ha), was the focus of the present investigations (see Figure 1-1). The Area of Potential Effects (APE) for the project is coterminous with the survey area, as no development is currently planned for the Angel Ranch Project Area.

The project area is located off of Ferry Road (formerly LA Hwy 10) and is part of Angel Ranch, owned by Bob and Mary Goodyear of New Roads. It is located within the historic boundaries of Lakeland Plantation. Background research for this project began in April 2015 and continued throughout the course of the project. The archaeological fieldwork was carried out by a three-member crew, including Field Archaeologist Michael P. Carpenter and Field Technicians Katie Baker

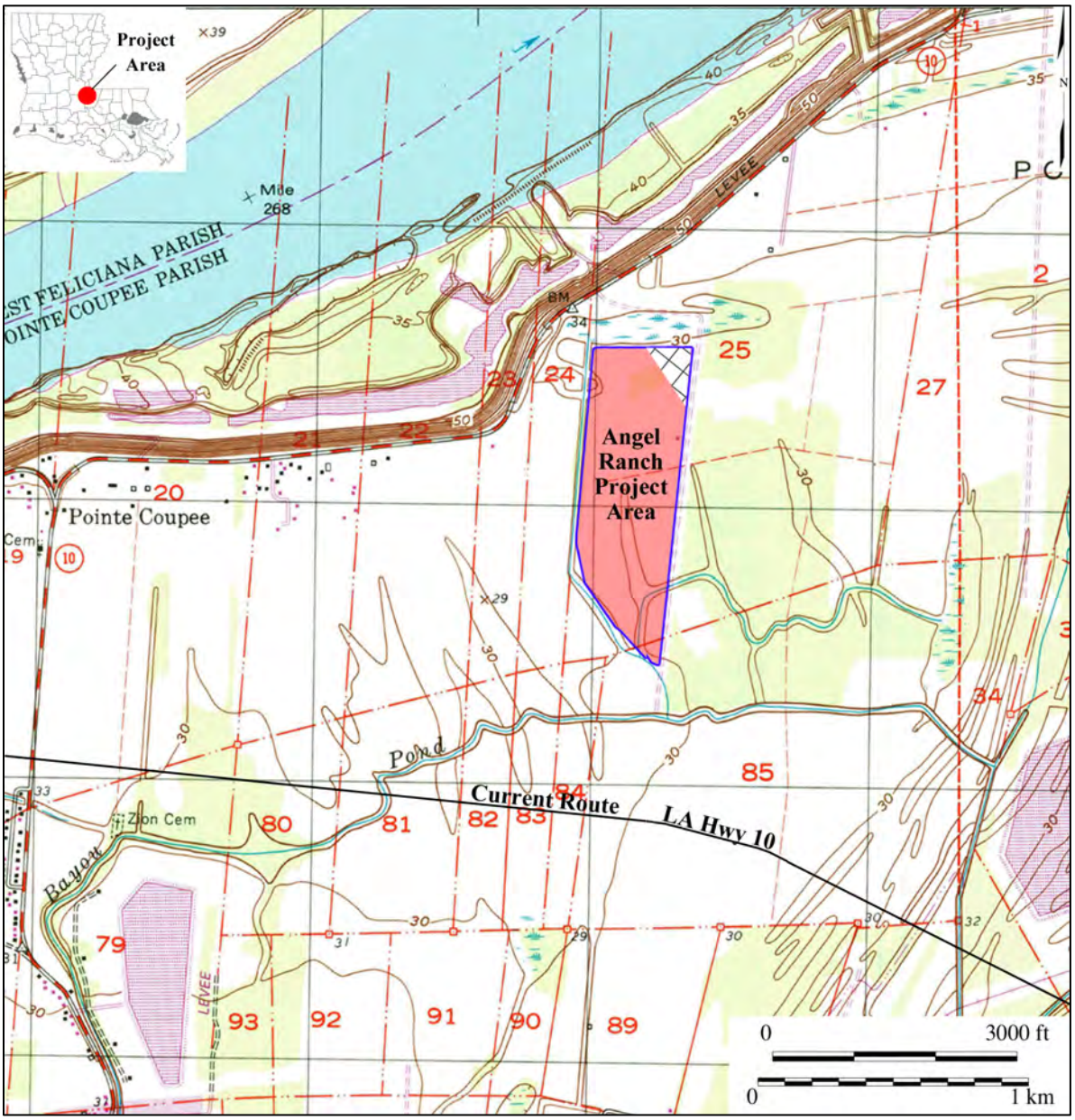

Figure 1-1. The Angel Ranch Project Area, Pointe Coupée Parish, Louisiana. Note the previously surveyed area (cross-hatching) in the northeast corner of the current project area.

and Philip Jungeblut, on the 29th and 30th of April 2015. The goals of this investigation were to locate all cultural resources within the project area and to assess their significance in terms of eligibility for the National Register of Historic Places (NRHP) through guidelines established by the National Park Service (1991).

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

This chapter presents a brief overview of the environment of the Lower Mississippi Alluvial Valley in order to provide a background for understanding past human adaptations to the area.

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 50 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 near shore 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, and Autin et al. (1991) have more recently revised their

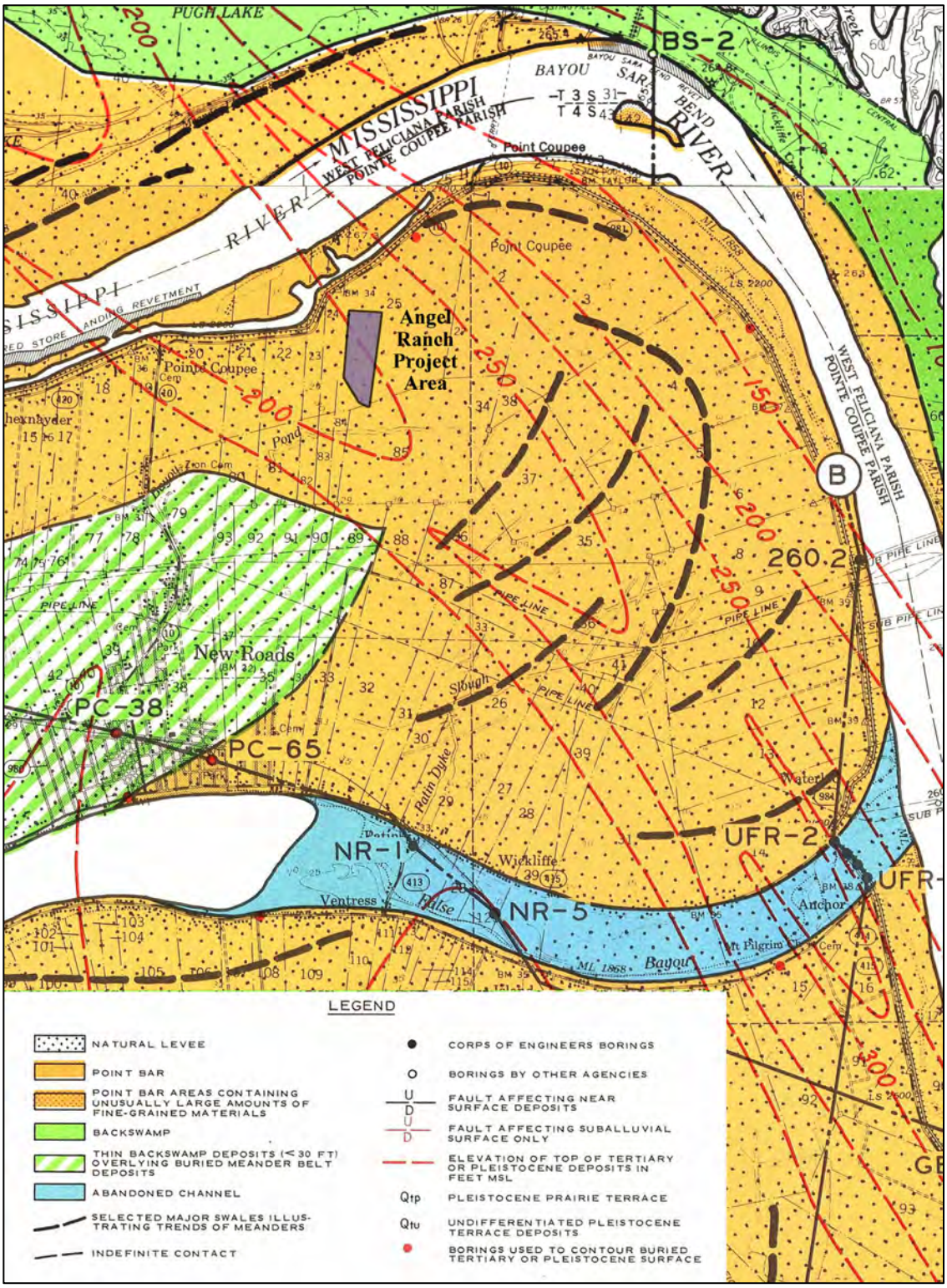

Figure 2-1. Geomorphology of the Angel Ranch Project Area, from Saucier (1969). The project area from is shown in purple.

numbering system, used for this discussion, and updated information on their age. 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 areas. 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 (Saucier 1974:21, Autin et al. 1991). 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 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 given rise to St. Bernard and later deltaic complexes in what previously had been estuarine and near shore 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:Fig. 1). Downstream from there, in the vicinity of the present project areas, they have been 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) has identified what may be portions of meander belt No. 2 from this area. 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; some of this land, particularly in the borrow areas to the west, was formed in late historic times, around the beginning of the twentieth century.

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. 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-wale topography that marks these point bar deposits (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 is an example of an abandoned channel that was cut off in the early eighteenth century.

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 (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 main project area consist of Commerce silty loams and silty clay loams. These Commerce soils, which comprise the highest elevations, are somewhat poorly drained, with low permeability. Further south, away from the natural levee, poorly drained Sharkey-Tunica association soils predominate (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. Further south, in the area known as the Island of Pointe Coupée (between False River and the current Mississippi channel), soils are predominantly of Sharkey-Tunica association. These areas are dominated by ridge-and-swale topography, the higher ridges being occupied by Tunica clays while the low channel remnants are filled with Sharkey clays. These soils are very poorly drained, have low permeability, and are often wet.

Since at least 1834 the movement of the Mississippi River channel has impacted cultural remains within and adjacent to the project area. From the center of the project area, more than 550 m (1,804 ft) of land has eroded into the Mississippi River from the west bank of the river (Figure 2-2). An average rate of 3.68 m (12.07 ft) of land per year was lost to erosion over 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. Further east, there has been comparatively little movement in the Mississippi River channel since the mid-1800s, and the potential for older cultural remains is higher in these areas.

Vegetation

Prior to extensive clearing of the Mississippi River floodplain for agriculture during the eighteenth and nineteenth centuries, it supported a vast bottomland hardwood forest. The forest was characterized by 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*).

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*), eastern chipmunk (*Tamais striatus*), 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

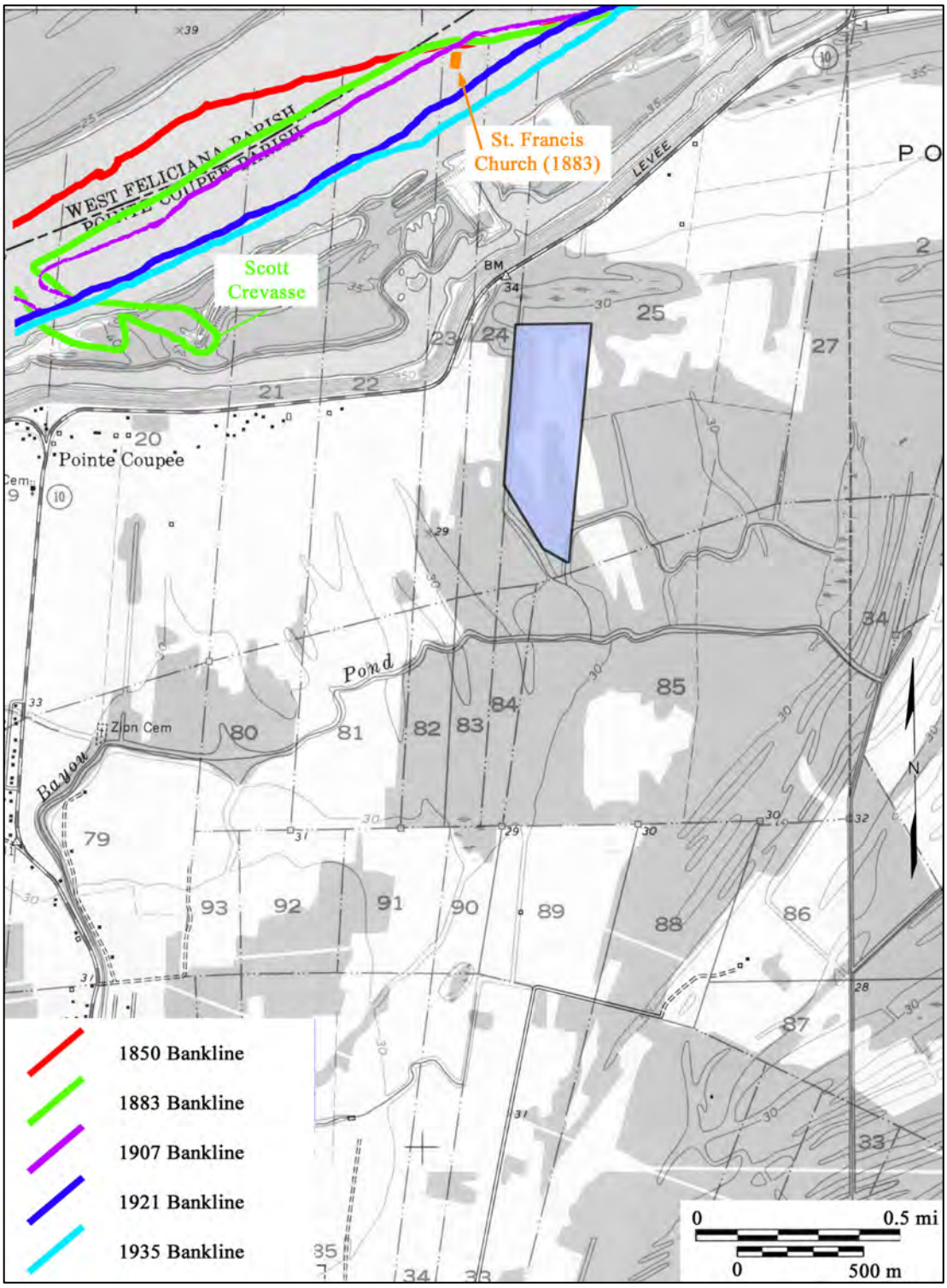

Figure 2-2. Banklines from circa 1850 to 1935 are shown in relation to the project area. Note the positions of the Scott Crevasse, which unleashed devastating floods in Pointe Coupée Parish in 1882-1884 (and possibly earlier), and the original St. Francis of Assisi Catholic Church (as plotted in 1883). Adapted from the 1962 New Roads, LA 7.5" quadrangle (USGS 1962).

recent years armadillos (*Dasypus novemcinctus*) have intruded into the region from neighboring western states.

