Exhibit FF. Belle Grove Site Phase I Cultural Resources Assessment Report





Belle Grove Site Phase I Cultural Resources Assessment Report

PHASE I CULTURAL RESOURCES SURVEY OF 558 ACRES (225.82 HECTARES) IN WHITE CASTLE, IBERVILLE PARISH, LOUISIANA

FINAL REPORT



to Baton Rouge Area Chamber (BRAC) 564 Laurel St Baton Rouge, LA 70801

April 26, 2017



PHASE I CULTURAL RESOURCES SURVEY OF 558 ACRES (225.82 HECTARES) IN WHITE CASTLE, IBERVILLE PARISH, LOUISIANA

Final Report

by

Brandy Kerr, Hamzah Jule, Will McManus, Jennie Garcia, Matthew Chouest, and Malcolm Shuman

SURA, Inc.

Submitted to

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

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From March 16 to March 28, 2017, Surveys Unlimited Research Associates, Inc. (SURA, Inc.), carried out a Phase I cultural resources survey for Baton Rouge Area Chamber (BRAC) of 558 acres (ac) (225.82 hectares [ha]) in White Castle, Iberville Parish, Louisiana. The survey involved the excavation of 1,450 shovel tests. Locus 1 was initially defined in a 1983 survey as site 16IV141, which was not within the bounds of the APE. Two separate loci (Locus 2 and 3) of artifact scatter were encountered during the survey, both considered part of the former Belle Grove Plantation site 16IV141. Due to heavy disturbance from plowing and the absence of intact features, these areas are considered ineligible to the National Register of Historic Places (NRHP).

The authors are grateful for the assistance of Joseph Yarbrough of CSRS for providing maps of the APE. The field crew for this project consisted of Brandy Kerr, Hamzah Jule, Will McManus, and Jennie Garcia. Dr. Malcolm Shuman was the principal investigator. Brandy Kerr led the crew and wrote the report.

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CHAPTER 1: INTRODUCTION

From March 16 to March 28, 2017, Surveys Unlimited Research Associates, Inc. (SURA, Inc.), under contract to Baton Rouge Area Chamber (BRAC), undertook a Phase I cultural resources survey of 558 acres (ac) (225.82 hectares [ha]) in portions of Section 10 and 11, T9S, R13E, in White Castle, Iberville Parish, Louisiana (Figure 1). The survey was carried out on the request of the Baton Rouge Area Chamber (BRAC) under the Louisiana Department of Economic Development (LED) site certification program.

Portions of the Carville, LA 1999 7.5' and White Castle, LA 1992 7.5' topographic maps show several structures within the northern boundary of the APE. One standing structure was encountered during the survey. The tract will be developed for industrial use. Figure 2 is an aerial view of the APE, which lies south of Hwy 405. The area is mostly cane fields with one small wooded area in the northwestern portion of the APE.

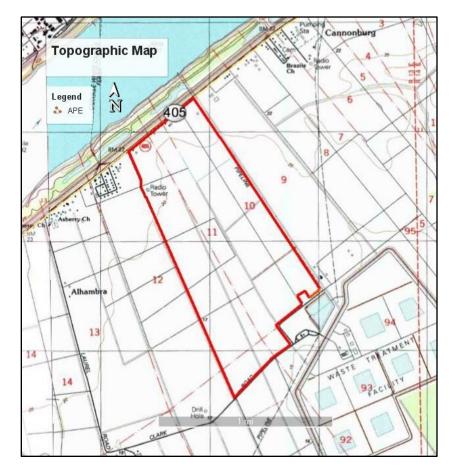


FIGURE 1. PORTION OF CARVILLE, LA 1999 7.5' AND WHITE CASTLE, LA 1992 7.5' TOPOGRAPHIC MAP (Source: USGS).

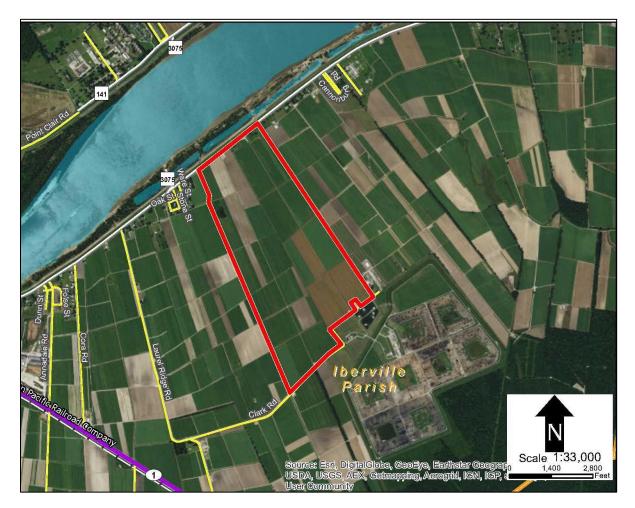


FIGURE 2. AERIAL VIEW OF APE (SOURCE: CLIENT).

The field crew consisted of four persons: Brandy Kerr, Hamzah Jule, Will McManus and Jennie Garcia.

The remainder of this report consists of chapters on the environment, prehistoric and historic culture, history of the project area, a consideration of previous research, a description of the methodology employed in this project, a discussion of the results, and a chapter with conclusions and recommendations. References cited are listed at the end of the document.

CHAPTER 2: ENVIRONMENTAL SETTING

GEOMORPHOLOGY

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

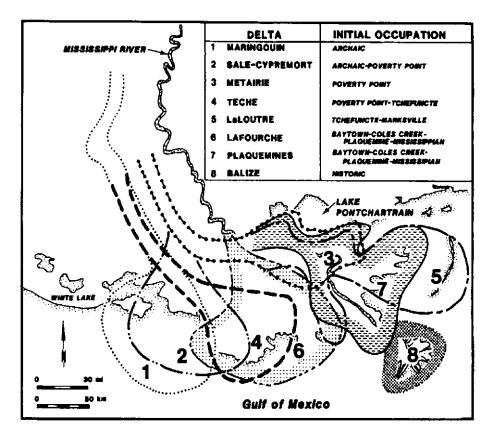


FIGURE 3. MAJOR DELTA COMPLEXES AND ASSOCIATED ARCHAEOLOGICAL COMPLEXES IN THE MISSISSIPPI RIVER DELTAIC PLAIN (ADAPTED FROM GAGLIANO 1984:40).

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

This geomorphological event may have also coincided roughly with the arrival of man into what is now the Mississippi Valley-Gulf Coast region. In fact, archaeology and geomorphology have aided each other in dating the locations and times of the various shifts in the Mississippi River and its attendant streams because aboriginal occupations appear to have generally occurred along active stream channels (e.g. Russell 1938, McIntire 1958, Gagliano 1984).

FLORA AND FAUNA

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

Animal life is likewise diverse and most of the 62 mammal species found in Louisiana may at one time have been found within the area (Table 1). These include white-tail deer (Odocoileus virginianus), cottontail rabbit (Sylvilagus floridanus), swamp rabbit (Sylvilagus aquaticus), gray squirrel (Sciurus carolinensis), fox squirrel (Sciurus niger), skunk (Mephitis mephitis), black bear (Euarctos americanus), raccoon (Procyon lotor), mink (Mustela vison), beaver (Castor canadensis), opossum (Didelphus virginiana), bobcat (Lynx rufus), gray fox (Urocyon cinereoargenteus) and red fox (Vulpes fulva) (Lowery 1974). Birds include such predators as the great horned owl (Bubo virginianus), barred owl (Strix platypterus), marsh hawk (Circus cyaneus), and many others. Non-predatory types include woodcocks (Philohela minor), wood ducks (Aix sponsa), bobwhite quail (Colinus virginianus), and mourning doves (Zenaidura macroura) (Lowery 1955).

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

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

TABLE 1. REPRESENTATIVE ANIMAL SPECIES PRESENT IN PROJECT AREA AND VICINITY (SOURCE: JONES ET AL. 1996).

