

US EPA ARCHIVE DOCUMENT

*Report for the Findings of No Adverse Effects to
Archeological Site 41SP35
and a Preliminary Determination of Effects to Historic Resources
Associated with voestalpine's Texas, LLC's
Direct-Reduced Iron (DRI) Project:
San Patricio County, Texas*



Cultural Resources Assessment (CRA): *Direct-Reduced Iron (DRI) Project*

voestalpine Texas, LLC
San Patricio County, Texas

Texas Antiquities Permit 6421

Draft Revision

January 24, 2014

www.erm.com

Delivering sustainable solutions in a more competitive world

Texas Registered Engineering Firm F-2393



voestalpine Texas, LLC

Cultural Resources Assessment (CRA):
Direct-Reduced Iron (DRI) Project

January 24, 2014

ERM Project No. 0187325

San Patricio County, Texas

Texas Antiquities Permit 6421

Draft Revision



Alicia Smith
Partner-in-Charge



Graham Donaldson
Project Manager



Dave Port, RPA
Project Consultant

Environmental Resources Management
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024
(281) 600-1000

ABSTRACT

Report Title: Cultural Resources Assessment (CRA) Report: voestalpine Texas, LLC's Direct-Reduced Iron (DRI) Project; San Patricio County, Texas

Report Date: January 24, 2014

Report Number: G:\2014\0187325\20265Hrpt.docx

Sponsor: voestalpine Texas LLC's (voestalpine, the Client)

Agency: U.S. Environmental Protection Agency (the EPA)

Permit Number: Texas Antiquities Commission (TAC) Number 6421

Project Description: The Environmental Resources Management Group, Inc., (ERM) completed a Cultural Resources Assessment (CRA) and a preliminary project impact and effects determination for voestalpine Texas, LLC (voestalpine) to support a Greenhouse Gas (GHG) Permit Application for a proposed hot-briquetted iron (HBI) production facility ("the Project") located south of the City of Gregory in San Patricio County, Texas. The GHG permit is authorized by the U.S. Environmental Protection Agency's (EPA's) Prevention of Significant Deterioration (PSD) program of the Clean Air Act (CAA). Because the Project would require a permit issued from the EPA, the Project is subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

The purposes of the CRA are:

1. To provide recommendations on National Register eligibility, pending the EPA's and the Texas Historical Commission (THC's) concurrence, for the cultural resources identified within the Project site and within the Project site's presumptive viewshed, and
2. To provide the results of an assessment of potential impacts and a preliminary determination of effects from the proposed Project on cultural resources, which includes archeological sites and historic properties, which are presented in this CRA as outlined in the requirements for the EPA's GHG permit applications. The information provided is for utilization in consultations with state and federal agencies that will lead to a formal Assessment of Effects (AOE), which will be submitted as a separate document, if needed and requested by the EPA.

Direct APE

Ricklis' (1999) investigation covered two (2) tracts owned by the Port of Corpus Christi Authority (POCCA): Tract 1 (153.93 acres) and Tract 2 (930.28-acres). The current Project site consists of a 475-acre parcel where voestalpine intends to construct a HBI production facility that is located within the POCCA's Tract 2.

Ricklis' (1999) pedestrian survey identified 10 archeological sites and his efforts consisted of a single linear transect approximately 30-feet in width by 3,700-feet in length north of the shoreline escarpment within Tract 2. Ricklis' (1999) sub-surface testing was limited to the excavation of 16 shovel tests within or near the 10 archeological sites; some shovel tests were placed as much as 50 meters (m) or more north of the shoreline bluffs and the sites intended for inspection.

Site 41SP35 (La Quinta Mansion) was identified by Ricklis (1999) as a multi-component site containing a prehistoric shell midden and a historic component connected with a property referred to as "La Quinta." Following the survey, Ricklis (1999:27-8) stated that "*no significant archeological deposits remain within the survey area*" and "*the shellcrete structures at 41SP35... associated with the fishing resort of La Quinta...have no appreciable historical significance and are not eligible for placement in the National Register of Historic Places (NRHP).*" The THC concurred with Ricklis' (1999) recommendations on June 29, 1999.

The THC's concurrence letter from June 29, 1999 has been applied as supporting documentation for the lack of integrity and significance of the archeological resources within both tracts (1,084.21 acres) as well as adjacent parcels consisting of approximately additional 30 acres owned by the POCCA.

Ricklis' (1999) study and a later study conducted within and adjacent to voestalpine's Project site (Turner 2004a, 2004b) provided inadequate data to support an assessment of the NRHP eligibility of site 41SP35. While these previous studies led to determinations that certain resources in or near the current direct APE were not eligible for listing on the NRHP, the current Project required a reconsideration of the NRHP eligibility of Site 41SP35, which lies within voestalpine's proposed 8-acre Access Corridor and the POCCA's La Quinta Terminal Area facility.

Site 41SP35 was recommended ineligible by Ricklis (1999). Subsequently, the site was recommended as potentially eligible and in need of further evaluation by Klinger in 2004. The eastern portion of the site was recommended ineligible by Turner in a follow-on study (2004a, 2004b). Those studies left the NRHP eligibility of the western portion of Site 41SP35 unresolved.

ERM's archeological fieldwork identified the location, size, and general function of the southwestern extent of Site 41SP35, which is located within voestalpine's proposed 8-acre Access Corridor and which is also within the POCCA Terminal Area. The archeological investigation was limited to the 8-acre Access Corridor. ERM's current investigations provide an assessment of the integrity and significance of a portion of the site within the direct APE and present an aboveground reconnaissance survey of the Project site's viewshed for the EPA's GHG permit.

No intact prehistoric shell middens and no historic artifacts, features, or deposits associated with Site 41SP35 (La Quinta Mansion) were identified during the archeological investigation of the Project site. Since no historic materials associated with the La Quinta Mansion site were present during the archeological investigation, the portions of 41SP35 within the direct APE cannot provide important historic or archeological information and do not have direct association with important themes or people at the local, state or national level. In the opinion of the Principal Investigator, the portion of the site within the 8-acre Access Corridor would not

contribute to the site's eligibility if portions of the site outside the 8-acre Access Corridor were later determined NRHP eligible.

ERM also recommends that a Chance Finds/Unanticipated Discovery Plans should be implemented for voestalpine and reviewed by the THC prior to construction activities. No further archeological investigations are recommended nor warranted for voestalpine's 8-acre Access Corridor within the Project site.

Indirect APE

ERM determined a reasonable indirect APE through windshield survey of the Project area, accounting for the atmospheric, audible, and visual effects of the Project, which is expected to have one structure that rises no higher than 520 feet (note: no visible plume is expected to emit from this facility). The physical plant is to be constructed in the south portion of the 425-acre Project site, closest to the access corridor to the POCCA terminal. ERM used a 1.5-mile radius from each corner of the proposed facility location at the south end of the parcel as a point of departure in determining the APE. The 1.5-mile reference area falls primarily within the triangle of land formed by Portland on the west, Highway 35 to Gregory on the north, Highway 361 to the Sherwin Alumina Plant on the east, and the Corpus Christi Bay on the south. Within this area, ERM weighed, in particular, the ultimate height of the proposed facility against the existing character of the Project area, including:

- the presence of industrial facilities extending east and southeast from the Project site along the Corpus Christi ship channel, between the mainland and La Quinta Island;
- the POCCA dredge spoil fields that encompass the Sherwin Alumina tailing ponds located between the Project site and Sherwin Alumina;
- the elevated Highway 35 bypass south of the Gregory traditional town center;
- the light industrial facilities between Highway 35 and the Project site; and
- the recent suburban residential development and a country club golf course between Portland and the Project site.

In consideration of the above factors, ERM recommends the indirect APE shown in Figures 3 and 9, beyond which the character or use of historic properties should they be present, will not be adversely affected.

The aboveground reconnaissance identified seven (7) resources for further consideration within the indirect APE and these include:

- Portland;
- Gregory;
- Portland/Gregory Cemetery (THC designation SP-C014);
- San Antonio and Aransas Pass (now Union Pacific) Railway;
- Sherwin Alumina Company (formerly the Reynolds Metals Company); and
- Green Lake and La Quinta ditches.

Of these resources, only the Portland/Gregory Cemetery appears to be eligible for listing on the NRHP. The cemetery is eligible under Criterion A for its association with the Coleman-Fulton Pasture Company and the early development of the area, and in particular its representation of the range of backgrounds of the surrounding community. The cemetery meets Criteria Consideration D as a resource significant for its distinctive design features and its association with historical events.

The Project is not expected to have direct effects on the Portland/Gregory Cemetery. The Project will result in indirect effects to the setting and feeling (aesthetics) of the cemetery. Both “setting” and “feeling (aesthetics)” are derived from and defined by Little et al.’s (2000) aspects, or qualities, for determining integrity depending on the specific NRHP criteria or criterion under which the resource is being evaluated (Table 3). The construction of the facility on a currently vacant parcel will result in the introduction of new visual elements (i.e., the facility itself, the electrical substation and transmission lines, access roads) within the setting of the cemetery; an intensification of the industrial character and use of the area within the indirect APE; and an increase in noise, traffic, etc. in the vicinity. Due to the vegetative screening around the cemetery and the distance of the facility site from the historic property, and in consideration of the already diminished setting and feeling of the cemetery, it is ERM’s opinion that the proposed Project will not adversely affect the historic property.

Recommendations:

Site 41SP35 (La Quinta Mansion) contains little to no integrity; both its prehistoric and historic integrity, significance, and context have been eradicated over time, and as such, it is no longer recommended potentially eligible for inclusion in the NRHP. This evaluation study demonstrated that there is a low probability that the Project will effect a historic property in the direct APE and the portion of Site 41SP35 in the direct APE is not a State Archeological Landmark (SAL). This CRA report requests the THC concurrence that cultural resources consultation for the 475-acre Project site be considered complete for the direct APE and that voestalpine be allowed to proceed to construction within the direct APE. ERM recommends that the Project be allowed to proceed as planned without additional cultural resources investigations within the direct APE. The EPA as the lead federal agency in consultation with the THC will make the final determination about the need for further archeological investigations within the Project site.

The Portland/Gregory Cemetery (SP-C014) appears to be eligible for listing on the NRHP under Criterion A for its association with the Coleman-Fulton Pasture Company, and the cemetery meets Criterion Consideration D as a resource significant for its distinctive design features and its association with historical events. The Project is not expected to have direct effects on the Portland/Gregory Cemetery. Due to the vegetative screening around the cemetery; the distance of the facility laydown site from the historic property; and the already diminished setting and feeling (aesthetics) of the cemetery, it is ERM’s opinion that the proposed Project will not adversely affect the historic property.

Based upon the Project information available to ERM at this time, no additional cultural resources investigations to identify historic properties in the direct or indirect APE or to assess the effects of the Project on the Portland/Gregory Cemetery are recommended. Further, it is

ERM's opinion that a formal AOE is not needed; however a template has been provided in Appendix A if the EPA as the lead agency requests a formal AOE.

Acres Surveyed: 475

Project Number: ERM Project No. 0187325

Project Location: San Patricio County, Texas

Unevaluated Properties: 0

NRHP-Eligible Properties: 1

The Portland/Gregory Cemetery (THC designation SP-C014)

NRHP-Ineligible Properties: 5 (Site 41SP35, the western extent of La Quinta Estates within the 8-Acre Access Corridor; Sherwin Alumina Company; San Antonio and Aransas Pass Railway; and Green Lake and La Quinta ditches)

NRHP-Listed Properties: 0

Isolated Occurrences: 0

Total Project Resources: 6

TABLE OF CONTENTS

ABSTRACT	i
LIST OF FIGURES	VIII
LIST OF TABLES	VIII
ACRONYMS	ix
1.0 INTRODUCTION	1
1.1 SECTION 106 UNDERTAKING	1
1.2 DESCRIPTION OF THE DIRECT APE	1
1.3 DESCRIPTION OF THE INDIRECT APE	3
1.4 AGENCY REGULATIONS	6
1.4.1 The Section 106 Regulatory Framework	6
1.4.2 Section 106 Planning	7
1.4.3 Section 106 Coordination	8
1.5 BACKGROUND RESEARCH AND FIELDWORK	10
1.6 PROJECT DESCRIPTION OVERVIEW	11
1.7 PROJECT SCHEDULE	11
1.8 PROJECT SITE LOCATION	11
1.9 PROJECT SITE DESCRIPTION	12
2.0 ENVIRONMENTAL SETTING	15
2.1 GEOLOGY	16
2.2 SOILS	18
2.3 FLORA	18
2.4 FAUNA	19
3.0 CULTURAL SETTING	21
3.1 CULTURAL PERIODS	21
3.1.1 Paleoindian Period	22
3.1.2 Archaic Period	22
3.1.3 Late Archaic to Late Prehistoric	25
3.2 SAN PATRICIO COUNTY HISTORY	27
3.3 PORTLAND	29
3.4 GREGORY	29
3.5 LA QUINTA PROJECT SITE HISTORY	32
4.0 METHODOLOGY	34
4.1 SITE FILE AND LITERATURE REVIEW	34
4.1.1 Additional Background Research	34
4.2 ARCHEOLOGICAL FIELD METHODS	35
4.3 ABOVEGROUND RECONNAISSANCE SURVEY	36

TABLE OF CONTENTS (Cont'd)

4.4	ARCHEOLOGICAL FIELD PROCEDURES	37
4.5	LABORATORY METHODS	38
4.6	CURATION	39
5.0	ARCHIVAL INVESTIGATIONS	40
5.1	RESULTS OF SITE FILE AND LITERATURE REVIEW	40
5.1.1	Results of Additional Background Research	44
6.0	RESEARCH DESIGN	46
6.1	BACKGROUND	46
6.2	ARCHIVAL RESEARCH AND FIELD INVESTIGATIONS	47
6.3	NATIONAL REGISTER ELIGIBILITY RECOMMENDATIONS	47
7.0	RESULTS OF FIELD INVESTIGATIONS	53
7.1	SITE 41SP35 - LA QUINTA MANSION	53
7.1.1	Field Investigation Results	53
7.1.2	Site Summary and Interpretations	57
7.2	ABOVEGROUND RECONNAISSANCE SURVEY	58
7.2.1	Inside the Project site (Direct APE)	58
7.2.2	Inside and Outside the Project area (Indirect APE)	59
7.2.3	Assessment of Effects to Aboveground Historic Properties	65
8.0	CONCLUSIONS AND RECOMMENDATIONS	69
8.1	SUMMARY OF EFFECTS	70
9.0	REFERENCES	72
9.1	PRINCIPAL INVESTIGATOR	72
9.2	REFERENCE DOCUMENTS	72

APPENDICES

APPENDIX A - ASSESSMENT OF EFFECTS TEMPLATE

APPENDIX B - PROJECT SURVEY MAPS

APPENDIX C - SITE INVESTIGATION PHOTOGRAPHS

APPENDIX D - SHOVEL TEST LOG

APPENDIX E - HISTORIC PHOTOGRAPHS OF LA QUINTA MANSION

APPENDIX F - THC SHPO CONSULTATIONS

APPENDIX G - LIST OF FEDERAL/STATE-RECOGNIZED AMERICAN INDIAN TRIBES

APPENDIX H - RESUME OF PRINCIPAL INVESTIGATOR

LIST OF FIGURES

Figure 1. Aerial Map of the Project site	2
Figure 2. POCCA’s Planned Development	3
Figure 3. Proposed Indirect APE	4
Figure 4. Proposed Project Layout and Linear Facilities	13
Figure 5. Land Cover Map	15
Figure 6. Previously Recorded Sites within and adjacent to the Project site	41
Figure 7. Archeological Investigations and Results within the Access Corridor	54
Figure 8. Ricklis’ (1999) Shellcrete Wall (A) within the Access Corridor and Wall (B) 20-Foot Outside the Access Corridor	56
Figure 9. Areas of Interest within and outside the Indirect APE	60
Figure 10. Portland/Gregory Cemetery (SP-C014)	66

LIST OF TABLES

Table 1. Previously Recorded Sites within and adjacent to the Project site	42
Table 2. Properties of Physical Attributes of Cultural Resources (Following Glassow 1977)	50
Table 3. Aspects, or Qualities, of Integrity for Historic Properties (Following Little et al. 2000)	51
Table 4. Effects of the Project on Portland/Gregory Cemetery (SP-C014) <i>Error! Bookmark not defined.</i>	

ACRONYMS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
CAA	Clean Air Act
CLEC	Closed Loop Emissions Control
CO	Carbon Monoxide
CRA	Cultural Resources Assessment
DRI	Direct-Reduced Iron
EPA	Environmental Protection Agency
ERM	Environmental Resources Management, Inc.
GHG	Greenhouse Gases
HBI	Hot-Briquetted Iron
HRSG	Heat Recovery Steam Generator
NHPA	National Historic Preservation Act
NNSR	Nonattainment New Source Review
NOX	Nitrogen Oxides
NRHP	National Register of Historic Places
NSR	New Source Review
PBR	Permits-by-Rule
PM	Particulate Matter
POCCA	Port of Corpus Christi Authority
PSD	Prevention of Significant Deterioration
ROW	Right-of-Way
SCR	Selective Catalytic Reduction
SHPO	State Historic Preservation Officer
SIL	Significant Impact Level
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
USACE	U.S. Army Corps of Engineers
voestalpine	voestalpine Texas, LLC
VOC	Volatile Organic Compounds

1.0

INTRODUCTION

voestalpine Texas, LLC (voestalpine) intends to construct a hot-briquetted iron (HBI) production facility (“the Project”) located south of the City of Gregory in San Patricio County, Texas (Figure 1).

Beginning on January 2, 2011, the U.S. Environmental Protection Agency (the EPA) began permitting greenhouse gases (GHGs) through the Prevention of Significant Deterioration (PSD) program of the Clean Air Act (the CAA). Most states directly issue GHG PSD permits, but the EPA currently retains authority to issue GHG permits in Texas. Therefore, the requirements of Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, become part of the PSD permitting process.

voestalpine is seeking a GHG permit under the PSD program. The EPA has requested that voestalpine undertake cultural resources investigations to identify historic properties and to conduct preliminary coordination with expected stakeholders to the Section 106 process. ERM’s Cultural Resources Assessment (CRA) provides the results of efforts to identify previously unrecorded historic properties in the vicinity of the Project and an assessment of effects of the proposed action within the presumptive Area of Potential Effects (APE).

1.1

SECTION 106 UNDERTAKING

Section 106 of the NHPA requires federal agencies to take into consideration the effects of their undertakings (including licensing and permitting actions) on historic properties (cultural resources listed on or eligible for listing on the NRHP). Section 106 of the NHPA and the implementing regulations of the Advisory Council on Historic Preservation (ACHP) (36 C.F.R. § 800) lay out procedures that ensure historic properties are considered in federal planning and/or permitting processes. Additionally, Section 106 of the NHPA requires federal agencies with the authority to license a project to take into account the effects of the project on historic properties and to afford the ACHP a reasonable opportunity to comment.

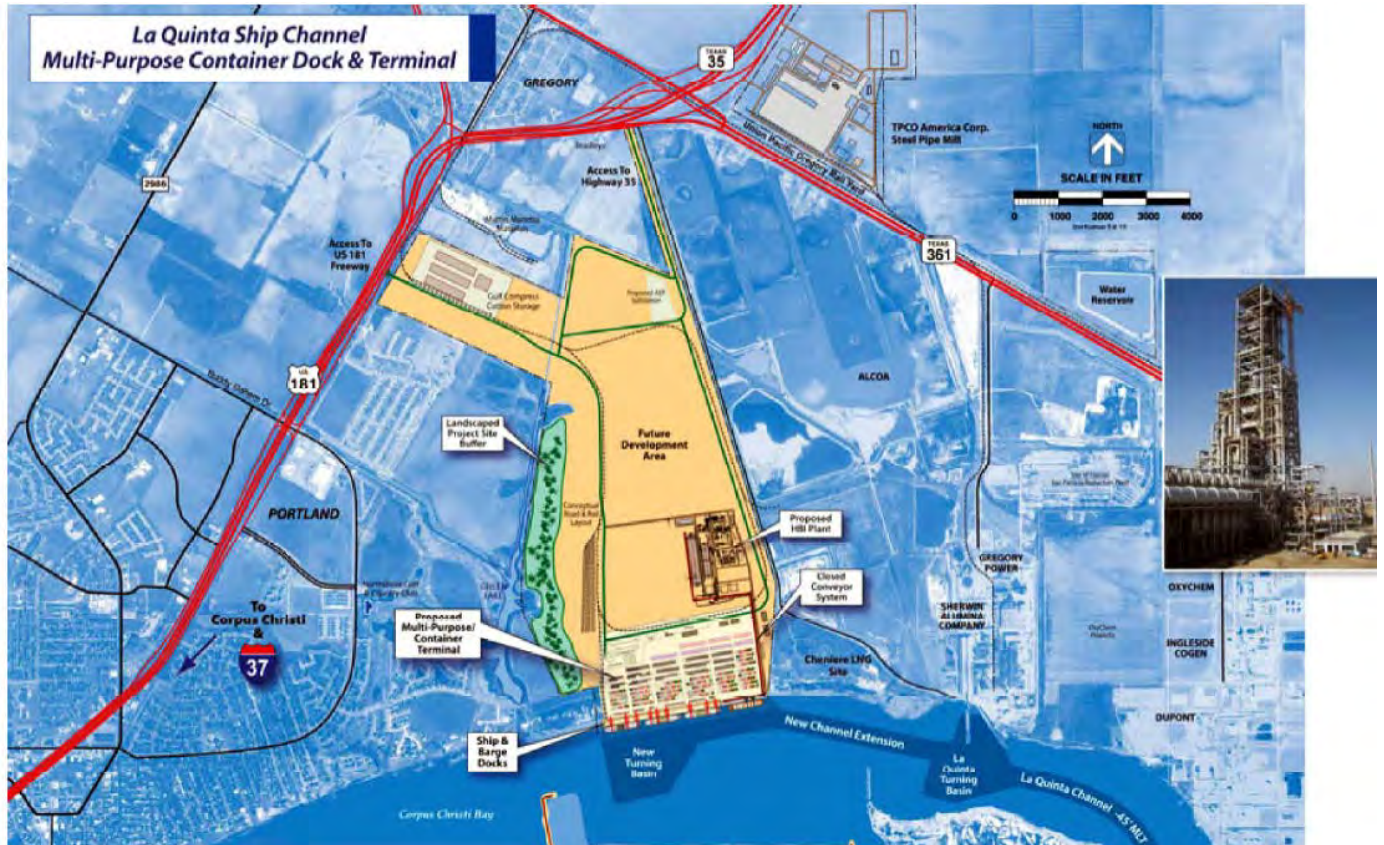
1.2

DESCRIPTION OF THE DIRECT APE

Throughout this document, two (2) different “study” or Action Areas are referenced: the Project site, which is the direct Area of Potential Effect (APE), and the Project area, which is the indirect APE consisting of the surrounding landscape and its viewshed within a 1.5 mile radius of the Project site’s perimeter measured from the Project site’s boundaries.

The Project site is defined by the physical boundary of the 475-acre property on which the proposed facility would be located. Figure 1 shows the boundaries of the Project site and Figure 2 depicts the planned development for the site, which is on land currently owned and maintained by the Port of Corpus Christi Authority (POCCA). Because the land is owned by a local municipality and

FIGURE 2. POCCA's Planned Development



farther removed in distance but are still reasonably foreseeable” (40 C.F.R. 1508.8). According to the THC’s State Historic Preservation Officer (SHPO’s) Section 106 Review Process, the APE includes “all areas of construction, demolition, and ground disturbance (direct effects) and the broader surrounding area that might experience visual or other effects from the project (indirect effects)” (THC: The Section 106 Review Process 2013).

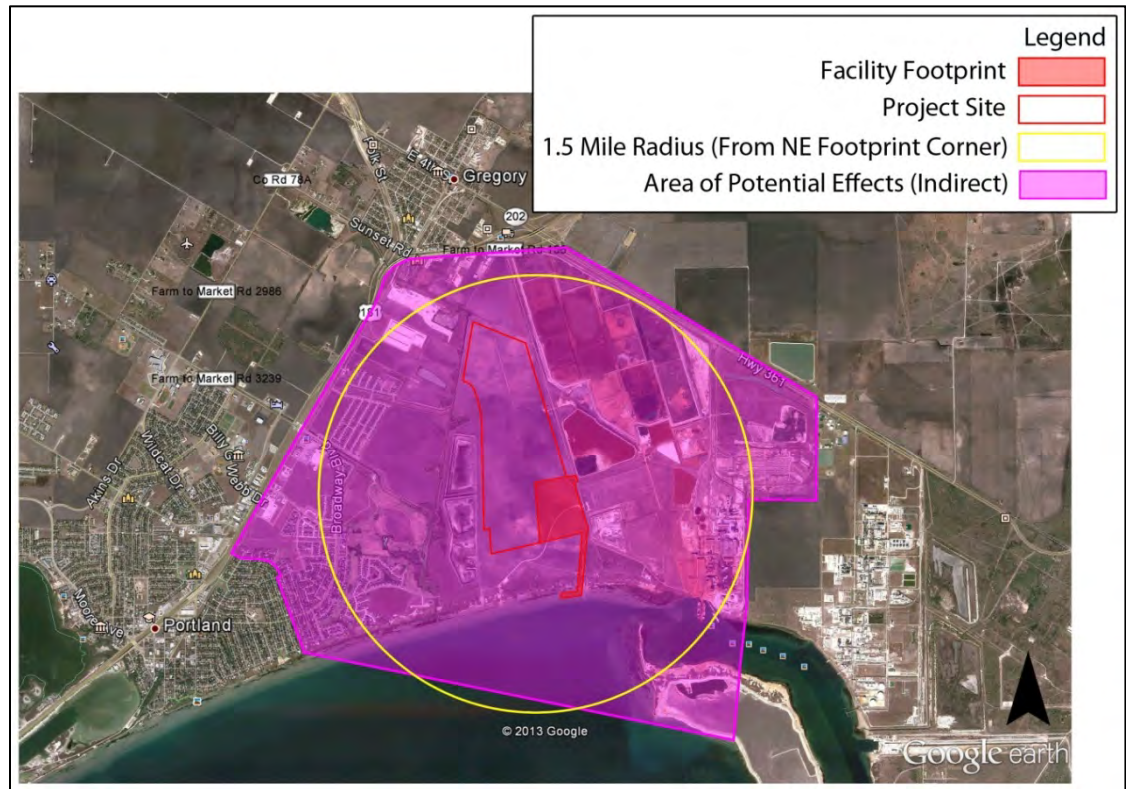
The APE not only includes the immediate Project site and its boundaries, which encompasses approximately 475 acres, but also cultural resources immediately adjacent to the Project site and within a 1.5 mile radius of the project’s viewshed. Given that the location of voestalpine’s HBI facility would be adjacent to a battery of industrial complexes and tailing ponds combined with a generally low-visibility viewshed, ERM in consultation with the THC in June 2013 used a 2.5 km (1.5 mile) radius for assessing the Project’s indirect visual effects for the APE (Figures 3 and 9; Appendix B: Project Survey Maps).

1.3 DESCRIPTION OF THE INDIRECT APE

In consultation with the THC in August and September 2012, ERM suggested a 1 km (0.6 mile) radius or Action Area, which would imply that the area for indirect effects (i.e., visual and auditory, ambient night lighting, etc.) would remain within the same radius. This recommendation was based on the nature and

sensitivity of the cultural resources identified during our initial desktop review and archival literature searches within and adjacent to the project's APE (Figure 3; Appendix B: Project Survey Maps). The APE will ultimately be determined by the EPA as the lead federal agency in consultation the THC and other consulting parties to Section 106 of the NHPA of 1966.

FIGURE 3. Proposed Indirect APE



Once in the field and after receipt of detailed project designs, ERM determined a reasonable indirect APE through windshield survey of the Project area that accounted for the atmospheric, audible, and visual effects of the Project, which is expected to have one structure that rises no higher than 520 feet (note: no visible plume is expected to emit from this facility). The physical plant is to be constructed in the south portion of the 475-acre Project site, closest to the 8-acre Access Corridor to the POCCA's Terminal. Linear facilities including a detention pond, substation area, water pipelines, and an electrical transmission line corridor are described further in *Section 1.9 Project site Description*.

ERM adjusted and enlarged the original 1 km (0.6 mile) radius and used a 2.5 km (1.5 mile) radius buffer from each corner of the Project site's boundaries as a point of departure in determining the indirect APE. This 1.5-mile reference area falls primarily within the triangle of land formed by Portland on the west; Highway 35 to Gregory on the north; Highway 361 to the Sherwin Alumina Plant on the east; and Corpus Christi Bay on the south. Within this area, ERM

weighed, in particular, the ultimate height of the proposed facility against the existing character of the Project area, including:

- the presence of industrial facilities extending east and southeast from the Project site along the Corpus Christi ship channel, between the mainland and La Quinta Island;
- the POCCA dredge spoil fields encompassing Sherwin Alumina's tailing ponds located between the Project site and Sherwin Alumina;
- the elevated Highway 35 bypass south of Gregory's traditional town center;
- the light industrial facilities between Highway 35 and the Project site; and
- the recent suburban residential development and a country club golf course between Portland and the Project site.

In consideration of the above factors, ERM recommends the indirect APE shown in Figure 3, beyond which the character or use of historic properties, should they be present, will not be adversely affected.

ERM's CRA is based on a review of the proposed Project, relevant data, archival/background research, and field investigations to evaluate the Project site and the surrounding area to determine what direct and indirect effects would occur on the cultural resources present within the Project site and its indirect APE.

Upon identification and documentation of all archeological resources and historic standing structures discovered within the Project site and within the proposed indirect APE, descriptive narratives are compiled to evaluate the properties' eligibility for inclusion in the NRHP. Should significant archeological resources and/or historic properties be located, ERM would make recommendations for management options such as avoidance and preservation or for further investigations to the EPA and the THC for their review and concurrence.

The aboveground survey portion of this CRA was primarily concerned with visual impacts to historic properties. ERM's Biological Assessment (BA), a counterpart to voestalpine's EPA's GHG permit application, includes a lengthy discussion on the auditory (indirect) effects as well as what efforts will be utilized to mitigate these proposed noise effects.

Following the Section 106 regulatory process and requirements, ERM would then provide recommendations for an Assessment of Effect (AOE) (i.e., *no effect*, *no adverse effect*, or *adverse effect*) upon those properties where Project impacts in the form of direct/indirect effects may occur. A proposed AOE Template is included

in Appendix A to better facilitate and streamline the process as well as to promote interagency consultations pending between the EPA and the THC's review and concurrences of ERM's recommendation regarding the cultural resources identified during the fieldwork. The proposed AOE template in Appendix A would be used if needed and requested by the EPA; however it is ERM's opinion that the current CRA provides sufficient details to support an AOE by the EPA.

1.4 AGENCY REGULATIONS

1.4.1 *The Section 106 Regulatory Framework*

After proposing an APE, which in this case was made based on field reconnaissance and reviewed with the THC, the general approach was to identify and collect information about the historic properties/cultural resources within the Project site; whether they are listed or eligible for listing on the NRHP; and then assess the potential for the undertaking to impact these properties/resources (36 C.F.R. § 800.4[a]-[d]).

Effects on cultural resources listed or eligible for listing on the NRHP are evaluated with regard to the Criteria of Adverse Effect, set forth in 36 C.F.R. § 800.5. Under these regulations, an adverse effect occurs "when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, setting, materials, workmanship, feeling, or association" (36 C.F.R. § 800.5[a][1]).

ERM's current CRA is a combination of a limited Phase II investigation of a portion of site 41SP35 within the project's direct APE and a survey of historic aboveground resources within the proposed indirect APE. The primary intent of the CRA was to:

- determine the NRHP eligibility of the portion of site 41SP35 within the Project site;
- to identify possible historic properties in the indirect APE;
- to evaluate the NRHP eligibility of any possible historic properties in the indirect APE; and
- to provide recommendations on NRHP eligibility to the EPA.

