

US EPA ARCHIVE DOCUMENT

July 23, 2012

To: Alfred Dumauual  
EPA Region 6 Main Office  
1445 Ross Avenue  
Dallas, Texas 75202

Re: Project Compliance with Section 106 of National Historic Preservation Act  
Lone Star NGL Mont Belvieu, L.P.  
Mont Belvieu Fractionator # 2 Project  
Chambers County, Texas

Dear Mr. Dumauual:

URS Corporation (URS) submits this letter and the attached information to the Environmental Protection Agency in support of the Mont Belvieu Fractionator # 2 Project (Project). Under contract with Lone Star NGL Mont Belvieu, L.P. (Lone Star), URS has performed an office review, field inspections and consultation with the Texas Historical Commission to ensure that historic properties as defined by the National Historic Preservation Act (NHPA) were properly addressed and will not be adversely affected during Project construction or operations. Based on this information, it is the opinion of URS that the Fractionator 2 Project complies with Section 106 of the NHPA

Location of Fractionator 2 Project

The Project will be located immediately west of the town of Mont Belvieu in Chambers County, Texas. The construction location lies within a mature oil and gas field that has been substantively developed for industrial energy use (see Figures 1 and 2).

Project Description

Lone Star proposes to construct a 100,000 barrel per day natural gas liquids (NGL) fractionation facility with associated ancillary buildings and equipment, expanding upon an existing energy facility situated in Mont Belvieu, and an adjacent fractionation facility currently in construction. The NGL fractionation facility will process mixed NGL into component products such as ethane, propane, normal butane, isobutene, and natural gasoline. The facility will lie within an existing oil and gas field.

Construction within this area will consist of clearing the necessary areas of vegetation, stripping most of the organics, establishing a minimum site grade to facilitate drainage using any excess soils and additional imported material, constructing foundations, installing equipment, constructing roadways, and sowing grass seed in non-process areas. The fractionator facility will be filled with a mixture of sand for general fill and clay suitable for structural support. A total of approximately 21,667 cubic yards of sand and clay will be placed on the site to establish a grade across the Project area. Roads will be constructed within the fractionator facility footprint, and access to the site will be via existing roads. Storm water and process water discharges will be made via an outfall to an existing swale, which drains into a tributary of Cedar Bayou. All outfall construction will occur within the upland swale; the construction of the outfall will not include any impacts to the Cedar Bayou tributary.

The Project area includes three tracts, to the northwest, southwest, and east of a fractionator under construction (USACE permit SWG-2010-00876). The fractionator facility will be located on the northwestern tract, and the eastern and southwestern tracts will be used for construction workspace.

## Mont Belvieu Fractionator # 2 Project

### Cultural Resources Investigations and Reviews of Project Lands

Lone Star has performed this cultural resources assessment in several discrete steps. First, in 2010, URS retained the professional services of HRA Gray and Pape to conduct a Section 106 investigation of lands partially associated with the Fractionator 2 Project. The report, entitled *Intensive Pedestrian Cultural Resource Survey of 74 Acres on Behalf of LDH Energy Mont Belvieu L.P. in Chambers County, Texas* included a visual inspection of that project area and systematic shovel testing (see Figures 3 and 4). No evidence of archaeological sites or historic properties were identified as a result of the investigation. The report recommended no further cultural resource investigations for the surveyed project areas. This report was submitted to the Texas Historical Commission, who concurred with the report findings on January 10, 2011. All formal correspondence with the THC is attached.

An office review of the Fractionator 2 Project was conducted in September 2011 by cultural resource staff at URS that meet the Secretary of Interior's professional standards. Based on the finding of HRA Gray and Pape on the overlapping surveyed lands, a review of the Texas Historical Commission GIS database, the online database of the National Register of Historic Places and aerial maps of the Project lands, their opinion was that the likelihood of unrecorded historic properties being located within the Project boundaries was very small. A submission to the Texas Historical Commission was prepared by URS on September 30, 2011, who concurred with the opinion on October 3, 2011 and returned a finding that no historic properties would be affected by the Project. With this finding, no additional field investigations were required.

Subsequent to that agency consultation, the need for additional Project workspace was identified by Lone Star NGL Mont Belvieu, L.P. In response, URS submitted a supplemental document to the Texas Historical Commission on November 2, 2011 that showed the location of these potential additional work locations. Upon review, the Texas Historical Commission responded on November 4, 2011 with the finding that that still had no concerns that the Project would adversely affect historic properties.

In mid-July, 2012, URS conducted additional photographic inspections at properties adjacent to the planned Project. This expansion of the Area of Potential Effect was performed in order to ensure that adjacent above-ground buildings in the immediate project area will not be indirectly impacted during the Project construction and operations phases. The locations of these additional photographs are identified in Figure 5 and are shown on the pages following. Based on an evaluation of the buildings and locations shown in these photos by URS cultural resources staff, there are no historic properties as defined by the NHPA within the examined viewshed.

### Conclusion

Based on the physical inspection of Project lands conducted in September 2010 by HRA Gray and Pape, office reviews of Project lands by URS cultural resources staff in September and November 2011 and photographic inspections of properties surrounding the Project in July 2012, there are no historic properties that will be directly or indirectly adversely affected by the proposed Fractionator 2 Project. We believe that the Project area has been reviewed as required by Section 106 of the National Historic Preservation Act. We recommend that no further archaeological or architectural studies are warranted for these project activities as currently defined.

If you have any questions or concerns regarding this study, please do not hesitate to contact me at 225-935-2974 or by email at [rob\\_lackowicz@urscorp.com](mailto:rob_lackowicz@urscorp.com).

Sincerely,



Rob Lackowicz, M.A.  
Cultural Resources Manager  
URS Corporation

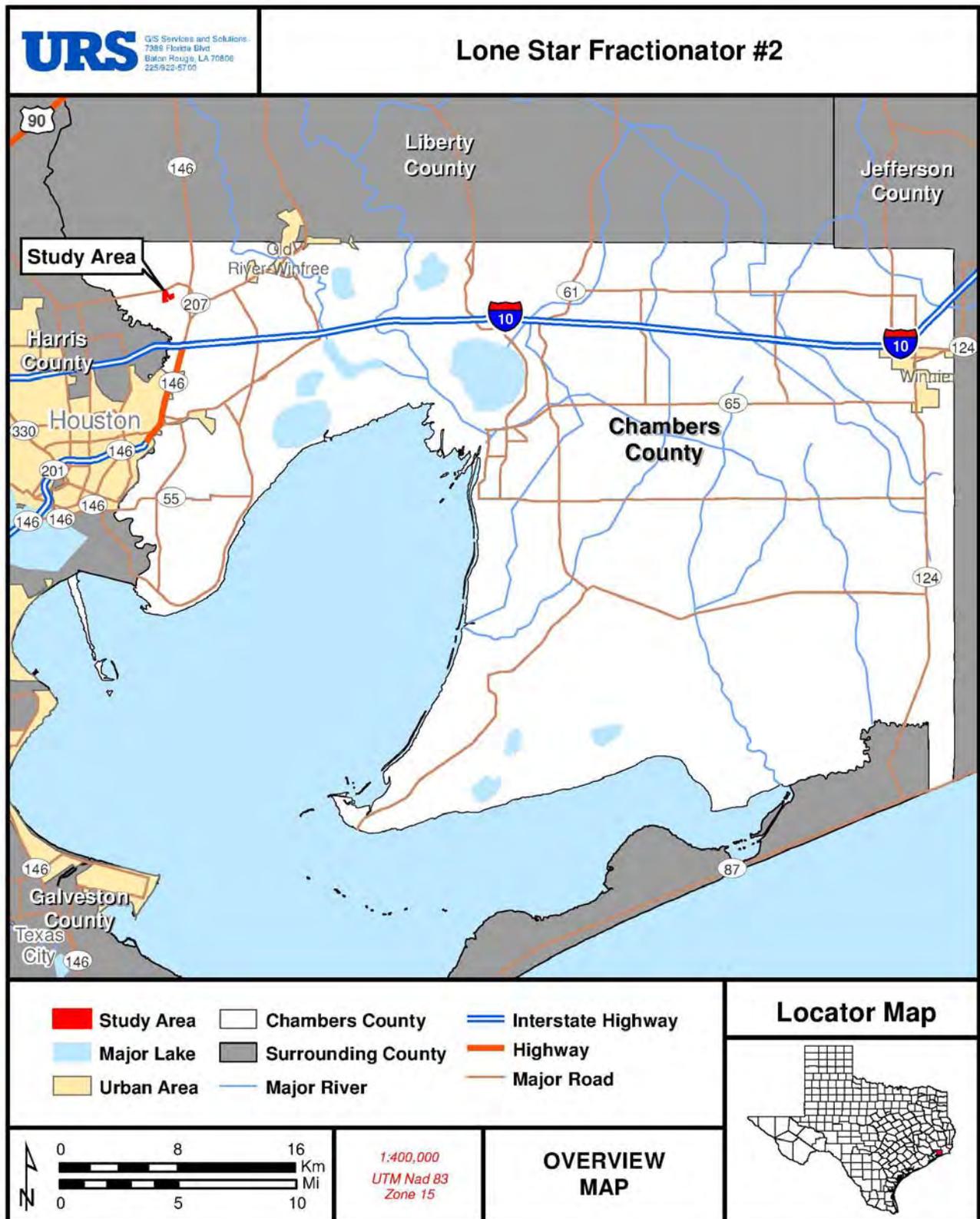
Mont Belvieu Fractionator # 2 Project

Cc: Tina Arnold, EPA Region 6

Attachments:

- Photographic Log
- HRA Gray and Pape Final Cultural Resource Report
- THC Responses to HRA Gray and Pape Cultural Resources Report
- Resumes of Cultural Professionals
- Request for SHPO Consultation (September 30, 2011)
- Request for SHPO Consultation (November 2, 2011)

Figure 1: Location Map of Fractionator 2 Project



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Figure 2: Topographic Map of Fractionator 2 Project (showing areas previously surveyed for cultural resources according to Texas Historical Commission)

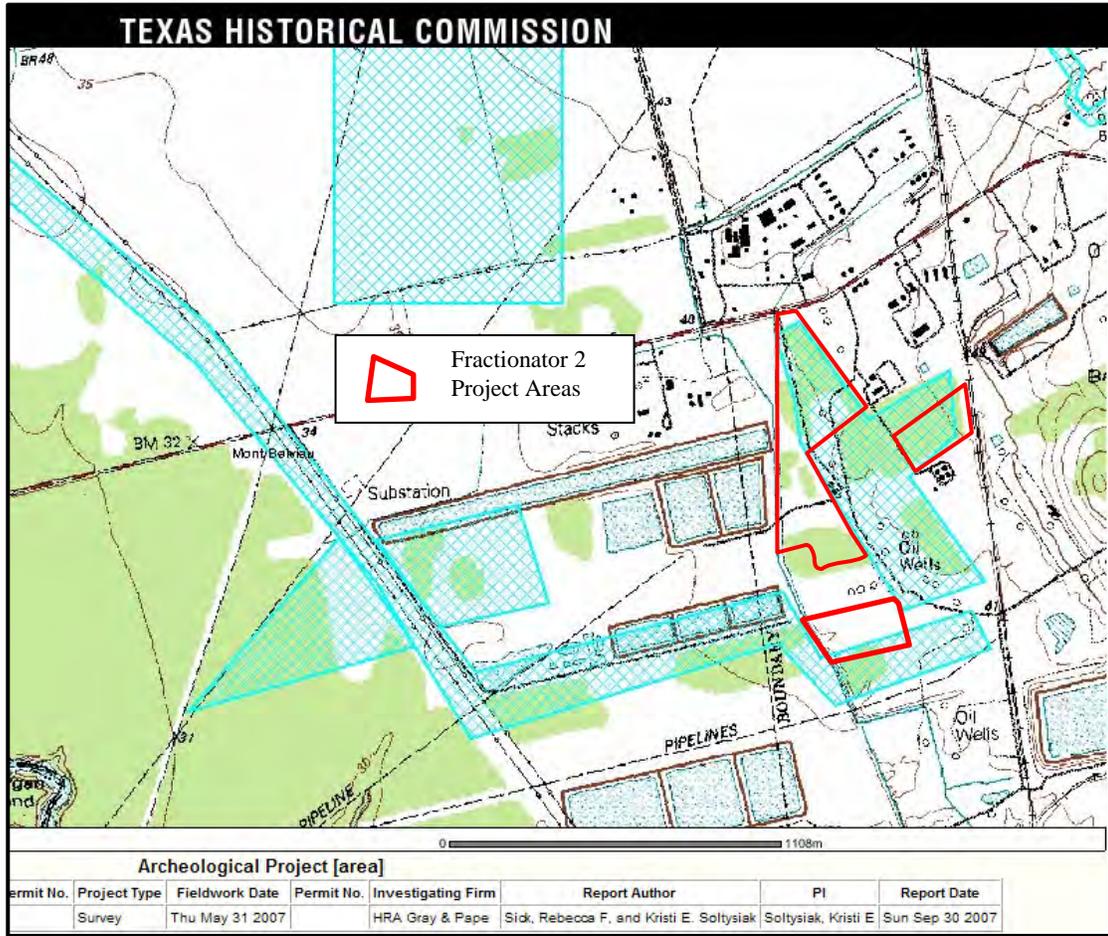
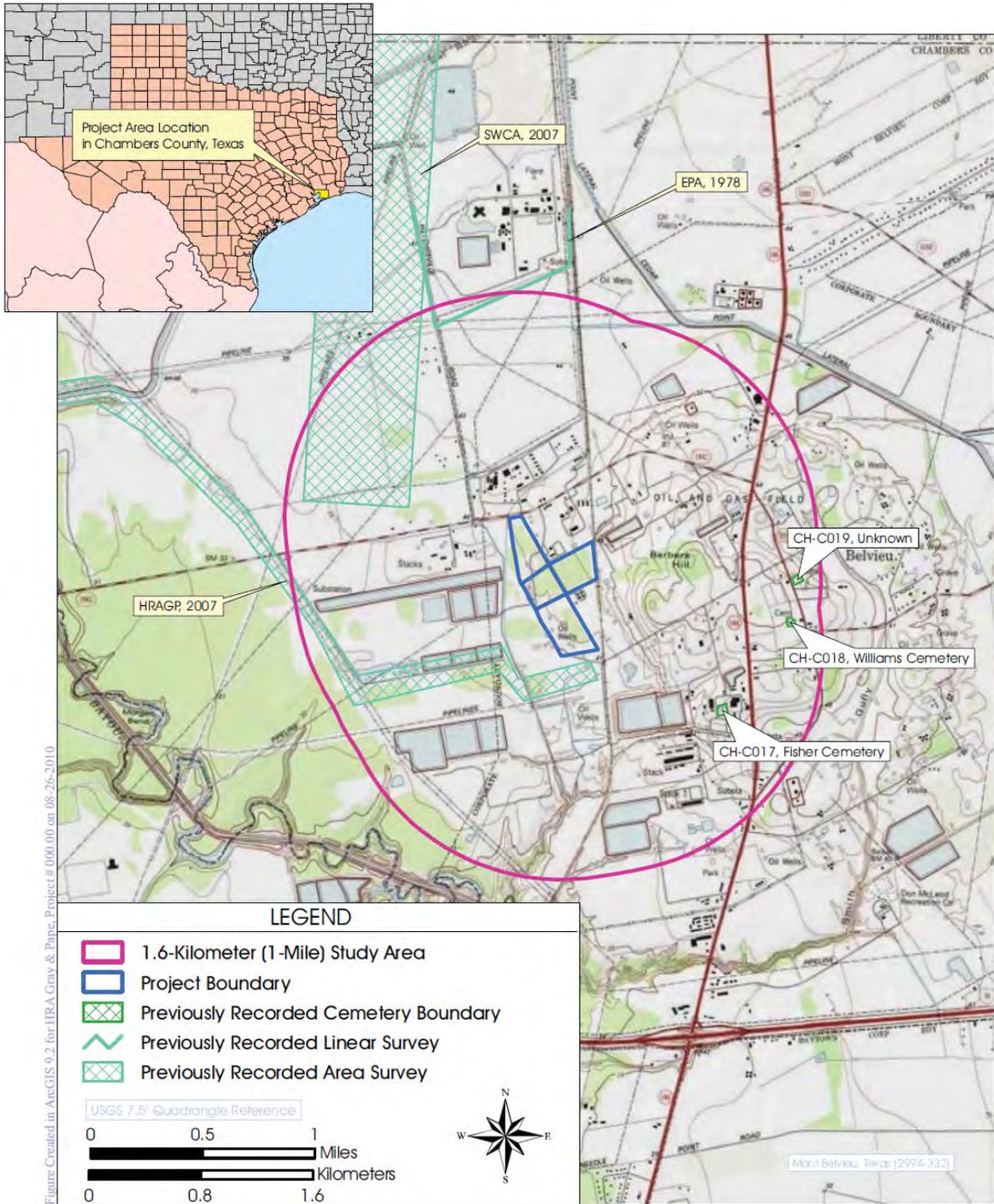


Figure 3: Location of Adjacent Fractionator 1 Project Boundaries (Assessed by URS / HRA Gray and Pape in 2010)

