

Exhibit FF. T.O. Allen Industrial Park
South Phase I Cultural Resources
Assessment Report & Transmittal Letter



T.O. Allen Industrial Park South Phase I Cultural Resources Assessment Report & Transmittal Letter

A PHASE I CULTURAL RESOURCES SURVEY FOR THE PROPOSED ALLEN ESTATES SOUTH PROJECT IN JEFFERSON DAVIS PARISH, LOUISIANA

NEGATIVE FINDINGS FINAL REPORT

PREPARED BY
TERRAXPLORATIONS, INC.

PREPARED FOR
ONE ACADIANA



A PHASE I CULTURAL RESOURCES SURVEY FOR
THE PROPOSED ALLEN ESTATES SOUTH PROJECT
IN JEFFERSON DAVIS PARISH, LOUISIANA

NEGATIVE FINDINGS
FINAL REPORT

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TERRAX REPORT NO. 2016.150

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ABSTRACT

From September 26-30 of 2016, TerraXplorations, Inc. (TerraX) of Mobile, Alabama performed a cultural resources survey for the proposed Allen Estates South project in Jefferson Davis Parish, Louisiana. The Phase I survey was performed by Chris Rivers, Field Director, with Paul D. Jackson serving as Principal Investigator. The survey tract encompasses approximately 142.6 acres. The investigation did not identify any cultural resources within the project area and background research identified no cultural resources that would be impacted by the proposed project. Accordingly, no further archaeological studies are recommended for the proposed Allen Estates South project.

TABLE OF CONTENTS

Abstract	i
Table of Contents	ii
Chapter 1: Introduction	1
Chapter 2: Project Area Environment	7
Chapter 3: Previous Investigations	9
Chapter 4: Methodology and Field Results	11
Field Methods	11
Laboratory Methods and Collection Curation	11
Results of Field Investigation	11
Chapter 5: Summary and Recommendations.....	13
References	15

LIST OF FIGURES

Figure 1.1. Map showing the project area.....	2
Figure 1.2. Aerial showing the project area.	3
Figure 1.3. View from corner at southeastern extension of project area, facing north.....	4
Figure 1.4. View at southeastern border of project area, facing north.....	4
Figure 1.5. View at northern boundary of project area, facing east.....	5
Figure 1.6 View from southwestern corner of project area, facing north	5
Figure 2.1. Geologic Map of Louisiana	8
Figure 3.1. Map showing previous surveys within one mile of the project area	10
Figure 4.1. Aerial map showing shovel test transects within the project area.....	12

CHAPTER 1

INTRODUCTION

TerraXplorations, Inc. (TerraX) of Mobile, Alabama was contracted by One Acadiana of Lafayette, Louisiana to conduct a cultural resources survey for the proposed Allen Estates South project in Jefferson Davis Parish, Louisiana. The Phase I survey was performed on September 26-30, 2016 by Chris Rivers (Field Director), Eric Wyrock, Matt Sumrall, Mike Lucas, and Caleb Walls, with Paul D. Jackson serving as Principal Investigator. The purpose of this study was to determine if any prehistoric or historic properties exist within the limits of the project area, and if so, to document and assess each based on the National Register of Historic Places (NRHP) criteria.

The project area lies just west-southwest of the community of Lacassine and east-southeast of the town of Iowa, Louisiana. U.S. Highway 90 forms the northern project boundary with Union Pacific Railroad and I-10 just north of that. The roughly rectangular project area is found within Section 35, Township 9 South, Range 6 West as seen on the 1985 Lacassine, Louisiana USGS 7.5' series topographic quadrangle (Figure 1.1). The survey tract is approximately 142.6 acres (57.7 hectares) in size.

Vegetation within the majority of the survey tract consisted of grasses and some legume plants, with a treeline of mixed hardwoods along the western boundary and portions of the southeastern extension. A flume/canal runs from northwest to southeast in the southern portion of the project area (Figure 1.2). The disturbance is limited to agricultural activities. Photographs depicting the present state of the land within the project area are provided (Figures 1.3-1.6).