There are numerous species of birds 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, lake, 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

The currently-accepted cultural sequence for southern Louisiana is presented in Figure 3-1. This 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).

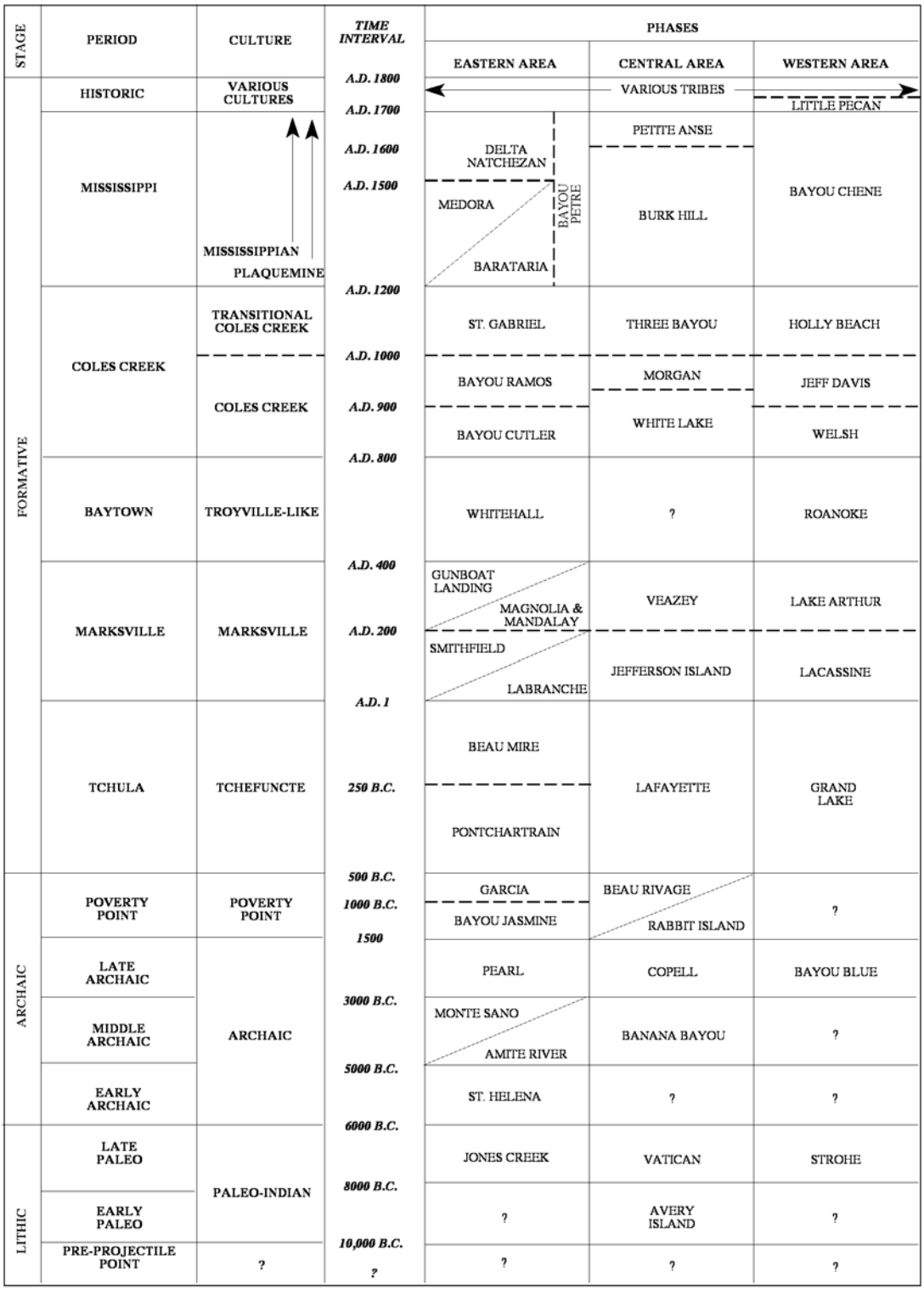

Figure 3-1 Aboriginal culture sequence for south Louisiana.

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; Shea 1978; Jackson 1986).

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), suggest 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 and Kleinpeter 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 2004; 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, 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 Native Americans

The principal aboriginal groups encountered by European explorers in the vicinity of the study area were the Tunica, Chitimacha, Houma, Bayagoula, Ofogoula, and Okelousa. The first recorded contact with the Bayagoula occurred in February of 1699 when a group of Bayagoula and Mugulasha discovered the French at Mobile and attempted to make an alliance (Swanton 1911:274). Shortly afterward, in March, Iberville ascended the Mississippi and visited their village on the west bank of the Mississippi, near the mouth of Bayou Lafourche, at the mouth of the crevasse channel that bears their name. This village site was later the location of the Paris-Duverney concession. Iberville recorded fairly detailed descriptions of the village as well as the material culture and personal appearance of the inhabitants.

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 surrounded by a ten-foot-high cane palisade. The community supported two temples, one for each group. 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, 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. Warfare broke out between the Bayagoula and Houma in 1700, and later that year the Bayougoula attacked the Mugulasha, initiating a devastating war between them. In 1706, the Bayagoula were destroyed as a power on the Mississippi River when the Taensa, their guests, turned on them and destroyed much of what was left of the tribe. The remaining Bayougoula merged with the Houma in the 1730s. Neither they nor the Mugulasha remained a distinct group after that time.

The Okelousa were identified by La Page Du Pratz as being from an area "west of and above Pointe Coupée" (1975 [1774]:317). Beyond this brief reference, however, little is known of the group 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 emphatically states that they are a separate tribal entity (Swanton 1911:30).

There is considerably more documentary information on the Chitimacha, who retain their tribal identity today. Their first contact with Europeans apparently occurred in 1702, for La Harpe notes that in August of that year Bienville learned of a raid on the Chitimacha by a group of Canadians and Indians led by 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 somewhere 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.

Raids between the Chitimacha and Indian groups allied with the French continued until 1718 when Bienville made peace with the tribe, apparently at the request of M. Dubuisson, the manager of the French concession located on the Mississippi River at the old Bayagoula village (McWilliams 1953:216-219). Under the terms of this agreement, the Chitimacha were to abandon their village on or near Bayou Lafourche and settle on the Mississippi one league below the concession. Penicaut states that they moved to the new location two weeks later, and, in fact, maps of the period show a Chitimacha village in that area (Giardino 1984:253).

Swanton (1911) questions whether this represented the entire tribe or simply one portion of it. In 1739, a French officer with the De Nouaille party reported that the Chitimacha settlement on the Mississippi was relatively small because most of the tribe lived with the Atakapas (Swanton 1911:343). After that there are few references to the Chitimacha until the late eighteenth century. In the 1770s Thomas Hutchins, at that time a cartographer in the British army, noted that there was a Chitimacha village located on Bayou Lafourche six leagues from its junction with the Mississippi River (Hutchins 1968:40). He also mentioned two other villages that probably represent Chitimacha settlements located on Bayou Teche. One of these, known as Mingo Luoac or Fire Chief, was situated 10 leagues above the mouth of the bayou. The other, called the village of Soulier Rouge or Red Shoes, was located three and a half leagues farther up (Hutchins 1968:46). Goodwin et al. (1985:207) place the first village on the east side of Irish Bend and the second in the vicinity of modern-day Charenton, the present location of the Chitimacha reservation.

By the early nineteenth century the Charenton settlement seems to have become the principal Chitimacha village on Bayou Teche. The Cathcart expedition of 1819 described it as a row of palmetto-covered cabins, each 50 to 100 yards apart extending for almost 3 mi along the bayou (Newton 1985:108). They also noted two smaller Indian settlements in this area: one a hunting and fishing camp located on Grand Lake near Charenton, and the other, known as Postion's settlement, consisting of three huts located on Berwick Island on the shore of Six Mile Lake (Newton 1985:52-53; 126-127; Prichard et al. 1945:781-782, 837). The expedition recorded another Indian village, this one under the chief Jean Champlain, on Bayou Plaquemine southeast of the present study area (Newton 1985:16; Prichard et al. 1945:760). Although Cathcart does not identify it as a Chitimacha settlement, Jon Gibson (1980:3-7), using land claims data, indicates that the occupants were Chitimacha. He also documents the presence of a second Chitimacha village of this period on nearby Bayou Jacob (Gibson 1980:7-10).

In the 1880s Gatschet conducted ethnographic research among the Chitimacha at Charenton and obtained a list of 15 historic villages (Gatschet 1883). Swanton later added to this list on the basis of his own research in 1907 and 1908 (Swanton 1911). Most of these settlements were located along Bayou Teche or on small streams in the Atchafalaya Basin, but three were situated on or near Bayou Plaquemine. Swanton (1911:352) notes the presence of a large Chitimacha village with a dance house at Grosse Tete, although it is unclear if he refers to the town or the bayou.

When first contacted by Iberville in 1699, the Houma lived on the east side of the Mississippi River in southern Wilkinson County, Mississippi or northern West Feliciana Parish, Louisiana (Swanton 1911:285). At Baton Rouge, the Houma established a territorial marker, "a maypole with no limbs, painted red, several fish heads and bear bones being tied to it as a sacrifice" (McWilliams 1981:65). This *baton rouge*, which may have been associated with a small Houma village, marked the boundary between Bayagoula and Houma territories. Iberville passed this site and went on to visit the principal Houma village, upriver near the Portage de la Croix (Figure 3-2). He noted approximately 140 huts in this village, centered around a 200 yard-wide circular plaza, home to about 350 men and their families (McWilliams 1981:69).

By 1706, the Houma had abandoned their village to the Tunica. It is not clear if this was the result of an attack by the latter group, or if the Houma simply left this area and moved south (Brain 1988:31). They moved first to New Orleans, and later west to Ascension Parish, where they established at least two villages. The "Grand" or "Great" Houma village has recently been identified as the site 16AN35. A second village, "Petite Houmas," may be associated with site 16AN3. In the late 1700's, the Houma sold these lands and moved to Terrebone Parish (Swanton 1911:290-291). The Houma are reported in the Lower Amite Basin as late as 1771 (Weinstein 1974), but by 1777, Bartram (1928 [1792]) made no mention of any native group in this area. Remnants of the Houma still live in Terrebonne Parish today.

As noted above, the Tunica entered the area in 1706 from the Lower Yazoo Basin. Brain (1988:21) believes that they may have originally come from the upper Sunflower River area, where they were encountered by DeSoto's expedition in the province of Quizquiz. Importantly, the Tunica also occupied a village on the west bank of the Mississippi, in present-day Pointe Coupée Parish (Brain 1988:30-34); undoubtedly they would have exploited the backswamp and levee-top resources inland from their village. Facing pressure from more aggressive groups to the north, including the Natchez, the Tunica moved to a new location on Tunica Bayou in 1731, downstream on the east bank

Figure 3-2. A portion of Guillame de L'Isle's (1702) *Carte de la rivière de Mississipi [sic]: sur les Mémoires de M. Le Sueur qui en a pris avec la boussole tos les tours et detours depuis la mer jusqu'à la rivière St. Pierre, et a pris la hauteur de pole en plusieurs endroits / par Guillaume de L'Isle geographe de l'Academie des Sciences.* Note the positions of the Bayogoula, Houma ("Ouma") and Chitimacha ("Toutimacha") villages, as well as the portage at the base of the Pointe Coupée cutoff. The river subsequently cut through this portage, creating False River and Pointe Coupée.

of the river. Allied to the French, a party of Tunica and other groups fired on a British expedition heading upriver in 1764, killing five, and had to flee their village for the safety of Mobile. They returned later that year to Pointe Coupée, settling on the opposite (east) side from the growing French settlements there. By the 1790's, most of the tribe had moved to the area of present-day Marksville, and have remained there ever since.

George Gauld's (1778) map depicts two "Offagoula" villages on the Mississippi River just upstream from the Pointe Coupée settlements (Figure 3-3). The Ofogoula (Ofo) were one of the "Petites Nations" closely tied to the French during colonial times, and in fact are one of the groups associated with the attack on the 1764 British expedition up the Mississippi River. 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 were found in the Yazoo Basin, but refused to aid the Yazoo and Koroa in attacks on the French. Fearing reprisals, they subsequently moved downriver to reside near their allies, the Tunica, 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).

Historic Cultural Setting

European Exploration 1542–1710

European exploration of this area began in 1542 when the survivors of the De Soto expedition passed down the Mississippi River on their way to the Gulf, but extensive European contact did not occur until the late seventeenth and early eighteenth centuries. In 1682 an exploring party led by Rene Robert Cavelier, Sieur de la Salle, traveled from French Canada down the Mississippi River to its mouth and there laid claim 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 that he founded on Matagorda Bay soon failed, and several years passed before the French crown was willing to finance another attempt. Finally in 1698 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. The following year they arrived in North America and selected a site near Biloxi for their base (Wall 1984:9-13).

