

## APPENDIX D: CULTURAL RESOURCES SURVEY

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### ◆◆◆◆ ANTIQUITIES PLANNING & CONSULTING ◆◆◆◆

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A  
Cultural Resources Survey  
of the  
Proposed Supplemental Air Surveillance Radar Unit  
Webb County, TX



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◆◆◆◆ Heritage Management Series Survey Report 104 July 31, 2015 ◆◆◆◆

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**ANTIQUITIES PLANNING & CONSULTING**

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of the  
Proposed Supplemental Air Surveillance Radar Unit  
Webb County, TX

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Prepared for  
Javelina Wind Farm, LLC  
and  
URS Corporation (an AECOM Company)  
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Submitted to the  
State Historic Preservation Officer  
Texas Historical Commission

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Heritage Management Series      Survey Report 104      July 31, 2015

# Abstract

The planned construction of the Proposed Supplemental Air Surveillance Radar Unit is a Federal Undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966 related to historic properties. The U.S. Customs and Border Protection (CBP) is the Lead Federal Agency for the proposed action (Proposed Supplemental Air Surveillance Radar Unit or Supplemental Radar Unit), in accordance with 36 Code of Federal Regulations (CFR) 800.2(A)(2). CBP's Environmental and Energy Division (EED) is responsible for NHPA compliance. EED administers CBP Undertakings in states along the southwestern border of the United States following the 2015 Programmatic Agreement Among U.S. Customs and Border Protection, the Historic Preservation Officers of the States of Arizona, California, New Mexico, and Texas General Services Administration, U.S. Department of Agriculture, U.S. Department of the Interior, U.S. International Boundary and Water Commission, New Mexico State Land Office, California Valley Miwok Tribe, Cocopah Indian Tribe, Delaware Nation, Fort Yuma-Quechan Tribe, Pechanga Band of Luiseno Mission Indians, Rincon Band of Luiseno Mission Indians, Tohono O'Odham Nation, Tonkawa Tribe of Oklahoma, Yavapai-Prescott Indian Tribe, and the Advisory Council on Historic Preservation (ACHP 2015).

URS Corporation (URS) (an AECOM Company), on behalf of Javelina Wind Farm, LLC, contracted with Antiquities Planning & Consulting (APC) to perform a cultural resources survey of the proposed action site. The cultural resources survey covered the direct effects Area of Potential Effect (APE) where new construction would take place and includes a 10.9 acre horizontal area and trenching to depths of about 4 feet (primarily for archaeological resources) and a visual effects APE above-the-ground area of 0.25 miles (primarily for historic architectural resources). APC covered additional acreage outside the direct effects APE to determine the limits of a newly found archaeological site (34.3 acres – Site 41WB798). APC conducted the intensive pedestrian survey on March 16-18, 2015 and April 7-8, 2015 in accordance with the Secretary of the Interior Guidelines and Texas Archaeological Survey Standards.

A database search of the Texas Archaeological and Historical Sites Atlas maintained by the Texas State Historic Preservation Officer (SHPO) and Texas Historical Commission (THC) showed that no historic properties listed on the National Register of Historic Places (NRHP), State Antiquities Landmark (SAL), or standing buildings more than 45 years old fall the within the 0.25 mile visual effects APE for the Supplemental Radar Unit locale. For this reason, a formal historic survey was not performed. The search also showed that no known archaeological sites were present, and no previous cultural resources surveys had been conducted in the direct effects APE. Therefore, APC performed an intensive pedestrian survey to identify any potential historic and archaeological properties that may be affected by the Supplemental Radar Unit construction. APC found one new prehistoric archaeological site (Site 41WB798) during the pedestrian survey and the Supplemental Radar Unit was moved as far outside of the new site as possible. Artifacts were not collected from the new site for analysis; and therefore, no artifacts were curated.

The eastern limit of the Supplemental Radar Unit falls within the southwestern margin of Site 41WB798. This part of Site 41WB798 contains a sparse surficial artifact scatter, features were absent. Thus, it was judged not to be a contributing factor to the site's NRHP or SAL eligibility status. The northern part of Site 41WB798 is a quarry or lithic procurement area which is made up of a surficial artifact scatter and lacked good integrity due to erosion and deflation and was also judged not to be a contributing factor to the NRHP or SAL eligibility status of the site. A segment of the fiber optic line and an access road would pass through a section of the quarry; however, the affect would not be adverse because the quarry is not a contributing factor to the NRHP or SAL eligibility status of the site.

Therefore, no further investigation would be warranted at the parts of Site 41WB798 that will be affected by the construction of the Supplemental Radar Unit.

The portions of Site 41WB798 located outside of the APE of the Supplemental Radar Unit contained a large number of hearth remnants, which could have a high research value related to regional prehistoric habitation and could contain archaeological deposits that could contribute to the site's NRHP or SAL eligibility status. The hearth fields were disturbed by erosion and appeared to lack good stratigraphic context. However, no features were tested because they fall outside the Supplemental Radar Unit APE and will not be affected. For the same reason, no geomorphic study has yet been performed inside the hearth field.

The deposits do contain a large number of datable features which could provide new information about occupation of the site and regional chronology. The large hearth field possesses a small area where undisturbed shallow soils were present which could provide new geomorphic data related to archeological site development. At this time, the hearth fields eligibility status was deemed undetermined because no significance testing was conducted at Site 41WB798.

The hearth fields fell well outside the direct effects APE and would not be affected by the Supplemental Radar Unit. Therefore, no further archaeological investigation of the hearth fields at Site 41WB798 was required. Unrelated to the construction of the Supplemental Radar Unit, future work inside the part of Site 41WB798 which has undetermined eligibility status, including the large and small hearth field, should include intensive survey to determine complete boundary and to perform significance testing of features.

APC recommends that construction of the Supplemental Radar Unit layout proceed, as planned, without additional survey or significance testing work under the following conditions. First, if any unexpected archaeological deposits are inadvertently discovered during construction, activity should stop until evaluated by a qualified cultural resources person. Construction personnel should notify the Proponent (CBP Office of Air and Marine/Air and Marine Facilities [OAM/AMF]), who will contact EED of the inadvertent discovery. OAM/AMF shall notify EED of the discovery of historic properties or unanticipated adverse effects within 24 hours. CBP shall immediately cease all operations for the portion of the Undertaking with the potential to adversely affect a historic property. EED shall notify the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO), tribe, and other affected parties of the post-review discovery via letter or electronic correspondence within two (2) business days. CBP protocol should be implemented as outlined in Stipulation X of its March 2015 Programmatic Agreement (ACHP 2015). Second, if human remains are uncovered, digging must cease and local law enforcement and authorities and CBP/EED should be notified. The discovery of human remains in Texas is covered under Chapter 711-715 of the Texas Safety and Health Code, and damage or destruction inflicted on human burial sites is a state felony under Section 28.03(1) of the Texas Penal Code.

