

SURA, Inc.

(Surveys Unlimited Research Associates, Inc.)

Exhibit EE. Grace Farms West Letter of Submittal to SHPO & Phase I Cultural Resources Report

Since 1986

Archaeology

Historic Preservation

Cultural Resources Management

June 4, 2013

Ms. Pam Breaux
State Historic Preservation Officer
Division of Archaeology
Office of Cultural Development
Department of Culture, Recreation & Tourism
P.O. Box 44247
Baton Rouge, LA 70804

Re: Grace Farms, Iberville Parish (West Section)

Dear Ms. Breaux:

This letter is in reference to the desktop assessment we sent you on November 20, 2012, relative to the Grace Farms property in Iberville Parish which my client, the Baton Rouge Area Chamber (BRAC) seeks to make available for industrial development under the Louisiana Economic Development program. In that assessment, we recommended that, because,

Most of the APE is back acreage from Trinity Plantation, which fronted on Bayou Grosse Tete. The distance of the APE back (west) from that bayou suggests that there are unlikely to be plantation structures in this area, which was almost certainly reserved for sugar cane fields. Trinity's big house is atop a Plaquemine-period mound (16IV7) (Jones and Shuman 1987), but the village area was probably not so far back as the fields under consideration here. No area survey of this back acreage is recommended. On the other hand, two bayous transect the APE, Bayou Maringouin and Bogan's Bayou. The former has been surveyed by CEI and two sites were located inside the APE. Because the NRHP status of these two sites is given as "unknown," it is recommended that these locations be revisited by archaeologists to determine if the sites still exist and to determine their NRHP status (Shuman 2012).

Your office concurred with this recommendation. Accordingly, SURA revisited these sites and on April 22, 2013, issued a report (22-4265) that stated,

It is recommended that site 16IV54 (Little Four site) be considered destroyed and receive no further archaeological attention.

It is recommended that the northern half of site 16IV55 (Pink Trailer site) be considered ineligible for the NRHP. It is recommended that the southern half of the site be considered of unknown NRHP eligibility and that it either be avoided or that Phase II NRHP testing be undertaken in that area (Shuman 2013).

On 23 May, 2013, your office wrote:

We concur that site 16IV54 is not eligible for nomination to the National Register of Historic Places, and that site 16IV55 is undetermined with respect to its eligibility for nomination. If development of the property should proceed before additional work to assess the eligibility of 16IV55 is completed, our office can work with the parties to define the specific areas to be avoided or set aside until the assessment is completed. If the area of 16IV55 can be avoided during development, our office has no further concerns for this project (Breux 2013).

BRAC has since revised their plans to remove from development that portion of the project area considered of undetermined NRHP eligibility (See attached map and attached list of coordinates). Accordingly, we respectfully request that you issue a letter to us, for transmittal to BRAC, stating that no further Section 106 issues remain for the area indicated within the black boundary lines on the attached map.

Thank you for your assistance in this matter.

Sincerely,



Malcolm K. Shuman, Ph.D.
SURA, Inc.

Enc. Map of Grace Farms West
List of Coordinates for Area to be Exempted from Development (16IV55)

Cc: Mr. Jim Cavanaugh, BRAC

**Area to be removed from development, Grace Farms West
(Part of archaeological site 16IV55)**

Point A: Intersection of Farm Road with LA 3000:

30°25'05"N, 91°30'17"W
UTMs 643616E, 3366060N

Point B: Farm Road and SW corner of property:

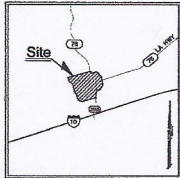
30°25'04"N, 91°30'19"W
UTMs 643563E, 3366028N

Point C: NW corner of property:

30°25'06"N, 91°30'20"W
UTMs 643535E, 3366090N

Point D: NE corner of property x LA 3000:

30°25'07"N, 91°30'19"W
UTMs 643562E, 3366121N



VICINITY MAP
Scale 1"=2000'±

GENERAL NOTES:

- NO ATTEMPT HAS BEEN MADE BY CSRS, INC. TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIP, EASES, RESTRICTIONS, SERVITUDES, EASEMENTS, OR OTHER BURDENS ON THE PROPERTY, OTHER THAN THAT FURNISHED BY THE CLIENT OR HIS REPRESENTATIVE.
- REFERENCE DOCUMENTS:
 - MAP SHOWING THE SURVEY OF A 358.06 ACRES TRACT KNOWN AS THE DAVID ELLISON PROPERTY LOCATED IN SECTIONS 56 AND 57, T15S, R9E AND SECTIONS 61, 62, T15S, R9E, BERWILLE PARISH, LOUISIANA FOR BRENT RIVET AND DAVID M. ELLISON, JR. BY WILLIAMS & HARRINGTON DATED JUNE 23, 2005
 - OFFICIAL PLAT MAP 1900 REDUCED PLAT FOR T-15-S, R-9-E, SEC-W BY JAMES LEWIS DATED JULY 21, 1900.
- SECTION LINES HAVE NOT BEEN VERIFIED IN THE FIELD AND ANY SHOWN ARE FOR GENERAL LOCATIVE INFORMATION ONLY.
- WETLANDS: A JURISDICTIONAL WETLAND DETERMINATION HAS NOT BEEN DONE BY CSRS, INC. AND IS NOT PART OF THIS SURVEY.
- THIS IS NOT A PROPERTY BOUNDARY SURVEY AND IS NOT INTENDED TO MEET THE LOUISIANA STANDARDS OF PRACTICE FOR PROPERTY BOUNDARY SURVEYS. BEARINGS AND DISTANCES FOR PARCEL NO. 3 WERE OBTAINED FROM REFERENCE DOCUMENT "A" FROM THE LOUISIANA STATE LAND OFFICE. THE WEST BOUNDARY OF PARCEL NO. 4 WAS DETERMINED BY FOLLOWING THE BANK OF THE BOWSON CANAL ON AN AERIAL PHOTOGRAPH AND DOES NOT REPRESENT A TRUE BOUNDARY. THE BOUNDARY SHOWN IS FOR GENERAL VISUALIZATION PURPOSES ONLY.
- THE EAST BOUNDARY OF PARCEL NO. 4 WAS DETERMINED BY FOLLOWING THE CENTERLINE OF BANDU MARRINGOON ON AN AERIAL PHOTOGRAPH AND DOES NOT REPRESENT A TRUE BOUNDARY.

PROPERTY FOOTNOTES:

- SELOFF OF 1.028 ACRES TO WAYNE LEWIS AS PER REFERENCE DOCUMENT "A".
- APPARENT SELOFF OF 0.666 ACRES TO ANNE SMITH THOMPSON & CHIDS AS SHOWN ON BERWILLE PARISH ASSOCIATION'S WEB SITE. BOUNDARY OF TRACT HAS NOT BEEN FIELD VERIFIED AND IS AN APPROXIMATE REPRESENTATION ONLY.
- APPARENT SELOFF OF 0.338 ACRES TO MARGUERITE D. JENNIS & CHIDS AS SHOWN ON BERWILLE PARISH ASSOCIATION'S WEB SITE. BOUNDARY OF TRACT HAS NOT BEEN FIELD VERIFIED AND IS AN APPROXIMATE REPRESENTATION ONLY.
- 1.856 ACRES ANTHROPOLOGICAL SITE.
- SELOFFS 1, 2, 3, & 4 AND ANTHROPOLOGICAL SITE ARE SHOWN EXTENDING TO THE BANDU MARRINGOON AND DO NOT REPRESENT THE ACTUAL BOUNDARY LOCATIONS. LOT LOCATIONS ARE FOR GENERAL VISUALIZATION PURPOSES ONLY.



LINE TABLE			LINE TABLE		
NUMBER	DIRECTION	DISTANCE	NUMBER	DIRECTION	DISTANCE
11	S89°58'12"E	388.67	126	S07°00'00"W	148.87
12	N10°00'00"W	298.47	127	N82°31'31"W	308.80
13	S81°54'42"E	113.07	128	N65°31'31"W	14.47
14	S86°40'00"E	328.20	129	S72°00'00"W	55.00
15	S20°40'00"E	21.00	130	S72°00'00"W	321.42
16	S28°40'00"E	327.48	131	N10°00'00"W	178.67
17	S28°40'00"E	81.32	132	S11°30'00"W	234.21
18	N10°00'00"W	307.17	133	S79°30'00"W	481.41
19	N10°00'00"W	45.87	134	S12°00'00"W	219.22
110	N10°40'00"E	58.07	135	S42°40'00"E	488.20
111	N14°22'12"E	163.42	136	S54°42'32"E	295.27
112	N6°20'27"E	418.21	137	S62°40'00"E	220.17
113	N10°00'00"E	138.17	138	S10°00'00"W	290.07
114	N10°00'00"E	148.20	139	S27°40'00"E	222.80
115	N13°30'00"E	103.32	140	S84°17'31"E	470.57
116	N23°30'00"E	74.51	141	S88°10'00"E	287.11
117	N10°00'00"E	228.87	142	S10°00'00"W	44.20
118	N10°00'00"E	107.60	143	S60°00'00"E	128.20
119	N10°00'00"E	98.80	144	S68°20'00"W	158.60
120	N64°20'00"E	83.52	145	S22°40'11"E	74.20
121	N10°00'00"E	384.20	146	N10°00'00"W	284.44
122	N44°40'00"E	148.80	147	S10°00'00"W	128.50
123	N10°00'00"E	144.80	148	S72°30'00"W	80.31
124	N10°00'00"E	284.57	149	S72°30'00"W	230.84
125	N10°00'00"E	283.20			