This report of our investigations is presented as follows. Chapter 2 contains information regarding the past and present environmental conditions in the project area. Chapter 3 details the background research for this project. Chapter 4 presents the methodology and results of fieldwork. Chapter 5 concludes the report and summarizes our findings and recommendations.

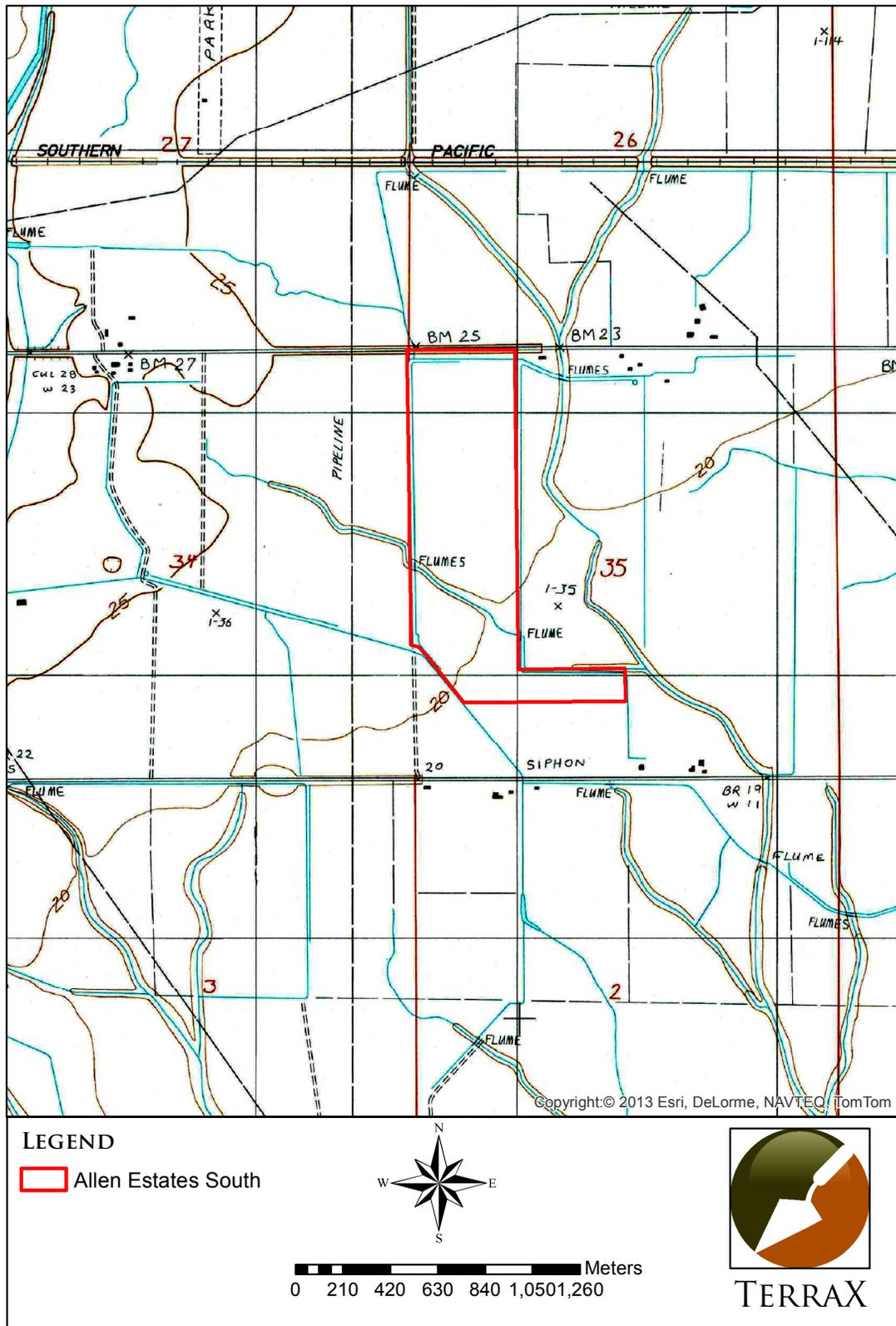


Figure 1.1. Map showing the project area (based on the 1985 Lacassine, Louisiana USGS 7.5' series topographic quadrangle).