ERM's CRA is further based on a review of the proposed Project, relevant data, archival/background research, and field investigations to evaluate the Project site and the surrounding area to determine what direct and/or indirect effects would occur on the cultural resources present within the proposed Project site's indirect APE.

Since several historic aboveground resources have newly been identified within the indirect APE, ERM first chose to assess and evaluate their eligibility for

inclusion in the NRHP before determining what indirect effects might occur. Following the EPA and the THC's review and concurrence on ERM's recommendations of National Register eligibility for the historic properties examined, an AOE can then be made, which will be submitted as a separate document if needed and as requested by the EPA.

1.4.2

Section 106 Planning

In August and September, 2012, ERM archeologist met with the THC to discuss the proposed Project and the results of previous surveys within the Project site. During both meetings, the direct APE was defined as the 475-acre Project site with an emphasis on the southern Project area where previously recorded sites were located, while the indirect APE was originally defined as the 1 km (0.6 mile) radius of the Project's viewshed. As discussed previously, an expanded indirect APE was determined during field reconnaissance and discussed with the THC in June 2013.

In August 2012 and May 2013, ERM held informal discussions with the EPA Region 6 environmental staff Meanie Magee (Technical Lead), Tina Arnold (ESA Lead), and A.C. Dumauual (Cultural Lead) among other EPA staff in attendance to discuss voestalpine's GHG permit application, including the timeline for review and issuance; voestalpine's progress in collecting information on environmental and cultural resources in the Project area; and the outstanding information needs required by the EPA to process the GHG permit application.

During the general discussion with the EPA, the issues of the potential connectivity of the natural gas pipelines, water intake supply line and water discharge, overall height of the cooling and emission stacks, and electric transmission lines were raised. Because the EPA's determination on the matter would affect the approach to environmental and Section 106 compliance, voestalpine and ERM requested that the EPA make a decision on this matter prior to the completion of the formal cultural resources report. The EPA indicated that they were willing to do so with documentation from voestalpine supporting the independent utility and linear facilities of these components.

In both agencies' meetings, ERM initiated the cultural resources discussion with an overview of the investigations and coordination completed, including background research and aboveground survey, and the initial coordination meetings with the THC (discussed above). ERM acknowledged the presence of the western extent of Site 41SP35 in the direct APE of the Project site's 8-acre Access Corridor as well as the Portland/Gregory cemetery in the expected indirect APE.

ERM plans to address specific steps of the Section 106 process in continued meetings with the EPA. The EPA has indicated their expectations in previous ERM supported GHG permit applications that ERM has submitted to the EPA. The CRA report outlines the first three (3) steps of the Section 106 process (i.e.,

initiation, identification of historic properties, and the presentation of recommendations to support an AOE).

Thus, ERM has provided the results of an assessment of potential impacts and recommendations to support a determination of effects from the proposed Project on historic properties. The information provided in this CRA is presented for the utilization in agency consultations with state and federal agencies that will lead to a formal AOE.

Once the CRA is received, the EPA will then formally initiate the Section 106 process with letters to 21 of the 27 Indian Tribes recognized by the EPA as having cultural interests in south Texas (Appendix G). The EPA clarified in past GHG permit applications that they would consult with the Tribes consistent with government-to-government procedures, but that voestalpine should coordinate with other potential stakeholders in the process, including the THC, the POCCA, and San Patricio County officials, to obtain their preliminary feedback prior to formal initiation of the Section 106 process¹.

1.4.3

Section 106 Coordination

To date, ERM has coordinated on voestalpine's behalf with the THC, the POCCA, and the EPA. In identifying cultural stakeholders, ERM has referred to 36 C.F.R. § 800.2(c), the Section 106 implementing regulations, and has at this time identified no other party to engage other than the property owner, the POCCA (Figure 2). Coordination with these parties is summarized below.

Texas Historical Commission (THC)

An ERM archeologist participated in an in-person meeting with the THC at the THC offices in Austin (Appendix F: THC SHPO Consultations). The purpose of the meeting was to obtain the THC's informal preliminary perspective on the proposed project prior to the EPA's formal initiation of the Section 106 process.

In an August 2012 meeting, ERM presented the general project scheme, shared observations made during initial site visits and informed by background research, (which included preliminary thoughts on the APE and potential cultural resources within the direct and indirect APE), and discussed the approach and potential level of effort to complete the identification of cultural resources under the Section 106 process, including archeological and aboveground investigations. ERM then requested the THC's preliminary opinion on the level of effort previously initiated for cultural resources within the Project site, and initiated discussion of potential sensitivities and key issues for the Section 106 process moving forward, including the role of the EPA in Section 106 consultation for the project.

¹ Information provided here is from previous GHG permit application meetings with the EPA.

In both meetings, the THC indicated their interest in the identification of historic properties within the Project site's 8-acre Access Corridor. At the same time, the THC acknowledged the rest of the 475-acre Project site had been sufficiently investigated by previous cultural resources surveys. Based on this consultation, the archeological investigation was confined to the 8-acre Access Corridor that contained previously recorded Site 41SP35 (the western extent of La Quinta Mansion and Estate). The actual mansion's foundations are located approximately 300-m east of the Project site's boundaries on the Cheniere Corpus Christi Liquid Natural Gas (CCLNG) Pipeline (Import) Terminal facility and property (Cheniere Project). While the western portion of site 41SP35 falls within voestalpine's Project site, the site does extend outside voestalpine's Project site upon property owned by the POCCA. The current investigations only examined the portion of the western extent of site 41SP35 that fell within the 8-acre Access Corridor.

Site 41SP35 (La Quinta Mansion) was identified by Ricklis (1999) as a multi-component site containing a prehistoric shell midden and a historic component connected with a property referred to as "La Quinta." Following the survey, Ricklis (1999:27-8) stated that "*no significant archeological deposits remain within the survey area*" and "*the shellcrete structures at 41SP35... associated with the fishing resort of La Quinta... have no appreciable historical significance and are not eligible for placement in the National Register of Historic Places (NRHP).*" The THC concurred with Ricklis' (1999) recommendations on June 29, 1999.

Following THC's concurrence letter from June 29, 1999, two (2) proposed laydown area projects for the Cheniere Project have not required cultural resources surveys; these proposed laydown areas fall within the 1,084 acres owned by the POCCA. At least two (2) subsequent cultural resources surveys conducted by PBS&J (Turner 2004a, 2004b) and Tetra Tech (Borstel 2012) related to the Cheniere Project have been conducted along existing west-to-east running pipeline corridors that are located across the center of voestalpine's Project site (the POCCA's Tract 2). No cultural resources were identified during either survey.

During initial consultation, THC requested additional information on the Project, including the height of visible plumes and the cooling and emission towers, night lighting, utilities servicing the Project, digital renderings, and high-quality photographs of aboveground resources over 50 years of age. The THC staff expressed no specific concerns over the Project with the exception of previously recorded sites within and adjacent to the southern Project site. The THC did not express an opinion on the potential for adverse effect, but did indicate that they expected the EPA to actively participate in the Section 106 process.

In June 2013, ERM architectural historian Carrie Albee sent an email to Kim Barker and Sarah Birtchet at the THC providing a brief description of the proposed project, and requesting an opportunity to meet to discuss the preliminary findings of the aboveground survey and the approach moving forward. Ms. Barker declined to participate prior to formal Federal agency

Section 106 initiation. Ms. Birtchet participated in an informal telephone call with Ms. Albee during which Ms. Albee shared a preliminary APE and the aboveground properties of interest identified during the survey. Regarding the APE, Ms. Birtchet referenced the Federal Communications Commission (FCC) Programmatic Agreement (PA) stipulated APE as a possible point of departure [e.g., the 2.5 km (1.5 mile) radius buffer to measure visual impacts and/or indirect effects]. Regarding identification of historic properties in the APE, Ms. Birtchet referenced ACHP Section 106 guidance to Federal agencies. She also indicated that in the case of irrigation systems in southeast Texas, the THC generally considered them eligible in the absence of alternate information.

The THC mentioned several other resources that should be considered in the identification and evaluation of historic aboveground resources during the Section 106 process in addition to irrigation systems and these included canals; railroads; and levees. While acknowledging that irrigation systems and railroads may be historic properties, the THC did not express concern for the effects of the Project on these resources provided no direct effect was expected. The THC also recommended that ERM contact the local historical society to determine if there is any known historical significance associated with extant resources in the indirect APE.

1.5

BACKGROUND RESEARCH AND FIELDWORK

The background research, archeological testing of Site 41SP35, and aboveground reconnaissance survey were completed between April 1 and April 5, 2013. Background research included a site review of the THC's Archeological Sites Atlas (TASA) online database, review of available historic maps, and a literature review of scholarly research as well as regulatory-driven cultural resources compliance reports.

In addition to conducting on-site survey, ERM consulted via telephone the following local institutions on the presence of historic properties in the Project area: the Portland Public Library on Memorial Parkway; the Sinton Public Library on North Pirate Boulevard; the San Patricio County Historical Commission in Odem; and the Texas A&M University-Corpus Christi Campus' Mary and Jeff Bell Library Special Collections. No historic properties were identified in Portland, Gregory, or their vicinity.

The background research and discussions conducted with the THC staff focused on the possibility that archeological features and artifacts associated with the western extent of Site 41SP35 [i.e., the shellcrete walls identified by Ricklis' (1999) survey] would be located within the Project site. Discussions with the THC staff, background research, and fieldwork summarized in this report indicated that activities related to the La Quinta Mansion era may have occurred within the direct APE.

The review of the THC's TASA confirmed that archeological sites were recorded within and immediately adjacent to the direct APE, but no recorded historic

properties were within the direct or proposed indirect APE. USGS topographic quadrangle maps dating back as far as 1918 were reviewed for the presence of historic resources within the direct APE. A tenant farmers' complex (ca. 1950s) located along the eastern boundary of the Project site is no longer present. During the field investigation, no aboveground structural remains or landscape features were identified over a graded area that once housed this complex.

The efforts that have been outlined are in compliance with the *Secretary of the Interior's Standards and Guideline: Standards for Identification* (as well as the *Secretary's Professional Qualification Standards for Archeologists and Historians*) as prepared under the authority of Sections 101(f) (g), and (h), and Section 110 of the NHPA (48 *Federal Register* 44716: September 29, 1983) (Appendix H).

1.6 **PROJECT DESCRIPTION OVERVIEW**

The Project consists of the development, construction and operation of a production facility that will utilize a natural gas-based process to produce HBI, a superior form of direct-reduced iron (DRI), from iron ore and iron oxide pellets.

1.7 **PROJECT SCHEDULE**

The first construction phase of the Project is scheduled to start in or around April 2014. First production is expected for the last quarter of 2015. A second phase of construction will be considered depending on market conditions. voestalpine plans to acquire enough land for this initial phase of construction as well as for any potentially foreseen future expansion.

1.8 **PROJECT SITE LOCATION**

The proposed facility is to be located on an approximately 475-acre parcel of land that is a portion of 1,114 acres of land currently owned by the POCCA. The Project site area is located south of the City of Gregory, TX, east of the City of Portland, TX, and west of the City of Ingleside, TX. Texas State Highway (SH) 361 traverses northwest to southeast east of the site, SH 35 traverses west to east just north of the site, and U.S. Highway 181 traverses northeast to southwest west of the site. The immediate surrounding area is a mixture of industrial and residential development (Figure 1).

The POCCA property is bounded on the east by a drainage easement paralleling La Quinta Road known as La Quinta Ditch, and on the south by Corpus Christi Bay. The Project site consists of approximately 475-acres interior to the POCCA boundary, and 5 acres associated with the dock along the southern boundary of the POCCA property. The northern boundary of the Project site is located parallel to and approximately 140 feet south of the northern POCCA boundary. The western boundary of the Project site is located parallel to and approximately 250 feet east of the western POCCA boundary along Green Lake Ditch. The majority of the southern boundary of the Project is located approximately 2,140 feet north of the proposed POCCA bulkhead; however, a portion of the Project site extends

south to an approximately 1,000-foot wide dock along the southern POCCA boundary at the north shore of Corpus Christi Bay.

An adjacent property north of the POCCA site consists of a lightly developed commercial and industrial area and SH 35. Immediately north of the highway are residences and commercial buildings associated with the City of Gregory. Directly east of the site are disturbed areas and disposal/tailing ponds associated with the Sherwin Alumina Company. Corpus Christi Bay is located immediately south of the site. Immediately west of the site is a dredged material placement area. West of the dredge material placement area is the San Patricio County Drainage District (SPCDD) Green Lake Ditch, which is also located directly east of the Northshore Golf and Country Club and residences associated with the City of Portland. Several pipelines traverse west-to-east across the Project site, and a communications tower, circa 1970s, is located in the southeastern portion of the site.

1.9 *PROJECT SITE DESCRIPTION*

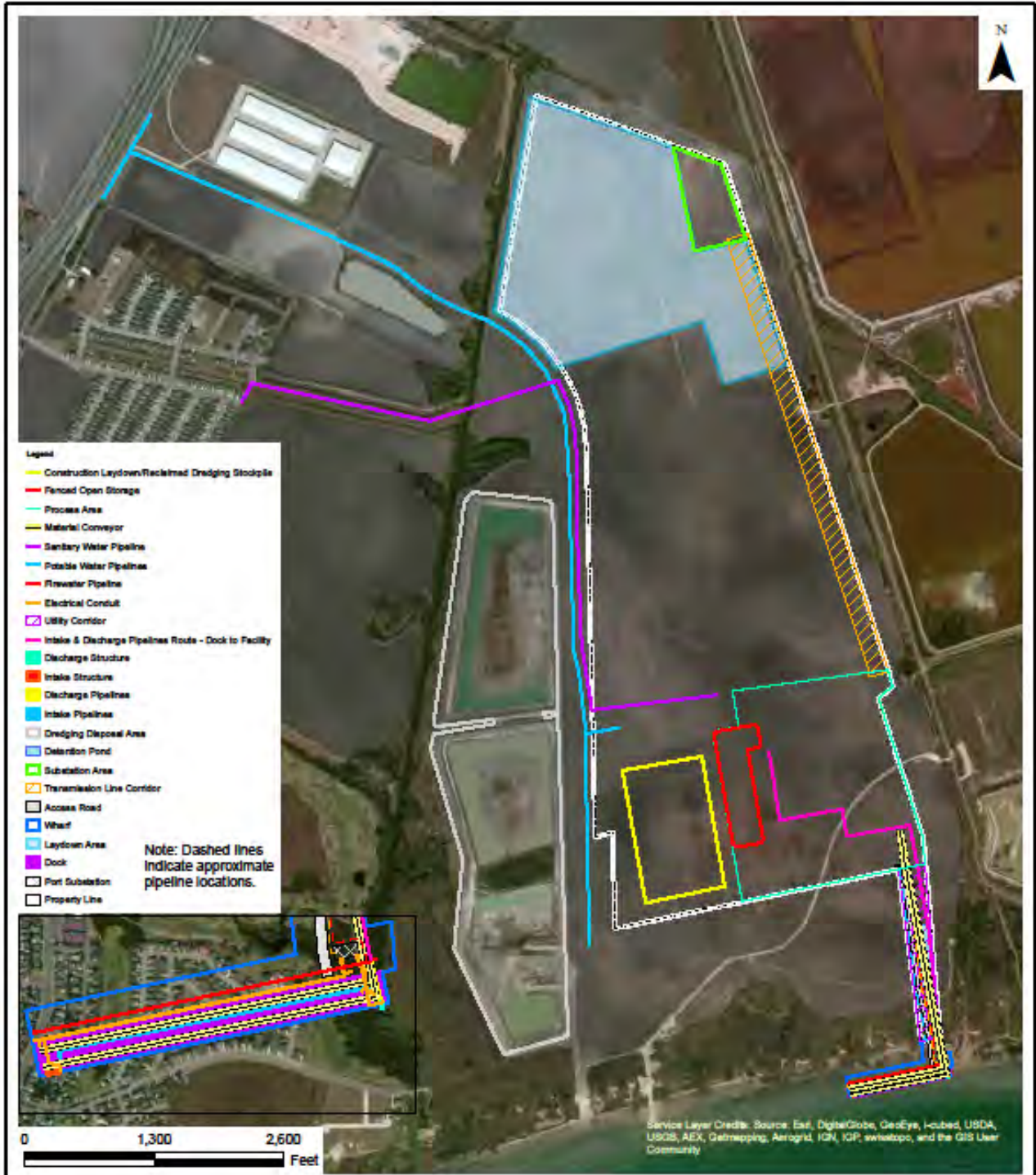
The selected site is a greenfield location owned by the POCCA that is part of a long-term federally-funded development of the proposed La Quinta Trade Gateway Terminal (Terminal). The Terminal is currently being considered on the southern portion of the Project site, and will require extension of the existing 45 foot deep La Quinta Ship Channel; construction of a 1,000 foot long ship dock with cranes; a 60 acre container storage yard; an access road and bridge; and over 400 acres for other facilities, including the proposed voestalpine Project (Figure 2). Other linear facilities proposed by voestalpine and related to their Project include the following components.

Pursuant to lease agreements, voestalpine will construct an approximately 1,020-foot wharf with a single shipberthing area, seawater intake and treated process water discharge structures, and a utility corridor containing an access road, pipelines, electrical conduit, and a material conveyor for the HBI facility as the initial phase of the terminal project. The HBI facility will be located in the southeastern portion of the property, north of the area for the container terminal and wharf. The POCCA will retain ownership of the wharf and land utilized by the Project. Additional funds for the terminal development will be needed before POCCA's plans for the remaining components of the terminal can advance beyond preliminary engineering. voestalpine is collaborating with POCCA to utilize existing planning documents and permits where possible and plans to initiate construction in April 2014.

Additional, proposed linear facilities and components are illustrated in Figure 4 and include the following:

- Substation;
- Detention Ponds;
- Transmission Lines/Utility Corridors;

FIGURE 4. Proposed Project Layout and Linear Facilities



Environmental Resources Management

**FIGURE 4
PROJECT LAYOUT
La Quinta Project
voestalpine
Portland, Texas**



DESIGN: T Wycoff	DRAWN: S King	CHKD.: N LastName
DATE: 11/1/2013	SCALE: AS SHOWN	REVISION: 0
FILE: K:\GIS\voestalpine\LA_QUINTA\RD\USACE_JWP\Project_layout.mxd		

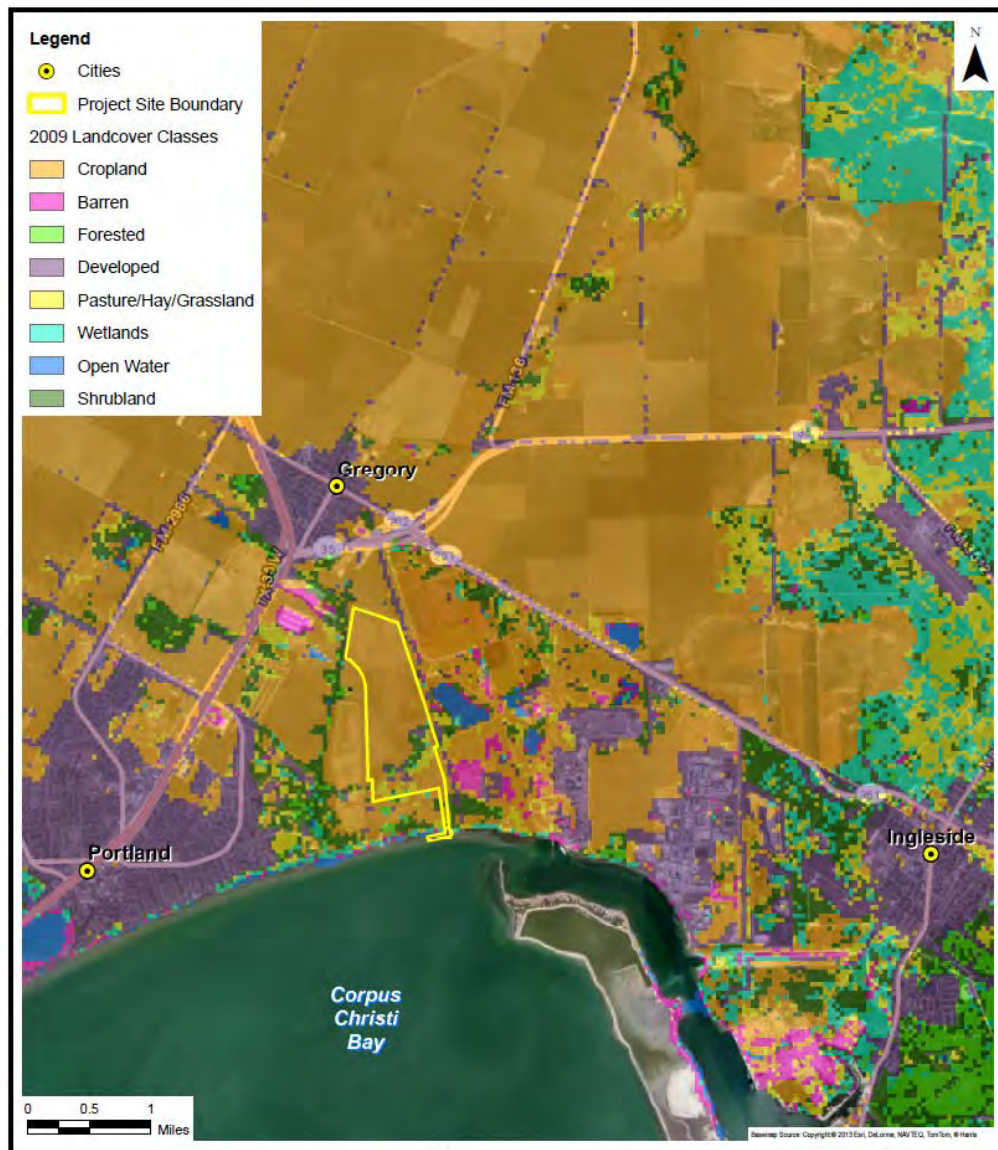
US EPA ARCHIVE DOCUMENT

- Sanitary Water, Potable Water, and Wastewater Lines; and
- Rerouting of existing natural gas pipelines.

Extension of the La Quinta Ship Channel, a spur of the Corpus Christi Ship Channel, to the Project site is currently underway under a separate Section 404 permit issued by the U.S. Army Corps of Engineers (USACE) – Galveston District to the POCCA, and this work should be completed in 2014.

The northern and central Project site's land cover is comprised primarily of cultivated cropland (Figure 5). The extreme southern section fronting Corpus Christi Bay is composed of the shoreline and eroded bluffs. According to the latest land cover data from the U.S. Department of Agriculture National Agriculture Statistics Service (USDA NASS) the site contains areas of cotton, sorghum, shrubland, deciduous forest, herbaceous grassland, and herbaceous and woody wetlands. According to the USDA-National Resource Conservation Service (NRCS) Web Soil Survey, soils on-site include clay, clay loam, sandy clay loam, and fine sandy loam soils. Soil boring logs taken by Dames and Moore (1996) indicate that surficial soils are generally gray silty clay between 6 and 10 feet in depth, with underlying layers of brown sandy clay.

FIGURE 5. Land Cover Map



The environmental setting of the Project area is described in detail in Klinger (2004), Turner (2004a), and Borstel (2012). These sections are incorporated herein in their entirety by reference.

In brief, the Project area is situated in the Coastal Prairies section of the Gulf Coastal Plains physiographic province. This region is characterized by Quaternary age deposits (ca. 2.6 million years ago to present) of low elevation and relief, which are comprised of alluvial, fluvio-deltaic, aeolian, and shallow marine facies. From the POCCA's Terminal Area inland to Chiltipin Creek (17 miles northwest), the Project area is situated on the middle to late Pleistocene Beaumont formation.

For the most part, the Project area is located in the upland landscapes of the Beaumont and Lissie formations. Terrain is generally level to gently sloping, and soils are characteristically fine grained, comprised of fine sands, silts, and clays, with very slow to slow permeability. The Project area is bordered by two (2) drainage ditches and several field swales. These latter features may be artificially channelized remnants of the natural drainage pattern. One other terrain feature of note is the marine scarp that Corpus Christi Bay has notched into Beaumont formation sediments along the shoreline of the POCCA's Terminal Area. Here, waves have eroded a low bluff or scarp in these sediments at the rear of the beach, some 10 to 25 feet high, depending on the upland topography of the adjoining Beaumont formation plain.

The terrestrial portion of the Project area is situated in the Southern Subhumid Gulf Coastal Prairies ecoregion. Prior to settlement, the natural vegetation of this region was predominantly prairie grassland, dominated by little bluestem, yellow Indiangrass, and tall dropseed, with scattered live oak and honey mesquite. Modern land use of the Project area is agricultural in the Terminal Area and surrounded by industrial complexes to the east. The agrarian environment supports agricultural fields that were in 2012 primarily planted in cotton and milo (sorghum).

2.1

GEOLOGY

San Patricio County is part of the West Gulf Coast Physiographic province located in the Gulf Coastal Plain, except for the western-most portion of the county, which is in the South Texas Plains. The West Gulf Coastal Plain is a relatively young area characterized by geologic formations that dip toward the Gulf of Mexico. The Project area is characterized as a nearly flat physiographic unit that rises gradually from the coast to the interior with progressively older formations exposed at the surface as one moves inland.

Regional Pleistocene formations, such as the Lissie and Beaumont, are the result of these processes. Soils and landforms in San Patricio County represent these respective formations. The Lissie formation dates to the middle Pleistocene and is represented by deposits consisting of clay, silt, and sand, with minimal representation of fine gravels. The Beaumont formation dates to the late

Pleistocene and is defined as the youngest continuous terrace fringing the gulf coast (Abbott 2001; Van Siclen 1991).

During the Wisconsin glacial maximum, sea level was approximately 100 meters (m) below its modern position, and coastal rivers cut down into the older Pleistocene deposits, creating a series of valleys along the coast. The Gulf shoreline was about 200 km east-southeast of the modern coastline. As sea levels rose after circa 16,000 B.C., these coastal river valleys were inundated and created long embayments (Ricklis 1994).

Ricklis (1993) argues that the Holocene sea level rise was episodic, and he demonstrates that gaps in radiocarbon dates from coastal archeological sites in the Corpus Christi area correspond to periods of apparent sea level rise. Ricklis (1993) suggests that the rich marine ecosystems of the bays and lagoons broke down during these periods of rapid sea level rise (4,000 to 5,000 B.C. and 1,000 to 2,000 B.C.), leading to decreased utilization by coastal groups.

Ricklis and Weinstein (2005) and Widmer (2005) both agree that an essentially modern sea level was reached circa 1,100 B.C., which allowed the development of stable barrier islands as well as productive bays, estuaries, and inundated shallows along the coast. The development of these resource-rich areas and their increased exploitation by aboriginal groups are mirrored, in part, by the advance of modern climactic conditions, as discussed in Section 3.0 *Cultural Setting*.

Intensive prehistoric occupations of the shoreline occurred during times of relatively stable sea levels during the Holocene, ca. before 5,000 B.C., between 3,900 and 2,200 B.C., and after 1,100 B.C. Conversely during period of fluctuating sea levels, which is suggested on the basis of geologic evidence, prehistoric occupations appear to have been significantly reduced. According to Abbott (2001), the best potential for site preservation occurs as a result of Holocene aggradations that buried dry elevated shoreline terraces with alluvial or eolian deposits.

According to Ricklis (2012), the sand, silt and clay sediments that comprise the geologic foundation of the Texas Gulf Coast indicate that there is a general absence of stone deposits. Coastal cherts and other workable stone materials could only have been procured at places where geophysical processes deposited gravels formed from rock clasts that originating at various inland locations. Along the Middle Texas Coast, buried gravelly point bars were deposited several million years ago along larger streams such as the Nueces and Guadalupe Rivers, mainly during the Pliocene Epoch (Solis 1981).

Alternately buried and later exposed by alluvial erosion, these gravel beds have been identified as specific sources of chert cobbles used by prehistoric Native American tool producers (Ricklis and Cox 1993; Collins 2002) on the basis of inclusive artifacts such as large reduction, bifacial, and thinning chert flakes, tested cobbles/hammerstones, and expedient cores. Further supporting the

inference that such locations were quarry sites for tool production are sets of lithic data showing linear, distance-dependent changes in key attributes according to how far a given archeological site is situated from the identified lithic source location (Ricklis and Cox 1993). In our present geographic area of interest, the identified source location is Site 41SP258, located in the bed of the Nueces River some 55 km inland near present-day San Patricio, Texas (Ricklis and Cox 1993).

2.2 SOILS

The following discussion of these associations and the map units contained within them are largely derived from Guckian and Garcia (1979), and the USDA-NRCS (2012, 2009). The Project site contained the following soil association: Vitoria-Raymond-Orelia.

Victoria-Raymond-Orelia generally occurs on nearly level to gently sloping landforms. They are defined as very slowly permeable, nonsaline through strongly saline, and clayey and loamy soils. The 3 series comprising this association are defined as follows:

Victoria soils have a surface layer of dark gray clay with a few calcium carbonate concretions (approximately 97 centimeters [38 inches] thick). This overlays light gray clay with vertical dark gray streaking and few pockets of gypsum crystals to a depth of approximately 147 centimeters (58 inches) below surface. Underlying these two (2) soils is light gray clay with few gray streaks and a few pockets and seams of gypsum and other salts to a depth of 183 centimeters (72 inches).

Raymond soils have a surface layer of dark gray overlaying very dark gray clay extending approximately 36 centimeters (14 inches). Below this, from 36 to 97 centimeters (14 to 25 inches), is gray clay containing calcium carbonate concretions. Soils from 64 to 97 centimeters (25 to 38 inches) are light gray clay and contain concretions and soft bodies of calcium carbonate. Underlying soils to a depth of approximately 152 centimeters (60 inches) are light gray clay with about 5% concretions and soft bodies of calcium carbonate.

Orelia soils have a surface layer of gray fine sandy loam extending approximately 13 centimeters (5 inches) below surface. Underlying this layer to a depth of approximately 81 centimeters (32 inches) is dark gray sandy clay loam over light gray sandy clay loam with calcium carbonate concretions and soft bodies. Underlying soils extending to an approximate depth of 152 centimeters (60 inches) consist of light gray sandy clay loam with brownish mottles and has about 5% calcium carbonate.

2.3 FLORA

A review of the USGS topographic quadrangle maps and aerial photographs of the area indicate that the northern portion of the Project area has been utilized as cultivated cropland since at least 1918. Disturbances potentially corresponding

to oil exploration activities are visible in a 1960 aerial photograph. The south-central portion of the Project site appears to have historically been native grassland, but has since experienced use as cultivated cropland, oil exploration, and undeveloped land. The southern portion of the site contains smooth cordgrass marsh, high marsh, and brackish supratidal wetlands associated with the northern shore of Corpus Christi Bay.

During field observations performed in April 2013, the site was observed to contain areas of cultivated cropland, grassland with scattered shrubs, riparian forest, herbaceous and woody wetlands, and coastal marsh. The Project site is bordered by two (2) major drainages including La Quinta Ditch on the east boundary, and the Green Lake Ditch at the northwest portion of the site. An additional manmade drainage originates at the southernmost spoil pond in the southwest boundary of the site, and extends south to Corpus Christi Bay. The following vegetative zones were observed during the field investigation:

Cultivated Cropland Habitat - The majority of the site consists of the cultivated cropland habitat. This habitat was observed as a recently-harvested sorghum field characterized by an open area of loose clay loam soils tilled into rows.

Grassland and Scattered Shrubs - This habitat was observed in the southern portion of the subject site.

Riparian Forest - This habitat was observed fringing portions of the La Quinta Ditch and Green Lake Ditch.

Herbaceous and Woody Wetlands - These wetland habitats were observed associated with La Quinta Ditch and Green Lake Ditch, as well as an isolated pond. The wetlands observed associated with Green Lake Ditch corresponded with the jurisdictional wetlands described in the POCCA's existing USACE permit.

Coastal Marsh Habitat - The coastal marsh habitat was observed along the southern boundary of the Project site and corresponds with the jurisdictional wetlands associated with the shore of Corpus Christi Bay identified in the POCCA's existing USACE permit.