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## 1.0 MANAGEMENT SUMMARY

The U.S. Department of Defense (DoD), Federal Aviation Administration (FAA), and U.S. Department of Homeland Security (DHS) jointly operate a system of radar units as part of the Air Route Surveillance Radar (ARSR) system and Joint Surveillance System (JSS) throughout the U.S. The ARSR-4 Radar unit in Oilton, TX was originally built as part of the Southern Air Defense System in 1972. The primary mission of the ARSR-4 Radar unit is to provide high quality, primary digital radar data on aircraft positions to FAA Air Route Traffic Control Centers, the DoD Sector Operations Control Center, the DoD Fleet Area Control Surveillance Facility, and the DHS-CBP Air and Marine Operations Center (AMOC).

Javelina Wind Farm, LLC, the proponent of a new wind farm in the proposed action area (the Javelina Wind Farm), has agreed to construct a Supplemental Radar Unit to alleviate concerns regarding the potential loss of functionality of the ARSR-4 Radar unit in Oilton, TX. An agreement has been reached to construct a Supplemental Radar Unit at Site 19 near the Javelina Wind Farm, located about 12 miles south of Mirando City on the southern edge of Webb County, TX for CBP to operate.

The construction and operation of the Supplemental Radar Unit is a Federal Undertaking and subject to the NHPA related to historic properties. The proposed action's NHPA requirements are being met under the National Environmental Policy Act (NEPA). The Lead Federal Agency in the process is CBP. CBP Undertakings in states located along the southwest border of the United States are conducted in accordance with the March 2015 CBP Programmatic Agreement Among U.S. Customs and Border Protection, the Historic Preservation Officers of the States of Arizona, California, New Mexico, and Texas General Services Administration, U.S. Department of Agriculture, U.S. Department of the Interior, U.S. International Boundary and Water Commission, New Mexico State Land Office, California Valley Miwok Tribe, Cocopah Indian Tribe, Delaware Nation, Fort Yuma-Quechan Tribe, Pechanga Band of Luiseno Mission Indians, Rincon Band of Luiseno Mission Indians, Tohono O'odham Nation, Tonkawa Tribe of Oklahoma, Yavapai-Prescott Indian Tribe, and the Advisory Council on Historic Preservation (ACHP 2015). This report is being carried out following the terms and conditions of this agreement, specifically the establishment of the proposed action's visual effects APE in accordance with Stipulation IV.E.1 CBP Section 106 Project Review Process for Towers and for Support Communications and Surveillance Undertakings as well as Stipulation V Identification and Evaluation of Historic Properties. Refer to Attachment I, at the end of this document, for the terms and conditions of Section IV and Section V of the Programmatic Agreement.

URS, on behalf of Javelina Wind Farm, LLC, contracted with APC to perform Section 106 services for the proposed action. A desktop review showed that although the Supplemental Radar Unit locale does not contain any historic properties listed in the NRHP or SAL which might be affected by the Supplemental Radar Unit, the locale has a medium to high probability of containing unknown cultural resources. A Cultural Resources Survey (CRS) was performed following the Secretary of the Interior Guidelines and the Texas Archaeological Survey Standards to identify any cultural resource present. The CRS covered the direct effects APE of 10.9 acres, trenching to depths of about 4 feet, additional acreage measuring 34.3 acres outside the APE where cultural material was encountered, and the 0.25 mile visual effects APE.

Within the direct effects APE, the following components would be constructed: (1) gravel access road that is 1,180 feet long by 100 feet wide, (2) 2-acre gravel or stone bed placed on top of the ground surface, (3) one concrete pad that measures 13 feet long by 13 feet wide by 4 feet 6 inches thick (slightly above grade) that supports the 40 foot tall radar tower, (4) one concrete pad that is 16 feet 6 inches long by 10 feet wide by 6 inches high that supports radar equipment, (5) electricity line that is 5,086 feet long

and aerially mounted, and (6) fiber optic communications line that is 1,750 feet long and would be buried in a trench 3-4 feet wide and up to 4 feet deep.

One new prehistoric archaeological site was found which contained two hearth fields, a quarry, and diagnostic artifacts from the Middle Archaic and Late Prehistoric periods. The new site was designated Site 41WB798 (see Attachment II for additional detail). The part of Site 41WB798 situated adjacent to the large hearth field fell inside the eastern limits of the direct effects APE of the two-acre Supplemental Radar Unit. A second part of Site 41WB798 located within the quarry fell in the direct effects APE of the fiber optic line and the access road. .

Erosion, deflation, ranch roads improvements, and construction of oil and gas well pads previously impacted the quarry and artifact scatter components of the site, rendering the research value of parts of the site to be low, without the potential to provide important new archaeological information. For these reasons, the Site 41WB798 quarry and the sparse surficial artifact scatter surrounding the southwestern limits of the hearth field were judged to be not eligible for listing in the NRHP or designated as a SAL.

The archaeological features in the hearth fields at Site 41WB798 appeared to lack stratigraphic integrity and not meet the minimum criteria for listing in the NRHP or SAL due to their surficial, deflated, and/or disturbed nature. However, it is not yet known if archaeological deposits within the parts of Site 41WB798 located in the small and large hearth fields could contain new scientific information in good context and could be eligible for listing in the NRHP under Criterion D related to potential important data recovery. Unrelated to the Supplemental Radar Unit, until archeological testing could be performed, the eligibility of the hearth fields at Site 41WB798 are considered to be undetermined. The parts of Site 41WB798 located within the large and small hearth fields fell outside the direct effects APE of the Supplemental Radar Unit and would not be affected. Therefore, no further archaeological investigation would be required at the hearth fields at Site 41WB798 and the Supplemental Radar Unit can proceed as planned.

