



# INDEX OF TEXAS ARCHAEOLOGY

*Open Access Gray Literature from the Lone Star State*

---

Volume 2017

Article 69

---

2017

## Cultural Resources Investigations for the Gregory Haul Road Project, San Patricio County, Texas

Laura I. Acuña

M. Kelly Russell

Follow this and additional works at: <https://scholarworks.sfasu.edu/ita>



Part of the [American Material Culture Commons](#), [Archaeological Anthropology Commons](#), [Environmental Studies Commons](#), [Other American Studies Commons](#), [Other Arts and Humanities Commons](#), [Other History of Art, Architecture, and Archaeology Commons](#), and the [United States History Commons](#)

Tell us how this article helped you.

---

This Article is brought to you for free and open access by the Center for Regional Heritage Research at SFA ScholarWorks. It has been accepted for inclusion in Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State by an authorized editor of SFA ScholarWorks. For more information, please contact [cdsscholarworks@sfasu.edu](mailto:cdsscholarworks@sfasu.edu).

---

## Cultural Resources Investigations for the Gregory Haul Road Project, San Patricio County, Texas

Creative Commons License



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

# **Cultural Resources Investigations for the Gregory Haul Road Project, San Patricio County, Texas**

Principal Investigator: Laura I. Acuña

Authors: Laura I. Acuña with contributions by  
M. Kelley Russell

Texas Antiquities Code Permit: 8112

August 11, 2017



# Cultural Resources Investigations for the Gregory Haul Road Project, San Patricio County, Texas

Principal Investigator: Laura I. Acuña

Report Authors: Laura I. Acuña with contributions by M. Kelley Russell

Texas Antiquities Code Permit: 8112

Prepared for:

Port of Corpus Christi Authority

222 Power Street

Corpus Christi, Texas 78401

Gulf Coast Growth Venture Asset Holding, LLC

10375 Richmond Avenue, Suite 1800

Houston, Texas 77042

Prepared by:

Atkins

11801 Domain Boulevard, Suite 500

Austin, Texas 78758

Atkins Job No. 100056499

Document No. 100056499-01

August 2017



# Management Summary

**Project Name:** Cultural Resources Investigations for the Gregory Haul Road Project

**Atkins Project No.:** 100056499

**Texas Antiquities Permit:** 8112

**Sponsor:** Gulf Coast Growth Venture Asset Holding, LLC and Port of Corpus Christi Authority

**Project Location:** San Patricio County, Texas

**Type of Investigation:** Intensive survey

**Regulatory Trigger:** Investigations completed should a U.S. Army Corps of Engineers permit under Section 404 of the Clean Water Act be required and Antiquities Code of Texas.

**Principal Investigator:** Laura I. Acuña

**Crew Members:** Laura I. Acuña, Justin Rains, and R. Ben Lee

**Date(s) of Work:** July 31, 2017 - August 2, 2017

**Person-Days:** Three-person crew for two days

**Area Surveyed:** 38.1 acres

**Newly Recorded Sites:** Resource 01—Historic-age drainage ditch

**Revisited Sites:** None

**Curation:** Records only, Center for Archeological Research at The University of Texas at Austin

**Comments:** Resource 01 is a historic-age drainage ditch dating to the early twentieth century. The resource is recommended as not eligible for listing on the National Register of Historic Places.

# Abstract

On behalf of Gulf Coast Growth Venture Asset Holding, LLC (GCGV LLC), Atkins North America, Inc. (Atkins) conducted an intensive cultural resources survey of a 2.37-kilometer (km; 1.47 miles [mi]) haul road and 0.32-km (0.20 mi) duct bank location near Gregory, Texas, in San Patricio County, Texas. The proposed haul road is located southwest of the town of Gregory, between Farm-to-Market (FM) Road 2986 and U.S. Highway (US) 181 (Figure 1). The property is owned by the Port of Corpus Christi Authority (POCCA), a political-subdivision of the state, which requires the proposed work to comply with the Antiquities Code of Texas under Permit No. 8112. In addition, in the event that a Section 404 U.S. Army Corps of Engineers (USACE) permit is required for the man-made drainage ditch, the work also was conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations under the Procedures of the Advisory Council on Historic Preservation, as amended in 2004 (Title 36 Code of Federal Regulations [CFR] Part 800 [36 CFR 800]).

The investigations consisted of a thorough background review and an intensive pedestrian survey with shovel testing focused around the drainage ditch. The direct Area of Potential Effect (APE) for the project is approximately 2.69 km (1.67 mi) in length, which includes the proposed 2.37-km (1.47-mi) long haul road and the 0.32-km (0.20 mi) long American Electric Power relocation impacts for a proposed duct bank that is part of the project (Figure 2). The width of the APE will include associated temporary and permanent construction impacts within a 61-meter (m; 200-foot [ft]) wide corridor for the road, and a 33-m (100-ft) wide corridor for the duct bank. Thus, the APE will be approximately 38.1 acres in size with depths of impacts ranging from 0.6 m (2 ft) to 6 m (20 ft) to account for the road grade, proposed bridge piers, and duct bank, respectively. The APE for indirect effects is a 150-ft buffer around the direct APE.

The results of the background review determined that no previously recorded cultural sites were within or adjacent to the APE, and a small section had been surveyed previously for cultural resources. In addition, a review of historic maps revealed that the drainage ditch was historic in age, dating to the early 20th century. The APE for direct effects was approximately 38.1 acres in size, with shovel testing focused within the 3-acre USACE jurisdictional area, specifically 300 m (984 ft) on either side of the drainage ditch. A total of six shovel tests were excavated within the USACE jurisdictional area and the entire 38.1 acres was inspected visually due to the existing disturbances. The Texas Historical Commission (THC) survey standards require two shovel tests per acre for projects 3 acres to 10 acres in size, or six shovel tests for the USACE jurisdictional area. Thus, the shovel test investigations within the USACE jurisdictional area met the survey standards, and the shovel tests were all negative for cultural materials. The APE consisted of harvested and fallow agricultural fields with ground surface visibility ranging from 20 percent to 100 percent. The investigations recorded the historic-age drainage ditch as Resource 01.

Resource 01 is a historic-age drainage ditch dating to the early-twentieth century. The drainage ditch was possibly part of a large company farm associated with the Coleman-Fulton Pasture Company. The site extends outside of the APE and has no evidence of significant cultural features or diagnostic artifacts. Atkins determined that Resource 01 within the APE is not eligible for listing on the National Register of Historic Places (NRHP). The site does not meet eligibility under Criteria A, B, C, or D, as defined by the evaluation criteria set in the National Register (36 CFR 60.4). Based on the investigations, Atkins made a reasonable and good-faith effort to identify historic properties within the APE. Since no properties were identified that meet criteria for listing on the NRHP under 36 CFR 60.04, Atkins



recommends no further work is needed and a finding of *no historic properties present* within the project area is made.