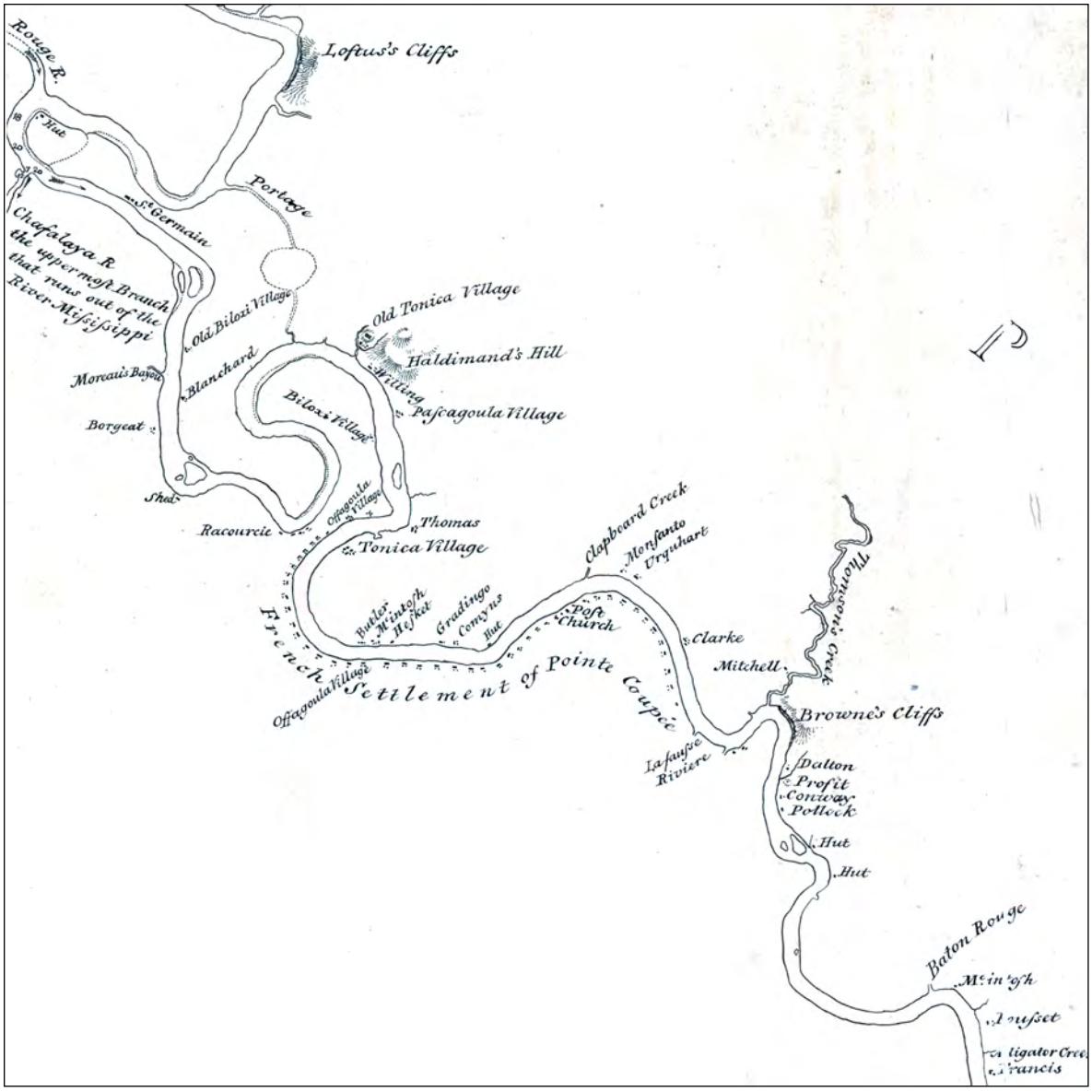

Figure 3-3. Settlement in the Pointe Coupée area in 1778 as depicted in George Gauld's *A Plan of the Coast of Part of West Florida and Louisiana including the River Mississippi from its entrances as high as the River Yazous.* Note the growth of settlement on the west bank of the river, from the mouth of the False River cutoff ("La fausse Riviere") to the Offagoula (Ofo) village near "Raccourcie." A second Offagoula village is shown within this area of settlement, not far downriver from the Morganza crevasse. The "Post" and "Church" depicted within this settlement are the colonial military post and St. Francis Church, respectively. Both fall just north of the project area, and were taken by the Mississippi River by the first or second decade of the twentieth century. Note also that the designation for modern-day Bayou Sara is "Clapboard Creek." This is a gentrification of its earlier names, Rivière a la Chaude Pisse and Clap River.

In that same year, Iberville led an exploring party up the Mississippi River to the vicinity of the mouth of Red River and then returned by way of Bayou Manchac and Lakes Maurepas and Pontchartrain. The Pointe Coupée cutoff at False River was in the process of forming at that time. André Pénicaut described the neck of the cutoff as "no more than a gunshot wide" (Pénicaut in McWilliams 1953:26) at the time and Iberville and his men portaged their craft across the neck. A small channel cleared across the neck soon diverted the flow of the Mississippi River through the narrow strip of land forming the cutoff at Pointe Coupée.

French Colonization 1710–1763

The first European settlement in the vicinity of the present project area was apparently established by French Canadian trappers at Pointe Coupée in the first or second decade of the eighteenth century (Curet 1969:1). In 1717 Bienville established a post there, and shortly thereafter land grants were offered in the area. One of the largest of these grants was the St. Reyne concession, located opposite False River in West Feliciana Parish. Most of these concessions were owned by members of the board of directors of the Company of the West, which ran the colony for the French crown. The owners generally resided elsewhere, and the concessions were operated as agricultural plantations by small numbers of *engagees* and slaves.

In January 1720, Jean Daniel Kolly and Francois Mathieu de Vernesobre de Laurieu organized two concessions under the appellation *Saint Reyne Colony* (Giraud 1966:3:197)—one in present-day West Feliciana Parish and the other in Jefferson Parish. 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, *Saint Reyne* met with almost instant financial disaster, the monetary notes issued to fund the colony considerably depreciating within a year of its charter (Giraud 1974:4:92). Kolly, who was also involved with the St. Catherine concession at Natchez, appears to have been reluctant to give up on the venture and absorbed most of the losses himself (Giraud 1974:4:109).

Kolly and Vernesobre de Laurieu selected an area opposite the upper arm of present-day False River (Figure 3-4) to establish one of their fledgling colonies. Although the precise location of *Saint 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

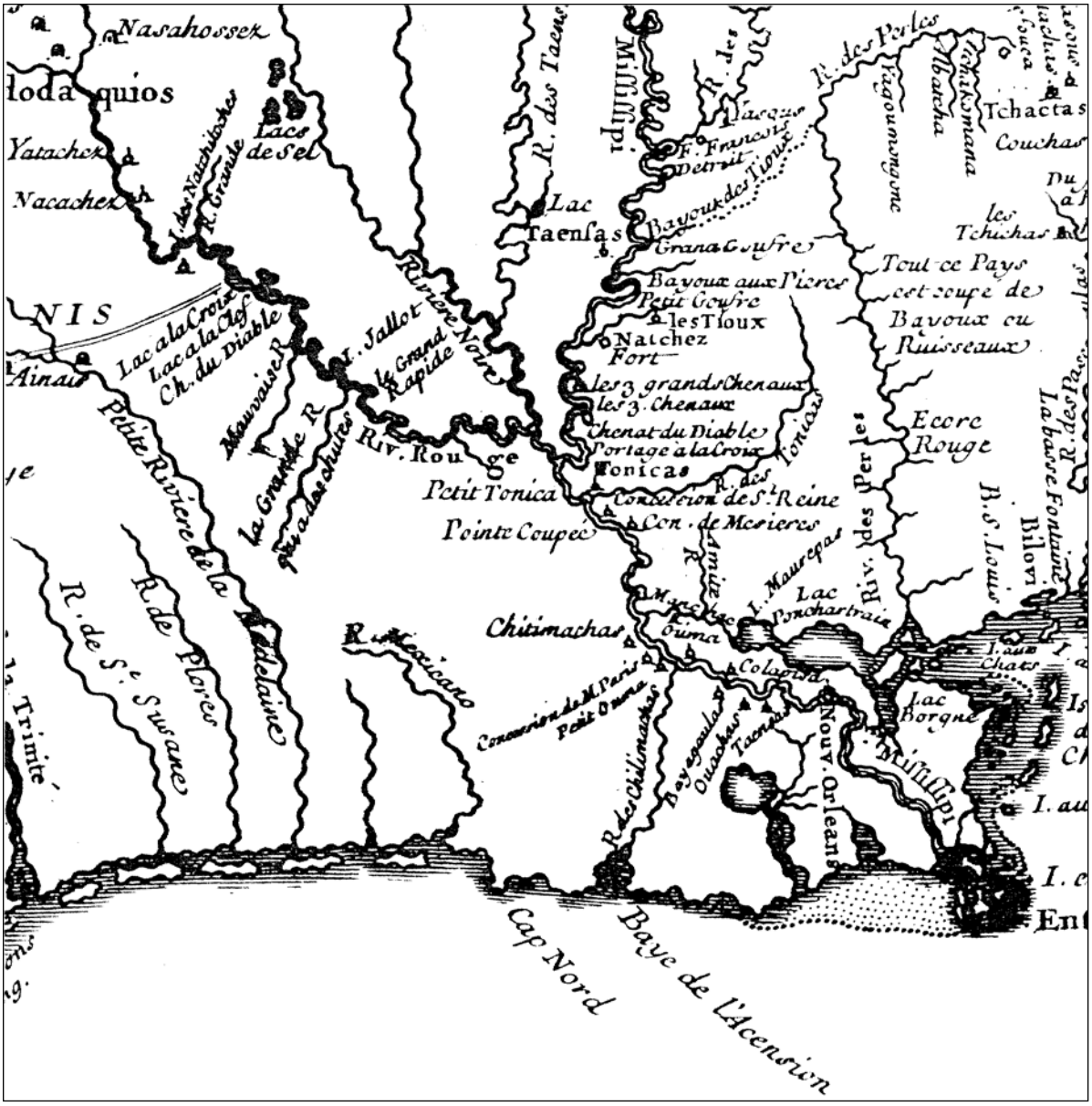

Figure 3-4. Portion of *Carte de la Louisiane Cours du Mississippi et Pais Voisins* (Bellin 1744, in O'Neill 1977:xxxiii). Based largely upon the 1720-1722 observations of Pierre F.X. de Charlevoix, the map depicts the approximate locations of the St. Reine and de Mézières concessions. "R. des Tonicas" refers to present-day Tunica Bayou at the community of Tunica.

(Figure 3-5). 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. Additionally, the river was located much closer to the bluffs during the early eighteenth century and there was much less land there to develop. 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 transportation link. Although *Pointe Coupée* is now used in reference to the False River area on the west bank of the Mississippi River, during the early colonial period it referred instead to the area of the actual cutoff on the east bank of the river, between the present-day communities of Powell and Port Hudson. The only other European development in the area at this early date was the concession of Marquis de Mézières and his wife at *Ecores Blancs* (see Figure 3-4), in the vicinity of present-day Port Hudson.

It is unclear how many people settled at *Saint 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 *Saint Reyne* concession, had a population of 62 men, 12 women, five children, 46 black slaves, and two Indian slaves in November 1721 (Conrad 1970:5), and it is likely that the population of the West Feliciana concession was considerably less. When Pierre F.X. de Charlevoix visited the Pointe Coupée concession on 30 December 1721, he described the settlement less than glowingly:

> . . . 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 [de Charlevoix in O'Neill 1977:163].

Similarly, de Charlevoix (in O'Neill 1977:163) described de Mezières' *Ecores Blancs* as consisting only of "(a) few huts covered with the leaves of trees, and a large tent made of canvas."

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 *Saint Reyne* concessions experienced rapid depopulation in 1721 as many of the French colonists returned home or moved to other concessions (Giraud 1987:5:160). By May 1722, Kolly and Vernesobre de Laurieu's Tchoupitoulas concession had declined in population to 12 men, one woman, one child, and two black slaves (Conrad 1970:8). In that same year, the Pointe Coupée *Saint Reyne* concession had a population of 15 men, 5 women, two children, and 19 black slaves.

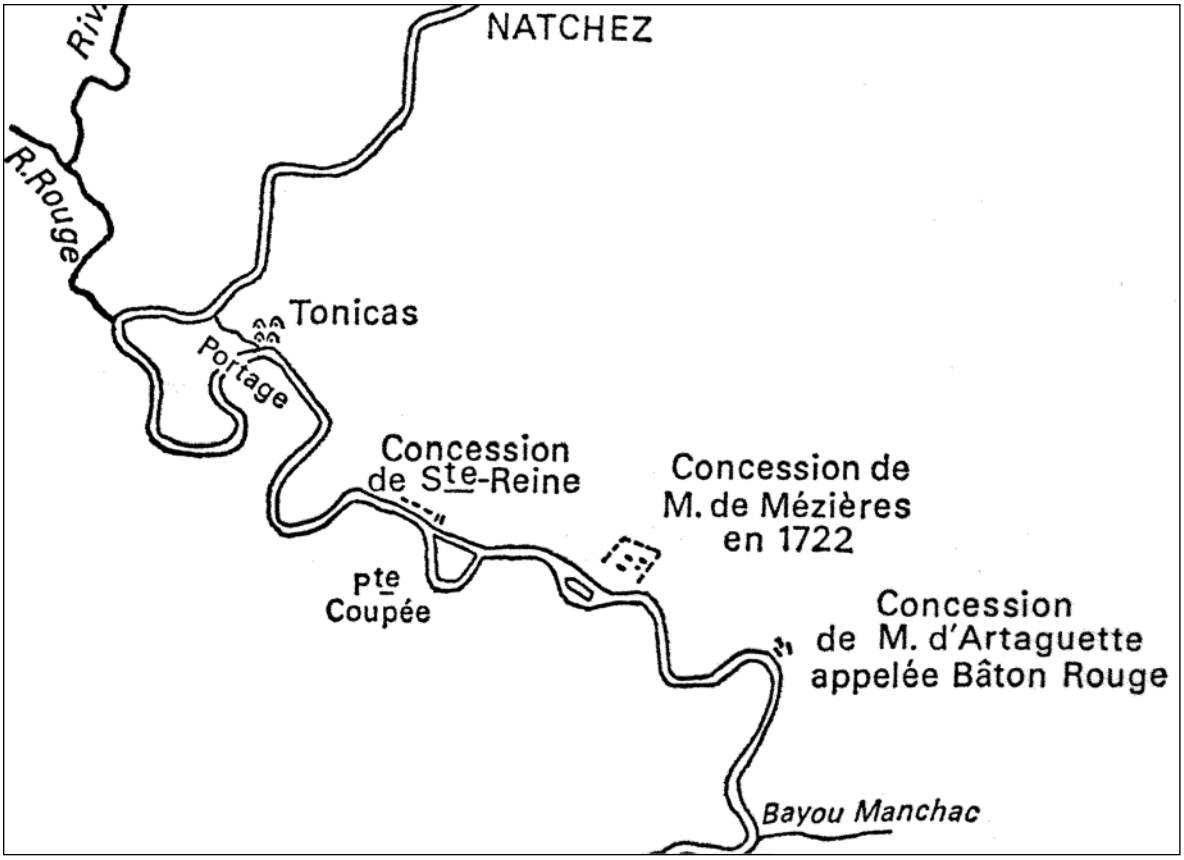

Figure 3-5. The locations of the St. Reine and de Mézières concessions in the 1720s (Giraud 1974:251). "Concession de Ste. Reine" was located between present-day Grant's Bayou and Thompson Creek while "Concession de M. de Mézières" was located near present-day Mt. Pleasant, in East Baton Rouge Parish.

Ecores Blancs, meanwhile, had a population of only 14 men, sixwomen, and three black slaves (Conrad 1970:8). Kolly, himself, apparently resided on his Tchoupitoulas concession during this period.

The financial status of *Saint 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, 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 1974:4:94). 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 1987:5:144).

By 1724, the Pointe Coupée concessions were virtually gone. Many of the inhabitants of both *Saint Reyne* and *Ecores Blancs* who were unable to return to France (particularly indentured servants whose repatriation efforts were often blocked) left the concessions and moved into the surrounding area (Giraud 1987:5:160, 178). This exodus left only ten indentured servants at *Saint Reyne* and nine at *Ecores Blancs* by January 1726. There were, however, four households outside of the Pointe Coupée concessions. These four households were comprised of six white males, three white females, eight children, and four indentured servants, who between them had cleared a total of 29 arpents (24.54 ac or 9.93 ha) of land (Conrad 1970:27, 32).

Unfortunately for Kolly, he and his son arrived at the St. Catherine concession at Natchez just prior to the Natchez uprising of 1729–1730. Both Kolly and his son were killed, as well as his servant (Conrad 1970:131). The Natchez uprising resulted in the abandonment of many of the Natchez concessions and a retreat to the New Orleans area for many of the colonists. Although both Pointe Coupée concessions were largely abandoned about that time as well, there were still 15 blacks living at *Ecores Blancs*. Additionally, there were seven farms at Pointe Coupée. Those seven farms, inhabited by seven white males, six white females, four children, two indentured servants, and 13 black slaves, comprised the entire population of West Feliciana in 1731 (Conrad 1970:60) (Figure 3-6).