Construction of the Supplemental Radar Unit and ancillary features, therefore, can proceed under the following conditions. First, if any unexpected archaeological deposits are inadvertently discovered during construction, activity should be stopped until evaluated by a qualified cultural resources person. Construction personnel should notify the Proponent (CBP OAM/AMF), who will contact EED of the inadvertent discovery. OAM/AMF shall notify EED of the discovery of historic properties or unanticipated adverse effects within 24 hours. CBP shall immediately cease all operations for the portion of the Undertaking with the potential to adversely affect a historic property. EED shall notify the appropriate SHPO/THPO, tribe, and other affected parties of the post-review discovery via letter or electronic correspondence within two (2) business days. CBP protocol should be implemented as outlined in Stipulation X of its March 2015 Programmatic Agreement (ACHP 2015). Second, if human remains are uncovered, digging must cease and local law enforcement and authorities and CBP/EED should be notified. The discovery of human remains in Texas is covered under Chapter 711-715 of the Texas Safety and Health Code, and damage or destruction inflicted on human burial sites is a state felony under Section 28.03(1) of the Texas Penal Code.

## 2.0 SUPPLEMENTAL RADAR UNIT

### BACKGROUND

The ARSR-4 Radar unit in Oilton, TX was originally built as part of the Southern Air Defense System in 1972. The ARSR-4 Radar unit is a three-dimensional radar system. The ARSR-4 Radar unit replaced the ARSR-1 and ARSR-2 radar systems and also established radar coverage at new locations in southwest Texas. The primary mission of the ARSR-4 Radar unit is to provide high quality, primary digital radar data on aircraft positions to FAA Air Route Traffic Control Centers, the DoD Sector Operations Control Center, the DoD Fleet Area Control Surveillance Facility, and the DHS-CBP Air and Marine Operations Center (AMOC). The ARSR-4 Radar unit also provides secondary radar (beacon) data on transponder-equipped aircraft when interfaced with an Air Traffic Control Beacon Interrogator. The secondary mission of the ARSR-4 Radar unit is to detect and report weather within the coverage area in National Weather Service six-level format.

Javelina Wind Farm, LLC, the proponent of a new wind farm in the proposed action area (the Javelina Wind Farm), has agreed to construct a Supplemental Radar Unit to alleviate concerns regarding the potential loss of functionality of the ARSR-4 Radar unit in Oilton, TX. An agreement has been reached to construct a Supplemental Radar Unit at Site 19 near the Javelina Wind Farm, located about 12 miles south of Mirando City on the southern edge of Webb County, TX for CBP to operate. Refer to Figure 1 for the vicinity and location of the proposed Supplemental Radar Unit.

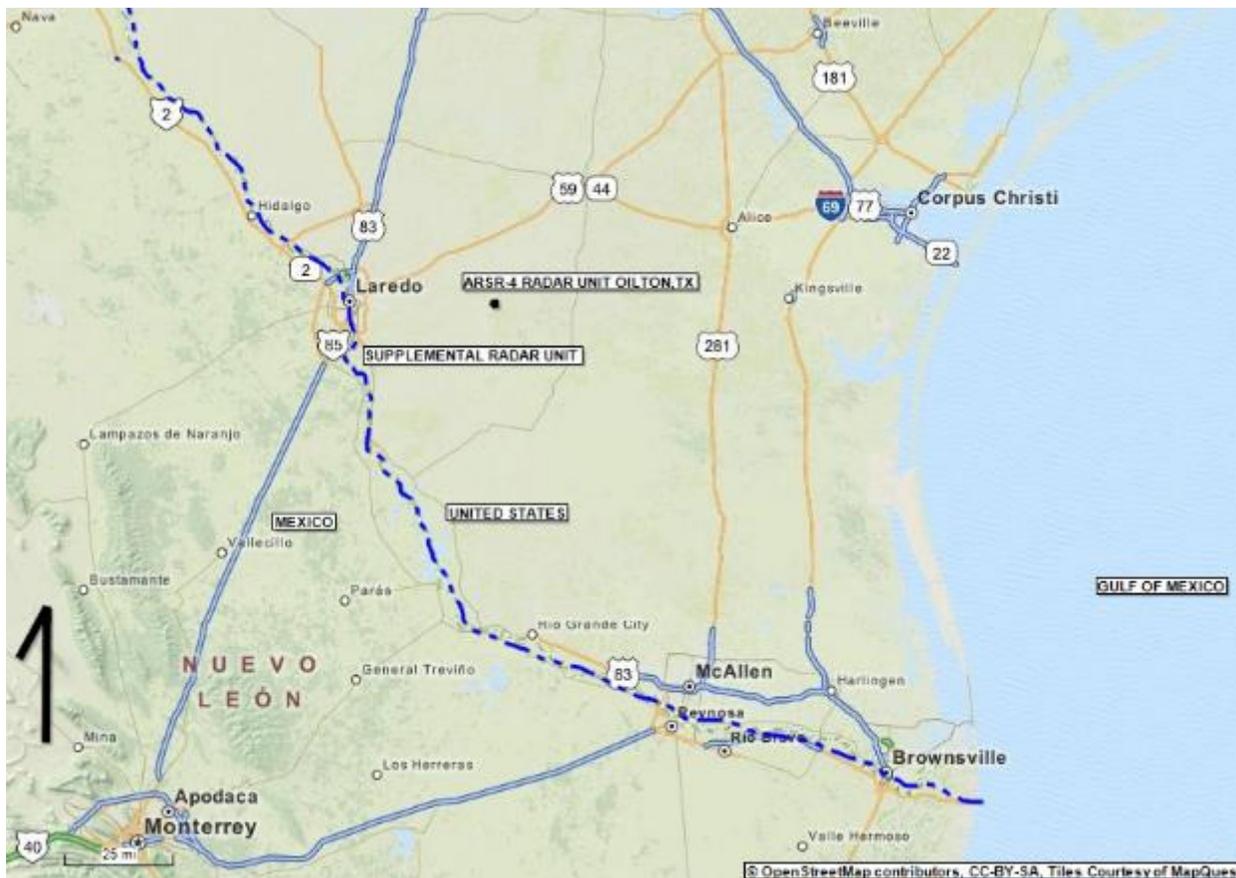


Figure 1. Regional Map Showing the Location of the ARSR-4 Radar Unit and the Supplemental Radar Unit.