CSRS
INCORPORATED

CSRS, Inc.
6107 PARRIS ROAD SUITE 200 PARRIS, LA 70056
PH: 504.788.4944 FAX: 504.787.4348
www.csrsurvey.com

Map Showing
Site Exhibit

Grace Farms West
of
SECTIONS 56, 57, 58, & 59
T-15-S, R-9-E &
SECTIONS 61, 62
T-15-S, R-9-E
SOUTHEASTERN-WEST OF THE
MISSISSIPPI LAND DISTRICT
BERWILLE PARISH
LOUISIANA

BRAC
Baton Rouge Area Chapter

DATE: May 11, 2011
REGISTERED: 212111.00
DRAWN BY: JAY
CHECKED BY: JAY
SCALE: 1"=200'

P:\2011\Other\Draws\2011\20110511\20110511.dwg
 CSRS, Inc. 6107 PARRIS ROAD SUITE 200 PARRIS, LA 70056
 PH: 504.788.4944 FAX: 504.787.4348
 www.csrsurvey.com

**RELOCATION AND ASSESSMENT
OF TWO ARCHAEOLOGICAL SITES,
GRACE FARM WEST,
IBERVILLE PARISH, LOUISIANA**



for

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

April 22, 2013



SURA, Inc.
*P.O. Box 14414
Baton Rouge, LA 70898-*

**RELOCATION AND ASSESSMENT
OF TWO ARCHAEOLOGICAL SITES,
GRACE FARM WEST,
IBERVILLE PARISH, LOUISIANA**

Draft Report

by

Malcolm K. Shuman, Taylor Gabour, Brandy Kerr and Karl Shuman

**SURA, Inc.
P.O. Box 14414
Baton Rouge, Louisiana 70898-4414
(225) 381-8201**

for

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

April 22, 2013

ABSTRACT

On April 2 and 4, 2013, personnel from Surveys Unlimited Research Associates, Inc. (SURA) attempted to relocate and assess two previously recorded archaeological sites near Rosedale, Iberville Parish, Louisiana. A total of 17 shovel tests were excavated in the environs of 16IV54 and 24 were excavated at 16IV55. Thus, in this project, 2.27 acres (.92 hectares) were surveyed and 41 shovel tests were excavated.

The first site, 16IV54 (Little Four site) was not successfully relocated and it was judged that the site had probably been destroyed.

The second site, 16IV55 (Pink Trailer site), was relocated and an assessment was made as to its NRHP eligibility. The standing structures at site 16IV55 do not meet the level of, in the case of the trailer and its outbuilding, the age for NRHP inclusion, being less than 50 years old (NPS 1995:2), and, in the case of the abandoned house and its two outbuildings, integrity, as all are badly damaged.

The archaeological portion of the site has yielded artifacts of sufficient age to qualify for eligibility in the southern portion of the site only. Articulated, subsurface bricks in one shovel test indicate the possibility of intact structural remains in this area.

Consequently, that portion (i.e., south half) of site 16IV55 is considered of unknown eligibility for the NRHP.

It was recommended that site 16IV54 (Little Four site) be considered destroyed and receive no further archaeological attention.

It was also recommended that the northern half of site 16IV55 (Pink Trailer site) be considered ineligible for the NRHP, but that the southern half of the site be considered of unknown NRHP eligibility and that it either be avoided or that Phase II NRHP testing be undertaken in that area.

ACKNOWLEDGMENTS

Mr. Jim Cavanaugh, of BRAC, provided maps and general direction. Dr. Malcolm K. Shuman was principal investigator and accompanied the crew in the field. Ms. Taylor Gabour led the field crew, which consisted of Ms. Brandy Kerr and Mr. Karl Shuman. Ms. Kerr and Mr. Karl Shuman carried out the lab work. Margaret Shuman edited the report.

TABLE OF CONTENTS

ABSTRACTi
ACKNOWLEDGMENTSii
LIST OF FIGURESiv
LIST OF TABLESv
CHAPTER ONE INTRODUCTION.....1
 Project Area1
 Report Organization.....1
CHAPTER II NATURAL SETTING OF THE PROJECT AREA.....3
 Geomorphology3
 Soils.....3
 Flora and Fauna.....4
CHAPTER III PREHISTORIC CULTURE HISTORY IN VICINITY OF PROJECT
AREA5
 Paleo-Indian Period (?-6,000 B.C.).....5
 Archaic Period (6,000 B.C.-1500 B.C.)5
 Neo-Indian Period (1500 B.C.-A.D. 1500)7
CHAPTER IV HISTORY OF THE PROJECT AREA12
 Early European Contact in the Study Area (1542-1699)12
 French Colonial Period (1699-1763).....12
 Spanish Period (1763-1802)13
 American Territorial Period (1804-1812).....14
 Statehood (1812-Present).....15
CHAPTER V PREVIOUS ARCHAEOLOGICAL AND RESOURCE
INVESTIGATIONS17
CHAPTER VI METHODOLOGY OF INVESTIGATIONS18
 Methodology.....18
 Curation Statement.....18
CHAPTER VII RESULTS OF FIELDWORK19
 16IV54 (Little Four Site).....19
 16IV55 (Pink Trailer Site).....30
CHAPTER VIII SUMMARY AND RECOMMENDATIONS47
 Summary.....47
REFERENCES CITED.....49

LIST OF FIGURES

Figure 1. Portion of the USGS 7.5' Maringouin, LA (1999) topographic quadrangle showing the project areas.....	2
Figure 2. The soils in the project area (USDA 1971).	4
Figure 3. CEI location of 16IV54 (Source: LDOA 1999).	19
Figure 4. LDOA aerial photo showing location indicated by CEI coordinates.	20
Figure 5. LDOA aerial photo showing location indicated by CEI verbal description. 21	
Figure 6. Presumed location of 16IV54, looking SW.	22
Figure 7. View of field road on north side of residential property, 16IV54, facing west.....	23
Figure 8. View of field and scraped area on north side of residential property, 16IV54, facing northwest.	24
Figure 9. Crew excavating shovel tests parallel to LA Hwy 76, 16IV54, facing SSE.	25
Figure 10. Aerial photo showing locations of shovel tests, 16IV54.	26
Figure 11. 1999 aerial photo of 16IV54 site area (Source: Google Earth).	27
Figure 12. 2010 aerial photo of field south of LA76 x Parish 3000 junction, showing locations of shovel tests (Source: Google Earth).	28
Figure 13. Crew shovel testing in field south of LA 76 X 3000 junction.....	29
Figure 14. Representative shovel test profiles.	29
Figure 15. LDOA aerial photo showing location of site 16IV55.....	30
Figure 16. Southern part of site 16IV55 from LA Hwy 76, facing NW.	31
Figure 17. North side of abandoned house, north part of 16IV55, facing SE.	32
Figure 18. Front part of abandoned house, north part of 16IV55, facing WSW.....	33
Figure 19. Abandoned shed, north part of 16IV55, facing east.....	34
Figure 20. Abandoned outbuilding, north part of 16IV55, facing east.	35
Figure 21. Sketch map of 16IV55, showing site boundary and sensitive area.	36
Figure 22. Starting location for 16IV55 site definition, facing NW.....	37
Figure 23. Excavating ST10NOW, 16IV55; note large dog at ST20NOW. Facing NNW.....	38
Figure 24. Subsurface articulated bricks and concrete at ST50NOW, pen pointing north.....	39
Figure 25. Backyard of trailer at 16IV55, showing utility meter; facing ENE.	40
Figure 26. Pipe in backyard of trailer at 16IV55, facing NNE.	40
Figure 27. Surface scatter in southern part of 16IV55, facing NE.	41
Figure 28. Example of whiteware with blue-green annular design, surface, 16IV55 (1830-1860) (Source: Hahn and Castille 1988:C-2). Scale in cm.	42
Figure 29. Example of stoneware with Rockingham glaze, surface, 16IV55 (1830-1900) (Source:C-2). Scale in cm.	43
Figure 30. Example of ironstone with partial maker's mark, ST700N10W, 16IV55 (probably late 19 th century) (Source: Kovell and Kovell 1968:14-15). Scale in cm.	44
Figure 31. Representative shovel test profiles.	46

LIST OF TABLES

Table 1. Prehistoric cultural chronology of southern Louisiana (Source: Rees 2010:12).....	6
Table 2. Artifacts recovered from 16IV55 (Pink Trailer Site).*	45

CHAPTER ONE INTRODUCTION

Project Area

On April 2 and 4, 2013, personnel from Surveys Unlimited Research Associates, Inc. (SURA) attempted to relocate and assess two previously recorded archaeological sites near Rosedale, Iberville Parish, Louisiana. This survey was done pursuant to certification for industrial use of this property by the Louisiana Economic Development Department. The client was the Baton Rouge Area Chamber (BRAC).