During the early colonial period, both sides of the river were under French control and under the religious jurisdiction of the Bishop of Quebec. The military post, originally established at

Figure 3-6. Pointe Coupée and surrounding areas as depicted in 1732 on the *Carte de la Louisiane par Sieur d'Anville* (Giraud 1987:383). Note the position of the "Fort de la Pointe Coupée" and the "Rve. a la Chaude Pisse" (Bayou Sara).

Waterloo, near the upper arm of the False River cutoff, was moved in 1722 to what became the town of Pointe Coupée, near the modern St. Francisville ferry landing, just to the north and east of the project area.. In 1738, St. Francis of Assisi Church was erected along the shore of the Mississippi River near the post. The church apparently deteriorated relatively quickly for it was replaced in 1760. Four years after the second church was erected on the river north of the current project area, an adjoining cemetery was consecrated (Yakubik et al. 1994:115; Costello 1999:5). The only Catholic church in the area until the establishment of St. Mary's Catholic Church in New Roads in 1823, St. Francis church served residents from Pointe Coupée and the Florida parishes.

As a result of the Seven Years War, France ceded all of her holdings east of the Mississippi River and north of the Isle of Orleans to Great Britain and all of the remainder of Louisiana to Spain. The 1763 Treaty of Paris, which brought the war to an official end, also resulted in Spain turning all of Florida over to Britain. Hence, all of the lands east of the Mississippi River, with the exception of the Isle of Orleans, were placed under British control while all of those west of the river came under Spanish rule (Wall 1984:32) (Figure 3-7).

Spanish Pointe Coupée 1763–1803

Unlike the English, who immediately took control of West Florida, Spain was rather languid in asserting Spanish control over the colony of Louisiana. Indeed, it was almost three years after acquiring Louisiana in 1763 that Spain sent a governor to the colony in the form of Antonio de Ulloa. Even after arriving in Louisiana, it was not until January 1767 that Ulloa took formal possession of the colony. 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 (Wall 1984:33, 35-38, 40). Spanish control was not firmly established in the colony until the arrival of Governor Alejandro O'Reilly in July 1769. The Pointe Coupée settlements and the French fort located there, which was subsequently occupied by the Spanish, are depicted in 1765 by Lt. John Ross (see Figure 3-7) and in 1778 by George Gauld (see Figure 3-2).

Shortly after Spain acquired Louisiana, large numbers of Acadians began moving into the colony, many of whom were settled in the Pointe Coupée area. The Acadian settlers joined the French colonists who were already there and were later joined by growing numbers of Anglos. Pointe Coupée was well settled by the time O'Reilly took office with houses "about a gun shot distance from one another" (Fabel 1993:416). The residents of the area grew tobacco and indigo as

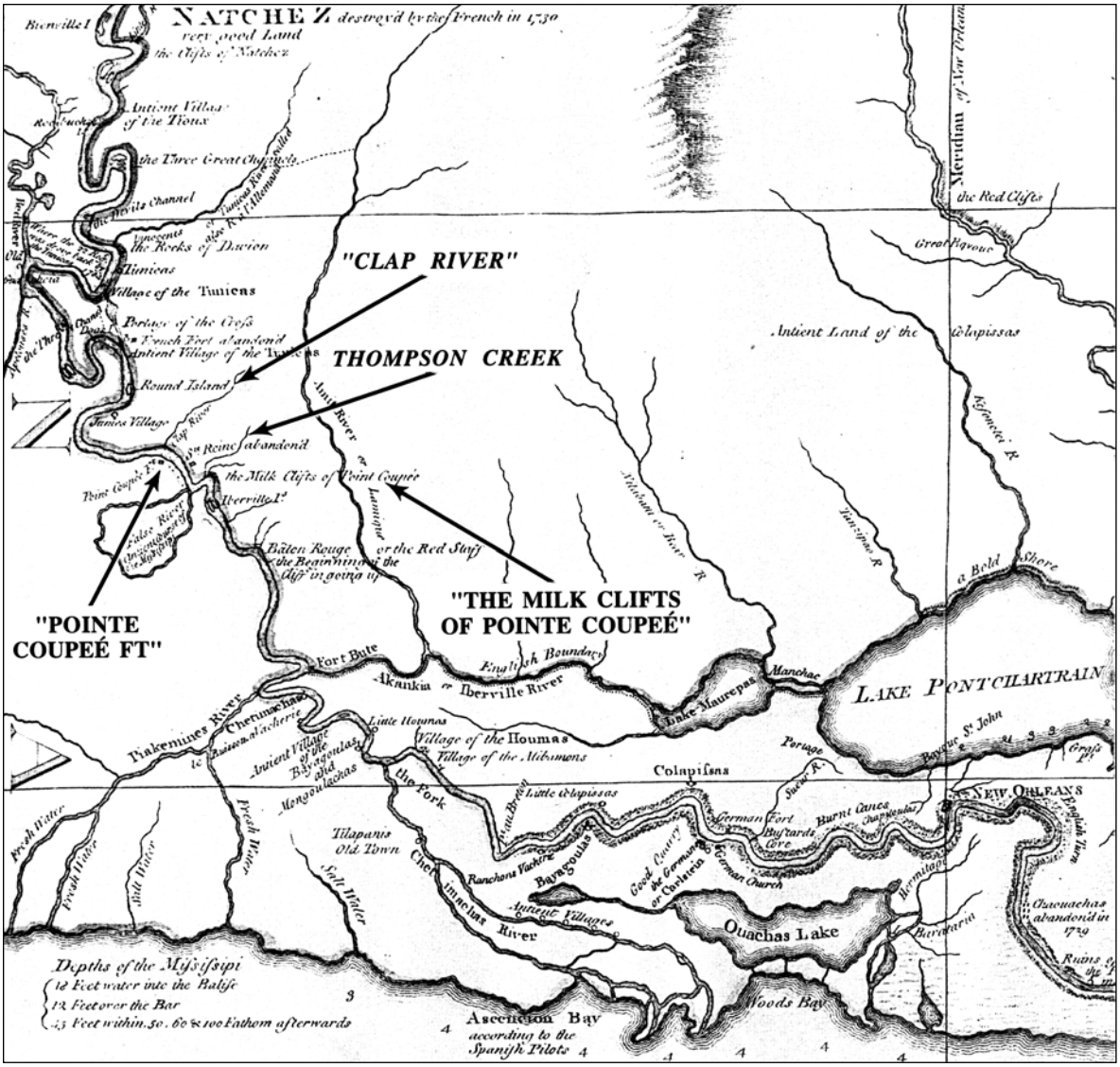

Figure 3-7. Pointe Coupée in 1765 as depicted by Lieutenant John Ross' (1772) *Course of the Mississippi River, from Balise to Fort Chartres*. Note the position of the "Pointe Coupée Ft" and "Clap River" (formerly Riviere Chaude Pisse, now Bayou Sara), as well as settlements on either side of the river in the modern Pointe Coupée area.

a cash crop when the district came under Spanish rule (Davis 1959:111; Wall 1984:78). 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 sugar cane (Fortier 1909:I:589). All of these cash crops required slave labor for their successful harvest and by 1768 there were 7,000 slaves in Pointe Coupée as compared to 2,000 whites (Pittman 1973:34). This ratio created tension in colonial Louisiana, particularly after the successful St. Domingue slave uprising that began in 1791. In 1795 a conspiracy among the slaves of Pointe Coupée, centered on Julien Poydras' plantation, was uncovered when slave owners were alerted by informants among the Tunica. The subsequent trial led to the hanging of 23 to 26 slaves, while others were sentenced to hard labor (Faber 2011; Holmes 1970). The heads of the conspirators were nailed to poles along the banks of the Mississippi River between New Orleans and Pointe Coupée.

Spain allied itself with France and the American Colonies in the American Revolution and declared war against Britain in June 1779. Lieutenant Colonel Alexander Dickson, the commander of the British forces in Baton Rouge, constructed Fort New Richmond at Stephen Watts and Samuel Flowers' plantation in what is now downtown Baton Rouge. By the end of September, the Spanish, under the direction of Governor Bernardo de Galvez, captured the fort (which he renamed Fuerte San Carlos) in the first Battle of Baton Rouge. As a result of the battle, Spain controlled the Mississippi River south of Natchez. Galvez also seized the British posts at Manchac and Pensacola, effectively ending British control of West Florida (Dalyrimple 1978:29; Davis 1959:93-95; Wall 1984:60-61).

Pointe Coupée, along with the rest of the colony of Louisiana, remained under Spanish control until it was transferred to France by the Treaty of St. Ildefonso on 1 October 1800. As when the Spanish acquired the colony in 1763, the French did not take immediate possession of Louisiana. Rather, formal possession was not taken until 30 November 1803, seven months after the United States made the Louisiana Purchase. The American government, in turn, did not take possession of the territory until 20 December 1803 (Wall 1984:65-68).

Pointe Coupée Parish 1803–DATE

Under the territorial government of the United States, Pointe Coupée County was one of the 12 original counties in the Territory of Orleans. Three years later the parish of Pointe Coupée was formed, the boundaries of which have largely remained unchanged. Cotton, which had been

introduced to the area in 1802, was widely grown as a cash crop by the time the parish was created. Sugar cane was also a major crop during the early nineteenth century. The cultivation of both cotton and sugar required a large (and relatively inexpensive) labor force, one that was formed by ever increasing numbers of slaves. In 1811 the slaves of the German Coast (St. John the Baptist and St. Charles Parishes) went into open revolt, killing several whites and burning a number of plantations on their way to New Orleans. The revolt was quickly suppressed and 66 slaves killed (Wall 1984:99-100). As in the 1795 rebellion, the heads of the conspirators were displayed along the banks of the river in the weeks that followed.

A building located adjacent to the St. Francis of Assisi Church was used as the judicial seat of the area during both the French and Spanish colonial periods. The only Catholic church in the area, many of the residents from West Florida patronized the church (Figure 3-8). Indeed, St. Francisville may have derived its name from the church. Both the church and the municipal building were located immediately down river of the present community of Pointe Coupée. The judicial building was used as such until it burned down in 1846. In 1848 a new courthouse was erected at the nearby community of New Roads to serve area planters (Fortier 1909:2:247, 314-316). Within the project area, sugar production was well underway by the late 1820s, and William Taylor's Lakeland Plantation featured prominently in the sugar records from the antebellum period into the 1880s (Champomier 1844-1862; Bouchereau 1869-1917; Degelos 1892) (Figures 3-9 to 3-11). The population of the parish continued to increase during the antebellum period; by 1860, there were a reported 3,650 whites, 750 free blacks, and 11,000 slaves residing in Pointe Coupée Parish (Hahn et al. 2003:37).

Despite the fact that nearby Port Hudson was the site of one of the pivotal battles of the Civil War, Pointe Coupée saw limited 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). Although there were several skirmishes 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

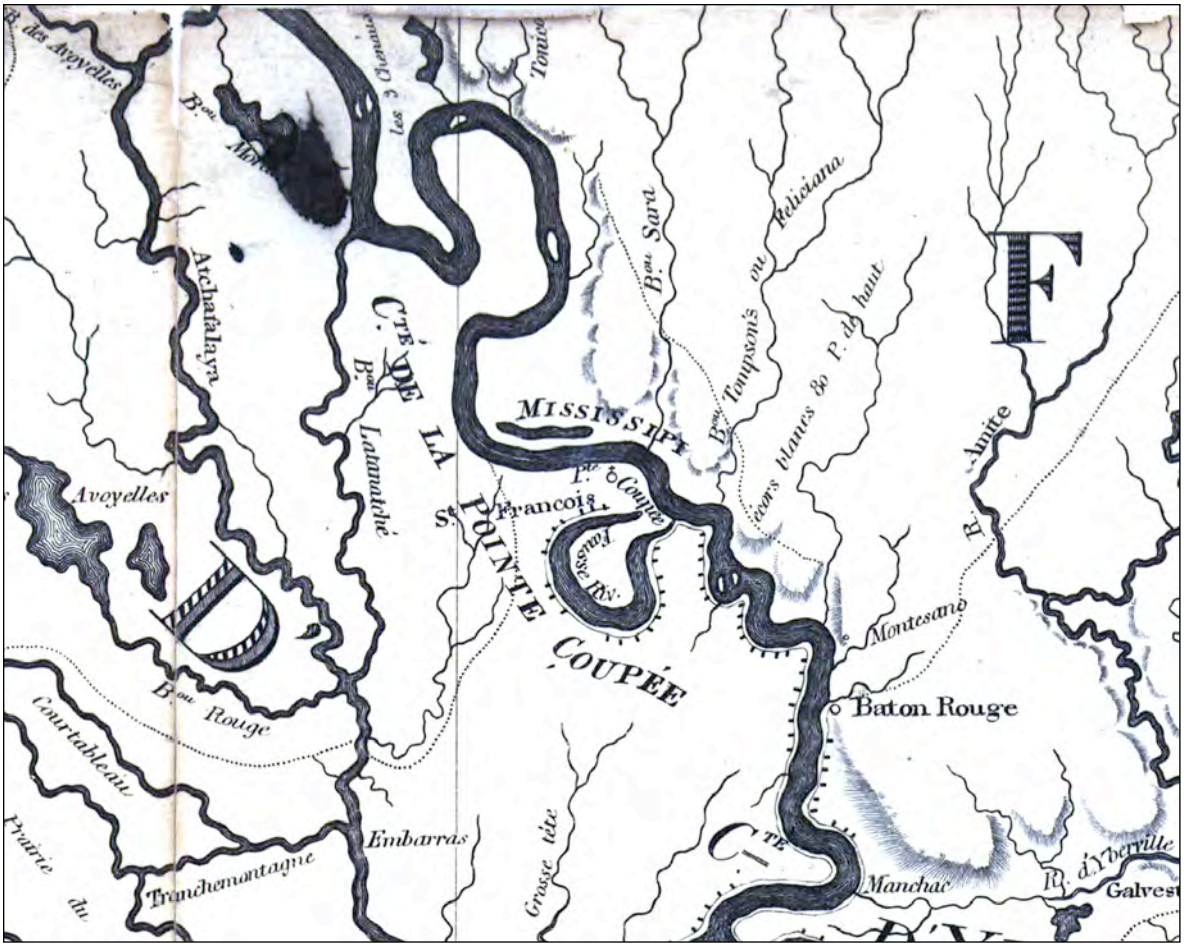

Figure 3-8. Portion of Barthélémy Lafon's 1806 *Carte Générale due Territoire de Orléans Comprenant aussi la Floride Occidentale et une Portion du Territoire du Mississipi* depicting the Pointe Coupée area. Note "St. Francois" church and the modern name Bayou Sara. The map also depicts several roads, at least one of which leads from modern-day Morganza westward across the Atchafalaya Basin and ultimately to the Attakapa post.