## SUPPLEMENTAL RADAR UNIT AREA

The Supplemental Radar Unit is located on a private property in a rural setting. The locale is in the south Texas Plains and Sand Plains physiographic regions and is covered by a mantle of gravel-bearing surface sands (Raiz 1960). The region is known as the south Texas “brasada” or bush country. On the east, is the Nueces River basin and to the west, is the Rio Grande River basin. Albercas Creek headwaters drain the locale and form many arroyos. The Supplemental Radar Unit would be placed on the southern end of a low ridgetop (Figure 2).

The region is known for its very large cattle ranches and is the home of early 19<sup>th</sup> century Tejano ranching and culture. The area has been a part of the recent, extensive south Texas oil and gas operations related to the Eagle Ford shale development. Current land uses observed on the ranches include range management, cattle operation, recreational hunting, oil and gas operations, pipelines, overhead transmission lines, substations, and meteorological and communications towers.

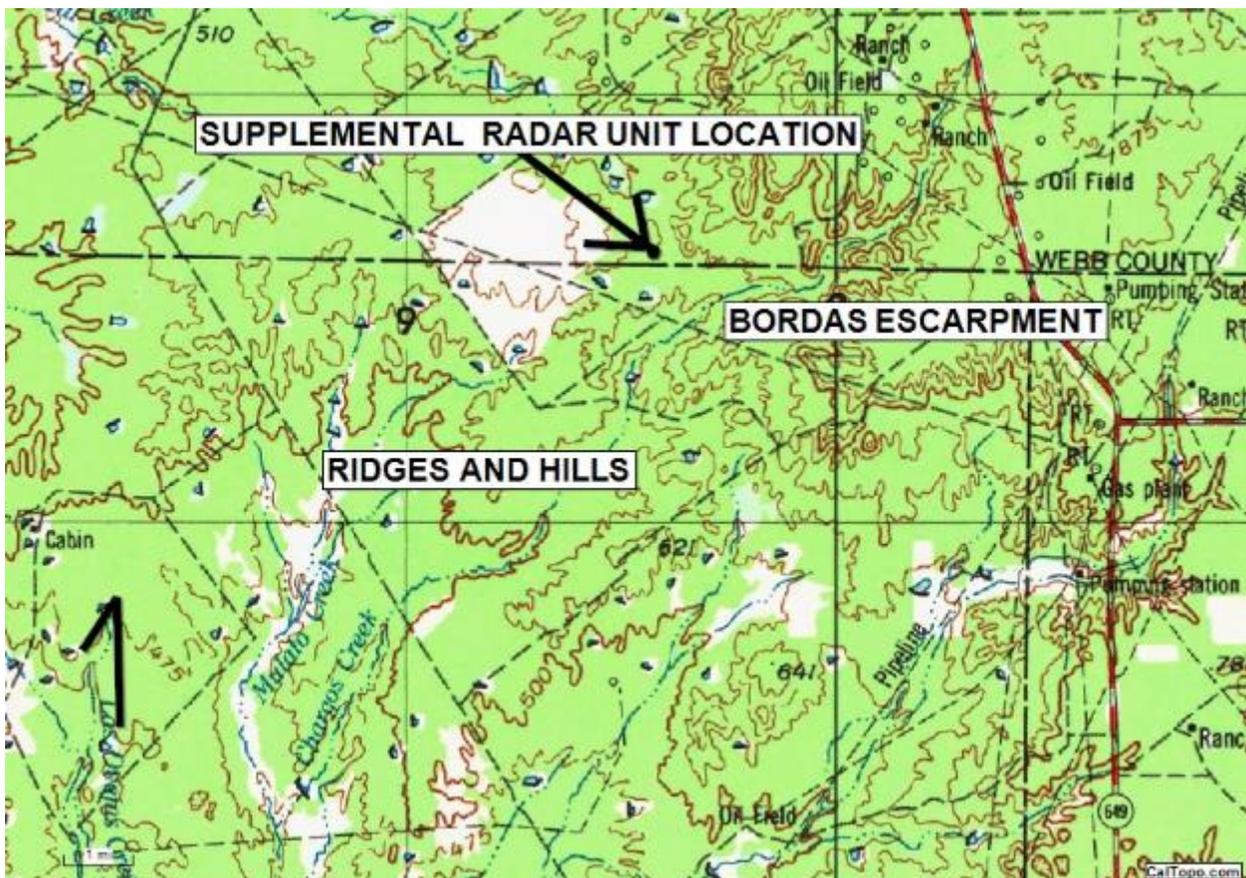


Figure 2. Portion of Folley, TX, Topographic Map Showing the Ridgetop Location of the Supplemental Radar Unit and Proximity to Chargos Creek (USGS 1967).

## SUPPLEMENTAL RADAR UNIT DESCRIPTION

The APE for the Supplemental Radar Unit would be multi-dimensional and would include direct horizontal extent, depth of disturbance, and visual effects related to changes that might result to the above ground landscape. The direct effects APE covers the radar locale (2 acres), ancillary linear features (8.9 acres), and trenching to depths of about 4 feet primarily for archaeological resources (Figure 3). The visual effects APE for a radar tower of 25 feet but not more than 100 feet extends out in a 0.25 mile radius, primarily for historic architectural resources.

Within the direct effects APE, the following components would be constructed: (1) gravel access road that is 1,180 feet long by 100 feet wide, (2) 2-acre gravel or stone bed placed on top of the ground surface, (3) one concrete pad that measures 13 feet long by 13 feet wide by 4 feet 6 inches thick (slightly above grade) that supports the 40 foot tall radar tower, (4) one concrete pad that is 16 feet 6 inches long by 10 feet wide by 6 inches high that supports radar equipment, (5) electricity line that is 5,086 feet long and aerially mounted, and (6) fiber optic communications line that is 1,750 feet long and buried in a trench 3-4 feet wide and up to 4 feet deep.

The Supplemental Radar Unit locale would be shredded and pushed, bladed, and cleared of vegetation before construction begins. The locale is generally level and cut and fill would not take place. The erection of the radar tower would add a new element to the view and horizon within historic ranch landscapes. However, no historic buildings are present inside the visual effects APE.