2.4

FAUNA

Historically in San Patricio County and prior to the emergence of modernized industries, terrestrial fauna was abundant and varied (Blair 1950). White-tailed deer (*Odocoileus virginiana*) and pronghorn antelope (*Antilocapra americana*) were grassland grazer inhabiting the upland prairies. During Late Prehistoric and Early Historic times, herds of buffalo (*Bison bison*) were hunted by, and economically important to, indigenous Native American groups of the Gulf Coastal Plain, and beyond.

Varieties of turtle, snakes, and even alligators (*Alligator mississippiensis*) were found in brackish and freshwater riverine areas. Various mice, rats, and pocket gophers constituted the smaller mammal rodent class along with rabbits (both cottontail and jackrabbit). Carnivores still present into modern times include the bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), and opossum (*Didelphis marsupialis*) (Scott and Dukes 2002).

Avian fauna included a wide range of finches, gulls, shorebirds, sandhill cranes (*Grus Canadensis*) and whooping cranes (*Grus Americana*). The cranes, ducks, and geese, are species that winter in the Texas Gulf Coastal Plain and beyond, and then spend the warmer breeding season far to the north.

Important estuarine aquatic fauna include certain fish species that were consistently exploited by human populations of the area throughout the millennia of prehistory (Ricklis 1996, 2007; Scott and Dukes 2002). Of these species, black drum (*Pogonias cromis*) was most prominently exploited, followed by red drum or redfish (*Sciaenops ocellata*), speckled sea trout (*Cynoscion nebulosis*), Atlantic croaker (*Micropogon undulatus*), and marine catfishes (*Aureus felis* and *Bagre Marinus*). Also represented in relatively minor amounts in archeological contexts are sheepshead (*Archosargus probatocephalus*), southern flounder (*Neoachirosetta milfordi*), and gars (*Atrachosteus sp.*, *Lepisosteus sp.*). These various species can be identified in the archeological context on the basis of diagnostic bone elements.

Archeological research has also shown that the Nueces-Corpus Christi Bay estuary system produced both bivalves and gastropods shellfish. In the brackish waters of Nueces Bay, *Rangia cuneata* was abundant and harvested by prehistoric people in considerable quantities during the Late Archaic, and then to a lesser degree, in the subsequent Late Prehistoric period (Ricklis 2012). During the Middle Holocene (ca. 3000 B.C.) another species of Rangia clam, *Rangia flexuosa*, was collected in large quantities.

Archeological shell middens of this period along the shorelines of Corpus Christi to Nueces Bay are dominated by the shells of this brackish-water clam (Ricklis 1996). The common oyster (*Crassostrea virginica*) was collected from both Nueces and Corpus Christi Bays during all archeologically identified cultural periods, beginning by ca. 4,000 B.C. Also present and exploited from shoreline sites were the bivalve species bay scallop (*Argopectin irradians*), southern Quahog (*Mercenaria campechensis*) and sunray venus (*Macrocallista nimbosa*). In more seaward locations and lagoon areas, the lightning whelk (*Busycon sp.*), the banded tulip (*Fasciolaria lillium*), shark eye (*Polinices duplicatus*) and the Florida horse conch (*Pleuroploca gigantea*) have been identified from the archeological record (Andrews 1977).

CULTURAL SETTING

The archeology and history of the Project area is discussed in detail in Hughey (2004), Klinger (2004), Perkins and Latham (2004), Turner (2004a), and Borstel (2012). These cultural overviews have largely remained consistent for the last decade.

The southeast Texas region is divided into inland and coastal margin subregions, which have archeologically distinctive subsistence/settlement patterns and artifact typologies (i.e., lithics, ceramic sequencing, faunal assemblages, etc.). Archeological and historic evidence suggests that some groups exploited inland resources year round, while other groups spent seasonal parts of the year both inland and on the coast. Prehistoric coastal archeological sites identified in San Patricio County tend to consist of short-term occupation sites situated on bluffs near bays, estuary streams, or river margins. Sites generally consist of temporally non-diagnostic scatters, thin subsurface deposits, or the presence of multiple cultural components within a mixed stratigraphic context. Historic sites in San Patricio County typically consist of farms or homesteads and cemeteries dating from the late 19th to mid-20th centuries. The following sections are overviews of the general cultural history of the region where the Project site is located.

CULTURAL PERIODS

Archeologists and historians divide the 13 millennia of human occupation of the central Gulf Coast of Texas into four (4) major periods, which reflect major shifts in technology, style of subsistence, and social complexity, among other traits:

- Paleoindian (ca. 11,000 to 7000 B.C.)
- Archaic (ca. 7000 B.C. to A.D. 1000)
- Late Prehistoric (ca. 1000 to A.D. 1700)
- Historic (ca. A.D. 1700 to present).

In general, these include the Paleoindian, Archaic (with Early, Middle, and Late subperiods), Late Prehistoric, and Historic American Indian. The Paleoindian stage of south Texas has been dated between 11,000 and 7,000 B.C. The Archaic period is looked upon as having started around 7,000 B.C. and ending sometime around A. D. 800 (Prewitt 1981, 1985; Story et al. 1990; Black and McGraw 1985). The Late Prehistoric began at the end of the Late Archaic stage sometime around A. D. 800. After the Late Prehistoric, the Historic American Indian stage began around A.D. 1600 with the exposure of the indigenous American Indians to European travelers. The chronologies developed by researchers are based primarily on changes in projectile point technologies within the region and the introduction of new technologies (i.e., ceramics). It is generally recognized that a broad-based hunting and gathering lifestyle was utilized throughout all time periods.

3.1.1

Paleoindian Period

Evidence is sparse for Paleoindian habitation. Much of what is known about the period in the region comes from a compilation of materials gathered from around the state of Texas and across North America. At the close of the Pleistocene, highly nomadic populations presumably continued with a hunting tradition brought with them from the Old World. Within a few millennia, these populations had penetrated into South America (Culberson 1993; Newcomb 1961). The Paleoindian people traveled in small bands (Culberson 1993) and were mega-fauna hunter-gathers with the bulk of their meat protein derived from mammoths, mastodons, giant bison, and giant sloths.

In the Texas Gulf Coastal Plains, it is highly likely that these small bands migrated from the plains and prairies to the coastal river bottoms in order to obtain new resources (McGraw and Hindes 1987; Campbell 1988). These groups carried with them an easily recognizable stone tool material culture, though admittedly, little is known about their wooden or bone tools or their clothing types. Diagnostic lithic artifacts such as Clovis, Angostura, Scottsbluff, Meserve, Plainview, and Golondrina point types (Aten 1983a) demonstrate the nature of the hunting style. These large points are designed to be attached to a spear. No evidence of bow and arrow hunting has been found associated with this period (Culberson 1993; Newcomb 1961). Isolated artifacts and sites from this period would be either buried by alluvium or found in remote, undisturbed upland settings.

3.1.2

Archaic Period

The Transitional Archaic Period begins about 7,000 B.C. and ends around 6,200 B.C. (Aten 1983a; Story et al. 1990). This stage is also poorly represented in the archeological work in the region, but isolated finds of Early-Side Notched and Early Expanding Stemmed dart points are attributed to this time period. Plant foods and small game undoubtedly supplanted the large game diet, and these secondary resources may have played a more important role in the social structure and adaptive subsistence strategies of these nomadic hunters (Black and McGraw 1985; Patterson 1995).

After the Pleistocene, the Gulf of Mexico started a physiographic transgression onto the Texas coast creating estuaries along the shoreline, which gave the Archaic-period populations of the Texas coast a strong reliance on marine resources (Jurgens 1989). This shift in food supply is seen as the pivotal transition between the Paleo and Archaic periods (Culberson 1993; Biesmaat et al. 1985; Newcomb 1961). Within the boundaries of the south Texas coast, Corbin (1974) has termed the Archaic period as the Aransas complex. Most of the material culture recovered from Archaic sites within the south Texas region consists mainly of worked shell artifacts such as Conch *columella* gouges, adzes,

hammers, and awls. There are three (3) progressive stages recognizable during the Archaic period: the Early, Middle, and Late subperiods.

The Archaic Period is believed to include a shift towards a plant-processing and extraction subsistence, yet the archeological record suggests that the diet is still broad-based and relies primarily on hunting. Plant-processing technology seen during the Archaic Period includes stone-lined hearths, baking pits, and milling/ grinding lithic tools (Story et al. 1990). Populations travel less distances and population densities begin to rise.

Early Archaic populations are presumed to constitute small, isolated bands of hunter-gatherers that remained in relatively restricted regions (Aten 1984). Many researchers (Prewitt 1981, 1985; Story et al. 1990; Black 1989) believe that the Early Archaic tradition is really a continuation of the Paleoindians. With the loss of the mega-fauna, Early Archaic populations adopted the hunting of smaller game such as bison and deer and increased their reliance on foraging (Culbertson 1993). The material record fits the transitional makeup of this period because there was a dramatic shift from the larger spear points of the Paleoindian period to a reliance on smaller dart type points. Diagnostic lithic artifacts for this period include Dalton, San Patrice, Angostura, Golondrina, Merserve, Scottsbluff, Wells, Hoxie, Gower, Uvalde, Martindale, Bell, Andice, Baird, and Taylor. These smaller stone points are more expediently crafted than their Paleo precursors, yet they were still designed for use on a spear shaft.

The Middle Archaic is believed to have started around 4,000 B.C. (Prewitt 1981, 1985; Story et al. 1990; Black 1989) and witnessed the largest growth in technology with the number of stone tools utilized. Specialized tools appeared for the milling of wild plant resources (Culbertson 1993) along with tools for food preparation and procurement. Many researchers feel that during the Middle Archaic, the reliance on natural flora increased dramatically (Story et al. 1990). Gravers, scrapers, axes and choppers, knives, drills and polished stone tools, also known as ground stone tools, began to appear in large quantities (Newcomb 1961). Diagnostics include Gary, Kent, Palmillas, Nolan, Travis, Belvedere, Pedernales, Marshall, Williams, and Lange, and they dominate the spectrum of dart points from the Middle Archaic period (Turner and Hester 1993). The advent of the spear-throwing device, the atlatl, also resides within this period (Culbertson 1993).

The earliest documented occupation at the more seaward location of Ingleside Cove, on the northeast shoreline of Corpus Christi Bay, dates to the Middle Archaic (Ricklis 2012). At Site 41SP120, excavations revealed two chert flakes, three small nodules of asphaltum, 35 small lumps of fired clay (not to be confused with ceramics), and a sample of southern quahog shell (*Mercenaria campechensis*), which was radiocarbon dated to 4,530-4,350 B.P., calibrated (or 4,350 BP). Although this site and the adjoining Site 41SP43 produced evidence for intensive Late Archaic to Late Prehistoric occupations, prehistoric populations clearly had begun to use the location by Middle Archaic times.

Middle Archaic occupation of the Nueces-Corpus Christi Bay estuary involved a significant use of the more inland bay shorelines around the head of Nueces Bay, but with some isolated settlements also targeting the Corpus Christi Bay shoreline by ca. 4,500 years ago. Few recorded sites have produced significant quantities of artifacts, including dart points, known to be culturally temporal to this general period across much of Texas (Ricklis 2012). Fish otoliths, while not nearly as abundant as on later sites, are frequently present and indicate that fishing was becoming a significant part of the subsistence economy in addition to shellfish gathering.

The Late Archaic period is thought to have begun around 2,000 B.C. (Prewitt 1981, 1985; Story et al. 1990; Black 1989), which was marked by a dramatic increase in the population densities of Native American groups. Human habitations in regions rich in diverse flora and fauna intensified, as did the variety of materials and artifacts deposited (Culberson 1993; Aten 1984a). Ricklis (2012) has observed that there was a notable gap in the archeological record from the radiocarbon data of prehistoric coastal sites between 2,000 and 1,000 B.C., which suggests a marked break in shoreline occupation that lasted roughly one millennium. Perhaps the fish and shellfish that attracted populations to the shoreline were either no longer available, or the marine resources had suffered a decline in abundances that caused the bay shores to be insufficient to support sustainable human populations. Geological evidence also suggests that by 1,000 B.C., the sea level had stabilized at approximately its present position (i.e., Brown et al. 1976; Paine 1991; Thomas and Anderson 1993).

Late Archaic populations began relying heavily on foraging tubers, berries, and nuts in addition to hunting small game such as birds, deer, rabbits, and raccoons to name a few as well as fish and shellfish. Shoreline sites of this period are markedly larger with thicker shell-midden deposits and higher artifact densities than any known sites of earlier periods (Ricklis 2012).

Shell-middens is an activity area of past human occupation that may consist of (and not limited to) animal and fish bones, botanical materials, shells, Native American ceramic pottery sherds, stone tools and lithics (especially debitage or chipped stone flakes), and other artifacts and ecofacts associated with past human occupations ranging from the Early Archaic to Protohistoric periods (roughly 8,000 BC to A.D. 1800).

A shell midden typically represents a procurement area where shell fish (oysters, mussels, whelk, etc.) are processed to extract food. In several documented examples from prehistoric sites throughout the Gulf Coast to the Mid-Atlantic regions, prehistoric human burials have been found within shell middens.

The densities of fish bones in shell-middens of the Late Archaic indicate a general, long-term population increase with a reliance on fishing resources over several millennia. As fishing attained major economic importance with the emergence of the essentially modern estuarine environment after 1,000 B.C., its

importance continued to increase, reaching an apogee of significance during the Late Prehistoric Rockport Phase, which began ca. A.D. 1000 (Ricklis 2012).

During this period, social groups became more complex than earlier periods. This social phenomenon is what Culberson (1993) has termed a “Lapidary Industry” in which stone artifacts were made from exotic materials (jasper, hematite, quartz, shale, slate, etc.) acquired from raw material sources at great geographical distances. These materials were fashioned into an increasingly complex array of household goods such as celts, plummets, banner stones, mortars and pestles, and pendants. Also during this period there is an increase in the occurrence of sandstone bowls (Culberson 1993). Diagnostic lithic tools of this subperiod are difficult to distinguish from those of the Middle Archaic subperiod. Points such as Marcos, Montell, San Gabriel, Mahomet, Fairland, and Castroville also appear at times.

3.1.3

Late Archaic to Late Prehistoric

The transition from the Late Archaic stage to the later prehistoric periods in the Mid-Atlantic, Southeastern, and/or Southwestern regions is typically a distinction from earlier Archaic cultural subperiods and generally contains one or both of the following characteristics in the archeological record:

1. the appearance of pottery, bow and arrow technology; and
2. a shift from hunting and gathering lifeways to a more sedentary settlement pattern supported by the farming of maize, beans and squashes, signifying economic transitions that characterize later periods.

However, this is not the case in the Texas Gulf Coastal Plains. Agriculture was never adopted by indigenous peoples who continued to live by hunting and gathering up until the period of European Contact, and further, into Colonial times.

By definition, the Archaic (or “Preceramic”) era in the Corpus Christi Bay ended with the introduction of ceramics approximately 1,000 years ago. Lighter, thinner, and generally smaller arrow points of the Scallorn, Catan, Fresno, and Matamoros types are also a key indicator of the transition from the terminal Archaic to the Late Prehistoric. The earliest pottery in the Middle Texas Coast region predates A.D. 1250/1300, given that Scallorn lithic points are replaced by arrow points of the Perdiz type by this time in inland Texas (Prewitt 1981, 1985). At the Melon Site (41RF21) in Refugio County, pottery appeared by A.D. 1250-1300 (Ricklis 1996). The pottery at the Melon Site is classified as Rockport ware, which are diagnostic indicator of the Rockport Phase, ca. A.D. 1250 to 1700. Rockport ware is defined as having a sandy paste with asphaltum (a natural black petroleum tar) used for coating or decorating the exterior.

Rockport Phase

The “Rockport Phase” defines the culture of the Middle to Gulf Coast region during the final centuries of the Late Prehistoric period and consists of a set of recurrent material-culture traits that are found from Matagorda Bay in the north to the northern shoreline of Baffin Bay in the south. From Ricklis (2012), these Rockport phase traits consist of the following:

1. Rockport ware pottery;;
2. arrow points, predominantly of the Perdiz type;
3. unifacially flaked end scrapers made of chert;
4. drills/perforators made of flaked chert;
5. bifacially flaked knives, sometimes with alternately beveled edges; and
6. prismatic blade-core technology for the production of elongated flakes (blades) with thin, sharp edges that could be used as expedient cutting and/or scraping tools.

Two (2) basic site types are identified in Rockport Phase sites in the Corpus Christ Bay and Copano Bay areas (Ricklis 1993, 1996), which are further distinguished on the basis of different environmental contexts, different assemblages of faunal remains, contrasting sizes of sites, and markedly different densities of artifacts. These site types include:

1. Large later period shell-midden deposits situated on the shores of coastal bays and lagoons, which usually occupy earlier Late Archaic period shell-middens. In addition to the profusions of fish remains, these sites have produced large quantities of Rockport ware potsherds in association with abundant stone tools in the forms of arrow points (mainly of the Perdiz type), end scrapers, drills, and the occasional bifacial knife; and
2. Inland sites located on the margins of prairie uplands immediately overlooking the various sub-parallel rivers and creeks that flow into the coastal estuaries. These sites typically cover relatively small areas (often less than 1,000-m²) and consist of thin scatters of cultural debris such as Rockport ware potsherds, scattered chert debitage, and limited quantities of arrow points, end scrapers and other stone tools.

Karankawa American Indians

At the time of the first Euroamerican exploration/settlement, the Middle Texas coast was home to the Karankawa American Indians, which is defined as a group of five (5) tribes closely related by culture, ethnicity, and linguistically by the Hokan group language, whose combined territorial range was a rather narrow strip of coastal land extending from the Matagorda Bay area in the north at least as far south as the Corpus Christi Bay area (Newcomb 1961). Prior to the decimating effects of European introduced diseases that first appeared by the late 1600s (if not earlier), the historically documented Karankawas can be linked to the Rockport Phase on the basis of:

1. the approximate isomorphism of their known range within the geographic extent of the archeological artifact assemblage;
2. the presence of artifacts of European origin on some Rockport Phase sites dating to Colonial times, and
3. an abundance of potsherds of Rockport ceramic types on certain Spanish Colonial sites known to have been frequented by the Karankawa, including the first location of Presidio de La Bahía (Ricklis 2007), the Mission of Nuestra Señora del Rosario (Ricklis 1999, 2007), and the Mission of Nuestra Señora del Refugio (Perttula 2002).

Spanish Colonial archival letters and inventory records from these missions provide references to the locations of Karankawa encampments during the late 17th and throughout the 18th centuries that supports a pattern of seasonal settlement and subsistence as inferred from the archeological data for the Rockport Phase. Early Spanish Colonial records place several hundred Karankawa in groups of shoreline encampments during the fall and winter seasons and much smaller groups, on the order of around 50 people, at camps along slightly inland rivers during the spring and summer seasons (Newcomb 1961).

The most destructive element for all indigenous groups in the region was the influx of European diseases, which reportedly decimated approximately 8,000 individuals, although some estimates for the region report an exponentially higher number. With the colonization of Texas and Louisiana by the Spanish and French, the Early Historic period began as American Indians' cultural traditions changed in obvious, fundamental lifeways. By the middle of the 19th century, the indigenous peoples of the Corpus Christi Bay area were gone, victims of the intrusion of Old World populations into the New World.

3.2

SAN PATRICIO COUNTY HISTORY

The first Europeans to visit San Patricio County were the Spanish. In 1519, Alonso Alvarez de Pineda sailed from Florida to chart the Gulf Coast. It is likely that Pineda reached the Nueces River at the site of present-day San Patricio (Guthrie 1986).

Although archeological evidence suggests the Karankawas migrated to the Texas Gulf Coast from the Caribbean in the early 1400s, it is unknown exactly how early these Indians roamed the Texas Gulf Coast region. The first written account of this group came from the diary of Alvar Nunez Cabeza de Vaca in the early 1500s (Guthrie 1986). The Karankawas disappeared from the San Patricio area in the mid-1800s. In the early 1830s, clashes with white settlers forced many Karankawas into Mexico where they were eventually killed or died out. Any remaining Karankawas fled to Mexico to face the same end following the 1852 battle against William Kuykendall at Hyness Bay in Refugio County, Texas (Guthrie 1986).

A number of later Spanish and French explorers, including Alonso De Leon, Jean Beranger, Diego Ortiz Parilla, and Jose de Evia, traveled through what is now San Patricio County. Following the expedition led by Piñeda who explored the bays behind Aransas Pass in 1519, De Leon's expeditions of 1689 and 1691 sailed up and down the coast investigating the bays and probably entered Aransas Pass. In 1712 and 1718, a party of French came ashore on St. Joseph Island, and later, Ortiz Parilla was instrumental in advancing the knowledge of the area with his expedition in the Nueces River valley. Jose de Evia made the field notes that turned into the Langara map which features this area. Mexican sheepherders also camped in what is now San Patricio County before the era of colonization (Guthrie 2012a).

Following a series of events including the Louisiana Purchase in 1803, the War of 1812, and Mexican Independence in 1821, Americans turned their attention to Texas, a new area to be settled. In 1825, the Mexican State of Texas adopted colonization laws, and by 1828 a contract was issued to settle 200 Irish Catholic American families on certain lands in Texas located along the Nueces River. By 1830, the colony of Villa de San Patricio de Hibernia was established with a handful of colonists living there. By 1834, the colony was renamed as the municipality of San Patricio, with 84 families (about 500 people) owning land within the town site. The economic mainstay of the San Patricio community during this time was cattle ranching, with agriculture limited to production for independent use (Guthrie 1986).

As the War for Texas Independence heated up, the majority of San Patricio residents sided with the Texans. Between 1835 and 1846, fighting between Mexican invaders and Texans raged in the San Patricio area. Most of the buildings were destroyed and the residents fled from the devastation. In 1845, Texas was annexed by the United States, and in August of that year General Zachary Taylor established a garrison at San Patricio. San Patricio served as a stop along the route that supplied Taylor with reinforcements and supplies during his invasion of Mexico. After Taylor left, the residents of San Patricio returned to reestablish the town that had been nearly wiped out during the war (Guthrie 1986).

During the War for Texas Independence, Texas adopted the Constitution of the Republic of Texas. San Patricio was recognized in the 1836 Constitution as one of the original precincts of the Republic of Texas. In 1846, San Patricio precinct was established as San Patricio County, Texas. Around the same time, waves of settlers from all over the United States began moving into San Patricio County. By 1848, the town of San Patricio established a court as part of the 4th Judicial District. Settlement continued throughout the 1800s, and many towns sprang up throughout the county including Aransas Pass, Ingleside (or then known as Engleside), White Point, Meansville, Sharpsburg, Rockport, Harbor City, Mathis, and Sinton. John G. Hatch settled in the southeastern part of the county in 1854, and the Engleside Post Office was established on the Cross S Ranch. Youngs Coleman established a ranch on Chiltipin Creek about the same time. During

this time, cattle ranching continued to dominate the local economy, with agricultural production slightly increasing (Guthrie 1986).

On the eve of the American Civil War in 1860, San Patricio County, Texas was home to 95 slaves. During the war, the residents of San Patricio County supported the Confederacy with the majority of men serving in the 29th Brigade of the 8th Texas Infantry regiment. The Federal Navy blockade of the Texas coast near San Patricio brought the war to the county in 1861. The blockade forced the Confederacy to find a new route to transport cotton for sale to Europe. The route, called the Cotton Road, passed directly through San Patricio County into Mexico. In 1864, a skirmish between Federal and Confederate troops occurred near San Patricio as part of a battle for control of the Cotton Road (Guthrie 1986).

Following the Civil War, San Patricio County continued to grow. Five (5) ferries operated in San Patricio County in the 1870s. Many new roads were built between towns and several bridges were constructed. Cattle ranching and agriculture took a hit in the 1880s when the area was plagued by a severe drought, but the introduction of the railroad into the area helped refuel the economy. In 1886, the San Antonio and Aransas Pass railroad cut through the county, as did the St. Louis, Brownsville and Mexico railroad in 1904 and the San Antonio, Uvalde and Gulf Railroad in 1912 (Guthrie 1986).

3.3

PORTLAND

Located across the Nueces Bay from Corpus Christi, the town of Portland was founded in 1891 as an economic venture led by Texas politician John G. Willacy that purchased 3 square miles of land along the bay from the Coleman-Fulton Pasture Company. The area was subdivided into tracts and resold through public auction (Guthrie 1986). Although the initial auction was successful and economic growth was strong, the Panic of 1893 stifled the nascent town. Many of the tracts were repossessed by the Coleman-Fulton Pasture Company. In 1911, Willacy approached the company a second time and negotiated for the return of the Portland tracts, as well as the company's greater involvement in the town's expansion. Owing in large part to the company's construction of a wharf and the area's provision of potable water, Portland saw a brief period of prosperity based primarily on agriculture and shipping. This success was curtailed when the hurricanes of 1916 and 1919 struck the bay and destroyed parts of the town. Following these disasters through World War II, the population of Portland slowly increased until the completion of the Reynolds Metals Company (now Sherwin Alumina) aluminum plant in 1953 stimulated a period of rapid growth in the area. Since the 1960s, Portland has primarily served as a suburban community and northern extension of Corpus Christi.

3.4

GREGORY

The town of Gregory traces its beginnings to 1886, the year the San Antonio and Aransas Pass railroad line was built through San Patricio County. The railroad

and the local Coleman-Fulton Pasture Company joined forces to build a station here at a site known as Corpus Christi Junction, a switch where the rail line turned toward Corpus Christi and branched off to Aransas Pass. By 1887 the railroad junction was known as Gregory, named for Thomas W. Gregory, a friend of the Fulton Family and later U.S. Attorney General. The San Antonio and Aransas Pass Railway of 1886 became part of the Southern Pacific Railroad system and the St. Louis, Brownsville, and Mexican Railway of 1907, which was then transferred and sold to the Missouri-Pacific and Union Pacific systems as it is known today.

The Coleman-Fulton Pasture Company, with 167,000 acres of land, was organized earlier in 1879. George Ware Fulton was a pioneer in fencing of the open south Texas rangelands and in shipping cattle by boat from the company's wharves. In 1871 Thomas M. Coleman and George W. Fulton joined with J. M. and Thomas H. Mathis in a partnership that formed the largest cattle firm in Texas. The Coleman, Mathis, and Fulton partnership, which held acreage in San Patricio, Goliad, and Aransas counties, flourished until an 18-month drought in 1878-79 that wiped out much of the stock. When the partnership dissolved in 1879, T. H. Mathis, who was awarded 64,000 acres of the firm's land, began plans to develop a townsite on his property. The remaining partners formed the Coleman-Fulton Pasture Company in 1880. The ranch headquarters was established at Rincon, seven miles north of the site of present Gregory, and it soon became a community with its own school (Guthrie 1986).

A U.S. Post Office opened in Gregory on March 8, 1887, and the new community grew quickly, soon boasting stores, hotels, banks, and other businesses, as well as a school and several churches. As many as seven (7) trains passed through the junction on daily round-trip schedules. The Coleman-Fulton Company gave land and built the first schoolhouse for Gregory in 1891, and by 1892 the community's population was 250.

To simplify the transaction of its ranch business, Coleman-Fulton in 1898 moved its headquarters from Rincon to the prospering new railroad town (Guthrie 1986). By 1900 the town's population had reached 400. In the late 1890s, the Coleman-Fulton Company donated the land for what would become the Portland/Gregory Cemetery. Many of the first interments date to the early 1900s.

In 1908, Charles P. Taft, director of the Coleman-Fulton Pasture Company (also known as Taft Ranch) extended an invitation to his half-brother, newly-elected President William Howard Taft, to visit the 165,000-acre Taft Ranch and the Taft community. The President agreed to come in October 1909. Charles Taft and ranch manager Joseph F. Green immediately began preparations for the event (Guthrie 2012d).

Green became manager in 1900 and built La Quinta ranch into one of the largest and most exclusive in the state at that time, a place where the press, dignitaries,

and even the President would visit. Both Green and the Coleman-Fulton Pasture Company also built the three-story, 22-room Hotel Green in Gregory to house the press corps and additional visitors in 1909. Many train travelers relied on Gregory as a stopover point.

President Taft's special railroad car arrived in Gregory on October 20, 1909. An automobile procession took the presidential party to La Quinta where they were greeted by Texas Governor Thomas M. Campbell. The following day the President visited Taft where he spoke to citizens assembled at the local school and enjoyed ice cream at the company creamery. A barbeque and rodeo were held at the Rincon Ranch in the President's honor, and he later visited Corpus Christi where he spoke to a crowd of 15,000 people.

Gregory, a company town in its early years, gradually turned into a trading center with a bank, specialty shops, general stores, and three (3) cotton gins. Although the Coleman-Fulton Company headquarters and the Green Hotel both relocated to Taft in 1922, the town survived and remained a viable residential community. In the 1920s, oil and gas was discovered in San Patricio County, fueling further growth. The onset of the Great Depression forced the town into significant decline. Dissolved in the 1920s, the Rincon Ranch was designated in 1993 by the THC SHPO as a Texas Historical Marker (No. 4268), and its history is closely related to the La Quinta estate and ranch. By 1930, approximately 1,470 farms located in San Patricio County had replaced previous ranch lands, but many of the farmers did not own the lands that they worked. Farm tenancy rates increased along with the expansion of cotton cultivation. Also by 1930, more than two-thirds (1,128) of the county's farmers were tenants; only 342 fully owned their lands.

In the 1940s, oil and gas production increased significantly, becoming the economic mainstay of the area (Guthrie 1986). With the growth of oil and gas production, San Patricio County was poised to become a fully industrial area. Growth slowly revived in Gregory when the Reynolds Metals Company built a plant to convert bauxite into alumina on the north shore of Corpus Christi Bay adjacent to the former site of the La Quinta mansion in 1952. Gregory was incorporated a year earlier in 1951 in anticipation of the Reynolds plant.

Farming never fully rebounded, and oil and gas production remained the economic mainstay of San Patricio County until the 1970s. In the 1980s, both DuPont and Occidental Chemical built large plants and terminals on the ship channel adjacent to the Reynolds' expanded facilities.

Within the last 30 years, two (2) of the world's largest marine rig-builders operate on the bay, and Ingleside was designated as the homeport for the U.S. Navy's Battleship Wisconsin battle group. Aransas Pass is home to about 300 shrimp boats, bringing in millions of dollars in seafood revenue. As of 1990, 59,288 people lived in San Patricio County in eight (8) incorporated and two (2) unincorporated towns (Guthrie 2012c).

LA QUINTA PROJECT SITE HISTORY

Historic environmental documents provided by the POCCA, USGS topographic quadrangle maps dating from 1918, and aerial photographs from 1950 to the present were reviewed to determine the historical use of the Project site. Desktop analysis of these studies and photographs indicates that the Project site has exhibited a variety of land use including oil and gas exploration, agricultural farm land and support structures, tenant residence, and native ranch land. In the late 1970s Tenneco Energy acquired the Project site for potential future development and leased it to a tenant farmer. The POCCA purchased the property from Tenneco Energy in late 1996. In 2012, the tenant residence and outbuildings were razed.

The historical aerial photographs depict an access road currently known as La Quinta Road extending south-to-southeast from the frontage road of TX-35, traversing parallel and outside of the eastern Project site's boundary. The road historically provided access to various agricultural support structures and tenant residences as well as the entrance drive for La Quinta Mansion and Estate (Site 41SP35), with the foundations of the mansion located east of the Project site. The agricultural support structures are no longer extant, but historically they extended across the northeast boundary of the Project site and included a residence with an associated septic tank and garage, an oil storage shed, an equipment storage shed, a maintenance shed, a hay storage shed, and other miscellaneous chemical and paint storage sheds (Dames and Moore 1996).