# Table of Contents

<b>Section</b>	<b>Page</b>
<b>Management Summary</b> .....	<b>i</b>
<b>Abstract</b> .....	<b>ii</b>
<b>Introduction</b> .....	<b>1</b>
Project Setting .....	1
Report Organization.....	2
<b>Environmental Setting</b> .....	<b>5</b>
Geology .....	5
Soils.....	5
Regional Vegetation.....	5
Fauna .....	6
Hydrology .....	6
<b>Cultural Context</b> .....	<b>7</b>
San Patricio County .....	7
Gregory, Texas .....	8
<b>Methods of Investigation</b> .....	<b>10</b>
Background Review .....	10
Field Investigations .....	10
Site Evaluations .....	11
<b>Results</b> .....	<b>12</b>
Background Review .....	12
Historic Map Review .....	13
Field Investigations .....	13
Resource 1.....	19
<b>Summary and Recommendations</b> .....	<b>21</b>
<b>References Cited</b> .....	<b>22</b>

## Figures

Figure 1. Project Vicinity Map (Gregory USGS Quadrangle 2797-434) .....	3
Figure 2. Project APE Map.....	4
Figure 3. Project results map .....	15
Figure 4. Overview of northwestern portion of the APE, facing east-southeast .....	16
Figure 5. Overview of southeastern portion of APE paralleling transmission line, facing west-northwest .....	16
Figure 6. Overview of southwestern portion of APE, facing north.....	17
Figure 7. Overview of cotton crop within southwestern portion of APE, facing south.....	17
Figure 8. Overview of cluster of trees within southwestern portion of APE, facing northeast .....	18
Figure 9. Resource 1, historic-age drainage ditch, facing northeast .....	20
Figure 10. Resource 1, base of historic-age drainage, facing northeast .....	20

## Tables

Table 1. Archeological Sites within 1.6-km (1-mile) Radius of APE .....	12
Table 2. Shovel Test Data.....	18

# Introduction

On behalf of Gulf Coast Growth Venture Asset Holding, LLC (GCGV LLC), Atkins North America, Inc. (Atkins) conducted an intensive cultural resources survey of a 2.37-kilometer (km; 1.47 miles [mi]) haul road and 0.32-km (0.20 mi) duct bank location near Gregory, Texas, in San Patricio County, Texas (Figure 1). The proposed haul road is located southwest of the town of Gregory, between Farm-to-Market (FM) Road 2986 and U.S. Highway (US) 181. The property is owned by the Port of Corpus Christi Authority (POCCA), a political-subdivision of the state, which requires the proposed work to comply with the Antiquities Code of Texas under Code No. 8112. The investigations focused on a man-made drainage ditch within the project area that may require review for U.S. Army Corps of Engineers (USACE) permitting. In the event a Section 404 USACE permit is required, the work also was conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations under the Procedures of the Advisory Council on Historic Preservation, as amended in 2004 (Title 36 Code of Federal Regulations [CFR] Part 800 [36 CFR 800]).

The investigations consisted of a background review, an intensive pedestrian survey with shovel testing, and associated reporting. The goal of the work was to assess the project for cultural resources that are State Antiquities Landmarks (SALs) or historic properties (National Register of Historic Places [NRHP]-listed or NRHP-eligible cultural resources), evaluate the project's effects on these resources, and address any mitigative measures. The investigations were completed from July 31, 2017, through August 2, 2017. Laura I. Acuña served as Principal Investigator, with Justin Rains as Project Archeologist and lead surveyor, assisted by staff archeologist R. Ben Lee.

## Project Setting

The project will consist of a haul road 2.37 kilometers (km; 1.47 miles [mi]) in length beginning at FM Road 2986 and terminating at US 181. The road is approximately 1.99 km (1.23 mi) oriented in a southeastern direction extending south and curving into US 181, with a branch deviating to the southeast into US 181 for 0.38 km (0.24 mi) (Figure 2). The road will provide ingress and egress of vehicular traffic between FM Road 2986 and US 181 and will be 36 meters (m; 126 feet [ft]) wide. The proposed work would involve grading and infill of the road grade, as well as constructing a bridge over an existing historic-age drainage ditch. The exact location and number of the bridge piles have not been determined at present, but the depth of the piles will range from approximately 4.5 m (15 ft) to 6 m (20 ft) in depth. In addition, as part of the project, American Electric Power (AEP) must relocate the Dupont—White Point 138-kilovolt (kV) above-ground lines within the current AEP right of way (ROW) to below the surface where the proposed haul road will intersect the powerline, approximately 95 m (310 ft) southeast of the existing drainage ditch. The duct bank will be approximately 168 m (550 ft) long, 4.5 m (15 ft) wide, and 6 m (20 ft) deep, and will include five new powerline structures for the modification. The proposed modification will be constructed entirely within the existing AEP ROW, which is approximately 33 m (100 ft) wide. The extent of the proposed impacts for the modifications will be 0.32 km (0.20 mi) in length to include the installation of the duct bank and five powerline structures.

The Area of Potential Effects (APE) for direct effects for the project is approximately 2.69 km (1.67 mi) in length, which includes the proposed 2.37-km (1.47 mi) long haul road and the 0.32-km (0.20 mi) long AEP relocation impacts. The width of the APE will include associated temporary and permanent

construction impacts within a 61-m (200-ft) wide corridor for the road, and a 33-m (100-ft) wide corridor for the duct bank (Figure 2). Thus, the direct APE will be approximately 38.1 acres in size with depths of impacts ranging from 0.6 m (2 ft) for the road grade, to 6 m (20 ft) to account bridge pilons, and duct bank, respectively. The APE for indirect effects is a 150-ft buffer around the direct APE (Figure 2).

## **Report Organization**

This report is organized in accordance with standards and guidance set forth by the Secretary of the Interior's Guidelines, the THC, and the Council of Texas Archeologists. The report contains eight sections, including the abstract, the introduction with project setting and report organization, environmental setting, cultural setting, methods of investigations for the background review and the survey methods, the results of the investigations detailing the background review and the field survey, summary and recommendations, and finally, references.