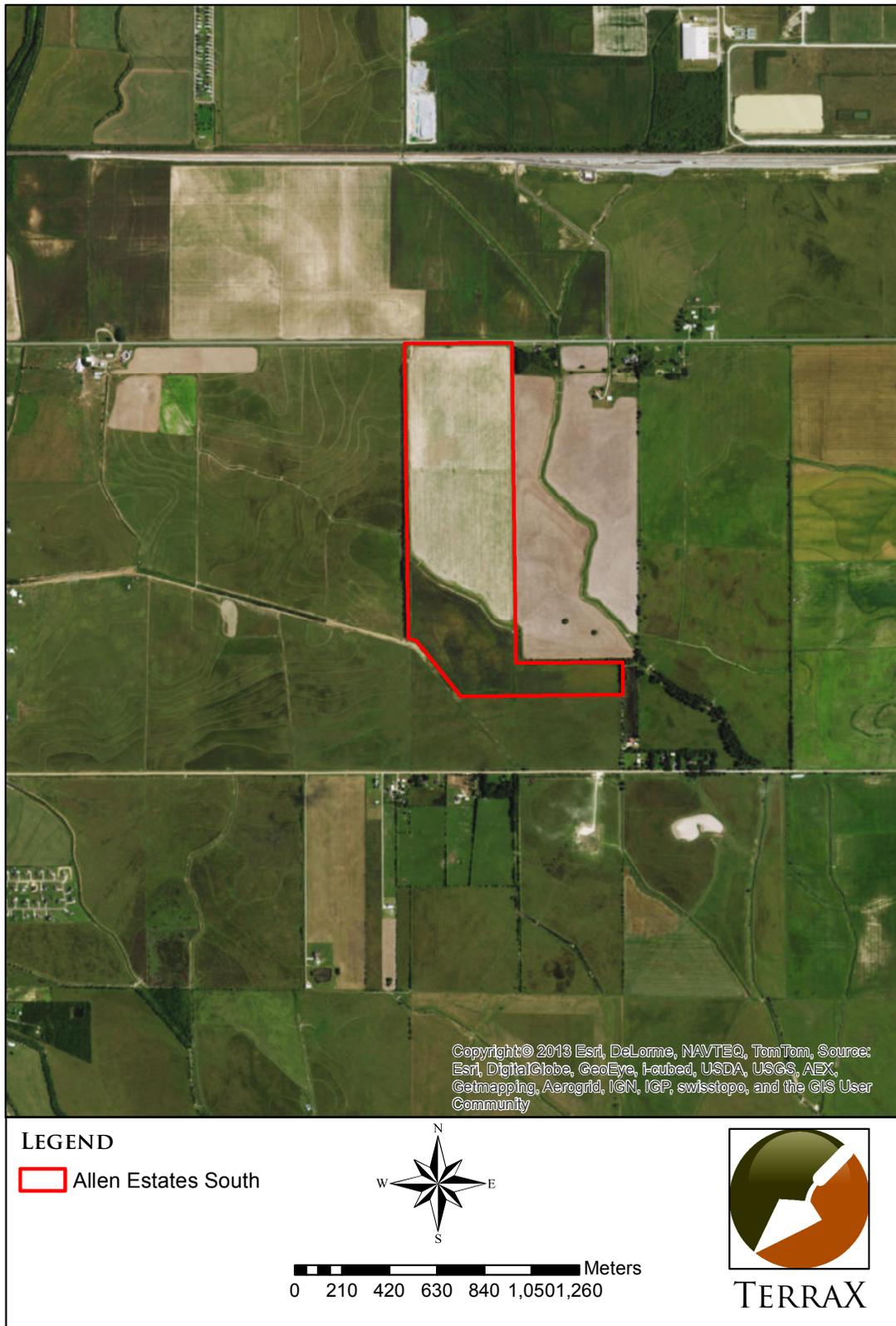


Figure 1.2. Aerial showing the project area.