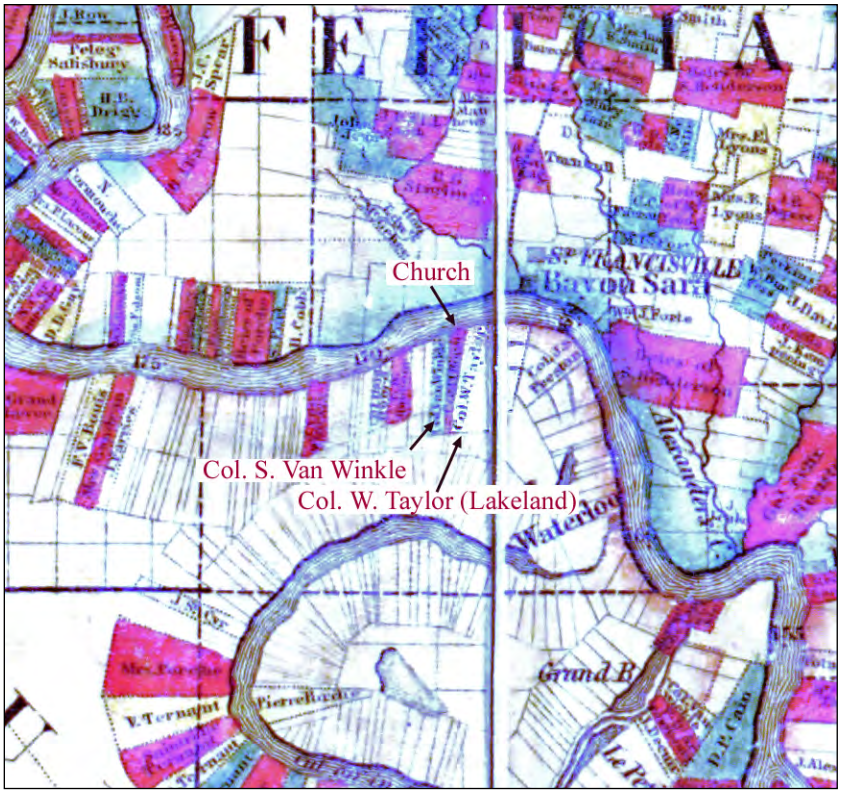

Figure 3-9. A portion of John Latourette's 1846 *LaTourette's Reference Map of the State of Louisiana from the Original Surveys of the United States Which show the Spanish Grants, Townships, Sections, or mile squares, Settlement Rights & C. also the Plantations with the Owner's names Engraved thereon.* At this time, Colonel William Taylor, a cousin of General (later President) Zachary Taylor, owned the land within and adjacent the project area (Lakeland Plantation). Colonel S. Van Winkle was the other major landowner, just west of the current project area.

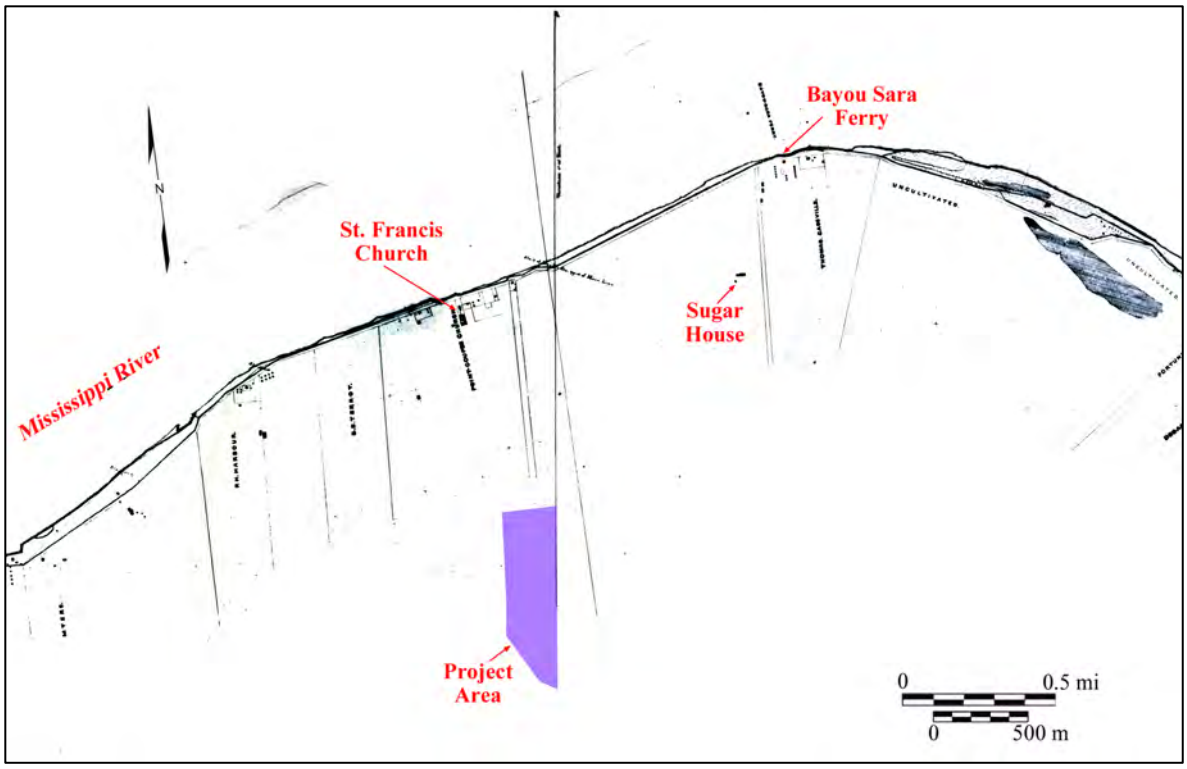

Figure 3-10. A portion of Humphreys and Abbot's 1858 chart *Mississippi River from Red River Landing to Carrollton (New Orleans)* (Humphries and Abbot 1858:Sheet VI), surveyed in 1850-1851. This is the first map to provide precise locations of buildings in the area. Note the sugar house northeast of the current project area. This was probably part of William Taylor's Lakeland Plantation, recorded as Bouvard Sugar House (16PC110) by Wells and McCarthy (2014).

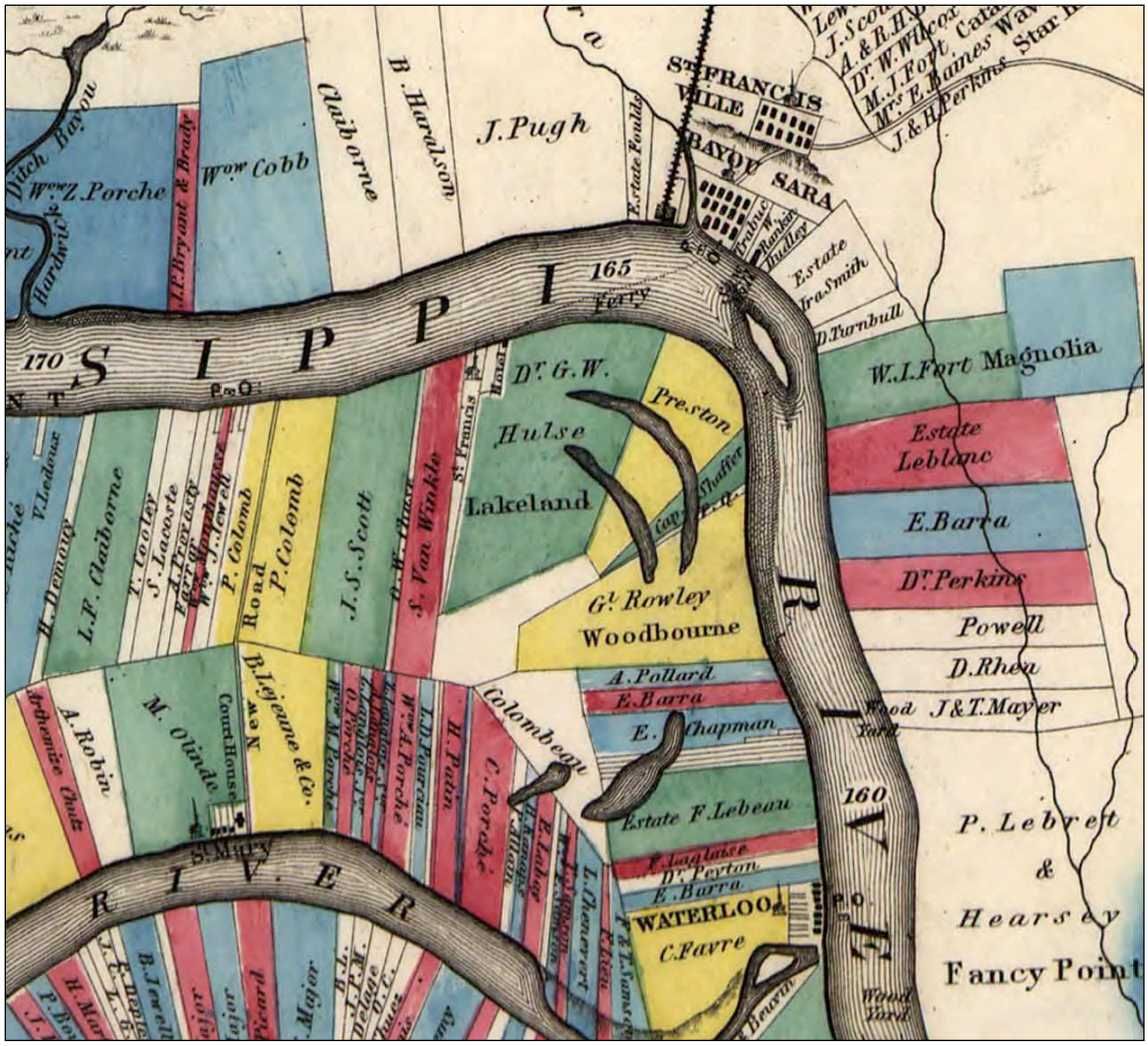

Figure 3-11. Adrien Persac's 1858 *Norman's Chart of the Lower Mississippi River*, showing the project area as part of Lakeland Plantation, then owned by Dr. G.W. Hulse (Persac 1858). Colonel S. Van Winkle is still designated as the owner just west of the current project area. Note the location of St. Francis Church, as well as the hotel at the Bayou Sara ferry landing.

captured and one wounded. By comparison, the Confederates lost one killed and two captured (Winters 1963:412).

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 sharecropping, planters were able to salvage some of their previous holdings and cotton, sugar cane, 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 (Figure 3-12). The roads that were developed to reach these house sites have largely been abandoned since the mid-twentieth century.

Despite the coming of the Texas and Pacific Railroad in 1898-1899 (Costello 1999:16), the Mississippi River remained the primary communications and trade link for the project area well into the twentieth century. Steamboats plied the river constantly, ranging from small working boats to gigantic packet boats that could haul thousands of bales of cotton and hundreds of passengers. Among the most notable of these was the *J. M. White*, built in 1878, one of the largest and fastest boats making the run between New Orleans and Vicksburg in the late 1800s. The *J. M. White* was 321 ft long and 91 ft wide, powered by ten 42-in-wide boilers that turned paddlewheels that were 44 ft in diameter. The boat could carry up to 10,000 bales of cotton, and her dining room could seat 230 guests. She was also among the most sumptuously appointed boats of her time (Figure 3-13), outfitted with stained glass windows, gilt chandeliers, furniture and paneling of bird's-eye maple, rosewood, satinwood, oak, ash, ebony and burled walnut, satin chairs, hot and cold water in the bathrooms, monogrammed silverware and china, a silver-plated water cooler, and a concert grand piano (Way 1983:234-235).

However, the *J. M. White* is remembered more for her spectacular death rather than her lavish appointments. On 13 December 1886, she was anchored at the Blue Store Landing, just off St. Maurice Plantation (7.1 km west of the current project area), when she caught fire and exploded, killing anywhere from 20 to 60 people—no passenger list survived the fire, and deck passengers, largely African-Americans, would probably not have been listed (*The Times-Picayune* 1886). The cause was never satisfactorily determined; eyewitness accounts had the fire starting with the cotton on the deck, or in the engine room. The boat was carrying at least 3.500 bales of cotton and

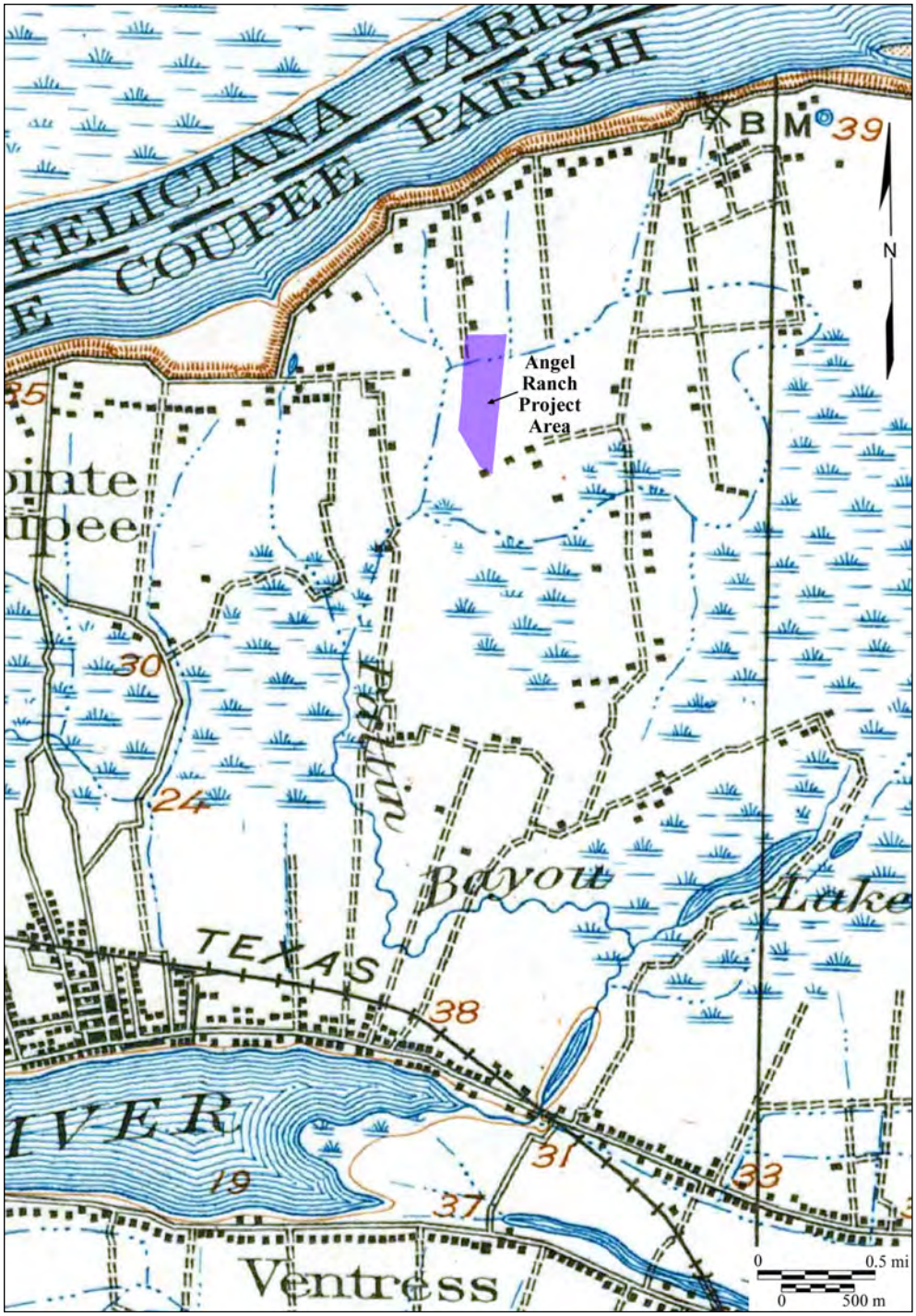

Figure 3-12. The project area, shown here in purple, projected onto the 1906 *Bayou Sara, LA* 7.5" minute quadrangle (USGS 1906). While the map is not consistent with more recent quadrangles or aerial photography, and the project area can only be shown in an approximate position, it does depict the settlement boom of the early decades of the twentieth century, particularly in the more marginal lands to the south of the natural levee of the Mississippi River.