Fish			
Common Name	Scientific Name	Habitat	
Spotted gar	Lepisosteus oculatus	Clearer waters of lakes, bayous,	
		and oxbows with abundant	
		vegetation	
Longnose gar	Lepisosteus osseus	Larger rivers	
Shortnose gar	Lepisosteus platostomus	Larger rivers	
Alligator gar	Lepisosteus spatula	Large bodies of water, rivers,	
		and lakes	
Bowfin	Amia calva	Sluggish waters of bayous and	
		borrow pits often choked with	
		vegetation	
Gizzard shad	Dorosoma cepedianum	Common in all waters of this	
		area	
Cypress minnow	Hybognathus hayi	Quiet water areas of rivers over	
<u>C'I</u>		soft bottom	
Silvery minnow	Hybognathus nuchalis	Main stream of major rivers	
		over mud, sand or gravel bottom	
Golden shiner	Notemigonus srysoleucas	Common in all waters of this	
Golden shiner	Noteringonus srysoleucus	area	
Emeral shiner	Notropis artherinoides	Large rivers	
River shiner	Notropis blennius	Large rivers	
Smallmouth buffalo	Ictiobus bubalus	Oxbow lakes and backwaters of	
		large rivers	
Bigmouth buffalo	Ictiobus cyprinellus	Rivers, lakes, oxbows, and	
		bayous	
Black buffalo	Ictiobus niger	Larger rivers, oxbows, and	
	lette bas mget	bayous	
Blue catfish	Ictalurus furcatus	Larger rivers	
Channel catfish	Ictalurus punctatus	Most lakes and rivers	
Yellow bass	Morone mississippiensis	Moderate to small lakes	
Blue gill	Lepomis macrochirus	Non-flowing, clear water with	
-		scattered weed beds	
Largemouth bass	Micropterus salmoides	Non-flowing water with aquatic	
-		vegetation	
Freshwater drum	Aplodinotus grunniens	Silty waters of large rivers and	
		lakes	

TABLE 1 (CONTINUED). REPRESENTATIVE ANIMAL SPECIES PRESENT IN PROJECT AREA AND VICINITY.

Amphibians			
Common Name	Scientific Name	Habitat	
American toad	Bufo americanus	Variety of habitats; require	
		water, cover and insects	
Green treefrog	Hyla cinerea	Swamps, lake borders, anyplace	
		with much water	
Gray treefrog	Hyla versicolor and Hyla	Low shrubs in or near standing	
	chrysoscelis	water	
Bullfrog	Rana catesbiana	Large bodies of water (lakes,	
		ponds, sluggish streams)	
Green frog	Rana clamitans melanota	Shallow, fresh water	
	Reptiles		
Snapping turtle	Chelydra serpentina	Permanent body of fresh water	
Alligator snapping turtle	Macroclemyx temmincki	Rivers and lakes	
Three-toed box turtle	Terrapene carolina triunguis	Terrestrial, wooded areas or edges	
Ground skink	Leiolopisma laterale	Forest floor covered with leaves	
Five-lines skink	Eumeces fasciatus	In or near wooded areas with	
		scattered debris	
Diamondback water snake	Natrix rhombifera rhombifera	Most aquatic habitats	
Yellow-bellied water snake	Natrix erythrogaster flavigaster	Large, permanent waterbodies	
Eastern garter snake	Thamnophis sirtalis sirtails	Virtually all semi-aquatic to terrestrial habitats	
Speckled king snake	Lampropeltis getulus holbrooki	Variety of habitats including	
		swamps	
Southern copperhead	Agkistrodon contortrix	Lowlands near swamps	
	contortrix		
Cottonmouth	Agkistrodon piscivorus	Aquatic habitat-swamps, lakes	
		and rivers	
	Birds		
Great blue heron	Ardea Herodias	Shallow swamps and bayous	
Marsh hawk	Circus cyaneus	Mature bottomland-pine	
		hardwood forest	
Black duck	Anas rubripes	Aquatic habitats	
Pintail	Anas acuta	Aquatic habitats	
Green-winged teal	Anas carolinensis	Aquatic habitats	
Blue-winged teal	Anas discors	Aquatic habitats	
Canvasback	Anas valisineria	Aquatic habitats	
Gadwall	Anas strepera	Aquatic habitats	
Great egret	Casmerodius albus	Wooded swamps	
Snowy egret	Egretta thula	Wooded swamps	

TABLE 1 (CONTINUED). REPRESENTATIVE ANIMAL SPECIES PRESENT IN PROJECT AREA AND VICINITY.

Birds (continued)			
Common Name	Scientific Name	Habitat	
Mallard	Anas platyrhynchos	Shallow wooded swamps or flooded bottomlands	
Wood duck	Aix sponsa	Wooded swamps and flooded bottomlands	
Wild turkey	Meleagris gallopavo	Mature bottomlands or pine hardwood forest	
Pileated woodpecker	Dryocopus pileatus	Conifer, mixed, and hardwood forests	
Red-headed woodpecker	Melanerpes erythrocephalus	Groves, farm country	
Mammals			
Virginia opossum	Didelphis virginiana	Wooded areas	
Eastern cottontail	Sylvilagus floridanus	Open grassy areas and pastures	
Swamp rabbit	Sylvilagus aquaticus	Heavily wooded areas	
Gray squirrel	Sciurus carolinensis	Wooded area	
Fox squirrel	Sciurus niger	Open, wooded area	
American beaver	Castor canadensis	Aquatic area with wood vegetation	
Coyote	Canis latrans	Prairies, open woodlands	
Red fox	Vulpes fulva	Open or broken mixed forest	
Gray fox	Urocyon cinereoargenteus	Upland mixed foresh-pasture areas	
Striped skink	Mephitis mephitis	Mixed open and wooded areas	
Neartic river otter	Lutra canadensis	Most aquatic habitats	
White-tailed deer	Odocoileus virginianus	Bottomland hardwood forest with openings	

The soils in the study area are mapped as pertaining to the Commerce and Sharkey associations. The first consists of loamy soils on the highest portions of the natural levees of the Mississippi River. Sharkey soils are clays that occur on the lower elevations of natural levees of the Mississippi River (University of California, Davis 2016). The distribution of these soils is shown in Figure 4.



FIGURE 4. SOIL MAP SHOWING PROJECT AREA (SOURCE: UNIVERSITY OF CALIFORNIA, DAVIS 2016/ GOOGLE EARTH).

CHAPTER 3: PREHISTORIC CULTURE HISTORY

PALEOINDIAN PERIOD (? - 6000 B.C.)

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

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

ARCHAIC PERIOD (6000 B.C. - 1500 B.C.)

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

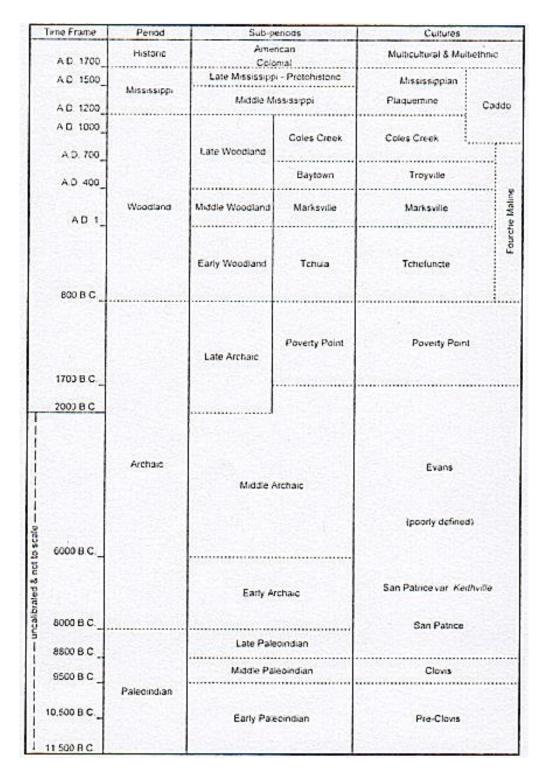


FIGURE 5. PREHISTORIC CULTURAL CHRONOLOGY OF SOUTHERN LOUISIANA (SOURCE: REES 2010).

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

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

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

NEO-INDIAN PERIOD (1500 B.C. – A.D. 1200)

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

POVERTY POINT CULTURE (1500 B.C.-500 B.C.)

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

Poverty Point featured baked clay balls (Poverty Point Objects), microlithic and lapidary industries and the construction of earthworks. The presence of pottery is debatable, although Clarence Webb (1982:40-42) discusses a number of cases in which ceramics have been found at Poverty Point sites. Hunting and gathering seem to have been the mainstays of Poverty Point subsistence and squash and chenopodium may have been cultivated during this period (Webb 1982:13). Webb (1968), on the other hand, sees agriculture as having a more important function.

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

TCHEFUNCTE CULTURE (500 B.C.-A.D.1)

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

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

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

Weinstein and Kelley (1992:34-35) suggest that the Tchefuncte people were mound builders, but Neuman (1984:135) writes, "the evidence to support the theory that the Tchefuncte Culture Indians were mound builders is most vague." Significant sites in the current project area with Tchefuncte components are the Kleinpeter site (16EBR5), the Lee site (I6EBR51), the Sarah Peralta site (16EBR67), and the Beau Mire site (16AN17).