Figure 1.3. View from corner at southeastern extension of project area, facing north.



Figure 1.4. View at southeastern border of project area, facing north.



Figure 1.5. View at northern boundary of project area, facing east.



Figure 1.6. View from southwestern corner of project area, facing north.

CHAPTER 2

PROJECT AREA ENVIRONMENT

The survey area is located in Jefferson Davis Parish, which is found in the southwestern part of the state. The survey tract falls within the Pleistocene Terraces Physiographic Region (Figure 2.1). Deposits associated within this region consist of sand, gravel, and mud, beneath raised, flat surfaces with differing degrees of tilt and dissection depending on their relative ages. These surfaces are remnants of former floodplains along the major rivers in southern and northern Louisiana (Louisiana Geological Survey 2010).

The study area is drained by numerous tributaries and flumes, flowing into West Bayou Lacassine. Many flumes and siphons are noted on the topographic map and are evidence of rice cultivation. Most of the acreage in Jefferson Davis Parish is composed of the Gulf Coast Prairies Major Land Resource Area (MLRA). These are loamy to clayey soils that are mainly used for cropland, with some utilized for urban development or pasture (Midkiff 2003).

Five soil types are found within the study area (Web Soil Survey 2016). Approximately one-third of the project area is within Crowley-Vidrine complex, 0 to 1 percent slopes. This moderately well drained and somewhat poorly drained soil is found on broad convex ridges on terraces and is mainly used as cropland. Slightly less than a third of the project area contains Mowata-Vidrine complex, 0 to 1 percent slopes. This level soil is found on broad flats on terraces. Poorly drained to moderately well drained, this soil is used primarily for cropland. Mowata silt loam, 0 to 1 percent slopes, can be found on 16 percent of the project area. This level, poorly drained soil occurs on broad flats and along drainageways on terraces. It is also used mainly for crops. Slightly less than 15 percent of the project area contains Kaplan silt loam, 0 to 1 percent slopes. Found on broad, slightly convex ridges on terraces, this level, somewhat poorly drained soil is used primarily as cropland. Less than 10 percent of the project area is within Morey loam. This level, poorly drained soil is found on broad flats on terraces and is also used primarily for cropland (Midkiff 2003).

Fauna within this region include deer (*Odocoileus virginianus*), squirrel (*Sciurus spp.*), rabbit (*Sylvagus spp.*), raccoon (*Procyon lotor*), beaver (*Castor canadensis*), wood duck (*Aix sponsa*), nutria (*Myocastor coypus*), and mink (*Neovision vision*) (Lowery 1974).

The climate throughout Jefferson Davis Parish is characterized as having long hot and humid summers with warm winters with cool air occasionally coming from the north. Average precipitation throughout the year measures 52 inches. Average yearly temperature for the area is 51° F in the winter and 81° F in the summer. Snowfall seldom occurs and rarely stays on the ground for more than a single day.