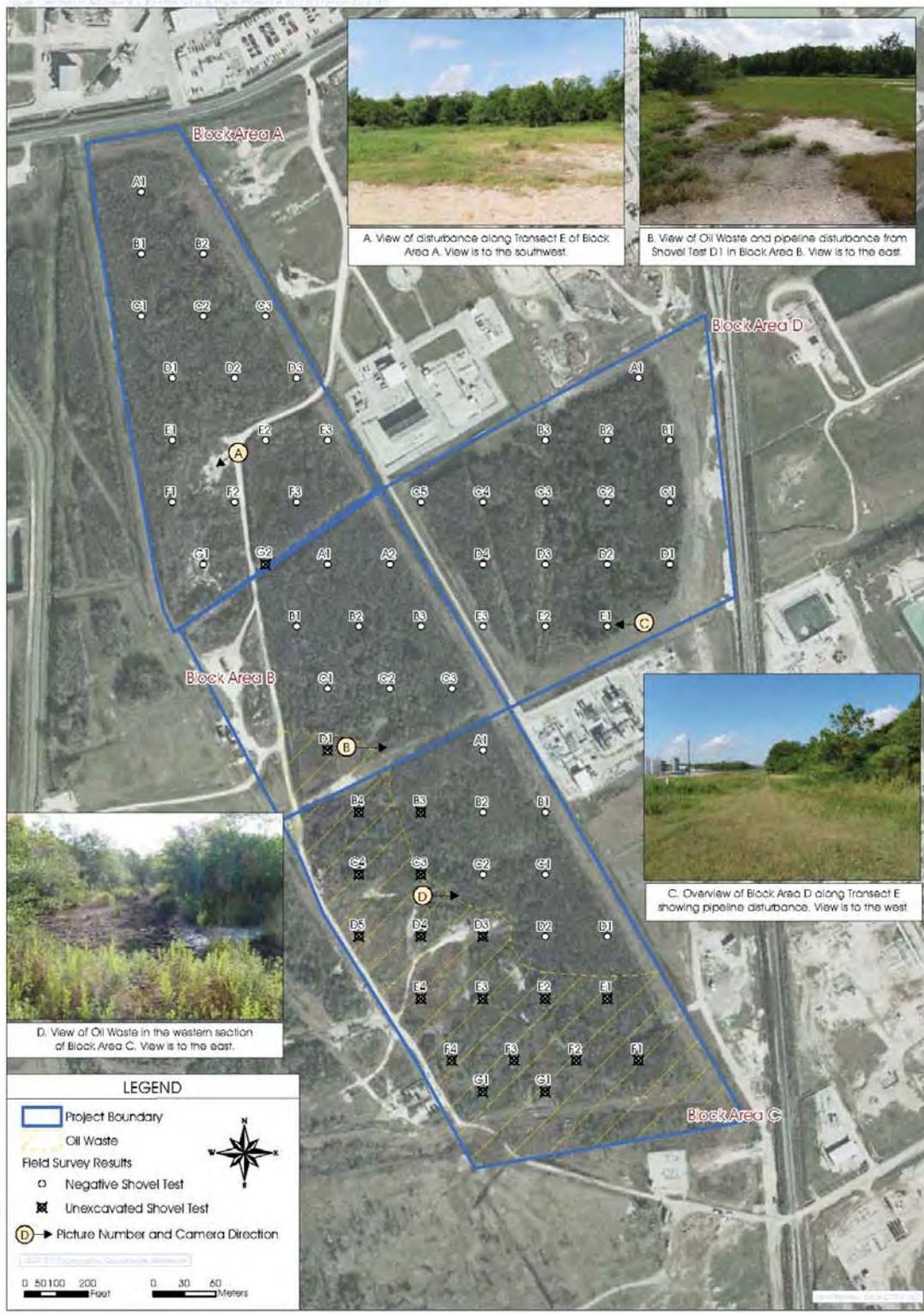


Project Area Location in Chambers County, Texas



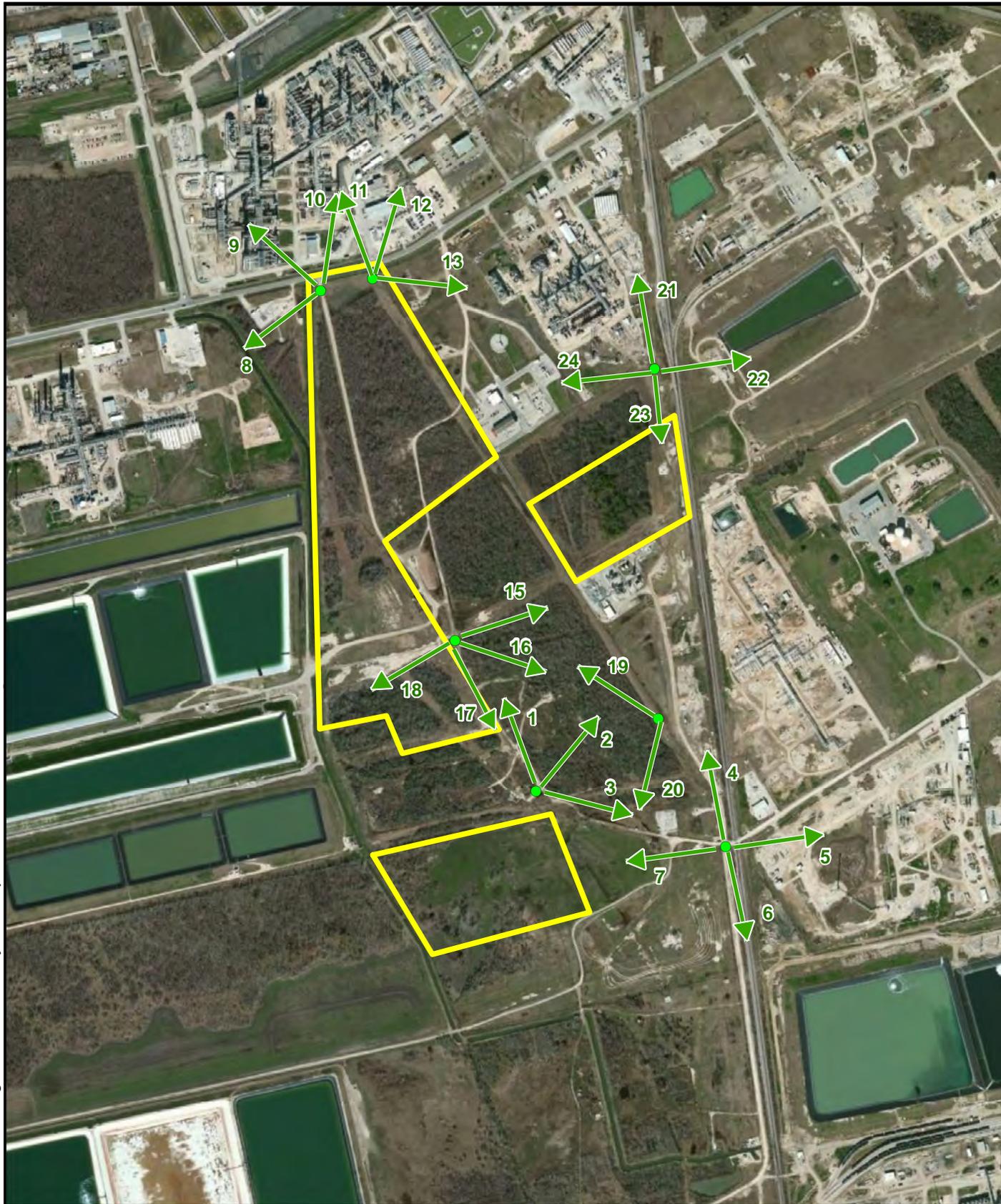
Figure 1

Figure 4: Aerial Map Showing Archaeological Field Inventory for Adjacent Fractionator 1 Project Boundaries (Assessed by URS / HRA Gray and Pape in 2010)



Overview of Survey Results with Representative Photos

Path: K:\ENG\WTR\25014412\GIS\MXD\Biological\_Assessment\Adjacent\_Properties.mxd



**Legend**

- Individual Photos
- Project Site



Title: <b>Adjacent Properties</b>			
Project: <b>Fractionator #2 Project Mont Belvieu, Texas</b>			
Client: <b>Lone Star NGL Mont Belvieu, L.P.</b>			
Drawn by: <b>AM</b>	Date: <b>7/20/2012</b>	Project No.: <b>25014412</b>	

# **Photographic Log**

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP		<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
<b>Date</b> 7/13/2012	<b>Photo No.</b> 1		
<b>Direction Photo Taken:</b> North-Northwest			
<b>Description:</b>			

<b>Date</b> 7/13/2012	<b>Photo No.</b> 2		
<b>Direction Photo Taken:</b> Northeast			
<b>Description:</b>			

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
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<b>Date</b> 7/13/2012	<b>Photo No.</b> 3
<b>Direction Photo Taken:</b> Southeast	



**Description:**

<b>Date</b> 7/13/2012	<b>Photo No.</b> 4
<b>Direction Photo Taken:</b> North	



**Description:**

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP		<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
<b>Date</b> 7/13/2012	<b>Photo No.</b> 5		
<b>Direction Photo Taken:</b> East			
<b>Description:</b>			

<b>Date</b> 7/13/2012	<b>Photo No.</b> 6		
<b>Direction Photo Taken:</b> South			
<b>Description:</b>			

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
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<b>Date</b> 7/13/2012	<b>Photo No.</b> 7
<b>Direction Photo Taken:</b> West	

**Description:**



<b>Date</b> 7/13/2012	<b>Photo No.</b> 8
<b>Direction Photo Taken:</b> Southwest	

**Description:**



<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP		<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
<b>Date</b> 7/13/2012	<b>Photo No.</b> 9		
<b>Direction Photo Taken:</b> Northwest			
<b>Description:</b>			

<b>Date</b> 7/13/2012	<b>Photo No.</b> 10		
<b>Direction Photo Taken:</b> North-Northeast			
<b>Description:</b>			

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP		<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
<b>Date</b> 7/13/2012	<b>Photo No.</b> 11		
<b>Direction Photo Taken:</b> North-Northwest			
<b>Description:</b>			

<b>Date</b> 7/13/2012	<b>Photo No.</b> 12		
<b>Direction Photo Taken:</b> North-Northeast			
<b>Description:</b>			

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
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<b>Date</b> 7/13/2012	<b>Photo No.</b> 13
<b>Direction Photo Taken:</b> East	



**Description:**

<b>Date</b> 7/13/2012	<b>Photo No.</b> 14
<b>Direction Photo Taken:</b>	

[Photo Deleted- Poor Image Quality]

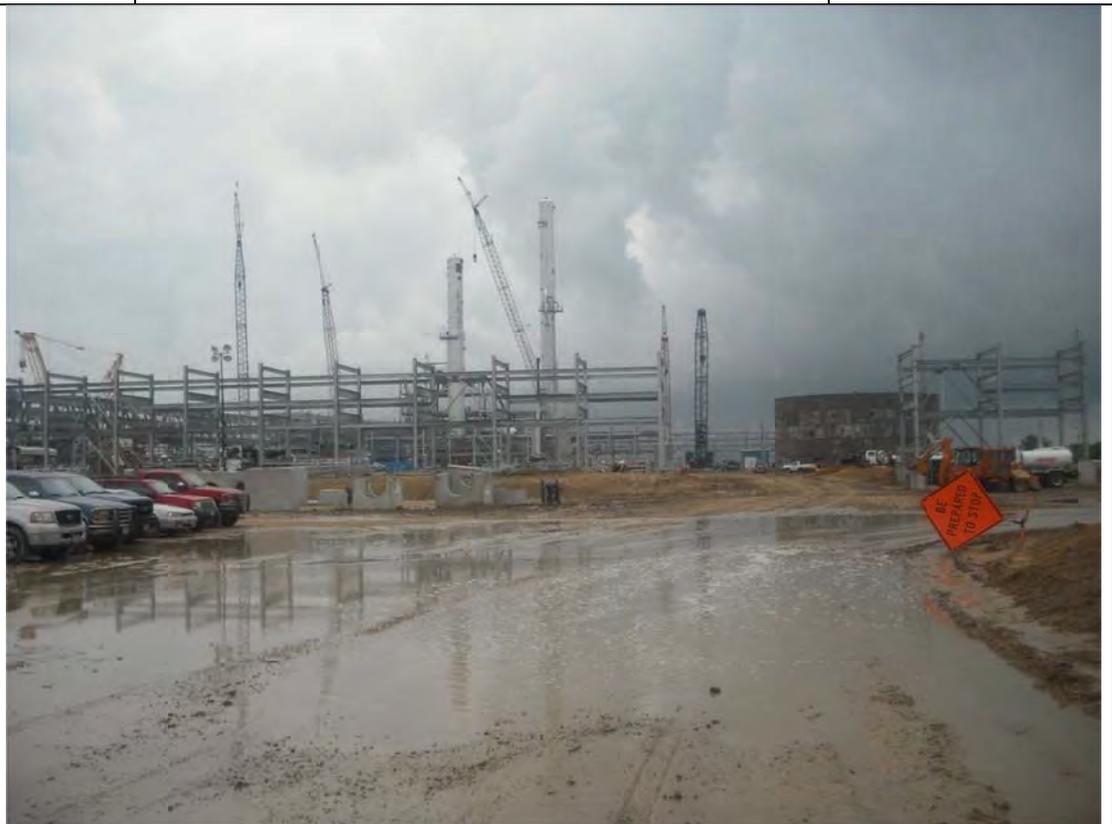
<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP		<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
<b>Date</b> 7/13/2012	<b>Photo No.</b> 15		
<b>Direction Photo Taken:</b> East-Northeast			
<b>Description:</b>			

<b>Date</b> 7/13/2012	<b>Photo No.</b> 16		
<b>Direction Photo Taken:</b> Southeast			
<b>Description:</b>			

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
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<b>Date</b> 7/13/2012	<b>Photo No.</b> 17
<b>Direction Photo Taken:</b> South-Southeast	

**Description:**



<b>Date</b> 7/13/2012	<b>Photo No.</b> 18
<b>Direction Photo Taken:</b> West-Southwest	

**Description:**



<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP		<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
<b>Date</b> 7/13/2012	<b>Photo No.</b> 19		
<b>Direction Photo Taken:</b> Northwest			
<b>Description:</b>			

<b>Date</b> 7/13/2012	<b>Photo No.</b> 20		
<b>Direction Photo Taken:</b> South-Southwest			
<b>Description:</b>			

<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
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<b>Date</b> 7/13/2012	<b>Photo No.</b> 21
<b>Direction Photo Taken:</b> North	

**Description:**



<b>Date</b> 7/13/2012	<b>Photo No.</b> 22
<b>Direction Photo Taken:</b> East	

**Description:**



<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator #2, Adjacent Tracts	<b>Project No.</b> 25014412
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<b>Date</b> 7/13/2012	<b>Photo No.</b> 23
<b>Direction Photo Taken:</b>  South	



<b>Description:</b>
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<b>Date</b> 7/13/2012	<b>Photo No.</b> 24
<b>Direction Photo Taken:</b>  West	



<b>Description:</b>
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**HRA Gray and Pape  
Cultural Resource Report**

# HRA Gray & Pape

***INTENSIVE PEDESTRIAN  
CULTURAL RESOURCES SURVEY  
OF 74 ACRES ON BEHALF  
OF LDH ENERGY MONT BELVIEU L.P.  
IN CHAMBERS COUNTY, TEXAS***

*Lead Federal Agency:  
The United States Army Corps of Engineers (USACE),  
Galveston District*

*USACE Permit Application # SWG-2010-876*



***Prepared for:***

*URS Corporation  
10550 Richmond Avenue, Suite 155  
Houston, Texas 77042*

*and*

*LDH Energy Mont Belvieu L.P.*

***Prepared by:***

*HRA Gray & Pape, LLC  
1428 West Alabama Street  
Houston, Texas 77006*



D E C E M B E R 0 6 , 2 0 1 0

**INTENSIVE PEDESTRIAN CULTURAL RESOURCES SURVEY  
OF 74 ACRES ON BEHALF OF LDH ENERGY MONT BELVIEU L.P.  
IN CHAMBERS COUNTY, TEXAS**

Lead Federal Agency:  
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Prepared for:

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10550 Richmond Avenue, Suite 155  
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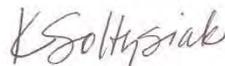
Contact:  
Mr. Aaron Boers  
Phone: (713) 914-6575

And

LDH Energy Mont Belvieu L.P.

Prepared by  
Jessica Bludau

With contributions by  
Kristi Soltysiak



\_\_\_\_\_  
Kristi Soltysiak  
Principal Investigator

## ABSTRACT

HRA Gray & Pape, LLC was contracted by URS Corporation, Inc. on behalf of LDH Energy Mont Belvieu L.P. to conduct cultural resources survey of 4 block areas subsuming a total of 30 hectares (74 acres) in the city of Mont Belvieu, Chambers County, Texas. The Area of Potential Effects is defined as all 30 hectares (74 acres). This investigation was completed in compliance with United States Army Corps of Engineers permitting requirements.

This work was conducted to satisfy requirements set forth by the National Historic Preservation Act, specifically requirements set forth by 33 CFR Part 325, Appendix C - Procedures for the Protection of Historic Properties (Department of the Army 1973). All work was conducted following accepted standards set forth by the Texas Historical Commission and the Council of Texas Archeologists. The project is located entirely on privately owned properties; therefore, it did not require a Texas Antiquities Permit. Fieldwork was conducted in September 2010.

This report presents the results of intensive pedestrian cultural resources survey of 4 block areas subsuming a combined 30 hectares (74 acres) of private property. As a result of investigations, a total of 47 shovel tests were excavated. All shovel tests revealed clayey soils of Pleistocene age and were negative for cultural materials. No new or existing archaeological sites or historic-age structures were recorded within the Area of Potential Effects. Based on the negative results of survey, HRA Gray & Pape, LLC recommends no further work and that the proposed project be allowed to proceed as planned.

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## 1.0 INTRODUCTION

In September 2010, HRA Gray & Pape, LLC (HRA Gray & Pape) of Houston, Texas, at the request of URS Corporation, Inc., under contract with LDH Energy Mont Belvieu L.P. (LDH Energy) conducted intensive pedestrian cultural resources investigation on a combined 30 hectares (74 acres) of private property in Chambers County, Texas (Figure 1). This investigation was completed in compliance with United States Army Corps of Engineers (USACE) permitting requirements.

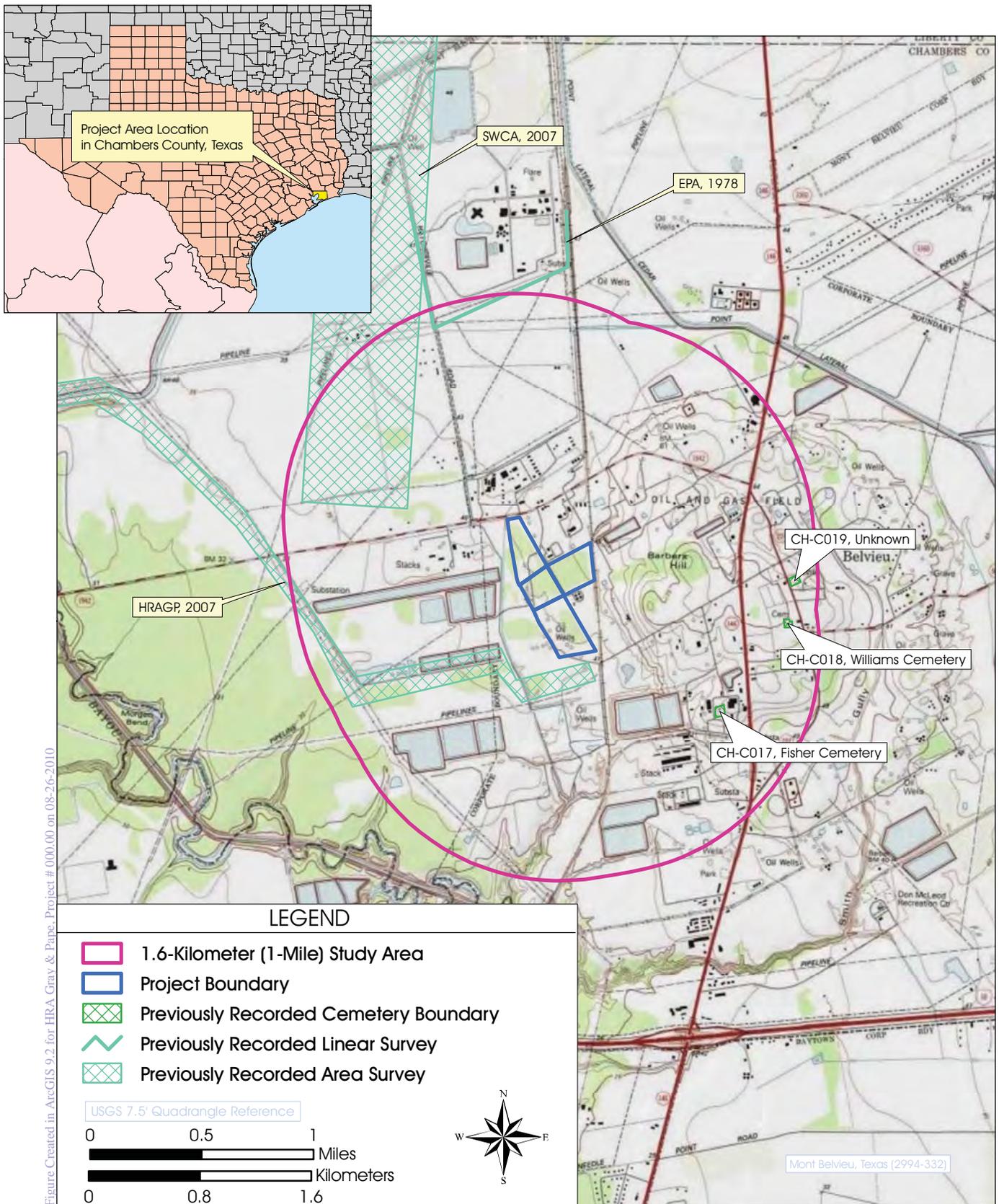
This work was conducted to satisfy requirements set forth by 33 CFR Part 325, Appendix C - Procedures for the Protection of Historic Properties (Department of the Army 1973). This Appendix establishes the procedures to be followed by the USACE to fulfill the requirements set forth in the National Historic Preservation Act of 1966, as amended (NHPA).