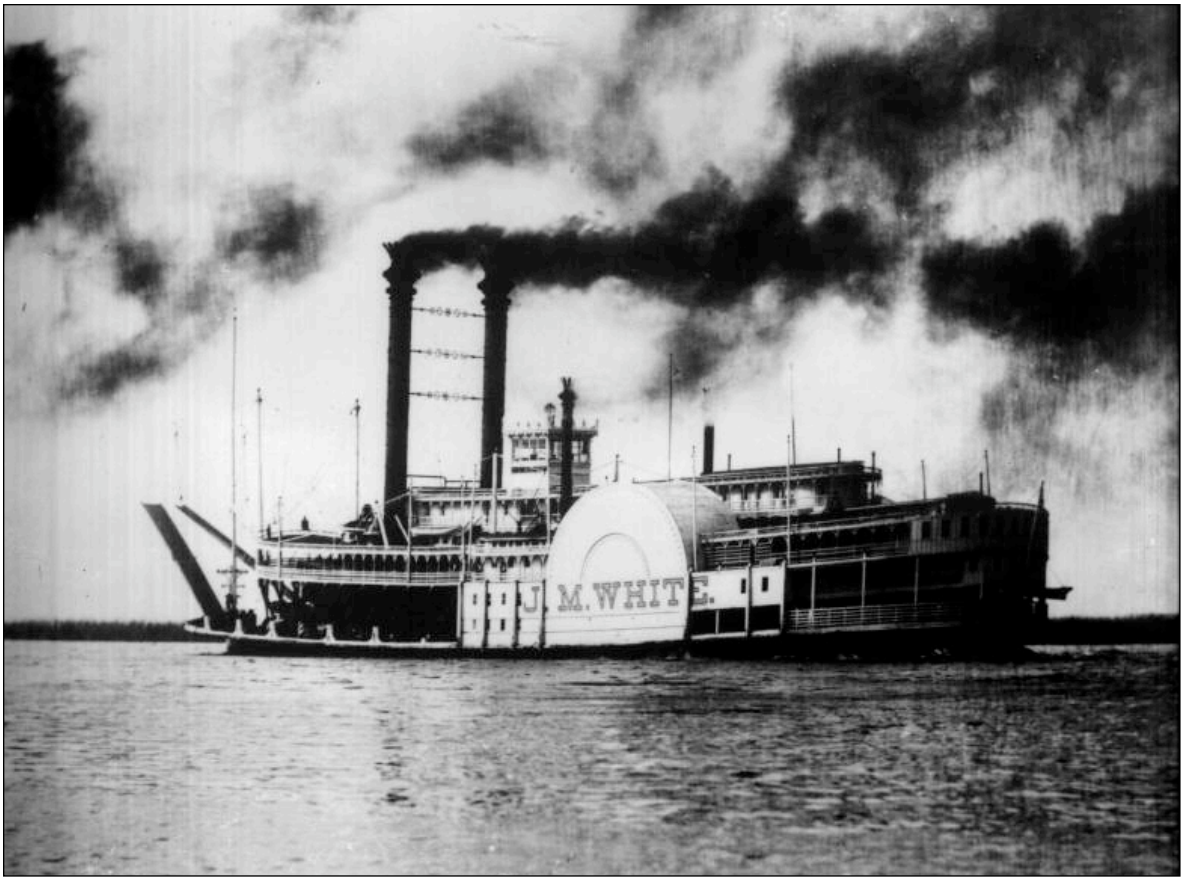

Figure 3-13. The steam packet *J. M. White*, in an undated photograph taken by James Howard. Source: University of Louisville Digital Library, Howard Steamboat Museum Photographic Collection <http://digital.library.louisville.edu/cdm/ref/collection/howard/id/1355>.

275 barrels of oil (presumably cottonseed). Many of the bales were observed in the night, on fire, floating downriver from the wreck. Her clerk, G. Wash Floyd, lost his life saving many of the passengers that had been trapped in the rear cabins. Within ten or fifteen minutes, the entire boat was engulfed stem to stern, and a store of gunpowder in the hold was touched off, blowing timbers skyward and sealing her fate. The hull of the *J. M. White*, burned to the waterline, was visible in the river for many years thereafter (Way 1983:235).

A full economic recovery of post-war Pointe Coupée proved elusive, as floods destroyed crops and buildings throughout the period. Particularly problematic was the levee at Morganza, which collapsed in 1874 and was not satisfactorily repaired until the twentieth century. The levee at Scott Plantation, within the current project area, was subject to a crevasse in 1882 that remained open to at least 1884 (Figure 3-14) (*The New York Times* 1882, 1884). The resulting flooding, according to Brian Costello (1999:17), was perhaps the worst in New Roads history; the main thoroughfare in town was covered by four feet of water. This necessitated a levee set-back at the former site of the town of Pointe Coupée, dooming St. Francis Church and the remainder of the old Pointe Coupée community to the erosion and flooding that eventually destroyed them. (Many of the burials from the churchyard were transferred to St. Mary's Catholic Church in New Roads between 1885 and 1891, although several coffins from the old cemetery floated into False River in the flooding of 1890 [Costello 1999]). Additionally, the spread of the boll weevil in Louisiana in 1909–1910 caused considerable hardship to cotton growers, followed by a near-collapse of the sugar industry in Louisiana in the 1920s due to the mosaic virus (Phillips et al. 1984:13). While cotton was eventually saved through the use of chemicals, the sugar industry revived only after new cane varieties were introduced from southeast Asia. Overall, however, it is hardly surprising that agriculture in the immediate project area appears to have gone into decline in the early and middle decades of the twentieth century.

Sugar cane remains the predominant cash crop of Pointe Coupée Parish, while pecans constitute a large proportion of the lesser crops. The current project area is entirely in cow pasture, and the cattle industry represents just over 45% of the agricultural acreage of the Parish (LSUAgCenter.com 2013). Although the parish's economy is still largely agriculturally based, tourism, focused around False River, is growing in importance. New Roads, the parish seat, and the town of Morganza are the only incorporated towns in the parish. The community of Pointe Coupée, once a center of legal, commercial, and religious life for the region, has largely been washed away by the Mississippi River and now consists of only a few homes.

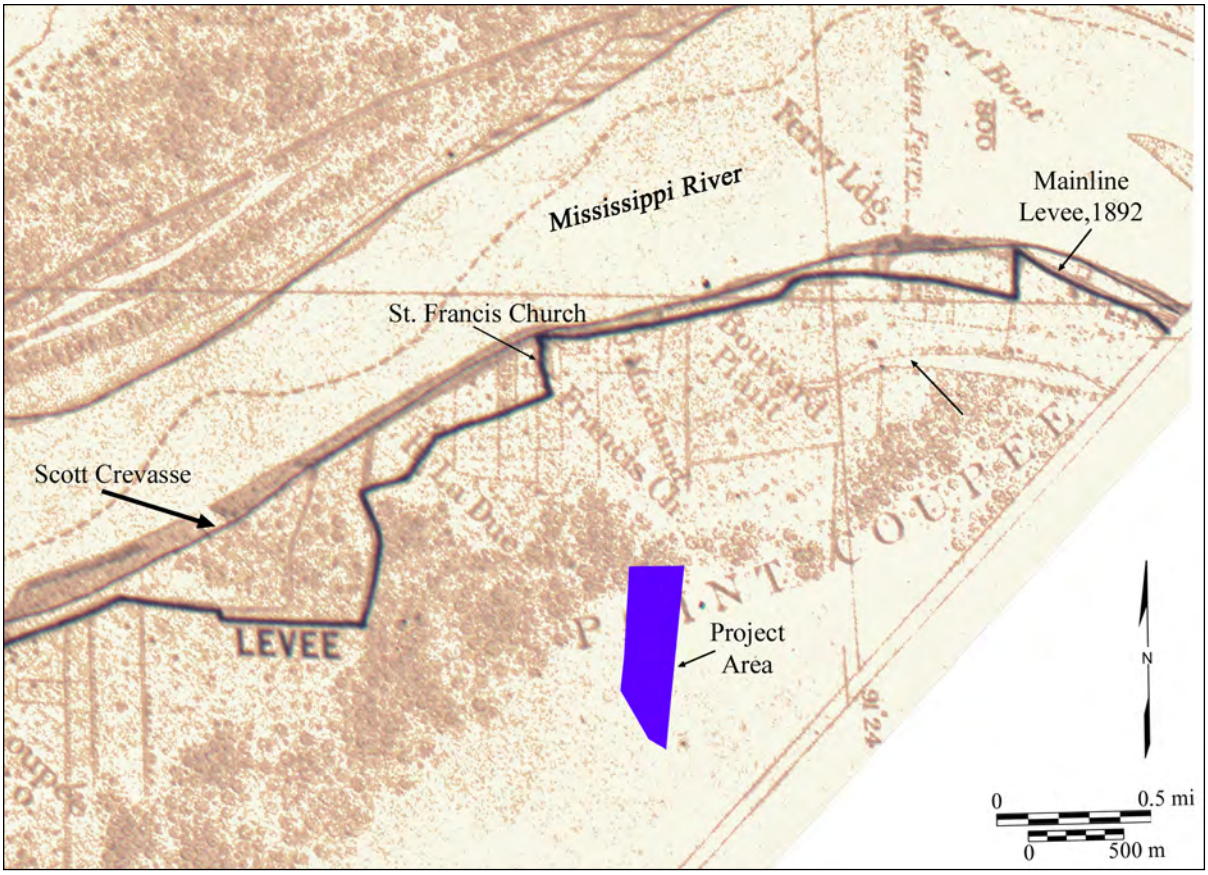

Figure 3-14. By the publication of the 1892 Mississippi River Commission (MRC) chart, Lakeland Plantation had been sold and split up. At the time of the survey for this map (MRC 1892), the Bouvard/Lakeland sugar mill had already fallen into disuse, probably in large part due flooding from the Scott Crevasse, just to the west. Note that St. Francis church is now on the unprotected side of the levee, and would soon disappear from subsequent maps as the river moved south and east. By the 1920s, the owners of the property had begun to break up the sugar house, mining it for brick, and many sugar kettles and boiler shells, presumably from Bouvard, can now be found throughout Angel Ranch, where they serve as cattle troughs and culverts (Wells and McCarthy 2014:Figures 31 and 32).

CHAPTER 4

PREVIOUS INVESTIGATIONS

Some of the earliest work within the Mississippi River floodplain in the Baton Rouge area included LSU-WPA excavations at the Medora site (16WBR1) in West Baton Rouge Parish (Quimby 1951) and the Bayou Goula site (16IV11) in Iberville Parish (Quimby 1957). These were important projects for establishing the framework of Lower Mississippi Valley prehistory as it is currently known: Medora became the type site for Plaquemine culture, while the Bayou Goula site provided important data on historic aboriginal occupation in the Mississippi Valley. However, little archaeological research took place near the immediate project area prior to the 1970s. A limited number of archaeological sites have been recorded near the project area, and all of these appear to have been recorded after 1970 (Figure 4-1, Table 4-1).

The early 1970s witnessed the beginnings of contract archaeology in Louisiana. Although much of this research in the immediate area has consisted of small surveys that have provided little or no new information, a few of these studies have contributed to our understanding of the archaeology of the region. The earliest study within a mile of the present project area was the survey of the Pointe Coupée to Arbroth Levee Enlargement project (Stuart and Greene 1983; Green et al. 1984), which includes the batture immediately north of the current project area. This survey area had suffered from disturbance, and no new sites were noted. The original French settlement of Pointe Coupée (16PC54) was thought to have been established in this area (Division of Archaeology [DOA] site files), and was recorded as a site based on limited archival research. However, no fieldwork was done to confirm its location, and survey of the protected side of the levee by CEI in 2014 revealed no signs of eighteenth or nineteenth century occupation in the immediate area of 16PC54 (Wells and McCarthy 2014).

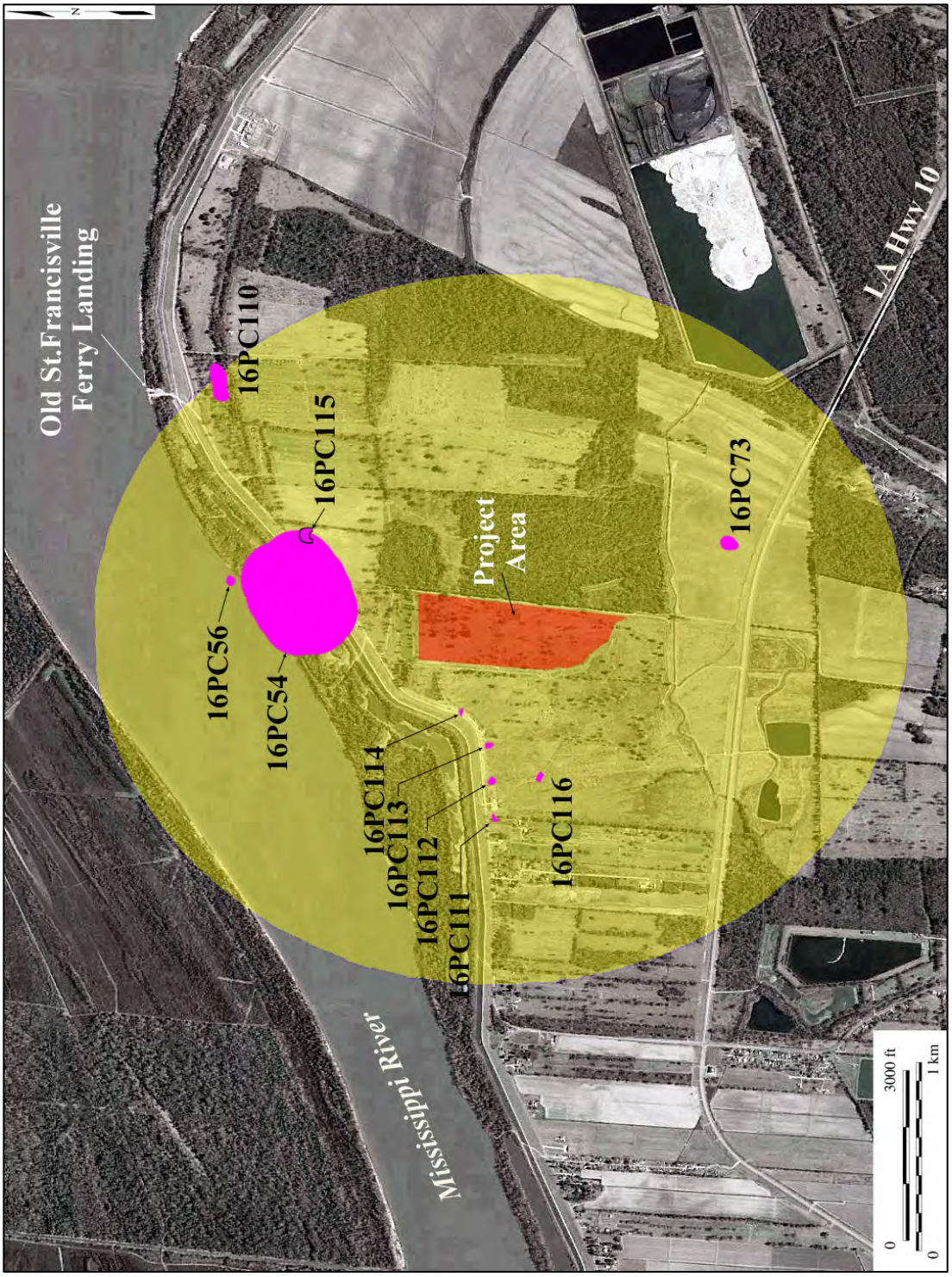

Figure 4-1. Previously recorded sites within a mile of the project area (shown in red).