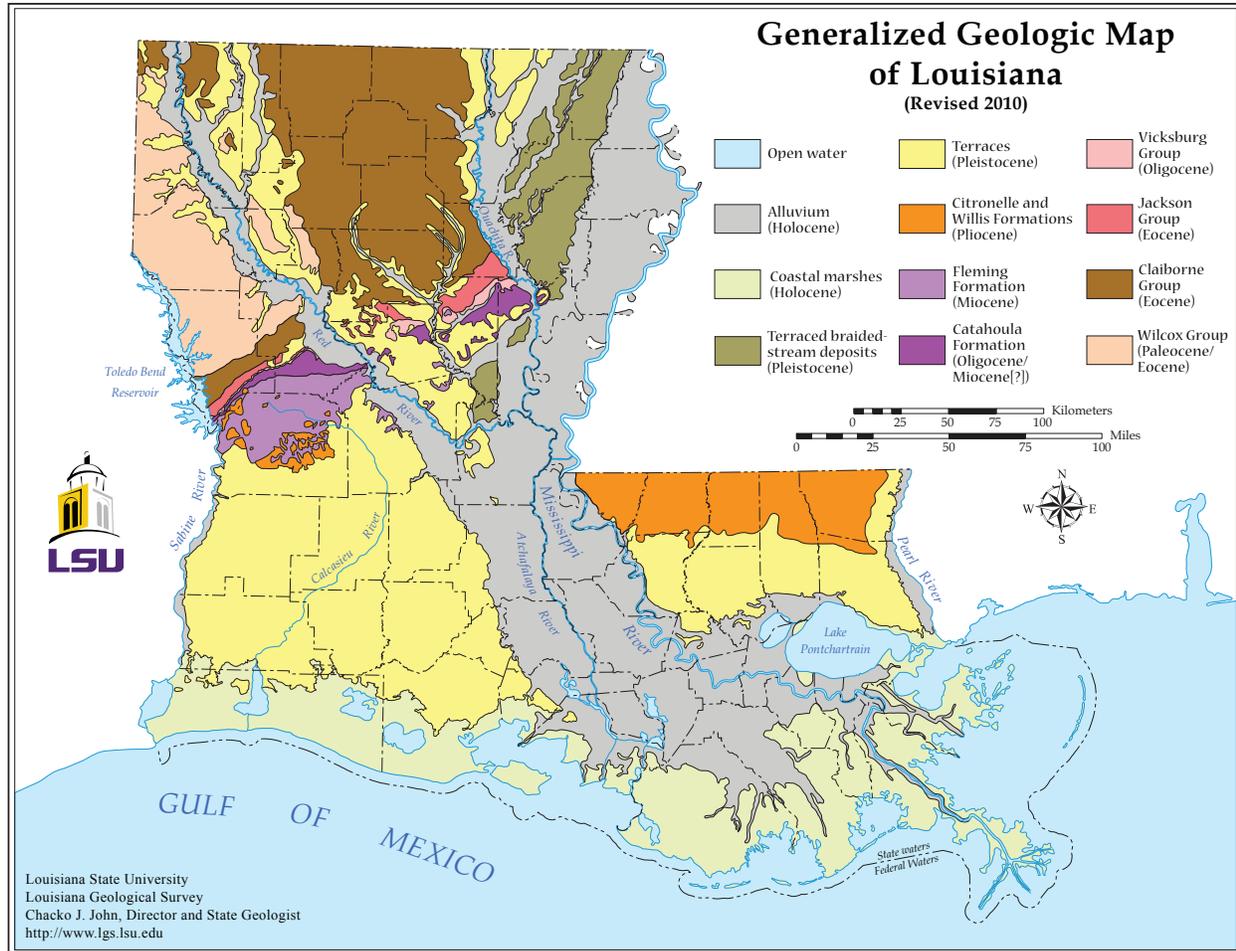


Figure 2.1. Geologic map of Louisiana (Louisiana Geological Survey 2010).

CHAPTER 3 PREVIOUS INVESTIGATIONS

Background research was conducted prior to the survey to identify previously recorded historic and prehistoric properties within a one-mile radius of the proposed Allen Estates project in Jefferson Davis Parish, Louisiana. This search included an online query of the Louisiana Site Files (Louisiana Division of Archaeology [LDOA] 2016). A one-mile (1.6 km) radius search was conducted around the proposed project area for previously recorded archaeological sites and previous cultural resources surveys. Also, a query into the National Register of Historic Places (NRHP) (National Park Service 2016) was conducted.