The goals of the cultural resources survey were to determine if land altering activities required to complete this project would affect any previously identified historic properties as defined by Section 106 of the NHPA of 1966, as amended (36 CFR 800), and to establish whether any previously unidentified cultural resources were located within the project's Area of Potential Effect (APE). Fieldwork and reporting activities were conducted following accepted standards set forth by the Texas Historical Commission (THC) and the Council of Texas Archeologists (CTA). The project is located entirely on privately owned properties; therefore, it did not require a Texas Antiquities Permit.

### 1.1 Project Description

The proposed project would include construction of: a pipeline from the existing LDH Energy Mont Belvieu facility, a fractionator facility with associated ancillary buildings and equipment, and a flare. Construction within this area will consist of clearing the necessary areas of vegetation, stripping most of the organics, establishing a minimum site grade to facilitate drainage using any excess soils and additional imported material, constructing foundations, installing equipment, constructing roadways, and sowing grass seed in non-process areas. The fractionator facility will be filled with a mixture of sand for general fill and clay suitable for structural support. Fifteen centimeters (6 inches) of fill will be placed across the facility site with 0.6 meters (2 feet) of fill in the equipment areas. Roads will be constructed within the fractionator facility footprint, and access to the site will be via existing roads. Stormwater and process water discharges will be made to an existing drainage ditch that is a tributary of Cedar Bayou.

The project consists of 4 block areas in Mont Belvieu, Texas near existing brine ponds, pipeline easements and other utility corridors, oil and gas fields, and industrial facilities. The project areas may be found on the *Mont Belvieu*, Texas United States Geological Survey topographic quadrangle map in Chambers County (Figure 1). The archaeological APE is defined as 30 hectares (74 acres), which includes all 4 block areas that make up the project.



Project Area Location in Chambers County, Texas

Figure 1

The project area is divided into 4 block areas that HRA Gray & Pape has labeled Block Areas A, B, C, and D. Block Area A is located in the northwest section of the APE and is approximately 7 hectares (18 acres) of property. The project area is described as a dense, wooded area with evidence of wetland vegetation. Gravel roads are located along the western boundary and running through the middle of the southern portion. The southern and eastern sides of the area are bounded by pipeline corridors.

Block Area B is located adjacent to Block Area A to the southeast and is approximately 4 hectares (11 acres) of property. The area is described as a dense, wooded area with evidence of wetland vegetation and the southeastern side of the area has remnants of Oil Waste. A gravel road runs along the western boundary of the area and pipeline corridors bound the northern, eastern, and southern sides. Block Area C is approximately 10 hectares (26 acres) of property and is located southeast and adjacent to Block Area B. The area is described as having wooded, wetland vegetation on the eastern side. Crout (1976) has recorded Oil Waste within the majority of the western side. The area has pipeline corridors along the northern, eastern, and southern boundaries and a gravel road along the western boundary. Block Area D is located adjacent to Block Area B on the eastern side. The area is approximately 8 hectares (19 acres) and is bounded by fence lines and pipeline corridors on the northern, western, and southern sides and Southern Pacific Railroad on the eastern side. The area is described as wooded and there are 2 cleared paths or “2-tract roads” running north-south on the western portion of the area.

## ***1.2 Organization of the Report***

This report is organized into 7 numbered chapters. Chapter 1.0 provides an overview of the project and summarizes the results of the field investigation. Chapter 2.0 presents an overview of the environmental setting and geomorphology of the project area. Chapter 3.0 presents a discussion of the cultural context associated with the project areas. Chapter 4.0 presents the research and field survey methods employed. The results of the research and field survey activities are presented in Chapter 5.0. A summary of the investigation and project management recommendations are provided in Chapter 6.0. Finally, Chapter 7.0 contains a list of literature references that are cited in the body of the report.

## ***1.3 Acknowledgements***

HRA Gray & Pape’s Houston, Texas office completed the fieldwork and reporting for this project, which required approximately 96 person hours. Field Director Charles E. Bludau, Jr. led the field surveys with Crew Chief Jessica Bludau and archaeological field technicians David Treichel and Kenneth Fleming. Fieldwork was supervised by Principal Investigator Kristi Soltysiak and Project Manager James Hughey. Site file research was conducted by Charles E. Bludau, Jr. prior to mobilization and included consultation of on-line research archives maintained by the THC. Jessica Bludau prepared the content of this report with contributions by Kristi Soltysiak. Julia Balakirova prepared the graphics for this report. The report was produced by Jessica Bludau.

## 2.0 NATURAL SETTING

As part of the Western Gulf Coastal Plain, the environmental setting of the region is a combination of flat coastal zones and slightly rolling inlands set between eastern woodlands and western prairies (Finneman 1938). The entire area is associated with creeks, agricultural fields, marshlands, and urban or otherwise developed properties. Dunes, ridges, and incised stream channels break the flat topography of the coast, while upland terraces are at times dotted with natural sand mounds. The climate is mild with hot summers and warm winters with the occasional cold front bringing temperatures to around freezing. The region includes many vegetation zones. Those near the coast contain marsh, shortgrasses, and water-tolerant trees, while those further inland may include oak savannas, prairies, mixed hardwoods, and dense pines (Jones 1983).

### 2.1 *Geomorphology*

The Geologic Atlas of Texas, Beaumont Sheet, shows that the sediments underlying the proposed project area consist of Pleistocene deposits of the Beaumont Formation (University of Texas Bureau of Economic Geology [UT-BEG] 1982). The Beaumont Formation is dominated by clay and sand. Relict river channels shown by meander patterns characterize the Beaumont Formation. Pimple mounds on meanderbelt ridges, separated by low featureless deposits are also common (UT-BEG 1982).

### 2.2 *Soils*

Review of the Chambers County official soil survey indicates that the proposed project crosses several map units in Chambers County, Texas (Crout 1976). These include Beaumont clay, Morey silt loam, and Oil Waste. The soil textures of each are typically silty loam to silty clay or clay loam and contain few mottles. All of these soils are found on upland prairies and consist of loamy and clayey sediments of the Beaumont Formation. Soils considered somewhat poorly drained to poorly drained and maintain a high water table in the winter and early spring months.

Morey silt loam (Mo) (leveled) is a level to nearly level soil that is somewhat poorly drained. This soil is found on west side of the general project area. A typical profile for this soil is silt loam from surface to 31.38 centimeters (12 inches) underlain by silty clay loam down to 167.36 centimeters (64 inches) (Crout 1976).

Comprising the majority of the project area is Beaumont clay (Ba), which is a poorly drained, nearly level soil found in between the areas of the Beaumont - Urban Land Complex. The surface layer is dark gray to gray clay 53 centimeters (21 inches) thick. This layer gradually grades to become gray clay 100 centimeters (38 inches) thick. This then becomes a grayish brown clay mottled with light olive brown and strong brown to a depth of 185 centimeters (73 inches) (Crout 1976).

## 3.0 CULTURAL SETTING

### 3.1 *Regional Prehistoric Overview*

Most of the prehistoric cultural resources located near the coast between the Brazos River and Sabine Lake consist of shell middens found in estuaries or exposed in cutbanks along streams (Aten 1983; Patterson 1985). These middens usually contain faunal material as well as cultural remains such as lithic tools and pottery. Inland sites are less likely to consist of middens and are more similar to generalized open campsites. Sites of this type consist of little to no stratification due to a short occupation time, erosion, and land clearing. Thus, subsurface features are rare (Patterson 1985). In both areas, sites are most often found near stream channels.

### 3.2 *Historic Overview of Chambers County, Texas*

Chambers County was named for Thomas Jefferson Chambers and was formed in 1858 from portions of Jefferson and Liberty Counties. Prior to becoming a county, the land in this area was used by the French until they were driven from the area by the Spanish circa 1818. In 1821, Americans began settling the in the area (Williams 1986).

The economy of Chambers County was depended on rice and cotton agriculture, although later a sawmill and shipyard were constructed. The county's first post office was at Anahuac, and this was established in 1844. Chambers County voted to secede during the Civil War and many in the county were members of the military. During the Reconstruction Era, farming began to be replaced by ranching. A meat packing plant was built in Wallisville during the 1870s. The railroad did not reach the interior of the county until the late 1890s (Williams 1986).

Chambers County has suffered some hardships. A fire burned down the courthouse in 1875 and the county was hit by 2 hurricanes in 1875 and 1900. The county also suffered the smallpox epidemic in 1877. However, between 1880 and 1910 the population increased steadily. Around 1930, the oil boom hit Chambers County. The oil fields in the county provided jobs to the residents, which decreased the effects of the Great Depression on the county. In modern times, farming and oil still employ the majority of the county's residents (Williams 1986).

## 4.0 METHODOLOGY

### 4.1 *Site File and Literature Review*

Background review and site file research were conducted prior to fieldwork mobilization. The background literature search included a review of both archaeological site files and architectural resource files, and a review of previously conducted cultural resource surveys in the vicinity of the proposed project. This information was primarily obtained by reviewing records through the on-line Texas Archaeological Sites Atlas, maintained by the THC.

Site file research was performed in order to identify all previously recorded archaeological sites within a 1.6-kilometer (1-mile) study radius of the project area (see Figure 1), and all recorded historic structures eligible for National Register of Historic Places (NRHP) listing located adjacent to the project APE.

Site file research was used to provide a historic context to the archaeological survey, and additional documentary research was conducted in order to provide an understanding of the development and history of the APE, the surrounding area, and southeast Texas in general.

### 4.2 *Field Survey Methods*

The APE was subjected to intensive pedestrian survey. Archaeological investigations included a combination of pedestrian walkover and systematic shovel testing along west-east oriented pedestrian survey transects spaced 30 meters (100 feet) apart. Every other transect was subjected to subsurface testing in each block area. Per THC guidelines, the minimum standards for surface reconnaissance and subsurface testing in non-linear areas subsuming between 4.5– 40.5 hectares (11– 100 acres) in size, call for the excavation of 1 shovel test every 0.8 hectares (2 acres). Exceeding these standards, a total of 66 shovel tests were planned for excavation within the combined 30-hectare (74-acre) APE.

Vertical control of each shovel test was maintained by excavating in arbitrary 10-centimeter (4-inch) levels. One wall of each shovel test was profiled and the walls and floor of each shovel test were inspected for color or texture change potentially associated with the presence of cultural features. Whenever possible, shovel tests were excavated into sterile subsoil, and soils were screened through 0.64-centimeter (0.25-inch) wire mesh; soils with high clay content were hand sorted. For this project, it was determined that mechanical deep testing was not necessary and that intensive pedestrian survey and systematic shovel testing were sufficient to determine whether intact, buried archaeological sites were present within the project APE.

Although no new archaeological sites were recorded as a result of survey, if buried resources were located, an attempt would have been made to define their boundaries. Additional delineation shovel tests were excavated in four radiating directions in intervals between 10– 30 meters (30– 100 feet) within the confines of the study corridor. In general, 2 sterile shovel tests would have been used to define a site's size and location. At a minimum, between 6 and

8 delineation shovel tests would have been excavated unless surrounding landforms or topography suggested the presence of a natural site boundary.

No historic structures appearing 50 years in age or older were identified during the surveys. However, if standing structures within or immediately adjacent to the APE were located, each would have been photographed during the survey and their locations plotted on field maps with Global Positioning System (GPS) points collected. General characteristics of each resource would also have been documented on standardized forms.

## 5.0 RESULTS OF INVESTIGATIONS

### 5.1 *Results of Site File and Literature Review*

Site file review indicated that no archeological sites, historic structures, NRHP properties, State Archaeological Landmarks (SALs), or Registered Texas Historic Landmarks (RTHLs), or historic markers were located within 1.6 kilometers (1 mile) of the project area (see Figure 1). Only 2 previous archaeological investigations have been conducted within a 1.6-kilometer (1-mile) radius of the project (see Figure 1). One of these surveys was completed by HRA Gray & Pape in 2007 on behalf of LDH Energy (Sick and Soltysiak 2007). A portion of the 2007 survey took place between both current project areas and along a portion of Cedar Bayou. No cultural resources were located as a result of the survey (Sick and Soltysiak 2007). The other survey, north of the current project area was completed by SWCA, Inc. in 2007 (see Figure 1). That survey was also negative for archaeological sites. Both previous investigations are documented on the online Texas Archaeological Sites Atlas, maintained by the THC.

### 5.2 *Results of Field Investigations*

For the current project, field survey efforts did not result in the identification of any newly recorded archaeological sites or historic structures. No artifacts or cultural features were encountered in any portion of the survey area. A total of 66 shovel tests were attempted within the entire project APE. Of those, 19 shovel tests were not excavated due to belowground disturbances such as pipelines and other buried utilities, and the presence of contaminated Oil Waste (Crout 1976) (Figure 2).

Shovel testing in Block Area A was conducted on 7 transects running west-east and labeled A-G. Seventeen shovel tests were attempted; however, 16 were excavated due to the disturbance of a pipeline corridor along the west side of Transect G (Figure 2). Wetland vegetation was observed in the southern portion of the area. Evidence of disturbance was observed in 1 shovel test along Transect E and 2 shovel tests along Transect F, as indicated by a gravel road and remnants of an oil pad in the southeast section of the area. Shovel tests ranged in depth from 15 to 50 centimeters (6 to 20 inches) upon which subsoil was encountered. Soils encountered were comparable to those mapped in the area and were most comparable to those of the Beaumont clay, which are of Pleistocene age. Morey silt loam was not encountered on the western boundary of the area. A representative test from this area is Shovel Test D1. Shovel Test D1 consisted of a surface layer of black (7.5YR 2.5/1) clay loam 5 centimeters (2 inches) deep followed by a layer of very dark gray (10YR 3/1) clay to a depth of 30 centimeters (12 inches).

Shovel testing in Block Area B was conducted on 4 transects labeled A-D, running west-east. Nine shovel tests were planned for this area; however, 8 were excavated due to Oil Waste and pipeline disturbance in the southern portion along Transect D (Figure 2). Wetland vegetation was noted in the central section of the area. Shovel tests were excavated to a depth of 30 centimeters (12 inches) upon which subsoil was encountered. Soils encountered were comparable to those mapped in the area and were most frequently Beaumont clay, which are



Overview of Survey Results with Representative Photos

of Pleistocene age. Morey silt loam was not encountered on the western boundary of the area. A representative test from Block Area B is Shovel Test B2 which consisted of a layer of very dark gray (10YR 3/1) clay to a depth of 30 centimeters (12 inches).

Shovel testing in Block Area C was conducted on 7 transects labeled A-G running east-west. Twenty-four shovel tests were attempted in this area, however 17 shovel tests were not excavated due to the verified presence of Oil Waste disturbance and existing gravel roads in the western and southern halves of the area (see Figure 2). Oil wells and other oil-related facilities were observed throughout the western and southern halves of the area. Wetland vegetation was observed in the eastern section of the area where shovel testing was concentrated. Shovel tests were excavated to a depth of 30 centimeters (12 inches) upon which subsoil was encountered. Soils encountered were comparable to those mapped in the area and were most comparable to those of the Beaumont clay, which are of Pleistocene age. Morey silt loam was not encountered on the western boundary of the area. A representative test from this area is Shovel Test C2 and consisted of a surface layer of dark gray (10YR 4/1) clay loam 5 centimeters (2 inches) deep followed by a layer of very dark gray (10YR 3/1) clay to a depth of 30 centimeters (12 inches).

Shovel testing in Block Area D was conducted on 5 transects labeled A-E running west-east (see Figure 2). Sixteen shovel tests were excavated to depths ranging from 25 to 50 centimeters (10 to 20 inches) where subsoil was encountered. Shovel tests were offset a few meters west due the disturbance of pipelines and concrete well pads located in the far eastern section of the area. Soils encountered were comparable to those mapped in the area and were most comparable to those of the Beaumont clay, which are of Pleistocene age. A representative test from this Block Area D is Shovel Test D3 and consisted of a layer of very dark gray (10YR 3/1) clay to a depth of 30 centimeters (12 inches).

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

This report presents the results of intensive pedestrian cultural resources surveys conducted for LDH Energy Mont Belvieu L.P. in Chambers County, Texas. The combined area comprising the APE for this project is 30 hectares (74 acres), all of which were subject to systematic subsurface and pedestrian surveys.

Fieldwork and reporting activities were completed with reference to state and federal guidelines. Fieldwork required approximately 96 person hours to complete. Field investigation within the project area consisted of a combination of pedestrian walkover and controlled surface inspection, and systematic shovel testing.

During this investigation, disturbances observed within the project area include the presence of Oil Waste, pipeline easements, and other utilities. Soils observed within the APE conform to those described by Crout (1976) and consisted of clayey sediments of Pleistocene age, that are considered to have a low geoarchaeological potential for containing buried deposits. Morey silt loam was not encountered along the western boundary of the area. Furthermore, the areas are typically considered to be low-lying and poorly drained, without a natural water source within 0.80 kilometers (0.5 miles). These conditions suggest that the project area would not have been the most favorable as a prehistoric living surface for short or long-term habitation.

As a result of the survey, a total of 47 negative shovel tests were excavated within soils of Pleistocene age, averaging 0.64 shovel tests per acre and exceeding the state's minimum standards. No evidence of archaeological sites or historic standing structures was recorded. Based on these results, HRA Gray & Pape recommends no further work within the surveyed areas and that the project be allowed to proceed as planned.

## 7.0 REFERENCES

Aten, Lawrence E.

1983 *Indians of the Upper Texas Coast*. Academic Press, New York.

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1976 *Soil Survey of Chambers County, Texas*. United States Department of Agriculture, Soil Conservation Service.

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1973 36 CFR Part 325- Appendix C. Procedures for the Protection of Historic Properties. U.S. Army Corps of Engineers Regulatory Program Regulations. March 12, 1973

Finneman, N.M.

1938 *Physiography of the Eastern United States*. New York: McGraw-Hill.

Jones, F. B.

1983 *The Flora of the Texas Coastal Bend*. Sinton, Texas: Welder Wildlife Foundation.

Patterson, Leland W.

1985 Prehistoric Settlement and Technological Patterns in Southeast Texas. *Bulletin of the Texas Archeological Society* 54: 253-270.

Sick, Rebecca F. and Kristi Soltysiak

2007 Intensive Pedestrian Cultural Resources Survey of the Proposed Cedar Bayou Terminal and Pipelines Project in Chambers and Harris Counties, Texas. HRA Gray & Pape Houston, Texas Report of Investigation, Project # 391.00.

University of Texas Bureau of Economic Geology (UT-BEG)

1982 Geologic Atlas of Texas: Houston Sheet. University of Texas. Austin.

Williams, H.C.

1986 "Gateway to Texas: The History of Orange and Orange County", edited by Dr. Howard C. Williams, The Heritage House Museum of Orange, Orange, 1986.