MARKSVILLE CULTURE (A.D. 1-400)

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

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

BAYTOWN CULTURE (A.D. 400-700)

Baytown (or Troyville) is perhaps the most problematical period in Louisiana prehistory. Partly this owes to the manner of its original definition (Gibson 1982; Belmont 1982). But it is also true that the period has been dealt with differently by different authors. Neuman, for instance, places it with Coles Creek, calling the two "Troyville-Coles Creek." Some authors, on the other hand, separate it, as a distinct period between Tchefuncte and Coles Creek (Weinstein and Kelley 1992:36-37). Weinstein and Kelley (1992:36) suggest that the development of Baytown in the Lower Mississippi Valley is associated with the appearance of Quafalorma and Woodville painted pottery, along with Mulberry Creek cord-marked, Salomon Brushed, and Alligator Incised ceramics. The attempt to devise phases for South Louisiana has been difficult. For example, the Whitehall Phase, named for a site on the Amite River (16LV19), is the only representative of its phase in the vicinity of the project area (Weinstein and Kelley 1992:36).

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

COLES CREEK CULTURE (A.D. 700-1200)

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

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

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

MISSISSIPPI PERIOD (A.D. 1200-1700)

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

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

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

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

Perhaps the preeminent Plaquemine site near the study area is the Kleinpeter site (16EBR5), a location consisting of six mounds and extensive midden areas. The site appears to have been abandoned prior to the arrival of the first Europeans, probably at some time during the Delta Natchezan phase (Jones et al. 1994).

PROTOHISTORIC CULTURES AND GROUPS

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

This time the leaders were Pierre le Moyne, Sieur d'Iberville, and his brother, Jean-Baptiste Le Moyne, Sieur d'Bienville. That year, after landing near Biloxi, Iberville led an exploring party

up the Mississippi to the mouth of the Red River (McWilliams 1981). During his trip, Iberville encountered a number of aboriginal groups. These included the Bayogoula, Quinapissa, Houma and the Mugulasha. The Bayogoula and Mugulasha lived in a single village on the west bank of the Mississippi above Bayou Lafourche (Swanton 1911:274). The Houma lived just north of them, their main village being in Wilkinson County, Mississippi or West Feliciana Parish, Louisiana (Swanton 1911:285; Guevin 1983:49-64). The dividing line between the territories of the two nations was just above Baton Rouge (McWilliams 1981). The Quinapissa lived in seven villages "eight days' travel overland east-northeast of (the Bayogoula) village."

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

The continued arrival of Europeans in the Lower Mississippi Valley and the Southeast throughout the eighteenth century set in motion a chain of major population upheavals among the native Americans. The Houmas, for instance, after an attack by the Tunicas, moved south to the vicinity of New Orleans in 1706 and then, in 1709, to Ascension Parish. In Ascension they built two, or possibly three, villages. One village, the Grand Village of the Houmas, was located near Burnside; Guevin has identified the Grand Village as site 16AN35 (Guevin 1983). The second village may be associated with site 16AN3 near Geismar (D'Anville 1732). Charlevoix visited this village in 1722 and mentioned that there were French houses associated with it (Charlevoix 1976:165). The Houma lived in Ascension parish until the late eighteenth century, finally selling their land and moving to Terrebonne Parish (Swanton 1911:290-291). The Bayogoula, in 1706, allowed the Taensa to come live with them, but seven years later the latter rose up and slew their hosts (Swanton 1946). The remainder of the Bayogoula fled to Plaquemine Parish. By the 1730s they seem to have merged with the Houma (Guevin 1990:13).

CHAPTER 4: HISTORY OF THE PROJECT AREA

EARLY EUROPEAN CONTACT IN THE STUDY AREA (1542-1699)

Recorded history in the lower Mississippi Valley begins in 1542 with the descent of the survivors of de Soto's expedition. This tired group of Spaniards were the first Europeans known to have passed the vicinity of the study area. The de Soto expedition had landed on Florida's Gulf Coast, traveled north, and then westward, as they blundered about in their quest for riches. The European invaders and various local tribal groups engaged each other in intermittent, vicious, combat. The Spanish crossed the Mississippi River somewhere between present-day Greenville and Memphis and continued west, past the upper Red River in Texas before returning to the Mississippi River (Wall 1990:12). Hoping to get to Mexico, the remnants of this expedition floated down the Mississippi River to the Gulf of Mexico, after a generally disappointing journey through the Southeast.

The French were the next to pass by the area. Rene-Robert Cavelier de La Salle and his lieutenant, Henri de Tonti, passed the study area in 1682 on their journey from Canada to the Gulf of Mexico (Wall 1990:16). At the mouth of the Mississippi River, La Salle claimed the entire Mississippi Valley, its tributaries, and all of the lands drained by them, for the king of France. Both La Salle and de Tonti advocated immediate colonization of the valley, or at least the establishment of a military presence at the mouth of the Mississippi River. It was to this end that La Salle made his disastrous colonizing effort on the south Texas Coast in 1684. The experience proved fatal for La Salle, but not for French intentions on the Mississippi River.

FRENCH COLONIAL PERIOD (1699-1763)

The idea of establishing a colony at the mouth of the Mississippi River was taken up by the French crown with more enthusiasm than the financial support might indicate. The colonization effort was lead by a Canadian, Pierre Le Moyne Sieur d'Iberville, who established the headquarters of the colony near present day Biloxi, Mississippi, on the Gulf Coast in 1699. In that year he lead an expedition up the Mississippi River, accompanied by his younger brother, Jean Baptiste Le Moyne, Sieur de Bienville, and the uncle of Iberville's wife, Louis Juchereau de St. Denis. This expedition traveled upriver as far as the Natchez village, before eventually returning to Biloxi. During the return trip the expedition divided into two parties at the mouth of Bayou Manchac, on the east bank of the Mississippi, just upstream from the study area. According to their Indian guides, this bayou was part of a shortcut which bypassed the tedious journey to the Gulf by way of the Mississippi River (Iberville 1981:65-80).

Among the accomplishments of the expedition were the identification of Bayou Manchac, Bayou Plaquemine, and Bayou Lafourche as the last distributaries of the Mississippi River above the delta (Newton 1987:113). Le Page du Pratz, an early colonist, reported that Bayou Plaquemine was a creek, rather than a river (du Pratz 1975:127). Bayou Plaquemine communicated with the Mississippi River in the east and the Atchafalaya Basin in the west.

Shortly after the establishment of the French in Louisiana, there began a series of lethal encounters between the French and the Chitimacha Indians. The Chitimacha were at a disadvantage when attacked by other Indian groups allied with and often lead by, the French. After some years of slave raiding by the French and ambushes of the Chitimacha by other tribes, peace was finally arranged. One of the agreements of the treaty required that the Chitimacha move their villages to the Mississippi River (Pénicaut 1988:216-219). In 1719 Chitimacha villages were established at the behest of the French on the west bank of the Mississippi River, near Bayou La Fourche and at Bayou Plaquemine (Swanton 1911:120, Figure 6).

On the east side of the river, the Houmas, who had fled to the vicinity of New Orleans in 1706, after an attack by the Tunicas, moved north in 1709 to what is now Ascension Parish, just a few miles downriver from the current study area. Here they built two, or possibly three, villages. One village, the Grand Village of the Houmas, was located near Burnside; Guevin has identified this location as site 16AN35 (Guevin 1983). The second village may be associated with site 16AN3, near Geismar (D'Anville 1732). Charlevoix visited this village in 1722 and mentioned that there were French houses associated with it (Charlevoix 1976:1650. the Houma lived in Ascension parish until the late 18th century, finally selling their land and moving to Terrebonne Parish (Swanton 1911:290-291).

At the time of the guerrilla war between the French and Chitimacha, one of the first large concessions was established in Louisiana. It was that of Joseph Paris, *dit* Duvernay, whose headquarters were established at the old location of the Bayou Goula village. At the time that the Paris concession was established, the Chitimacha War was still in progress and two employees of the concession were killed by members of that tribe (Pénicaut 1988:218). Despite the peace, this concession was not successfully developed, though it brought the first European settlers to the area (Riffel 1985:4).

SPANISH PERIOD (1763-1802)

Apart from the establishment of the Paris concession and the desultory increase of the population, little of note happened in the study area in the first half of the eighteenth century. Momentous events were developing elsewhere, however. The brutal struggle between the French and English for the interior of the North American continent was decided in England's favor in 1762. France ceded her interests east of the Mississippi River to England. This area extended as far south as the Isle d'Orleans, of which Bayou Manchac was the northern boundary. The Isle d'Orleans and all of the Mississippi Valley west of the river became Spanish territory (Wall 1990: 53-53).