Table 4-1. Archaeological Sites and Standing Structures Recorded within One Mile of the Project Area.

State Number	Site Name	Component/Cultural Affiliation	NRHP Status	Reference
16PC54[1]	Pointe Coupee	("Site of French Settlement At Pointe Coupee")	unknown	Greene et al. 1984
16PC56	-	19th-20th C. Historic	Ineligible	Yakubik et al. 1994
16PC73	Mad-Cow	19th-20th C. Historic	Ineligible	Hahn et al. 2003
16PC110	Bouvard Sugar Mill	19th-20th C. Historic	unknown	Wells and McCarthy 2014
16PC111	PCS-1	20th Century Historic	Ineligible	Wells and McCarthy 2014
16PC112	PCS-2	20th Century Historic	Ineligible	Wells and McCarthy 2014
16PC113	PCS-3	20th Century Historic	Ineligible	Wells and McCarthy 2014
16PC114	PCS-4	20th Century Historic	Ineligible	Wells and McCarthy 2014
16PC115	PCS-5	20th Century Historic	Ineligible	Wells and McCarthy 2014
16PC116	PCS-6	20th Century Historic	Ineligible	Wells and McCarthy 2014
39-0837	CEI-1	1920	Ineligible	Wells and McCarthy 2014
39-00838	CEI-2	1900	Ineligible	Wells and McCarthy 2014
39-00839	CEI-3	1950	Ineligible	Wells and McCarthy 2014

[1] Site location based on interpretation of historic maps. No work done to confirm location.

Seven new historic sites (16PC56 to 62) were recorded during surveys of the Red Store, Grand Bay, and Arbroth Revetment easements on the west bank of the Mississippi River (Yakubik et al. 1994). Occupations at these seven newly-recorded sites range in date from the eighteenth to the twentieth century. Sites 16PC56 to 60 produced no in situ features or midden deposits, and no further work was recommended. Testing at Nina Plantation (16PC62) revealed architectural features and sheet middens associated with both the great house and the slave quarters. A machine mount and two large pans were also discovered at the site of the former sugar house. This site was evaluated as eligible for inclusion in the National Register of Historic Places (NRHP) and data recovery was subsequently conducted (Markell et al. 1999).

In 1994 and 2001-2002, CEI conducted archaeological survey of the proposed St. Francisville Bridge project for HNTB Corporation and the Louisiana Department of Transportation and Development (DOTD) (Hahn et al. 2003). One road alignment in particular, Alignment F, was surveyed through the northeast corner of CEI's current project area, and represents the only area excluded from the current project due to previous survey. A spot find of two creamware sherds was found within the Alignment F corridor on the batture immediately north of the levee, at the edge of the borrow pit, just north of the current project area. A single early twentieth century site, 16PC73 (Mad Cow) was found 350 m south of Bayou Pond, just north of the current LA Hwy 10 corridor, but was not considered eligible for the NRHP.

In 2014, Malcolm Shuman surveyed a proposed 2.5 mi (4.1 km) pipeline route adjacent to the Big Cajun II power plant for CRC, LLC (Shuman 2014). Despite shovel testing at 30-m intervals, and the excavation of five auger tests, no archaeological deposits or cultural materials were found. Two structures were recorded, a barn and a cattle crib, although it is not clear if LHRI forms were filled out for them, as no State Standing Structure numbers are included. Despite being older than 50 years, neither was considered eligible for the NRHP, as they were in poor condition and had been altered multiple times.

Finally, also in 2014, CEI conducted archaeological survey for the Corps of Engineers Pointe Coupee Seepage project on large portions of Angel Ranch and surrounding areas (Wells and McCarthy 2014). The current project area, in fact, is defined by property not included in this survey. Surveying at 30- and 50-m intervals, depending on elevation, Wells and McCarthy (2014) surveyed 540.5 ac (218.7 ha), and recorded seven sites and three standing structures. While most of these sites (16PC111 to 16PC116) proved to be twentieth century tenant or farm occupations that possessed little

integrity and were not considered NRHP-eligible, several intact brick features were noted at the Bouvard Sugar Mill (16PC110), a sugar house dating from the 1830s into the early twentieth century. While this last site was considered possibly eligible for the NRHP, Corps of Engineers construction plans were altered to remove any potential impacts. The three structures included a residence dating to the 1920s (38-00837), a set of concrete machinery bases that could have signaled the presence of another sugar house (38-00838) at the turn of the twentieth century, and a wood-framed farm storage shed (circa 1950) (38-00839). None of these structures were considered eligible for the NRHP, although further work was recommended for the area surrounding the machinery bases, as it lay outside the archaeological survey area (Wells and McCarthy 2014:78). None of these sites or structures lay within the current project area.

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 (1987:102) 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 1987:102).

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

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.

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 project area was deemed to have a low potential for containing archaeological deposits. Shovel tests were excavated 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.

Archaeological Survey

Between 29 and 30 April 2015, CEI conducted a Phase I cultural resources survey of the Angel Ranch Project Area for BRAC in Point Coupée Parish, Louisiana, as part of an industrial site assessment. The BRAC project area consists of approximately 81 ac (32.8 ha) (Figure 6-1). However, 5.9 ac (2.4 ha) were previously surveyed by CEI (Hahn et al. 2003) in 1994 and 2002 (see cross-hatched area in Figure 6-1). CEI examined the remaining 75.1 ac (30.4 ha) in 2015 during the investigations detailed below.

The Angel Ranch Project Area is part of Angel Ranch, owned by Bob and Mary Goodyear of New Roads. The entire 81-ac (32.8-ha) project area is covered by ridge and swale topography and is used as pastureland. A crew of three conducted visual and shovel test survey of the project area on transects spaced 50 m apart. In total, 121 shovel tests were excavated at 50-m intervals along these transects. Shovel Tests were excavated to a minimum depth of 50 cm. A typical shovel test in the project area consists of 15 cm of a very dark gray (10YR 3/1) silty clay overlying at least 35 cm of a dark grayish brown (10YR 4/2) silty clay with oxidation.

One historic archaeological site and one spot find were identified during the course of the survey– Angel Ranch 1 (16PC126) and Spot Find 1. An additional 29 shovel tests were excavated at 10-m intervals off of each positive shovel test within the boundaries of Angel Ranch 1, and an additional 9

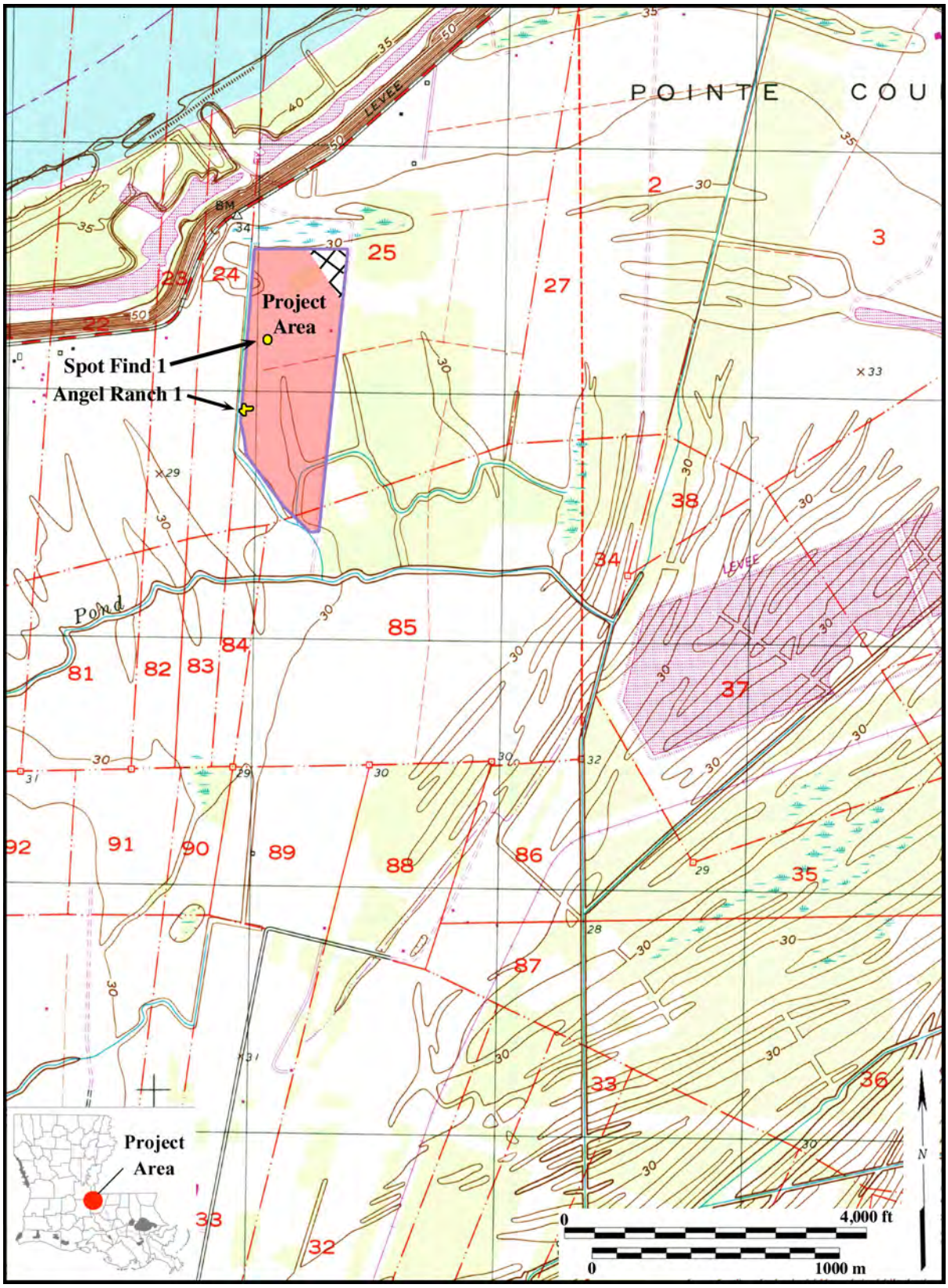

Figure 6-1. The Angel Ranch Project Area, Pointe Coupée Parish, Louisiana. Note the location of the Angel Ranch 1 site (16PC126) and Spot Find 1 (USGS 1996).

shovel tests were excavated at 10-m intervals off of the one positive shovel test at Spot Find 1. The Angel Ranch 1 site and Spot Find 1 are discussed below.

Angel Ranch 1 (16PC126)

The Angel Ranch 1 site (16PC126), located on the western edge of the project area, measures 50 by 40 m (Figure 6-2). The site is situated in Section 25, Township 4 South, Range 10 East in the Southeastern District (west bank of the Mississippi River). Surface visibility at the site was good, with only sparse vegetation covering the ground (Figures 6-3). The typical shovel test profile consists of 20 cm of a very dark grayish brown (10YR 3/2) silty clay overlaying at least 30 of a dark grayish brown (10YR 4/2) silty clay with oxidation (Figure 6-4). In total, 29 shovel tests were excavated at the site, nine of which contained historic artifacts (Figure 6-5). In addition to shovel testing, a small grab sample was collected from the surface. Thirty-two artifacts were recovered from the nine positive shovel tests excavated, and an additional thirty-one artifacts were collected from the surface (Table 6-1). The artifact assemblage consists of historic ceramics, glass, metal, and brick.

The 26 ceramics collected at 16PC126 include whiteware (n=10), ironstone (n=9), stoneware (n=5), and porcelain (n=2) (see Table 6-1). Only one of the 10 sherds of whiteware is decorated, featuring Repoussé on a blue background (Figure 6-5a). Repoussé decorated whiteware dates from 1890 to 1930; while the undecorated whiteware dates from 1840 to 1895 (Moir 1987:102). In addition three of the sherds of whiteware included maker's marks; however, the manufacturers could not be identified. One of the sherds was marked "HANLEY…/ ENGLAN…" (Figure 6-5b). The addition of the names of the country of origin in maker's marks generally appears on ceramics after passage the McKinley Tariff Act of 1891 (Kovel and Kovel 1986:229). All of the nine sherds of ironstone are undecorated and date from 1850 to 1895 (Figure 6-5c) (Moir 1987:102). The stoneware consists of three sherds of slip glazed (interior) slip glazed (exterior) (Figure 6-4d) that dates from 1875 to 1900, and two sherds of Bristol and Albany Slip (Figure 6-5e) that dates from 1890 to 1920 (Greer 1981:197, 200, 261). The porcelain consists of one sherd of Repoussé decorated porcelain (Figure 6-5f) and dates from 1890 to 1930 (Moir 1987:102), and one Prosser-porcelain button (Figure 6-5g) that did not gain popularity in the United States until after 1848 (Pool 1987:Figure V8).