**THC Responses to HRA Gray and Pape  
Cultural Resource Report**



# HRA Gray & Pape, LLC

Mr. Mark S. Wolfe  
Texas Historical Commission  
108 West 16<sup>th</sup> Street  
Austin, TX 78701

**RECEIVED**  
OCT 15 2010

TEXAS HISTORICAL COMMISSION

October 14, 2010

**Re: Draft Report, Intensive Pedestrian Cultural Resources Survey of 74 Acres on behalf of LDH Energy Mont Belvieu L.P. in Chambers County, Texas**

**Lead Federal Agency: The United States Army Corps of Engineers (USACE), Galveston District  
USACE Permit Application # SWG-2010-876**

Dear Mr. Wolfe,

HRA Gray and Pape, LLC has recently completed a cultural resources investigation of 74 acres of private property owned by LDH Energy Mont Belvieu L.P. under contract with URS Corporation. The enclosed draft report presents the results of intensive pedestrian cultural resources surveys of 4 block areas subsuming a combined 74 acres, defined as the Area of Potential Effects (APEs). The Lead Federal Agency for this project has been identified as the United States Army Corps of Engineers (USACE), Galveston District. This work was conducted to satisfy requirements set forth by the National Historic Preservation Act, specifically requirements set forth by 33 CFR Part 325, Appendix C - Procedures for the Protection of Historic Properties (Department of the Army 1973). All work was conducted following accepted standards set forth by the Texas Historical Commission and the Council of Texas Archeologists.

The goals of the cultural resources survey were to determine if land altering activities required to complete this project would affect any previously identified historic properties as defined by Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR 800), and to establish whether or not previously unidentified cultural resources were located within the project's APE.

The project is located entirely on privately owned properties; therefore, it did not require a Texas Antiquities Permit. Fieldwork was conducted in September 2010. As a result of investigations, a total of 47 negative shovel tests were excavated, averaging 0.64 shovel tests per acre, exceeding the state's minimum standards. No new or existing cultural resources were recorded within the APEs. Disturbances observed within the project area include the presence oil waste, pipeline easements, and other utilities. Based on the negative results of survey, HRA Gray & Pape, LLC recommends no further work and that the proposed project be allowed to proceed as planned. If you have any questions, or are in need of additional information, please do not hesitate to contact me at (713) 541-0473.

Sincerely,

*Kristi Soltysiak*  
Kristi Soltysiak  
Principal Investigator

**NO HISTORIC  
PROPERTIES AFFECTED  
PROJECT MAY PROCEED**  
by *Mark Wolfe*  
for Mark Wolfe  
State Historic Preservation Officer  
11/15/10  
201102671

**DRAFT REPORT  
ACCEPTABLE**  
by *Mark Wolfe*  
Executive Director, THC  
Date \_\_\_\_\_

Enc. CC: Aaron Boers. URS Corporation,  
Jerry Androy, USACE, Galveston District

HRAGP Project #602.00

<b>Cincinnati Ohio</b> 1318 Main St Cincinnati, OH 45202 513.287.7700 F 513.287.7703	<b>Missoula Montana</b> 125 Bank St Fifth Floor Missoula, MT 59802 406.721.1958 F 406.721.1964	<b>Houston Texas</b> 1428 West Alabama St. Houston, TX 77006 713.541.0473 F 713.541.0479	<b>Richmond Virginia</b> 100 West Franklin St. Suite 102 Richmond, VA 23220 804.644.0656 F 804.643.8119	<b>Seattle Washington</b> 1904 Third Ave. Suite 240 Seattle, WA 98101 206.343.0226 F 206.343.0249	<b>Portland Oregon</b> 909 N. Beech St. Suite B Portland, OR 97227 503.247.1319 F 503.284.1161	<b>Providence Rhode Island</b> 80 Valley St. Suite 103 Providence, RI 02909 401.273.9900 F 401.273.9944
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TEXAS HISTORICAL COMMISSION  
*real places telling real stories*

January 10, 2011

Ms. Kristi Soltysiak  
HRA Gray and Pape, LLC  
1428 W. Alabama Street  
Houston, TX 77006

Re: Project review under Section 106 of the National Historic Preservation Act of 1966  
Final Report: *Intensive Pedestrian Cultural Resources Survey of 74 Acres on Behalf of LDH Energy  
Mont Belvieu L.P. in Chambers County, Texas*

Dear Colleague:

We are in receipt of the final report for the above referenced project. We will add the report to our agency library. Also, thank you for sending a completed *Abstracts in Texas Contract Archeology* form and a copy of the report on a tagged PDF CD. The electronic copy will allow the report to be viewed online.

Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If we may be of further assistance, please contact Ed Baker, (512/463-6096).**

Sincerely,



for  
Mark Wolfe  
Executive Director

MW/lft



RECEIVED

TEXAS HISTORICAL COMMISSION

OCT 03 2011

REQUEST FOR SHPO CONSULTATION:

TEXAS HISTORICAL COMMISSION

Projects Subject to Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

Submission of this form only initiates consultation with the Texas Historical Commission, the State Historic Preservation Officer (SHPO) for Texas. The SHPO may require additional information to complete the review for some projects.

FCC projects: this form should not be completed when submitting Form 620 or 621 for communications towers.

Section 106 of the National Historic Preservation Act of 1966, as amended, requires federal agencies to consider the effects of their undertakings on historic properties and to consult with the State Historic Preservation Officer (SHPO) regarding the undertaking. An undertaking is any action by or on behalf of a federal agency that has the potential to affect historic resources and includes funding, permits, or other approvals. Federal agencies are required to identify historic resources that may be affected and to avoid, minimize, or mitigate any adverse effects. The Section 106 regulations are codified in 36 CFR 800 and are available from the Advisory Council on Historic Preservation website at www.achp.gov. Regulations allow 30 days upon receipt for SHPO review.

The Antiquities Code of Texas (Title 9, Chapter 191 of the Texas Natural Resources Code) is intended to protect historic and archeological landmarks and is applicable to public lands owned by the state of Texas or a political subdivision of the state, including state agencies, counties, cities, school districts, and public colleges and universities, as well as other public authorities. Notification of the Texas Historical Commission is required before breaking ground at a project location on state or local public land.

[X] This is a new submission

Complete all pages of this form and include required attachments.

[ ] This is additional information relating to original submission made on or about \_\_\_\_\_

Complete only the first page of this form and add any new information, including attachments.

1. Project Information

PROJECT NAME: Lone Star Fractionator 2
PROJECT ADDRESS: Chambers
PROJECT CITY: Mont Belvieu
PROJECT ZIP CODE(S): 77521
PROJECT TYPE: [X] Site Excavation, [X] Utilities & Infrastructure, [X] New Construction
BRIEF PROJECT SUMMARY: Lone Star NGL Mont Belvieu, LP is expanding its existing natural gas liquids (NGL) facility.

2. Project Contact Information

PROJECT CONTACT NAME: Rob Lackowicz
TITLE: Cultural Resource Manager
ORGANIZATION: URS Corporation
ADDRESS: 7389 Florida Blvd., Suite 300
CITY: Baton Rouge
STATE: LA
ZIP: 70806
PHONE: 225-935-2974
EMAIL: rob.lackowicz@urs.com

For SHPO Use Only

Track Review to:

- [ ] Archeology Division: Reviewer:
[ ] History Programs Division: Reviewer:
[ ] Architecture Division: Reviewer:

Date Stamp Below:

NO HISTORIC PROPERTIES AFFECTED PROJECT MAY PROCEED
by [Signature] for Mark Wolfe
State Historic Preservation Officer
Date 10/4/11
Track#

TEXAS HISTORICAL COMMISSION

RECEIVED

NOV 02 2011

**REQUEST FOR SHPO CONSULTATION:**  
**Projects Subject to Section 106 of the National Historic Preservation Act**  
**and/or the Antiquities Code of Texas**

Submission of this form only initiates consultation with the Texas Historical Commission, the State Historic Preservation Officer (SHPO) for Texas. The SHPO may require additional information to complete the review for some projects.

FCC projects: this form should not be completed when submitting Form 620 or 621 for communications towers.

Section 106 of the National Historic Preservation Act of 1966, as amended, requires federal agencies to consider the effects of their undertakings on historic properties and to consult with the State Historic Preservation Officer (SHPO) regarding the undertaking. An undertaking is any action by or on behalf of a federal agency that has the potential to affect historic resources and includes funding, permits, or other approvals. Federal agencies are required to identify historic resources that may be affected and to avoid, minimize, or mitigate any adverse effects. The Section 106 regulations are codified in 36 CFR 800 and are available from the Advisory Council on Historic Preservation website at [www.achp.gov](http://www.achp.gov). Regulations allow 30 days upon receipt for SHPO review.

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- This is a new submission  
Complete all pages of this form and include required attachments.
- This is additional information relating to original submission made on or about Sept. 30, 2011  
Complete only the first page of this form and add any new information, including attachments.

<b>1. Project Information</b>		
PROJECT NAME Lone Star Fractionator 2		
PROJECT ADDRESS	PROJECT CITY Mont Belvieu	PROJECT ZIP CODE(S) 77521
PROJECT COUNTY OR COUNTIES Chambers		
PROJECT TYPE (Check all that apply)		
<input type="checkbox"/> Road/Highway Construction or Improvement	<input type="checkbox"/> Repair, Rehabilitation or Renovation of Structure(s)	
<input checked="" type="checkbox"/> Site Excavation	<input type="checkbox"/> Addition to Existing Structure(s)	
<input checked="" type="checkbox"/> Utilities & Infrastructure	<input type="checkbox"/> Demolition or Relocation of Existing Structure(s)	
<input checked="" type="checkbox"/> New Construction	<input type="checkbox"/> None of these	
BRIEF PROJECT SUMMARY: Please provide a one or two sentence description to explain the project. More details will be provided separately in Part 5, the Project Work Description Attachment. Lone Star NGL Mont Belvieu, LP is expanding its existing natural gas liquids (NGL) facility. The undertaking will include building a new fractionator, which processes mixed NGL into component products such as ethane, propane, normal butane, isobutane and natural gasoline.		

<b>2. Project Contact Information</b>			
PROJECT CONTACT NAME Rob Lackowicz	TITLE Cultural Resource Manager	ORGANIZATION URS Corporation	
ADDRESS 7389 Florida Blvd., Suite 300	CITY Baton Rouge	STATE LA	ZIP 70806
PHONE 225-935-2974	EMAIL rob.lackowicz@urs.com		

<b>For SHPO Use Only</b> Track Review to:	<input type="checkbox"/> Archeology Division: Reviewer:
	<input type="checkbox"/> History Programs Division: Reviewer:
	<input type="checkbox"/> Architecture Division: Reviewer:

**Date Stamp Below:**

NO HISTORIC PROPERTIES AFFECTED PROJECT MAY PROCEED

by William A. Martin  
for Mark Wolfe  
State Historic Preservation Officer  
Date 11/9/11  
Track#

**Supplemental Information  
Project Description and Area of Potential Effect**

PROJECT LOCALITY: Chambers County

DATE SUBMITTED: 11/02/2011

DATE ORIGINAL SUBMITTED: 09/30/2011

PROJECT NAME: Lone Star Fractionator 2, Mont Belvieu, Chambers County, Texas

PROJECT DESCRIPTION:

The overall project remains unchanged. Lone Star NGL Mont Belvieu, LP (Lone Star) proposes to construct a 100,000 barrels per day natural gas liquids (NGL) fractionation facility, expanding upon an existing energy facility situated in Mont Belvieu, Texas. The precise construction footprint including associated utilities has not yet been defined but it will involve building of a new Fractionator NGL facility that will process mixed NGL into component products such as ethane, propane, normal butane, isobutane and natural gasoline. The facility lies within an existing oil and gas field.

SUPPLEMENTAL DESCRIPTION:

The previous submission identified two work locations with maximum project limits totaling about 54 acres. Lone Star has subsequently identified the need for additional work space. The maximum project area now encompasses three locations that total 70.8 acres. The changes include a 3.3 acre southward extension to the western project area that was originally submitted to THC and a new 13.5 acre project area south of that position (see attached maps). The supplemental work areas lie within land previously cleared for development.

SUPPLEMENTAL AREA OF POTENTIAL EFFECT:

The new project areas continue to be located in a mature oil and gas field surrounded by existing industrial buildings and infrastructure that are less than 50 years in age. Based on the findings of previous cultural resource investigations conducted in the area, no historic properties are located within or near the undertaking. The Area of Potential Effect remains limited to construction activities within the defined limits shown in the attached maps, as well as buildings within direct visual sight of the completed facility.

SUPPLEMENTAL DETERMINATION OF EFFECT:

The supplemental work areas shown here are located in close proximity and in a similar setting as those shown in the original referral. Portions have already been surveyed for cultural resources, with no historic properties identified. The previous determination of No Historic Properties Affected is requested to extend to these additional work areas.

COMPARISON WITH APPLICABLE PLANS:

As before, the supplemental improvements will complement the existing infrastructure and would not significantly change land or facility use from its current state.

<u>Factor</u>	<u>Project Will be in Compliance</u>		
	Yes	No (Explain)	N.A.
Local Comprehensive Plans Including Land Use and Growth Management Elements	<u>X</u>	_____	_____
Area and Regional Plans	<u>X</u>	_____	_____
Local Zoning Ordinances	<u>X</u>	_____	_____

# **Resumes of Cultural Professionals**



## **Robert J. Lackowicz M.A., R.P.A.**

*Cultural Resource Manager*

---

### **Areas of Expertise**

Section 106 NHPA Compliance  
Phase I, II, and III Cultural  
Resources Studies  
Natural Gas and Product Pipelines  
Federal Energy Regulatory  
Commission (FERC) - Third Party  
Reviews  
Technical Writing;  
Transportation Corridor Studies -  
Hydroelectric Transmission Line  
Corridors and Facilities  
Native American, State and Federal  
Agency Coordination;  
Programmatic Agreements  
Project Management

### **Years of Experience**

With URS: 3.5 Years  
With Other Firms: 17 Years

### **Education**

MA/Anthropology/1996/  
Trent University  
BA/Anthropology/1991/  
Memorial University

### **Overview**

Mr. Lackowicz has 20 years of cultural resource management experience. He has directed cultural resource studies for numerous energy sector projects and conducted independent technical reviews for the Federal Energy Regulatory Commission and the U.S. Department of State. He also has extensive experience consulting with Native American, state and federal agencies, including developing memoranda of understandings and programmatic agreements for complex projects.

### **Project Specific Experience**

#### **Senior Technical Reviewer for State Dept., TransCanada Keystone and Cushing Extension Pipelines, 2007-2008:**

Senior Technical Reviewer for Entrix and the U.S. State Department, determining Section 106 compliance for the United States portion of this international pipeline (North Dakota, South Dakota, Missouri, Nebraska, Illinois, Kansas and Oklahoma) and authoring the cultural resource sections of the Environmental Impact Statement.

#### **Cultural Resource Manager, Carbon Dioxide Sequestration and Enhanced Oil Recovery in Southeast Texas for NRG Energy, 2011-12:**

Phase I cultural resource study for proposed 80 mile pipeline to capture and inject carbon dioxide into mature oil field for enhanced recovery operations.

#### **Cultural Resource Manager, Carbon Dioxide Sequestration and Enhanced Oil Recovery in Southeast Texas for Air Products and Chemicals, 2011:**

Phase I cultural resource study for 13 mile pipeline being built to capture and inject carbon dioxide into mature oil field for enhanced recovery operations.

#### **Cultural Resource Manager, North Main and North Main Loop System Abandonment and Replacement Program, Various Counties and Parishes in Alabama, Mississippi and Louisiana for Southern Natural Gas Company, 2007-2010:**

Phase IA desktop and Phase I cultural resources studies associated with multiple natural gas pipeline abandonment and replacement activities along the North Main and North Main Loop natural gas pipeline systems. All projects were FERC-permitted and included preparation of Resource Report 4.



**Cultural Resource Manager, Elba Island III Liquefied Natural Gas Terminal Expansion, and Elba Express Natural Gas Pipeline and Facilities in Georgia and South Carolina for Southern Natural Gas Company, 2006-2007:**

Phase I cultural resources studies and preparer of Resource Report 4 for FERC-permitted 187 mile long natural gas pipeline and liquefied natural gas facility project.

**Cultural Resource Manager, Natural Gas Pipeline and Facilities in Texas and Oklahoma for Gulf South / Boardwalk, 2007:**

Phase I cultural resources studies for Phase I cultural resources studies associated with FERC-permitted 137 mile long new natural gas pipeline in Texas and 37 mile natural gas pipeline in Bryan County, Oklahoma for the Gulf Crossing Pipeline project.

**Cultural Resource Manager, Natural Gas Pipelines and Facilities in Louisiana for El Paso, 2007:**

Phase I cultural resources studies associated with the 67 mile long Louisiana portion of Continental Connector natural gas pipeline project.

**Cultural Resource Manager, Natural Gas Pipelines and Facilities in Mississippi for Enterprise Products, 2006-2007:**

Phase I cultural resources studies associated with proposed Petal Cavern Conversions and Petal Compressor Station 3 natural gas storage and pipeline projects.

**Senior Technical Reviewer for FERC, Sempra Port Arthur LNG Facility, Jefferson County, Texas, 2006:**

Senior Technical Reviewer for third party EIS determining Section 106 compliance for the proposed pipeline and liquefied natural gas facility, authoring the cultural resource sections of the Environmental Impact Statement.

**Cultural Resource Manager, Cypress Phase II Natural Gas Pipeline and Facilities in Georgia and Florida for Southern Natural Gas Company, 2005-2006:**

Phase I cultural resources studies for 167 mile long natural gas pipeline. Also prepared Resource Report 4 for FERC filing.

**Cultural Resource Manager, Natural Gas Pipeline and Facilities in Brazoria County, Texas for Freeport LNG/ Conoco Phillips, 2004:**

Phase I cultural resources inventory study of 30 mile long natural gas pipeline project in southeast Texas.

**Professional Societies/Affiliates**

Register of Professional Archaeologists (RPA)



## **JAMES HUGHEY**

### **TITLE**

Regional Manager/Project Manager  
Principal Investigator-Archaeology

### **EXPERTISE**

NAGPRA Compliance  
NHPA Section 106 Compliance  
Southeast Prehistoric Archaeology  
Historic Plantation Archaeology  
Historic Urban Archaeology

### **EDUCATION**

*Master of Arts, Anthropology, 2001*  
University of Houston

*Bachelor of Science, Cum Laude, Anthropology, 1996*  
University of Houston

SGA Environmental Inspection & Construction Compliance. February 2003-10.

FERC Environmental Report Preparation Seminar. June 2003.

NEPA and Transportation Decision Making, LADOT, February 2003.

OSHA Excavation Safety Training for Competent Persons.

## **SUMMARY OF EXPERIENCE**

Mr. Hughey has over fifteen years of experience working on Phase I, II, and III archaeological survey, testing, and mitigation projects relating to the pipeline, transportation, and construction industries and has completed documentary research in various state archives associated with land use histories. Consultation with multiple State Historic Preservation Offices has resulted in a solid understanding of state and federal regulations and requirements.