When Canada and Acadia became part of the English empire many of the French inhabitants of Acadia were forced to leave. Acadia was renamed Nova Scotia and populated by Scottish highlanders, who were evicted from their own country. Soon after the peace, in 1762 Acadians began arriving in Louisiana, many settling in the Plaquemine area. By 1777 the population of western Iberville Parish had increased to 160 people (Riffel 1985:4).

In 1776 outside events again influenced the developments in the region around the study area, when the English Atlantic colonies declared themselves an independent nation. The self-declared "United States" claimed the former English territories west of the Appalachian Mountains. England, naturally, resisted the loss of its American colonies, by force of arms.

After the Revolutionary War started, Spain sided with the United States, more to injure England than to help the new nation. Spain permitted her governor of Louisiana to attack the English garrisons. In 1779, the English abandoned Fort Bute at Manchac and built another fort further upriver. But their efforts were to no avail. The Spanish military adventure was a complete success and West Florida became part of Spanish Louisiana (Wall 1990:66-67). By treaty, the former English claims to the Mississippi Valley passed to the new American government.

In the Spanish colonial period, farming in this area was devoted to the cultivation of indigo, tobacco, small amounts of cotton, and food crops, especially corn. After 1795, when Étienne de Boré perfected a sugar granulating method, applicable to Louisiana's short-season cane, the cultivation of sugar cane became the basis of the economy of lower Louisiana (Wall 1990:74). In the project area, however, trapping, hunting, subsistence agriculture, and cattle herding remained the primary economic activities.

AMERICAN TERRITORIAL PERIOD (1804-1812)

In 1800, Spain returned Louisiana to France. France, however, did not officially assume possession of Louisiana until November 30, 1803. France, in turn, quickly sold Louisiana to the United States, which took official possession on December 20, 1803 (Wall 1990:94). The Louisiana Purchase area west of the Mississippi River was divided into the Louisiana Territory and Territory of Orleans. The Territory of Orleans was roughly the present state of Louisiana, though without the Florida Parishes (Newton 1987:139, 143).

All properties granted under both the French and Spanish rule were recognized under the terms of the Louisiana Purchase. Under the previous regimes, all transactions involving real estate required official permission. Under Article 1, Section 8 of the United States Constitution, congressional approval was required for transactions involving Indian tribal lands. Thus, tribal land, including that of the Chitimacha, could not be sold without the concurrence of the U. S. Government. The Chitimacha held tribal land on Bayou Plaquemine, which some tribal members, apparently, were willing to sell to settlers (American State Papers 1834:392). With the influx of Acadians, Haitians, and Americans pressure to sell increased on the Chitimacha living on desirable farmland.

STATEHOOD (1812-PRESENT)

Louisiana achieved statehood in 1812 and became the first "foreign," or non-English, territory to be brought into the union. In 1815, war between England and the United States was brought to the region with the British plans to invade the lower Mississippi Valley by way of New Orleans. The American general, Andrew Jackson, hoping to forestall English use of Bayou Manchac, had its entry into the Mississippi River blocked. Naturally prone to rafting, the entire length of the bayou quickly became choked with debris. This ended the usefulness of Bayou Manchac as a thoroughfare (Gagliano et al. 1977:31).

The cultivation of cotton, and especially of sugar cane, proved profitable for plantations on the natural levees along the lower Mississippi River. Much land was cleared for sugar production in the 1820s and by the time of the Civil War, nearly all arable land along the river was in sugar cane cultivation (Riffel 1985:64-65).

Most of the white residents of Iberville Parish supported Louisiana's secession from the Union in 1861. Several companies of soldiers were raised in support of the Confederate cause in the war. The year 1862 brought Union occupation of lower Louisiana and the Mississippi River. From 1862 to the end of the war small skirmishes were occasionally fought in the general area of Plaquemine, and the town was periodically occupied by either Confederate or U.S. troops.

In 1864 Union forces began construction of an earthwork fort or gun emplacement at Plaquemine, between the bayou and town, overlooking the Mississippi River. The fort, built using impressed slave labor, had a square plan with bastions at each corner. Of the nine heavy caliber guns originally planned, eight mounted. Seven lighter field guns were also to be included in the fort's armament. The fort was still not completed by October of 1864 (Riffel 1985:88).

Life for area residents became difficult as slaves escaped from the plantations and both Union and Confederate forces confiscated food and livestock (Riffel 1985:85-89). Though there was considerable property damage, personal loss, and pervasive hardship for area residents, suffering in this part of the South was not comparable with that of Virginia, or other such parts of the Confederacy. The Civil War brought challenges to the planters in the area, and freedom to the slaves, but the plantation-based economy soon resumed its pre-war importance as planters adjusted to the new social realities. In the Plaquemine area, sugar cane remained the primary agricultural crop, though cypress timber and other forest products increased in importance.

From the time of its settlement by Europeans, the general territory around the project area was subjected to floods and land-loss. By the 1860s the Mississippi River threatened to reclaim its former bed and follow a shorter, steeper course to the Gulf. After centuries of partial isolation from the great river, Plaquemine Bayou was again flowing, navigable even to large steamboats, which easily entered it, except at low water (Pearson et al 1989:226). Beginning in 1867 or 1868, the Police Jury of Iberville Parish built a dike across the mouth of Bayou Plaquemine. Naturally, this upset business owners along the bayou who needed to ship their goods on the Mississippi River. After much wrangling, the U. S. Engineer Department (now the U.S. Army Corps of Engineers) began construction of the Plaquemine Locks in 1895, which became fully operational by 1909 (Pearson et al. 1989: 226).

The greatest recent change in the economic base in the parish occurred with the discovery of oil in the Atchafalaya Basin in the early twentieth century. Since that time the petroleum industry has supplanted all other industries along the lower Mississippi River. Many former sugar plantations are now given over to chemical plants, refineries, and other petroleum-dependent productions. In 2010, the population of the parish stood at 33,387, as compared with 33,320 in 2000 (Calhoun 2012:184).

CHAPTER 5: PREVIOUS INVESTIGATIONS

HISTORIC INVESTIGATIONS

Some of the pioneering archaeological investigations in Louisiana were conducted in the general region around the project area. The late Dr. Fred Kniffen of Louisiana State University conducted a survey of prehistoric Indian mounds in Iberville Parish (Howe et al. 1938). The largest aboriginal site in the vicinity of the project area is a historic Chitimacha Indian Village site (16IV158), on the west side of the Mississippi River. It is near the modern community of the same name that is located at the confluence of Bayou Plaquemine with Bayou Grosse Tete.

The Medora Site (16WBR1) is located to the north of the project area and on the west side of the Mississippi River, just inside West Baton Rouge Parish. This site is on Bayou Bourbe, which drains a portion of Manchac Point. This site was excavated by the WPA and LSU during the Great Depression. Data from this site were instrumental in defining the Plaquemine culture within the prehistoric culture history sequence of the Lower Mississippi Valley (Quimby 1951).

On the eastern side of the river, and in adjacent Ascension Parish, Guevin claimed, probably correctly, to have located the Grand Village of the Houmas (16AN35), near Burnside (Guevin 1983).

Within the city of Plaquemine, the Plaquemine Locks are reported as an archaeological site (16IV130) and are listed on the National Register of Historic Places. Additionally, site 16IV129 was reported to the Louisiana Division of Archaeology as the former location of the Masonic Hall in Plaquemine that was destroyed by levee construction (LDOA site files).

Turnerville, now a part of the city of Plaquemine, has been recognized as a Historical District. Turnerville was never an incorporated town, though proceedings to incorporate it were begun in 1952. In 1954 it was incorporated as the town of North Plaquemine, only to be absorbed into Plaquemine in 1956 (Riffel 1985:54, 210).

PROJECTS WITHIN 2 MI (3.2 KM) OF APE

Several surveys have been conducted within a 2 mi (3.2 km) radius of the current APE, all of which can be seen in Table 2 below. In 1981, a Phase I survey was conducted for a proposed pipeline corridor extending from Weeks Island, LA to Little Creek, MS. Three prehistoric sites were recorded (As 5, 17, and 14) that were located within the vicinity of the propsed easement, however, it was determined that the proposed pipeline right-of-way would not have any adverse impact on any known sites or structures (McIntire 1981).

In 1984, a comprehensive study report was drawn up by the Corps of Engineers as an overview of known resources adjacent to the Mississippi River in southeastern Louisiana. This report is based largely on archival research, and in most cases, the sites mentioned have not been field checked (Greene et al 1984).

Another assessment of reconnaissance was done in 2000 on behalf of the U.S. Army Corps of Engineers, New Orleans district. It included preliminary investigations of eleven levee-related project items throughout southeastern Louisiana (George et al 2000).