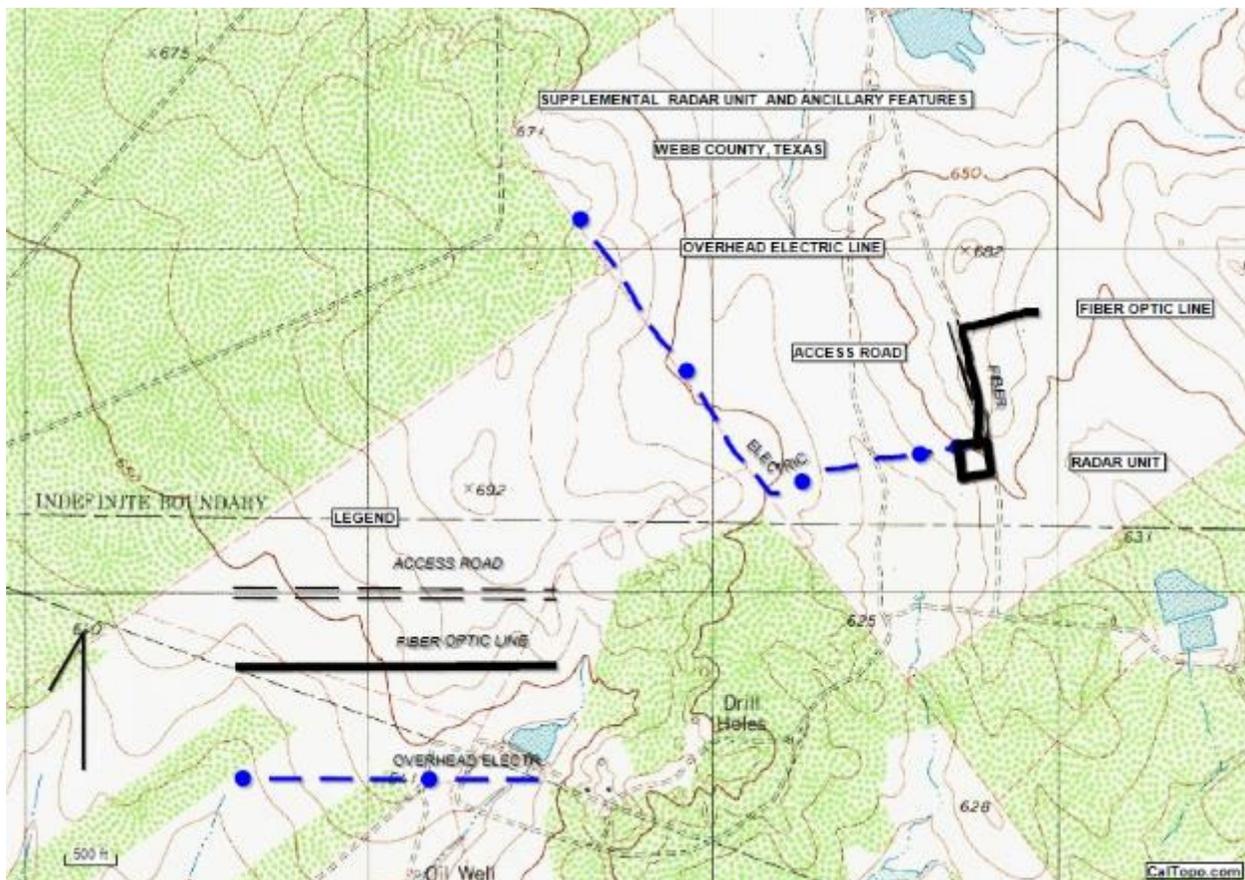


Figure 3. Portion of Folley, Texas Topographic Map Showing the APE of the Supplemental Radar Unit and Ancillary Features (USGS 1967).

## ENVIRONMENTAL SETTING

The Supplemental Radar Unit locale is on a low ridgetop west of the Bordas Escarpment (Figure 4). It is in the Tamaulipan Biotic Province (Blair 1950). This province is characterized by a semi-arid subtropical climate consisting of warm winters and hot summers. Average temperatures range from 58°F (14°C) in the winters to 97°F (36°C) in the summers. The average length of the growing season is almost 300 days, and the area rarely has hard freezes. The prevailing winds are from the southeast. Annual rainfall is approximately 20-22 inches (Blakley 1967).



**Figure 4. Photograph, Facing South, Showing the Supplemental Radar Unit Location Vegetation and Surface Visibility.**

Surface geology consists of Cenozoic-era (245-1800 millions of years ago) formations deposited during the Pliocene, Miocene, and Oligocene (Bureau of Economic Geology 1977). The area is underlain by the Willis and Goliad Formations from the same era (Renfro *et al.* 1977). Soils in the region were formed on Pleistocene (2 million -10,000 years ago) and Pre-Pleistocene surfaces.

The Supplemental Radar Unit is in the Mesquite-Chaparral-Savannah vegetation region (Biessart *et al.* 1985). The variety and proliferation of brush species, most of which have thorns, have also caused this region to be referred to as south Texas Brush Country, or the *brasada* by Spanish-speaking inhabitants (Davis 1992). The brush, however, was present only in isolated stands in the 18<sup>th</sup>, 19<sup>th</sup>, and early 20<sup>th</sup> centuries, causing the region to have a much more savannah-like appearance (Inglis 1964).

After long-term overgrazing, decrease in natural fires, and drought conditions, grasslands were overtaken by thorny brush, which comprises climax woody vegetation in the region (USDA 1974). A plant list for the area includes black brush, creosote, lotebush, guayacan, mesquite, sumac, shrubby blue

sage with candalia, prickly pear, and tasajillo. Modern fauna in the area include deer, turkey, wild hogs, javelina, bobcats, jack rabbits, raptors, and song birds.

## **REGULATORY REQUIREMENTS**

The Supplemental Radar Unit is a Federal Undertaking subject to Section 106 of the NHPA, 16 United States Code (USC), Part 470f (Public Law 89-665) of 1966, as amended (2006), and its implementing regulations, the Procedures for the Protection of Historic and Cultural Properties (36 Code of Federal Regulations [CFR] 800). Section 106 tasks Federal agencies with taking into consideration Undertakings which could result in an adverse effect on historic properties listed or eligible for listing on the NRHP. The parties involved must make a "reasonable and good faith effort" to identify any historical properties that could be affected.

Section 106 and its implementing regulations limit historic properties to any prehistoric or historic districts, sites, buildings, structures, or objects listed in the NRHP, or eligible for listing in the NRHP. The identification and evaluation process requires a combination of records searches, survey, and consultation with the appropriate SHPO, Federally-recognized tribes, and other parties with known or demonstrated interests to identify potential and known properties; assess or reassess their eligibility for the NRHP; and assesses the potential effect of the agency's proposed actions on each historic property.