The areas investigated lie in Sections 58 and 59, T7S, R9E, and are on the west side of LA Hwy 76, on the west side of Bayou Maringouin (Figure 1).

Report Organization

The remainder of this report is organized in the following manner. Chapter 2 briefly discusses the environment of the project area, including its geomorphology, soils, flora, and fauna. The human prehistory of the region is summarized in Chapter 3. Recorded historic events affecting the general area are briefly highlighted in Chapter 4. In Chapter 5 previous archaeological work is discussed. The methodology employed during the course of the survey by SURA is covered in Chapter 6. The results of the survey are presented in Chapter 7. Finally, Chapter 8 recapitulates the results of the fieldwork and analysis presented in this report and presents SURA's recommendations.

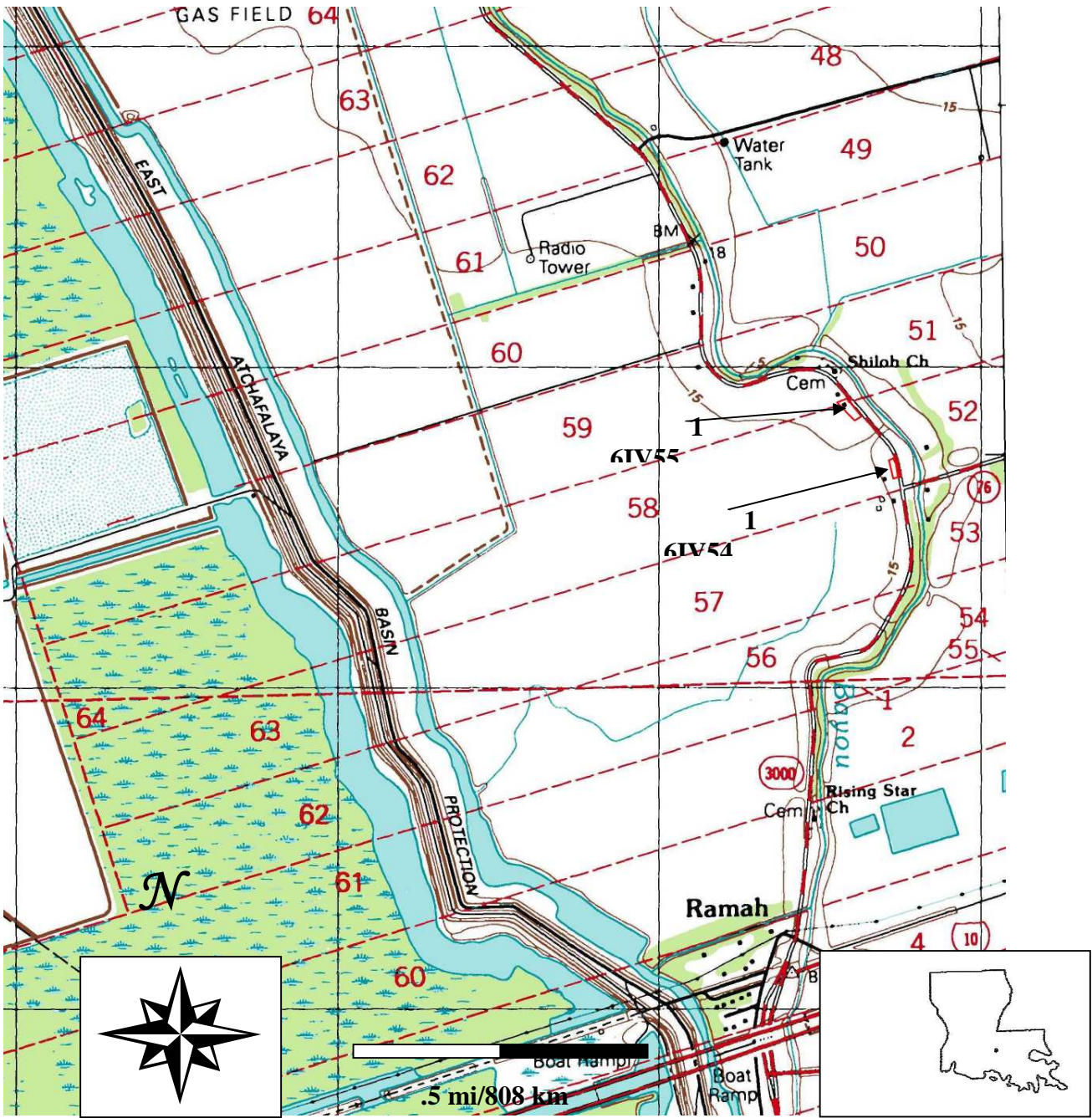


Figure 1. Portion of the USGS 7.5 minute Maringouin, LA (1999) topographic quadrangle showing the project areas.

CHAPTER II NATURAL SETTING OF THE PROJECT AREA

Geomorphology

The project areas are located in the alluvial valley of the Mississippi River, on the east side of the Atchafalaya Basin. The sediments eroded from throughout the Mississippi, Ohio, and Missouri valleys have been continuously deposited by the river on its banks and delta for the last 12 thousand years, since the end of the Pleistocene Period. The great weight of the sediments has caused the continental crust to dip along the northern Gulf of Mexico. A rough balance was formerly maintained between the sinking of the coastal areas of Louisiana and build-up of thicker sediments on the subsiding surface. According to one view, since the construction of the continuous artificial levee system in this century, the deposition of flood-born sediments on the subsiding land has been prevented. Areas of low relief have continued to sink, but no new sediments are deposited on their sinking surfaces, which eventually become permanently inundated. This process appears to be an important contributing factor in coastal land loss in Louisiana (Saucier 1994:53).

The sites investigated are on the natural levee of the west bank of Bayou Maringouin. Elevation is 15 feet (ft) (4.6 meters [m]) above mean sea level.

Soils

The soils in the project area are predominantly of the Commerce Association, being nearly level, somewhat poorly drained and loamy in nature. The crew did, however, encounter some Sharkey soils, which are level, poorly drained, and clayey (USDA 1971) (Figure 2).

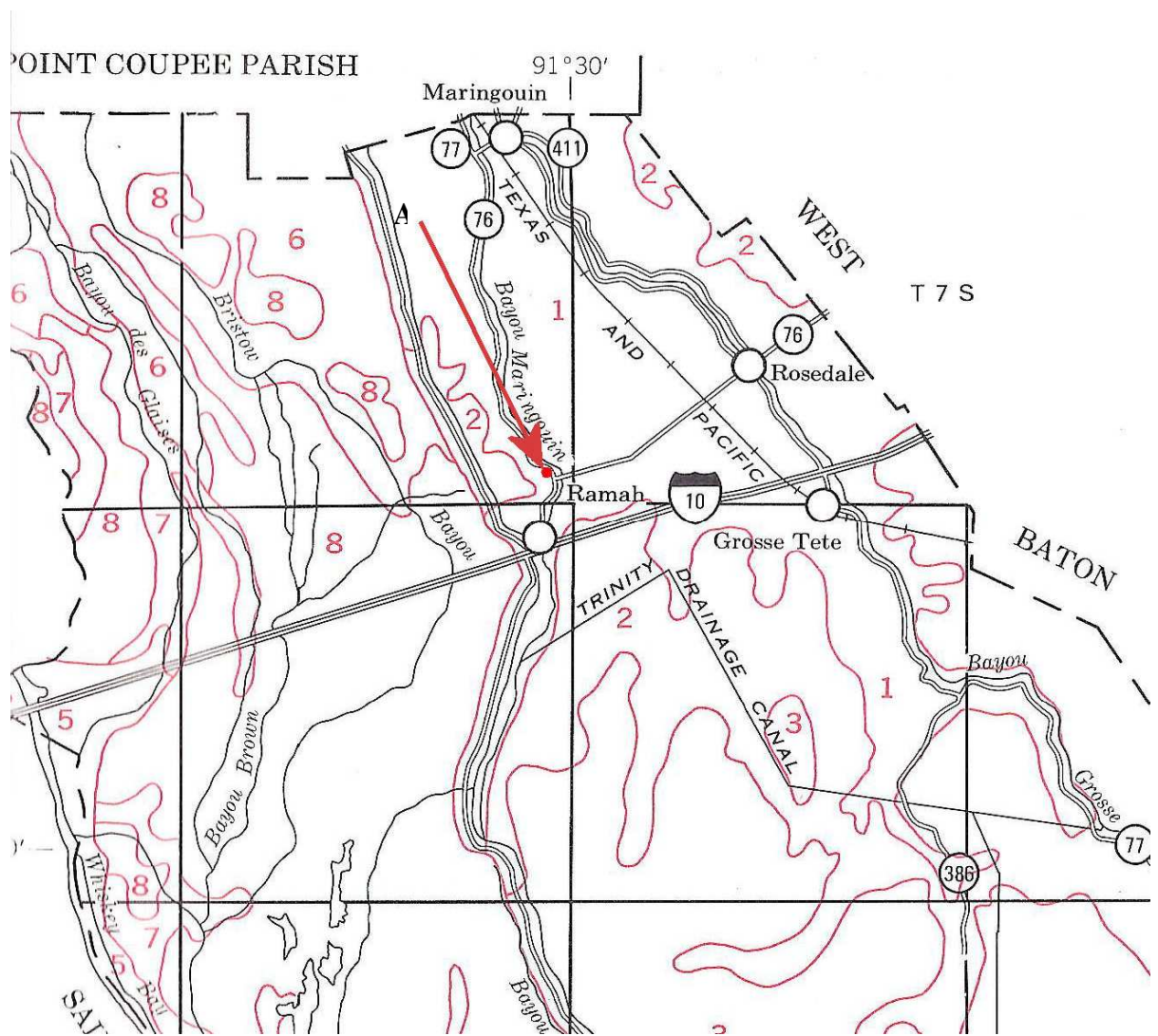


Figure 2. The soils in the project area (USDA 1971).