Projects managed by Mr. Hughey include gas pipeline, water and sewer line surveys, channel and creek widening surveys, and projects associated with the construction of detention basins and outfall structures where the United States Army Corps of Engineers serves as the lead or a consulting Federal Agency. Often, these types of projects will cross through numerous topographic features, including uplands, terraces overlooking major waterways, floodplain environments, or through coastal environments. Several of the project examples listed below outline Mr. Hughey's experience in conducting investigations in these varied environments, and have required a thorough understanding of the particular needs associated with managing cultural resources in floodplain or terrace environments on projects located adjacent to or incorporating major streams, rivers or water bodies.

Mr. Hughey also has five years of experience working in museum settings, where his duties included collections-based research, NAGPRA compliance, and the completion of curation, exhibit and interpretive duties associated with material culture from the Americas, Africa, the Middle East, and Indonesia.

## **SELECTED PROFESSIONAL EXPERIENCE**

Project Manager- Toledo Bend Relicensing Study, Texas and Louisiana. Sabine River Authority. Federal Energy Regulatory Commission Lead Federal Agency.

Principal Investigator- Data Recovery of Site 41OR85, Orange County, Texas for AMEC Paragon and Golden Pass Pipeline.

Project Manager- National Register Evaluation of Sites 41FB280, 41FB281, 41FB304, and 41FB306, Fort Bend County, Texas. USACE Lead Federal Agency.

Project Manager/Co-Principal Investigator- The Vintage National Register Evaluation Project (Sites 41HR997, 41HR1000, and 41HR1001, Harris County, Texas, for V&W Partners.

Project Manager- Survey of 400 acres proposed for development along Flat Bank Creek, Sienna Plantation, Fort Bend County, Texas. Report submitted to Sienna Johnson Development and the USACE, Galveston District.

Project Manager/Co-Principal Investigator- Survey and Geoarchaeological assessment of the Brazos River channelization project, Fort Bend County, Texas. Report submitted to the USACE, Galveston District.

Principal Investigator- Archaeological survey of 700 acres proposed for the South Sienna Development, Fort Bend County, Texas. USACE, Galveston District Lead Federal Agency.

Project Manager- Archaeological survey and deep testing of 743 acres associated with the Imperial Sugar complex and Central State Prison Farm Camp No. 3, Fort Bend County, Texas.

Project Manager- Survey of Lake Kemp, Texas for the USACE Conservation Pool Reallocation Study for the USACE, Tulsa District.

Project Manager- Cultural Resource Management Survey for the LIT-37 Pipeline Project in De Soto Parish, Louisiana. Submitted to Gulf Engineers & Consultants, Inc.

Project Manager- Cultural Resource Management Survey for the J-113 Pipeline Project in White County, Arkansas. Submitted to Gulf Engineers & Consultants, Inc.

Project Manager- Cultural Resources Management Survey for 10 Miles of the Blue Water Highway Reconstruction Project in Brazoria County, Texas, for Berg-Oliver Associates, Brazoria County, and the Texas Department of Transportation.

Project Manager- Cultural Resources Management Survey for the Wister Lake Roads Expansion Project, Le Flore County, Oklahoma for Black & Veatch/GEC and U.S. Army Corps of Engineers, Tulsa District.

Project Manager- Ozark Atlas Pipeline Project, White, Woodruff, Monroe, St. Francis, Lee, and Phillips Counties, Mississippi, and Coahoma, Quitman, and Panola Counties Alabama, for ENSR and Ozark Gas Transmission, LLC.

Principal Investigator- Southeast Expansion Pipeline, Choctaw County Alabama and Simpson, Smith, Jasper, and Clarke Counties Mississippi, for ENSR and Gulf South Pipeline Company, LP.

Project Manager/Principal Investigator- Southern Pines Pipeline, Greene County, Mississippi, for ENSR and SG Resources Mississippi, LLC.

Project Manager/Principal Investigator- Goodrich to Koontz Clarity Pipeline, Hardin, Polk, and Liberty Counties, Texas, for URS and Enbridge.

Project Manager/Principal Investigator- Bethel to Crockett Clarity Pipeline, Houston and Anderson Counties, Texas, for URS and Enbridge.

Project Manager- Kountze to Orange Clarity Pipeline, Hardin, Jasper, and Orange Counties, Texas for URS and Enbridge.

Project Manager- National Register Evaluation of Sites 41HR293, 41HR745, 41HR809, 41HR810, and 41HR811, Harris County, Texas, for Harris County Flood Control Department.

Project Manager- Freeport LNG Expansion Survey, Brazoria County, Texas, for NRG and Freeport LNG.

Project Manager- Miller's Lake Lateral Pipeline Survey, Evangeline Parish, Louisiana, for ENSR International.

Project Manager- The Vintage 380-Acre Survey, Harris County, Texas, for V&W Partners.

Project Manager- Camp Swift cultural resources survey, Bastrop County, Texas, for the University of Texas MD Anderson Cancer Research Center.

Project Manager- Catlettsburg Tri-State Pipeline Survey, Wayne County, West Virginia and Boyd County, Kentucky, for Sendero Environmental and Catlettsburg Refining, LLC.

Project Manager/Principal Investigator- Farm to Market 1484 Expansion, Montgomery County, Texas, for Texas Department of Transportation and Turner Collie & Braden, Inc.

Project Manager/Principal Investigator- Cultural Resources Assessment for the Proposed Matagorda Ship Channel Improvement Project, in Matagorda and Calhoun Counties, Texas, for URS Corporation and the Port of Port Lavaca/Port Comfort.

Project Manager- Sabine Pass Gas Storage and Pipeline, Jefferson County, Texas, for ERM and Unocal Midstream and Trade.

Project Manager/Principal Investigator- Farm to Market Road 762, Fort Bend County, Texas, for Texas Department of Transportation and Berg Oliver Associates, Inc.

Project Manager- Ellington Field Archaeological Assessment, Harris County, Texas, for M.D. Anderson Cancer Center, University of Texas.

Project Manager- Gulf South and Trunkline Interconnect Pipeline, Calcasieu Parish, Louisiana, for ENSR International, Gulf South Pipeline, and Trunkline LNG.

Project Manager/Principal Investigator- Archaeological Assessment for the Proposed ConocoPhillips Pipeline Reroute in Tulsa and Wagoner Counties, Oklahoma, for ENSR and ConocoPhillips.

Project Manager- Golden Pass LNG Terminal/Pipeline Project, Jefferson, Newton, and Orange Counties, Texas and Calcasieu Parish, Louisiana, for ERM and Golden Pass LNG, L.P.

Project Manager- Pearl Crossing LNG Pipeline Project, Cameron and Calcasieu Parishes, Louisiana, for URS Corporation and Pearl Crossing LNG, L.P.

Project Manager/Principal Investigator-Golden Pass Pipeline Reroute survey, Jefferson, Newton, Orange, Counties Texas and Calcasieu Parish, Louisiana, for AMEC Paragon and Golden Pass Pipeline LP.

Project Manager/Principal Investigator- Vista del Sol LNG Terminal/Pipeline Project, San Patricio County, Texas, for URS Corporation and Vista del Sol LNG, L.P.

Project Manager- State Highway 87 Survey, Galveston County, Texas, for Texas Department of Transportation and Berg Oliver Associates, Inc.

Project Manager- Tennessee Gas 100-3 Pipeline Replacement Project, Harris County, Texas, for Coler & Colantonio and Tennessee Gas Pipeline Company.

Project Manager/Principal Investigator- Four Corners and Rio Brazos Service Areas Water and Sewer Systems Survey, Fort Bend County, Texas, for Berg Oliver Associates and the UDSA-RUS.

Project Manager/Principal Investigator- Kleberg County/FEMA Rechannelization Survey, Kleberg County, Texas, for URS Corporation.

Project Manager/Principal Investigator- Kenedy County/FEMA Rechannelization Survey, Kenedy County, Texas, for URS Corporation.

Project Manager/Principal Investigator- Line Replacement Survey for El Paso Natural Gas Pipeline 1107, Upton County, Texas, for Coler and Colantonio and the El Paso Corporation.

Project Manager- Phase I Cultural Resources Survey of the ANR/Nipsco-Chesterton Interconnect, Porter County, Indiana, for Coler and Colantonio and El Paso Corporation.

Project Manager- Phase I Cultural Resources Survey of the Proposed Pipeline Replacement of the Kosciusko Pipeline, Rankin County, Mississippi, for Gremminger and Associates and Gulf South Pipeline Company.

Project Manager- City of Angleton Sidewalk Categorical Exclusion Documentation, for Berg Oliver Associates, the City of Angleton, Texas and the Texas Department of Transportation.

Project Manager- Phase I Cultural Resources Survey of the Brand Lane Development Project, Fort Bend County, Texas, for Berg Oliver Associates.

Project Manager- Chain Site Survey Project, Lake Livingston, Texas, for the Houston Museum of Natural Science Anthropology Department.

Principal Investigator- Environmental Assessment/Phase I Cultural Resources Survey for the Fish Creek Thoroughfare Expansion Project in Montgomery County, Texas, for Turner, Collie, and Braden, Inc.

Principal Investigator- Houston Hike and Bikeways Categorical Exclusion Documentation/Phase I Cultural Resources Survey for the City of Houston, Texas, Klotz Associates, Berg Oliver Associates, and the Texas Department of Transportation.

Principal Investigator- Phase I Cultural Resources Survey for the ANR/Seminole Pipeline Interconnect Project, Oklahoma City, Oklahoma, for Coler & Colantonio Inc. and the El Paso Corporation.

Principal Investigator- Phase I Cultural Resources Survey for Power Plant Construction in Hidalgo County, Texas, for Malcolm Pirnie, Inc.

Principal Investigator- Site File Research for the Madisonville Pipeline Project, in Madison County, Texas, for Natural Resource Group, Inc.

Principal Investigator- Proposed Regional Detention Basin and Outfall Structure Cultural Resources Survey, in Harris County, Texas, for Berg Oliver Associates, Inc.

Principal Investigator- Phase I Cultural Resources Survey for the St. Martin Parish Business Park Property, in St. Martin Parish, Louisiana, for the St. Martin Economic Development Authority.

Principal Investigator- Woodtrace Development Cultural Resources Survey, in Montgomery County, Texas, for Berg Oliver Associates, Inc.

Field Director- Alamo Compressor Station Site Survey, in Hidalgo County, Texas, for the El Paso Corporation.

Field Director- Fiber Optic Routing Survey, in North Carolina, Georgia, and Florida for AT&T.

Field Director- Steward Creek Expansion Survey, in Conroe, Texas, for the City of Conroe.

Field Director- Anauac National Wildlife Reserve Kerr-McGee Oil Lease Survey, in Montgomery County, Texas, for Kerr-McGee and Ensource Corporation.

Field Director- Fiber Optic Regen Station Survey, Griffin, Georgia, for PFNet and AT&T.

Field Archaeologist- Phase III data recovery at the Levi Jordan Plantation, 41 BU 165, Brazoria, Texas, for the University of Houston Anthropology Department.

Field Archaeologist- Phase III data recovery at the Ballpark at Union Station, 41 HR 820, Houston, Texas, for the Houston Sports Authority.

Field Director- Phase III data recovery at the Frogmore Plantation, 38 BU 1116, St. Helena Island, South Carolina for the University of Houston Anthropology Department.

#### ARCHIVAL RESEARCH

Project Archaeologist or Principal Investigator on numerous projects using records in SHPO offices and state and county repositories on urban and rural land use and development projects associated with predictive modeling activities, and developing testing and mitigation strategies for NHPA eligibility studies, archaeological data recovery, and NEPA compliance.

## **SELECTED PUBLICATIONS**

Mehok, Rebecca Sick, Kristi Turner Soltysiak, and James Hughey (2008)

*A Cultural Resources Survey of Gulf South's Proposed Southeast Expansion Natural Gas Pipeline Project in Simpson, Smith, Jasper, and Clarke Counties, Mississippi.*

Soltysiak, Kristi Turner, Rebecca Sick Mehok, and James Hughey (2008)  
*A Cultural Resources Survey of Gulf South's Proposed Southeast Expansion Natural Gas Pipeline Project in Choctaw County, Alabama.*

Sick, Rebecca, James Hughey, Kristi Soltysiak, and Thomas McKinney (2008)  
*Cultural Resources Survey of the Whitetail Gas Storage Project in Monroe County, Mississippi.*

Mehok, Rebecca and James Hughey (2009)  
*Data Recovery at Site 41OR85 in Orange County, Texas.*

Scott, Tony, James Hughey, and John Picklesimer (2009)  
*Cultural Resource Management Survey of the Golden Pass LNG Pipeline Project in Jefferson, Orange, and Newton Counties, Texas.*

Hughey, James (2000)  
*"The Ceramic Assemblage at Fort Concho" in Fort Concho National Historic Landmark, San Angelo, Texas: An Archaeological Investigation for Enlisted Men's Barracks 2 Restoration, Kathy Roland (ed.); Fort Concho National Historic Landmark, San Angelo.*

Hughey, James (Unpublished Master's Thesis)  
*A Technological Analysis of Low-Fired, Hand-Built Ceramics From the Frogmore Plantation (38BU1116), Beaufort County, South Carolina.*

Baird, Steven, Samuel Sweitz, and James Hughey (2002)  
*Phase I Cultural Resources Survey of Proposed Fresh Water and Sewer Systems for the Four Corners and Rio Brazos Service Areas in Fort Bend County, Texas.*

Baird, Steven, James Hughey, and John Oswald (2003)

*Phase I Cultural Resources Survey of the Western Rim Development Project Area, Montgomery County, Texas.*

Gowdy, Harrison Stamm, Jim Hughey, Cinder Griffin Miller, and Rita Walsh (2001)

*Phase I Cultural Resources Investigations of the Greater Cleveland Regional Transit Authority's Proposed East Side Transit Center, Cleveland, Cuyahoga County, Ohio.*

Hughey, James and Cinder Griffin Miller (2001)

*Revised Working Document, Euclid Corridor Transportation Project, Cuyahoga County, Cleveland, Ohio, Archaeology Model Step 7.*

Oswald, John and James Hughey (2002)

*Phase I Cultural Resources Management Short Report of Archaeological Investigations Associated with Power Plant Construction in the City of McAllen, Hidalgo County, Texas.*

Hughey, James (2002)

*Phase I Cultural Resources Survey of Proposed Replacement Locations Along Gulf South's Existing Kosciusko Pipeline, Rankin County, Mississippi.*

Barber, Michael, Maureen Meyers, and James Hughey (2002)

*A Phase I Cultural Resources Management Survey for the Proposed St. Martin Parish Business and Industrial Park St. Martin Parish, Louisiana.*

Hughey, James (2002)

*Results of Phase Ia Site File Research for the Madisonville Pipeline Project, Madison County, Texas.*

## **PROFESSIONAL ORGANIZATIONS**

Register of Professional Archaeologists  
Society for American Archaeology  
American Cultural Resources Association

Council of Texas Archeologists (Membership Committee Co-Chair)  
Texas Archeological Society



**KRISTI E. (TURNER)  
SOLTYSIAK**

## **TITLE**

Principal Investigator, Archaeology

## **EXPERTISE**

NHPA Section 106 Compliance

Southeast Prehistoric Bioarchaeology

Human Osteology

Forensic Anthropology

## **EDUCATION**

*Master of Arts, Anthropology, 2002*  
The University of Southern Mississippi

*Bachelor of Arts, Cum Laude, Anthropology, 2000*  
Southwest Texas State University

## **SUMMARY OF EXPERIENCE**

Mrs. Soltysiak has 10 years of experience working on Phase I, II, and III archaeological survey, testing, and mitigation projects relating to the pipeline, transportation, and construction industries in the American south

and southeast. Her experience ranges from directing field activities to project planning, budgeting, and contracting. She has four years of experience conducting forensic investigations in Texas, Mississippi, and abroad in Iraq. Mrs. Soltysiak was the examining osteologist for skeletal analyses of numerous archaeological populations across the American southeast and assistant osteologist for forensic cases in the state of Mississippi. She also has management experience with coordinating the collection of forensic evidence from mass graves using archaeological methods in Iraq and handling chain of custody documents.

## **SELECTED PROFESSIONAL EXPERIENCE**

Principal Investigator- Buffalo Bayou improvements and monitoring, Harris County, Texas, for Harris County Flood Control Department.

Principal Investigator- Archaeological survey and deep testing of 743 acres associated with the Imperial Sugar complex and Central State Prison Farm Camp No. 3, Fort Bend County, Texas, for Berg Oliver Associates, Inc.

Principal Investigator- Intensive pedestrian survey of four water body crossings within the Big Thicket National Preserve (BTNP) in Hardin, Jasper, Jefferson, and Orange Counties, Texas conducted on behalf of the Kelson Transmission Company. Prepared an ARPA permit for survey within the BTNP owned by the NPS, for ERM Southwest, Inc.

Principal Investigator- Intensive pedestrian survey of 7.84 miles for the proposed Baytown sewer pipeline project in Harris and Chambers Counties, Texas, for Berg-Oliver Associates, Inc.

Principal Investigator- Intensive pedestrian survey and deep testing of 329 acres associated with a proposed sandpit project in Montgomery, County, Texas, for Southern Crushed Concrete Company.

Principal Investigator- Archaeological assessment survey of 0.47-acre associated with South Mayde Creek in Harris County, Texas, for Harris County Flood Control District.

Principal Investigator- Intensive pedestrian survey of a 5-mile pipeline project with associated facilities in Chambers and Harris Counties, Texas, for URS Corporation.

Principal Investigator- Kountze to Orange DC-36-KO Clarity Pipeline in Hardin, Jasper, and Orange Counties, Texas, for URS Corporation and Enbridge East Texas Pipelines, L.P.

Principal Investigator- Phase I cultural resources management survey of Florida Gas Transmission Company's proposed Eunice Relay in St. Landry Parish, Louisiana, for Florida Gas Transmission Company, LLC.

Principal Investigator- Phase I cultural resources management surveys of Florida Gas Transmission Company's proposed Eunice EWL 18" Relay #3 and Port Barre 30" Relay #1 in St. Landry and East Baton Rouge Parishes, Louisiana, for Florida Gas Transmission Company, LLC.

Evidence and Case Files Manager- Supervised the collection of physical evidence of crimes from mass gravesites in Iraq. Compiled and maintained individual case files assembled for victims recovered from mass graves in the Ninevah, Muthanna, and Maysan Provinces of Iraq. Maintained all chain of custody documents and material evidence for judicial use, for the Regime Crimes Liaison Office of the U.S. Department of Justice and U.S. Army Corps of Engineers.

Osteoarchaeologist- Field recovery and laboratory processing of individuals from mass graves in the Muthanna and Maysan Provinces of Iraq using archaeological and forensic methods, for the Regime Crimes Liaison Office of the U.S. Department of Justice and U.S. Army Corps of Engineers.

Osteologist- Field recovery and assistance with laboratory forensic examination of skeletal human remains in the state of Mississippi. Preparation of professional reports of findings to local law enforcement agencies in Mississippi.

Project Archaeologist- Cultural resources survey of 127 acres proposed for the MHI Pearland development project in Brazoria County, Texas.

Project Archaeologist- Cultural resources survey and impact evaluation of land proposed for the construction of three border safety inspection facilities (BSIFs) in Hidalgo and Cameron Counties, Texas.

Project Archaeologist- Cultural resources survey for a 3-mile road extension project in Bexar County, Texas.

Co-Principal Investigator- Cultural resources survey of a 50-acre tract of land proposed for a beachside housing development in Galveston, Texas.

Project Archaeologist- Cultural resources survey and archaeological testing of a proposed LNG terminal facility in Corpus Christi, Texas. FERC regulated.

Project Archaeologist- Cultural resources survey of a proposed LNG terminal facility in Cameron Parish, Louisiana. FERC regulated.