CBP entered into a Programmatic Agreement under 36 CFR 800.14(b) to more effectively implement Section 106 for its activities where the effects to historic properties are similar and repetitive, are multi-state or regional in scope, where routine management activities are undertaken at Federal facilities or other land management units, and to address other circumstances that warrant a departure from the normal Section 106 process and which have proven to have little to no potential to impact historic properties. EED administers CBP Undertakings in states along the southwestern border of the United States following the March 2015 Programmatic Agreement.

The SHPO consults with the agency on the scope of the identification efforts; reviews and approves research designs for field work in accordance with state protocols for the issuance of necessary permits; and provides comments along with a concurrence or non-concurrence with the agency's eligibility determination and/or assessment of effects. The proposed action area, or APE, in which new construction would occur includes the area or areas where the proposed action may directly or indirectly cause alterations in the character or use of historic properties. The scale and nature of the proposed action also influences how the area is defined. For the proposed action, the APE was defined in accordance with Stipulation IV.E.1 of the March 2015 Programmatic Agreement.

## **RESOURCE SIGNIFICANCE**

As part of NHPA analysis and the Section 106 process, newly found cultural resources are evaluated for their potential to be eligible for Federal and state listing as historic properties, prior to determining potential construction affects. Two sets of eligibility criteria would apply in the determination of cultural resource significance. The first set is for listing in the NRHP. The second is for formal designation by the state of Texas as a SAL.

Pursuant to Federal regulations, historic buildings and archaeological sites may be eligible for listing in the NRHP, if the following conditions are met (USDOJ 1990). The quality of significance of the resource in American history architecture, archeology, engineering, and/or 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 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, important information in prehistory or history.

Under the Antiquities Code of Texas, historic buildings that meet the following conditions are eligible for formal designation as SALs. Historic structures (Title 13, Part 2, Chapter 26, Rule 26.15) may be designated if:

- (1) the structure, or building is listed in the NRHP; and
- (2) the structure, or building fits within at least one of the following criteria:
  - a. is associated with events that have made a significant contribution to the broad patterns of our history;
  - b. is associated with the lives of persons significant in our past;
  - c. is important to a particular cultural and or ethnic group;
  - d. is the work of a significant architect, master builder, or craftsman;
  - e. embodies the distinctive characteristic of a type, period, or method of construction, possesses high aesthetic value, or represents a significant and distinguishable entity whose components may lack individual distinctions; and/or
  - f. has yielded or may be likely to yield information important to the understanding of Texas culture or history.

Archaeological sites, shipwrecks, caches and collections may be officially designated as SALs. The THC shall use one or more of the following criteria when assessing the appropriateness of official landmark designation for archaeological sites, and/or the need for further investigations under the permit process:

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

Shipwrecks may be considered significant and be recognized or designated as landmarks provided that the following conditions are met:

- (1) the shipwreck is located on land owned or controlled by the state of Texas or one of its political subdivisions;
- (2) the shipwreck is pre-20<sup>th</sup> century or is otherwise historically significant and is 50 years old or older in age; and/or

- (3) the remains consist of a shipwreck sunken, abandoned, or a wreck of the sea, or are represented by the ship's remains and/or contents or related embedded treasure.

Caches and collections may be considered significant and be recognized or designated as landmarks, provided that at least one of the following conditions is met:

- (1) the cache or collection was assembled with public funds or taken from public lands;
- (2) preservation of materials is adequate to allow the application of standard archaeological or conservation techniques;
- (3) the cache or collection is of research value, thereby contributing to scientific knowledge; and/or
- (4) the cache or collection is of historic value or contributes to a theme.

If a resource is found to be significant, any potential new construction effect to that resource would need to be ascertained under the NHPA, before construction begins. A finding of no significant effect would require no further cultural resources work. A finding of adverse effect would likely trigger additional requirements for agencies. An adverse effect is one that directly or indirectly alters the characteristics of a historical or archaeological resource that is listed or eligible for listing in the NRHP. If an agency finds that a proposed action would adversely affect eligible or listed historic or cultural properties, then the parties begin further consultation under the Section 106 process.

### 3.0 CULTURAL HISTORY

#### INTRODUCTION

The Supplemental Radar Unit area lies within the south Texas archaeological region, an area that has been much investigated by archeologists. Chronological frameworks have been established for the region (Hester 1995; Turner and Hester 1999). While much has been written concerning the cultural chronology of the south Texas region, for the purpose of this report only the briefest of summaries has been provided. For those wanting a more in-depth and comprehensive discussion on all of the time periods see Black (1989). The time periods pertinent to this report are listed in Table 1, and are briefly discussed below.

**Table 1. Cultural Chronology for the South Texas Archaeological Region**

Time Period	Stage	Phase	Beginning Date	Ending Date
Prehistoric			Pre 11,200 BP	260 BP
	PaleoIndian		11,200 BP	8000 BP
	Archaic	Early Archaic	8000 BP	4500 BP
		Middle Archaic	4500 BP	2500 BP
		Late Archaic	2500 BP	1200 BP/AD 488
	Late Prehistoric		1200 BP	400 BP
Historic			AD 1528	AD 1960
	European Contact and Exploration		AD 1528	AD 1725
	Spanish and Mexican Colonization		AD 1725	AD 1835
	Republic, Statehood, and Economic Development		AD 1835	AD 1880
	Ranching, Mining, Oil and Gas, and Commerce		AD 1880	AD 1960

Notes: BP=Before the Present; AD=Anno Domini

#### PREHISTORIC PERIOD

**PaleoIndian Period (11,200 to 8000 BP).** Like other areas of North America, the area around Laredo, TX shares aspects of a common prehistory, especially in the early periods. The earliest inhabitants arrived sometime before 12,000 years ago during the late Pleistocene. They possessed a distinctive lithic technology based on the production of blades and a characteristic fluted point for their thrusting spears. They hunted large game, including mammoth and mastodon. Little is known of their plant utilization, although they certainly made extensive use of plants for tools, fiber, and food. Their spear points are denominated *Clovis* as is their culture, which spread rapidly across North America.

In south Texas and northeastern Mexico, according to Hester (1980:135), there are two major cultural traditions. The plains-related fluted projectile point tradition of the North American Great Plains and Southwest is the first. Point-types include *Clovis*, *Folsom*, *Plainview*, *Golondrina*, *Angostura*, and *St. Mary's Hall* (Hester 1980:98-102). The second is the small projectile point tradition of northeastern Mexico dated to ca. 8800 BP at the La Calzada Rockshelter in Nuevo Leon, Mexico (Hester 1980:136).