The historic portion of La Quinta Road leading toward the mansion has since been gated off, and the road has been extended southeast to serve as additional access to the Sherwin Alumina facility located east of the Project site as well as the entrance to the proposed Cheniere Project site. The farm or access road currently extending west onto the Project site from La Quinta Road is present on historical aerial photographs, and at one time provided access to at least three (3) former oil and gas exploration sites in the southern portion of the POCCA property, one of which is located within the Project site's boundary. The majority of the area within the Project site has been historically maintained as undeveloped agricultural land. Details of La Quinta Mansion are provided below.

- Built between 1906 and 1907, the La Quinta Mansion and estate were reported to be one of the largest and most innovative ranches in the state at the time, introducing new crops and cattle breeds. In addition, the La Quinta estate also featured a nine-hole golf course, several outbuildings, and a three-story mansion with a balcony stretching the width of the building. The first floor of the mansion held two (2) dining rooms each capable of seating 100 people, while the upper two-stories contained 12 bedrooms and six (6) baths as well as a gallery on the second floor and an observation deck on the third. The mansion was also referred to as the La Quinta Hotel and the La Quinta Gardens from photographs of the era

(Appendix E). The estate provided Joseph F. Green a place to entertain hundreds of dignitaries who were visiting the ranch.

- In Green's obituary dated November 26, 1926, the La Quinta Mansion, which was known to be located near Portland and on the north shore overlooking Corpus Christi Bay, was praised for being "famous for its hospitality and a showpiece in that section." Green and his wife, May Mathis, who was the heiress of the prominent Mathis-Taft cattle family in San Patricio County and partners in the Coleman-Fulton Company, had no children upon Green's death (Bartlett Tribune and News 1926). Based on archival research, a portion of the La Quinta estate is believed to have occupied the southeastern section of the Project site and was a sister ranch to Rincon Ranch. Upon Mathis' death in the 1930s, the mansion remained abandoned until a fire brought it to ruins in January 1938 (Guthrie 1986). In the 1960s, tenant farmers were reported to have razed the above ground skeleton of the mansion; however sections of the former estate still remained in isolation 300-m east of the Project site.

4.0

METHODOLOGY

Prior to the site file and literature review, the THC was notified by letter of ERM's intent to initiate an informal meeting with the THC staff prior to conducting any pedestrian investigation of the Project site. The SHPO Consultation forms were also mailed prior to our field investigation (Appendix F: THC SHPO Consultation). A Texas Antiquities Permit was needed since formal cultural resources investigations were anticipated on public/State land owned by the POCCA. The permit was issued on January 11, 2013, and is recorded as Texas Antiquities Commission (TAC) No. 6421. Archeological fieldwork investigations were confined within an 8-acre Access Corridor within the Project site, which will be explained in the following Sections: *Site File and Literature Review*, *Archeological Field Methods*, and the *Research Design*.

4.1

SITE FILE AND LITERATURE REVIEW

Site file research was initiated prior to fieldwork mobilization in order to identify all previously recorded archeological sites and previous investigations within a 1 km (0.6 mile) radius of the Project site. This information was obtained by reviewing records through the online Texas Archeological Sites Atlas (TASA), which is maintained by the THC. The TASA review indicated that no known and recorded historic structures, NRHP-listed or eligible properties or NRHP-Districts, State Archeological Landmarks (SALs), and/or Texas Historic Markers are located within the direct APE.

Site file research identified Site 41SP35, La Quinta Mansion, within the 8-acre Access Corridor; 13 archeological sites outside of the Project site's boundaries but within the 1 km radius for the site file search; and one historic cemetery (Portland/Gregory Cemetery SP-C014), which is located to the northwest and outside of the Project site's boundaries but lies within the 1 km radius.

4.1.1

Additional Background Research

The 1851 land grant that contains the APE was obtained from the Texas General Land Office (GLO) county map and showed that Thomas T. Williamson held the land from the mid-19th century until the late 1890s when the Coleman-Fulton Pasture Company secured property adjacent to the town of Gregory. Construction on La Quinta Mansion and Estate began in 1906 under Joseph Green, and the Project site and adjacent areas had remained largely rural and agricultural until 1952 when the Reynolds Metals Company facility commenced construction. Additional historic aerial and topographic maps were provided by the Texas Natural Resources Information System (TNRIS) and the USGS Map Locator service. The archival, site file research, and desktop survey work associated with this assessment also relied on a review of information relating to the APE from the following databases and archives:

- The University of Texas (Austin) Briscoe Center Map Collection
- The University of Texas (Arlington) Special Collections Library

- Texas State Historical Association Archives
- Texas State Archeological Landmarks
- National Park Service (NPS) Database - NRHP Properties
- Texas State Library and Archives Commission Collection - Texas Heritage Online
- U.S. Library of Congress
- Texas GLO
- San Patricio County Tax Assessor's Office - Property Search
- San Patricio County Historical Commission
- USGS 7.5 minute series, Topographic Map Search; Historic Quadrangle Maps include: Corpus Christi 1918; Corpus Christi 1925; Corpus Christi 1951; Gregory 1969, and Gregory 1975.

4.2

ARCHEOLOGICAL FIELD METHODS

The archeological investigation associated with the current undertaking was designed to the portion of Site 41SP45 in the direct APE. The archeological team conducted field identification of the location, size, and general function of the southwestern extent of Site 41SP35 within voestalpine's proposed 8-acre Access Corridor. ERM's limited testing strategy follows from and addressed the data collected during Ricklis' 1999 archeological reconnaissance survey of the property. The limited investigation was not intended to define the boundaries of the previously recorded archeological Site 41SP35, rather it was intended to identify productive locations in various parts of the site within the Access Corridor.

A "productive location" was defined as one (1) or more shovel tests exhibiting high artifact density (i.e., at least 10 artifacts) and/or diversity; temporally diagnostic artifacts; a distinct midden deposit; a possible prehistoric or historic feature; and/or clearly stratified prehistoric deposits. The limited investigation was conducted as follows:

- Establishment of survey control across the property by establishing a north-to-south baseline tied to fixed points and/or through GPS controls corresponding to specific loci (archeological areas of activity and importance requiring further investigation) within the 8-acre Access Corridor;
- Excavation of a minimum of 20 shovel test pits (STPs) at set intervals (along a 30-m linear baseline offset by a 30-m grid) to a standard depth of 50 cm and a maximum depth of approximately 100 cm, supplemented by controlled surface collections where possible;
- Excavation of additional shovel tests at 15-m intervals at each productive location and/or positive STP identified to answer questions concerning a site's integrity, significance, and NRHP-eligibility (see Section 6.0 *Research Design*);
- Optional Test Unit (TU) Excavations if intact features and/or significant artifact densities were identified;

- Documentation of each site and/or locality or archeological feature using a GPS unit with UTM coordinates [NAD 1983].
- Photo and written documentation of the field survey efforts; and
- Preparation of sketch maps of each concentration of above-ground or buried features and of each archeological locus.

4.3

ABOVEGROUND RECONNAISSANCE SURVEY

This ERM task included the field efforts to identify aboveground resources within the indirect and visual APE, which was established by a vehicular and pedestrian assessment of topography, vegetation, and modern intrusions within the Project area. As previously defined, indirect effects consisted of visual impacts, auditory (noise/vibrations), and air emissions containing hazardous constituents, which included the broader surrounding area that might experience visual or other effects from the project (THC: *The Section 106 Review Process* 2013).

The aboveground survey portion of this CRA was primarily concerned with visual impacts to historic properties. ERM's Biological Assessment (BA), a counterpart to the EPA's GHG permit application, includes a lengthy discussion on the auditory effects as well as what efforts will be utilized to mitigate these proposed effects.

During ERM's BA, a noise study was conducted to aid in the assessment of the Project impacts. The study used Portland's noise threshold for residential neighborhoods (63 dB) as a guideline for the project. Existing noise levels from the receptor closest to the Portland/Gregory Cemetery, located at the north Project site boundary, approximately 0.5 mile (2,624 feet) from the cemetery, were measured at 50.1 dB. Using this baseline, the noise study determined a radius within which noise levels will exceed 63 dB during normal operation of the plant. The Portland/Gregory Cemetery is approximately 0.75 mile from that radius, and as such, noise levels at the cemetery are expected to be minimally affected by the proposed Project.

Based upon available data, construction of the proposed Project is not expected to result in noise levels exceeding the 63 dB threshold for residentially zoned areas in the City of Portland. Although the City of Gregory has not adopted any noise regulations, construction and operation of the Project is not expected to result in noise levels exceeding the residential standards adopted by the City of Portland.

The aboveground architectural task included a windshield level of effort supplemented by pedestrian reconnaissance as necessary to include:

- Photo documenting resources of interest (i.e., those identified as requiring additional consideration to determine NRHP eligibility); and
- Collection of adequate field data to make a preliminary determination on NRHP eligibility.

In addition to conducting on-site survey, ERM consulted via telephone the following local institutions on the presence of historic properties in the Project area: the Portland Public Library on Memorial Parkway; the Sinton Public Library on North Pirate Boulevard; the San Patricio County Historical Commission in Odem; and the Texas A&M University-Corpus Christi Campus Mary and Jeff Bell Library Special Collections. No historic properties were identified in Portland, Gregory, or their vicinity based on these telephone calls.

4.4 *ARCHEOLOGICAL FIELD PROCEDURES*

Surface Inspections

Exposed surfaces along the eroded shoreline, at the base of the bluffs, and/or at the upper crest of the bluffs' faces, trails, roads, and/or graded areas were inspected from the site walkover within the 8-acre Access Corridor. Surface collection involved 100 percent recovery of materials from prehistoric surface scatters for identification and photo documentation, and if scatters contained less than 50 prehistoric artifacts. Historic discards were sampled selectively for diagnostic artifacts.

Subsurface Testing

A north-to-south baseline within the Access Corridor received a permanent rebar datum to designate the site's respective location and recorded with GPS captured UTM coordinates referenced as data points. Stakes and rebar were marked with day-glo pink and blue flagging tape.

For this investigation, positive shovel tests were flagged with day-glo pink and blue flagging tape to denote their location within a site's boundary. Shovel tests were arrayed on set intervals (30-m intervals, followed by 15-m cruciform for positive tests). Each test location was inspected for cultural resources by examination of exposed ground surfaces and by the excavation of systematic shovel tests. Each test location was also consecutively numbered and recorded in the field journals.

Test pits were excavated to subsoil or a maximum depth of 100 centimeters below surface (cmbs); or until sterile subsoil; or unless artifact densities/integrity require deeper excavations. Additional shovel tests are excavated as judgmentals in areas within voestalpine's Access Corridor deemed appropriate by the Project Manager and/or Field Director leading the archeological investigation.

Test pits have a minimum, consistent diameter of at least 30 to 35 cm in width. The profiles of each shovel test were visually inspected by the field technician for artifacts or features. The soil from each test pit was screened using 0.25-in (1/4") wire mesh, and artifacts were bagged and tagged by shovel test provenience and levels. Shovel tests were excavated using 10-cm stratigraphic levels to align with possible expanded, larger excavations (i.e., test units) and to allow for assessments of horizontal and vertical integrities. Stratigraphic descriptions include depth,

artifact recovery, and soil texture as well as soil hue/description based on Munsell color codes that are identified in field books (Munsell 1992). All artifacts recovered through surface and subsurface inspection are placed in plastic bags with a clearly written-out provenience in black Sharpie on the plastic bag.

Excavations proceeded in arbitrary 10 cm levels with the exception of the upper organic stratum (Ao) or overburden/dredge fill. The upper strata are typically removed as single levels. In situations where it is not obvious whether the upper A-horizon represents disturbance, dredge fill, or some other kind of deposit, excavations would proceed in arbitrary 10 cm levels. In some situations, 5 cm arbitrary levels would be excavated to better define potential vertical separation of cultural deposits. All shovel tests were excavated to compact B-Horizons, or the C-substratum if the AB horizon was conflated, and/or sterile subsoil. Excavation terminated at sterile substrate [i.e., two (2) sequent sterile levels, three (3) levels with two (2) or less artifacts, bedrock refusal, etc.].²

Once shovel tests excavations were completed, a site plan was prepared to show the locations of shovel tests as well as the major site features (i.e., bluff faces, the extent of surface artifact scatters, roads, modern dredge fill areas, etc.). Phase I survey site maps from Ricklis (1999) were used as base maps, as feasible. Texas State Site Forms will be updated through the Texas Archeological Research Laboratory (TARL).

4.5

LABORATORY METHODS

Upon arrival at the laboratory facility maintained by the subcontractor, Coastal Environments Inc. (CEI) of Corpus Christi, Texas, field bags were checked-in and staged for analysis. All materials collected during the project, including artifacts, floral and faunal remains, and soil samples were cleaned, stabilized, treated, and sorted as appropriate. Archeological materials were placed in commonly accepted typological and functional classifications employed by the subcontractor using the THC standards.

For example, chipped lithic prehistoric artifacts are sorted by raw material type and technological features. Artifacts are then classified in accordance with a generalized lithic reduction model, and when necessary, lithic artifacts are subject to initial examination under magnification to determine the presence of striations, microflaking, and polishing that might be correlated with prehistoric use-wear. As needed, published typologies and reference collections are consulted to identify diagnostic projectile points. Prehistoric ceramics are inspected to determine surface treatment, tempering agent, and vessel morphology. This information is used to place ceramics into a temporal/cultural overview and/or functional framework.

Historic artifacts are analyzed by type and temporal affiliation using published typologies and collectors books on ceramics, glass, metal, and composite

² Note that due to OSHA requirements, no excavation will exceed 4 ft in depth.

materials. Ceramics are examined to identify glazing and paste properties, surface design and treatment, vessel morphology and manufacturing markings. In addition to typing, artifacts are classified into functional/activity groups. South's (1977) classification system is commonly used for the analysis of historic sites, but the artifact types are most relevant to sites occupied before 1850. In view of the increasing abundance and variety of artifacts on later 19th and early 20th century sites, Gray (1983) proposed a revised system to categorize these more diverse assemblages. Since the site occupation extended into the late 20th century, Gray's categories of classification system were more relevant to the current study.

Archeological laboratory procedures were scaled to assess the research potential and to provide the justification required to support NRHP eligibility recommendations. For example, lithic analysis would allow a reasonable level of comparison between current and previously recovered data sets along with an evaluation of data set redundancy. Definitions of functionally grouped artifacts recovered during testing will be similar to those used during previous investigations within regional studies of the Project area.

In summary, field and laboratory data from the field investigation will answer the following questions:

- a) Is it likely that new and important archeological data can be extracted through data recovery?
- b) Have the research issues relevant to this site already been addressed at other sites within and adjacent to the APE and that have been previously investigated at the current level of investigation?

Following the identification and cataloging of the artifacts, artifact tables are generated, and site plans and drawings are transcribed for the report. Reporting will follow the THC reporting guidelines as noted in the *Archeological Survey Standards for Texas* (2002) and the *Council of Texas Archeologists (CTA) Guidelines for Cultural Resource Management Reports* (2012).

4.6

CURATION

All of the written records, photographs, artifacts, and project materials generated from this Project are curated and stored on a temporary basis by CEI at their laboratory facility. Curation will be prepared in accordance with the THC and the CTA guidelines, which are modeled after *Curation of Federally Owned and Administered Archeological Collections* (36 C.F.R. § 79). All of these materials in the curated collection are the property of the POCCA; however it is anticipated that the curated collection will be submitted to one of the THC's Approved Curation Facilities unless otherwise instructed by the POCCA.

ARCHIVAL INVESTIGATIONS

The primary purposes of this investigation were:

- 1) To determine if any previously unidentified cultural resources or any historic properties either listed or eligible for listing on the NRHP were located within the indirect APE;
- 2) To determine if any previous cultural resource investigations had been conducted in and/or adjacent to the direct APE;
- 3) To determine whether or not any previously unidentified and intact cultural resources were present within the direct APE by conducting an archeological survey;
- 4) To perform the preliminary evaluation of existing historic structures and archeological sites to establish their eligibility for the National Register; and
- 5) To provide management recommendations based on the research and survey activities while providing an assessment of the integrity and significance of the western extent of Site 41SP35 that was within the 8-acre Access Corridor in addition to completing an aboveground reconnaissance survey of the indirect APE.

5.1

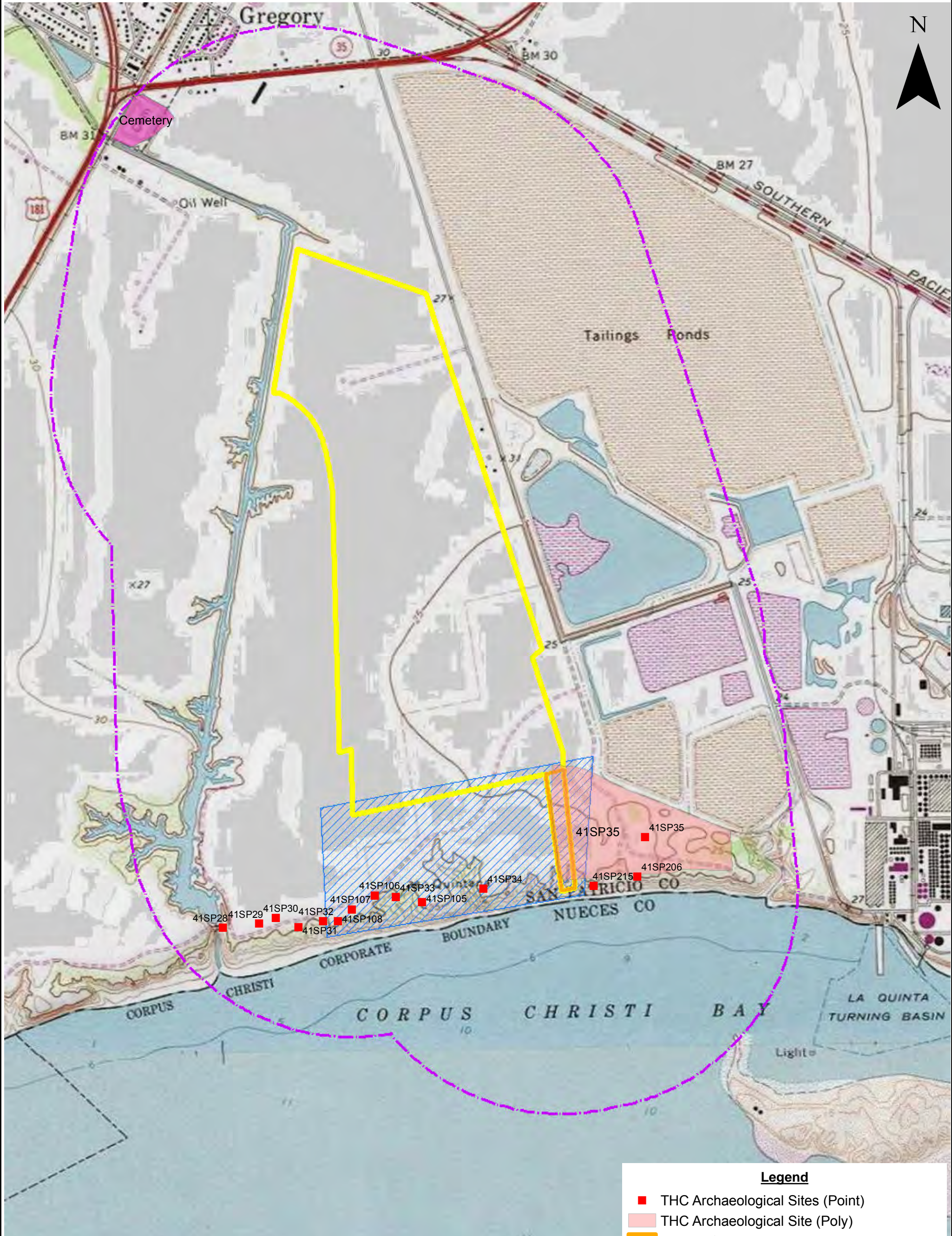
RESULTS OF SITE FILE AND LITERATURE REVIEW

Research activities, including a site file research and a review of available historic maps, were initially undertaken for the Project as part of a pre-fieldwork literature and site file review.

Most portions of the proposed Project were previously surveyed by Ricklis (1999), Klinger (2004), and Turner (2004a, 2004b). These investigations identified and evaluated one archeological site within the direct APE and 13 sites within 1 km (0.06 mile) adjacent to the Project site (Figure 6).

All of the prehistoric components situated in the Terminal Area are located along the low bluff (erosional escarpment) that marks the interior edge of the backshore of the beach along Corpus Christi Bay (Table 1). The prehistoric sites are characteristically small loci that were identified by surface survey of the eroding bluff. They typically are comprised of a thin scatter of shells, usually oyster and lightning whelk, with lumps of burned clay. Animal bone is common but not universal. Occasional lithic artifacts occur at some of the sites, commonly consisting of flakes but also including bifacial preforms and tool fragments. In addition, some ceramic sherds of prehistoric/American Indian occur, but rarely. The assemblage of sites within the Project area was identified over the course of several cultural resources surveys conducted within the last 50 years.

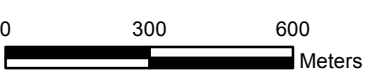
Site 41SP35 was first recorded in the early 1960s by Corbin (1963) and subsequently examined by Ricklis (1999), Klinger (2004), and Turner (2004a, 2004b). Sites 41SP206 and 41SP215 were identified by Klinger in October 2003 (Klinger 2004), while he reinvestigated the eastern extent of Site 41SP35. Turner (2004a, 2004b) was the last to examine these three (3) sites discussed above.



Legend

- THC Archaeological Sites (Point)
- THC Archaeological Site (Poly)
- Access Corridor
- Gregory/Portland Cemetery
- Approximate Project Boundary
- 1 km Buffer of Approximate Project Boundary
- Terminal

Topo Source: USGS 7.5' Topographic Quad Gregory 1969 PR 1975 [NAD 1927], Quad # 2797-434
 Service Layer Credits: Copyright:© 2013
 National Geographic Society, i-cubed



Environmental Resources Management		
DESIGN: DP	DRAWN: SRK	CHKD.: DP
DATE: 6/4/2013	SCALE: AS SHOWN	REVISION: 0
FILE: K:\GIS\Voestalpine\LA_QUINTAMXD\WorkingFigures\topo_with_sites.mxd		

FIGURE 1
 TOPOGRAPHIC MAP
 WITH ARCHAEOLOGICAL SITES
 La Quinta Project
 voestalpine
 Portland, TX



TABLE 1. Previously Recorded Sites within and adjacent to the Project site

Site No.	Location	Description	Site Size	Recommendations*
41SP28	Below the bluff edge; along shoreline	Small lithic and shell midden, possible Aransas Phase, circa 700 B.C - A.D. 1000	30-m sq	Unevaluated (Corbin 1963)
41SP29	Bluff edge	Small lithic and shell midden	30-m sq	Unevaluated (Corbin 1963)
41SP30	Bluff edge	Small lithic and shell midden	30-m sq	Unevaluated (Corbin 1963)
41SP31	Bluff edge	Small lithic and shell midden	30-m sq	No further work (Ricklis 1999)
41SP32	Bluff edge	Small lithic, ceramic, and shell midden, Rockport Phase, circa A.D. 1000 - 1700	30-m sq	No further work (Ricklis 1999)
41SP33	Bluff edge	Small lithic, ceramic, and shell midden, Rockport Phase, circa A.D. 1000 - 1700	30-m sq	No further work (Ricklis 1999)
41SP34	Bluff edge	Small lithic, ceramic, and shell midden, Rockport Phase, circa A.D. 1000 - 1700	30-m sq	No further work (Ricklis 1999)
41SP35	Bluff edge	Unknown lithic and shell midden; Early 20th Century Estate, circa 1907 - 1938	~760-m E/W x ~590-m N/S (~34 ha or ~83 ac) - extends east and outside of APE	Recommended Potentially Eligible and for further testing (Klinger 2004); Recommended no further work for the eastern half outside the APE (Turner 2004a,2004b)
41SP105	Bluff edge	Medium lithic, ceramic, and shell midden, Rockport Phase, circa A.D. 1000 - 1700	50-m sq	No further work (Ricklis 1999)
41SP106	Bluff edge	Unknown lithic and shell midden	30-m sq	No further work (Ricklis 1999)
41SP107	Bluff edge	Medium lithic, ceramic, and shell midden, Rockport Phase, circa A.D. 1000 - 1700	30-m sq	No further work (Ricklis 1999)
41SP108	Bluff edge	Medium lithic, ceramic, and shell midden, Rockport Phase, circa A.D. 1000 - 1700	30-m sq	No further work (Ricklis 1999)
41SP206	Bluff edge	Unknown shell midden	10-m sq	No further work (Turner 2004a, 2004b)
41SP215	Bluff edge	Aransas - to - Rockport Phases lithic/ceramic shell midden, circa 700 B.C. - A.D. 1700	30-m sq - southeast of APE	No further work (Turner 2004a, 2004b)

Sources: Corbin (1963); Ricklis (1999); Klinger (2004); Turner (2004a, 2004b)

* Latest consultant recommendations are listed and that have received concurrence from the THC.

Klinger's (2004) report left the overall impression that sites 41SP35, 41SP206 and 41SP215 had substantial integrity and research potential. However, a subsequent resurvey by Turner (2004a, 2004b), which included very limited shovel testing and bank profiling, indicated that only small amounts of intact deposits of any of the prehistoric sites remained as a result of coastal erosion. Turner (2004a) concluded that the sites had little research potential. Although Turner (2004a, 2004b) did not explicitly use NRHP criteria in her evaluations, it is clear from her discussion that she believed the sites substantially lacked integrity and did not have the potential to yield information important to our understanding of the prehistory of the Corpus Christi Bay region (i.e., NRHP Criterion D), nor would they meet other NRHP significance criteria. As a result, Turner (2004a) recommended that none of the sites warranted further investigations, a recommendation with which the THC concurred in August 2004 after an addendum report was reviewed (Turner 2004b).

In addition to a prehistoric component, the La Quinta Mansion Site (41SP35) contained an extensive early 20th century component. As discussed previously, the site was the location of the grand 3-story mansion constructed at the beginning of the 20th century by Joseph Green, superintendent of the Taft Ranch, and then destroyed by fire in 1938. It comprised building foundations, concrete curbs and sidewalks, the ruins of a pier, a mooring basin at the terminus of La Quinta Drainage ditch, trash scatters, and ornamental plantings (Klinger 2004; Turner 2004a). Without offering an explicit rationale, Turner (2004b) recommended no further work on these components as well and she received concurrence from the THC in August 2004.

At least two (2) cultural resources surveys for existing west-to-east running pipelines were commissioned in the central portion of the Project area. Both surveys were conducted in association with the Cheniere's Project area: one by PBS&J in 2004 (Turner 2004b) and the other recently by Tetra Tech in 2012 (Borstel 2012). Neither of the surveys identified any archeological resources or historic structures within the Project area.

Since the THC's concurrence letter from June 29, 1999 stated that there are "*no significant archeological deposits*" within the approximate 1,084 acres owned by the POCCA, two (2) proposed laydown area projects for the Cheniere Project have not required cultural resources surveys; these proposed laydown areas fall within the 1,084 acres owned by the POCCA.; these projects were conducted by PBS&J and Tetra Tech in 2004 and in 2008, respectively.

Both PBS&J (Turner 2004, 2004b) and Tetra Tech (Borstel 2012) efforts have been conducted in support of the Federal Energy Regulatory Commission's (FERC's) *Final Environmental Impact Statement* [FERC/EIS-0174: March 2005]. Tetra Tech's efforts since 2008 have followed from the FERC's (2005) Final EIS and directives for unevaluated/unrecorded cultural resources as well as an ongoing monitoring program for impacts to cultural resources within the Cheniere Project; specifically, the FERC's (2005) Final EIS stated that:

1. The Cheniere Project would file with the Secretary all additional required inventory and evaluation reports, a SHPO-approved Project-specific Unanticipated Discovery Plan (UDP or Chance Finds Procedure document), and any necessary treatment plans;
2. The Cheniere Project would file with the Secretary the SHPO comments on all cultural resources investigation reports and plans; and
3. Environmental and Engineering inspection and mitigation monitoring programs that would ensure compliance with all mitigation measures would become conditions of the FERC authorization.

Finally, in an August 10, 2004 letter from the THC to PBS&J staff, the THC reviewer, Mr. Lawrence Oaks, reported that State Marine Archeologist Steven Hoyt completed a review of the submerged area where the Cheniere Project would be constructed. The letter indicated that the submerged area had been previously surveyed and the remaining area was very shallow. The letter further stated that *"the project may proceed without further underwater archeological survey."*

5.1.1 *Results of Additional Background Research*

Additional archival research began prior to fieldwork and was conducted to determine the approximate construction dates of the industrial facilities within or in the vicinity of the APE. The majority of the area within the Project site has been historically maintained as undeveloped agricultural land until recently. Detailed analysis from archival research, historical topographic maps, and aerial photography are provided below.

- The 1918 topographic map depicts the northern portion of the Project site as cultivated farmland and the southern portion as undeveloped native land with the exception of an unimproved roadway that parallels the shoreline of Corpus Christi Bay and an improved road historically known as La Quinta Road, which parallels the eastern boundary of the Project site. Structures are depicted north of the Project boundary and immediately west of La Quinta Road. A structure is also depicted outside of the southeastern boundary of the Project site at the intersection of La Quinta Road and the shoreline roads.
- The 1925 topographic map shows the expansion of the Green Lake Drainage located west of the Project site. La Quinta Drainage first appears parallel to the northern boundary of the Project site and crosses La Quinta Road before proceeding south to Corpus Christi Bay along the Project site's eastern border. The structures north of the Project and west of La Quinta Road are no longer mapped. Three (3) structures are now located along La Quinta road outside the southeastern boundary of the Project site. The farm or access road is visible extending onto the Project site from La Quinta Road. The Portland/Gregory cemetery also first appears on the 1925 map and is located outside of the northwestern boundary of the Project site.
- The 1951 topographic map and 1950 aerial photograph depict the northern and the southern portions of the Project site as native grass and

shrub land, while the central portion of the Project site is agricultural land. A cluster of agricultural support structures appear along La Quinta Road and across the east-central boundary of the Project site in the aerial photograph. An additional area of residential structures are visible offsite and southeast of the Project site that are likely related to the La Quinta ruins depicted on the topographic maps. An unimproved roadway is present in the southern portion that connects to La Quinta Road and transects west across the Project site. Two other structural features are marked as "Fan Marker" and "Airway Beacon," which are located in the eastern central section of the Project site. In addition, an USGS survey datum also first appears on the 1951 map adjacent to and centered along the shoreline within the Project site.

- The 1961 and 1968 aerial photos and the 1969 topographic map depict the same general features from the 1951 map and aerial photograph. The agricultural support area recorded by Dames and Moore (1996) first appears as a cluster of five (5) buildings along the eastern central boundary and directly west of La Quinta Road, which were believed to be tenant farmer residences and outbuildings. Structures previously located on the 1925 and the 1951 maps within the southeastern corner are non-existent. Structural features that were labeled as the "Fan Marker" and "Airway Beacon" are no longer located in the eastern central section of the Project site. The USGS survey datum that first appeared on the 1951 map is now labeled Quintana, which is possibly a reference to La Quinta, the estate and ranch of Joseph F. Green where U.S. President William Howard Taft stayed during his visit to the towns of Gregory, Taft, Rincon Ranch, and Corpus Christi in October 1909.
- The 1974 aerial photograph and the 1975 topographic map show the undeveloped Project site much as it was in the 1968 photograph and the 1969 map respectively with continued farming and the presence of the agricultural support area located along the eastern central Project site's boundary. The 1975 map depicts an unimproved road that was last seen adjacent to the coast on the 1951 map. An oil/gas well is located near the north central portion of the Project site.
- The 1983, 1995, 2004, 2005, and 2006 aerial photographs continue to depict the northern and eastern central sections of the Project site as agricultural farm land and tenant residences, and the southern section as native ranch land and coastal dunes near Corpus Christi Bay. A small pond is observed in the southeast corner of the Project site. The Enterprise pipeline meter station is also visible in this series of aerial photographs.
- 2006 to 2011: The Project site is owned by the POCCA. A majority of the Project site is used primarily as agricultural farm land, which extends further southward towards Corpus Christi Bay than previously seen in the 2006 aerial photograph. In 2012, the 1950s tenant residences and outbuildings were razed.