Three surveys were conducted at the former location of the Braziel Baptist Church. In 2000, remote sensing was done at the church and cemetery complex, site 16IV49 (Coyle et al 2000). In 2005, remote sensing and ground truthing activities were conducted within a proposed project parcel positioned adjacent to the Braziel Baptist Church and Cemetery Complex. Construction plans called for this portion of the batture to be used for the construction of a levee set forward by the U.S. Army Corps of Engineers, New Orleans District (Coughlin 2005). In 2009 a monitoring project was conducted which was associated with land preparations necessary to install concrete mattresses along 0.2 mi (0.4 km) of the right descending bank of the Mississippi River near White Castle, in Iberville Parish, Louisiana (Eberwine and Athens 2009).

LDOA No.	Туре	Author(s)	Year
22-1021	Assessment of Reconnaissance	McIntire	1981
22-0918	Assessment of Reconnaissance	Greene, et al.	1984
22-2358	Assessment of Reconnaissance	George, et al.	2000
22-2326	Remote Sensing	Coyle, et al.	2000
22-2727	Remote Sensing and Ground Truthing	Coughlin, et al.	2005
22-3185	Monitoring	Eberwine and Athens	2009

TABLE 2. PROJECTS WITHIN 2 MI (3.2 KM) OF APE (SOURCE: LDOA).

CHAPTER 6: METHODOLOGY

ARCHIVAL RESEARCH

Initially, on-line historic maps from the United States Geological Survey (USGS) were consulted in order to determine what structures and roads might have existed on the property in the 20th century. In addition, the site files and report library of the Louisiana Division of Archaeology (LDOA) were examined to determine what archaeological sites had been reported for this area by previous investigators.

RESEARCH DESIGN AND FIELD METHODOLOGY

Based on the proximity to the known Belle Grove Plantation (16IV141), High Probability (HP) was conducted 0.28 mi (450 m) from River Road to the back swamp, from which testing was then done at Low Probability (LP). Thus, fieldwork consisted of shovel tests excavated every 98.4 ft (30 m) along transects spaced 98.4 ft (30 m) apart within the HP areas. Within the LP areas, shovel tests were excavated every 164 ft (50 m) along transects spaced 164 ft (50 m) apart.

CURATION STATEMENT

Artifacts were returned to the SURA laboratory, washed, analyzed and catalogued, and will be deposited with the Louisiana Division of Archaeology, along with associated documents. Collected material and associated records are curated by the Louisiana Division of Archaeology (DOA). Upon completion of the project, the artifacts will be delivered to the Louisiana Division of Archaeology, Central Plant North Building 2nd Floor, 1835 North Third St., Baton Rouge, LA 70802.

CHAPTER 7: RESULTS OF THE SURVEY

ARCHIVAL RESEARCH

A number of sources were consulted prior to fieldwork. These included site files from the Louisiana Division of Archaeology and on-line historic maps from the United States Geological Survey (USGS).

TOPOGRAPHIC MAPS

The earliest map, the White Castle, LA 1936 7.5' topographic map (Figure 6), shows several structures within the northern portion of the APE as well as railroad tracks and roads running throughout the project area. The succeeding White Castle, LA 1963 7.5' and portions of the Carville, LA 1999 and White Castle, LA 1992 7.5' topographic maps (Figure 7) continue to show standing structures within the northern portion of the APE. One standing structure was encountered in the northern portion of the APE.

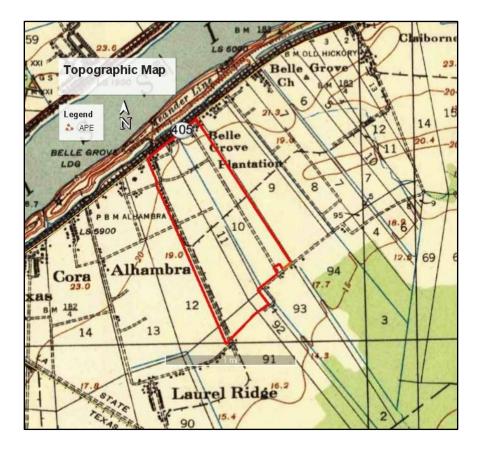


FIGURE 6. PORTION OF THE WHITE CASTLE, LA 1936 7.5' TOPOGRAPHIC MAP (SOURCE: USGS).

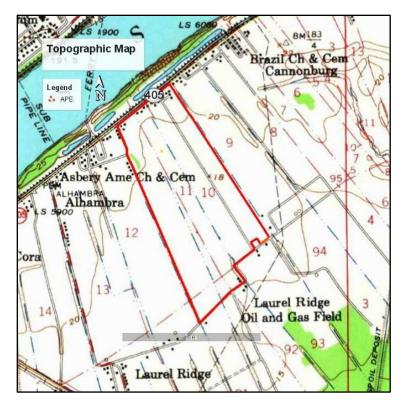


FIGURE 7. PORTION OF THE WHITE CASTLE, LA 1968 7.5' TOPOGRAPHIC MAP (SOURCE: USGS).

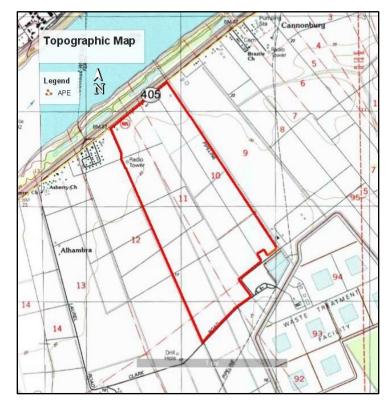


FIGURE 8. PORTIONS OF CARVILLE, LA 1999 AND WHITE CASTLE, LA 1992 7.5' TOPOGRAPHIC MAP (SOURCE: USGS).

ARCHAEOLOGICAL SITES WITHIN 2 MI (3.2 KM) OF APE

Several sites, most of which are plantations, surround the current APE and can be seen listed in Table 3 below. White Castle Plantation (16IV132) is located approximately 0.25 mi (0.40 km) from the southwest corner of the APE. This site is historic in nature from the Antebellum and Civil War & Aftermath periods. White Castle Plantation (16IV132) was once a sugar plantation, but now is only ruins. During a survey done in 1977, there was great disturbance in the form of cultivation. Cultural features included the big house and a "Vaughn" crypt located approximately 200 m south of the big house. Eligibility to the National Register of Historic Places (NRHP) is unknown.

Sites also associated with White Castle Plantation are located along the levee on the other side of Hwy 405. Three separate surveys were conducted in 1985, yielding sites 16IV148, 16IV149, and 16IV151. Sites 16IV148 and 16IV151 have both historic and prehistoric properties. Materials recovered from 16IV148 indicate Coles Creek culture, while prehistoric finds at 16IV151 and 16IV148 are unknown. 16IV149 consisted of solely historic materials associated with early 19th century occupation. All sites were deemed ineligible for nomination to the National Register of Historic Places (NRHP) due to erosion along the batture.

Approximately 0.39 mi (0.63 km) to the east of the APE along Hwy 405, is site 16IV90. The site was discovered in 2004 during a Phase I survey, which yielded historic surface and subsurface scatter from the late 19th to early and mid 20th centuries. The materials recovered are believed to be associated with the Braziel Baptist Church nearby. The site has been used in sugar cane cultivation in the past and is currently a horse pasture and a portion of the church parking lot, thus it is considered ineligible for the National Register of Historic Places (NRHP).

Claiborne Plantation (16IV226) is located 1.56 mi (2.5 km) east of the APE and was most recently surveyed in 2016. This site is associated with Antebellum, Civil War & Aftermath, and Industrial & Modern periods. The function was a sugar plantation with slave cabins, tenant houses, and supporting structures. A prehistoric isolated find was noted as well. Materials were recovered below the plowzone and structures appeared to possess integrity, thus it was recommended further work be done.

Possibly the most significant historic location near the current APE is Locus 1 of Belle Grove Plantation (16IV141), located approximately 0.11 mi (0.18 km) from the northwest corner of the APE. The plantation home was built in the 1850s and was demolished after World War II. This indicates period of occupation from Antebellum, Civil War & Aftermath to Industrial & Modern. According to the 1983 site form, the material collected consisted of historic surface scatter (LDOA). It was previously recorded of unknown eligibility to the National Register of Historic Places (NRHP). The following loci, Loci 2 and 3 of 16IV141, will be discussed in the following section.