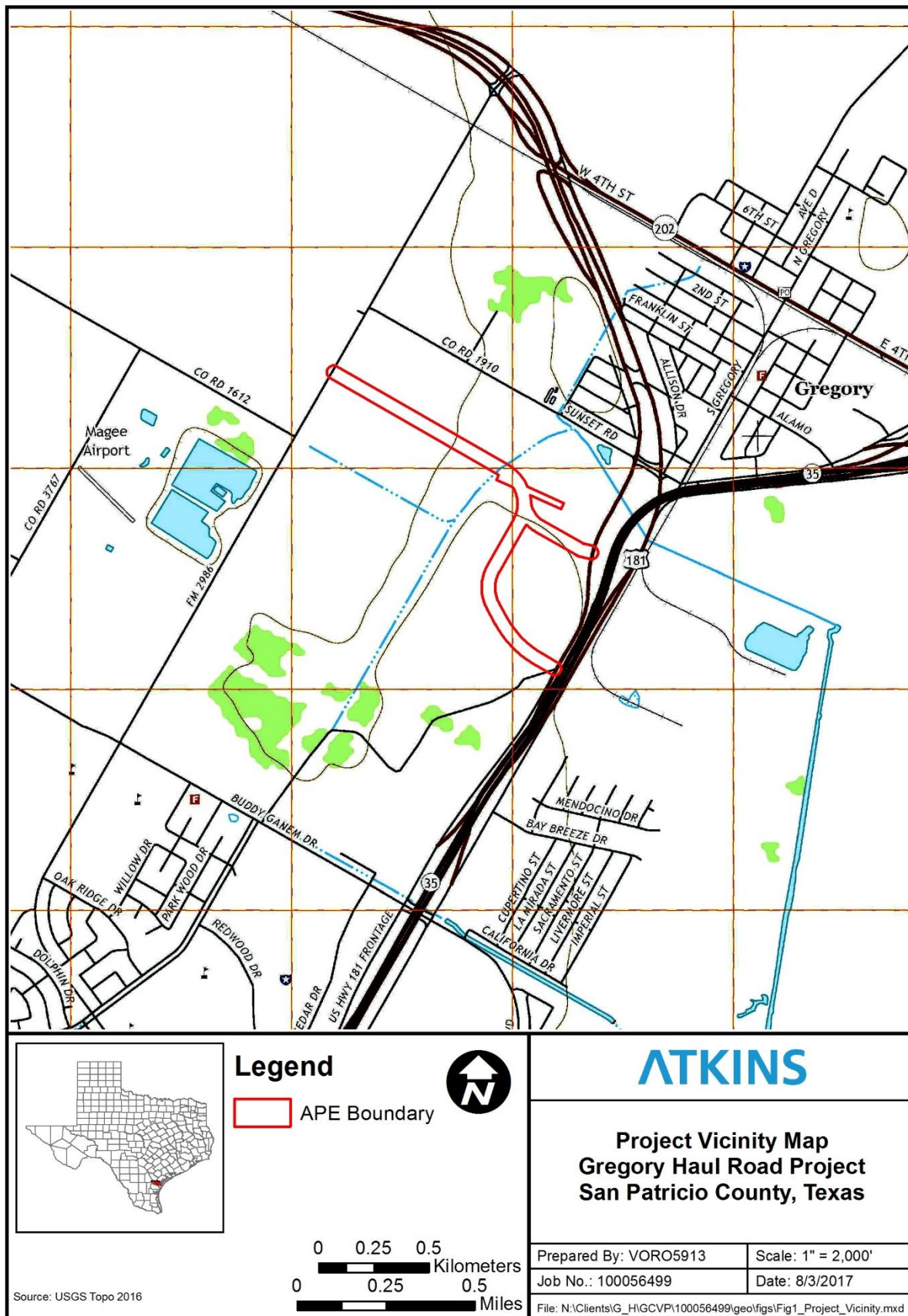


Figure 1. Project Vicinity Map (Gregory USGS Quadrangle 2797-434).



Figure 2. Project APE Map.



# Environmental Setting

The APE lies within a rural setting rapidly transitioning from agricultural land use to industrial, commercial, and residential development. The APE is currently within fallow, plowed fields that have been continuously farmed since the 1950s based on historic aerial photography (NETRO 2017).

## Geology

The underlying geology of the project area is characterized as Beaumont Formation, areas predominantly sand, with the southernmost terminus along the second branch mapped as Beaumont Formation, areas predominantly clay (USGS, USDOJ 2017a; USGS, USDOJ 2017b).

## Soils

The soils of the APE are mapped as 27 percent Orelia fine sandy loam with 0 to 1 percent slopes, 20 percent Raymondville clay loam with 0 to 1 percent slopes, 20 percent Victoria clay with 0 to 1 percent slopes, 12 percent Delfina loamy fine sand, 10 percent Banquette clay with 0 to 1 percent slopes, 7 percent Calallen sandy clay loam with 0 to 1 percent slopes, and 4 percent Papalote fine sandy loam with 0 to 1 percent slopes (NRCS,USDA 2017).

## Regional Vegetation

The project area is within the Western Gulf Coast Plain, floodplain and low terraces, ecological region as defined by Tinker (2010) and the Southern Subhumid Gulf Coastal Prairies Level IV Ecoregions (a subregion of the Texas Coastal Bend Region) as defined by Griffith et al. (2007). This ecoregion consists of low, flat plains, and some low-gradient, entrenched streams. Almost all of the coastal prairies have been converted to agricultural practices, as well as for urban and industrial development. Little bluestem (*Schizachyrium scoparium*), yellow Indiangrass (*Sorghastrum nutans*), and tall dropseed (*Sporobolus asper*) were once dominant grasses. Due to fire suppression, overgrazing, and other similar disturbances, woody or thorn-shrub species such as honey mesquite (*Prosopis glandulosa*), huisache (*Acacia smallii*), black brush (*Acacia rigidula*), and granjeno (*Celtis pallida*) have invaded (Griffith et al. 2007).

Historic observations noted that the Texas Coastal Bend Region was largely a treeless prairie that varied from flat and poorly drained to undulating or rolling (Lehman et al. 2009). While grasses prevailed, there were nongrassy herbs and a scattering of shrubby growth present, including: mesquite (*Prosopis glandulosa*), Texas prickly pear cactus (*Opuntia engelmannii*), Indian paintbrush (*Castilleja indivisa*), winecup (*Callirhoe involucrata* and *C. leiocarpa*), and red pricklypoppy (*Argemone sanguinea*) (Lehman et al. 2009). Trees that occupied the area were Mexican ash (*Fraxinus berlandieriana*), cedar elm (*Ulmus crassifolia*), boxelder (*Acer negundo*), black willow (*Salix nigra*), huisache (*Acacia minuata*), and the occasional cottonwood (*Populus deltoides*), sycamore (*Platanus occidentalis*), pecan (*Carya illinoensis*), and bald cypress (*Taxodium distichum*) (Lehman et al. 2009). On higher ground and good distances from the channels, were groves of hackberry (*Celtis laevigata*), coma (*Sideroxylon lanuginosum*), soapberry (*Sapindus saponaria*), and live oak (*Quercus virginiana*) (Lehman et al. 2009).

The immigration of Irish colonists in Refugio and San Patricio counties in the late 1820s brought about the chief enterprise of raising livestock, and thus put a lot of pressure on the grassy areas of the Texas Coastal Bend Region and brought about the rise of woody vegetation and cactus (Lehman et al. 2009). With these changes, the original prairie grasslands as they were previously known all but disappeared.