6.0

RESEARCH DESIGN

6.1

BACKGROUND

At least five (5) archeological investigations have been conducted within and directly adjacent to the Project site, and these include: Corbin (1963); McDonald and Dibble (1973); Ricklis (1999); Klinger (2004); and Turner (2004a, 2004b).

Ricklis (1999) investigation was prepared for the POCCA for Section 106 compliance pursuant to a Section 404 permit and focused on an examination within 100-m of the present bayshore for a length of 3,700-feet along the shoreline. At Site 41SP35, three (3) shellcrete wall sections were identified. Based on Corbin's (1963) description, Ricklis (1999) dismissed these walls as part of an abandoned, early 20th century fishing resort or village. We now believe that these were the sea walls for La Quinta Mansion and Estate, which was located approximately 300-m to the northeast of these remnant structures, and that at least one of the walls may have been within the Project area.

In his report, Ricklis (1999:27-8) stated that "*no significant archeological deposits remain within the survey area*" and "*the shellcrete structures at 41SP35... associated with the fishing resort of La Quinta... have no appreciable historical significance and are not eligible for placement in the NRHP.*" The THC concurred with Ricklis' (1999) recommendations on June 29, 1999.

Ricklis' 1999 recommendation was the basis for assessing Project Impacts in at least one environmental study: *Environmental Document for the proposed La Quinta Container Terminal, Nueces County, Texas* (2003), prepared for the POCCA by Shiner, Moseley, and Associates, Corpus Christi, Texas. In that study, Shiner, Moseley, and Associates (2003:83) state that the "*La Quinta Container Terminal will have no affect to cultural resources as no significant deposits remain onsite and on the surrounding shoreline.*" Three (3) other environmental studies since 2003 in the APE conducted by Arcadis, Inc. of Corpus Christi, Texas have not referenced any of the cultural resources investigations described herein and likewise state that no cultural resources will be affected within the direct APE. Within one year of Shiner, Moseley, and Associates' (2003) study, five (5) new archeological sites were identified on the surrounding shoreline within the Project area.

Klinger (2004) reinvestigated Site 41SP35 (which was reclassified as La Quinta Mansion) and identified two (2) new sites located southeast and outside of the current Project site: 41SP206 and 41SP215. Among several other sites identified during his investigation, Klinger (2003) recommended these three (3) sites for further testing. Within voestalpine's direct APE, Klinger (2013) recommended "Phase III as required" for Site 41SP35.

Shortly after, Turner (2004a) identified three (3) new sites and reinvestigated 11 previously recorded sites, which included the three (3) sites recommended for further testing by Klinger (2003) within the Project area. In her conclusions, Turner (2004a) did not assess the NRHP eligibility and recommended no further

testing for these 14 sites based on “*limited information potential.*” Upon initial review, the FERC disagreed with Turner (2004a) stating that they “*cannot accept this document as a final report.*”

Although Turner (2004b) did make the appropriate revisions and the FERC granted the license for the Cheniere CCLNG facility, both Ricklis’ (1999) study and Turner’s (2004a) efforts pose similar data limitations that result from the level of effort necessary to assess NRHP eligibility of the archeological sites previously investigated.

While previous studies may have led to determinations that certain resources were not NRHP eligible, the current project requires a reconsideration of the NRHP eligibility of Site 41SP35 (La Quinta Mansion), which lies within the proposed 8-acre Access Corridor to be utilized by voestalpine and that has the most potential to yield information (Appendix B: Project Survey Maps).

Specifically, Site 41SP35 was recommended ineligible by Ricklis (1999), recommended potentially eligible with a need for further testing by Klinger (2004), and then the eastern section of the site was recommended ineligible by Turner (2004b). The western section of Site 41SP35 was still in question and is technically recommended as potentially eligible for listing on the NRHP.

Following an analysis of past investigations that showed inconsistencies and omissions, ERM in consultation with the THC proposed that a limited cultural resources investigation and assessment of the integrity and significance of Site 41SP35 within the Access Corridor was prudent for the site in question (Appendix F: THC SHPO Consultation).

6.2

ARCHIVAL RESEARCH AND FIELD INVESTIGATIONS

Archival work and field documentation enable research-oriented and scholarly-based interpretations; promote formal NRHP-eligibility recommendations; or allow mitigations in consultation with the EPA, the THC, and/or the USACE – Galveston District to proceed for the anticipated loss of a property through the conservation of information about a property’s historical, aboveground and/or archeological significance. The objective of the limited archeological investigations within the Project site was to identify productive archeological locations. A productive location was defined as:

- one or more shovel tests exhibiting high artifact density (i.e., at least 10 artifacts) and/or diversity; or
- a collection of temporally diagnostic artifacts; a distinct midden deposit; a possible feature; and/or clearly stratified prehistoric deposits

Based on previous archeological investigations within the general vicinity of the Project area, it was anticipated that two (2) potential types of productive archeological areas would be present.

The first type of productive area would be archeological materials associated with Site 41SP35, the La Quinta Mansion. The boundary of this historic mansion complex was believed to extend into the Project site. However since Ricklis's (1999) pedestrian reconnaissance, no formal subsurface investigation had been conducted within the Project site to definitively determine whether archeological materials associated with the La Quinta site were present or not.

In addition to the La Quinta site, numerous prehistoric shell midden sites have been identified along the coast to the east and west of the Project site. These prehistoric sites consist of shell concentrations identified at the base of or within the exposed bluffs of the marine terraces overlooking the shoreline. Ten (10) of these sites were investigated by Ricklis in 1999 with three (3) of these sites, (41SP32, 41SP33, and 41SP35), yielding a variety of prehistoric artifacts. Artifacts recovered from these sites during Ricklis' 1999 survey included Rockport ware pottery, bone-tempered pot sherds, chert flakes, and marine shell. Due to the large number of these sites previously identified in the Project area, there was a high probability of encountering a similar site in the south end of the 8-acre Access Corridor.

Based on the data from the archival research and the field investigations, archeological resources and historic properties are assessed as ineligible for the NRHP, or as having an unknown NRHP eligibility status, or as being eligible for the NRHP. For this Project, cultural resources are considered ineligible for the NRHP when the survey data demonstrate that:

- 1) There is little potential for possessing reasonably intact archeological deposits (i.e., severely disturbed, redeposited, etc.);
- 2) The sites have low artifact density and/or diversity; and/or
- 3) are less than 50 years old.

For these resources and isolated finds, sufficient information can be collected during the field survey to satisfy research concerns. It is important to note that for historic sites, the probable age of the resource and relative frequency of that particular site type in the area are both considered as important factors in assessing NRHP eligibility status. Recent and/or common historic resources, such as discard scatters or house site components dating to the middle 20th century, are normally considered ineligible for the NRHP.

An archeological resource has an unknown NRHP eligibility status when there is insufficient data to assess the significance of the site, but there is a reasonable possibility of finding intact deposits or features. This usually occurs when survey-level sampling is not adequate to make clear eligibility recommendations, or when a portion of the subject site is outside of the Project site. If it is confirmed through further evaluation (i.e., Phase II testing) that the resource meets NRHP criteria, the resource is considered eligible for the NRHP.

For historic structural resources recorded within the APE, factors such as age, modifications, association with prominent persons, events, craftsmanship, and

uniqueness are considered in assessing NRHP eligibility. For many common and traditional properties (i.e., plain traditional structures, late 19th/early 20th century farmsteads, churches, and cemeteries), association with broad patterns of historical settlement and architecture are important factors in assessing NRHP eligibility status.

For cultural resources with an unknown or eligible NRHP eligibility status, the Project's effects are assessed. In assessing the effects, the heaviest weight is placed on the Project activities with the potential for causing severe disturbance, such as excavation/borrow/fill operations or associated clearing and grubbing activities. The potential effects of Project activities are weighed against the potential loss of information retained by each significant cultural resource. Indirect impacts such as visual effects are also considered.

Archeological sites are typically altered by cultural processes (i.e., farming, grading, development, etc.) and natural processes (i.e., water and wind erosion, freezing and thawing, disturbance by plants and animals) that change the deposited materials and their spatial relationships. Integrity of archeological sites is based upon the site's potential to yield specific data that addresses important research questions, or in other words, *"it is important that the significant data contained in the property remain sufficiently intact to yield important information, if the appropriate study techniques are employed"* (Andrus 1997).

Selected National Register Bulletins (Little et al. 2000) and other sources (Glassow 1977) are the basis for assessing cultural resource significance and Project effects. Central to the application of these regulatory criteria is consideration for each resource's potential for contributing important prehistoric or historic information to local or regional cultural contexts. Glassow's (1977) criteria are used by some archeologists to evaluate archeological resources. Glassow divided the physical attributes of a cultural resource into three (3) basic groups: 1) items (artifacts); 2) deposits (strata); and 3) surfaces (living floors, hearths).

Glassow viewed each of these attributes as having five (5) primary properties: 1) variety; 2) quantity; 3) clarity; 4) integrity; and 5) environmental context (Table 2). For the current study, artifact density and diversity, assemblage completeness and clarity, and preservation state were used to establish the research potential of each cultural resource.

6.3

NATIONAL REGISTER ELIGIBILITY RECOMMENDATIONS

There are four (4) criteria for evaluating NRHP eligibility found in the regulations of the National Park Service (36 C.F.R. § 60.4). These criteria are presented to facilitate review and discussion of eligibility determination. The NRHP Criteria for Evaluation are standards designed to evaluate the significance of properties (i.e., districts, sites, buildings, structures, and objects) to American history, architecture, archeology, engineering, and culture.

TABLE 2. *Properties of Physical Attributes of Cultural Resources (Following Glassow 1977)*

Property	Definition
Variety	Diversity of attributes
Quantity	Density measure
Clarity	Measure of distinguishing temporal or functional components based on the attributes present
Integrity	State of preservation
Environmental Context	Nature of the surroundings of the archeological/aboveground resources

Significance is present in properties that are more than 50 years old (although less than 50 years old is accepted in special cases), possess integrity, and meet the qualifications of at least one of the four criteria presented below. 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.

To be included in the NRHP, a property must meet one of the criteria for evaluation and must possess integrity. Integrity may be defined as the authenticity of a property’s historic identity, demonstrated by the survival of physical characteristics that existed during the historic property’s period of significance.

To retain historic integrity, a property must exhibit at least one of seven (7) necessary aspects: location, design, setting, materials, workmanship, feeling, and association. A property that has retained the physical characteristics that it possessed in the past has the capacity to convey associations with historic

patterns or persons, aboveground or engineering design and technology, or information about a culture or people (Andrus 1997).

Little et al. (2000) is also used in evaluating archeological resources. Little et al. (2000) relate the seven (7) aspects of integrity, with each aspect or quality conveying differing importance depending on the specific NRHP criteria or criterion under which the resource is being evaluated (Table 3).

TABLE 3. *Aspects, or Qualities, of Integrity for Historic Properties (Following Little et al. 2000)*

Aspect/Quality	Definition
Location	The place where the historic property was constructed or the place where the historic event occurred.
Design	The combination of elements that create the form, plan, space, structure, and style of a property.
Setting	The physical environment of a historic property, including elements such as topography, open space, viewshed, landscape, vegetation, and artificial features.
Materials	The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
Workmanship	The physical evidence of the labor and skill of a particular culture or people during any given period in history or prehistory.
Feeling	A property's expression of the aesthetic or historic sense of a particular period of time.
Association	The direct link between an important historic event or person and a historic property.

National Register eligibility recommendations for archeological site 41SP35 under Criterion (D) will be based on the presence/absence of distinct cultural features, intact middens, and/or clear and stratigraphically correct archeological deposits within the same STP or series of STPs. A positive NRHP eligibility recommendation will be clearly justified with physical evidence, such as but not limited to the following: pit/post features, distinct artifact caches, tightly defined rock or shell clusters, moderate to high concentrations of artifacts indicative of intense residential use (i.e., high frequencies of ceramics, high diversity in lithic tool types, hearth-related burned clay, daub, etc.) and/or well defined midden deposits. That is, the archeological materials recorded must have the capability to address research issues and therefore, meet NRHP eligibility Criterion (D) in terms of yielding "information important in prehistory or history."

A positive eligibility recommendation will be justified further by comparing data from the current investigations to data recovered during the previous Phase I surveys (Ricklis 1999; Klinger 2004; Turner 2004b) within and adjacent to the APE. To qualify as eligible for the NRHP under Criterion (D), this investigation will provide a reasonable and evidence-based argument that future data recovery efforts at the site(s) in question will not result in a data set that is highly redundant of data sets from sites investigated in the area.

The level of 19th and 20th century impact to archeological deposits may play an important role in determining the depositional integrity and contextual clarity, and therefore, the NRHP eligibility of the sites being evaluated. The effects of cultivation (i.e., plow-scarring, soil homogenization due to cultivation), heavy equipment scars/ tracking, dredge filling, grading, and similar 19th to 20th century disturbances will be assessed and recorded, as feasible, to support negative NRHP eligibility recommendations.

Following a review of ERM's recommendations for NRHP eligibility for historic properties by the EPA and the THC respectively, ERM may be asked by EPA to prepare an AOE for these properties, which will be submitted after the agencies' concurrences and upon the EPA's request if a formal AOE is warranted.

In the interest of better facilitating consultations between the agencies and ERM's Client, Appendix A provides a sample AOE template for the EPA's and the THC's consideration once the agencies' reviews and concurrences are complete for ERM's National Register recommendations for the cultural resources identified during this investigation.

7.0 RESULTS OF FIELD INVESTIGATIONS

7.1 SITE 41SP35 - LA QUINTA MANSION

7.1.1 Field Investigation Results

Two (2) types of archeological methods were employed within the Project site: a formal STP investigation supplemented by a pedestrian surface (visual) inspection. The STP investigation was executed through the excavation of 57 STPs. The majority of the STPs were laid out at 30-m intervals along three (3) transects running roughly north-to-south through the Project site (Figure 7 below). The pedestrian visual inspection was conducted for all exposed ground surfaces within the Project site.

STPs were given alpha-numeric designations with transects labeled A-C from east to west and STPs labeled 1-17 from south to north. A total of four (4) radial STPs set at 15-m intervals from positive STPs were excavated. In addition to the 30-m interval STPs, five (5) judgmental STPs were excavated to increase the amount of subsurface testing in areas with a higher potential for containing archeological materials in the south half of the Project site. Based on differences in surface vegetation and current land-use, the Project site was divided into two (2) sub-areas: Area A and Area B.

Area A

Area A consisted of the southern end of the Project site covered in low, scrub brush and grasses (Appendix C: Figures 1 - 2). The area was bounded by seasonal drainages to the east and west; the agricultural field (Area B) to the north; and the beach to the south. The principal landform in Area A was the edge of a marine terrace overlooking the beach to the south. The western half of the area was relatively flat, terminating in a series of stepped terraces down to the beach. The eastern half of Area A was comprised of a gentle slope down to the seasonal drainage located on the east side of the Project site.

The pedestrian inspection of Area A identified the following features and artifacts:

- a small cinder block and brick structure;
- 4 large wooden posts;
- 2 small chert flakes, likely prehistoric in date; and
- evidence of recent ground disturbances.

The small cinder block, brick, and firebrick structure was located near the western edge of Area A (Appendix C: Figures 3 - 4). It consisted of two (2) courses of cinder blocks forming a rectangle measuring 1.8 x 1.5-m. The interior

Legend

- 2 small flakes
- small structure remains 1.8 x 1.5m
- Access Corridor
- ACCESS ROAD & BULLDOZER CUT
- Cow pond and berm

Shovel Tests

FINDINGS

- Negative
- + Positive



Environmental Resources Management

FIGURE 7
APRIL SURVEY DATA
 Project La Quinta
 VoestAlpine
 Portland, Texas



DESIGN:	D Port	DRAWN:	S King	CHKD.:	G Donaldson
DATE:	4/10/2013	SCALE:	AS SHOWN	REVISION:	0
FILE: K:\GIS\Voestalpine\LA_QUINTA\MXD\WorkingFigures\april_gps_data.mxd					

spaces of the cinder blocks contained vertical rebar and were filled with poured cement. The interior of the structure contained a small pile of disarticulated rectangular and square, bricks. At least one firebrick was stamped "Clipper" followed by a series of numbers (Appendix C: Figure 5).

Four (4) large, vertical, circular posts were found to the southeast of the small cinder block structural remains (Appendix C: Figure 6). These posts were arranged in a square and were located near the terminus of the landform, overlooking the beach. The portions of the posts visible above the ground surface were approximately 2.0 m in height. The area between the posts contained disarticulated wooden boards.

The pedestrian survey in Area A identified an extensive area of ground disturbance. A 5-to-10-m wide dirt road was found running through the Project site from the dirt access road in the agricultural fields to the north down to the beach south of Area A (Appendix C: Figures 7 – 8). The dirt road ran north-to-south along the eastern edge of the Project site for approximately 65 m where it turned southeast, exiting Area A at the southeastern corner of the Project site. Heavy machinery tread marks and small push piles along the margins of the road suggest it was recently cut using a bulldozer or trackhoe. Fragments of shellcrete blocks were visible on the surface of and pressed into the road suggesting the possible disturbance of a shellcrete structure or rubble pile during road construction (Appendix C: Figures 8 – 9). One of the shellcrete walls that Ricklis' (1999) observed was previously identified in the Project site in October 2012 (Figure 8 below; Appendix C: Figures 11 – 12). Wall B would have been approximately 20-feet south of the southeast corner and outside of the Project site/ Access Corridor. All three (3) wall sections were determined to be ineligible for listing on the NRHP by the THC in June 1999.

In addition to the access road, there was evidence that heavy machinery was used to truncate the end of the marine terrace in Area A. A small, circular area of elevated land located at the southern end of Area A was separated from the rest of the landform by a low area covered with small push piles and heavy machinery tread marks (Appendix C: Figure 10). During the pedestrian survey of this area, two (2) small chert flakes were found on the north slope of the truncated end of the landform (Appendix C: Figure 5). The marine terrace is actually the remnant escarpment of the upland margin of the shoreline's bluffs that were observed and intact as recently as October 2012.

A total of 21 STPs were excavated in Area A. Typical soil profiles visible in these STPs, as well as the exposed terraces of the remnant shoreline, consisted of two (2) strata. Stratum I was a 50-70 cm lens of grayish brown (10YR 5/2), hard, compact sandy loam interpreted as an A Horizon. Beneath this stratum, Stratum II consisted of a pale brown (10YR6/3) sand interpreted as a B Horizon. These soil profiles are within the range of Orelia series soils that are commonly found in the area; the B Horizon is towards the lighter colored and sandier textured end of the recorded range of characteristics for this soil series.

FIGURE 8. Ricklis' (1999) Shellcrete Wall (A) within the Access Corridor and Wall (B) 20-Foot Outside the Access Corridor

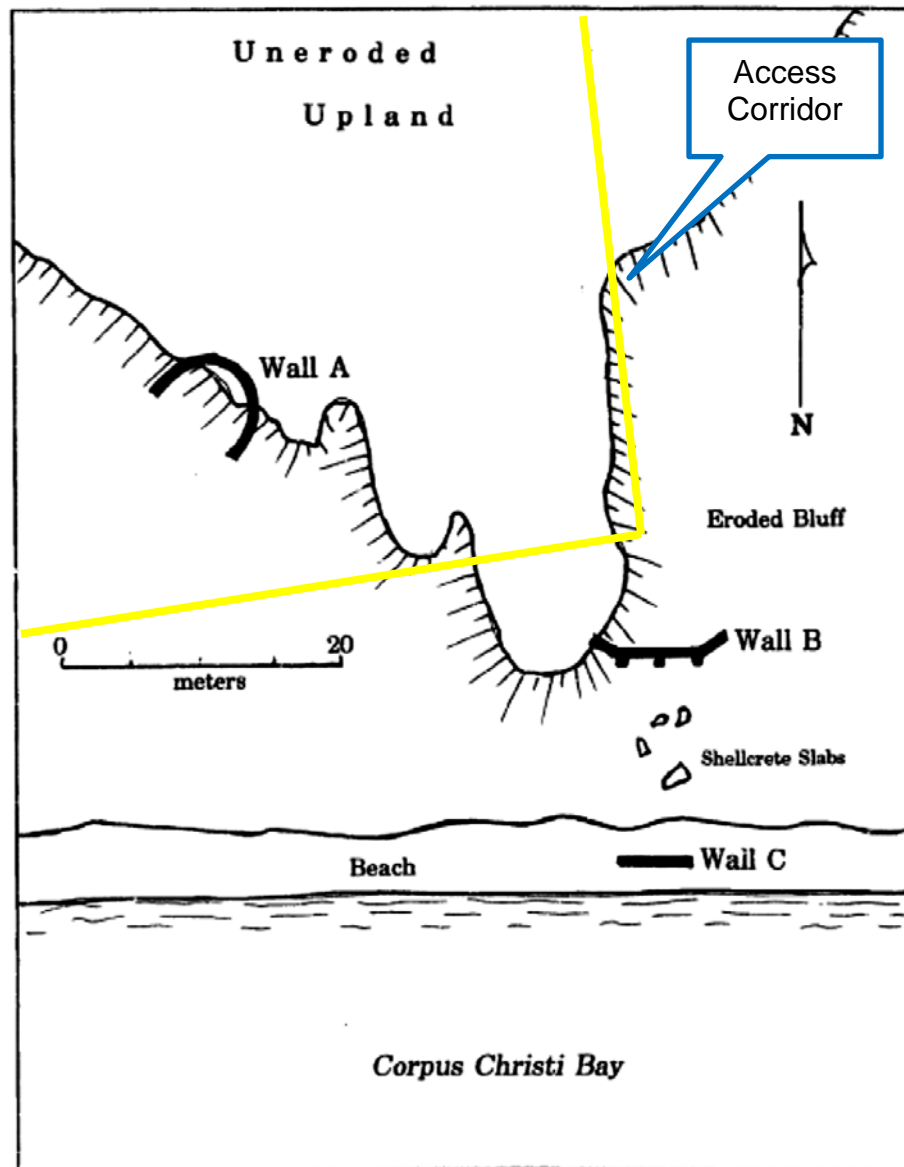


Figure 8. Plan showing configurations and relative positions of shellcrete wall, Locus 11, 41SP35.

Along the eastern half of Area A along the gentle slope leading down to the drainage, STPs contained up to four (4) strata. Stratum I was a 30 cm-thick layer of grayish brown (10YR 5/2) sandy loam interpreted as an A Horizon. Stratum II was a white (10YR 8/1) sand approximately 15 cm-thick and interpreted as an E Horizon. Stratum III was a 10 cm-thick, dark grayish brown (10YR 4/2) sandy loam interpreted as a buried A (Ab) Horizon. Stratum IV was a yellow (10YR 7/8) clayey sand interpreted as a B Horizon. The buried ground surfaces (Ab Horizons) likely formed as a result of periodic slope wash.

Two STPs, A-2 and C-1, excavated in Area A were positive for faunal material that may be from cultural deposits (Figure 7). STP A-2 contained a large mammal bone and pieces of marine shell, while STP C-1 contained a large mammal tail vertebra. The mammal bone recovered from both STPs was identified in the field as cattle (bovine) bones. Radial STPs were excavated at 15 m intervals and additional judgmental STPs were excavated near these two (2) positive STPs. The additional shovel tests were negative.

Cattle bones were discovered across the ground surface of Area B, and evidence of cattle ranching in the form of barbed wire fence lines were identified to the east of Area A. This suggests that the cattle bones found in both STPs could be relatively modern. The recovered shell fragments are not necessarily indicative of an archeological site. Shell fragments were visible in the exposed profiles of numerous and intact terrace bluffs in the Project area and are known to occur naturally in soil deposits near beach fronts.

Area B

Area B consisted of the portion of the Project site extending through the modern agricultural field to the north of Area A (Appendix C: Figure 13). The topography in Area B is flat with the only variation being a depression surrounded by a horseshoe shaped berm at the north end of the area (Appendix C: Figure 14). This depression has been identified as a manmade cattle or livestock pond with the surrounding berm comprised of the piled earth excavated from the pond. The vegetation in Area B was rows of recently sprouting plants no more than 10 cm tall (Appendix C: Figure 15). As a result of the lack of vegetation, surface visibility across Area B was near 100 percent. The only artifacts found during the pedestrian survey of Area B were plastic electric fence insulators, cattle bones, and modern pieces of metal wire. All of these objects are interpreted as the remains of recent cattle farming in the area.

A total of 36 STPs were excavated in Area B. None of the STPs in Area B were positive for archeological material. Typical STP profiles in Area B contained three (3) strata. Stratum I was a grayish brown (10YR 5/2) sandy loam extending to a depth of 20 cm below ground surface. Stratum I is interpreted as plow zone or Ap Horizon. Stratum II consisted of a 30 cm-thick, dark grey (10YR 4/1) sandy clay interpreted as the top of the B Horizon. Stratum III was a gray (10YR 6/1) sandy clay extending to a depth of 1-m below ground surface and interpreted as the lower part of the B Horizon. These soil profiles are consistent with the typical soil pedon for the Orelia Soil series.

7.1.2

Site Summary and Interpretations

No productive archeological areas or significant archeological sites were identified during the pedestrian surface inspection and STP testing. A total of five (5) possible artifacts were recovered during the survey. The possible artifacts recovered from the two (2) positive STPs consisted of faunal material commonly found on the ground surface or in exposed bluffs in and in the

vicinity of the Project site. Marine shell was seen eroding out of cliff faces and terraces in the vicinity of the Project area. Cattle bones and modern artifacts associated with cattle ranching were common throughout the Project site. The small rectangular structure made of cinder blocks and “Clipper” firebrick could not be definitively dated based on the available evidence; however, the use of metal rebar and concrete in its construction suggest it dates from the 1920s to the late 20th century. The four (4) wooden posts could also not be definitively dated, but they do not represent a significant resource by themselves.

The two (2) definite artifacts recovered during the archeological investigation were the small chert flakes recovered in the disturbed area near the southern end of the Project site from the remnant terrace or upland margins of the former bluffs. Based on their small size and morphology, these flakes are interpreted as tertiary retouching flakes resulting from prehistoric tool sharpening or maintenance in the Project site. A search in the vicinity of the flakes did not yield any other prehistoric materials. As a result, the flakes are viewed as isolated finds and not indicative of the presence of a significant prehistoric archeological site.

No historic artifacts, features, or deposits associated with Site 41SP35 (La Quinta Mansion) were identified during the archeological investigation of the Project site. Since no historic materials associated with the La Quinta Mansion site were observed and/or recovered during the archeological investigation, ERM recommends that the portion of Site 41SP35 within the direct APE be considered not eligible for listing on the NRHP. In the opinion of the Principal Investigator, the portion of the site within the 8-acre Access Corridor would not contribute to the site’s eligibility if portions of the site outside the 8-acre Access Corridor were later determined NRHP eligible.

7.2 ABOVEGROUND RECONNAISSANCE SURVEY

7.2.1 *Inside the Project site (Direct APE)*

To assess the effects of the proposed project on aboveground resources, an ERM Architectural Historian meeting the *Secretary of the Interior’s Professional Qualification Standards* in the discipline conducted a windshield and pedestrian survey of the Project area on April 2, 2013. The survey area included: the 475-acre Project site, which includes the 8-acre Access Corridor and the direct APE to account for direct effects, and the indirect APE.

The Project area was originally part of the immense holdings of the Coleman-Fulton Pasture Company (1871-1930), which once owned nearly all of San Patricio County (Guthrie 1986). Review of aerial imagery and background information collected for the archeological fieldwork in advance of the survey suggested that no extant aboveground buildings remained on the Project site or within the 8-acre Access Corridor. This was confirmed in the field via windshield survey along the boundaries of the Project site, and limited pedestrian survey within and adjacent to the Access Corridor.

Other than Site 41SP35, no other resources (i.e., structures, objects, sites, or districts) with the potential to be eligible for listing on the NRHP were observed during the survey of the direct APE. Aerial imagery and on-site investigations indicate that the Project area primarily consists of former agricultural fields, separated by two (2) perpendicular dirt field roads in the central-to-southern portion of the tract. The fields may have been associated with a small farmstead complex shown on aerial imagery just outside the east boundary of the Project site, but are no longer extant. This cluster of metal-roofed buildings was located on the west side of La Quinta Road, approximately 1.15 miles southeast of the turnoff of South Gregory Road (Farm-to-Market [FM] Road 136). On-site survey of the former location confirmed the absence of extant buildings as well as a graded landscape.

The southernmost end of the Access Corridor, approximately 400 feet from the water's edge, changes from open fields to shoreline scrub vegetation and steep banks down to the beach (Appendix C: Figures 16 - 19). This area was investigated on foot. No extant aboveground buildings were observed in or adjacent to the Project site or Access Corridor. A small rectangular structure comprised of cinder blocks and firebrick stamped with "Clipper" was observed in the Access Corridor and recorded by the archeology team (Appendix C: Figures 3 - 5, 20). The former location of La Quinta, completed in 1907 as the palatial residence of the Coleman-Fulton Pasture Company/Taft Ranch superintendent Joseph F. Green and now part of archeological site (41SP35), lies approximately 300-m east from the Access Corridor. The La Quinta site and associated resources were not evaluated as an aboveground property in this survey.

7.2.2

Inside and Outside the Project area (Indirect APE)

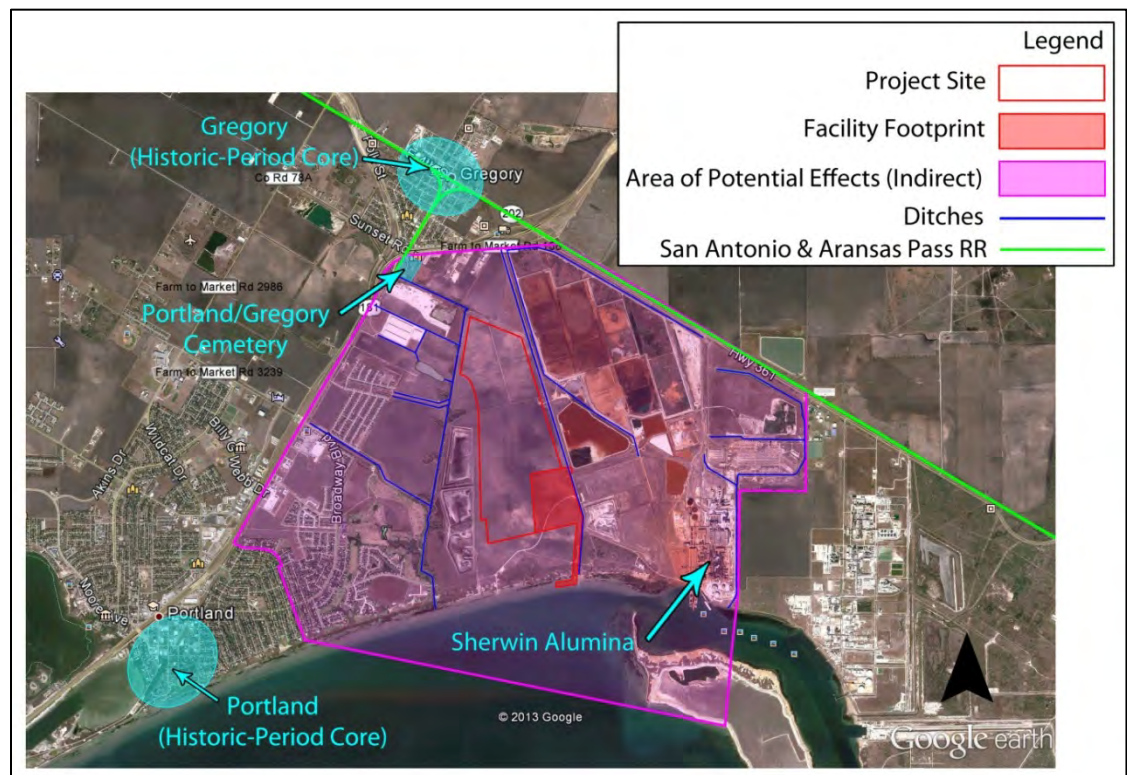
As investigated through windshield survey, the area outside of the Project site and within the proposed APE is defined by three (3) concentrations of built resources: the town of Portland to the southwest; the town of Gregory to the north; and the Sherwin Alumina Company facility to the east. The three (3) clusters are linked by Highway 35 and Highways 181/361, respectively, creating a triangular area including the Project site outside of which adverse effects to historic properties are not expected due to the character of the landscape and intersecting highways that act as a buffer shielding visual impacts to the north, northwest, and west of the Project site (Appendix C: Figures 43 and 44). Built resources observed during the survey were primarily related to these three (3) clusters. A small jetty of Quinta Island is located within 1 km south of the Project site. This island was not surveyed.