Site No.	Name	Culture/Period	Function	NRHP Status
16IV132	White Castle Plantation	Antebellum, Civil War & Aftermath	Plantation, Cemetery	unknown
16IV148	White Castle 3	Historic (Unknown) Prehistoric (Unknown, Coles Creek)	Unknown	Ineligible
16IV149	White Castle 4	Early 19 th Century	Unknown	Ineligible
16IV151	White Castle 6	Historic (Unknown), Prehistoric (Unknown)	Unknown	Ineligible
16IV90	Locus B5A-01	Late 19 th to Mid & Late 20 th Century	Possible Church	Ineligible
16IV226	Claiborne Plantation	Antebellum, Civil War & Aftermath, Industrial & Modern, Prehistoric (Unknown)	Plantation with Slave Cabins and Tenant Houses	Eligible
16IV141	Belle Grove Plantation	Antebellum, Civil War & Aftermath, Industrial & Modern	Plantation	Ineligible

TABLE 3. RECORDED ARCHAEOLOGICAL SITES WITHIN 2 MI (3.2 KM) OF APE (SOURCE: LDOA).

FIELDWORK

Fieldwork was done at High Probability (HP) and Low Probability (LP). HP consists of shovel tests excavated every 98.4 ft (30 m) along transects spaced 98.4 ft (30 m) apart, while LP consists of shovel tests excavated every 164 ft (50 m) along transects spaced 164 ft (50 m) apart. Based on the proximity to the known Belle Grove Plantation big house, HP was conducted 450 m from River Road to the back swamp. This methodology conforms to Chart 68 of the 1913 Mississippi River Commission (Figure 9), which shows the sugar house located at that distance, with the tenant houses in two parallel lines closer to the river. The remainder of the APE was done at LP. A total of 30 transects and 458 shovel tests were excavated at HP. Within the LP, a total of 21 transects and 992 shovel tests were excavated.

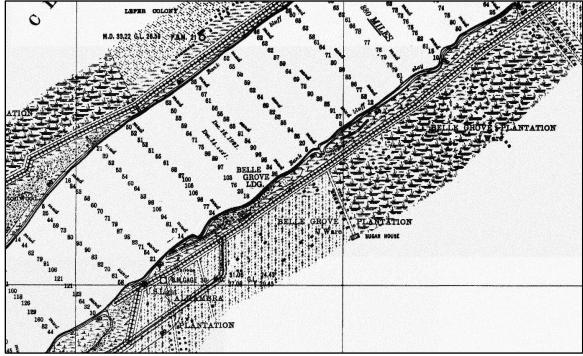


FIGURE 9. MRC HYDROGRAPHIC CHART NO. 68 SHOWING STRUCTURES ON BELLE GROVE PLANTATION.

ENVIRONMENT

The APE consisted mostly of open cane fields, with a small wooded area in the northwestern portion of the APE. Modern trash and push piles were encountered within the wooded area, which can be seen in Figure 12 and 13. Figures 10 and 11 below provide representations of the various areas.



FIGURE 10. REPRESENTATION OF LP AREA; FACING NORTH.



FIGURE 11. REPRESENTATION OF HP AREA WITH WOODED AREA TO THE SOUTH; FACING SOUTH.



FIGURE 12. WOODED AREA; FACING WEST.



FIGURE 13. MODERN TRASH IN WOODED AREA; FACING EAST.

SHOVEL TESTS AND TRANSECTS

A total of 30 transects and 458 shovel tests were excavated at HP. Within the LP, a total of 21 transects and 992 shovel tests were excavated. An aerial view of the transects can be seen in Figure 14. A representation of the soil stratigraphy can be seen in Table 4.



FIGURE 14. TRANSECT MAP (SOURCE: GOOGLE Earth).

Representation of HP	(0-20 cmbs)	10 YR 4/2 sandy clay
	(20-50 cmbs)	10 YR 4/3 clay
Representation of LP	(0-15 cmbs)	10 YR 5/3 clayey sand
	(15-50 cmbs)	10 YR 4/2 clay
Representation of Wooded Area	(0-20 cmbs)	10 YR 3/3 silty sandy loam
	(20-35 cmbs)	10 YR 4/2 sandy clay
	(35-50 cmbs)	10 YR 4/4 clay

TABLE 4. SOIL STRATIGRAPHY.

ARCHAEOLOGICAL PROPERTIES

During the course of the survey, two separate areas (Locus 2 and Locus 3 of 16IV141) within the HP yielded historic materials. Locus 2 was strictly surface scatter, while Locus 3 yielded one positive subsurface shovel test along with surface scatter.

Based on the proximity of these finds to the known Belle Grove Plantation site (16IV141) and the historic nature of the materials collected, it is clear these areas are associated with site 16IV141.

Locus 1 was the portion of 16IV141 where the big house of Belle Grove Plantation previously stood. Locus 2 and Locas 3 of 16IV141 were recorded within the High Probability portion of the APE during the Phase I survey.

LOCUS 1

In 1983, site 16IV141 was recorded by Lawrence van Horn (LDOA). It was determined that the big house of Belle Grove Plantation was previously within the boundaries of site 16IV141, but was destroyed after World War II. The surface scatter site found during the original survey will heretofore be referred to as "Locus 1" of 16IV141.

Belle Grove Plantation was originally owned by a wealthy sugar planter from Viriginia named John Andrews. Andrews owned over 7,000 acres (2,800 ha) spread over several plantations, with Belle Grove having $\frac{3}{4}$ mile (1.2 km) of river frontage. With Dr. John Phillip Read Stone as a partner, Andrews founded Belle Grove Plantation in the 1830s. The partnership was dissolved in 1844 and Andrews assumed full ownership. By the 1850s, his more than 150 slaves were producing over one-half million pounds of sugar each year (Matrana 2009).

Following the Civil War and the collapse of the plantation economy, Andrews sold the plantation to James Ware in 1867. The Ware family continued to occupy and farm the plantation

until the early 1920s. In 1925, Ware was forced to sell the plantation following several years of poor crops where the house sat vacant.

During the post Civil War era, Belle Grove began to decay. One wing was destroyed due to neglect from a roof leak. Belle Grove Plantation was owned by several people, however, none had the finances to restore it in the time of the Great Depression and World War II. During the night of March 17, 1952 a mysterious fire destroyed all that remained of the big house (Friends of Belle Grove). The photo below provides a representation of the big house when it stood in 1938 (Figure 15, Library of Congress).

The UTMs of the big house recorded during the original survey in 1983 are 681000 E 3340580 N.



FIGURE 15. FRONT (RIVER FACADE) OF BELLE GROVE PLANTATION BIG HOUSE 1938 (SOURCE: LIBRARY OF CONGRESS).

Locus 2 of 16IV141 is located within the northwestern portion of the APE. All materials encountered were surface scatter spread out over 5 transects within an area measuring 420 m x 120 m (0.26 mi x 0.07 mi). Brick scatter was noted throughout the majority of the area, though no articulation was encountered. (Figure 17). The artifacts recovered from Locus 2 during the survey and subsequent delineation are listed in Table 5.

A total of 1,277 artifacts were collected, the majority of which were ceramics (n=626). Of these ceramics, the most common encountered were ironstone, whiteware, and porcelain. Various yellowwares, stonewares, and pearlwares were also noted. A single sherd of plain creamware was collected. After ceramics, glass was the most common material collected (n=461). Both cut and wire nails were noted, as well. The materials collected suggest a period of occupation spanning from the Antebellum to Industrial & Modern periods.

Ironstone was the most common ceramic collected (n=299), making up 23% of all ceramics. Of the decorated sherds, maker's mark (n=3), making up 27% of all decorated, and transfer printed (n=2), making up 18% of all decorated, were the most common. No maker's mark was able to be identified from the sherds collected. The various decorations of ironstone encountered date from 1813-20th century (Kovel and Kovel 2004; Campbell 2006).

The second most commonly collected type of ceramic was whiteware. Transfer printed (n=16) and annular (n=12) made up the majority of the decorated whitewares. Transfer printed whiteware dates from 1830-1850, while annular decorated has a date range from 1790-1830. One piece of mocha decorated whiteware, probably dating to the first half of the 19th century, though possibly the late 18th (Hahn and Castille 1988; Noel Hume 1970; Rickard 2006) was noted and can be seen in Figure 26.

Porcelain (n=90) made up 7% of all ceramics collected, the majority of which were undecorated (n=79), suggesting a date range from 1738- present (Kovel and Kovel 2004). A few of these sherds have been identified as houseware. A toilet fragment was collected and can be seen in Figure 25 as well as a doll piece, which can be seen in Figure 28.

Several sherds of yellowware (n=35) were encountered and made up 3% of all ceramics. The majority of these were undecorated. Six annular sherds were collected, making up 17% of all yellowware encountered. One sherd of dendritic yellowware can be seen in Figure 23. These sherds have a date range from 1830-1900 (Hahn and Castille 1988).