Flora and Fauna

Most of the project areas have been in sugar cane cultivation, with the exception of residential locations along LA Hwy 76. The banks of Bayou Maringouin are overgrown with willow (*Salix nigra*), oaks (*Quercus sp.*), ash (*Fraxinus sp.*), pecan (*Carya Illinoensis*), and other bottom land vegetation. Cypress (*Taxodium distichum*) also grows in the lower areas. Fauna typical of river valley agricultural land are found here. Squirrels (*Sciurus sp.*), rabbits (*Sylvilagus sp.*), and aquatic turtles (*Graptemys sp.* and *Chrysemys sp.*) are common, as are white-tailed deer (*Odocoileus virginianus*), opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*).

CHAPTER III PREHISTORIC CULTURE HISTORY IN VICINITY OF PROJECT AREA

Paleo-Indian Period (?-6,000 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 Paleo-Indians 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) (Table 1).

In Louisiana, there is evidence of Paleo-Indians, both from a series of surface finds of fluted points, and from excavations (Webb et al. 1971). Most of these data derive from the northern half of the state; evidence from the Coastal Zone is somewhat more ambiguous. During the 1960s, Sherwood Gagliano carried out a series of investigations at Avery Island, a salt dome island in Iberia Parish (Gagliano 1963; 1967; 1970). The results of these investigations led Gagliano to conclude that Avery Island had been inhabited by a "pre-Clovis" culture associated with a bipolar tool industry. As Neuman has written, however, Gagliano has been unable to point to a single Paleo-Indian 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 +/-590 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 indicate that Paleo-Indian occupations were present in the vicinity of the current project area (Weinstein et al. 1977).

Archaic Period (6,000 B.C.-1500 B.C.)

This period represents a time of heavy exploitation of wild plant foods and of small game, representing adaptation to an expanding boreal environment (Weinstein and Kelley 1984:32-34). The initial part of this period, the Early Archaic (6000-5000 B.C.), is defined by a series of distinctive projectile points and it has been suggested that society was organized at the band level and focused on a seasonal round of hunting and gathering. The succeeding Middle Archaic period (5000-3000 B.C.) was typified 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 to areas around the Great Plains. It is presently unclear what affect that may have had on the Southeast.

**Table 1. Prehistoric cultural chronology of southern Louisiana
(Source: Rees 2010:12)**

Time Frame	Period	Sub-periods		Cultures	
A.D. 1700	Historic	American Colonial		Multicultural & Multiethnic	
A.D. 1500		Mississippi	Late Mississippi - Protohistoric		Mississippian
A.D. 1200	Woodland		Middle Mississippi		Plaquemine
A.D. 1000		Late Woodland		Coles Creek	Coles Creek
A.D. 700			Baytown	Troyville	Fourche Maline
A.D. 400	Middle Woodland		Marksville	Marksville	
A.D. 1		Early Woodland	Tchula	Tchefuncte	
800 B.C.	Archaic	Late Archaic	Poverty Point	Poverty Point	
1700 B.C.			Middle Archaic		Evans
2000 B.C.	Early Archaic			(poorly defined)	
6000 B.C.		Paleoindian		San Patrice var. <i>Keithville</i>	
			San Patrice		
8000 B.C.		Late Paleoindian			
8800 B.C.		Middle Paleoindian	Clovis		
9500 B.C.		Early Paleoindian	Pre-Clovis		
10,500 B.C.					
11,500 B.C.					

The Middle Archaic is poorly represented in southern 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. The mound yielded Williams and Pontchartrain points, crude bifaces, lithic debitage and a fairly large number of baked 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. 1977; Gagliano et al. 1982; Weinstein et al. 1977; 1979). Typical diagnostic artifacts include Evans, Palmillas, Ensor, Macon, Gary, and Pontchartrain points and such ground stone implements as winged atlatl weights and tubular pipes (Weinstein and Kelley 1992:33).

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

Neo-Indian Period (1500 B.C.-A.D. 1500)

The Neo-Indian period saw the introduction of ceramics, the widespread use of cultigens and the importation of the bow-and-arrow. The construction of earthen mounds, while apparently practiced to some extent during the Late Archaic (Gibson 1994; Saunders 1994; Russo 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 et al. (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 field investigations by Kuttruff and Shuman failed to find a Poverty Point component (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 was hunted, including deer, raccoon, ducks, muskrat, otter, bear, gray fox, ocelot and alligator. It seems that crustaceans were not eaten. The Tchefuncte culture is especially known for its shell middens, heaps of shells from the brackish water clam, *Rangia cuneata*. These clams were evidently 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, hammerstones, knives, scrapers and projectile points. Ground stone artifacts include abraders, atlatl weights, beads, cobble hammerstones, 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 that "the evidence to support the theory that the Tchefuncte Culture Indians were mound builders is vague." Most sites near the current project area with Tchefuncte components are 16EBR5 (Kleinpeter), 16EBR51 (Lee), 16EBR67 (Sarah Peralta), and 16AN17 (Beau Mire).

Marksville Culture (A.D. 1-400)

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

On the basis of his survey of sites along the Amite River, east of Baton Rouge, Weinstein identified two phases for Marksville (Smithfield and Gunboat Landing) for the eastern part of Louisiana (Weinstein 1974). The Kleinpeter site (16EBR5), located on a terrace overlooking Bayou Fountain, also contains a significant late Marksville component (Jones et al. 1994), as does the Broussard Mounds site (16AN1) (Shuman et. al.(1995). Other significant sites in South Louisiana appear to be the Gibson mounds (16TR5) and Mandalay Plantation (16TR1), both in Terrebonne Parish. Other such 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.

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 cordmarked, 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 (Weinstein and Kelley 1992:36).

Nevertheless, Baytown components have been found at several locations in south Louisiana. These include Kleinpeter (16EBR5), 16EBR51 and 16EBR67. 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, the Morgan Site [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 Ascension parish (16AN128) 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. The latter is indicated by vast complexes of truncated earthen pyramids and the use of shell temper in ceramics, as well as in distinctive ceramic forms, such as effigy vessels. Mississippian culture sites were often fortified (Stoltman 1978:725). During this period, social and political organization appears to have centered on a chiefdom and subsistence was based on the triad of maize, beans and squash.

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

The nature of the relationship between Plaquemine and Mississippian culture is as yet unclear. Phillips (1970), for example, considered Plaquemine culture to have evolved by about A.D. 1000 and to have thereafter been steadily influenced by the Mississippians until about A.D. 1400, when Mississippian groups actually displaced the indigenous Plaquemine peoples. Brain, 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 a hybrid in his view (Brain 1978).

On the basis of information developed largely from ceramic analyses, three regional phases have been suggested for early Plaquemine culture in this general area. The first is the Medora Phase, based on the work of Quimby (1951) at the Medora Site (16WBR1) in West Baton Rouge Parish. The second is the Baratavia Phase, based largely on work at the Fleming Site (16JE36) (Holley and DeMarcey 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 largest Plaquemine site in the vicinity of the project area is Kleinpeter (16EBR5), a location consisting of six mounds and extensive midden areas. The site appears to have been abandoned some time prior to the arrival of the first Europeans, probably at sometime during the Delta Natchezan phase (Jones et al. 1994).

CHAPTER IV 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 Plaquemine 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 1979:120, Figure 4). No native groups were reported to have lived in the Plaquemine area prior to the establishment of the Chitimacha there, at the behest of the French.

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 village of the Bayou Goula. 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 study area (Riffel 1985:4). The general vicinity of Plaquemine developed slowly throughout the French colonial period. In 1731 there were only 24 residents and a *vacherie* (ranch) (Riffel 1985:4). Presumably, both the French and the native residents lived by hunting, light agriculture, and the hide trade. The French also had access to beef and dairy products and, of course, manufactured goods from Europe.

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, including the project area, 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.