The aboveground reconnaissance survey identified seven (7) resources of interest within the indirect APE (Figure 9 below):

- Portland;
- Gregory;

- Portland/Gregory Cemetery (THC designation SP-C014);
- San Antonio and Aransas Pass (now Union Pacific) Railway;

FIGURE 9. Areas of Interest within and outside the Indirect APE



- Reynolds Metals Company/ Sherwin Alumina Company; and
- Green Lake and La Quinta drainage ditches.

As previously discussed, the town of Portland was founded in 1891 as an economic venture led by Texas politician John G. Willacy that purchased 3 square miles of land along the bay from the Coleman-Fulton Pasture Company. The area was subdivided into tracts and resold through public auction (Guthrie 1986). Although the initial auction was successful and economic growth was strong, the Panic of 1893 stifled the nascent town. Many of the tracts were repossessed by the Coleman-Fulton Pasture Company. In 1911, Willacy approached the company a second time and negotiated for the return of the Portland tracts, as well as the company's greater involvement in the town's expansion. Owing in large part to the company's construction of a wharf and the area's provision of potable water, Portland saw a brief period of prosperity based primarily on agriculture and shipping. This success was curtailed when the hurricanes of 1916 and 1919 struck the bay and destroyed parts of the town. Following these disasters through World War II, the population of Portland slowly increased until the completion of the Reynolds Metals Company (now Sherwin Alumina) aluminum plant in 1953 stimulated a period of rapid growth in the area. Since the 1960s, Portland has primarily served as a suburban

US EPA ARCHIVE DOCUMENT

community and northern extension of Corpus Christi (Appendix C: Figures 21 – 24).

The town of Portland appears to possess historical significance on a local level sufficient for listing on the NRHP under Criterion A as representative of the late 19th-century development of San Patricio County. Map records indicate that the traditional development core was south of Broadway Avenue and west of Wildcat Drive adjacent to the former San Antonio and Aransas Pass (now Union Pacific) Railway line from Corpus Christi to Gregory. Windshield survey of Portland reveals that the community has changed profoundly since that time, suggesting that the town does not retain integrity sufficient to convey its historical significance; however, a thorough evaluation of the integrity of the town was not undertaken in this study. Thus, Portland's eligibility for listing on the NRHP in its current condition has not been determined.

A section of the Northshore Golf Club of Portland and the associated neighborhood is located within 1 km (0.6 mile) of the Project site. Windshield survey of this area indicates that the club and the suburban residential neighborhood surrounding the golf club is of modern construction (i.e., within the last 10 years). Between the club and the Project site are dredging spoil piles from the POCCA activities. Should the town of Portland be eligible for listing on the NRHP, it is not expected that the Northshore Golf Club and residential neighborhood would fall within the historic district boundaries.

Established in 1886 through an agreement between the Coleman-Fulton Pasture Company and the San Antonio and Aransas Pass Railway, which was completed in the same year, the town of Gregory lies northeast of Portland (Guthrie 1986). Named for the U.S. Attorney General Thomas W. Gregory, the town was strongly connected to the company, which moved its headquarters to Gregory in 1896 and erected many of its significant buildings through the 1920s. In 1909, the company funded the construction of the Hotel Green, which hosted President Taft during his visit to South Texas in the same year. In the early 1920s, the Coleman-Fulton Pasture Company relocated its operations to the nearby company town of Taft, further north on the railroad line, which triggered a decline in Gregory. Like the town of Portland, the completion of the Reynolds Metals Company plant in 1953 stimulated growth in the town, though Gregory's growth was modest in comparison and the town has remained a small crossroads community.

The town of Gregory appears to possess historical significance on a local level sufficient for listing on the NRHP under Criterion A as representative of the late 19th-century development of San Patricio County and for its association with the Coleman-Fulton Pasture Company. The traditional center of the town of Gregory was located at the intersection of the San Antonio and Aransas Pass Railway main line and the spur to Corpus Christi (Gregory and 4th Streets). The railroad, now Union Pacific, is still active, although the town core reflects sharp economic decline, with former commercial lots now vacant and deteriorating dwellings from the first half of the 20th century (Appendix C: Figures 25 – 28).

The date of the construction of the Gregory bypass, which diverted traffic from the two main roads through downtown Gregory, Highways 181/361 and 35, appears to have occurred in the 1950s when several major highway projects are known to have been completed in the area.

The Highway 35 bypass south of Gregory created a significant barrier between the town proper and the project site, cutting off easy access to the Portland/Gregory Cemetery (SP-C014) and other outlying properties (Appendix C: Figure 43). Windshield survey of Gregory suggests that the town does not retain integrity sufficient to convey its historical significance; however, a thorough evaluation of the integrity of the town was not undertaken in this survey. Thus, Gregory's eligibility for listing on the NRHP in its current condition has not been determined.

The southernmost blocks of the former Gregory town grid and the Highway 35 bypass fall within the indirect APE. Buildings along the bypass are generally commercial or light industrial in nature and appear to post-date highway construction, dating to the mid-to-late 20th century. The Portland/Gregory Cemetery (SP-C014) is a notable exception, with some headstones dating back to the early 1900s. To the north of the Highway 35 bypass is a modest residential neighborhood dating to the 1950s (Appendix C: Figures 31 - 33). Consistent with NRHP guidance on boundaries of historic districts, should the town of Gregory be eligible for listing on the NRHP, it seems likely that the district would not extend beyond the Highway 35 bypass. As such, a potential Gregory Historic District would be outside of the APE for this Project (i.e., the character or use will not be affected).

Located within the indirect APE, the Portland/Gregory Cemetery (SP-C014) was established in 1901 on land provided by the Coleman-Fulton Pasture Company (Guthrie 1986). The new cemetery replaced the previous common burial ground at "Dolan's Motte," a wooded hill between the towns of Gregory and Ingleside that had been used to bury area settlers and employees of the Coleman-Fulton Pasture Company. The Portland/Gregory Cemetery was segregated into three sections: an area for whites, an area for Mexicans, and a "potter's field," a term denoting a burial ground for unknown or indigent people. Upon completion of this new cemetery, many of the white families in the area relocated burials from Dolan's Motte to the new plots.

The cemetery was maintained by the Coleman-Fulton Pasture Company until 1926 when the newly-formed Portland/Gregory Cemetery Association took over its management. Pedestrian survey of the cemetery confirms that it is in active use by the local Latino population. A wide range of headstones are exhibited, from commercially available professionally engraved stones to handmade and hand engraved concrete and wood markers (Appendix C: Figures 34 - 41). Catholic and Latino folk funerary art is present, including statuary and wood, ceramic, glass, and marble ornamentation (Appendix C: Figures 37 - 41).

The Portland/Gregory Cemetery (SP-C014) appears to be eligible for listing on the NRHP under Criterion A for its association with the Coleman-Fulton Pasture Company and the early development of the area, and in particular its representation of the range of backgrounds of the surrounding community. The cemetery meets Criteria Consideration D as a resource significant for its distinctive design features and its association with historical events.

The one-story wood-frame building located immediately adjacent to the cemetery, facing the bypass, appears to be a mid-20th century utilitarian warehouse building, despite recent aerial imagery that labels the building as a church (Appendix C: Figure 42). The building does not appear on the 1969 USGS topographic map of Gregory. As it does not appear to be historically associated with the cemetery, the building would not be included in the NRHP historic property boundaries for the Portland/Gregory Cemetery (SP-C014).

Almost the entire east boundary of the Project site abuts the dredge spoil piles and tailing ponds of what is now the Sherwin Alumina Company (formerly Reynolds Metals Company) at 4633 Highway 361 (Appendix C: Figures 17 and 29). This large industrial facility was first developed on 1,600 acres of the former La Quinta/Taft Ranch property acquired by the Reynolds Metals Company for the La Quinta alumina plant in 1951 (Guthrie 1986). The facility extracted alumina from bauxite (aluminum oxide) and sent it to the company's nearby Reynolds San Patricio Reduction Plant, where the alumina was processed into aluminum. As noted above, the opening of the facility in 1953 was a much needed economic stimulus for the nearby towns of Portland and Gregory. According to Guthrie (1986), the world's largest capacity ship unloader was installed at Sherwin's facility dock No. 5 in 1985.

The current owner, the Sherwin Alumina Company, remains a major contributor to the economy of the area, employing 725 people and producing 4,350 metric tons of alumina products per day in a plant that is five (5) times the size of the original facility. The actual plant that was constructed in 1952 is believed to be located over 1.4 km from the eastern extent of the Access Corridor and Project site's boundaries.

The potential historical significance of the Sherwin Alumina Company facility is difficult to assess based upon the limited information obtained during this survey. While the facility certainly played a role in the economic and physical development of the area, a sound evaluation of NRHP eligibility requires an understanding of the history and technology of alumina processing in general, and of the importance of this facility within that context. Additionally, the Sherwin Alumina Company facility was not accessible during the aboveground survey, and no on-site investigations were conducted, so integrity could not be determined.

Given the substantial growth of the facility since the 1950s and the intrinsic nature of industrial facilities as resources that must be constantly upgraded to remain in active use, it is expected that the extant facility is considerably changed

and greatly expanded since its original construction. Accordingly, ERM recommends that the Sherwin Alumina Company be treated as ineligible for listing on the NRHP for the purposes of assessing the effects of the Project on historic properties

In recent consultations, the THC advised ERM on several additional resources that may be considered in the identification and evaluation of historic properties during the Section 106 process, and these include irrigation ditches; railroads; and levees. The NRHP eligibility of additional aboveground resources located within the indirect APE was considered: the San Antonio and Aransas Pass (now Union Pacific) Railway, which includes the Portland to Gregory segment; and the drainage ditches to the west and east of the Project site.

Completed in 1886, the San Antonio and Aransas Pass Railway was a private venture heavily funded by San Antonio and Corpus Christi investors constructed to link inland San Antonio 135 miles to Aransas Pass and the deep water port potential of the Gulf of Mexico. The presence of a railroad that has been actively used for an extended period of time and/or since an important period in local history is not sufficient justification for listing on the NRHP. A linear transportation resource, railroads are similar to roads in that they often play a central role in the development of towns and rural areas. And like roads, railroads that remain in service to the present day have been continuously upgraded to accommodate changing needs, resulting in a loss of materials, workmanship, and design aspects. While they frequently retain their original path and active use into the present day (i.e., location, association), setting and feeling (aesthetics) undergo considerable change over time as a result of adjacent development and the loss of associated secondary buildings and structures such as stations, storehouses, and roundhouses, rendering the resource ineligible for listing on the NRHP.

The railway appears to possess historical significance under NRHP Criterion A for its role in the development of the area; however, an evaluation of the integrity of the full railway was not undertaken in this survey. While the line remains in its original location, and at least one depot building in Gregory remains intact, it is expected that the materials and support structures of the railway have been upgraded over time (Appendix C: Figures 25 - 27; 30). Accordingly, ERM recommends that the San Antonio and Aransas Pass Railway be treated as ineligible for listing on the NRHP for the purposes of assessing the effects of the Project on historic properties.

Also located within the indirect APE are two (2) drainages: one along the west side of the Project site with the dredging spoils that follow the path of a natural tributary known as Green Lake, and which flow toward the Corpus Christi Bay (Appendix C: Figure 45); another runs along the east boundary of the Project site, west of La Quinta Road, known as La Quinta Drainage Ditch (Appendix C: Figure 46). The drainage ditches are not known to possess historical significance; however, the La Quinta Ditch holds historic shellcrete foundation pads associated with the mooring basin of La Quinta Mansion's dock facilities and

wharf (Turner 2004a). In the preparation for the Reynolds Metal Company, the San Patricio County Drainage District (SPCDD) was established in 1951 and maintains the larger drainage and irrigation systems network for San Patricio County, which includes the drainage and ditch that border the Project site's western and eastern boundaries.

An understanding of the history of south Texas confirms that irrigation and drainage systems were important to the development of agriculture in the region. However, it is known that the Project site was within the extensive holdings of the Coleman-Fulton Pasture Company, and as such, the ditches in the Project area not known to be directly associated with agricultural development. The ditches in the indirect APE are not known to possess historical significance either individually or as part of a larger drainage or irrigation system district. ERM recommends these resources as ineligible for listing on the NRHP.

7.2.3

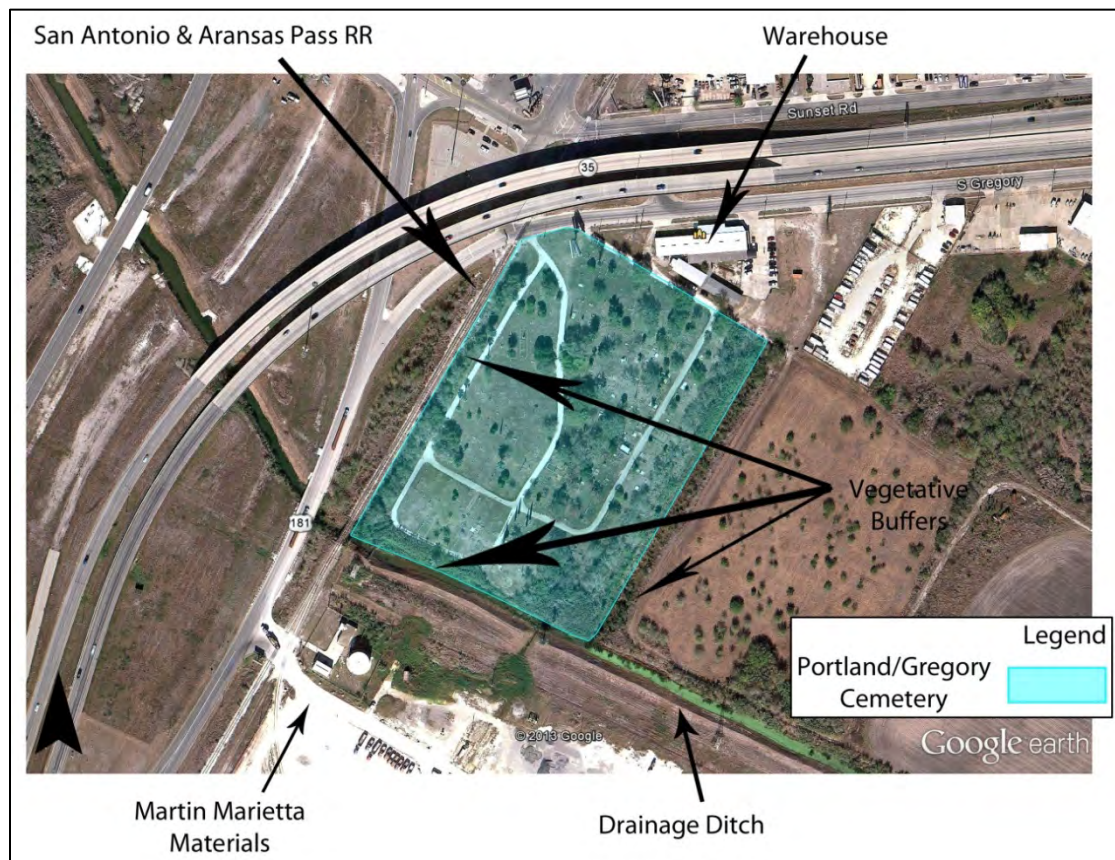
Assessment of Effects to Aboveground Historic Properties

The Section 106 implementing regulations state that *"an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association."* One aboveground resource was found to be eligible for listing on the NRHP, the Portland/Gregory Cemetery (SP-C014). The expected effects of the Project on this historic property are presented below.

As shown in Figure 9, the cemetery is located at the north edge of the indirect APE, approximately 0.5 mile from the Project site boundary and 1.5 miles from the location of the core facility construction. The cemetery property is a rectangular parcel consisting of approximately 11 acres located at the junction of Highway 181 and the Highway 35 bypass, on the east side of the San Antonio and Aransas Pass Railway (now Union Pacific) spur from Gregory to Corpus Christi. The area within which the cemetery is located is currently light-industrial in character. The cemetery is accessed via S. Gregory Road, which runs parallel to the Highway 35 bypass between Highway 181 and Highway 361. The cemetery is bordered by the railroad on the west, S. Gregory Road on the north, Highway 181 Frontage/S. Gregory Road on the east, and Martin Marietta Materials on the south. The cemetery is buffered on the west, south, and east by mature trees and dense vegetation, screening the cemetery from the properties beyond (Figure 10 below).

The Project is not expected to have direct effects on the resource. The Project will result in indirect effects to the resource. The construction of the facility on a currently vacant parcel will result in the introduction of new visual elements within the setting of the cemetery (i.e., the facility itself, electrical substation and transmission lines, access roads, etc.), and an intensification of the industrial character and use of the area within the indirect APE, as well as an increase in

FIGURE 10. Portland/Gregory Cemetery (SP-C014)



noise, traffic, etc. in the vicinity of the cemetery. These indirect effects have the potential to fall into two (2) categories of the Adverse Effect Criteria outlined in the Section 106 implementing regulations:

- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance (Adverse Effect Criterion iv, 36 C.F.R. § 800.5[a][2][iv]); and
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features (Adverse Effect Criterion v, 36 C.F.R. § 800.5[a][2][v]).

The Project will not change or restrict the character of the property's use, or the use of the property in any way. In a broad sense, the Project will affect the physical features within the property's setting that contribute to its historic significance. The Project will also result in the introduction of visual, atmospheric, and audible elements. These two (2) categories of effects have the potential to impact two (2) NRHP aspects of integrity: setting and feeling (Table 4). Both "setting" and "feeling (aesthetics)" are derived from and defined by Little et al.'s (2000) aspects, or qualities, for determining integrity depending on

the specific NRHP criteria or criterion under which the resource is being evaluated (Table 3).

TABLE 4. *Effects of the Project on Portland/Gregory Cemetery (SP-C014)*

Historic Property in the APE	NRHP Resource Type	NRHP Eligibility	Type of Effect	Character or Use?	Potential Criteria of Adverse Effect	Aspects of Integrity Affected	Intensity of Effect
Portland/Gregory Cemetery	Site (SP-C014)	Eligible, Individually	Indirect	Character	iv; v	Setting; Feeling	<u>Low</u>

As described in Section 7.2.2 *Inside and Outside the Project area (Indirect APE)*, the Portland/Gregory Cemetery (SP-C014) appears to be eligible for listing on the NRHP under Criterion A for its association with the Coleman-Fulton Pasture Company and the early development of the area, and in particular its representation of the range of backgrounds of the surrounding community. Consistent with this, character-defining features of the resource include the grave markers, fences and partitions, and associated funerary art. Other character-defining features are expected to include the layout of the cemetery (i.e., paths, clustering of white and Latino burials, burial orientation), and plantings.

Aspects of integrity most important to convey the historical significance of the cemetery are expected to be workmanship, materials, and design, followed by association and location. On-site survey of the cemetery suggested that these aspects of integrity are intact. The proposed Project will not affect these aspects.

As the significance of the cemetery is derived from the vernacular art value of a collection of objects (i.e., funerary art), setting and feeling (aesthetics) as aspects, or qualities, of integrity that extends beyond the boundaries of the property are the least important in conveying the historical significance of the resource. When the cemetery was first established by the Coleman-Fulton Pasture Company, the cemetery was surrounded by open land to the east, and by both the road and railroad to the north and west.

On-site survey suggest that the setting and the feeling (aesthetics) of the cemetery have changed considerably since its establishment in the early 20th century by substantial changes outside of the boundaries of the property including: highway construction (i.e., widening and upgrading, construction of frontage roads, the construction of the Highway 35 bypass to the north and west); the corresponding increase in traffic and associated noise, vibration, and limitation of pedestrian access; and the construction of light industrial and commercial facilities along S. Gregory/Sunset Roads and to the south of the cemetery on Highway 181 (i.e., Martin Marietta Materials, Gulf Companies Cotton Storage, etc.). However, the visibility of the changes in setting on the west, south, and east is obscured by a vegetative buffer along the property

lines. This same buffer is expected to wholly obscure the view of the proposed voestalpine Project. Given the proximity of highways, it is not expected that a change in noise levels will be detectable from the cemetery. Some increase in traffic in the vicinity of the cemetery along existing roads is possible, including industrial transport and worker commuting traffic, but this will be consistent with the character of the traffic in the area currently and will not be readily detectable to the average visitor to the cemetery. Particulate emissions from the Project are not expected.

In consideration of the above analysis, it is ERM's opinion that the Project will not further diminish the setting and feeling (aesthetics) of the Portland/Gregory Cemetery (SP-C014) and that the Project will not adversely affect the historic property.

Based upon the Project information available to ERM at this time, no additional cultural resources investigations to identify historic properties in the indirect APE or to assess the effects of the Project on the Portland/Gregory Cemetery (SP-C014) are recommended. Further, it is ERM's opinion that a formal AOE is not needed; however a template has been provided in Appendix A if the EPA as the lead agency requests a formal AOE.

CONCLUSIONS AND RECOMMENDATIONS

ERM's CRA presents the findings of an archival literature review; an aboveground reconnaissance survey of historic properties; and a limited archeological evaluation conducted for voestalpine Texas, LLC to support the EPA's GHG Permit Application for a proposed hot-briquetted iron (HBI) production facility in San Patricio County, Texas. Because the land is owned by the POCCA, a Texas Antiquities Permit was required and issued on January 11, 2013, as TAC No. 6421.

The Project consists of the development, construction and operation of a production facility that will utilize a natural gas-based process to produce HBI. Because the project would require a GHG permit from the EPA, the project is subject to Section 106 of the NHPA of 1966, as amended. This document has been prepared to support EPA in the completion of their Section 106 requirements for the GHG permit.

The purposes of the CRA were to provide:

1. The evaluation of National Register eligibility, pending the EPA's and the THC's concurrence, for the cultural resources identified within the Project site and the indirect APE, and
2. The results of an assessment of potential impacts and a preliminary determination of effects from the Project on cultural resources, which includes archeological sites and historic aboveground resources, are presented in this CRA as outlined in the requirements for the EPA's GHG permit applications. The information provided is for utilization in consultations with state and federal agencies that will lead to a determination of effects.

ERM's efforts relocated the western extent of one archeological site (41SP35, La Quinta Mansion), within the direct APE and identified seven (7) aboveground resources outside the Project site's boundaries but within the indirect APE. ERM evaluated the significance and integrity of these resources to determine their eligibility for listing on the NRHP.

The western extent of Site 41SP35 was recommended ineligible by Ricklis (1999) and later recommended for further testing by Klinger (2004). Based on the scarce archeological deposits to support additional investigations and highly disturbed nature of the property, the portion of Site 41SP35 within the direct APE is recommended as not eligible for inclusion in the NRHP. As such, the Project should be allowed to proceed as planned without additional cultural resources investigations. In the opinion of the Principal Investigator, the portion of the site within the 8-acre Access Corridor would not contribute to the site's eligibility if portions of the site outside the 8-acre Access Corridor were later determined NRHP eligible.

ERM recommends that a Chance Finds/Unanticipated Discovery Plans be prepared and implemented by voestalpine during construction activities. This CRA report requests the THC concurrence that all cultural resources consultation for the 475-acre Project site be considered complete for the direct APE and that voestalpine should be allowed to proceed to construction within the direct APE.

The seven (7) resources identified during the aboveground reconnaissance include the following:

- Portland;
- Gregory;
- Portland/Gregory Cemetery (THC designation SP-C014);
- San Antonio and Aransas Pass (now Union Pacific) Railway;
- Sherwin Alumina Company (formerly the Reynolds Metals Company);
and
- Green Lake and La Quinta ditches.

Established in 1901, the Portland/Gregory Cemetery (SP-C014) appears to be eligible for listing on the NRHP under Criterion A (for its association with the Coleman-Fulton Pasture Company) and Criteria Consideration D (as a resource significant for its distinctive design features and its association with historical events).

8.1

SUMMARY OF EFFECTS

ERM recommends that EPA consider a finding of *No Adverse Effect* as defined in 36 C.F.R. § 800.4(d)(1) for voestalpine's Texas, LLC HBI production facility. In regards to Site 41SP35 (La Quinta Mansion), the proposed Project *would* result in a change in the character of the property's use and there *would* be a direct effect that would alter the character of the continued use of the property. However, the portion of Site 41SP35 in the direct APE is not a historic property in and of itself. This portion of the site contains little to no integrity; both its prehistoric and historic significance and context have been eradicated over time; as such, the portion of the site within the 8-acre Access Corridor is recommended as not eligible for inclusion in the NRHP. No further archeological investigations are recommended nor warranted for voestalpine's 8-acre Access Corridor within the Project site.

The Project is not expected to have direct effects on the Portland/Gregory Cemetery. The Project will result in indirect effects to the setting and feeling (aesthetics) of the cemetery. Both "setting" and "feeling (aesthetics)" are derived from and defined by Little et al.'s (2000) aspects, or qualities, for determining integrity depending on the specific NRHP criteria or criterion under which the resource is being evaluated (Table 3). The construction of the facility on a currently vacant parcel will result in the introduction of new visual elements within the setting of the cemetery (i.e., the facility, itself, and electrical substation and transmission lines, access roads) and an intensification of the industrial

character and use of the area within the indirect APE, as well as an increase in noise, traffic, etc. in the vicinity. Due to the vegetative screening around the cemetery and the distance of the facility laydown site from the historic property, and in consideration of the already diminished setting and feeling of the cemetery, it is ERM's opinion that the proposed Project will not adversely affect the historic property.

Based upon the Project information available to ERM at this time, no additional cultural resources investigations are recommended. Further, it is ERM's opinion that a formal AOE is not needed; however a sample template has been provided in Appendix A if the EPA as the lead agency requests a formal AOE.

9.0 REFERENCES

9.1 PRINCIPAL INVESTIGATOR

- Port, Dave ERM: Archeologist, RPA; Cultural Resources
Consultant - Impact and Assessment Planning (IAP)
Group: Southwest Division, Houston, TX.
- Albee, Carrie ERM: Architectural Historian; Senior Project Manager -
IAP Group: Northern Division, Washington, DC.
- Bedard, Justin ERM: Archeologist, RPA - IAP Group: Northern
Division, Washington, DC.

9.2 REFERENCE DOCUMENTS

- Advisory Council for Historic Preservation (ACHP)
2001 36 C.F.R. § 800: Protection of Historic and Cultural Properties. *Federal Register*, September 2, 1986, as amended January 11, 2001. Washington, D.C.
- Andrews, J.
1977 *Shells and Shores of Texas*. Elma Dill Russell Spencer Foundation, Series 5. University of Texas Press, Austin.
- Andrus, Patrick
1997 *How to Apply the National Register Criteria for Evaluation Bulletin*. U.S. Department of the Interior, National Park Service.
- Aten, Lawrence E.
1979 *Indians of the Upper Texas Coast: Ethnohistoric and Archeological Frameworks*. Ph.D. dissertation, Department of Anthropology, The University of Texas at Austin.
- 1983a *Indians of the Upper Texas Coast*. Academic Press, New York.
- 1983b *Analysis of Discrete Habitation Units in the Trinity River Delta, Upper Texas Coast*. Occasional Papers No. 2. Texas Archeological Research Laboratory, The University of Texas at Austin.
- Barnes, V.E.
1992 *Geologic Atlas of Texas, Beaumont Sheet, revised*. *Bureau of Economic Geology*, University of Texas at Austin.
- Bieskaart, Lynne A., Wayne R. Roberson, and Lisa Clinton Springs
1985 *Prehistoric Archeological Sites in Texas: A Statistical Overview*. Office of the State Archeological Report 28. Texas Historical Commission, Austin.

- Binford, L.R.
1980 Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archeological Site Formation. *American Antiquity* 45(1):4-20.
- Black, S. L.
1989 "South Texas plains." Pages 39-62 in *From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos Texas*, by T. R. Hester, L. L. Black, D. G. Steele, B. W. Olive, A. A. Fox, K. J. Reinhard, and L. C. Bement. Arkansas Archeological Survey Research Series No. 33. Center for Archeological Research at the University of Texas
- Black, Stephen L., and A. Jochim McGraw
1985 *The Panther Springs Site: Cultural Change and Continuity within the Upper Salado Watershed, South-Central Texas*. Archeological Survey Report 100. Center for Archeological Research, University of Texas at San Antonio.
- Blair, W. F.
1950 The Biotic Provinces of Texas. *Texas Journal of Science* 2(1):93-117.
- Borstel, Christopher L.
2012 *Corpus Christi Liquefaction Project Supplementary Phase I Archeological Survey Of Project Segments in San Patricio County, Texas*. Prepared for Corpus Christi Liquefaction LLC and Cheniere Corpus Christi Pipeline, L.P., by Tetra Tech, Morris Plains, NJ.
- Brown, L. F., J. L. Brewton, J. H. McGowen, T. J. Evans, W. L. Fisher, and D. G. Groat
1976 *Environmental Geologic Atlas of the Texas Coast: Corpus Christi Area*. Bureau of Economic Geology, The University of Texas at Austin.
- Campbell, T. N.
1988 *Indians of Southern Texas and Northeastern Mexico, Selected Writings of Thomas Nolan Campbell*. Texas Archeological Research Laboratory, The University of Texas at Austin.
- Collins, M. B.
2002 *Lithic Sources on the Central Gulf Plain of Texas. In: The Smith Creek Bridge Site (41DW270): A Terrace Site in De Witt County, Texas*, by D. Hudler, K. Prilliman and T. Gustavson, pp.143-160. *Studies In Archeology* 35, Texas Archeological Research Laboratory, The University of Texas at Austin and Archeology Studies Program Report No. 17, Texas Department of Transportation. Austin.
- Corbin, J. E.
1963 Archeological materials from the Northern Shore of Corpus Christi Bay, Texas. *Bulletin of the Texas Archeological Society* 34:5-30.

1974 "A Model of Cultural Succession for the Coastal Bend of Texas." *Bulletin of the Texas Archeological Society* Volume 45:29-54.

Council of Texas Archeologists (CTA)

1987 *Guidelines for Professional Performance Standards*. Austin, TX.

2012 *Guidelines for Cultural Resource Management Reports*. Available at <http://counciloftexasarcheologists.org/wordpress/wpcontent/uploads/Guidelines-for-CRM-Reports.pdf> (Accessed on May 18, 2013). Published by the THC.

Culberson, Linda C.

1993 *Arrowheads and Spear Points in the Prehistoric Southeast: A Guide to Understanding Cultural Artifacts*. University Press of Mississippi, Jackson.

Dames and Moore, Inc.

1996 *Phase I Environmental Site Assessment and Phase II Limited Baseline Assessment: 960 Acre Vacant Property*. La Quinta Road, Gregory, San Patricio and Nueces Counties, Texas.

Ensor, H.B.

1987 San Patrice and Dalton Affinities on the Central and Western Gulf Coastal Plain. *Bulletin of the Texas Archeological Society* 57:69-81.

1991 Research Design. In *Alabonson Road: Early Ceramic Period Adaptation to the Inland Coastal Prairie Zone, Harris County, Texas*, edited by H.B. Ensor and D.L. Carlson. Reports of Investigation No. 8. Archeological Research Laboratory, Texas A&M University, College Station.

Federal Energy Regulatory Commission (FERC)

2005 *Final Environmental Impact Statement (EIS): FERC/EIS-0174*. Prepared for Corpus Christi Liquefaction LLC and Cheniere Corpus Christi Pipeline, L.P., by Office of Energy Projects, Washington, D.C.