Project Archaeologist- Cultural resources survey of 16 miles for the Cheniere 48-inch pipeline project in Cameron Parish, Louisiana. FERC regulated.

Project Archaeologist- Cultural resources survey of 120 miles for the Cheniere 48-inch pipeline project in Cameron and Vermilion Parishes, Louisiana. FERC regulated.

Project Archaeologist- Cultural resources survey for proposed modifications to the Kinder Morgan Gulf Coast Nos. 1 and 2 natural gas pipeline crossings of the Colorado River in Wharton County, Texas.

Crew Chief- Phase III data recovery of prehistoric sites 22GN687, 22GN685, and 22GN680 in Greene County, Mississippi.

Field Technician- NRHP eligibility testing of a prehistoric site (41BO217) in Brazoria County, Texas.

Adjunct Faculty- Mississippi State University, *Societies of the World*.

Adjunct Faculty- The University of Southern Mississippi, *Introduction to Anthropology*.

Instructor of Record- University of Southern Mississippi, *Introduction to Anthropology*.

## **SELECTED PUBLICATIONS**

Soltysiak, Kristi (2010)

*Archaeological Survey and Deep Testing of 743 Acres Associated with the Imperial Sugar Complex and Central State Prison Farm Camp No. 3, Fort Bend County, Texas.*

Soltysiak, Kristi (2009)

*Cultural Resources Management Surveys of Florida Gas Transmission Company's Proposed Relay#1 and Relay#4 in Brazoria and Galveston Counties, Texas.*

Soltysiak, Kristi (2009)

*Report on Phase I Cultural Resources Management Surveys of Florida Gas Transmission Company's Proposed Eunice EWL 18" Relay #3 and Port Barre 30" Relay #1 in St. Landry and East Baton Rouge Parishes, Louisiana.*

Mehok, Rebecca, James Hughey, and Kristi Soltysiak (2009)

*Data Recovery at Site 41OR85 in Orange County, Texas.*

Soltysiak, Kristi (2008)

*Intensive Pedestrian Cultural Resources Survey for Trunkline Gas Company's Proposed Field Zone Expansion II (FZE II) Pipeline Project in Hardin and Jasper Counties, Texas.*

Soltysiak, Kristi (2008)

*Cultural Resources Intensive Pedestrian Survey of 159.77 Acres Associated with the Duke Realty Development Project in Harris County, Texas.*

Soltysiak, Kristi (2007)

*Intensive Pedestrian Cultural Resources Survey and Deep Testing of 73 Acres for the De Ayala Development Project in Aransas County, Texas.*

Soltysiak, Kristi and James Hughey (2007)

*Cultural Resources Intensive Pedestrian Survey of Enbridge's Proposed DC 36-Inch Bethel to Crockett (DC-36-BC) Natural Gas Pipeline Segment in Houston and Anderson Counties, Texas.*

Turner, Kristi and Jeremy Mangum (2007)

*An Intensive Pedestrian Cultural Resources Survey of 50 Acres of Property Proposed for Freeport LNG's Stratton Ridge Well Pad in Brazoria County, Texas.*

Turner, Kristi (2007)

*An Intensive Pedestrian Cultural Resources Survey and Deep Testing of 329.61 Acres for Southern Crushed Concrete's Sandpit Project in Montgomery County, Texas.*

Turner, Kristi (2006)

*Intensive Pedestrian Cultural Resources Survey and Deep Testing Of 31 Acres for the Proposed Steep Bank Village 16 Residential Development In Fort Bend County, Texas.*

Turner, Kristi and Tony Scott (2006)

*Archaeological Assessment of 13.03 Acres of Land in Galveston and Brazoria Counties, Texas.*

Turner, Kristi (2004)

*Archaeological Constraints Analysis of a 92-Acre Tract in Austin County, Texas.*

Turner, Kristi (2004)

*Archaeological Survey of the 127-Acre MHI Pearland Development Project Area in Brazoria County, Texas.*

Turner, Kristi (2004)

*Cultural Resources Survey of the Proposed 3-Mile Wiseman Road Extension Project in Northwestern San Antonio, Bexar County, Texas.*

Turner, Kristi and D.L. Latham (2004)

*A Phase I Cultural Resources Survey of a 50-Acre Tract Proposed for the Beachside Village Housing Development in Galveston County, Texas.*

Turner, Kristi and D.L. Latham (2003)

*A Phase I Cultural Resources Survey of the Sabine Pass Pipeline Project in Cameron and Vermilion Parishes, Louisiana.*

Turner Kristi and P. Bishop (2003)

*A Cultural Resources Survey for Proposed Modifications to Sections of the Kinder Morgan Gulf Coast No.1 and No.2 Pipeline Crossings of the Colorado River in Wharton County, Texas.*

Turner, Kristi (2003)

*A Cultural Resources Survey of the Fort Bend Westpark Tollway from 0.74 Mile West of SH 99 to 0.54 Mile East of FM 1464 in Fort Bend County, Texas.*

## **PROFESSIONAL ORGANIZATIONS**

Texas Archeological Society  
Society for American Archaeology  
Council of Texas Archeologists



**CHARLES E. BLUDAU JR.**

## **TITLE**

Field Director - Archaeology

## **EDUCATION**

*Bachelor of Arts, Anthropology, 2004*  
Texas State University

## **SUMMARY OF EXPERIENCE**

Mr. Bludau has over five years of experience working on Phase I, II, and III archaeological survey, testing, and mitigation projects relating to the pipeline, transportation, and construction industries as well as research based projects. He is familiar with state and federal regulations and requirements. His employment and academic experience includes prehistoric and historic site excavations, surveys, research, forensic cases, and laboratory analyses. Mr. Bludau has extensive knowledge of the Trimble GeoXT handheld GPS unit, and the Trimble ProXH Allegra backpack unit.

## **SELECTED PROFESSIONAL EXPERIENCE**

Field Director - 700 acre mixed use development project associated with the historic Sienna Plantation in Fort Bend County, Texas. Supervised three Field Technicians and coordinated all field activities with the Principal Investigator

Field Director - Reconnaissance Survey of Select Locations along the Toledo Bend Reservoir shoreline for the Toledo Bend Relicensing project in Texas and Louisiana.

Field Director - Intensive survey on behalf of TxDOT for the proposed expansion of the Interstate 10 (I-10) corridor in Austin and Walker Counties, Texas.

Field Director - National Register Evaluation of Sites 41FB280, 41FB281, 41FB304, and 41FB306, Fort Bend County, Texas.

Field Director - Department of Homeland Security Border Crossing, North Dakota Border Stations.

Field Director - Intensive Pedestrian Survey and Deep Testing of 400 Acres of the Proposed Flat Bank Creek Residential Development, Fort Bend County, Texas.

Field Director - Crown Team Yacht Basin Survey 208 Acres, Galveston County, Texas.

Field Director - Archaeological Assessment of New Proposed Right-of-Way along Garth Road Near the Earthman Memory Gardens Cemetery in Harris County, Texas.

Field Director - FLNG NGL Extraction Project, Brazoria County, Texas.

Field Director - Blue Water Highway Reconstruction Survey, Brazoria County, Texas

Field Director - Springwood Parkway Survey, Springwood, Texas

Crew Chief-Ozark Atlas Pipeline Project, White, Woodruff, Monroe, St. Francis, Lee, and Phillips Counties, Mississippi, and Coahoma, Quitman, and Panola Counties Alabama, for ENSR and Ozark Gas Transmission, LLC.

Crew Chief-Goodrich to Kountz Clarity Pipeline, Hardin, Polk, and Liberty Counties, Texas, for URS and Enbridge.

Crew Chief-Bethel to Crockett Clarity Pipeline, Houston and Anderson Counties, Texas, for URS and Enbridge.

Crew Chief - Rush Development 102.36 Acres, Galveston, Texas, for Rush Development, L.P.

Crew Chief - 39-mile Kountze to Orange Segment of the Enbridge Clarity Natural Gas Pipeline Project in Hardin, Jasper, and Orange Counties Texas.

Crew Chief - Proposed 250-acre Southern Crushed Concrete Sandpit Operation and Plant Facility in Montgomery County, Texas.

Crew Chief - Southeast Expansion Pipeline Project, Mississippi and Alabama, for ENSR and Gulf South

Crew Chief - Golden Pass Mitigation Site Survey, Jefferson County, Texas, for Golden Pass Terminal LP and URS Corporation

Crew Chief - Golden Pass Pipeline Project, Jefferson, Newton, and Orange Counties, Texas and Calcasieu Parish, Louisiana, for AMEC Paragon and Golden Pass LNG, L.P.

## **SELECTED PUBLICATIONS**

Soltysiak, Kristi and Charles Bludau, Jr.

2008 Intensive Pedestrian Cultural Resources Survey of Centerpoint Energy Gas Transmission Company's Proposed Line Cp-3 (Penn-Virginia) Pipeline Project in Harrison and Panola Counties, Texas.

Bludau, Charles, Jr. and Rebecca Mehok

2008 An Intensive Pedestrian Cultural Resources Survey and Deep Testing of 18 Acres Proposed for the West Greens Road Replacement Area in Harris County, Texas.

Bludau, Charles, Jr.

2008 Cultural Resources Intensive Pedestrian Survey of 102.36 Acres Associated with the Rush Development Project in Galveston County, Texas.

Bludau, Charles, Jr. and Kristi Soltysiak

2008 A Cultural Resources Site File Review for the Toledo Bend FERC Relicensing in Texas and Louisiana.

Bludau, Charles, Jr. and Kristi Soltysiak

2008 Cultural Resources Inventory for the Lake Kemp Reallocation Study, Baylor County, Texas.

Bludau, Charles, Jr. and Sean Nash

2009 Intensive Archaeological Survey of 13.46 Acres Proposed for Construction of a Detention Basin at Cullen Boulevard in Brazoria County, Texas.

Bludau, Charles, Jr. and Sean Nash

2009 Intensive Archaeological Survey of a Proposed Detention Basin on Hollister Road, Harris County, Texas.

Soltysiak, Kristi and Charles Bludau, Jr.

2009 A Cultural Resources Survey of New Proposed Facilities Associated with the Fresh Water and Sewer Systems Project in the Rio Brazos Service Area in Fort Bend County, Texas.

Bludau, Charles, Jr. and Kristi Soltysiak

2009 Report on Negative Findings for a Phase I Cultural Resources Management Survey of Florida Gas Transmission Company's Proposed Eunice Relay in St. Landry Parish, Louisiana.

Bludau, Charles, Jr. and Kristi Soltysiak

2009 Cultural Resources Survey for Trunkline Gas Company's Proposed 24-Inch Replacement Pipeline Project in Hardin and Jasper Counties, Texas.

Soltysiak, Kristi and Charles Bludau, Jr.

2009 A Cultural Resources Intensive Pedestrian Survey of 208 Acres Proposed for Yacht Basin Development on Bolivar Peninsula in Galveston County, Texas.

Soltysiak, Kristi and Charles Bludau, Jr.

2009 Intensive Pedestrian Archaeological Survey for the Proposed NLG Extraction Project in Brazoria County, Texas.

# **Request for SHPO Consultation**

**September 30, 2011**

TEXAS HISTORICAL COMMISSION

REQUEST FOR SHPO CONSULTATION:
Projects Subject to Section 106 of the National Historic Preservation Act
and/or the Antiquities Code of Texas

Submission of this form only initiates consultation with the Texas Historical Commission, the State Historic Preservation Officer (SHPO) for Texas. The SHPO may require additional information to complete the review for some projects.

FCC projects: this form should not be completed when submitting Form 620 or 621 for communications towers.

Section 106 of the National Historic Preservation Act of 1966, as amended, requires federal agencies to consider the effects of their undertakings on historic properties and to consult with the State Historic Preservation Officer (SHPO) regarding the undertaking. An undertaking is any action by or on behalf of a federal agency that has the potential to affect historic resources and includes funding, permits, or other approvals. Federal agencies are required to identify historic resources that may be affected and to avoid, minimize, or mitigate any adverse effects. The Section 106 regulations are codified in 36 CFR 800 and are available from the Advisory Council on Historic Preservation website at www.achp.gov. Regulations allow 30 days upon receipt for SHPO review.

The Antiquities Code of Texas (Title 9, Chapter 191 of the Texas Natural Resources Code) is intended to protect historic and archeological landmarks and is applicable to public lands owned by the state of Texas or a political subdivision of the state, including state agencies, counties, cities, school districts, and public colleges and universities, as well as other public authorities. Notification of the Texas Historical Commission is required before breaking ground at a project location on state or local public land.

- This is a new submission
Complete all pages of this form and include required attachments.
This is additional information relating to original submission made on or about
Complete only the first page of this form and add any new information, including attachments.

1. Project Information
PROJECT NAME
PROJECT ADDRESS PROJECT CITY PROJECT ZIP CODE(S)
PROJECT COUNTY OR COUNTIES
PROJECT TYPE (Check all that apply)
Road/Highway Construction or Improvement
Site Excavation
Utilities & Infrastructure
New Construction
Repair, Rehabilitation or Renovation of Structure(s)
Addition to Existing Structure(s)
Demolition or Relocation of Existing Structure(s)
None of these
BRIEF PROJECT SUMMARY: Please provide a one or two sentence description to explain the project. More details will be provided separately in Part 5, the Project Work Description Attachment.

2. Project Contact Information
PROJECT CONTACT NAME TITLE ORGANIZATION
ADDRESS CITY STATE ZIP
PHONE EMAIL

For SHPO Use Only Date Stamp Below:
Track Review to:
Archeology Division: Reviewer:
History Programs Division: Reviewer:
Architecture Division: Reviewer:

US EPA ARCHIVE DOCUMENT





**10. Applicant's Determination of Effect (Section 106 only)**

An effect occurs when an action alters the characteristics of a property that qualify it for listing in the National Register of Historic Places, including changes to the property's location, design, setting, materials, workmanship, feeling, and association. Effects can be direct or indirect, and can be physical, visual, audible, or economic. They may include a change in ownership or change in use.

- No Historic Properties Affected** based on 36 CFR 800.4(d)(1). Please provide the basis for this determination.
- No Adverse Effect** on historic properties based on 36 CFR 800.5(b). Please explain why the criteria of adverse effect at 36 CFR 800.5(a)(1) were not found to be applicable for your project.
- Adverse Effect** on historic properties based on 36 CFR 800.5(d)(2). Please explain why the criteria of adverse effect at 36 CFR 800.5(a)(1) were found to be applicable to your project. You may also wish to include an explanation of how these adverse effects might be avoided, minimized, or mitigated.

In the space below or as an attachment, please explain the effect of the project on historic properties.

**Submit Completed Form and Attachments to:**

Via mail:  
 Mark Wolfe  
 State Historic Preservation Officer  
 Texas Historical Commission  
 PO Box 12276  
 Austin, TX 78711

Via hand delivery or private express delivery:  
 Mark Wolfe  
 State Historic Preservation Officer  
 Texas Historical Commission  
 108 West 16<sup>th</sup> St.  
 Austin, TX 78701

**Faxes and email are not acceptable.**

**For SHPO Use Only**

PROJECT NAME		
PROJECT ADDRESS	PROJECT CITY	PROJECT ZIP CODE(S)
PROJECT COUNTY OR COUNTIES		
PROJECT CONTACT NAME	TITLE	ORGANIZATION
ADDRESS	CITY	STATE ZIP
PHONE	EMAIL	

**Project Description and Area of Potential Effect**

PROJECT LOCALITY: Chambers County

DATE SUBMITTED: 09/29/2011

PROJECT NAME: Lone Star Fractionator 2, Mont Belvieu, Chambers County, Texas

PROJECT DESCRIPTION:

Lone Star NGL Mont Belvieu, LP proposes to construct a 100,000 barrels per day natural gas liquids (NGL) fractionation facility. The undertaking will occur within an existing defined oil and gas field and expand from an existing energy facility situated in Mont Belvieu. The project will develop additional storage facilities for y-grade liquids and infrastructure to provide NGL suppliers and customers access to storage, other fractionators, pipelines and multiple markets.

The precise construction footprint including associated utilities has not yet been defined. It will involve building of a new Fractionator NGL facility that will process mixed NGL into component products such as ethane, propane, normal butane, isobutane and natural gasoline. The maximum potential project limits are shown on the accompanying maps as two locations totaling approximately 54 acres.

AREA OF POTENTIAL EFFECT:

The project area is located in a mature oil and gas field surrounded by existing industrial buildings and infrastructure that are less than 50 years in age. Based on the findings of previous cultural resource investigations conducted in the area, no historic properties are located within or near the undertaking. The Area of Potential Effect is limited to construction activities within the defined limits shown in the attached maps, as well as buildings within direct visual sight of the completed facility.

COMPARISON WITH APPLICABLE PLANS:

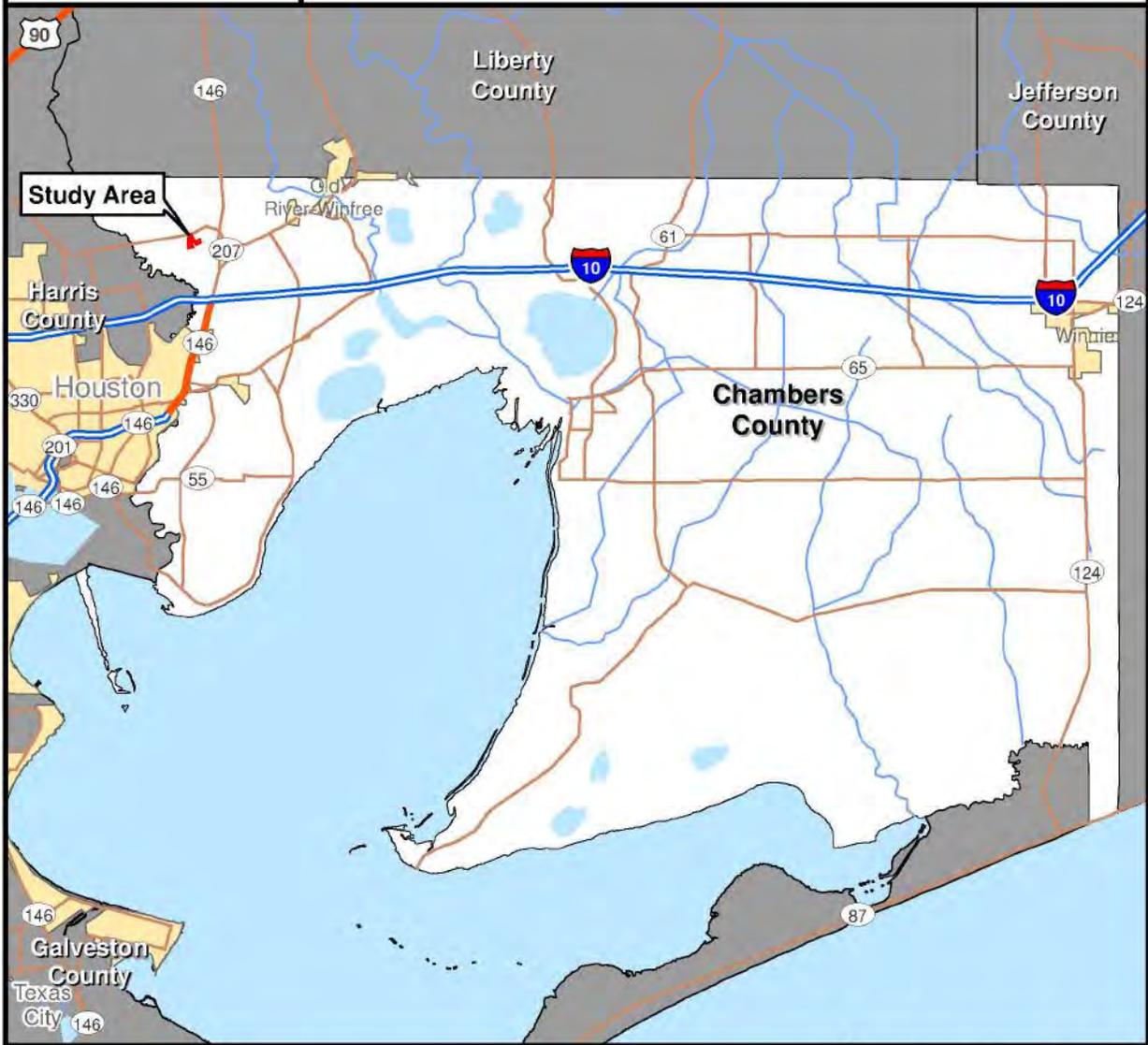
The proposed improvements complement the existing infrastructure and would not significantly change land or facility use from its current state. Applicable plans would not specify a small improvement such as this.