Meanwhile, Acadians continued to enter Louisiana and usually settled below Bayou Manchac along both banks of the Mississippi River. In 1784, Thomas Hutchens reported that the Chitimacha were still established along the west bank of the Mississippi River, above Bayou La Fourche (Swanton 1979:120, Figure 5).

From 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 Plaquemine 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 farm land.

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 the area 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 were 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.

The greatest recent change in the economic base in Ibeville 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.

CHAPTER V PREVIOUS ARCHAEOLOGICAL AND RESOURCE INVESTIGATIONS

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 area is a historic Chitimacha Indian Village site (16IV158). It is near the modern community of the same name that is located at the confluence of Bayou Plaquemine with Bayou Grosse Tete (Kniffen 1938, DOA site files).

In modern times, four previous projects have taken place in/adjacent to this APE. The earliest was Robert Neuman's 1968 survey of the proposed route of I-10, a survey for which no report exists, though Malcolm Shuman was a crew member during the portion of the survey that passed through Iberville Parish. In 1982, Gibson conducted a study for the Atchafalaya protection levees (Gibson 1982). This project took place on the western boundary of the current APE and did not record any sites for the APE. Three years later Shuman conducted a survey for a water line that ran along La Hwy 76, alongside Bayou Maringouin, and recorded one cemetery (Shuman 1985). The most pertinent survey was one by Coastal Environments, Inc. (CEI), that included the banks of Bayou Maringouin, off La Highway 76 (Kelley et al. 2000). This survey recorded a number of sites along the bayou, two of being sites 16IV54 and 16IV55, which are being investigated by the present project.

CHAPTER VI METHODOLOGY OF INVESTIGATIONS

Methodology

This project involved archival research and fieldwork. For the former, historic maps at the Louisiana State University Cartographic Information Center of the Department of Geography and Anthropology were examined, and site and project files at the Louisiana Division of archaeology were reviewed.

Field work consisted of shovel testing at 10 m intervals at the purported locations of the sites, along an axis parallel to the highway (LA 76 and Parish 3000). Shovel tests were extended at right angles to the west from shovel tests on that axis, when not prevented by standing structures, saturated soil, and/or utilities. Locations surveyed were mapped using tape and compass and photographed.

Curation Statement

All materials recovered are delivered to the Louisiana Division of Archaeology. The curation guidelines also specify that several documents be submitted with the artifacts. The documents include a typed site form, two copies of the catalog record, two copies of all field notes, one reproducible master copy of the final report for the project, all original color slides or prints, black and white photographic negatives and associated contact sheets, and box inventory for each box of artifacts submitted. Requirements for documentation of photographic material include photographic logs for black and white or color prints and negatives, as well as the labeling of all slides submitted. When no artifacts are found, field notes remain in the SURA archive. The address of the LDOA curation facility is:

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

CHAPTER VII RESULTS OF FIELDWORK

This project had as its aim the relocation and assessment of two sites, 16IV54 and 16IV55, recorded by CEI in 1999 as part of their Atchafalaya Basin backwater area survey (Kelley et al. 2000). Both sites, which were apparently 20th-century rural residential locations, were listed as of Unknown NRHP eligibility. Because the property on which they are located is being considered for certification as an industrial site, it became necessary to attempt to relocate these two properties and determine their NRHP eligibility. Work at the sites will now be described in turn.

16IV54 (Little Four Site)

CEI states that this site consists of whiteware, stoneware, bottle glass, bricks and nails. It is said to be at UTM coordinates 643740E, 3365660N, in a field about 328 ft (100 m) west of the junction of LA Hwy 76 and Parish Road 3000 (Figure 3). The site form states the “site may already be destroyed; plowing ensures future damage” (LDOA 1999).

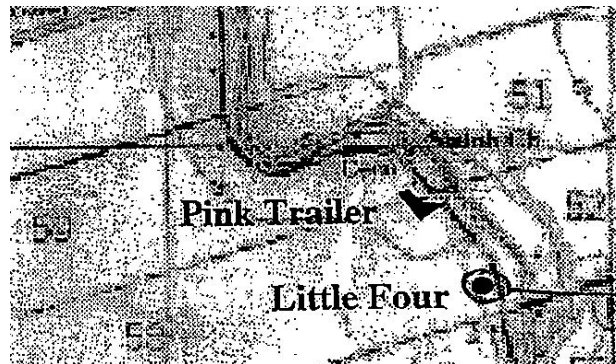


Figure 3. CEI location of 16IV54 (Source: LDOA 1999).

The problem with this description is that the UTM coordinates place the site *south*, not *north*, of the intersection mentioned (Figure 4). If the coordinates are taken at face value, the location is, indeed, in a cane field.



Figure 4. LDOA aerial photo showing location indicated by CEI coordinates.

If, on the other hand, the verbal description is taken as accurate, the location is on residential property, specifically, a front lawn; this is the location shown in the LDOA cultural resources data base site map (Figure 5). There is a field, however, adjacent to this residential property on the north.



Figure 5. LDOA aerial photo showing location indicated by CEI verbal description.

Due to the fact that the CEI site form was prepared at a time when GPS units were less common, so that there may have been some map error derived from imprecise scaling, and because the verbal description is specific in stating that the location is north of the intersection of LA 76 and Parish 3000 (and also because, as will be seen, the verbal description for the location of site 16IV55 turned out to be accurate), it was decided to test in the location shown in Figure 5 (i.e., north of the intersection, on the west side of LA Hwy 76). This location is shown in Figure 6. The field road and part of a concrete slab in that road on the north side of the residential property are depicted in Figure 7. A cane field is just north of this (Figure 8).



Figure 6. Presumed location of 16IV54, looking SW.



Figure 7. View of field road on north side of residential property, 16IV54, facing west.



Figure 8. View of field and scraped area on north side of residential property, 16IV54, facing northwest.

The crew attempted to relocate site 16IV4 first by excavating shovel tests at 32.8 ft. (10 m) intervals in the front yard of the house at the site's inferred location (Figure 9).



Figure 9. Crew excavating shovel tests parallel to LA Hwy 76, 16IV54, facing SSE.

Obviously, because this was a front lawn, and the tenant was not home, it seemed inadvisable to carry out testing along more than a single transect close to the highway. Likewise, the two pit bulls in the backyard made testing in that location seem unwise. In any case, the procedure resulted in five shovel tests, all of which were negative. In addition, three shovel tests were conducted along a similar transect in the field just north of this house, on the west side of LA Hwy 76 (Figure 10). A 1999 aerial photograph (Figure 11) may show a house in that location but definition is insufficient to allow a positive identification. In any case, the shovel tests in this field were also negative. No testing was conducted in the bare spot between the house and the field because it appeared to have been extensively disturbed.



Figure 10. Aerial photo showing locations of shovel tests, 16IV54.



Figure 11. 1999 aerial photo of 16IV54 site area (Source: Google Earth).

To be complete, a site definition grid at 32.8 ft (10 m) intervals was excavated in the field south of the intersection of LA Hwy 76 and Parish 3000, where the CEI coordinates would have placed the site (Figure 12). This procedure resulted in the excavation of nine additional shovel tests, all of which were negative (Figure 13).

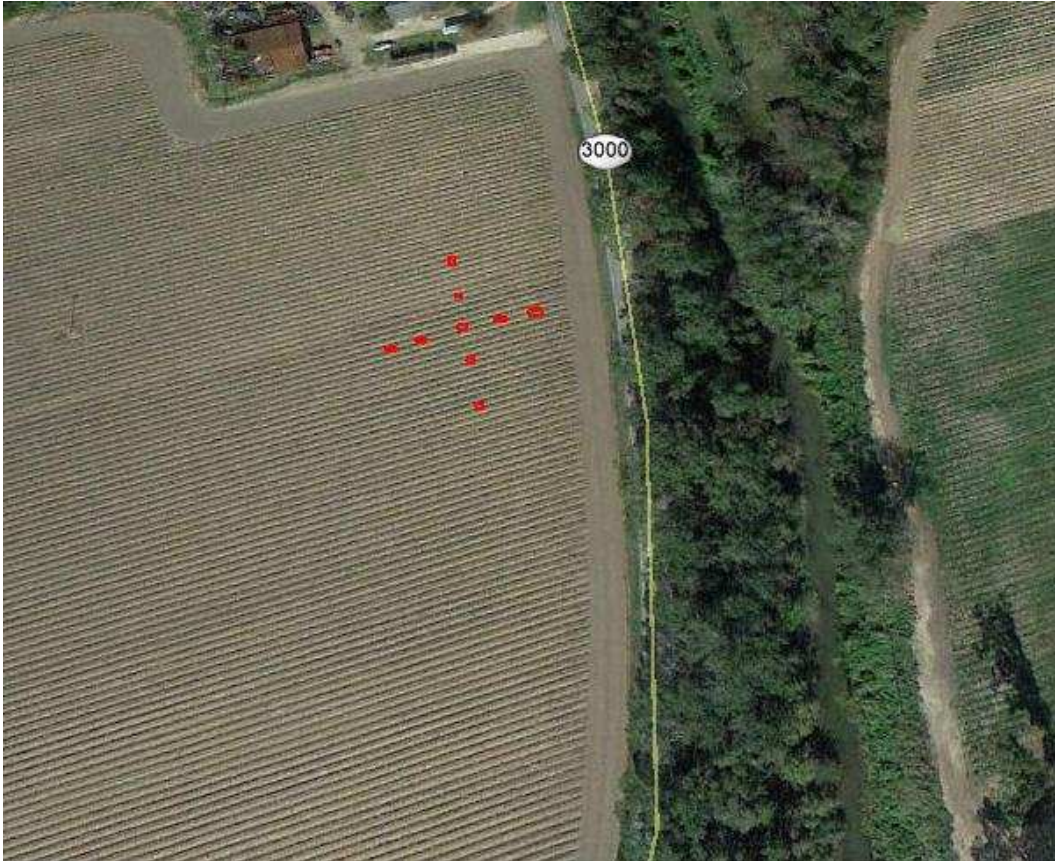


Figure 12. 2010 aerial photo of field south of LA76 x Parish 3000 junction, showing locations of shovel tests (Source: Google Earth).