Fenneman, N.M.

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

Folmer, Henri

1940 DeBellisle on the Texas Coast. *Southwestern Historical Quarterly* 44(2):204-231.

Gadus, E.F., and M.A. Howard

1990 *Hunter-Fisher-Gatherers on the Upper Texas Coast: Archeological Investigations at the Peggy Lake Disposal Area, Harris County, Texas*. Reports of Investigations No. 74.

Glassow, M.

1977 Issues in Evaluating the Significance of Archeological Resources.
American Antiquity 42: 413-420.

Gray, M. A.

1983 *The Old Home Place: An Archeological Investigation of Five Farm Sites along the Savannah River, Georgia and South Carolina.* Russell Papers, National Park Service, Atlanta, GA.

Guckain, William J. and Ramon N. Garcia

1979 *Soil Survey of San Patricio and Aransas Counties, Texas.* Report produced by the U.S. Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Experiment Station.

Guthrie, Keith

1986 *History of San Patricio County.* Nortex Press, Austin, TX.

2012a "San Patricio County." *Handbook of Texas Online.* Available at <http://www.tshaonline.org/handbook/online/articles/hcs04> (Accessed on May 20, 2013). Published by the Texas State Historical Association.

2012b "Coleman-Fulton Pasture Company." *Handbook of Texas Online.* Available at <http://www.tshaonline.org/handbook/online/articles/aqc02> (Accessed on May 20, 2013). Published by the Texas State Historical Association.

2012c "Gregory, TX." *Handbook of Texas Online.* Available at <http://www.tshaonline.org/handbook/online/articles/hgg05> (Accessed on May 20, 2013). Published by the Texas State Historical Association.

2012d "Taft, TX." *Handbook of Texas Online.* Available at <http://www.tshaonline.org/handbook/online/articles/hgt01> (Accessed on May 20, 2013). Published by the Texas State Historical Association.

Hall, G.D.

1981 *Allens Creek: A Study in the Cultural Prehistory of the Lower Brazos River Valley, Texas.* Research Report No. 61. Texas Archeological Survey, The University of Texas at Austin.

Howard, M.A., G.L. Bailey, C.B. Bousman, K.M. Gardner, and R.C. Fields

1991 *National Register Testing at the Spanish Moss Site (41GV10) and 41GV53, Galveston County, Texas.* Reports of Investigations No. 77. Prewitt & Associates, Inc., Austin, Texas.

Hughey, James

2004 *Site Assessment of the Proposed Vista del Sol LNG Terminal Facility Location, San Patricio Awesome - County, Texas (Draft)*. Report produced by HRA Gray & Pape, LLC, Houston, Texas for URS Corps, Houston, Texas.

Jones, F. B.

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

Jurgens, Christopher J.

1989 *Additional Archeological Survey of Proposed Wastewater System Construction at Riviera Water Control and Improvement District, Kleberg County, Texas*. Construction Grants Division, Texas Water Development Board.

Klinger, Timothy C.

2004 *Historic Properties Review of a Proposed Liquefied Natural Gas Facility Near Corpus Christi, Texas*. Prepared for Corpus Christi LNG, L.P., Houston, Texas, by Historic Preservation Associates, Fayetteville, Arkansas

Little, Barbara, Erika Martin Seibert, Jan Townsend, John H. Sprinkle, Jr. and John Knoerl

2000 *National Register Bulletin: Guidelines for Evaluating and Registering Archeological Properties*. U.S. Department of the Interior, National Park Service, National Register, History and Education.

McDonald, K. L. and D. S. Dibble

1973 *An Archeological and Historical Resource Inventory and Evaluation of a Site in San Patricio County, Texas*. Research Report No. 33, Texas Archeological Survey, University of Texas, Austin.

McGraw, A. J. and K. Hindes

1987 *Chipped Stone and Adobe: A Cultural Resources Assessment of the Proposed Applewhite Reservoir, Bexar County, Texas*. Center for Archeological Research, Archeological Survey Report No. 163 University of Texas at San Antonio.

McMahan, C.A., R.G. Frye, and K.L. Brown

1984 *The Vegetation Types of Texas, including Cropland*. Texas Parks and Wildlife Department, Austin.

Munsell Soil Color Charts

1992 Revised Edition. Macbeth Division of Kollmorgan Instruments Corporation.

Natural Resources Conservation Service (NRCS)

2012 Official Soil Series Descriptions (OSD). Available at <http://soils.usda.gov/technical/classification/osd/index.html> (Accessed on May 1, 2013). Published by the USDA.

Newcomb, W.W. Jr.

1961 *The Indians of Texas From Prehistoric to Modern Times*. The University of Texas Press, Austin, Texas.

Paine, J. G.

1991 *Late Quaternary Depositional Units, Sea Level, and Vertical Movement Along the Central Texas Coast*. Ph.D. dissertation, Department of Geology, The University of Texas at Austin.

Patterson, Leland W.

1995 The Archeology of Southeast Texas. *Bulletin of the Texas Archeological Society*. 66:239-264.

Perkins, Shelley and Darren Latham

2004 *A Phase 1 Cultural Resources Survey for the Corpus Christi Pipeline Project, San Patricio County, Texas*. Prepared for Cheniere Corpus Christi Pipeline Company, Houston Texas, by PBS&J, Houston, Texas.

Perttula, T. K.

2002 Aboriginal Ceramics. In: *Archeological Investigations at the Last Spanish Colonial Mission Established on the Texas Frontier: Nuestra Señora del Refugio (41RF1), Refugio County, Texas*. Volume I, Archeological Investigations. Pp. 233-260. Center for Archeological Research, The University of Texas at San Antonio, Archeological Survey Report No. 315 and Texas Department of Transportation, Environmental Affairs Division, Archeological Studies Program, Report No. 39.

Prewitt, E. R.

1981 Cultural Chronology in Central Texas. *Bulletin of the Texas Archeological Society*. 52: 65-90.

1985 From Circleville to Toyah: Comments on Central Texas Chronology. *Bulletin of the Texas Archeological Society*. 54 (for 1982): 201-238

Ricklis, R.A.

1993 *A Model of Holocene Environmental and Human Adaptive Change on the Central Texas Coast: Geoarcheological Investigations at White's Point, Nueces Bay, and Surrounding Area*. Coastal Archeological Studies, Inc., Corpus Christi.

1994 *Aboriginal Life and Culture on the Upper Texas Coast: Archeology at the Mitchell Ridge Site, 41GV66, Galveston Island*. Coastal Archeological Research, Inc., Corpus Christi.

- 1996 *Karankawa Indians of Texas: An Ecological Study of Cultural Tradition and Change*. University of Texas Press, Austin, Texas.
- 1997 "Prehistoric and Early Historic People and Environment in the Corpus Christi Bay Area." Coastal Bend Bays & Estuaries Program, Corpus Christi, Texas. Available at <http://www.cbbep.org/publications/virtuallibrary/ricklis.html> (Accessed on May 20, 2013).
- 1999 *Archeological Survey of Port of Corpus Christi Tracts 1 and 2, North Shore of Corpus Christi Bay, San Patricio County, Texas*. Submitted to the Port of Corpus Christi Authority by TAS, Inc., and Coastal Archeological Research, Inc., Corpus Christi, TX.
- 2007 "The Prehistory of the Texas Coastal Zone: 10,000 Years of Changing Environment and Culture." Webpage on Texas Beyond History: The Virtual Museum of Texas' Cultural History. College of Liberal Arts, University of Texas at Austin. Available at <http://www.texasbeyondhistory.net/coast/prehistory/images/intro.html> (Accessed on May 20, 2013).
- 2012 *Identifying Complexity in the Late Prehistoric Fishing Economy along the Middle Texas Coast: Data Recovery Excavations at the McGloin Bluff Site, 41SP11, San Patricio County, Texas*. TAC Permit No. 5060. Report submitted to the POCCA by TRC Environmental Corp., Austin, TX.
- Ricklis, R. A. and K. A. Cox
- 1993 Examining Lithic Technological Organization as a Dynamic Cultural Subsystem: The Advantages of an Explicitly Spatial Approach. *American Antiquity* 58(3):444-461.
- Ricklis, R.A. and R.A. Weinstein
- 2005 Sea-Level Rise and Fluctuation on the Central Texas Coast: Exploring Cultural and Ecological Correlates. In *Gulf Coast Archeology: The Southwest United States and Mexico*, edited by N.M. White, pp. 68-86. University Press of Florida, Gainesville.
- San Patricio County Tax Assessor's Office
- 2012 *Public Access to Tax records*. Available at http://www.co.san-patricio.tx.us/default.aspx?San-Patricio_County/County.Assessor.Collector (Accessed on August 18, 2012).
- Scott, S. L. and J. Dukes
- 2002 Vertebrate Fauna. In: *Archeological Investigations at the Guadalupe Bay Site (41CL2): Late Archaic through Historic Occupation along the Channel to*

Victoria, Calhoun County, Texas. R. A. Weinstein, editor. Pp. 585-644.
Coastal Environments, Inc., Baton Rouge, Louisiana

Sherwin Alumina

2013 "Plant History." Available at
<http://lq.sherwinalumina.com/history/default.aspx> (Accessed on May
20, 2013).

Shiner, Moseley, and Associates, Inc.

2003 *Environmental Document for the proposed La Quinta Container Terminal,
Nueces County, Texas.* Submitted to the POCCA by Shiner, Moseley, and
Associates, Corpus Christi, Texas.

Solis, R. F.

1981 Upper Tertiary and Quaternary Depositional Systems, Central Coastal
Plain, Texas – Regional Geology of the Coastal Aquifer and Potential
Liquid-Waste Repositories. Reports of Investigations No. 108, *Bureau of
Economic Geology*; University of Texas at Austin.

South, S.

1977 *Method and Theory in Historical Archeology.* Academic Press, New York, NY.

Story, D.A.

1985 Cultural History of the Native Americans. In *The Archeology and
Bioarcheology of the Gulf Coastal Plain* 1: 163-366. 2 vols. Research Series
No. 38. Fayetteville, Arkansas Archeological Survey.

Story, D.A., Janice A. Guy, Barbara A. Burnett, Martha D. Freeman, Jerome C.
Rose, D. Gentry Steele, Ben W. Olive, and Karl J. Reinhard

1990 *The Archeology and Bioarcheology of the Gulf Coastal Plain: Volume 1.*
Arkansas Archeological Survey Research Series, No. 38.

Texas General Land Office (GLO)

2011 Texas General Land Office Land Grant Search, Harris County, Abstract
419, Harris Script, File No. 000109

Texas Historical Commission (THC)

2002 "Archeological Survey Standards for Texas." THC Archeology
Division, Austin, Texas. Available at [http://www.thc.state.tx.us/project-
review/statutes-regulations-rules#standardsandguidelines](http://www.thc.state.tx.us/project-review/statutes-regulations-rules#standardsandguidelines)
(Accessed on May 20, 2013).

2012 *Texas Archeological Sites Atlas (TASA).* Restricted Cultural Resource
Information Access. (Accessed August 18, 2012). Published by the THC.

2013 "Defining the Area of Potential Effects." *The Section 106 Review Process.*
Available at [http://www.thc.state.tx.us/project-review/
national-](http://www.thc.state.tx.us/project-review/national-)

[historic-preservation-act/section-106-review-process](#) (Accessed May 1, 2013). Published by the THC.

The Bartlett Tribune and News

1926 "Manager of Taft Ranch Died in Temple," Obituary of Joseph F. Green in (*Bartlett, Texas*), Vol. 41 (13:1), Friday, November 26, 1926, p. 3.

The National Historic Preservation Act (NHPA)

1966 *Section 106*, as amended, Public Law 89-665; 16 U.S.C. 470 *et seq.*

The Portal to Texas History

2010 Rescuing Texas History Collection. Available at <http://texashistory.unt.edu/> (Accessed on July 16, 2012).

Thomas, M. A. and J. B. Anderson

1994 Sea-Level Controls on Facies Architecture of the Trinity/Sabine Incised-Valley System, Texas Continental Shelf. *Transactions of the Gulf Coast Association of Geological Sciences* 39:563-570.

Turner, Kristi E.

2004a *A Phase I Cultural Resources Survey for the Cheniere Corpus Christi Liquefied Natural Gas (LNG) Terminal Project, San Patricio and Nueces Counties, TX.* Submitted to the Federal Energy Regulatory Commission (FERC) and the USACE-Galveston District by PBS&J, Houston, TX.

2004b *A Cultural Resources Survey for the Cheniere Corpus Christi Liquefied Natural Gas (LNG) Terminal Project, San Patricio and Nueces Counties, Texas - Addendum No. 1.* Prepared for Corpus Christi LNG, L.P. Houston, Texas, by PBS&J, Houston, Texas.

Turner, E. and T. R. Hester

1993 *Stone Artifacts of the Texas Indians.* Third edition. Gulf Publishing Company. Houston.

U.S. Department of the Interior, National Park Service

1983 "Archeology and Historic Preservation: The Secretary of the Interior's Standards and Guidelines for Archeologists and Historians." *Federal Register* 48 (190):44716-44742 [Notices]. Annotated version available at http://www.cr.nps.gov/local-law/arch_stnds_0.html (Accessed on May 20, 2013).

Van Sicken, D.C.

1991 Surficial Geology of the Houston Area: An Off-lapping Series of Pleistocene (& Pliocene?) highest Sea Level Fluviodeltaic Sequences. *Transactions of the Gulf Coast Association of Geological Societies*, Volume 41:651-666

Vines, R.A.

1977 *Trees of East Texas*. University of Texas Press, Austin.

Widmer, R.J.

2005 A New Look at the Gulf Coast Formative. In *Gulf Coast Archeology: The Southeast United States and Mexico*, edited by N.M. White, pp. 68–86. University Press of Florida, Gainesville.

APPENDICES

APPENDIX A

ASSESSMENT OF EFFECTS (AOE) TEMPLATE

January 24, 2014

Project No. 0187325

ASSESSMENT OF EFFECTS

voestalpine Texas, LLC
Cultural Resources Assessment (CRA): Texas Project site
Texas Antiquities Permit 6421

SAN PATRICIO COUNTY, TEXAS

ERM Project No. 0187325

FINDING OF NO EFFECT/NO ADVERSE EFFECT/ADVERSE EFFECT TO
[NAME OF PROPERTY]

January 28, 2014 (update after each edit)

This document has been produced for use in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and subsequent amendments.

**SUPPORT FOR EPA SECTION 106 FINDING OF
[NO EFFECTS/NO ADVERSE EFFECTS/ADVERSE EFFECTS]
TO HISTORIC PROPERTIES**

**[Project Proponent Name]
[Project Name]
[Project Location]**

**[Preparer Name]
[ERM Project No.]**

[Date]

INTENDED USE

This document has been prepared by Environmental Resources Management, Inc. (ERM) on behalf of the Project proponent to support the Environmental Protection Agency's (EPA's) compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 as part of the agency's review of the proponent's greenhouse gas (GHG) permit under the Prevention of Significant Deterioration (PSD) program of the Clean Air Act (the CAA). The information presented here is intended to be a summary of the documentation required under the Section 106 implementing regulations (36 CFR Part 800), the Texas Historical Commission's (THC's) *Survey Standards for Texas*, and the Council of Texas Archeologists' (CTA's) *Guidelines for Cultural Resource Management Reports*. As such, this document presents the preparer's findings with respect to:

- 1) the definition of the undertaking (36 CFR §800.3[a]);
- 2) potential consulting parties (36 CFR §800.2[c]);
- 3) the Area of Potential Effects (APE) (36 CFR §800.4[a]);
- 4) historic properties in the APE (36 CFR §800.4[b]); and
- 5) an assessment of the effects of the proposed Project on historic properties (36 CFR §800.5).

PROJECT PROPONENT CONTACT INFORMATION

Name:

Title:

Company:

Street Address:

Telephone Number(s):

Email Address(es):

This person is the preferred contact. OR The preparer (below) is the preferred contact.

PREPARER CONTACT INFORMATION

Name:

Title:

Company:

Street Address:

Telephone Number(s):

Email Address(es):

DEFINITION OF THE UNDERTAKING

A Section 106 undertaking is “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.” (36 CFR §800.16[y])

Project Name:

Other Project Identifiers: [e.g., EPA Reference Number]

Project Need and Purpose: [1 paragraph limit]

Project Description:

[Should include a description of the maximum area of ground disturbance, including water/natural gas/electrical interconnections, construction staging, associated road improvements, and fill sources/spoil disposal areas. Should also include: a description of the maximum height, scale, and mass expected; expected visible steam/emissions plumes; construction and operation sound projections; lighting plan (day and night); and expected particulate deposition.]

[Confirm this description is the same as that used in Notification and Survey Report. If the project description has been updated since the submittal of the Notification, modify the description accordingly and provide an explanation for the changes.]

Project Schedule:

[Indicate when the Project permitting is scheduled to be completed, when construction is to begin and end, and when the Project is expected to be completed and in service.]

Supporting Graphics:

[Must include: site location map (outline of the state of Texas with county highlighted); and site plan with facility laydown area identified. If available, also include: conceptual renderings depicting height, scale, mass, and general configuration; and elevation drawings. To the extent possible, supporting graphics throughout the document should be embedded into the appropriate section. Additional graphics should be included in Appendix A.]

POTENTIAL CONSULTING PARTIES/PUBLIC INVOLVEMENT

According to the Section 106 implementing regulations, consultation is “the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process.” (36 CFR §800.16[f]) Parties with a role in the Section 106 consultation process are specified in 36 CFR §800.2. Potential consulting parties for the proposed Project are listed below for EPA’s consideration. Consistent with the consultative process, Section 106 includes a plan to involve the public. EPA’s efforts to fulfill this requirement may be aided by public outreach carried out by the Project proponent.

Lead Agency: [e.g., EPA]

Other Federal Agencies: [e.g., U.S. Army Corps of Engineers]

State/Tribal Historic Preservation Officer: [e.g., Texas Historical Commission]

Indian Tribes: [e.g., Alabama-Coushatta Tribes of Texas. Indicate whether they are federally or State recognized.]

Representatives of Local Government: [e.g., county historic preservation commission representative]

Applicant for Federal permit: [i.e., Project proponent/GHG permit applicant]

Other Parties: [e.g., National Park Service, local historical society, etc.]

Do you expect the Advisory Council on Historic Preservation to participate in consultation?

Yes No

If yes, explain why:

Coordination to date:

[Summarize in a few paragraphs coordination with potential consulting parties undertaken by the Project proponent or consultant to date. Include the names of party representatives, and copies of emails and letters, including correspondence directed to the parties as well as responses received. Provide copies of key correspondence in Appendix B]

Plan to involve the Public:

[Describe the public involvement plan including public outreach and any public meetings. Note that these efforts do not need to be specific to the Section 106 process, provided the effects to historic properties are presented and an opportunity for public comment is provided. Provide copies of key correspondence in Appendix B.]

SAMPLE

AREA OF POTENTIAL EFFECTS

As defined in 36 CFR 800.16(d), the Area of Potential Effects (APE) of an undertaking is “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist.” The direct APE generally consists of the area within which direct physical impacts will occur to historic properties, should they be present (e.g., area of ground disturbance). The indirect APE generally extends beyond the area of direct physical impacts to include such aspects as visual impacts, noise/vibration, and air emissions containing hazardous constituents. Consistent with the Section 106 implementing regulations, the APE should account for immediate effects as well as reasonable and foreseeable effects that may occur at a more distant time in the future (e.g., demolition by neglect, subsequent development).

Description and justification of the proposed APE:

[Should address both the direct and indirect APE, and include a discussion of how they were determined.]

Supporting Graphics:

[Should include at least one map depicting the APE and the Project site.]

IDENTIFICATION OF HISTORIC PROPERTIES

The NHPA defines historic properties as those that are listed in or eligible for listing on the National Register of Historic Places (NRHP). The Section 106 implementing regulations state that the lead federal agency must make a “reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. The agency official shall take into account past planning, research and studies, the magnitude and nature of the undertaking and the degree of Federal involvement, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the area of potential effects.” (36 CFR §800.4[b][1]) The ACHP clarifies that “while it may be appropriate in some circumstances to identify all historic properties in the APE, it is important to note that the regulations do not require identification of all properties.” (http://www.achp.gov/docs/reasonable_good_faith_identification.pdf) A summary of the efforts undertaken to identify historic properties within the APE, and the results of those efforts, are presented below.

Background Research:

[Describe the repositories and sources consulted to locate previously identified historic properties in the APE (e.g., THC Archaeological Sites Atlas (TASA), NRHP online database, historic topographic maps, etc.).]

Archaeological Investigations:

[Describe archaeological investigations undertaken to identify historic properties, with a brief statement of the methodology employed. Indicate the firm that conducted the investigations, and whether they meet the *Secretary of the Interior’s Professional Qualification Standards* for the appropriate discipline.]

Has a report been prepared? ___ Yes ___ No

If yes, please provide the citation.

Texas Antiquities Permit Number (if applicable):

Aboveground Investigations:

[Describe aboveground investigations undertaken to identify historic properties, with a brief statement of the methodology employed. Indicate the firm that conducted the investigations, and whether they meet the *Secretary of the Interior’s Professional Qualification Standards* for the appropriate discipline. Note that

aboveground resources may include buildings, structures, cultural landscape features, Traditional Cultural Properties and resources of significance to Native American groups.]

Has a report been prepared? ___ Yes ___ No

If yes, please provide the citation.

HISTORIC PROPERTIES WITHIN THE APE

Summary Resource Count:

Buildings: [Number]
 Structures: [Number]
 Sites: [Number]
 Objects: [Number]
 Districts: [Number]

 Total: [Total Number]

Supporting Graphics:

[Should include at least one map depicting the APE, the Project site, and the location of the historic properties. Survey forms, nominations, or other property-specific information documents may be included in Appendix C. If more than 5 historic properties are located within the APE, please include a summary table in Appendix D.]

Historic Property #1: [Name]

Address:

Eligibility Status (select all that apply):

- NRHP Listed (Individually)
- NRHP Listed (Contributing)
- NRHP Eligible (per previous Section 106 determination)
- NRHP Eligible (per SHPO records)
- NRHP Eligible (per consultant recommendation)

Date of Origin:

Brief Description:

Statement of Significance:

[Indicate the applicable NRHP Criteria, Criteria Considerations, and aspects of integrity.]

Period of Significance:

Boundaries:

Photograph:

[One photograph of each historic property should be included.]

[Repeat for each historic property.]

SAMPLE

ASSESSMENT OF EFFECTS

Historic Property #1: [Name]

No Effect

No Adverse Effect

Adverse Effect

Comments:

[Explain in brief (1-2 paragraphs) the effects the proposed Project is expected to have on the historic property, and why that does or does not constitute an adverse effect per 36 CFR §800.5. Consider direct physical effects (e.g., demolition, alteration, relocation) as well as indirect effects (e.g., visual, atmospheric, audible, vibration, neglect).]

If adverse, check all of the following Criteria of Adverse Effect that apply:

(i) Physical destruction of or damage to all or part of the property

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines

(iii) Removal of the property from its historic location

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization

(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

Other

Can the adverse effect be avoided? Yes No

If yes, explain. [e.g., avoidance of an archaeological site, change of alignment, project redesign, etc. Only include avoidance measures that are reasonable and feasible for the Project proponent.]

Can the adverse effect be minimized? ___ Yes ___ No

If yes, explain. [e.g., vegetative buffers, sound barriers, compatible design, etc. Only include minimization measures that are reasonable and feasible for the Project proponent.]

[Repeat for each historic property.]

SAMPLE

ADDITIONAL INFORMATION

Is the Project proponent coordinating the Section 106/NHPA planning for this Project with National Environmental Policy Act (NEPA) planning, if applicable? ___ Yes ___ No

Has the Project proponent prepared or are they preparing any environmental reports (e.g., Biological Assessment) for this Project? ___ Yes ___ No

If yes, please provide the citation.

Will other federal permits, licenses, or grants be required for this Project? ___ Yes ___ No

If yes, please explain.

SAMPLE

**SUPPORT FOR EPA SECTION 106 FINDING OF
[NO EFFECTS/NO ADVERSE EFFECTS/ADVERSE EFFECTS]
TO HISTORIC PROPERTIES**

APPENDICES

APPENDIX A
PROJECT DOCUMENTS

SAMPLE

APPENDIX B

COORDINATION WITH CONSULTING PARTIES AND
PUBLIC OUTREACH

SAMPLE

APPENDIX C
HISTORIC PROPERTY SURVEY AND NOMINATION FORMS

SAMPLE

SAMPLE

APPENDIX D
HISTORIC PROPERTY SUMMARY TABLE

APPENDIX B
PROJECT SURVEY MAPS

January 24, 2014

Project No. 0187325

Environmental Resources Management
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024
(281) 600-1000



Plate 1 - The Project site's boundaries (the direct APE)

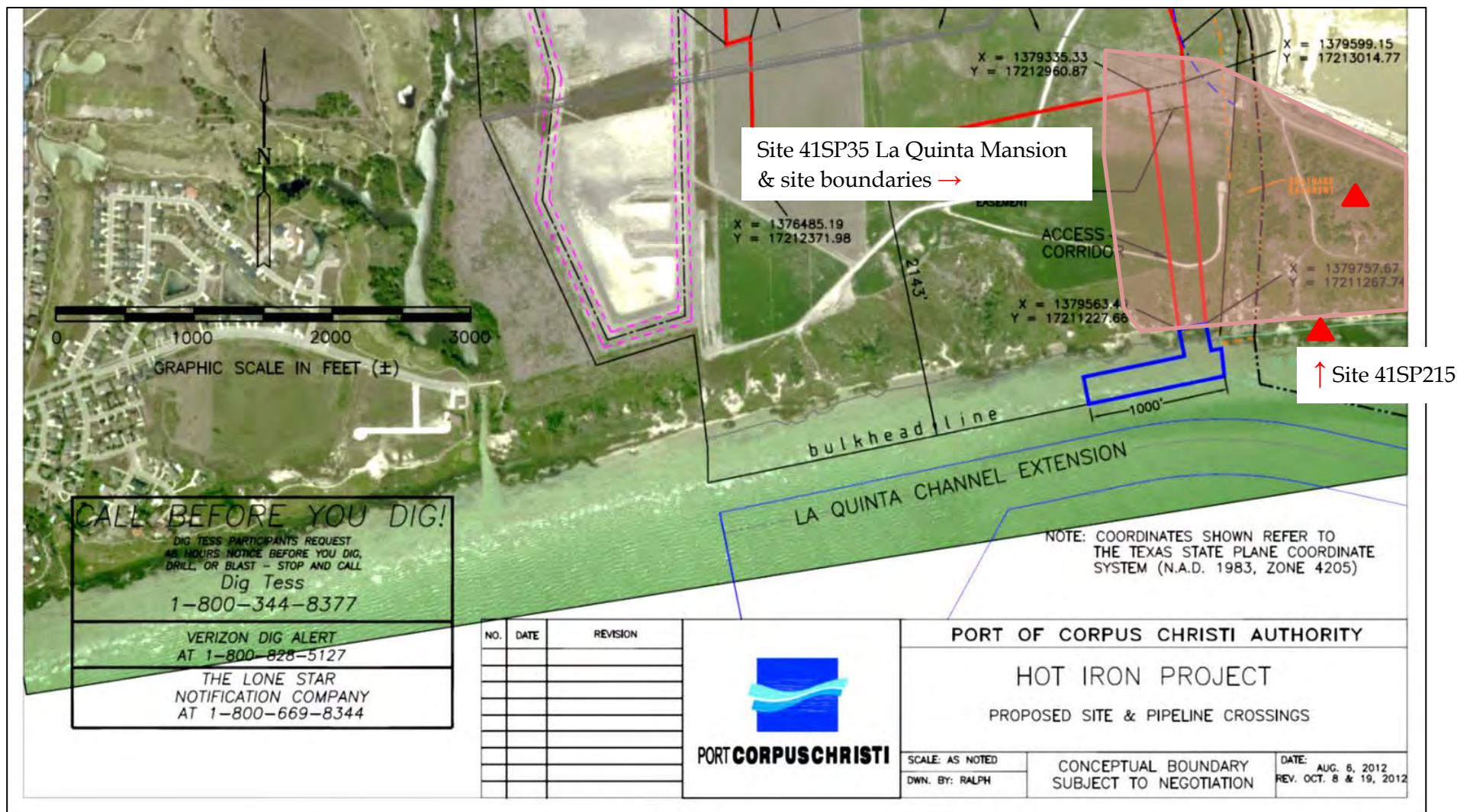


Plate 2 - The 8-acre Access Corridor within Site 41SP35's boundaries

APPENDIX C

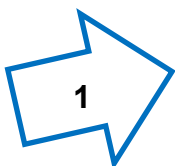
SITE INVESTIGATION PHOTOGRAPHS

January 24, 2014

Project No. 0187325

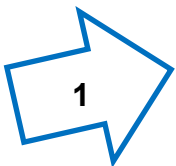
Environmental Resources Management
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024
(281) 600-1000

Area A



Observation Points – Figure Numbers and Direction

Area B



Observation Points – Figure Numbers and Direction

Gregory (Historic-Period Core) Figures 25 – 28 (general views outside the 1.5 mile Indirect APE)

Figures 31 – 43 (detail below)

Portland (Historic-Period Core) Figures 21 – 24 (general views outside the 1.5 mile Indirect APE)

Figures 17 – 20, 46 (detail below)

44

45

30

29

16





© 2013 Google

Google earth

Gregory (Historic-Period Core) Figures 25 – 28 (general views outside the 1.5 mile Indirect APE)

Figures 34 – 42

33
32
31
43

Google earth



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
1

Date:
4/4/13

Direction Photo Taken: SE

Description: East Side of Area A



Photo No.
2

Date:
4/4/13

Direction Photo Taken: NE

Description: East Side of Area A



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
3

Date:
4/4/13

Direction Photo Taken: S

Description: Cinder block structural remains in Area A



Photo No.
4

Date:
4/4/13

Direction Photo Taken: SE

Description: Cinder block structural remains in Area A



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
5

Date:
4/4/13

Direction Photo Taken: S

Description: Stamped brick from structural remains in Area A



Photo No.
6

Date:
4/4/13

Direction Photo Taken: SE

Description: Four wooden posts in Area A



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
7

Date:
4/4/13

Direction Photo Taken: SE

Description: Dirt access road through Area A



Photo No.
8

Date:
4/4/13

Direction Photo Taken: SE

Description: Shellcrete block fragments in access road



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
9

Date:
4/4/13

Direction Photo Taken: SW

Description: Disturbed area at southern end of Area A



Photo No.
10

Date:
4/4/13

Direction Photo Taken: NE

Description: Isolated southern end of landform. The 2 chert flakes were found on the north side of the terraced remnant bluff



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
11

Date:
10/10/12

Direction Photo Taken: N

Description: La Quinta Seawall in October 2012; directly south and adjacent to Project site's Access Corridor



Photo No.
12

Date:
10/10/12

Direction Photo Taken: NE

Description: La Quinta Seawall in October 2012; directly south and adjacent to Project site's Access Corridor



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
13

Date:
4/4/13

Direction Photo Taken: NW

Description: Area B



Photo No.
14

Date:
4/3/13

Direction Photo Taken: W

Description: Livestock pond at the north end of Area B



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
15

Date:
4/4/13

Direction Photo Taken: E

Description: Plowed ground surface and new cultivation in Area B



Photo No.
16

Date:
4/3/13

Direction Photo Taken: SW

Description: Project site



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
17

Date:
4/4/13

Direction Photo Taken: SE

Description: Access Corridor, (Sherwin Alumina Plant in the center; their Terminal on the right)



Photo No.
18

Date:
4/3/13

Direction Photo Taken: SE

Description: Access Corridor, (Sherwin Alumina Plant's Terminal on the left)