## Fauna

The lands and waters of the Texas Coastal Bend Region are the home for a documented 2,342 species of animals (Smeins et al. 1992). Historically, the diverse animal populations of the region included bison (*Bison bison*), pronghorn (*Antilocarpa americana*), and white-tailed deer (*Odocoileus virginianus*), although they were fewer in number than those populations of the grasslands to the west and north (Smeins et al. 1992). Red wolves (*Canis rufus*) were once found along the riverine forests and low flat plains of the region (Grafe et al. 1999). Birds and waterfowl are still abundant. In spite of the region's agricultural and industrial influence, there are nearly 500 species of resident and migratory birds. Some of these species are whooping cranes (*Grus americana*), Arctic and American peregrine falcons (*Falco peregrinus*), piping plover (*Charadrius melodus*), snowy plover (*C. nivosus*), Eskimo curlew (*Numenius borealis*), and brown pelicans (*Pelecanus occidentalis*) (Smeins et al. 1992).

## Hydrology

The project area is within the floodplains and low terraces of the coastal plains. The APE is intersected by a man-made historic-age drainage ditch that empties into Corpus Christi Bay approximately 4 km (2.59 miles) to the southeast of the project.

# Cultural Context

The history of San Patricio County is rich and diverse, with evidence of human occupation spanning 10,000 years. Focusing on the time period of recorded sites and farms, the following cultural setting details historic context of the region and the city of Gregory.

## San Patricio County

The proposed project is located just west of the town of Gregory in southeast San Patricio County, Texas. The earliest recorded permanent European settlement in the project vicinity began about 1830, when the first of approximately 200 Irish-American families began to settle at the new colony of San Patricio de Hibernia near the mouth of the Nueces River. The Mexican government soon began to issue land grants to the San Patricio settlers, and the colony was officially established in 1834. By 1836, San Patricio consisted of 500 people residing on 84 land grants; however, the Texas Revolution began that same year, and many of the colonists subsequently relocated to Victoria or other safe havens during the war (1836–1845), as the region became unstable and vulnerable. The county of San Patricio was established by the Republic of Texas in 1836, though it was much larger than its current size, as it formerly encompassed portions of present-day surrounding counties. The region was officially designated a “depopulated area” by the new government until Texas was annexed by the United States in 1845, and the Mexican-American War came to an end the following year (Guthrie 2016).

By the 1850s, cattle ranching had become the mainstay of the local economy, with little focus on crop cultivation. In 1860, the population numbered 620 residents, including 95 slaves, many of whom were cow herders and drovers. The county, at this time, was occupied by several large cattle ranches, including those owned by John G. Hatch, Youngs Coleman, the White Brothers, and William M. Means. The Civil War soon brought further change to the county. While the area was far removed from battle lines, it was located on the “Cotton Road” to Matamoros, Mexico, which became a major center of cotton smuggling after the Union government imposed a blockade on the South. To avoid threats from smugglers, those fighting against the smugglers, and cattle rustlers, many residents fled the area once again and headed to the safety of Goliad (Guthrie 2016).

During the Civil War and the years immediately following, land was inexpensive and the population was small, which attracted new settlers to San Patricio County. In 1870, the county had a population of 602, including 64 African Americans. Crop cultivation had begun to increase slowly, although ranching continued to dominate the local economy. In 1871, the largest cattle company in the state was established in San Patricio, Goliad, and Aransas Counties, when cattlemen Youngs and Thomas M. Coleman and George W. Fulton combined their private land holdings with J.M. and Thomas H. Mathis, and they rapidly began to acquire additional land. However, by the end of the decade, financial troubles and drought led the five partners to dissolve the company. In 1880, Fulton and the Colemans formed the Coleman-Fulton Pasture Company and quickly became a giant in Texas ranching and land development, controlling 167,000 acres primarily situated in San Patricio County. This includes the project area, which is situated in Section O and P of the Coleman-Fulton Pasture Company (Guthrie 2010a, 2016).

San Patricio County and its economy began to grow after 1885, when the San Antonio and Aransas Pass Railway (S.A. & A.P. Railway) was built through the county to connect to the newly laid Aransas

Harbor. Several new towns were platted along the railroad subsequently, including Mathis and Sinton, as well as Gregory, located just northeast of the project area. By 1900, after several years of financial instability, Charles P. Taft, half-brother of future U.S. President William H. Taft, assumed control of the Coleman-Fulton Pasture Company, which became known as the Taft Ranch. Taft later appointed Joseph F. Green to manage the ranch, and it was under his control that the Taft Ranch greatly expanded, developed new breeds of cattle, and began to focus on agriculture (Guthrie 2010a, 2016).

Beginning in 1909, Green developed a system of model farms to demonstrate and introduce new crops to the area and to encourage farming and new settlers in the county. Development of San Patricio County intensified as land agents began to advertise property in the county to prospective farmers. Hundreds of new farmers and laborers moved to the area from Texas and other states. Additionally, many laborers were brought by train from Mexico to clear the land for farming, and a large number remained in San Patricio County to work in the fields, shaping the culture of the county. From 1910 to 1920, the county's population increased from 7,307 to 11,386, and the number of farms increased from 470 to 757. With the increase in population, new towns sprang up along the railroad, including Odem, St. Paul, Edroy, Taft, and Sodville. Ranching continued to remain a vital part of the county's economy; however, crop farming began to emerge as the dominant element of the agricultural economy as ranchland was converted to cropland. A large amount of farming was devoted to vegetables bound for urban markets, though cotton had quickly become the county's most important crop. With the expansion of cotton came the increase of farm tenancy, as by 1930 only a third of the county's farmers owned the land they farmed. This number further increased during the Great Depression as thousands of acres were forced out of production and hundreds of farmers were forced off the land. Farming was revived during the 1940s; however, the number of farms and laborers continued to decrease with mechanization and farm consolidation (Guthrie 2010a, 2010b, 2016).

The decrease of farming in the county was partially offset by the oil and gas industry, which had its beginnings in the county during the 1910s and 1920s. In 1926, a gas pipeline was laid from neighboring Refugio County to the Aransas gas fields. By the 1940s and 1950s, many oil wells and gas fields were located throughout the county, as well as pipelines, which continue to be laid to this day. At the height of the oil and gas boom in the county during the mid-1950s, more than 16 million barrels of crude oil were produced a year. As oil production and farming declined in the county, the economy revived by industrial plants, chemical plants, marine rig builders, and the shrimping industry (Guthrie 2016).

## Gregory, Texas

Through a joint agreement between the railroad and the Coleman-Fulton Pasture Company, the town of Gregory was laid out at a junction of the S.A & A.P. Railway, where a spur led to Corpus Christi. In 1887, the Coleman-Fulton Pasture Company gave 640 acres of land for the town, built cattle pens and a schoolhouse, and eventually relocated their headquarters from Rincon to Gregory in 1898.