The glass assemblage collected from the Angel Ranch 1 site consists mostly of glass of unidentified manufacture (n=9) but includes machine-made glass (n=3). The machine-made glass

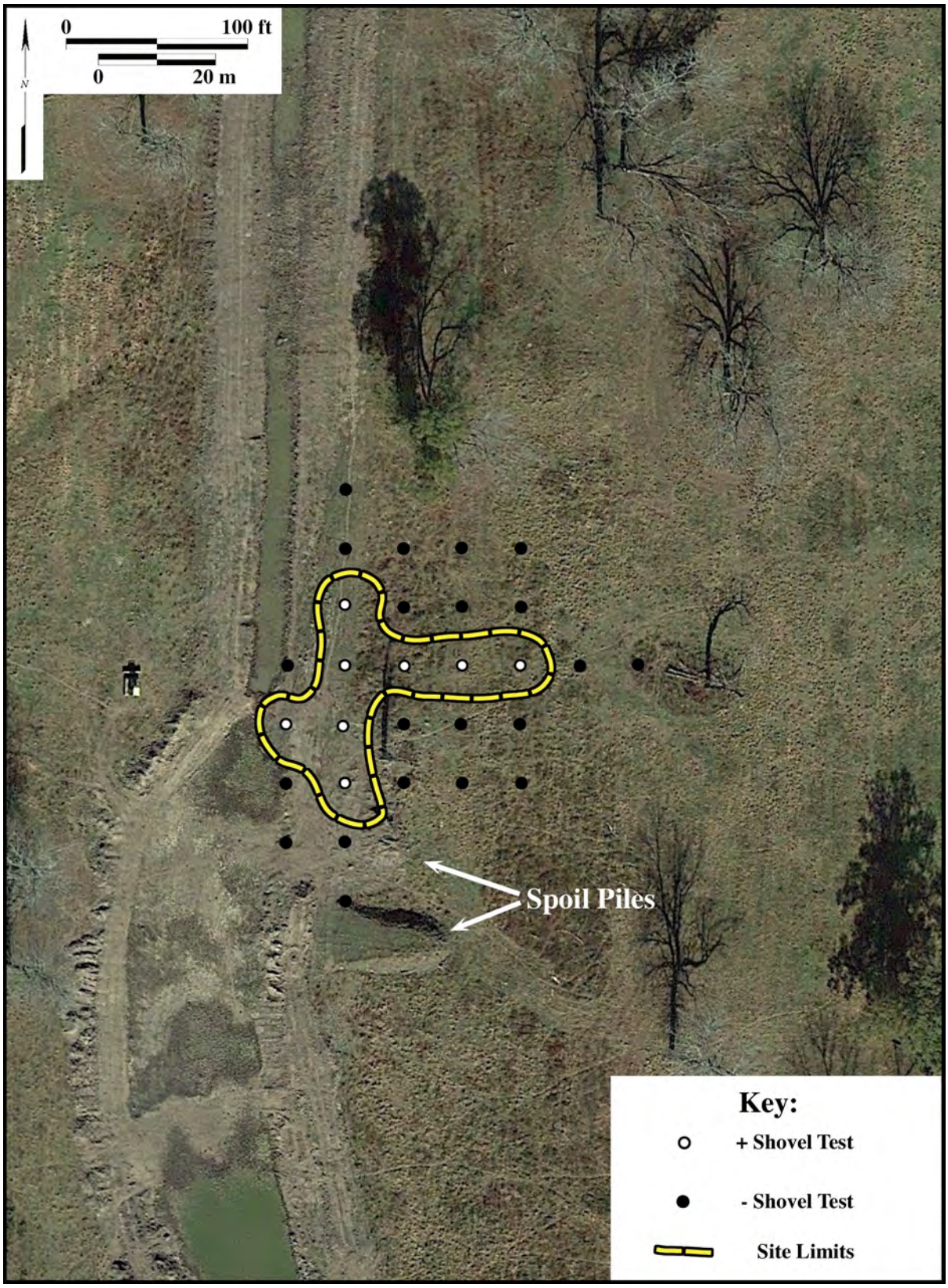

Figure 6-2. The sketch map of the Angel Ranch 1 Site, Pointe Coupée Parish, Louisiana. Note the location of the spoil piles and recent dredging (Google 2015).

Figure 6-2. The Angel Ranch 1 site (16PC126). View is to the south. Date: 4/30/2015

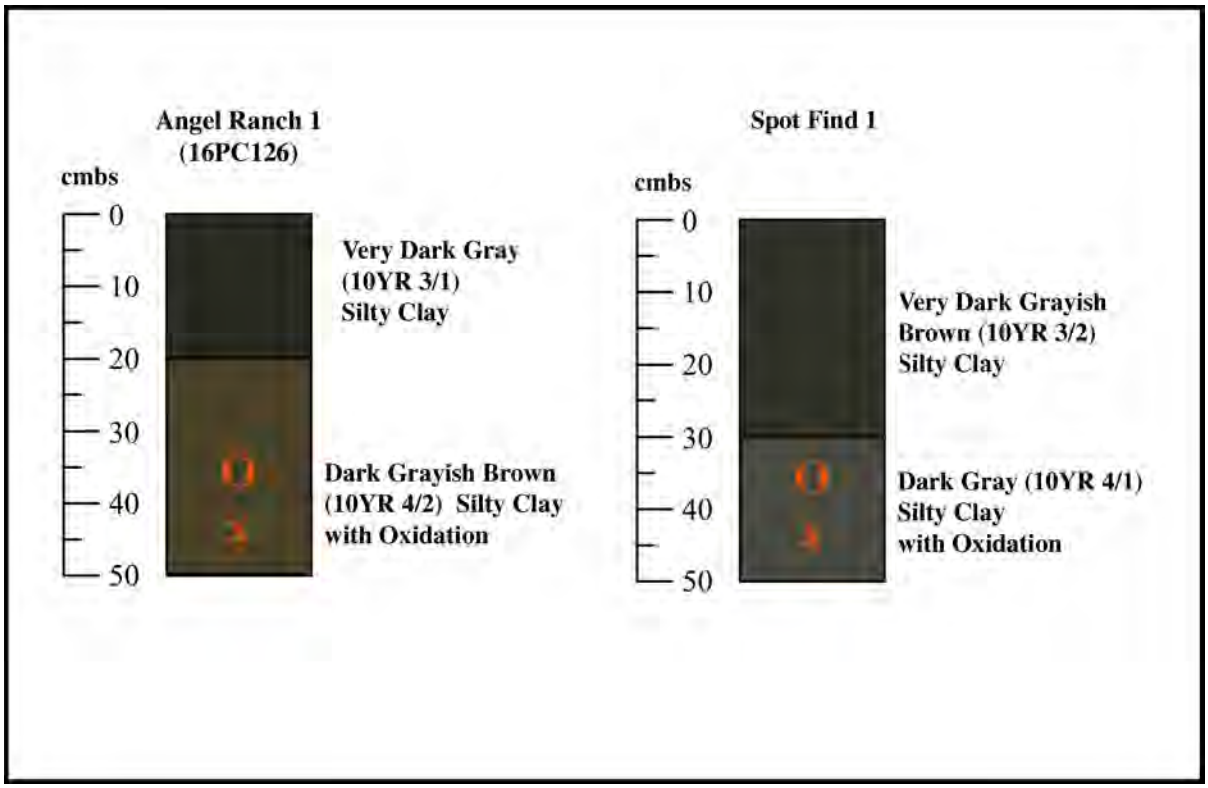

Figure 6-4. Typical shovel test profiles from the Angel Ranch survey.

Figure 6-5. Artifacts recovered from 16PC126. a) Repoussé decorated whiteware; b) whiteware with maker's mark; c) ironstone handle; d) slip glazed (interior) slip glazed (exterior) stoneware; e) slip glazed (interior) slip glazed (exterior) stoneware f) Repoussé decorated porcelain; g) Prosser porcelain button; i-h) embossed machine-made glass; j) machine-cut nail.

Table 6-1. Artifacts recovered from 16PC123.

	GENERAL SURFACE	ST 1 STRAT 1 & 2	ST 2 STRAT 1	ST 3 STRAT 1	ST 4 STRAT 1	ST 5 STRAT 1	ST 6 STRAT 1	ST 7 STRAT 1	ST 7 STRAT 2	ST 8 STRAT 1	Total
CERAMIC											
Refined Earthenware											
White Improved Earthenware											
Repoussé											
blue											
unidentified	1	—	—	—	—	—	—	—	—	—	**1**
Undecorated											
unidentified	6	—	—	—	—	—	—	—	—	—	**6**
maker's mark											
unidentified	3	—	—	—	—	—	—	—	—	—	**3**
Ironstone											
Undecorated											
cup	1	—	—	—	—	—	—	—	—	—	**1**
flatware	3	—	—	—	—	—	—	—	—	—	**3**
handle	1	—	—	—	—	—	—	—	—	—	**1**
hollowware	2	—	—	—	—	—	—	—	—	—	**2**
unidentified	2	—	—	—	—	—	—	—	—	—	**2**
Stoneware											
Albany Slip (int.)/Bristol glazed (ext.)											
Undecorated											
hollowware	1	—	—	—	—	—	—	—	—	1	**2**
Slip Glazed (int.)/Slip Glazed (ext.)											
Undecorated											
hollowware	2	—	—	—	—	—	—	—	—	—	**2**
unidentified	1	—	—	—	—	—	—	—	—	—	**1**
Porcelain											
Hard Paste											
Repoussé											
flatware	1	—	—	—	—	—	—	—	—	—	**1**
Prosser											
button	1	—	—	—	—	—	—	—	—	—	**1**
GLASS											
Machine Made											
Not applicable											
Embossed Lettering											
clear purple											
stopper	1	—	—	—	—	—	—	—	—	—	**1**
jar	1	—	—	—	—	—	—	—	—	—	**1**
Unidentified Machine Type											
Embossed Lettering											
clear green											
vessel	—	—	—	—	—	—	—	1	—	—	**1**
Unidentified Manufacture											
Unid. lipping technique											
Unembossed											
clear blue											
vessel	2	—	—	—	—	—	—	—	—	—	**2**
clear purple											
vessel	—	—	—	—	—	—	7	—	—	—	**7**
METAL											
Ferrous											
Iron											
buckle	1	—	—	—	—	—	—	—	—	—	**1**
Type 11-12 nail											
nail	—	1	2	—	—	—	—	—	—	—	**3**
Type 3-10 nail											
nail	—	2	—	—	—	—	—	—	—	—	**2**
Type 7–8 nail											
nail	1	1	3	—	—	—	—	—	—	—	**5**
BRICK											
Firebrick											
maker's mark											
brick	1	—	—	—	—	—	—	—	—	—	**1**
Handmade											
brick	—	2	—	—	—	—	—	—	—	—	**2**
Unidentified Manufacture											
brick	—	—	6	1	1	1	—	1	1	1	**12**
Total	**32**	**6**	**11**	**1**	**1**	**1**	**7**	**2**	**1**	**2**	**64**

includes: a clear-purple jar embossed with "TRADE MARK (arch)/ VASELINE (arch)/ CHESEBROUGH/ NEW-YORK (rocker)" (Figure 6-5h); a clear-purple stopper embossed with "C & Co." (Figure 6-5i); and one clear-green vessel. The jar was manufactured by the Chesebrough Manufacturing Company between 1903 and 1915 (Walbridge 1920:67-71; Munsey 1970:55); while the stopper was manufactured by Cunningham's & Co from 1879 to 1907 (Toulouse 1972:119). The clear-green vessel was likely manufactured after 1903 (Walbridge 1920:67-71). The glass of unidentified manufacture is mostly clear purple (n=7) and dates up to 1915 (Munsey 1970:55).

The remainder of the artifact assemblage from 16PC126 consists of ferrous metal (n=11) and brick (n=15). The ferrous metal includes a buckle and eight nails. Seven of the nails are cut (Figure 6-5j) (Types 7-8 & 3-10) and likely produced between 1834-1885, while three are wire (Type 11-12). Wire nails were first introduced in 1877, but were not widely produced until after about 1892 (Edwards and Wells 1993). The brick assemblage consists of mostly of rubble of unidentified manufacture (n=12). In addition, two hand-made bricks were identified and one firebrick. The firebrick was manufactured Thomas Freeman of Hancock County, West Virginia, from 1829 to 1856 (Newton et al. et al. 1879:422-423).

Given the location of the Angel Ranch 1 site (16PC126), the deposits appear to be debris from a dwelling or tenant farm. Archival evidence indicates that a few structures, presumably houses, were present in this area in 1903-1904 (see Figure 3-12). However, no structures were recorded in the vicinity in 1939 (USGS 1939), or 1953 (LDH 1958). The artifactual material and historical data indicate the site was probably associated an occupation from the turn of the twentieth-century and did not extend beyond the first few decades of the 1900s. However, shovel testing and an examination of surface revealed that site had suffered disturbance. This disturbance included trampling, dredging and cleanout of the nearby ditch, and spoil piles (see Figure 6-2). Given its isolated location near the intersection of a ditch and natural drainage, it is possible that the cultural material was pushed into its present location by a farmer clearing the fields. There appears to be little research potential for the Angel Ranch I site, and it is not considered eligible for the NRHP.

Spot Find 1

Spot Find 1 consists of a single artifact encountered in a shovel test excavated in the approximate center of the project area in Section 25, Township 4 South, Range 10 East in the

Southeastern District (west bank of the Mississippi River) (see Figure 6-1). 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 consists of 30cm of a very dark grayish brown (10YR3/2) silty clay overlying a least 20 cm of a dark gray (10YR 4/1) silty clay with oxidation. (see Figure 6-5). The single artifact is sherd of whiteware that dates from 1840 to 1895 (Moir 1987:102). 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.

Standing Structure Survey

There are no current plans to develop the Moseley South Project Area. Therefore, the APE for this study has been limited to the project area footprint. No standing structures were recorded within the portion of the Angel Ranch Project Area previously surveyed in 1994 and 2002 by CEI (Hahn et al. 2003). The current project area also falls within the indirect APE of CEI's 2013 survey (Wells and McCarthy 2014), which likewise recorded no standing structures. No standing structures were recorded by CEI during the 2015 survey of the remaining 75.1 ac (30.4 ha) of the Angel Ranch Project Area.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

Between 29 and 30 April 2015, CEI conducted a Phase I cultural resources and standing structure survey of the Angel Ranch Project Area in in Point Coupée Parish, Louisiana, for the Baton Rouge Area Chamber (BRAC) as part of an industrial site assessment. The original scope of work called for a survey of approximately 81 ac (32.8 ha). However, 5.9 ac (2.4 ha) were previously surveyed by CEI (Hahn et al. 2003) in 1994 and 2002. Hence, CEI's April 2015 examination was limited to the 75.1 ac (30.4 ha) of the BRAC study area that had not been previously surveyed. As no construction plans have been made yet, the APE is considered the same as the survey area.

No previously recorded archaeological sites or historic standing structures occur within the portions of the BRAC study area surveyed in 1994, and 2002. One archaeological site and no standing structures were recorded in the newly surveyed portion of the Angel Ranch project. The Angel Ranch 1 site (16PC126) is a small historic artifact scatter potentially associated with a structure erected before 1906 and removed by 1939 (see Figures 3-12). As no *in situ* cultural deposits were encountered at this site, it is deemed to have little research potential. Therefore, site 16PC126 is recommended as ineligible for inclusion on the NRHP, and no additional investigations are required there.

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