<u>Factor</u>	<u>Project Will be in Compliance</u>		
	<u>Yes</u>	<u>No (Explain)</u>	<u>N.A.</u>
Local Comprehensive Plans Including Land Use and Growth Management Elements	<u>X</u>	_____	_____
Area and Regional Plans	<u>X</u>	_____	_____
Local Zoning Ordinances	<u>X</u>	_____	_____



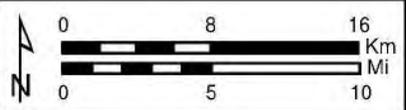
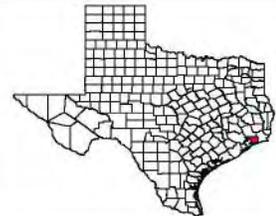
GIS Services and Solutions  
7395 Florida Ave  
Baton Rouge, LA 70801  
225/922-3700

### Lone Star Fractionator #2



- Study Area
- Chambers County
- Interstate Highway
- Major Lake
- Surrounding County
- Highway
- Urban Area
- Major River
- Major Road

#### Locator Map



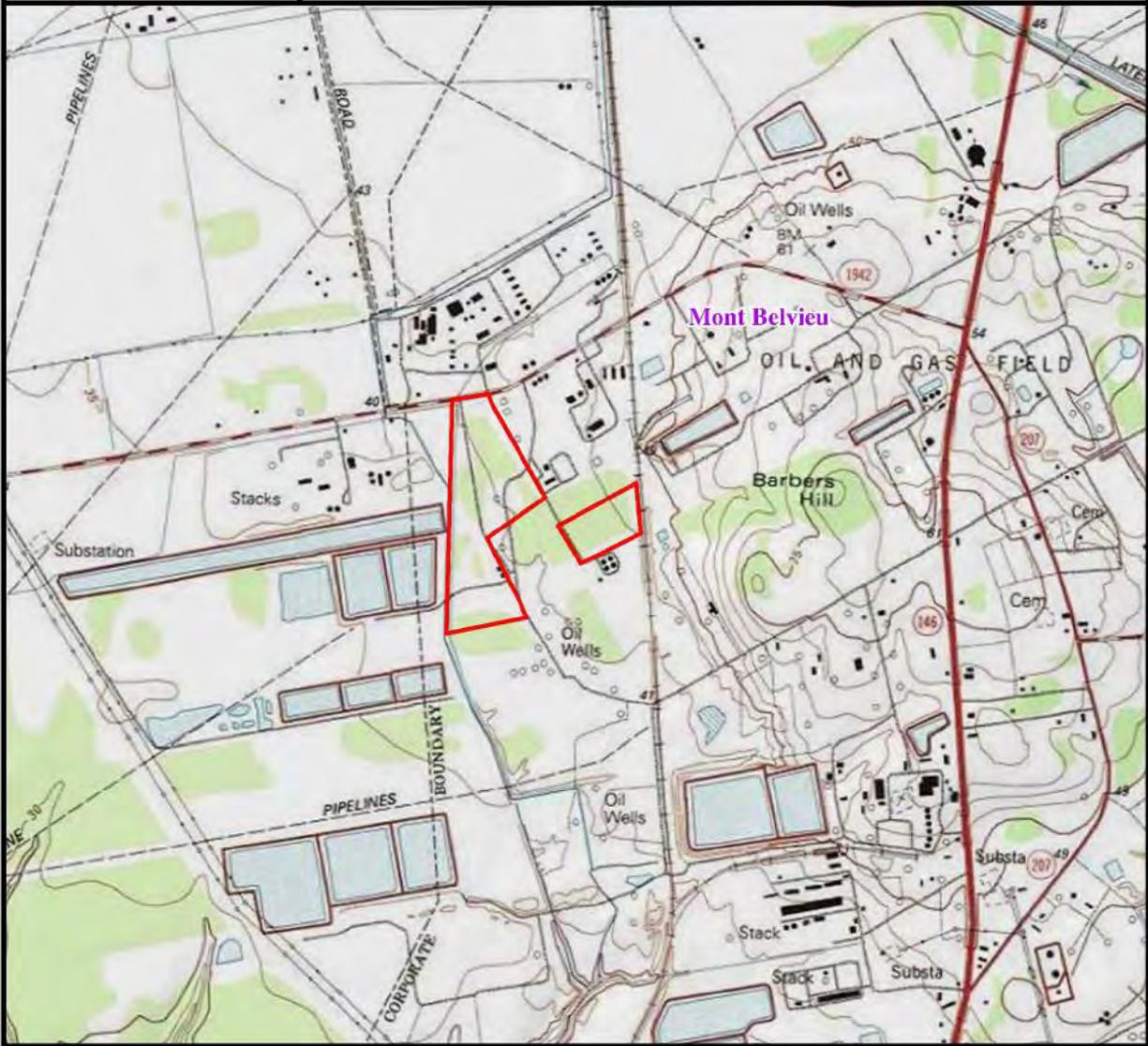
1,400,000  
UTM Nad 83  
Zone 15

#### OVERVIEW MAP



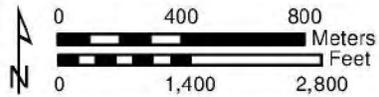
GIS Services and Solutions  
7389 Tivoli Drive  
Baton Rouge, LA 70805  
225/622-5700

## Lone Star Fractionator #2



 Study Area

### Locator Map



1:24,000  
UTM Nad 83  
Zone 15

USGS Quads:  
Mont Belvieu, TX

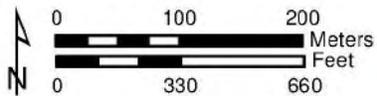
US EPA ARCHIVE DOCUMENT

### Lone Star Fractionator #2



 Study Area

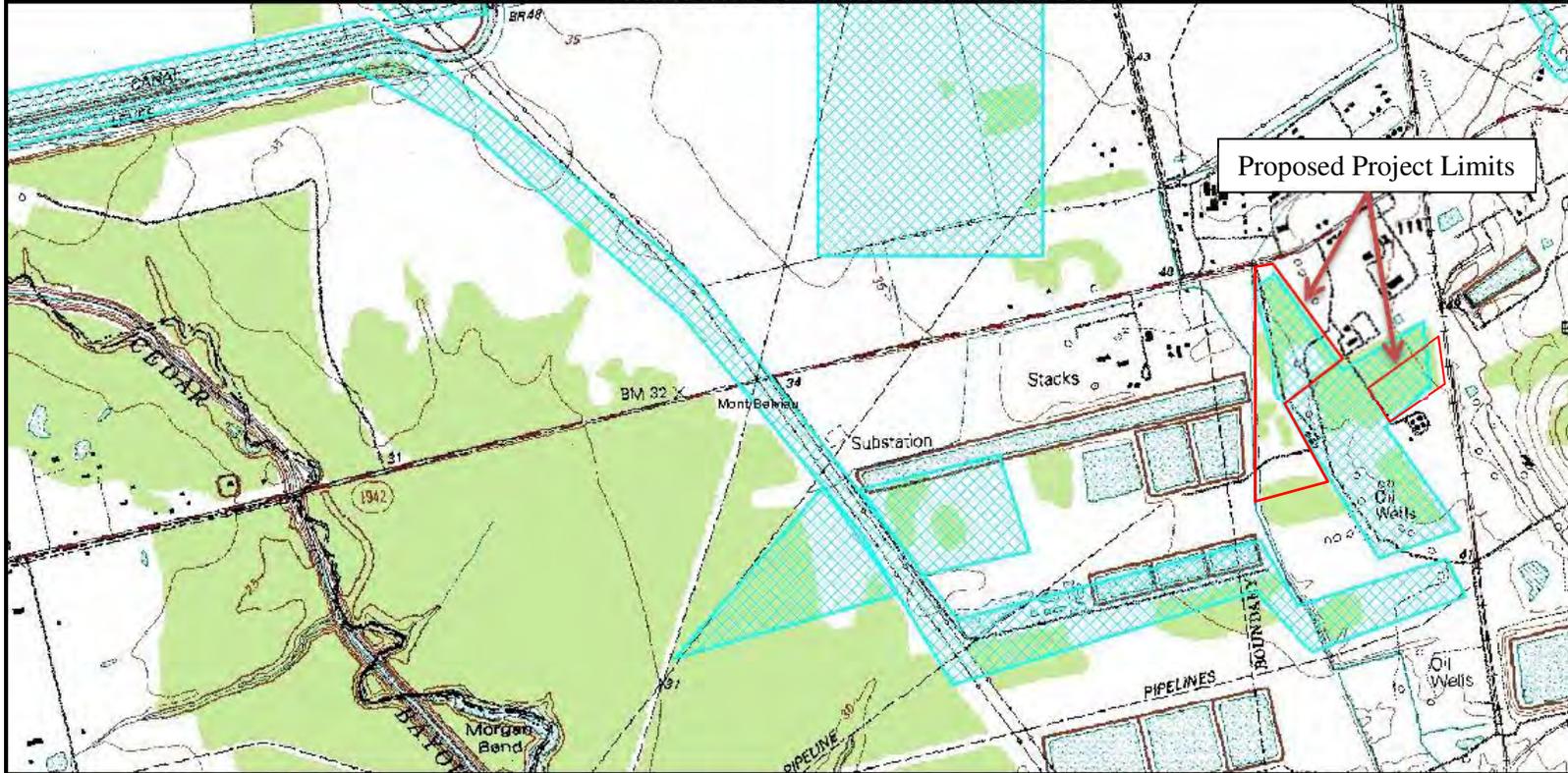
#### Locator Map



1:6,000  
UTM Nad 83  
Zone 15

USGS Quads:  
Mont Belvieu, TX

TEXAS HISTORICAL COMMISSION



- Layers**
- Visible Select
  - Archeological Site Centroids
  - Archeological Site Boundaries
  - Archeological Site Areas
  - Neighborhood Survey
  - Historical Marker
  - National Register Property
  - National Register District
  - National Register District (address restricted)
  - Archeological Project [linear]
  - Archeological Project [area]
  - Cemetery
  - Shipwreck
  - USGS Quad Grid
  - Counties
  - USGS Topo Data

[Refresh Map](#)

[Show Legend](#)

ological Sites Atlas - Copyright (C) 1995-2011 Texas Historical Commission

Archeological Project [area]

Rec	USGS Map	ID No.	Project Type	Date	Agency	Sponsor Agency	Permit No.	Project Type	Fieldwork Date	Permit No.	Investigating Firm	Report Author	PI	Report Date
1						CoE-Galv		Survey	Thu May 31 2007		HRA Gray & Pape	Sick, Rebecca F, and Kristi E. Soltysiak	Soltysiak, Kristi E	Sun Sep 30 2007

<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.</b> 25013784
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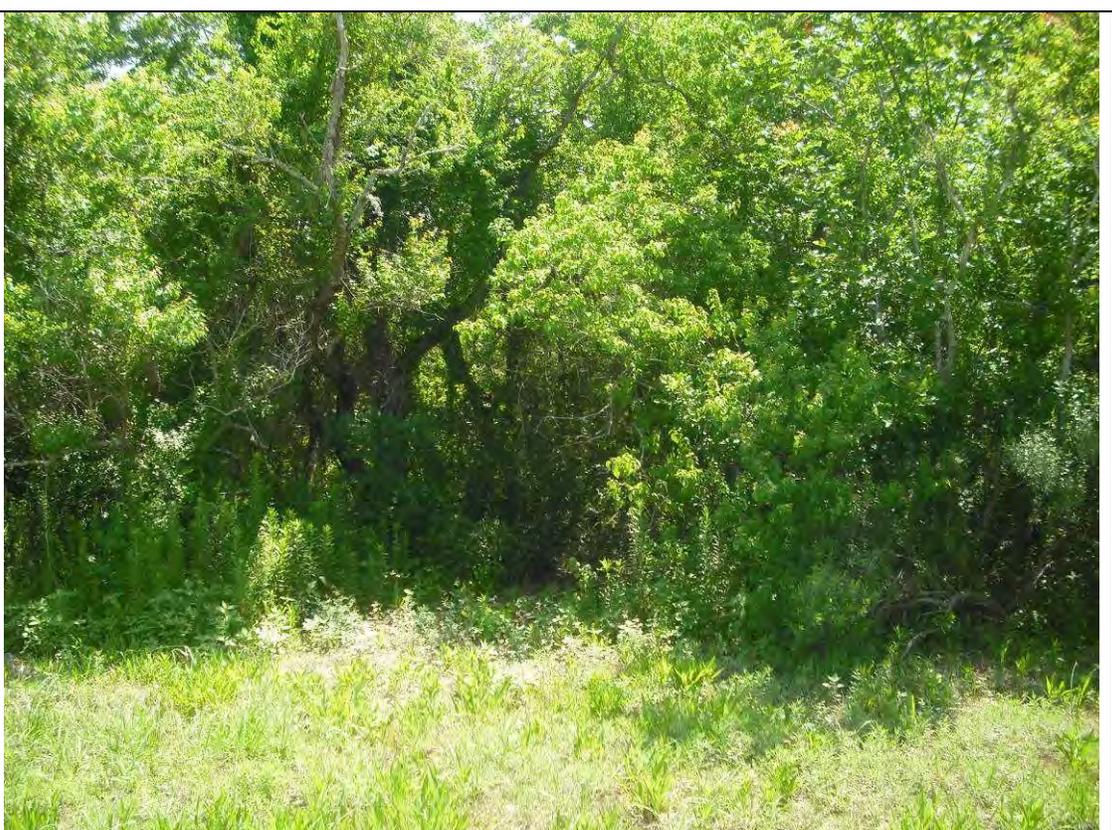
<b>Date</b> 6/04/10	<b>Photo No.</b> 1
<b>Direction Photo Taken:</b> North	

**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/04/10	<b>Photo No.</b> 2
<b>Direction Photo Taken:</b> East	

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
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<b>Date</b> 6/04/10	<b>Photo No.</b> 3
<b>Direction Photo Taken:</b> South	

**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/04/10	<b>Photo No.</b> 4
<b>Direction Photo Taken:</b> West	

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.</b> 25013784
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<b>Date</b> 6/04/10	<b>Photo No.</b> 3
<b>Direction Photo Taken:</b> South	



<b>Description:</b> Vicinity of Sampling Point
---

<b>Date</b> 6/04/10	<b>Photo No.</b> 4
<b>Direction Photo Taken:</b> West	



<b>Description:</b> Vicinity of Sampling Point
---

<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
---	--	---------------------------------

<b>Date</b> 6/04/10	<b>Photo No.</b> 1
<b>Direction Photo Taken:</b> North	

| **Description:** Vicinity of Sampling Point |

<b>Date</b> 6/04/10	<b>Photo No.</b> 2
<b>Direction Photo Taken:</b> East	

| **Description:** Vicinity of Sampling Point |

<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
---	--	---------------------------------

<b>Date</b> 6/04/10	<b>Photo No.</b> 1
<b>Direction Photo Taken:</b> North	

**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/04/10	<b>Photo No.</b> 2
<b>Direction Photo Taken:</b> East	

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.</b> 25013784
---	--	--------------------------------

<b>Date</b> 6/04/10	<b>Photo No.</b> 3
<b>Direction Photo Taken:</b> South	

<b>Description:</b> Vicinity of Sampling Point
---



<b>Date</b> 6/04/10	<b>Photo No.</b> 4
<b>Direction Photo Taken:</b> West	

<b>Description:</b> Vicinity of Sampling Point
---



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
---	--	---------------------------------

<b>Date</b> 6/04/10	<b>Photo No.</b> 1
------------------------	-----------------------

**Direction Photo Taken:**  
North

**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/04/10	<b>Photo No.</b> 2
------------------------	-----------------------

**Direction Photo Taken:**  
East

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
---	--	---------------------------------

<b>Date</b> 6/04/10	<b>Photo No.</b> 3
<b>Direction Photo Taken:</b> South	

**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/04/10	<b>Photo No.</b> 4
<b>Direction Photo Taken:</b> West	

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator # 2 – T4P1	<b>Project No.</b> 25014274
---	--	--------------------------------

<b>Date</b> 9/20/2011	<b>Photo No.</b> 3
<b>Direction Photo Taken:</b> East	

**Description:**  
Surrounding vegetation



<b>Date</b> 9/20/2011	<b>Photo No.</b> 4
<b>Direction Photo Taken:</b> South	

**Description:**  
Surrounding vegetation





# PHOTOGRAPHIC LOG

**Client Name:**

Lone Star NGL Mont Belvieu, LP

**Site Location:**

Fractionator # 2 – T4P1

**Project No.**

25014274

**Date**  
9/20/2011**Photo No.**  
5**Direction Photo Taken:**

West

**Description:**

Surrounding vegetation



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
---	--	---------------------------------

<b>Date</b> 6/09/10	<b>Photo No.</b> 3
------------------------	-----------------------

**Direction Photo Taken:**  
South

**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/09/10	<b>Photo No.</b> 4
------------------------	-----------------------

**Direction Photo Taken:**  
West

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
---	--	---------------------------------

<b>Date</b> 6/09/10	<b>Photo No.</b> 1
------------------------	-----------------------