Before Joseph F. Green began selling off portions of the Taft Ranch landholdings for profit, several company farms and tenant farms were established between Taft, Gregory, and Portland. Large company farms—typically 1,000 acres in size that consisted of the manager's home, barn, corrals, and housing for immigrant workers—were established (Guthrie 1986). Historic aerial imagery of the property from 1952 depicts a cluster of small and large structures southeast and outside of the APE, which likely represent the worker housing and other farm-related structures (NETRO 2017). The current project area is within Farm 23, one of the five big company farms established within the Taft Ranch lands between

Gregory and Portland, northwest of the project area (Guthrie 1986). As was the trend in the rest of the county, the land within the project area transformed from pasture land to agricultural land. Cotton was the main crop, but the company also experimented with new crops such as corn, citrus, peanuts, and flax. As part of the development of farmland, the Taft Ranch began digging ditches throughout its landholdings in the early 1900s to drain water off the land, especially those lands devoted to cotton. In addition, several smaller drainage ditches were dug by local landowners. Many of the larger drainage ditches were incorporated into drainage districts (Guthrie 1986). Farm 23 and its associated drainage was sold during the public land sales in the 1920s and 1930s, breaking the property into separate parcels. When the last of the Taft Ranch lands were sold, a part of the drainage ditches were sold to the Taft Prospect Syndicate, a group of business men from San Antonio, Austin, Corpus Christi, and Houston (Guthrie 1986). By the 1960s, the San Patricio County Drainage District took over most of the drainage ditches and systems in the county.

# Methods of Investigation

The primary goals of this investigation were to (1) locate any cultural resources that may exist within the APE; (2) assess their potential for SALs and NRHP eligibility; (3) assess the effect of the proposed construction on the located resources; and (4) provide site-specific recommendations for mitigation of adverse impacts to any SAL/NRHP-eligible or listed property, or properties of unknown eligibility.

## Background Review

Atkins archeologists conducted a preliminary cultural resources background review of the area within a 1.6-km (1-mile) radius of the APE using the THC's Texas Archeological Sites Atlas and Texas Historic Sites Atlas database (Atlas) to identify previously recorded cultural resource sites, NRHP-listed properties, NRHP districts, cemeteries (including historic Texas cemeteries), Official Texas Historical Markers (OTHM) (including Recorded Texas Historic Landmarks [RTHL]), and SALs, as well as any other potential cultural resources such as National Historic Landmarks, National Monuments, National Memorials, National Historic Sites, and National Historical Parks. A review of additional resources was performed, including the Texas Department of Transportation (TxDOT) historic overlay and TxDOT's database of NRHP-listed and NRHP-eligible bridges. Prior to the commencement of fieldwork, historic aerial imagery and topographic maps were examined to review the historic development of the project area.

## Field Investigations

Atkins archeologists conducted an intensive pedestrian survey with shovel testing focused on the area around the historic-age irrigation channel, also a potential USACE jurisdictional area (Figure 3). Because the entire APE is within disturbed, plowed fields, Atkins visually inspected the ground surface and any available cut bank exposures within the APE via pedestrian survey. Atkins performed shovel testing to probe for subsurface cultural materials within the USACE jurisdictional area, approximately 91 m (300 ft) on either side of the historic-age man-made drainage, a total size of 3 acres. Shovel testing was focused in this area due to the historic-age resource. The depth and location of shovel tests fluctuated depending on the nature of the disturbances, soils, topography, and previously surveyed areas. No backhoe trenching was done for the APE.

The frequency and intensity of the shovel testing regime was keyed to the level of disturbance of the proposed project area and the nature of the soils, geology, and topography. With a focus on the USACE jurisdictional area, the shovel testing met the THC's minimum archeological survey standards for two shovel tests per acre for areas 3 acres to 10 acres in size. Shovel tests consisted of excavating in 20-cm arbitrary levels to a 1-m depth or to pre-Holocene deposits, whichever came first, and screening the matrix through ¼-inch mesh, unless it was dominated by clay; clay soils were hand sorted and visually inspected for the presence of cultural materials. Atkins plotted each shovel test location using a sub-meter GPS receiver, and recorded each test on appropriate project field forms. Any areas determined in the field to be sufficiently deflated, disturbed, and/or contaminated as to not require shovel testing were documented and the reason for not conducting shovel tests in that area is explained in this report.

During the survey, all located cultural resources were fully defined within the project area. Field crews explored any resources encountered during the investigations to the maximum extent possible and with

consideration to land access constraints. The historic-age drainage was documented and photographed as a cultural resource.

Atkins performed a non-collection survey. The proposed investigations were entirely within existing property owned by POCCA.

Upon completion of the archeological fieldwork, all paperwork was transported to Atkins' in-house laboratory for for curation along with all documentation. Atkins will submit documentation to the Center for Archeological Studies at Texas State University after the THC has accepted this draft report.

## Site Evaluations

Newly documented cultural resources were evaluated for designation as a SAL following criteria for evaluating archeological sites as set forth in Texas Administrative Code Title 13 Part 2 Chapter 26.10 (13 TAC 26.10). The following criteria were used to assess the appropriateness of the site for official landmark designation, and/or the need for further investigations under the permit process, including:

- 1) The site has potential to contribute to a better understanding of the prehistory and/or history of Texas by the addition of new and important information.
- 2) The archeological deposits and artifacts within the site are preserved and intact, thereby supporting research potential or preservation interests of the site.
- 3) The site possesses unique or rare attributes concerning Texas prehistory and/or history.
- 4) The study of the site offers opportunity to test theories and methods of preservation, thereby contributing to new scientific knowledge.
- 5) There is a high likelihood that vandalism and relic collecting has occurred or could occur, and official landmark designation is needed to ensure maximum legal protection, or alternatively, further investigations are needed to mitigate the effects of vandalism and relic collecting when the site cannot be protected.

In addition, newly documented and previously recorded cultural resources were evaluated according to the NRHP criteria for evaluation under 36 CFR 60.4, which states:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and;

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

# Results

## Background Review

Atkins archeologists conducted a preliminary cultural resources background review of the area within a 1.6-km (1-mile) radius of the APE using the THC’s Atlas to identify previously recorded cultural resource sites, NRHP-listed properties, NRHP-listed districts, cemeteries (including historic Texas cemeteries), OTHMs (including RTHLs), and SALs, as well as any other potential cultural resources such as National Historic Landmarks, National Monuments, National Memorials, National Historic Sites, and National Historical Parks. A review of additional resources was performed, including the TxDOT historic overlay and TxDOT’s database of NRHP-listed and NRHP-eligible bridges. Prior to the commencement of fieldwork, historic aerial photographs and topographic maps were examined to review the historic development of the project area.

Results of the records review determined that there are no previously recorded sites within the proposed APE and a portion of the project was previously surveyed. Approximately four previously recorded sites and historic markers are within a 1.6-km (1-mile) radius of the APE, including a cemetery. In addition, the historic map review indicates the drainage ditch is historic-age. The project is intersected by three linear cultural resources surveys that were conducted in 1998, 1999, and 2015. The 1998 utility project was completed on behalf of the San Patricio Municipal Water District and intersects and parallels the irrigation channel within the APE. The investigations encountered sites 41SP195 and 41SP196 within the 1.6-km (1-mile) radius of the project area (Table 1; Prikryl 1998). The 1999 survey was completed on a pipeline corridor on behalf of the Cheniere Corpus Christi Pipeline Co., and the 2015 survey was a pipeline project completed for a Corpus Christi Liquefaction project (Atlas 2017). Both lines parallel each other, intersecting the proposed road and covering 100 m (300 ft) of the APE. No cultural resources were identified within a 1.6-km (1-mile) radius of the project during the investigations. In addition to sites 41SP195 and 41SP196, sites 41SP179 and 41SP279 are within a 1.6-km (1-mile) radius of the APE. Site 41SP179 was recorded during a 1992 survey of US 181 on behalf of TxDOT and 41SP279 during a Phase II evaluation for a greenhouse gas permit application (Atlas 2017).