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
19 **Date:**
4/3/13

Direction Photo Taken: SW

Description: Access Corridor, View Towards Portland



Photo No.
20 **Date:**
4/3/13

Direction Photo Taken: NW

Description: Structure Foundation of Clipper's Brick



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
21

Date:
4/3/13

Direction Photo Taken: N

Description:
Representative Housing on the East Side of Portland



Photo No.
22

Date:
4/3/13

Direction Photo Taken: NE

Description:
Representative Housing on the East Side of Portland



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
23

Date:
4/3/13

Direction Photo Taken: W

Description: Bayside Park, East Side of Portland, View West at Representative Housing



Photo No.
24

Date:
4/3/13

Direction Photo Taken: E

Description: Bayside Park, East Side of Portland, View East Towards Project Site and Sherwin Alumina



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
25 **Date:**
4/3/13

Direction Photo Taken: N

Description: Gregory Town Center, View North Towards Union Pacific Railroad and Vacant Commercial Building



Photo No.
26 **Date:**
4/3/13

Direction Photo Taken: E

Description: Gregory Town Center, View East Towards Union Pacific Railroad and Gregory Street



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
27 **Date:**
4/3/13

Direction Photo Taken: N

Description: Gregory Town Center, Union Pacific Depot



Photo No.
28 **Date:**
4/3/13

Direction Photo Taken: S

Description: Gregory Town Center, View South Towards Gregory Street



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
29

Date:
4/3/13

Direction Photo Taken: SE

Description: View from La Quinta Road Towards Sherwin Alumina Plant (Dredge Spoil Piles in the Foreground)



Photo No.
30

Date:
4/3/13

Direction Photo Taken: E

Description: View from Highway 361 Towards Union Pacific Railroad



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
31 **Date:**
4/3/13

Direction Photo Taken: NW

Description:
Representative Housing in Gregory along Lee Avenue



Photo No.
32 **Date:**
4/3/13

Direction Photo Taken: NW

Description:
Representative Housing in Gregory along Lee Avenue



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
33

Date:
4/3/13

Direction Photo Taken: SE

Description:
Representative Housing in Gregory along Lee Avenue, Adjacent to the Highway 35 Bypass



Photo No.
34

Date:
4/3/13

Direction Photo Taken: S

Description:
Portland/Gregory Cemetery (SP-C014)



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
35

Date:
4/3/13

Direction Photo Taken: SE

Description:
Portland/Gregory Cemetery (SP-C014)



Photo No.
36

Date:
4/3/13

Direction Photo Taken: E

Description:
Portland/Gregory Cemetery (SP-C014)



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
37

Date:
4/3/13

Direction Photo Taken: SE



Description:
Portland/Gregory Cemetery (SP-C014),
Grave Marker Dated 1908

Photo No.
38

Date:
4/3/13

Direction Photo Taken: S



Description:
Portland/Gregory Cemetery (SP-C014),
Commercially Produced
Grave Marker

US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
39

Date:
4/3/13

Direction Photo Taken: W

Description:
Portland/Gregory Cemetery (SP-C014), Handmade Concrete-Poured Grave Markers



Photo No.
40

Date:
4/3/13

Direction Photo Taken: S

Description:
Portland/Gregory Cemetery (SP-C014), Handmade Concrete-Poured Grave Markers



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
41

Date:
4/3/13

Direction Photo Taken: W

Description:
Portland/Gregory Cemetery (SP-C014), Catholic Funerary Art



Photo No.
42

Date:
4/3/13

Direction Photo Taken: NE

Description: Mid 20th-Century Building Adjacent to Portland/Gregory Cemetery (SP-C014)



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine	Site Location: voestalpine Stahl GmbH: San Patricio County, Texas	Project No. 0187325
---------------------------------	--	----------------------------

Photo No. 43	Date: 4/3/13
Direction Photo Taken: SW	

Description: Gregory, View SW at Highway 35 Bypass from Gregory Street



Photo No. 44	Date: 4/3/13
Direction Photo Taken: SE	

Description: North Side of Portland, View SE Towards Project Area from Highway 35



US EPA ARCHIVE DOCUMENT



PHOTOGRAPH LOG

Client Name: voestalpine

Site Location: voestalpine Stahl GmbH: San Patricio County, Texas

Project No. 0187325

Photo No.
45

Date:
10/10/12

Direction Photo Taken: NW

Description: NW View of Green Lake Ditch and bordering riparian forested habitat



Photo No.
46

Date:
10/10/12

Direction Photo Taken: N

Description: North View of historic concrete debris (mooring basin) and pool at mouth of La Quinta Ditch



US EPA ARCHIVE DOCUMENT

APPENDIX D
SHOVEL TEST LOG

January 24, 2014

Project No. 0187325

Environmental Resources Management
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024
(281) 600-1000

Shovel Test Log						
Transect	Area	Shovel Test	Result	Depth (cm)	Artifacts	
A	A	A-1	Negative	94	0	
		A-2	Positive	71	2	
		A-3	Negative	68	0	
		A-4	Negative	55	0	
	B	B	A-5	Negative	Not Excavated	0
			A-6	Negative	68	0
			A-7	Negative	72	0
			A-8	Negative	67	0
			A-9	Negative	65	0
			A-10	Negative	63	0
			A-11	Negative	60	0
			A-12	Negative	62	0
			A-13	Negative	62	0
			A-14	Negative	70	0
			A-15	Negative	65	0
			A-16	Negative	60	0
B	A	B-1	Negative	60	0	
		B-2	Negative	56	0	
		B-3	Negative	70	0	
		B-4	Negative	60	0	
	B	B	B-5	Negative	65	0
			B-6	Negative	90	0
			B-7	Negative	60	0
			B-8	Negative	70	0
			B-9	Negative	63	0
			B-10	Negative	75	0
			B-11	Negative	63	0
			B-12	Negative	75	0
			B-13	Negative	62	0
			B-14	Negative	80	0
B-15	Negative	85	0			
B-17	Negative	75	0			
C	A	C-1	Positive	100	1	
		C-2	Negative	95	0	
		C-3	Negative	90	0	
		C-4	Negative	60	0	
	B	B	C-5	Negative	70	0
			C-6	Negative	80	0
			C-7	Negative	70	0
			C-8	Negative	70	0
			C-9	Negative	75	0
			C-10	Negative	70	0
			C-11	Negative	65	0
			C-12	Negative	65	0
			C-13	Negative	70	0

Shovel Test Log					
Transect	Area	Shovel Test	Result	Depth (cm)	Artifacts
		C-14	Negative	70	0
		C-15	Negative	60	0
		C-16	Negative	60	0
		C-17	Negative	50	0
Radials	A	C-1 North	Negative	65	0
		C-1 West	Negative	75	0
		A-2 North	Negative	50	0
		A-2 East	Negative	50	0
Judgmental	A	J-1	Negative	55	0
		J-2	Negative	60	0
		J-3	Negative	80	0
		J-4	Negative	75	0
		J-5	Negative	60	0

APPENDIX E

HISTORIC PHOTOGRAPHS OF LA QUINTA MANSION

January 24, 2014

Project No. 0187325



La Quinta Mansion, Photograph, n.d.; digital images, Rescuing Texas History Collection, 2010 (<http://texashistory.unt.edu/ark:/67531/metaph104901/> : accessed June 16, 2012), University of North Texas Libraries, The Portal to Texas History, <http://texashistory.unt.edu>; crediting Bell/Whittington Public Library, Portland, Texas.



Group of Women at La Quinta Hotel, Photograph, n.d.; digital images, Rescuing Texas History Collection, 2010 (<http://texashistory.unt.edu/ark:/67531/metapth104977/> : accessed June 16, 2012), University of North Texas Libraries, The Portal to Texas History, <http://texashistory.unt.edu>; crediting Bell/Whittington Public Library, Portland, Texas.



La Quinta Mansion, Photograph, n.d.; digital images, Rescuing Texas History Collection, 2010 (<http://texashistory.unt.edu/ark:/67531/metaph104898/> : accessed June 16, 2012), University of North Texas Libraries, The Portal to Texas History, <http://texashistory.unt.edu>; crediting Bell/Whittington Public Library, Portland, Texas.

APPENDIX F

THC SHPO CONSULTATIONS

September 24, 2012

December 7, 2012

January 11, 2013

June 4, 2013

Project No. 0187325

Environmental Resources Management

840 West Sam Houston Parkway North, Suite 600

Houston, Texas 77024

(281) 600-1000

TEXAS HISTORICAL COMMISSION

REQUEST FOR SHPO CONSULTATION:

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

Please see instructions for completing this form and additional information on Section 106 and Antiquities Code consultation on the Texas Historical Commission website at <http://www.thc.state.tx.us/crm/crmsend.shtml>

- This is a new submission.
 This is additional information relating to THC tracking number(s): _____

Project Information		
PROJECT NAME La Quinta Project Phase II Investigation of Site: 418P35 (Historic La Quinta Mansion)		
PROJECT ADDRESS east/south of US Hwy 181 and State Hwy 35	PROJECT CITY Portland/Gregory	PROJECT ZIP CODE(S) 78374
PROJECT COUNTY OR COUNTIES San Patricio County		
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 type="checkbox"/> Utilities and 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 DESCRIPTION: Please explain the project in one or two sentences. More details should be included as an attachment to this form. Owned by the Port of Corpus Christi Authority (POCCA), ERM's Client wishes to develop a facility north of the POCCA's La Quinta Terminal. Project Area is 475-acres that includes an 8-acre Access Corridor across the POCCA's La Quinta Terminal. Previous archaeological investigations identified 418P35 that has an unaccessed (potentially eligible) NRHP eligibility. U.S. Environmental Protection Agency (the EPA) permits greenhouse gases (GHGs) and this requires Section 106 of the NHPA.		

Project Contact Information			
PROJECT CONTACT NAME Dave Port	TITLE Archeologist, RPA	ORGANIZATION ERM	
ADDRESS 16810 Park Ten Place suite 300	CITY Houston	STATE TX	ZIP CODE 77084
PHONE 770-316-1885	EMAIL dave.port@erm.com		

Federal Involvement (Section 106 of the National Historic Preservation Act)	
Does this project involve approval, funding, permit, or license from a federal agency? <input checked="" type="checkbox"/> Yes (Please complete this section) <input type="checkbox"/> No (Skip to next section)	
FEDERAL AGENCY USACE - Galveston District & EPA	FEDERAL PROGRAM, FUNDING, OR PERMIT TYPE Section 404 Permit & GHG Permit
CONTACT PERSON unknown at this time	PHONE
ADDRESS	EMAIL

State Involvement (Antiquities Code of Texas)	
Does this project occur on land or property owned by the State of Texas or a political subdivision of the state? <input checked="" type="checkbox"/> Yes (Please complete this section) <input type="checkbox"/> No (Skip to next section)	
CURRENT OR FUTURE OWNER OF THE PUBLIC LAND Port of Corpus Christi Authority (POCCA)	
CONTACT PERSON Paul D. Carangelo	PHONE 361 885-8137
ADDRESS Port of Corpus Christi Authority 222 Power St. Corpus Christi, TX 78401	EMAIL paul@poccca.com

REQUEST FOR SHPO CONSULTATION – PROJECT NAME: La Quinta Project Phase II Investigation of Site: 418P36 (Historic east/south of US Hwy 181 and State Hwy 36 Portland/Gregory San Patricio County

Identification of Historic Properties: Archeology		
Does this project involve ground-disturbing activity? <input checked="" type="checkbox"/> Yes (Please complete this section) <input type="checkbox"/> No (Skip to next section)		
Describe the nature of the ground-disturbing activity, including but not limited to depth, width, and length. Client wishes to develop a production facility that would utilize the POCCA's property. Ground disturbing activities include land moving activities in preparation for construction of facilities. Area to be developed approx. 476 acres.		
Describe the previous and current land use, conditions, and disturbances. Current land use is fallow agricultural fields with natural gas pipelines dispersed. Land is surrounded by 6 large industrial areas: Gulf Compress Cotton Storage to the West; Cheniere CCLNG, ALCOA, and Sherwin (Reynolds) Aluminum Companies to the East, and the POCCA's La Quinta Terminal to the South. The city of Gregory is located North.		
Identification of Historic Properties: Structures		
Does the project area or area of potential effects include buildings, structures, or designed landscape features (such as parks or cemeteries) that are 45 years of age or older? <input checked="" type="checkbox"/> Yes (Please complete this section) <input type="checkbox"/> No (Skip to next section)		
Is the project area or area of potential effects within or adjacent to a property or district that is listed in or eligible for listing in the National Register of Historic Places? <input type="checkbox"/> Yes, name of property or district: possibly La Quinta Mansion Site 418P36 <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown		
In the space below or as an attachment, describe each building, structure, or landscape feature within the project area or area of potential effect that is 45 years of age or older.		
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
Portland/Gregory Cemetery (THC designation 8P-C014)	1801	Coleman-Fulton Packer Co.
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE

Attachments

[Please see detailed instructions regarding attachments.](#)

Include the following with each submission:

- Project Work Description
- Maps
- Identification of Historic Properties
- Photographs

For Section 106 reviews only, also include:

- Consulting Parties/Public Notification
- Area of Potential Effects
- Determination of Eligibility
- Determination of Effect

Submit completed form and attachments to the address below. Faxes and email are not acceptable.

Mark Wolfe
 State Historic Preservation Officer
 Texas Historical Commission
 P.O. Box 12276, Austin, TX 78711-2276 (mail service)
 108 W. 16th Street, Austin, TX 78701 (courier service)

For SHPO Use Only

Revised Memorandum

CONFIDENTIAL

Environmental
Resources
Management

To: Bill Martin and Jeff Durst

From: Dave Port, RPA; Alicia Smith; Chris Polglase, RPA

Date: December 7, 2012

Subject: *Third Revision:* La Quinta Project– Research Design:
Limited Cultural Resources Investigation, Methods and
Procedures

15810 Park Ten Place,
Suite 300
Houston, Texas 77084-5140
(281) 600-1000
(281) 600-1001 (fax)



This document provides a description of the methods and procedures and plans for completing a limited cultural resources investigation of the La Quinta Property.

1.0 RESEARCH DESIGN: LIMITED CULTURAL RESOURCES INVESTIGATION, METHODS AND PROCEDURES

1.1 OVERVIEW

Both Ricklis' (1999) study and Turner's (2004) efforts conducted within and adjacent to the Client's project area pose similar data limitations that result from the level of effort necessary to assess NRHP eligibility of the archeological sites previously investigated. While previous studies may have led to determinations that certain resources were not NRHP eligible, the current project requires a reconsideration of the NRHP eligibility of Site 41SP35 (La Quinta Mansion), which lies within the proposed Access Corridor to be utilized by the Client and that has the most potential to yield information. Specifically, Site 41SP35 was recommended ineligible by Ricklis (1999), recommended potentially eligible and for further testing by Klinger (2003), and then the eastern section of the site was recommended ineligible by Turner (2004). The western section of Site 41SP35 is still in question and is technically recommended as potentially eligible for listing to the NRHP. ERM's investigation would provide an assessment of the integrity and significance of this site in addition to completing an architectural reconnaissance survey of the indirect APE for the EPA's GHG permit.

1.2 BACKGROUND

The project area is defined as a contiguous tract comprised of a 473-acre area located east of Portland, Texas, approximately one mile south of Gregory, Texas, that is proposed for development by Client (Figures 1 and 2). Access to the project area is provided by La Quinta Road, a two lane road extending south from State Highway 35. The project area contains two distinct sections; a low-lying coastal area consisting of clayey sand dunes and native brush to the south, and an uplands agricultural farmland area occupying the central and northern extent. Located on the Gregory (1969 PR 1975), Texas, U.S. Geologic Survey (USGS) 7.5-minute topographical quadrangle map [NAD 1927, Quad # 2797-434], the project area is bounded by Texas State Highway (SH) 35 to the north; approximately 0.5 mile east of U.S. Highway 181 along the western extent; La Quinta Road to the east, and Corpus Christi Bay to the south.

Disclaimer: As ERM is not a law firm, the technical assessment herein cannot be interpreted as legal advice. It is recommended that this technical assessment be supplemented with legal analysis.

From: Jeff Durst [<mailto:Jeff.Durst@thc.state.tx.us>]
Sent: Friday, January 11, 2013 1:21 PM
To: Dave Port
Subject: Permit # 6421

Dave,

The Texas Antiquities Permit No. for the La Quinta Project is: **6421**. The permit issue date is 1/11/2013 and the permit expiration date is 1/11/2015. You will receive a hard copy of this notice via the U.S. postal service.

Best regards,
Jeff

APPENDIX G

*FEDERAL AND STATE-RECOGNIZED TRIBES IN SOUTH
TEXAS*

January 24, 2014

Project No. 0187325

INDIAN TRIBES

Consultation with Indian tribes is specifically required under Section 106 of the NHPA (USC 16, §470, et seq.) and the Native American Graves Protection and Repatriation Act (NAGPRA) (U.S. Code 25, §3001, et seq.); and it is encouraged for compliance with the Texas Health and Safety Code (Title 8, Chapters 711–714). Federal law and policy requires consultation to occur with Indian tribes that have been federally recognized. Federally recognized Indian tribes are those that have been formally acknowledged by the Bureau of Indian Affairs' Office of Federal Acknowledgment, the U.S. Congress, or a federal court as descendants of an historical Native American tribe. Federally recognized Indian tribes have rights of self-governance and are eligible to receive services and participate in programs offered by the federal government. Non-federally recognized Indian tribes may also be included in the Section 106 process if they have a demonstrated interest in the undertaking.

Currently, Texas has three (3) tribal communities living within State boundaries and at least 24 other communities with historic ties to Texas. Most of the tribes with historic ties to Texas do not reside within the State; however, they may still have a cultural interest in lands within the State. Note that tribal interest areas may change as new discoveries provide information about historic tribal territories. For additional information the following may be consulted:

- NPS NAGPRA database or tribal websites for contact information;
- Southern Plains Regional Office of the Bureau of Indian Affairs; and
- THC's State Archeologist.

According to the THC's Tribal Consultation Guidelines, the below federally recognized Native American Tribes are known to have interests in south Texas. Please be aware that tribal interest areas may change as new discoveries provide information about historic tribal territories. In addition, state-recognized Tribes that are not listed may have an interest in voestalpine's activities. Contact information on these additional Tribes can be provided for the specific Project site at the request of the EPA and coordinated through the THC. These state-recognized Tribes will be contacted on the advice of the EPA and/or voestalpine in those instances if and where human remains are potentially identified within the Project site and if the THC's State Archeologist recommends a broad stakeholder engagement program.

Federally-Recognized Tribal Contacts (last updated July 2013)

Alabama-Coushatta Tribe of Texas

Kyle Williams, Chairman Alabama-Coushatta Tribe of Texas

571 State Park Rd. 56

Livingston, TX 77351

Phone: 936.563.1100 Fax: 936.563.3184

Alabama-Quassarte Tribal Town

Tarpie Yargee, Chief
P.O. Box 187
Wetumka, OK 74883
Phone: 405.452.3987 Fax: 405.452.3968

Apache Tribe of Oklahoma

Donnie Donald Cabaniss, Jr., Chairman
P.O. Box 1220
Anadarko, OK 73005
Phone: 405.247.9493 Fax: 405.247.2686

Caddo Nation

Brenda Edwards, Chairperson
P.O. Box 487
Binger, OK 73009
Phone: 405.656.2344 Fax: 405.656.2892

Robert Cast, Tribal Historic Preservation Officer

P.O. Box 487
Binger, OK 73009
Phone: 405.656.2901 Fax: 405.656.2386

Cherokee Nation of Oklahoma

Bill John Baker, Principal Chief
P.O. Box 948
Tahlequah, OK 74465
Phone: 918.456.0671 Fax: 918.458.5580

Comanche Nation of Oklahoma

Wallace Coffey, Chairman
HC-32, Box 1720
Lawton, OK 73502
Phone: 580.492.4988 Fax: 580.492.3796

Jimmy Arterberry, Tribal Historic Preservation Officer

P.O. Box 908
Lawton, OK 73502
Phone: 580.595.9960, ext. 9618 Fax: 580.595.9733

Coushatta Tribe of Louisiana

Kevin Sickey, Chairman
P.O. Box 818
Elton, LA 70532
Phone: 337.584.2261 Fax: 337.584.2998

Linda Langley, Tribal Historic Preservation Officer
P.O. Box 818
Elton, LA 70532
Phone: 337.584.1560

The Delaware Nation

C.J. Watkins, Acting President
P.O. Box 825
Anadarko, OK 73005
Phone: 405.247.2448 Fax: 405.247.6329

Kialegee Tribal Town

Tiger Hobia, Town King
P.O. Box 332
Wetumka, OK 74883
Phone: 405.452.3262 Fax: 405.452.3413

Kickapoo Traditional Tribe of Texas

Juan Garza, Jr., Chairman
HC 1, Box 9700
Eagle Pass, TX 78852
Phone: 830.773.2105 Fax: 830.757.9228

Kickapoo Tribe of Oklahoma

Gilbert Salazar, Chairperson
P.O. Box 70
McLoud, OK 74851
Phone: 405.964.2075 Fax: 405.964.6211

Kiowa Tribe of Oklahoma

Amber Toppah, Chairperson
P.O. Box 369
Carnegie, OK 73015
Phone: 580.654.2300 Fax: 580.654.2188

Mescalero Apache Tribe

Frederick Chino, Sr., President
P.O. Box 227
Mescalero, NM 88340
Phone: 575.464.4494 Fax: 575.464.9191

Holly Houghten, Tribal Historic Preservation Officer
P.O. Box 227

Mescalero, NM 88340
Phone: 575.464.3005 Fax: 575.464.3005

Poarch Band of Creek Indians

Buford L. Rolin, Chairman
5811 Jack Springs Rd.
Atmore, AL 36502
Phone: 251.368.9136 Fax: 251.368.1026

Robert Thrower, Tribal Historic Preservation Officer
5811 Jack Springs Rd.
Atmore, AL 36502
Phone: 251.368.9136, ext. 2656 Fax: 251.368.4502

Quapaw Tribe of Oklahoma

John L. Berrey, Chairman
P.O. Box 765
Quapaw, OK 74363
Phone: 918.542.1853 Fax: 918.542.4698

Jean Ann Lambert, Tribal Historic Preservation Officer
P.O. Box 765
Quapaw, OK 74363
Phone: 918.642.4724 Fax: 918.542.4694

Seminole Nation of Oklahoma

Leonard M. Harjo, Principal Chief
P.O. Box 1498
Wewoka, OK 74884
Phone: 405.257.7200 Fax: 405.257.7209

Thlopthlocco Tribal Town

George Scott, Town King
P.O. Box 188
Okemah, OK 74859
Phone: 918.560.6198 Fax: 918.560.6196

Tonkawa Tribe of Oklahoma

Donald L. Patterson, President
1 Rush Buffalo Rd.
Tonkawa, OK 74653-4449
Phone: 580.628.2561 Fax: 580.628.3375

Tunica-Biloxi Tribe of Louisiana

Earl J. Barbry, Sr., Chairman

P.O. Box 1589
Marksville, LA 71351
Phone: 318.253.9767 Fax: 318.253.9791

Earl J. Barbry, Jr., Tribal Historic Preservation Officer
P.O. Box 1589
Marksville, LA 71351
Phone: 318.253.8174 Fax: 318.253.7711

United Keetoowah Band of Cherokee Indians

George Wickliffe, Chief
P.O. Box 746
Tahlequah, OK 74465
Phone: 918.431.1818 Fax: 918.431.1873

Wichita and Affiliated Tribes

Terri Parton, President
P.O. Box 729
Anadarko, OK 73005
Phone: 405.247.2425 Fax: 405.247.2430

APPENDIX H

RESUME OF PRINCIPAL INVESTIGATOR

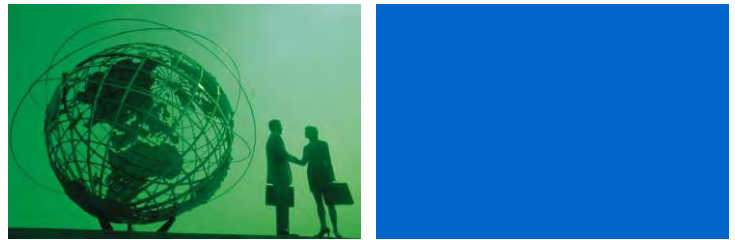
January 24, 2014

Project No. 0187325

Environmental Resources Management
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024
(281) 600-1000

Dave Port, RPA

Cultural Resources Consultant - IAP



Mr. Dave Port is a Cultural Resources Consultant within ERM based in the Houston office (Southern Division) and is part of the Environmental Impact Assessment and Planning (IAP) Group. He has over 14 years of cultural resources management (CRM) experience field directing and project managing various archeological investigations as well as participating in the development/planning of community-based support initiatives for programs concerning advocacy, education, interpretation, and self-governance/management. Further, he has worked with over a dozen State Historic Preservation Officers (SHPOs) across the Mid-Atlantic, Southeastern and Southwestern states. He has over 20 years of combined experience in historical research, architectural history, and archeological fieldwork with a primary emphasis in archeology and with over 90 projects/reports that he has field directed, completed, and published. He also has extensive experience with impact assessments, agency consultations, and project management.

Mr. Port has completed work for and consulted with the following state and federal agencies: Georgia Department of Transportation (GDOT); Alabama Historical Commission (AHC); Florida Bureau of Archaeological Research; South Florida Water Management District; Federal Highway Administration (FHWA); U.S. Army Corps of Engineers (USACE) Districts in Mobile, AL; Jacksonville and Clewiston, FL; Wilmington, NC; and Savannah, GA; U.S. Department of the Army at Fort Bragg, NC, and Fort McClellan, AL; National Park Service (NPS) Southeast Region; U.S. Department of Agriculture - National Forest Service (NFS): Nantahala District, NC; Sumter, Long Cane, and Enoree Districts, SC; and Chattahoochee District, GA; and the U.S. Fish and Wildlife Service (FWS). He has also consulted with various natural gas pipeline companies including Williams Gas - Transco, Duke Energy, and East Tennessee Natural Gas (ETNG).

Professional Affiliations & Registrations

- Register of Professional Archeologists (RPA), 2002 -
- Georgia Council of Professional Archeologists (GCPA), 2001 -
- Council of Texas Archeologists (CTA), 2012

Fields of Competence

- Historical Archeology
- Industrial Archeology
- Southeastern Archeology
- Plantation Archeology
- African American Archaeology
- Highland Mayan/Central American Archeology
- Ethnographies and Oral Histories and TCPs
- HABS/HAER Documentation
- Architectural History
- NEPA Documentation/Analyst/Reviewer

Education

- PhD Program, (ABD), Public Archeology, University of South Florida (2003-06)
- MA, Anthropology, Northern Arizona University (1999)
- BA, History, University of Alabama at Birmingham (1993)

Professional Training

- Georgia DOT Certificates in NEPA Documentation; Archaeology; and Historic Resources
- 24-Hour OSHA HAZWOPER

Professional Memberships

- Archaeological Society of South Carolina (ASSC), 2010 -
- Archaeological Institute of America (AIA) (North Alabama chapter), 2010 -
- Alabama Archaeological Society (AAS), 2009 -
- Southeastern Archaeological Conference (SEAC), 2003 -
- Society of Georgia Archaeology (SGA), 2001 -
- Society for Historical Archaeology (SHA), 2010-
- Society for American Archaeology (SAA), 2010-

Key Projects for ERM

- *Nebula Gulf Coast Gas-to-Liquids (GC GTL)*. Phase I, II, and III Cultural Resources Assessments supporting ESHIA and Environmental Compliance/Permitting conducted for ERM's oil/gas Client: Louisiana, 2012-13.
- *Eagleford P-Ranch GTL*. Scoping and Baseline Studies of Cultural Resources supporting ESHIA and Environmental Compliance/Permitting conducted for ERM's oil/gas Client: Texas, 2012-13
- *Arrowhead GTL*. Scoping and Baseline Studies of Cultural Resources supporting ESHIA and Environmental Compliance/Permitting conducted for ERM's oil/gas Client: Kansas, 2012-13
- *La Quinta Terminal*. Phase II Cultural Resources Assessment supporting ESHIA and Environmental Compliance/Permitting conducted for ERM's international Client: Texas, 2012-13.
- *Tenaska - Brownsville*. Phase I Cultural Resources Assessment supporting ESHIA and Environmental Compliance/Permitting conducted for ERM's domestic energy Client: Texas, 2012-13.
- *Tenaska - Grimes County*. Phase I Cultural Resources Assessment supporting ESHIA and Environmental Compliance/Permitting conducted for ERM's domestic energy Client: Texas, 2012-13.
- *PPG/Axiall*. Phase I Cultural Resources Assessment supporting ESHIA and Environmental Compliance/Permitting conducted for ERM's domestic chemical industries Client: Louisiana, 2012-13.
- *Verizon Nationwide*. Phase I Cultural Resources Assessments supporting NEPA and FCC Compliance/Permitting conducted for ERM's telecommunication Client: Nationwide, 2012-13.

Additional Key Projects

- *Haile Gold Mine Site, Lancaster Co., SC*. Phase I and II investigation reports submitted to Romarco Minerals Co., Toronto, Canada- please see: <http://www.heraldonline.com/2011/04/01/2954685/epa-opposes-gold-mine.html?storylink=addthis>
- *Blair Mountain, Piney Branch Mountain Top Coal Removal Survey, Logan Co., WV*. Phase I investigation conducted for the Aracoma Coal Co., WV, for the contested Blair Mountain National Register (NR)-eligible battlefield: <http://blogs.wvgazette.com/coalattoo/2009/07/06/blair-mountain-news-its-coming-of-the-list/>
- *Vanderbilt Mansion, Hyde Park, New York*. Phase II Evaluation/ Assessment of Effects (AoE) conducted for the NPS, 2011.
- *GDOT's Transportation Enhancement (TE) Projects Environmental Coordinator, Atlanta, GA*. Managed environmental compliance/NEPA regulations on over 150 TE Projects in coordination with GDOT, FHWA, SHPO/HPD, and FWS, totalling over \$60 million, Fiscal Year 2010-11.

Selected Publications

- 2011 *The Spiritual Flash: A Glass Filled Chimney at Site 1MA748* with Diana Vaulk and J.W. Joseph, PhD, New South Associates. In *Stones & Bones - The Newsletter of the AAS*, Vol. 53, Issue 2, March 2011, pp. 4-5.
- 2009 *Joys and Sorrows of This Passing Life: African American Archeological Investigations at the 1818 Hickman Log Cabin and the Cook's House at Pond Spring Plantation (1LA663), Lawrence County, Alabama* (in review: Cultural Heritage Study Series, University of Florida Press).
- 2009 *Cultural Resources Survey Strategy for the Comprehensive Everglades Restoration Project (CERP) for Southern Florida*. <http://newsouthassoc.com/notable/everglades.html>
Report submitted to the Florida Bureau of Archaeological Research; the USACE-Jacksonville and Clewiston Districts, FL; and the South Florida Water Management District.
- 2004 *The History of Lake Okeechobee: Headwaters of the Everglades and the Origins of the Okeechobee Waterway*. Level II HABS/HAER documentation submitted to NPS Southeast Regional Office, Tallahassee, FL, and presented at the 2001 Congressional Hearings for the Everglades Restoration Project by the USACE-Jacksonville District, FL.
- 2004 *Historical Archaeology in Georgia*. Report submitted to the Georgia Archaeological Research Design Paper No. 14, and the University of Georgia (UGA) Laboratory of Archaeology Series, Report Number 39, Athens, GA. <http://www.valdosta.edu/~aesanfor/historica1%20architecture.pdf>
- 2003 *Thirteen Site Phase II Testing and Evaluation, Fort Bragg, North Carolina*. Report submitted to U.S. Department of the Army, Fort Bragg, NC, and the NPS, Southeast Regional Office, Tallahassee, FL. Contract # C5890020435. Online at www.PalmettoHistory.org South Carolina Archaeology Reports: <http://www.palmettohistory.org/archaeology/ftbraggSM3.pdf>
- 1999 *Collecting Close to Home: Local and Family Histories From Southside, Flagstaff Minority Residents: 1930s-1950s*. Published in cooperation with Northern Arizona University (NAU) and Pioneer Historical Society, Flagstaff, AZ.