Figure 13. Crew shovel testing in field south of LA 76 X 3000 junction.

Stratigraphy was varied in the areas tested, ranging from Commerce loams to Sharkey clays. Representative shovel test profiles are presented in Figure 14.

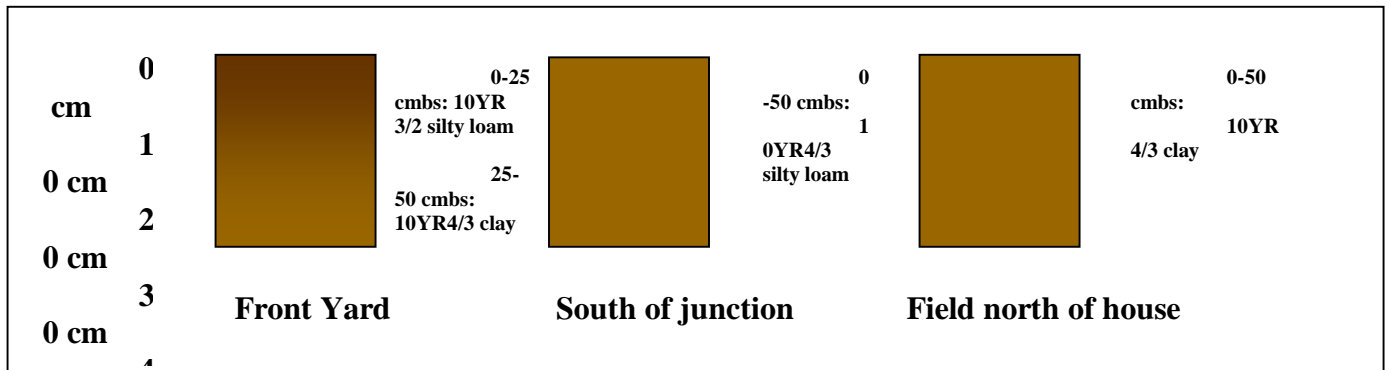


Figure 14. Representative shovel test profiles.

The conclusions of the current investigators are that site 16IV54 has been destroyed. We feel that it is likely to have been just north of the present house on whose lawn shovel tests were excavated. The concrete slab in what is now a field road could be (but is not necessarily) the foundation of what was once a house. The area around this slab has been scraped, such that no topsoil remains. No artifacts were noted on the surface at this location. The field just to the north did not produce any artifacts upon shovel testing. We recommend that this site be considered ineligible for the NRHP on the basis of lack of integrity.

16IV55 (Pink Trailer Site)

CEI states that this site consists of whiteware, stoneware, bottle glass, bricks and nails. It is said to be at UTM coordinates 643580E, 3365860N, in a field about 492 ft (150 m) west of the junction of LA Hwy 76 and Parish Road 3000 (Figure 3). The site form states the “site may already be destroyed; plowing ensures future damage” (LDOA 1999).

As with 16IV54, the UTM coordinates would put the site considerably further south than it should be, in this case, closer to where we infer site 16IV54 to have actually been. On the other hand, the verbal description accords well with the situation actually encountered, down to the fact that there is a site in that location that conforms in both materials and dimensions to the site described by CEI. We feel that the LDOA site map (Figure 15) has placed the site in the correct location.



Figure 15. LDOA aerial photo showing location of site 16IV55.

When visited on April 2 and 4, 2012, the site was occupied by a trailer (not pink) and storage shed (Figure 16) and, to its north, across a fence line, an abandoned house (Figures 17 and 18) and two outbuildings (Figures 19 and 20).



Figure 16. Southern part of site 16IV55 from LA Hwy 76, facing NW.



Figure 17. North side of abandoned house, north part of 16IV55, facing SE.



Figure 18. Front part of abandoned house, north part of 16IV55, facing WSW.



Figure 19. Abandoned shed, north part of 16IV55, facing east.



Figure 20. Abandoned outbuilding, north part of 16IV55, facing east.

Site definition was carried out at 10 m intervals, along a transect parallel to and about 15 m west of LA Hwy 76. Shovel tests at 10 m intervals were excavated at right angles to this line where lack of buildings and utilities permitted. Figure 21 is a sketch map of the site.

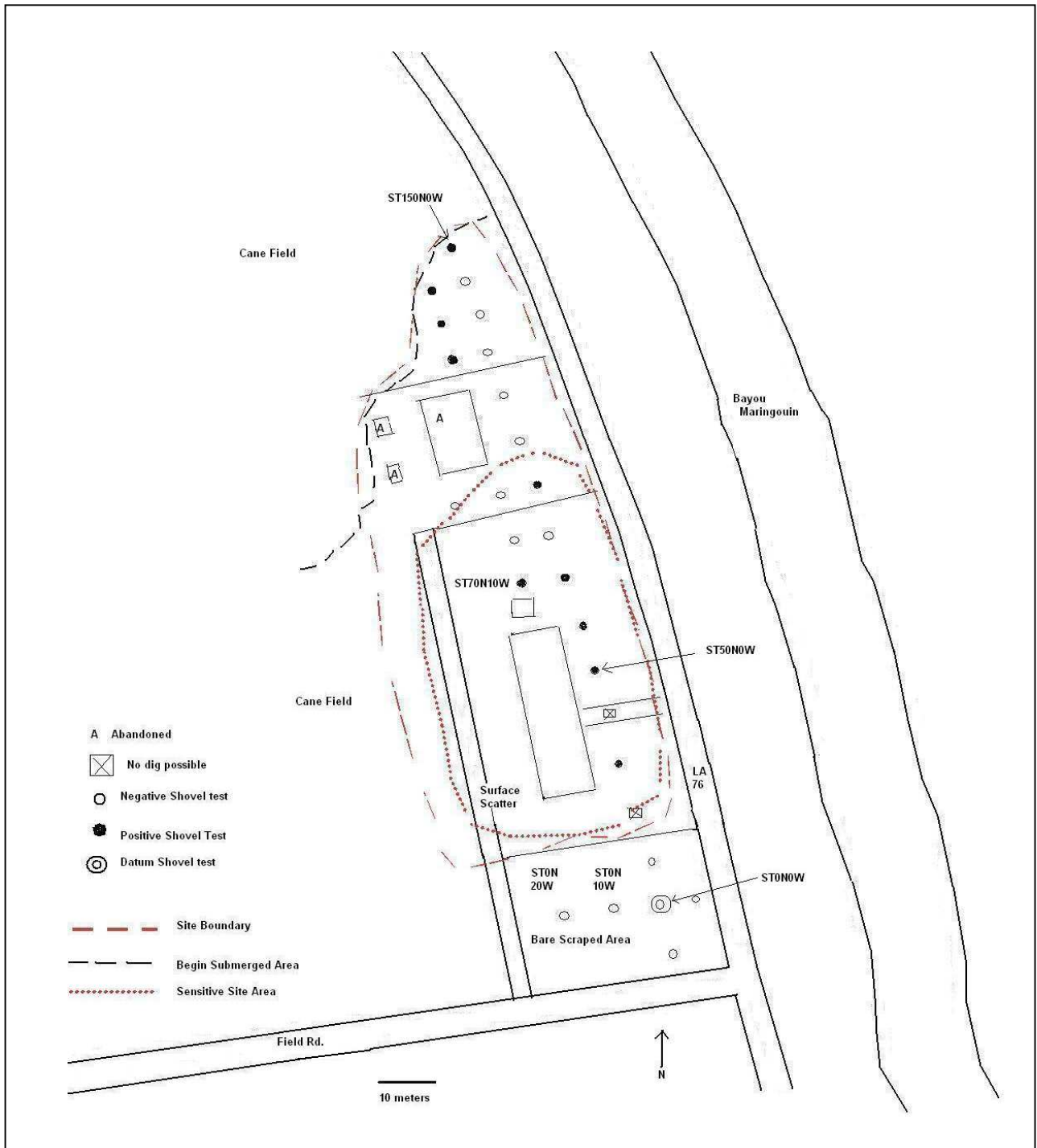


Figure 21. Sketch map of 16IV55, showing site boundary and sensitive area.