**Table 1. Archeological Sites within 1.6-km (1-mile) Radius of APE**

Name	Site Type	Designation for NRHP/SAL	Within Project APE
Site 41SP179	Prehistoric scatter	Unknown or Undetermined Eligibility	No
Site 41SP195	Prehistoric scatter	Unknown or Undetermined Eligibility	No
Site 41SP196	Prehistoric shell midden	Unknown or Undetermined Eligibility	No
Site 41SP276	Portland/Gregory Cemetery (SP-C014)	Unknown or Undetermined Eligibility	No

The two historic markers within the 1.6-km (1-mile) radius are located within the town of Gregory and commemorate the history of the town and its first school. The town of Gregory was founded in 1887,



after the S.A. & A.P. Railway built a line through San Patricio County and built a station with the local Coleman-Fulton pasture company known as Corpus Christi Junction (Historic Marker 2281). The town was named after Thomas W. Gregory, a friend of the Fulton family who later served as the U.S. Attorney General. The school was established in 1891 as a one-room schoolhouse adjacent to McKamey Store, on land donated by the Coleman-Fulton Pasture Company (Historic Marker 14741).

## Historic Map Review

The background research also involved a review of historic maps from the Texas Historic Overlay (THO), maps available online at the University of Texas Perry-Castañeda Library, and maps and aerial imagery available online at National Environmental Title Research Online (NETRO) (Foster et al. 2006; UT Austin 2017; NETRO 2017). Maps dating to 1846, 1855, and 1975 were examined on the THO for historic resources and trails. No distinct historic-age trails or resources were identified (Foster et al. 2006). In addition, a review of Texas General Land Office maps and San Patricio County Appraisal District maps available online indicate that the parcels on which the proposed project is located are situated within the John Gerraghty [sic], John M. Swisher, and Jno. Keating [sic] original land abstracts (The Portal to Texas History 2017; San Patricio County Appraisal District 2017). Also, reference materials on San Patricio County at the Sinton Library were also reviewed.

A review of topographic maps indicates that the project area was in use as farmland as early as 1918 and the drainage ditch was constructed as early as 1922 (UT Austin 2017). A review of historic aerial imagery dating to 1952, 1968, and 1995 indicates that the APE has been impacted frequently by agricultural activities (NETRO 2017). A well pad site and associated road are depicted adjacent to the APE on the 1968 aerial photograph. Based on a 1977 USGS topographic map, the access road extended across the agricultural field. The well pad and access road appear abandoned on the 1995 and 2004 maps, and much of the APE remained relatively the same on 2008, 2010, and 2012 maps (NETRO 2017). The surrounding area consists primarily of agricultural fields transitioning to residential and industrial development.

## Field Investigations

Atkins conducted intensive survey investigations within the APE from July 31, 2017 to August 2, 2017. A pedestrian survey was conducted within the entire direct APE, with shovel tests focused around the historic-age drainage ditch, approximately 300 m (984 ft) on either side (Figure 3). The project is oriented west-northwest from the frontage road of US 181. The vegetation northwest of the historic-age drainage ditch consists of harvested sorghum fields with 100-percent ground surface visibility (Figure 4). Southeast of the historic-age drainage ditch, the haul road splits into two routes. The route that parallels the transmission line in an east-southeast direction consists of tall grasses with 0 percent to 20 percent ground surface visibility, including patches of 100-percent ground surface visibility (Figure 5). The route that forks south-southwest consists of tall grasses and planted cotton with ground surface visibility ranging from 0 percent to 100 percent (Figure 6).

Disturbances observed within the APE include frequent harvesting and plowing activities, and existing pipeline and transmission line corridors intersecting the APE southeast of the drainage ditch. In addition, 378.6 m (1,242.1 ft) of the direct APE has been recently planted with cotton (Figure 7). Approximately 668 m (2,191 ft) north of US 181 within the southwestern portion of the direct APE was a cluster of trees and shrubs with push-piles of agricultural debris and soil (Figure 8). The trees appear on a 1951 aerial

photograph with a two-track road traversing through them. However, no standing structures were observed in the historic aerial imagery or within the direct or indirect APE at the time of investigations.

Due to the highly-disturbed nature of the APE, the subsurface investigations focused on the potential USACE jurisdictional area. Four shovel tests were excavated on either side of the historic-age drainage ditch, for a total of six shovel tests within the potential USACE review area. The shovel tests terminated at 10 cm to 30 cm below the surface due to compact silty clay, and all were negative for cultural material (Table 2).