Stoneware (n=79) made up 6% of all ceramics, with salt glazed sherds making up the majority of these (n=43). Salt glazed stoneware has a date range from 1820-1900 (Hahn and Castille 1988). Twelve sherds of bristol glazed stoneware, which date from 1835-1900 (FMNH n.d.), were also collected. An example of the salt glazed and bristol glazed sherds encountered can be seen in Figures 20 and 24.

The smallest amount of ceramics encountered were pearlware and a single sherd of creamware. The most common decorations of pearlware collected were three sherds of flow blue, dating from 1790-1830, and four shell edged sherds, dating from 1780-1830 (Hahn and Castille 1988). A representation of the flow blue decorated pearlware can be seen in Figure 22. The final type of ceramic collected was a single sherd of creamware. This sherd is the earliest chronologically and spans from middle 18th to early 19th century (Hahn and Castille 1988).

After ceramics, glass was the most commonly encountered material, making up 36% of all artifacts collected. The majority of these were curved bottle glass (*n*=404) and milk glass (*n*=51). According to *The Collector's Encyclopedia of Milk Glass*, milk glass popularity piqued around 1895-1910 (Newbound 1994). Shards of cobalt and solarized glass were noted. Solarized glass dates from the 19th century and on (Lockhart 2006), while cobalt glass dates from the 1840s to the early 1900s and was frequently used as soda and mineral water bottles (Historic Glass Bottle Identification and Information Website). However, no intact solarized or cobalt bottles were discovered.

Additionally, of the 29 nails that could be identified, 23 (79%) were cut nails, dating to the 19th century (Edwards and Wells 1993).

Although brick scatter was noted throughout Locus 2 of 16IV141 (Figure 17), no intact features were encountered. Due to the heavy farming and plowing carried out in this area over time, there can be no certainty as to where the materials collected originated. Locus 2 of 16IV141 is considered ineligibility for the National Register of Historic Places (NRHP).

Figure 16 provides a representation of the area. The sketch map below (Figure 18) provides a representation of the artifact scatter within Locus 2. The UTMs of the boundaries of Locus 2 are as follows:

NW Corner: 681249 E 3341036 N NE Corner: 681334 E 3341107 N SE Corner: 681493 E 3340760 N SW Corner: 681387 E 3340719 N



FIGURE 16. CENTER OF LOCUS 2 (16IV141); FACING N.



FIGURE 17. REPRESENTATION OF BRICK SCATTER IN LOCUS 2 (16IV141); FACING N.

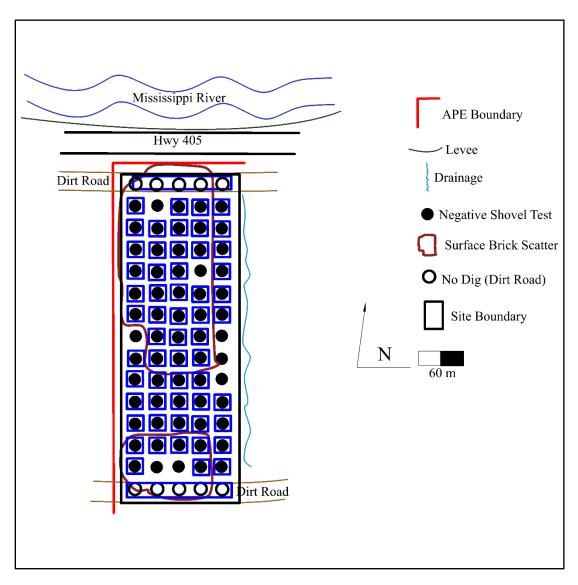


FIGURE 18. SKETCH MAP OF LOCUS 2 (16IV141).



FIGURE 19. AERIAL OF LOCUS 2 (16IV141) (SOURCE: GOOGLE EARTH).



FIGURE 20. SALT GLAZED STONEWARE PARTIAL BASE, LOCUS 2 (16IV141).



FIGURE 21. AQUA LIP/NECK, LOCUS 2 (16IV141).

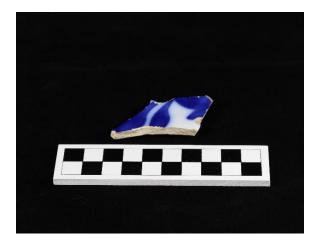


FIGURE 22. FLOW BLUE PEARLWARE, LOCUS 2 (16IV141).

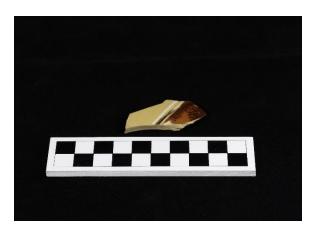


FIGURE 23. DENDRITIC YELLOWWARE, LOCUS 2 (16IV141).



FIGURE 24. BRISTOL GLAZED STONEWARE, LOCUS 2 (16IV141).



FIGURE 25. PORCELAIN TOILET FRAG, LOCUS 2 (16IV141).

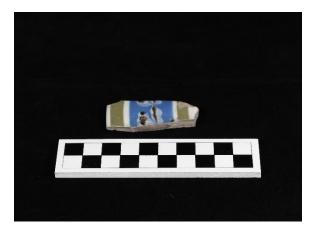


FIGURE 26. MOCHA WHITEWARE, LOCUS 2 (16IV141).



FIGURE 27. MOLDED MULTICOLOR GLAZED WHITEWARE, LOCUS 2 (16IV141).



FIGURE 28. PORCELAIN DOLL PIECE, LOCUS 2 (16IV141).

	Locus 2			
	Surface	N Dirt Rd Scatter	S Dirt Rd Scatter	TOTAL
Ceramics				
Whiteware				
Plain	103	2	3	108
Decorated				
Transfer Printed	14	1	1	16
Blue Willow	1			1
Hand-painted	10		1	11
Flow Blue	9			9
Annular	12			12
Mocha	2			2
Maker's Mark	4			4
Sponge	1			1
Shell edge	8			8
Other	8		1	9
UID	3			3
Stoneware				
Bristol Glaze	12			12
Lead Glaze	1			1
Salt Glaze	39	4		43
Albany Slip	4			4
Manganese Glaze	5	1	2	8
Rockingham Glaze	3			3
Unglazed	2			2
Slip Glaze	1			1
Splattered	1			1
Sponge	3			3
UID	1			1

TABLE 5. ARTIFACT TALLY OF LOCUS 2 (16IV141).

Ironstone				
Plain	251	25	12	288
Decorated				
Stained	1			1
Maker's Mark	3			3
Banded	1			1
Hand-painted	1			1
Other	3			3
Transfer Printed	2			2
Pearlware				
Plain	8			8
Decorated				
Banded	3			3
Transfer Printed	2			2
Flow Blue	2		1	3
Shell Edge	4			4
Sponge	1			1
Hand-Painted	2			2
UID	2			2
Creamware				
Plain	1			1
Yellowware				
Plain	25			25
Decorated				
UID			1	1
Banded	2			2
Dendritic	1			1
Annular	6			6
Fiestaware	1			1
Marble	2			2

TABLE 5. ARTIFACT TALLY OF LOCUS 2 (16IV141) (CONT).

Porcelain				
Plain	77		2	79
Decorated				
Transfer Print	1			1
UID	4			4
Sponge	2			2
Button 4-Hole	11			11
Terra cotta	5	2		7
Glass				
Bottle (Curved)	367	28	9	404
Window (Flat)	2			2
Milk	49	2		51
Marbles	1			1
Whole Bottle	1			1
Button	2			2
Metal				
Iron				
Fasteners				
Nails				
Cut	23			23
Wire	5			5
Unknown	1			1
Strap	5			5
Spikes	1	1		2
Bolt w/ Nut	1			1
Hook	1			1
Wrench		1		1
Unknown	7			7

TABLE 5. ARTIFACT TALLY OF LOCUS 2 (16IV141) (CONT).

2			2
2			2
	1		1
6		4	10
7	5		12
2			2
2			2
	1		1
2			2
6			6
1166	74	37	1277
	2 6 7 2 2 2 2 2 2 2 2 2 2 6	2 2 1 6 7 5 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	2

TABLE 5. ARTIFACT TALLY OF LOCUS 2 (16IV141) (CONT).

LOCUS 3

Locus 3 of 16IV141 is located in the northeastern portion of the APE. Materials collected were spread out over 10 transects within an area measuring 240 m x 270 m (0.15 mi x 0.17 mi). One shovel test was a subsurface positive (T25ST2); the remainder was solely surface scatter. Brick scatter was encountered in the eastern portion of the surface scatter (Figure 31).