**Direction Photo Taken:**  
North

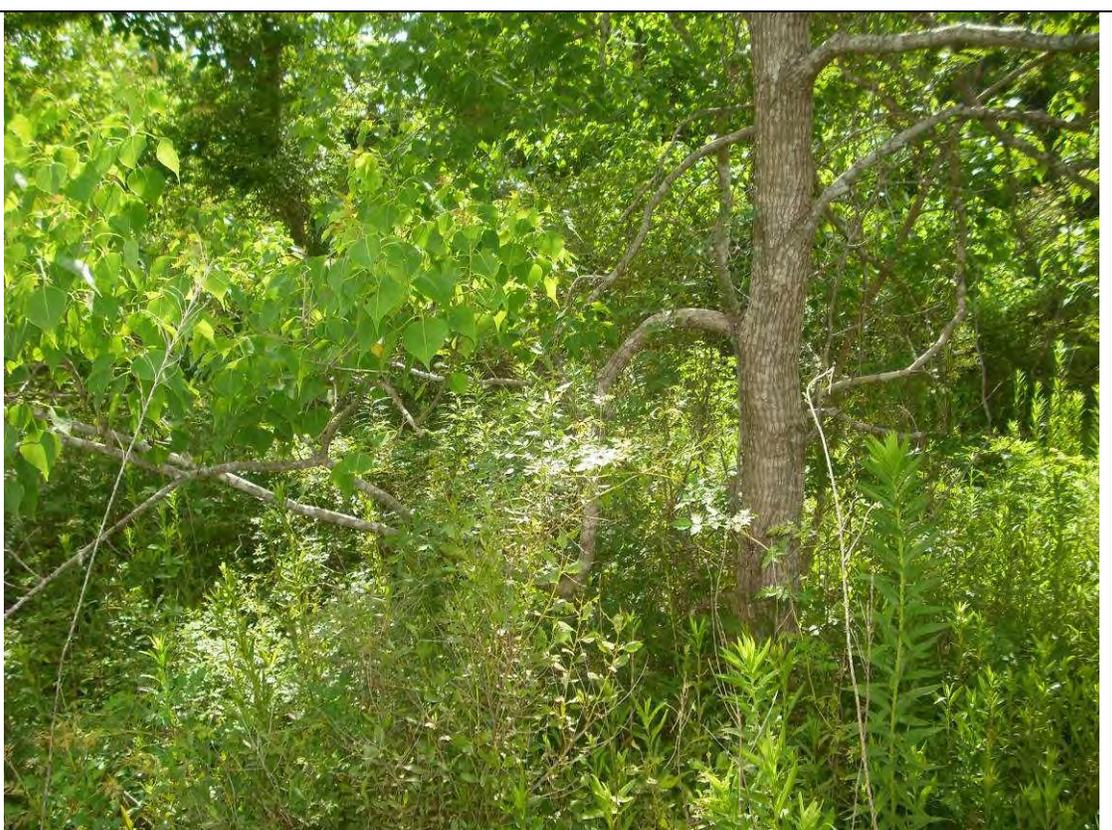
**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/09/10	<b>Photo No.</b> 2
------------------------	-----------------------

**Direction Photo Taken:**  
East

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, L.P.	<b>Site Location:</b> Fractionator #2	<b>Project No.:</b> 25013784
---	--	---------------------------------

<b>Date</b> 6/09/10	<b>Photo No.</b> 3
------------------------	-----------------------

**Direction Photo Taken:**  
South

**Description:**  
Vicinity of Sampling Point



<b>Date</b> 6/09/10	<b>Photo No.</b> 4
------------------------	-----------------------

**Direction Photo Taken:**  
West

**Description:**  
Vicinity of Sampling Point



<b>Client Name:</b> Lone Star NGL Mont Belvieu, LP	<b>Site Location:</b> Fractionator # 2	<b>Project No.:</b> 25014274
---	---	---------------------------------

<b>Date</b> 9/20/2011	<b>Photo No.</b> 1
<b>Direction Photo Taken:</b> North	



<b>Description:</b> Upstream
---------------------------------

<b>Date</b> 9/20/2011	<b>Photo No.</b> 2
<b>Direction Photo Taken:</b> South	



<b>Description:</b> Downstream
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# **Request for SHPO Consultation**

**November 2, 2011**

TEXAS HISTORICAL COMMISSION

**REQUEST FOR SHPO CONSULTATION:  
Projects Subject to Section 106 of the National Historic Preservation Act  
and/or the Antiquities Code of Texas**

Submission of this form only initiates consultation with the Texas Historical Commission, the State Historic Preservation Officer (SHPO) for Texas. The SHPO may require additional information to complete the review for some projects.

FCC projects: this form should not be completed when submitting Form 620 or 621 for communications towers.

Section 106 of the National Historic Preservation Act of 1966, as amended, requires federal agencies to consider the effects of their undertakings on historic properties and to consult with the State Historic Preservation Officer (SHPO) regarding the undertaking. An undertaking is any action by or on behalf of a federal agency that has the potential to affect historic resources and includes funding, permits, or other approvals. Federal agencies are required to identify historic resources that may be affected and to avoid, minimize, or mitigate any adverse effects. The Section 106 regulations are codified in 36 CFR 800 and are available from the Advisory Council on Historic Preservation website at [www.achp.gov](http://www.achp.gov). Regulations allow 30 days upon receipt for SHPO review.

The Antiquities Code of Texas (Title 9, Chapter 191 of the Texas Natural Resources Code) is intended to protect historic and archeological landmarks and is applicable to public lands owned by the state of Texas or a political subdivision of the state, including state agencies, counties, cities, school districts, and public colleges and universities, as well as other public authorities. Notification of the Texas Historical Commission is required before breaking ground at a project location on state or local public land.

- This is a new submission  
Complete all pages of this form and include required attachments.
- This is additional information relating to original submission made on or about Sept. 30, 2011  
Complete only the first page of this form and add any new information, including attachments.

1. Project Information		
PROJECT NAME Lone Star Fractionator 2		
PROJECT ADDRESS	PROJECT CITY Mont Belvieu	PROJECT ZIP CODE(S) 77521
PROJECT COUNTY OR COUNTIES Chambers		
PROJECT TYPE (Check all that apply)		
<input type="checkbox"/> Road/Highway Construction or Improvement	<input type="checkbox"/> Repair, Rehabilitation or Renovation of Structure(s)	
<input checked="" type="checkbox"/> Site Excavation	<input type="checkbox"/> Addition to Existing Structure(s)	
<input checked="" type="checkbox"/> Utilities & Infrastructure	<input type="checkbox"/> Demolition or Relocation of Existing Structure(s)	
<input checked="" type="checkbox"/> New Construction	<input type="checkbox"/> None of these	
BRIEF PROJECT SUMMARY: Please provide a one or two sentence description to explain the project. More details will be provided separately in Part 5, the Project Work Description Attachment. Lone Star NGL Mont Belvieu, LP is expanding its existing natural gas liquids (NGL) facility. The undertaking will include building a new fractionator, which processes mixed NGL into component products such as ethane, propane, normal butane, isobutane and natural gasoline.		

2. Project Contact Information			
PROJECT CONTACT NAME Rob Lackowicz	TITLE Cultural Resource Manager	ORGANIZATION URS Corporation	
ADDRESS 7389 Florida Blvd., Suite 300	CITY Baton Rouge	STATE LA	ZIP 70806
PHONE 225-935-2974	EMAIL rob.lackowicz@urs.com		

For SHPO Use Only	Date Stamp Below:
Track Review to:	
<input type="checkbox"/> Archeology Division: Reviewer:	
<input type="checkbox"/> History Programs Division: Reviewer:	
<input type="checkbox"/> Architecture Division: Reviewer:	

US EPA ARCHIVE DOCUMENT

**Supplemental Information  
Project Description and Area of Potential Effect**

PROJECT LOCALITY: Chambers County

DATE SUBMITTED: 11/02/2011

DATE ORIGINAL SUBMITTED: 09/30/2011

PROJECT NAME: Lone Star Fractionator 2, Mont Belvieu, Chambers County, Texas

PROJECT DESCRIPTION:

The overall project remains unchanged. Lone Star NGL Mont Belvieu, LP (Lone Star) proposes to construct a 100,000 barrels per day natural gas liquids (NGL) fractionation facility, expanding upon an existing energy facility situated in Mont Belvieu, Texas. The precise construction footprint including associated utilities has not yet been defined but it will involve building of a new Fractionator NGL facility that will process mixed NGL into component products such as ethane, propane, normal butane, isobutane and natural gasoline. The facility lies within an existing oil and gas field.

SUPPLEMENTAL DESCRIPTION:

The previous submission identified two work locations with maximum project limits totaling about 54 acres. Lone Star has subsequently identified the need for additional work space. The maximum project area now encompasses three locations that total 70.8 acres. The changes include a 3.3 acre southward extension to the western project area that was originally submitted to THC and a new 13.5 acre project area south of that position (see attached maps). The supplemental work areas lie within land previously cleared for development.

SUPPLEMENTAL AREA OF POTENTIAL EFFECT:

The new project areas continue to be located in a mature oil and gas field surrounded by existing industrial buildings and infrastructure that are less than 50 years in age. Based on the findings of previous cultural resource investigations conducted in the area, no historic properties are located within or near the undertaking. The Area of Potential Effect remains limited to construction activities within the defined limits shown in the attached maps, as well as buildings within direct visual sight of the completed facility.

SUPPLEMENTAL DETERMINATION OF EFFECT:

The supplemental work areas shown here are located in close proximity and in a similar setting as those shown in the original referral. Portions have already been surveyed for cultural resources, with no historic properties identified. The previous determination of No Historic Properties Affected is requested to extend to these additional work areas.

COMPARISON WITH APPLICABLE PLANS:

As before, the supplemental improvements will complement the existing infrastructure and would not significantly change land or facility use from its current state.

Factor	<u>Project Will be in Compliance</u>		
	Yes	No (Explain)	N.A.
Local Comprehensive Plans Including Land Use and Growth Management Elements	<u>X</u>	_____	_____
Area and Regional Plans	<u>X</u>	_____	_____
Local Zoning Ordinances	<u>X</u>	_____	_____



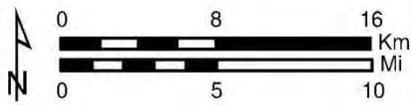
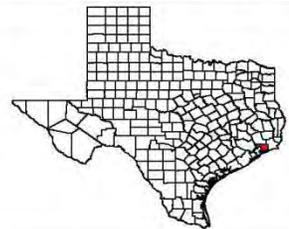
GIS Services and Solutions  
7389 Florida Blvd  
Baton Rouge, LA 70806  
225-922-5700

### Lone Star Fractionator #2



- |            |                    |                    |
|------------|--------------------|--------------------|
| Study Area | Chambers County    | Interstate Highway |
| Major Lake | Surrounding County | Highway            |
| Urban Area | Major River        | Major Road         |

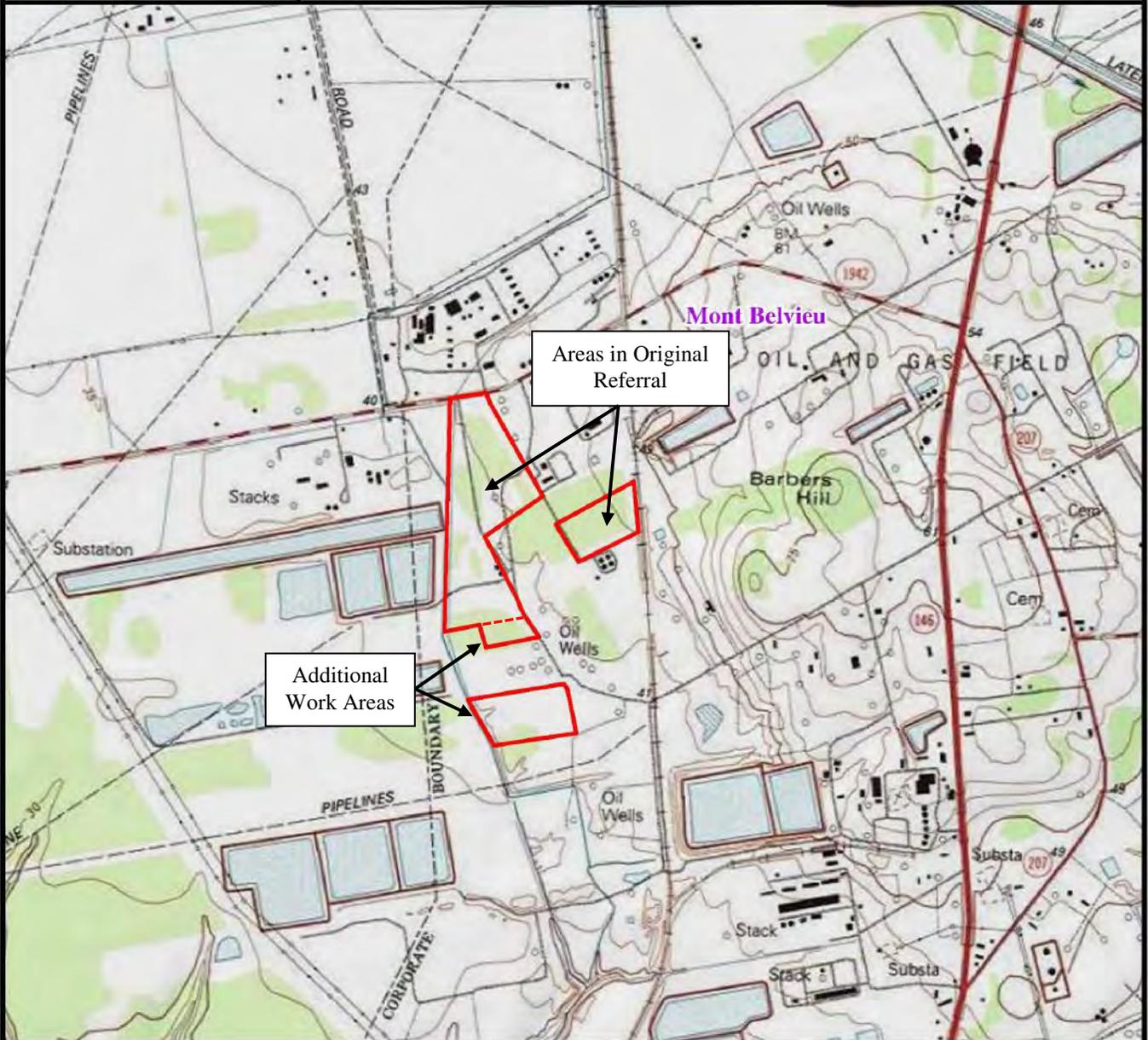
#### Locator Map



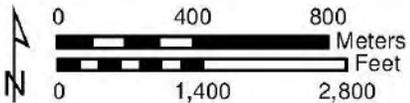
1:400,000  
UTM Nad 83  
Zone 15

#### OVERVIEW MAP

# Lone Star Fractionator #2



 Study Area



1:24,000  
UTM Nad 83  
Zone 15

USGS Quads:  
Mont Belvieu, TX

## Locator Map





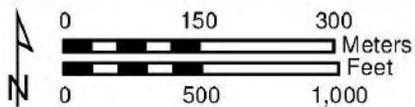
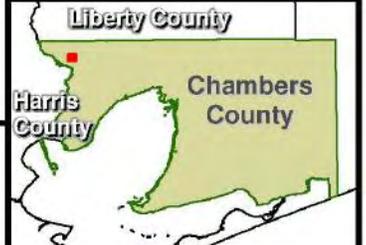
GIS Services and Solutions  
7989 Florida Blvd  
Baton Rouge, LA 70806  
225/922-5700

# Lone Star Fractionator #2



 Study Area

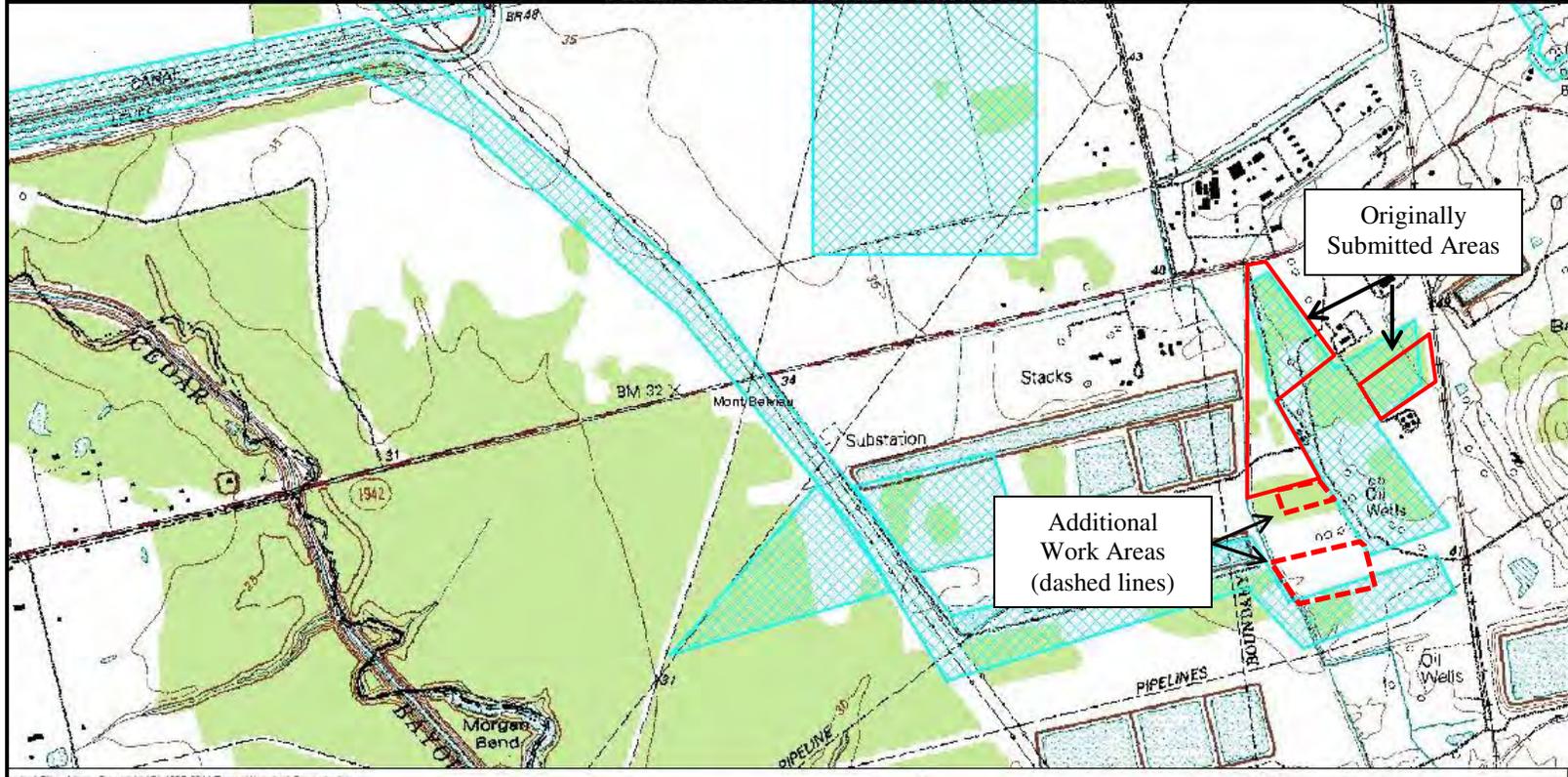
## Locator Map



1:9,000  
UTM Nad 83  
Zone 15

USGS Quads:  
Mont Belvieu, TX

TEXAS HISTORICAL COMMISSION



- Layers**
- Visible Select
  - Archeological Site Centroids
  - Archeological Site Boundaries
  - Archeological Site Areas
  - Neighborhood Survey
  - Historical Marker
  - National Register Property
  - National Register District
  - National Register District (address restricted)
  - Archeological Project [linear]
  - Archeological Project [area]
  - Cemetery
  - Shipwreck
  - USGS Quad Grid
  - Counties
  - USGS Topo Data

[Refresh Map](#)

[Show Legend](#)

Archeological Project [area]

Rec	USGS Map	ID No.	Project Type	Date	Agency	Sponsor Agency	Permit No.	Project Type	Fieldwork Date	Permit No.	Investigating Firm	Report Author	PI	Report Date
1						CoE-Galv		Survey	Thu May 31 2007		HRA Gray & Pape	Sick, Rebecca F. and Kristi E. Soltysiak	Soltysiak, Kristi E	Sun Sep 30 2007