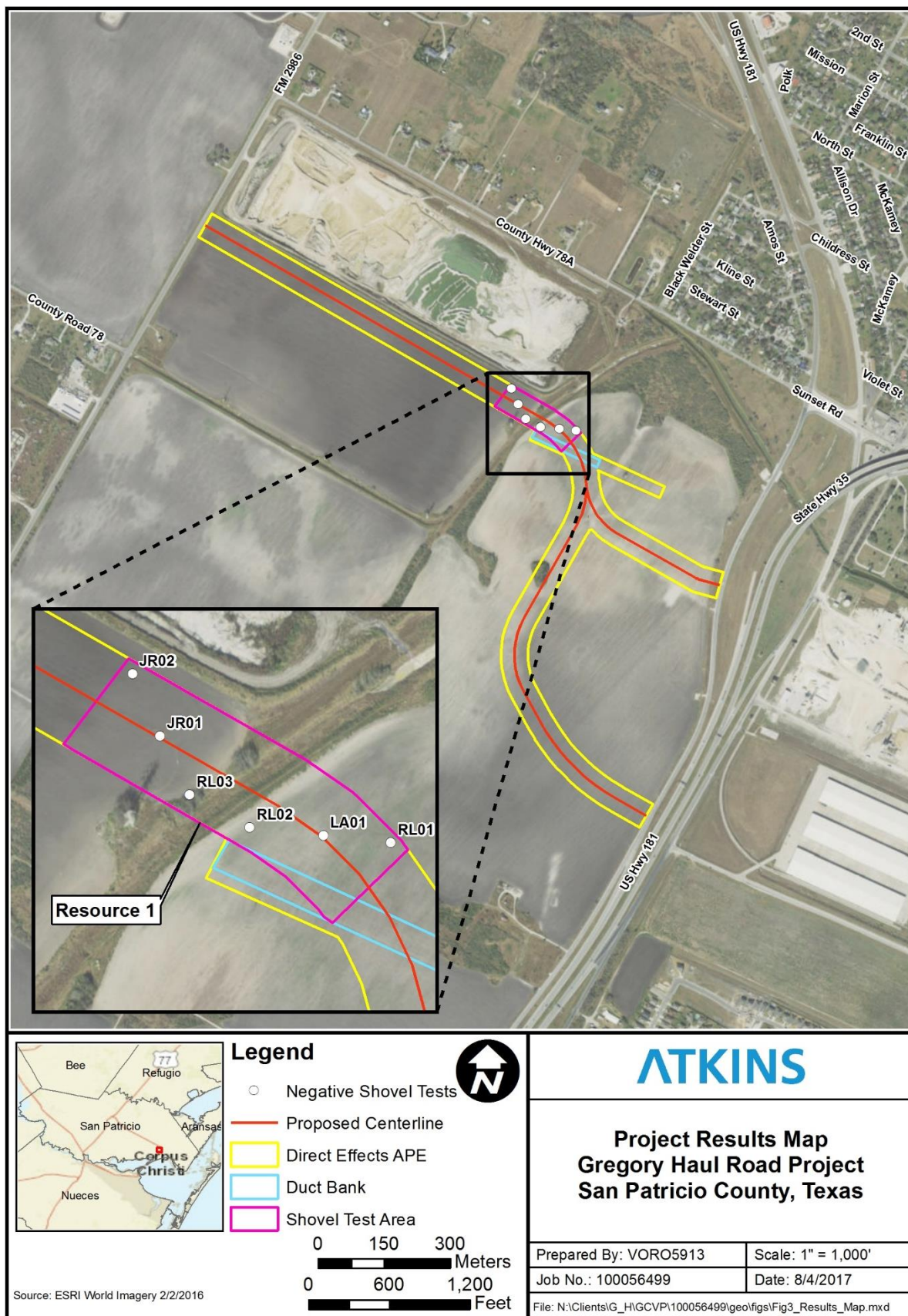


Figure 3. Project results map



**Figure 4. Overview of northwestern portion of the APE, facing east-southeast**



**Figure 5. Overview of southeastern portion of APE paralleling transmission line, facing west-northwest**



**Figure 6. Overview of southwestern portion of APE, facing north**



**Figure 7. Overview of cotton crop within southwestern portion of APE, facing south**



Figure 8. Overview of cluster of trees within southwestern portion of APE, facing northeast

Table 2. Shovel Test Data

Shovel Test	Level (10 cm)	Depth (cmbs)	P = Pos; N = Neg	Munsell Soil Color	Soil Texture	Description/Comments	Reason/ Depth of Termination
LA01	1	0-10	N	10YR 3/4	Silty Clay	Southeast of drainage, tall grasses, 20% ground surface visibility	Compact Clay
JR01	1-3	0-30	N	10YR 3/4	Silty Clay	Northwest of drainage, harvested field, 100% ground surface visibility	Compact Clay
JR02	1-3	0-30	N	10YR 3/4	Silty Clay	Northwest of drainage, harvested field, 100% ground surface visibility	Compact Clay
RL01	1	0-10	N	10YR 3/4	Silty Clay	Southeast of drainage, tall grasses, 20% ground surface visibility	Compact Clay
RL02	1	0-10	N	10YR 3/4	Silty Clay	Southeast of drainage, tall grasses, 20% ground surface visibility	Compact Clay
RL03	1-3	0-30	N	10YR 3/4	Silty Clay	Northwest of drainage, harvested field, 100% ground surface visibility	Compact Clay

## Resource 1

Resource 1 is a historic-age (circa 1915) segment of a drainage ditch located approximately 526.6 m (1,727.8 ft) west-northwest of the US 181 southbound frontage road. Within the project area, the drainage ditch is approximately 11.5 m (37.9 ft) wide and 3.2 m (10 ft) deep (Figure 9). Approximately 67 m (219.8 ft) of the drainage ditch intersects the APE and is oriented in a northeast-southwest direction. The ditch banks were covered with vegetation ranging from grass to shrubs, and no water was present within the APE at the time of the investigation (Figure 10). No cultural resources were observed within the ditch profiles, nearby shovel tests, or on the surface.

The drainage ditch extends north and south of the APE with the southwestern portion, traversing across agricultural lands for 1,505.9 m (4,940.8 ft). The ditch travels 348.2 m (1,142.6 ft) northeast of the APE and connects to another drainage ditch, which extends east under US 181 then continues south before draining into Corpus Christi Bay.

Based on the local historic context and historic map review, the drainage was likely excavated in the early-twentieth century while it was part of the 1,000-acre Farm 23 under ownership of the Taft Ranch. A review of historic maps indicates that the drainage ditch was excavated as early as 1918 and extended north of the APE to just west of Gregory and 1.5 km south of the APE. In addition, a west branch was located along County Road (CR) 78 (UT Austin 2017). Topographic maps and aerial imagery indicate that the drainage ditch was extended around 1950 and likely widened periodically. (NETRO 2017). The drainage ditch and the drainage system is managed and maintained currently by the San Patricio County Drainage District, which assumed responsibility of the regional drainage districts in the 1960s.

The drainage ditch (Resource 1) retains historic integrity of location, setting, materials, and feeling; however, it lacks integrity of design and workmanship due to alterations, including extension and widening. In addition, integrity of association has been compromised since it is no longer associated with the Taft Ranch landholdings.

The drainage ditch is located on property formerly known as the Taft Ranch landholding of Farm 23, which followed the county trend of conversion from ranchland to farmland. Although the drainage was likely integral to the successful transition and development into farmland, it does not hold any known specific association with this regional pattern of history to be eligible under NRHP Criterion A. In addition, there are no known individuals associated with the drainage ditch who made significant contributions to history to qualify it for listing in the NRHP under Criterion B. The drainage ditch also does not contain any distinctive engineering features or methods of construction that make it unique to the numerous drainage ditches that are within the region to meet the criteria for NRHP listing under Criterion C. Lastly, based on the lack of diagnostic cultural materials and features and its common construction, the resource does not hold the potential to yield information important to history and thus the drainage ditch is not eligible for listing on the NRHP under Criterion D. Resource 1 is not recommended eligible for SAL designation as cultural resources must be eligible for listing in the NRHP prior to designation as an SAL,



**Figure 9. Resource 1, historic-age drainage ditch, facing northeast**



**Figure 10. Resource 1, base of historic-age drainage, facing northeast**



# Summary and Recommendations

On behalf of GCGV LLC, Atkins conducted an intensive cultural resources survey for the Gregory Haul Road project in San Patricio County, Texas. The investigations were within property owned by the POCCA and focused along a historic-age drainage ditch, a potential USACE jurisdictional area. The investigations were conducted in compliance with the Antiquities Code of Texas under Permit No. 8112, and Section 106 of the NHPA of 1966, as amended and its implementing regulations under the Procedures of the Advisory Council on Historic Preservation, as amended (36 CFR 800). The investigations consisted of a thorough background review, an intensive pedestrian survey, and shovel testing focused around the drainage.