Research of the Louisiana Site Files (LDOA 2016) identified no previously recorded archaeological sites within a mile of the current study area. An examination of the NRHP online files (National Park Service 2016) failed to reveal any registered properties within a mile of the project area. The Historic Standing Structure Survey Files at the State Library in Baton Rouge, Louisiana was searched to ascertain whether any historic resources have been recorded within or near the project area; none were found. Five previous archaeological surveys, assessments, or reconnaissance projects have been conducted within one mile of the project area (Figure 3.1).

LDOA# 22-0121. *Archaeological Survey: Colonial Pipe Line Company, Forty-Inch Pipeline, East Feliciana Parish, Louisiana to Orange County, Texas.* Coastal Environments, Inc. conducted this large linear pipeline survey (Gagliano et al. 1976). Two sites of concern were mentioned (16CM58 and 16PC31). Neither of the sites are near the project areas.

LDOA# 22-0186. *An Archaeological Survey of the West Fork of Bayou Lacassine Watershed, Louisiana.* Three sites were identified (16JD7, 16JD9, and 16JD21) and recorded during this investigation (Neuman 1974). None of these sites were impacted by the watershed project. This cultural resources inspection did include the current project boundaries; however, this investigation does not meet Phase I survey guidelines.

LDOA# 22-0324. *Cultural Resources Survey for Jefferson Davis Sewage District #2 Facilities, Louisiana.* G. Harry Stopp, Jr. conducted this inspection for the sewer district. No fieldwork appears to have been conducted (Stopp, Jr. 1977).

LDOA# 22-2329. *Phase IA Cultural Resources Investigation for a Proposed Fiber-Optic Line through the Southern Portions of Louisiana.* Panamerican Consultants, Inc. performed this Phase IA desktop cultural resources investigation of a 270-mile fiber-optic cable route from Pensacola, Florida to Houston, Texas. The bulk of this project took place within existing road or pipeline right-of-way. No fieldwork was performed (Jackson et al. 2000).

LDOA# 22-2859. *Phase I Cultural Resources Survey and Archeological Inventory of the Kinder Morgan Louisiana Pipeline Project, Cameron, Calcasieu, Jefferson Davis, Acadia, and Evangeline Parishes, Louisiana.* R. Christopher Goodwin & Associates, Inc. conducted this 132-mile linear pipeline project. A total of 26 cultural resources were recorded as a result of this project. None of these resources were deemed significant or eligible for the NRHP (Handly et al. 2010).

Several historic maps were also inspected for possible nearby historic structures. The map review included inspections of recent aerials and modern and historic topographic quadrangles. Research of the 1955 Welsh, Louisiana USGS 15' series topographic quadrangle does not show any historic structures within the project boundary. There is no historic soil survey map available for Jefferson Davis Parish.