The small, stemless projectile points are not associated with fluted points. Some of the projectile points that might be related to this tradition are the *Meserve*, *Milnesand*, *Lerma*, and *Scottsbluff* (Turner and Hester 1999). Hester (1980:142) also reports that most Late PaleoIndian points in south Texas occur in surface settings, eroded out by sheetwash and gullying, and often mixed with Archaic period artifacts that have eroded out onto the hardpan surface.

Within the south Texas region, artifacts of this time period have generally been recovered from the surface, often in upland settings or on ancient terraces well above the modern floodplains (Hall *et al.* 1986:394). Little is known about the actual lifeways of the PaleoIndians of south Texas. Accepted opinion is that relatively small groups were involved in broad-spectrum hunting and gathering of post-Pleistocene plants and animals (Hester 1989). Subsistence and settlement patterns of these early peoples are thought to have centered at first around such resources as bison and deer; but eventually the emphasis on hunting lessened, and the orientation swung largely toward food collecting (Hester 1980).

**Archaic Period (8000 to 1200 BP).** By about 6,000 to 7,000 years ago there was a technological revolution allowing hunters to stand off from the game and to hunt smaller, modern game animals, especially deer. This was the development of the atlatl with a usually detachable foreshaft on a fletched main shaft. Points were barbed. The earliest recognized are the early barbed points first recognized in the Lake Amistad Reservoir area. Evidence of plant utilization consists of the remains of food, wooden tools and hafts, fiber, and the utilization of heated stones to cook vegetal products. Much of this evidence comes from rock shelters in the Del Rio area upstream from Laredo.

This period is called the Archaic and sites of this period are relatively common, reflecting both an increased population and a greater duration. Projectile points of this period in the Laredo, TX area have more similarity to those of the Rio Grande River delta and northern Mexico than they have to the Del Rio, TX area or central Texas. The typical Archaic points in the area are fairly large triangular points and are stemless. Archaic points have been found by the hundreds on the surface at the nearby Killam Ranch in Webb County, TX (Turner *et al.* 2011). This period and its associated artifacts are poorly known in the area.

In south Texas, the Archaic period is divided into three subperiods: Early Archaic, Middle Archaic, and Late Archaic (Black 1989:49-51). Prehistoric life styles during this period changed due to a drier, warmer climate provided by an altithermal in the western United States. This environmental shift allowed for an increase in the human population of the region (Hester 1980:146).

**Early Archaic Period (8000 to 4500 BP).** The Early Archaic period still remains relatively unknown, much like the preceding PaleoIndian period (Davis 1992:9). Some of the projectile points most often associated with this period are early triangular, *Bell*, *Andice*, *Abasolo*, and a variety of Early Expanding Stem projectile types (Black 1986:49). Little is known about the transition from the PaleoIndian period to the Archaic, but within 1,000 years the hunting and gathering life style had become much more refined.

Some of the specific advances of this period involved hunting and the seasonal scheduling for plant gathering, and the size of the group and its movements around the area were more closely controlled by this subsistence regime. Preferred campsites were often reused over millennia (Hester 1980). This repeated occupation resulted in large sites with dense accumulations of occupational debris and additional activity residue across all areas of the landscape (Davis 1992:9). Black (1989:49) postulates that during this time in south Texas, the region was occupied by small groups of aborigines ranging over a wide territory to facilitate their subsistence.

**Middle Archaic Period (4500 to 2500 BP).** In south Texas, the Middle Archaic is often recognized by such stemmed dart points as *Tortugas*, *Bulverde*, *Pedernales*, and *Langtry*. While these point types have been found in datable contexts in adjacent cultural regions, one of the most prominent local diagnostic markers seems to be the *Tortugas* point (Black 1989:49-50). This period also witnesses the beginning of the accumulations of large quantities of fire-cracked rock residue that is the result of intensive utilization of large stone-lined hearths, presumably for the processing of some type of subsistence material, probably vegetal (Hall *et al.* 1986:401). Reliance upon plant resources may have become more prevalent during this period, though hunting was still practiced (Davis 1992:10).

**Late Archaic Period (2500 to 1200 BP).** In south Texas, the Late Archaic period is very similar to the Middle Archaic. Some of the stemmed projectile points that are indicative of the period are the *Ensor*, *Marcos*, *Frio*, *Fairland*, and *Ellis* (Hall *et al.* 1986:400). Other major dart point types from the Late Archaic period that are common in Webb County are *Desmuke*, *Catan*, and *Matamoros* (Turner and Hester 1999). Well-constructed stone-lined hearths and associated fire-cracked rock debris are very prominent components of these sites, indicating a focus on the processing of plant remains for subsistence (Hall *et al.* 1982:471). During the terminal or transitional portion of the Archaic period, regional population growth continued and territorial tendencies developed (Black 1989:51).

Late Archaic period components in the region have been investigated by several authors (Mahoney *et al.* 2002; Quigg *et al.* 2000). The Lino Site, 41WB437, a stratified Late Archaic campsite located on San Idelfonso Creek, contained six stratified components in the top 120 centimeters (cm) of sediment (Quigg *et al.* 2000). Material remains in all components were similar, dated to the Late Archaic period, and include quantities of burned rocks, burned rock features, a limited number of formal tools and diagnostic projectile points, quantities of lithic debitage, and sparse stone tools. The remains are thought to represent a series of extended family campsites, each occupied for more than a few days. Investigations at the Boiler Site (41WB557) provided similar data about prehistoric upland utilization over a period of 4,200 years. Recent investigations at Site 41WB556, located on Bercerra Creek, yielded additional data about the Late Archaic period (Mahoney *et al.* 2002).

**Late Prehistoric Period (1200 to 4000 BP).** About 2,000 years ago the invention of the bow and arrow initiated another period. This period in other areas was also characterized by the development of agriculture and pottery, and, in some cases, town living. However, in the present day Laredo, TX area, the principal artifacts marking this period are small triangular arrow points including *Alba*, *Caraca*, *Clifton*, *Cuney*, *Scallorn*, *Toyah*, and *Perdiz*. Many Late Prehistoric point types were used into the Historic Period. The bow and arrow allowed hunters to stand off still farther from the game. This period has variously been called Neo-American, Post Archaic, Late Prehistoric, Proto-Historic and others. Hunting and gathering continued to be the Native American way of life well into the historic period.