The results of the background review determined that no previously recorded sites were within or adjacent to the APE, and a small section had been surveyed previously. In addition, a review of historic maps revealed the drainage ditch was historic-age, dating to the early-twentieth century. The APE for direct effects was approximately 38.1 acres in size, with shovel testing focused within the 3-acre USACE jurisdictional area, specifically, 300 m (984 ft) on either side of the drainage. A total of six shovel tests were excavated within the USACE jurisdictional area and the entire 38.1 acres was inspected visually. Focused on the USACE jurisdictional area, THC survey standards require two shovel tests per acre for projects 3 acres to 10 acres in size, or six shovel tests for the USACE jurisdictional area. Thus, the current investigations met the survey standards, and the shovel tests were all negative for cultural materials. The APE consisted of harvested and fallow agricultural fields with ground surface visibility ranging from 20 percent to 100 percent. The investigations recorded the historic-age drainage as Resource 1.

Resource 1 is a segment of a historic-age drainage ditch dating to the early-twentieth 20th century that was possibly excavated while the property was part of the 1,000-acre Farm 23 under ownership of the Taft Ranch. The drainage ditch extends outside of the APE, and has no evidence of significant cultural features or diagnostic artifacts. Based on the findings and historic research, Atkins recommends that the segment of Resource 1 within the APE is not eligible for listing in the NRHP or as an SAL as it does not meet any of the applicable criteria. Based on the investigations, Atkins made a reasonable and good-faith effort to identify historic properties within the APE for direct and indirect effects. As no properties were identified that meet criteria for listing in the NRHP or as an SAL, Atkins recommends no further work and a makes a finding of ***no historic properties present*** within the project area.

# References Cited

Foster, E., T. Summerville, and T. Brown

- 2006 *The Texas Historic Overlay: A Geographic Information System of Historic Map Images for Planning Transportation Projects in Texas*. Document No. 060206. Prepared for the Texas Department of Transportation by PBS&J, Austin.

Grafe, V., L. Allain, M. Vidrine, C. Allen, and S. Johnson

- 1999 *Paradise Lost? The Coastal Prairie of Louisiana and Texas*. U.S. Fish and Wildlife Service and U.S. Geological Survey Pamphlet, 39p.

Griffith, G., S. Bruce, S. Bryce, J. Omernik, and A. Rogers

- 2007 "Ecoregions of Texas." Project report to Texas Commission on Environmental Quality. Available online, [ftp://ftp.epa.gov/wed/ecoregions/pubs/TXeco\\_Jan08\\_v8\\_Cmprsd.pdf](ftp://ftp.epa.gov/wed/ecoregions/pubs/TXeco_Jan08_v8_Cmprsd.pdf) (accessed September 29, 2016).

Guthrie, Keith

- 1986 *The History of San Patricio County*. San Patricio County Historical Commission. Nortex Press, Austin, Texas.
- 2010a *The Handbook of Texas Online*, s.v. "San Patricio, Texas," <https://tshaonline.org/handbook/online/articles/hls13> (accessed September 2016).
- 2010b *The Handbook of Texas Online*, s.v. "Gregory, Texas," <https://tshaonline.org/handbook/online/articles/hgg05> (accessed September 2016).
- 2016 *The Handbook of Texas Online*, s.v. "Coleman-Fulton Pasture Company," <https://tshaonline.org/handbook/online/articles/aqc02> (accessed September 2016).

Lehman, R.L., R. O'Brien, and T. White

- 2009 *Plants of the Texas Coastal Bend*. Vol. 7, Texas A&M University Press.

National Environmental Title Research Online (NETRO)

- 2017 Aerial Photography Dated 1955, 1963, 1966, 1973, and 1986. Historic Aerials, <http://www.historicaerials.com/> (accessed May 21, 2017).

Natural Resources Conservation Service (NRCS), United States Department of Agriculture

- 2017 *Web Soil Survey*. <http://websoilsurvey.nrcs.usda.gov/app/> (accessed May 21, 2017).

Portal to Texas History, The

- 2017 Various maps of San Patricio County 1863, 1879, 1883, and 1896. University of North Texas Libraries, The Portal to Texas History, [texashistory.unt.edu](http://texashistory.unt.edu). [https://texashistory.unt.edu/search/?sort=date\\_a&q=San+Patricio+County&fq=str\\_location\\_county%3ASan+Patricio+County%2C+TX&fq=dc\\_type%3Aimage\\_map&t=fulltext](https://texashistory.unt.edu/search/?sort=date_a&q=San+Patricio+County&fq=str_location_county%3ASan+Patricio+County%2C+TX&fq=dc_type%3Aimage_map&t=fulltext) (accessed on September 27, 2016).

Prikryl, D.J.

- 1998 *An archeological survey of the San Patricio Municipal Water District Proposed water system improvements project, San Patricio County, Texas*. Report of Investigations No. 10. Archeological and Environmental Consultants. Austin, Texas.

San Patricio County Appraisal District

- 2017 Property information for San Patricio parcels 56687, 56714, and 56819.  
<https://propaccess.trueautomation.com/clientdb/?cid=39> (accessed on August 2, 2017).

Smeins, F.E., D.D. Diamond, and C.W. Hanselka

- 1992 "Coastal Prairie." Chapter 13. In: R.T. Coupland (editor), *Natural Grasslands, Introduction and Western Hemisphere, Ecosystems of the World, Volume 8A*. Elsevier, New York. Pp. 269–290.

Tinker, S. W.

- 2010 Map of Ecoregions of Texas. Bureau of Economic Geology, Jackson School of Geosciences. The University of Texas at Austin.

U.S. Geological Survey (USGS), U.S. Department of the Interior

- 2016a "*Beaumont Formation, Areas Predominantly Clay*." Mineral Resources On-Line Spatial Data. <http://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=TXQbc;0> (accessed August 31, 2016).
- 2016b "*Beaumont Formation, Areas Predominantly Sand*." Mineral Resources On-Line Spatial Data. <http://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=TXQbs;0> (accessed August 31, 2016).

Texas Archeological Sites Atlas (Atlas)

- 2017 *Texas Archeological Sites Atlas*. Online restricted database published by the Texas Historical Commission, <https://atlas.thc.state.tx.us/Account/Login> (accessed May 21, 2017).

The University of Texas at Austin (UT Austin)

- 2017 Topographic maps available online from the Perry-Castañeda Library. "Corpus Christi, Texas 1918" and "Corpus Christi, Texas 1925". University of Texas at Austin. <http://www.lib.utexas.edu/maps/topo/texas/p.html> (accessed August 4, 2017).



Atkins North America, Inc.  
1801 Domain Boulevard  
Suite 500  
Austin, Texas 78758

**Telephone** (512) 327-6840  
**Fax** (512) 327-2453

© Atkins Ltd except where stated otherwise.

The Atkins logo, 'Carbon Critical Design' and the strapline  
'Plan Design Enable' are trademarks of Atkins Ltd.