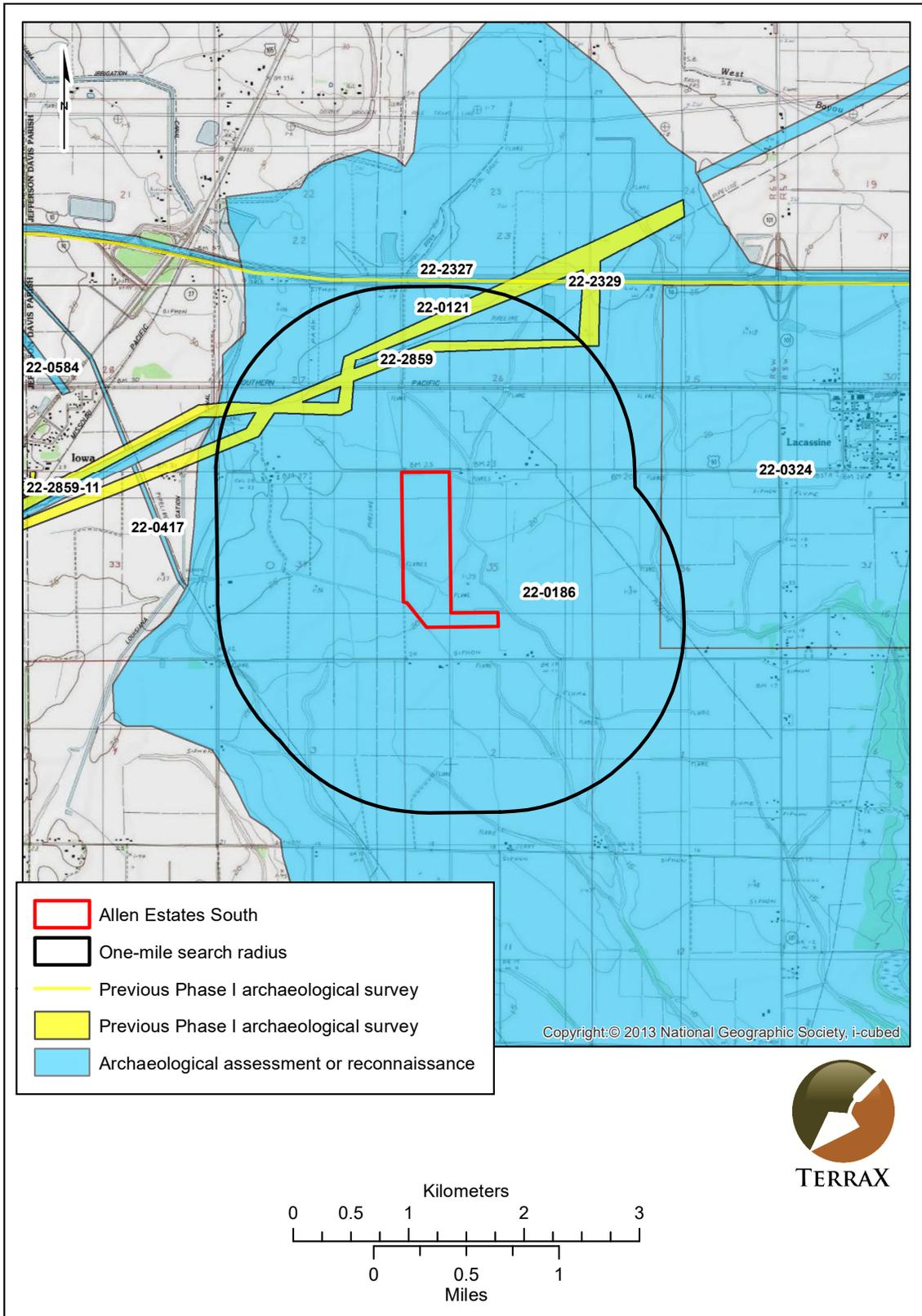


Figure 3.1. Map showing previous surveys within one mile of the project area (based on the 1985 Lacassine, Louisiana USGS 7.5' series topographic quadrangle).

CHAPTER 4 METHODOLOGY AND FIELD RESULTS

FIELD METHODS

The field survey conducted implemented standard archaeological survey techniques. Full land coverage requirements were achieved through visual inspections of the entire survey area and subsurface testing. While conducting visual inspections, any exposed surfaces were carefully examined for cultural material.

Subsurface testing was performed along 30-m interval transects comprised of shovel tests spaced 30 m apart. Standard shovel tests consist of 30 centimeter (cm) diameter cylindrical holes excavated to the top of the sterile subsoil layer. Soils from each test are screened through 1/4-inch (0.64 cm) hardware cloth for the purpose of recovering any cultural material that may exist at that location. When cultural material is encountered, the material is sorted by provenience and placed into bags labeled with the pertinent excavation information before being transported to TerraX's laboratory.