Site datum was in a bare, scraped area (Figure 22) near the junction of a field road with LA Hwy 76, at UTM coordinates 643598E, 3366032N +/-15 ft.



Figure 22. Starting location for 16IV55 site definition, facing NW.

The 0E/W transect proceeded north from this area, with only two shovel tests being impossible to excavate, one (ST20N0W) due to the presence of a tethered large dog (Figure 23) and one (ST40N0W) due to the presence of a gravel sidewalk.



Figure 23. Excavating ST10NOW, 16IV55; note large dog at ST20NOW. Facing NNW.

At ST150N0W, standing water halted excavation. Nevertheless, by that time a number of artifacts had been recovered and one shovel test (50N0W) showed the presence of articulated bricks, indicating a possible foundation (Figure 24). In fact, all shovel tests from ST30N0W to ST60N0W produced brick fragments.



Figure 24. Subsurface articulated bricks and concrete at ST50NOW, pen pointing north.

Utilities and a septic tank disallowed shovel testing in the side and back yards of the trailer in the southern half of the site (Figures 25 and 26).



Figure 25. Backyard of trailer at 16IV55, showing utility meter; facing ENE.



Figure 26. Pipe in backyard of trailer at 16IV55, facing NNE.

Nevertheless, there were considerable numbers of historic ceramics and glass fragments on the surface in the southern corner of the site, near the borders of the field road with the backyard of the trailer (Figure 27).



Figure 27. Surface scatter in southern part of 16IV55, facing NE.

This surface scatter included bottle glass, whiteware, an example of blue annular whiteware (Figure 27) and stoneware (Figure 28).



Figure 28. Example of whiteware with blue-green annular design, surface, 16IV55 (1830-1860) (Source: Hahn and Castille 1988:C-2). Scale in cm.



Figure 29. Example of stoneware with Rockingham glaze, surface, 16IV55 (1830-1900) (Source:C-2). Scale in cm.

Shovel tests produced two child's glass marbles, brick fragments, a steel screw, whiteware, bottle glass, an iron handle of some sort, and one fragment of ironstone with a partial maker's mark (Figure 30).



Figure 30. Example of ironstone with partial maker's mark, ST700N10W, 16IV55 (probably late 19th century) (Source: Kovell and Kovell 1968:14-15). Scale in cm.

This piece of ironstone is too small to identify the maker's mark in its entirety, but the letters "OIT" indicate that this was part of the English royal motto, "Dieu et mon Droit," which appears in banners on several types of stoneware, made by John Ridgway and Company, of Staffordshire, England (1830-present); Peoria Pottery Company, of Peoria, Illinois (1873-1902); Brockman Pottery Company of Cincinnati, Ohio (1888-1912); Isaac Davis (Prospect Hill Pottery), of Trenton, New Jersey (1875-1895); and a number of other makers of the late 19th century, from Trenton, New Jersey, and Cincinnati, Ohio (Kovell and Kovell 1986:14-15). The full inventory of artifacts from 16IV55 is presented in Table 2. Shovel test profiles are presented in Figure 31.

Table 2. Artifacts recovered from 16IV55 (Pink Trailer Site).*

	Surface	ST0N50W	ST60N0W	ST80N0W	ST70N10W	ST90N0W	ST120N0W	150N0W	120N10W	130N10W	150N10W	TOTAL
Ceramics												
Whiteware												
Plain	13				1	1						15
Decorated												
Blue-Green annular	1											1
Ironstone												
Maker's Mark					1							1
Stoneware												
Rockingham Glaze	1											1
Glass												
Bottle				1	6							7
Child's marble		1	1									2
Metal												
Steel screw					1							1
Iron handle								1				1
Construction Material												
Bricks					2		3		2	1		8
Tar blocks											3	3
TOTAL	15	1	1	1	11	1	3	1	2	1	3	40

*Not all brick fragments were collected; hence, some shovel tests listed as positive but which yielded only brick fragments, do not have material listed for this table.

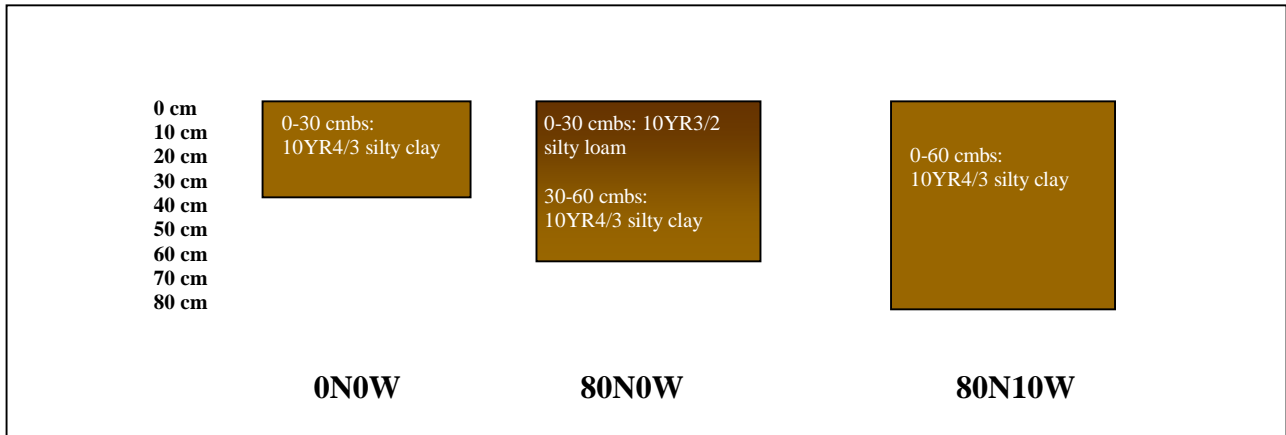


Figure 31. Representative shovel test profiles.

We do not consider the standing structures at this site significant because, in the case of the trailer and its storage shed, neither meets the 50-year age criterion. The other three structures (abandoned house and two outbuildings) may meet the age criterion, but they are so badly damaged as to destroy their integrity.

The archaeological aspect of the site is slightly more problematic. The artifacts do not indicate any great age, but, nevertheless, the oldest of them suggest the late 19th century (or conceivably even the middle of that century). It is quite possible these artifacts are legacy items, used for several generations, and the site itself is much younger. The discovery of articulated brick at ST 50N0W, however, indicates the possibility of structural remains at the site that may inform this question. Therefore, while we are comfortable in dismissing the northern portion of the site (i.e., that part north of ST80N), we are less comfortable doing so with the southern half. It is for this reason that we consider this part of site 16IV55 (i.e., the portion in which the present trailer is located) to be of unknown NRHP eligibility.

CHAPTER VIII SUMMARY AND RECOMMENDATIONS

Summary

In April, 2013, SURA, Inc., undertook the relocation and evaluation of two previously recorded archaeological sites, 16IV54 and 16IV55. During the course of the survey, .57 acres (ac) (.23 hectares [ha]) were surveyed at the presumed location of 16IV54 and 1.7 acres (ac) (.69 hectares [ha]) were surveyed at 16IV55. A total of 17 shovel tests were excavated in the environs of 16IV54 and 24 were excavated at 16IV55. Thus, in this project, 2.27 acres (.92 hectares) were surveyed and 41 shovel tests were excavated.

The first site, 16IV54 (Little Four site) was not successfully relocated and it was judged that the site had probably been destroyed.

The second site, 16IV55 (Pink Trailer site), was relocated and an assessment was made as to its NRHP eligibility.

According to the NRHP criteria for evaluation (NPS 1995:2),

The quality of significance in American history, architecture, archeology, engineering, 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;

D. That have yielded, or may be likely to yield, information important in prehistory or history.

The standing structures at site 16IV55 do not meet the level of, in the case of the trailer and its outbuilding, the age for NRHP inclusion, being less than 50 years old

(NPS 1995:2), and, in the case of the abandoned house and its two outbuildings, integrity, as all are badly damaged.

The archaeological portion of the site has yielded artifacts of sufficient age to qualify for eligibility in the southern portion of the site only (STs 30N-80N). Articulated, subsurface bricks in one shovel test indicate the possibility of intact structural remains in this area.

Consequently, that portion (i.e., south half) of site 16IV55 is considered of unknown eligibility for the NRHP.

Recommendations

It is recommended that site 16IV54 (Little Four site) be considered destroyed and receive no further archaeological attention.

It is recommended that the northern half of site 16IV55 (Pink Trailer site) be considered ineligible for the NRHP. It is recommended that the southern half of the site be considered of unknown NRHP eligibility and that it either be avoided or that Phase II NRHP testing be undertaken in that area.

REFERENCES CITED

American State Papers

- 1834 Documents Legislative and Executive of the Congress of the United States. 2nd Session of the 11th to the 3rd Session of the 13th Cong. 1809-1815. Vol. 2, Washington.

Belmont, John S.