A total of 8 shovel tests were excavated to delineate the single positive encountered in Locus 3, all of which were negative. Brick fragments were encountered within the shovel test. All materials collected were above the plow zone. There was no noted articulation. The artifacts recovered from Locus 3 during the survey and subsequent delineations can be seen in Table 6.

Within Locus 3, 241 artifacts were collected (Table 6). Significantly less artifacts were encountered in Locus 3 than Locus 2. The majority of these artifacts were ceramics and glass. Ceramics (n=60) made up 25% of all materials recovered and glass (n=141) made up 59%. The

most common ceramics encountered were whiteware, porcelain, and ironstone. Like Locus 2, these artifacts suggest a date range from early 1800s to the present.

A total of twenty-four sherds of whiteware were encountered, with the majority undecorated or unidentifiable. Plain whiteware dates from 1840-1890 (Hahn and Castille 1988). Porcelain (n=14) made up 6% of all materials collected and were undecorated (Figure 38). The dating of porcelain ranges from 1738- present (Kovel and Kovel 2004). Likewise, all eleven sherds of ironstone collected were undecorated and have a date range from 1813- 20th century (Kovel and Kovel 2004).

Glass, and specifically bottle glass, made up the second majority of materials collected. Bottle glass (n=141) made up 86% of all glass collected. As with Locus 2, cobalt and solarized glass were noted, indicating a date range from 1840s- early 1900s (Lockhart 2006; Historic Glass Bottle Identification and Information Website). Milk glass, marbles and whole bottles were also encountered. An Owen's 1925 clear glass bottle can be seen in Figure 34 below.

Locus 3, like Locus 2, is located within an area of heavy plowing and farming. Brick scatter was noted, though no intact features were encountered. However, unlike Locus 2, the majority of the ceramics collected were undecorated. Because of the heavy disturbance and relatively undiagnostic artifacts collected, this area is considered ineligibility to the National Register of Historic Places (NRHP).

A sketch map of the area and photos of the artifacts can be seen below. The UTMs of the boundaries of Locus 3 are as follows:

NW Corner: 681618 E 3341325 N NE Corner: 681815 E 3341476 N SE Corner: 681898 E 3341324 N SW Corner: 681688 E 3341174 N



FIGURE 29. CENTER OF LOCUS 3 (16IV141); FACING W.



FIGURE 30. WESTERN SIDE OF LOCUS 3 (16IV141); FACING E.



FIGURE 31. REPRESENTATION OF BRICK SCATTER IN LOCUS 3 (16IV141); FACING W.

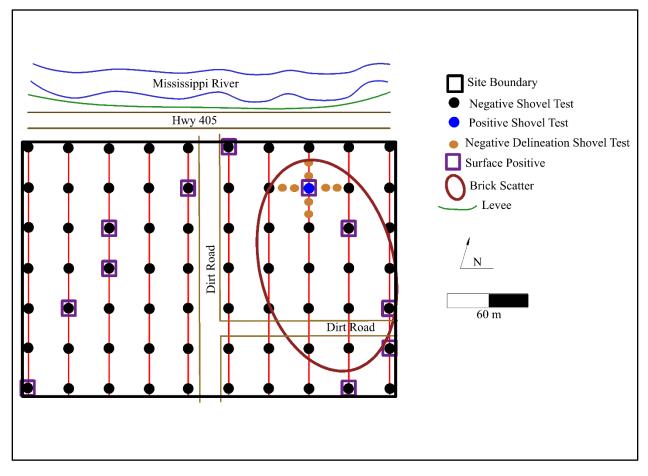


FIGURE 32. SKETCH MAP OF LOCUS 3 (16IV141).



FIGURE 33. AERIAL OF LOCUS 3 (16IV141) (SOURCE: GOOGLE EARTH).



FIGURE 34. GLASS BOTTLE, LOCUS 3 (16IV141).



FIGURE 35. IRON BOLT WITH NUT, LOCUS 3 (16IV141).



FIGURE 36. GLASS MARBLES, LOCUS 3 (16IV141).



FIGURE 37. SALT GLAZED STONEWARE, LOCUS 3 (16IV141).



FIGURE 38. PORCELAIN, LOCUS 3 (16IV141).

	Locus 3		
	T25ST2	TOTAL	
Ceramics			
Whiteware			
Plain	3	14	17
Decorated			
Hand-painted		1	1
Other	2	4	6
Stoneware			
Rockingham Glaze		1	1
Salt Glaze		8	8
Ironstone			
Plain		11	11
Fiestaware		1	1
Porcelain			
Plain		13	13
Castor Wheel		1	1
Prosser Button		1	1
Glass			
Bottle (Curved)	14	127	141
Window (Flat)		1	1
Milk	1	12	13
Marbles		5	5
Whole Bottle		4	4
Metal			
Iron			
Fasteners			
Nails			
Wire	2	2	4
Nut		1	1
Bolts		3	3
Misc.		2	2

TABLE 6. ARTIFACT TALLY OF LOCUS 3 (16IV141).

Lead			
Misc.	1		1
Cast Iron			
Тоу			
Cap Gun		1	1
Plastic			
Button		2	2
Construction Material			
Asbestos		3	3
TOTAL	23	218	241

TABLE 6. ARTIFACT TALLY OF LOCUS 3 (16IV141) (CONT).

STANDING STRUCTURES

The structure found within the APE was constructed out of what appears to be concrete masonry units (cmu) or cinder blocks. Also found within the torn down structure was a metal window frame and what appears to be some type of wooden porch all on a raised foundation. To date the structure just based on the torn down elements, it appears to have been built no earlier than the 1930s and most likely no later than the 1950s. The structure probably mirrored the remaining structure across from it. If this is correct and noting the area where a porch once stood, then the structure was most likely a front facing gable bungalow (gable side perpendicular to the street) with no identified architectural styling. This plain construction is in line with the typical architecture found in the area of a worker class community. Due to the altered integrity and neglect, this structure is not considered eligible for the National Register of Historic Places (NRHP). Photos can be seen in Figures 40 and 41. The UTMs of the standing structure are as follows:

Western Corner: 681564 E 3341274 N Northern Corner: 681574 E 3341282 N Eastern Corner: 681579 E 3341276 N Southern Corner: 681570 E 3341268 N



FIGURE 39. AERIAL OF STANDING STRUCTURE (SOURCE: GOOGLE EARTH).



FIGURE 40. STANDING STRUCTURE, NORTHEASTERN WALL; FACING SOUTHWEST.



FIGURE 41. STANDING STRUCTURE, SOUTHEASTERN WALL; FACING NORTHWEST.

SUMMARY OF FIELDWORK

The APE consisted of open cane fields with one small wooded area along the western boundary. A total of 1,450 shovel tests were excavated. Two separate loci (Locus 2 and 3 of 16IV141) of surface scatter were recorded. Based on the proximity and the materials collected, these loci are associated with the nearby previously recorded site 16IV141.

While Locus 2 was strictly surface scatter, Locus 3 yielded a single positive shovel test amidst surrounding surface scatter. A total of 8 delineation shovel tests were done, none of which contained artifacts. Brick fragments were noted within the positive shovel test, all of which were above the plow zone. No articulation was encountered.

Due to decades of farming and subsequent soil tilling within the APE, as well as the absence of intact brick features, Locus 2 and Locus 3 of 16IV141 are considered ineligible to the National Register of Historic Places (NRHP). The lone standing structure is also considered ineligible for the NRHP.

CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

From March 16 to March 28, 2017, Surveys Unlimited Research Associates, Inc. (SURA, Inc.), under contract to Baton Rouge Area Chamber (BRAC), undertook a Phase I cultural resources survey of 558 acres (ac) (225.82 hectares [ha]) in portions of Section 10 and 11, T9S, R13E, in White Castle, Iberville Parish, Louisiana.

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

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

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

Archaeological sites are usually assessed under Criterion D.

A total of 1,450 shovel tests were excavated under both a High Probability and Low Probability protocol. Two separate loci (Locus 2 and Locus 3 of 16IV141) of artifact scatter were encountered, both of which are associated with the Belle Grove Plantation (16IV141). The artifacts indicate a span from the early 19th through at least part of the 20th century.

Both loci are presently used for agricultural purposes and have been disturbed due to subsequent tilling. The majority of artifacts throughout the sites are associated with the surface or are located above the plow zone. No features were encountered during the initial survey or delineations. As a result of the sites lacking archaeological integrity, they are not eligible for the National Register of Historic Places under Criterion D.

Due to heavy disturbance and the lack of intact features in Locus 2 and Locus 3 of 16IV141, it is deemed the requirements of Section 106 of the National Register of Historic Places (NRHP) have been satisfied and that these areas and the lone standing structure are considered ineligible for the national register. It is recommended that the development be allowed to proceed.

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