LABORATORY METHODS AND COLLECTION CURATION

If cultural materials are recovered during field projects, they are delivered to TerraX's laboratory in Tuscaloosa, Alabama for processing. Here, materials are sorted by provenience, cleaned, and analyzed. Along with any cultural material, all project records, photographs, and maps produced while conducting the investigation are transported for curation at the Office of Archaeological Research, Erskine Ramsay Curation Facility, University of Alabama Museums, Moundville, Alabama. See Appendix A for a copy of the curation agreement.

RESULTS OF FIELD INVESTIGATION

This Phase I investigation included the placement of 631 shovel tests along 49 transects. Of these tests, 625 were negative and six were not excavated due to the flume/canal. Typical shovel test profiles exposed 25 to 40 cm of grayish brown (10YR 5/2) silty clay loam underlain by gray (10YR 5/1), yellowish brown (10YR 5/6), or brown (10YR 4/3) clay. A map has been produced detailing the placement of the shovel tests conducted during this survey (Figure 4.1).

Vegetation within the majority of the survey tract consisted of grasses and some legume plants, with a treeline of mixed hardwoods along the western boundary and portions of the southeastern extension. A flume/canal runs from northwest to southeast in the southern portion of the project area. Some disturbance is evident from agricultural activities.

One plastic screw and one fragment of colorless glass were observed, both modern and not collected. Visual inspections and shovel tests within the proposed Allen Estates project area did not locate any significant cultural material or historic resources.



Figure 4.1. Aerial map showing shovel test transects within the project area.

CHAPTER 5 SUMMARY AND RECOMMENDATIONS

TerraX, under contract with One Acadiana of Lafayette, Louisiana conducted a cultural resources survey for the proposed Allen Estates South project in Jefferson Davis Parish, Louisiana in compliance with federal and state regulations. The Phase I survey was performed on September 26-30, 2016 by Chris Rivers, Field Director, with Paul D. Jackson serving as Principal Investigator. The investigation did not identify any cultural resources within the project area and background research identified no cultural resources that would be impacted by the proposed project. Accordingly, no further archaeological studies are recommended for the proposed Allen Estates South project.

REFERENCES

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Stopp, G. Harry, Jr.

1977 *Cultural Resources Survey for Jefferson Davis Sewage District #2 Facilities, Louisiana*. LDOA#22-0324.

Web Soil Survey

2016 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Electronic document, <http://websoilsurvey.nrcs.usda.gov/>, accessed October 3, 2016.

APPENDIX A
CURATION AGREEMENT



Feb. 23, 2016

Paul Jackson
TerraXplorations
3523 18th Avenue NE
Tuscaloosa AL 35406

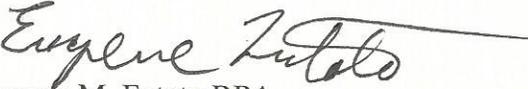
Dear Paul:

As per your request, this letter is to confirm our standing agreement with you to provide curation services to TerraXplorations on an as-needed basis. As you know, we are recognized by a variety of Federal agencies as a repository meeting the standards in 36 CFR Part 79 and have formal agreements to provide curation under these guidelines to agencies such as the National Park Service, U.S. Fish and Wildlife Service, U.S. Soil Conservation Service, U.S. Army Corps of Engineers, Tennessee Valley Authority, National Forest Service, etc.

Please be advised that once a year we must be notified of all reports in which we were named as the repository. Project collections must be submitted within one calendar year of completion. Small projects may be compiled for periodic submission. The AHC survey policy specifies which materials must be curated (Administrative Code of Alabama, Chapter 460-X-9). Note that collections must be curated whether or not artifacts are recovered. Renewal of this agreement is contingent upon compliance.

We appreciate this opportunity to be of assistance and look forward to working with you in the future.

Sincerely,


Eugene M. Futato RPA
Deputy Director