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

Brain, Jeffrey P.

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

Brown, Ian W.

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

Brown, Ian W. and Nancy Lambert-Brown

- 1978 *Archaeological Investigations at the Banana Bayou Mound (33-I-6)*. Research Notes No. 5. Petit Anse Project, Lower Mississippi Survey, Peabody Museum, Harvard University, Cambridge, MA.

Byrd, Kathleen Mary

- 1974 *Tchefuncte Subsistence Patterns, Morton Shell Mound, Iberia Parish, Louisiana*. Unpublished M.A. thesis submitted to the Department of Geography & Anthropology, Louisiana State University. Baton Rouge.

- 1977 The Brackish Water Clam (*Rangia cuneata*): A Prehistoric 'Staff of Life' or a Minor Food Resource. *Louisiana Archaeology* 3:23-31.

Coastal Environments, Inc.

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

Collins, Henry B.

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

du Pratz, Le Page

1975 *The History of Louisiana*. Originally published in 1774. Edited by Joseph G. Treagle, Jr. Louisiana State University Press, Baton Rouge.

Gagliano, Sherwood M.

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

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

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

1974 *An Archaeological Survey of Avery Island*. Avery Island, Baton Rouge.

Gagliano, Sherwood M, and Clarence H. Webb

1970 Archaic-Poverty Point Transition at the Pearl river Mouth, In: *The Poverty Point Culture*, ed. by Bettye J. Broyles and Clarence H. Webb, ;: 47-72. Bulletin No. 12, Southeastern Archaeological Conference, Morgantown.

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

1982 *Sedimentary Studies of Prehistoric Archaeological Sites: Criteria for the Identification of Submerged Archaeological Sites of the Northern Gulf of Mexico Continental Shelf*. Unpublished report submitted to the Division of State Plans and Grants, National Park Service, Department of the Interior, and on file with the Louisiana Division of Archaeology.

Gagliano, Sherwood M., Richard A. Weinstein, Eileen K. Burden, Susan Fulgham and Charles Wax

1977 *Cultural Resources Testing Along the Mississippi Riverbank of Woodstock Plantation, East Baton Rouge Parish, Louisiana*. Unpublished report submitted to Woodstock Plantation and on file with the Louisiana Division of Archaeology.

Gibson, Jon L.

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

Gibson, Jon L.

1982 *Archaeology and Ethnology on the Edges of the Atchafalaya Basin, South Central Louisiana, Avoyelles, St. Landry, Iberia, St. Martin, St. Mary, and Iberville Parishes, Louisiana.* Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

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

1994 Before their time? Early Mounds in the Lower Mississippi Valley. *Southeastern Archaeology* 13(2)162-186.

Gilmore, A. B.

1938 *The Louisiana Sugar Manual.* A. B. Gilmore, New Orleans.

Hahn, Thurston H. G. and George J. Castille

1988 *Archaeological Investigation of the Marogne-Laine Site on Acadia Plantation, Lafourche Parish, Louisiana.* Unpublished report submitted to the Division of Archaeology and the Lafourche Heritage Society, and on file with the Louisiana Division of Archaeology, Baton Rouge.

Holley, George R. and Gary B. DeMarcey

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

Howe, Henry V., Richard Joel Russell, Fred B. Kniffen, James H. McGuirt, and Stanley M. McDonald

1938 *Reports on the Geology of Iberville and Ascension Parishes.* Geological bulletin No. 13, Department of Conservation, Louisiana Geological Survey, New Orleans.

Iberville, Pierre LeMoyne, Sieur d'

1981 *Iberville's Gulf Journals.* Translated and edited by Richebourg Gaillard McWilliams. University of Alabama Press: University, Alabama.

Jones, Dennis C. and Malcolm K. Shuman

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

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

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

Kelley, David B., Douglas C. Wells, Dana Bowker Lee, Richard A. Weinstein, and Josetta A. LeBoeuf

2000 *Cultural Resources Evaluation of the Lower Atchafalaya Basin Backwater Area, South Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Kniffen, Fred B.

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

Kovell, Ralph and Terry Kovel

1986 *Kovell's New Dictionary of Marks*. Crown Publishers, Inc., New York.

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

1993 *Archaeological Testing of the North Bend Site (16SMY132) and Survey of the Todd Area Levee, St. Mary Parish, Louisiana*. Submitted by the Louisiana Geological Survey to the New Orleans District of the U. S. Army Corps of Engineers, New Orleans.

LDOA (Louisiana Division of Archaeology)

1999 *Site files: Iberville Parish*. Baton Rouge, La.

LSUCIC (Louisiana State University Cartographic Information Center)

2012 *Historic Map files*. Department of Geography and Anthropology. Baton Rouge.

Neuman, Robert W.

1984 *An Introduction to Louisiana Archaeology*. Louisiana State University Press, Baton Rouge.

Newton, Milton B.

1987- *Louisiana: A Geographical Portrait*. Geoforensics, Baton Rouge.

NPS (National Park Service)

1995 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. National Park Service, Department of the Interior, Washington, D.C.

Pénicaud, André

1988 *Fleur de Lys and Calumet: Being the Pénicaud Narrative of French Adventure in Louisiana*. Written 1723, translated and edited by Richebourg Gaillard McWilliams. University of Alabama Press, Tuscaloosa.

Phillips, Philip

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

Quimby, George I.

- 1951 *The Medora Site, West Baton Rouge Parish, Louisiana*. Anthropological Series 24(2):81-135. Field Museum of Natural History, Chicago.

- 1957 The Bayou Goula Site, Iberville Parish, Louisiana. *Fieldiana: Anthropology* 47(2):89-170. Chicago Natural History Museum, Chicago.

Rees, Mark A. (Ed.)

- 2010 *Archaeology of Louisiana*. Louisiana State University Press, Baton Rouge.

Riffel, Judy (editor)

- 1985 *Iberville Parish History*. Le Comite' des Archives de la Louisiane, Baton Rouge.

Russo, Michael

- 1994 A Brief Introduction to the Study of Archaic Mounds in the Southeast. *Southeastern Archaeology* 13(2)93-108.

Saucier, Roger T.

- 1994 *Geomorphology and Quaternary Geologic History of The Lower Mississippi Valley*, vol. I. United States Army Corps of Engineers/Waterways Experiment Station. Vicksburg

Saunders, Rebecca

- 1994 The Case for Archaic Period Mounds in Southeastern Louisiana. *Southeastern Archaeology* 13(2)118-133.

Shuman, Malcolm K.

- 1985 *Cultural Resources Survey of an Area of Proposed Water Works Improvement along Bayou Grosse Tete, Iberville Parish, Louisiana*. Unpublished report on file with the Louisiana Division of Archaeology, Baton Rouge.

Shuman, Malcolm, Dennis Jones, Melissa Wiedenfeld, John Lindemuth

- 1995 *Cultural Resources Survey of the Proposed Route of a Liquid Hydrogen Pipeline in Ascension, East Baton Rouge, Iberville, and West Baton Rouge Parishes, Louisiana*. Survey Unlimited Research Associates, Inc. (SURA).

Report submitted to R-S-H Engineering, Inc. Baton Rouge and on file with the Louisiana Division of Archaeology.

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

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

Stoltman, James B.

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

Swanton, John R.

1979 *The Indians Of the Southeastern United States*. Smithsonian Institution Press, Washington, D. C.

Swanton, John R.

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

Toth, Edwin Alan

1988 *Early Marksville Phases in the Lower Mississippi Valley: A Study of Culture Contact Dynamics*. Unpublished doctoral dissertation submitted to the Anthropology Department, Harvard University.

USDA (United States Department of Agriculture)

1971 *Parish General Soil Maps: Iberville Parish*. Soil Conservation Service, Alexandria, Louisiana.

Wall, Bennett H. (editor)

1990 *Louisiana: A History*. Second edition, Forum Press, Arlington Heights, IL.

Webb, Clarence H.

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

1982 *The Poverty Point Culture*. second edition, revised. *Geoscience and Man*, Vol. 17, Louisiana State University, Baton Rouge.

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

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

Weinstein, Richard Alan

- 1974 *An archaeological Survey of the Lower Amite River, Louisiana.* Unpublished M.A. thesis submitted to the Department of Geography and Anthropology, Louisiana State University, Baton Rouge.

Weinstein, Richard and David Kelley

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

- 1992 *Archaeology and Paleogeography of the Upper Felsenthal Region: Cultural resources Investigations in the Calion Navigation Pool.* South-Central Arkansas, Unpublished report submitted to the Vicksburg District, Corps of Engineers, and on file with the Division of Archaeology.

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

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

Weinstein, Richard A., Eileen K. Burden, Katherine L. Brooks and Sherwood M. Gagliano

- 1978 *Cultural Resources Survey of the Proposed Relocation Route of U.S. 90 (LA 3052), Assumption, St. Mary, and Terrebonne Parishes, Louisiana.* Unpublished report submitted to the Office of Highways, Louisiana Department of Transportation and Development, and on file with the Louisiana Division of Archaeology.

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

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

Woodiel, Deborah

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