The Late Prehistoric period archaeological sites are the best documented aboriginal occupation within the south Texas region. The reasons for this are threefold: the deposits are distinctive, numerous, and better preserved (Black 1989:51). Sites from this period are usually concentrated on or near the present or abandoned channels of large creeks and rivers. Large amounts of lithic debris, hearths, and ash pits are common at Late Prehistoric period sites (Lynn *et al.* 1977:41).

## **HISTORIC PERIOD**

**European Contact and Exploration (AD 1528 to 1725).** Texas history begins in 1519 when Alonso de Pineda mapped the coast of the Gulf of Mexico, putting his ships in at least a couple of places on the Texas coast for water including at the mouth of the Nueces River. Later, in 1528, the survivors of the Panfilo de Narvaez expedition landed at Matagorda Island and eventually passed across the Rio

Grande River near Mission, TX and again near Dryden. This expedition was followed in 1554 by Spanish shipwrecks at Padre Island. The French explorer Henri Joutel arrived in 1684 on the Texas Gulf Coast at Matagorda Bay (Foster 1998).

At the time of European contact, Native Americans occupied northern Mexico and south Texas in autonomous bands collectively known as Coahuiltecas. Little happened in south Texas until Spanish settlement reached the Monterrey and Saltillo areas in the late 1580s causing the displacement northward of hunting and gathering groups into the area of present day Laredo, TX, who, in turn, displaced the local groups. Historic period stone artifact types found in south Texas include *Guerreo*, *Cuney*, and *Zavala* projectile points. European ceramics, forged metal tools, coinage and precious metals, hand-made glass, religious, and trade items appear in the archaeological record at contact sites. By 1670, another European import, epidemic disease, decimated the remaining indigenous population.

In the late 1680s, Alonzo de Leon crossed the Rio Grande River south and north of present day Laredo, TX on separate expeditions in search of an illegal French colony. Upstream from Laredo the community of San Juan Bautista developed and became the major crossing on the Rio Grande River for settlers, government officials, and religious groups on their way into Texas, expanding Spanish control to the north of the Rio Grande River (known as *Rio Bravo* to Spanish). This area became known as *El Seno Mexicano* and included today's Tamaulipas, part of Nuevo Leon, and much of south Texas (Pena 2006:60:1).

**Spanish and Mexican Colonization (AD 1725-1835).** Indigenous peoples remained in the region and groups from the southwest and the plains of the United States entered the area. The Spaniards identified 60 Indian groups in El Seno Mexicano and northern territories (Pena 2006:71) and the population exceeded 5,400 by the 1750s (Pena 2006:84). The Indians lived near settlements, missions, and in the municipalities of the Villas del Norte. One tribe lives in adobe homes in Carmago, Mexico. Historic period stone artifact types found in south Texas include *Guerrero*, *Cuney*, *Starr*, and *Zavala* projectile points. Metal projectile points and tools began to be used at this time, but were not yet common.

Enterprising individuals attempted the earliest *El Seno Mexicano* settlements from 1725 to 1749. According to Pena (2006:60:2), in 1745 Nicolas de la Garza of Monterrey Mexico and in 1747 Jose Baez Benavides with his five brothers started ranches 20 leagues northwest of Carmago, Mexico in the vicinity of the Supplemental Radar Unit locale. *Vaqueros* and *ciboleros* from Coahuila and Nuevo Leon, Mexico began to regularly enter the area. Plans to colonize *El Seno Mexicano* were formulated in an effort to pacify and convert native inhabitants and discourage French and English encroachment (Pena 2006:61:1). In 1746, the Viceroy of New Spain, Juan Francisco de Güemes y Horcasitas, the Conde de Revilla Gigado, appointed José de Escandón to explore and settle areas of a new region to be known as *Nueva Santander* (Hinojosa 1983).

*Nueva Santander* was established as the northernmost province of New Spain and later became the Mexican state of Tamaulipas. Nuevo Santander was created as a protector of Spanish holdings, and settlers were chosen who could defend outlying holdings from Anglo-American encroachment and attacks by Native American groups (Tijerina 1998:xx). Fortified towns known as municipalities formed the "*La Frontera*" or first line of defense. Between the municipalities and established Spanish settlements a zone was created which was known as the "*despolando*" or un-peopled lands and acted as a protective buffer.

Escandon's endeavor, unlike other Spanish colonizing efforts using missions and priests, used a settlement model specific to the region. Monetary incentives augmented the Escandon plan by offering pioneers exemption from taxes for 10 years and moving expenses. Lastly, he offered additional free land

grants at later date (Pena 2006:62). The effort relied on “*frontera*” ranches for protection and food supplies (Tijerina 1998:xxi) and intentional selection of the regions’ established frontier people to be the first residents and defenders of “*La Frontera*.”

Municipalities were built on the south and north sides of the Rio Grande River and were known as the *Villas Del Norte*. The names of the municipalities were Laredo (*Villa De San Augustin*), Revilla (*Guerrero*), Mier, Carmargo, Reynosa (*Nuestra Senora De Guadalupe de*), *San Juan*, and *Matamoras*. Large land grants were created north of the villas. The Escandon colonization model was a highly successful planned approach to colonization across south Texas and the southern Bordas Escarpment. The Mexican frontiersman established a unique frontier ranching life way and culture which became known as *Tejano* and which endures today.

In 1750, Jose Vasquez Borrego founded *Nuestra Senora de los Dolores Hacienda* near the historic town of San Ygnacio, TX. By 1755, a ferry was built at Dolores, making it an important mercantile and shipping location in the region. During this time, Spanish, Mexican, and Native American travelers regularly visited the *Sal del Ray* on roads which passed through area. Laredo was raised to the status of “*villa*” in 1767, and because of the developing wealth, saw numerous Indian raids by Comanches and Lipans beginning in the 1770s.

Four Spanish land grants were issued in the vicinity of the Supplemental Radar Unit from 1740 to 1767 (Pena 2006). The *Agua Nueva de Arriba* grant located to the south was issued to Jose Miguel Ramirez in 1740 and was eight leagues or 35,427 acres in size. The same year Juan Miguel Ramirez acquired the *Agua Nueva del Abajo* grant, also located south of the Supplemental Radar Unit area. A third grant issued in 1740 was to Simon de Ynojosa for the *Noriacitas* located in present day Hebronville, TX, to the northeast. Jose Antonio Garcia received a grant for *El Randado* Ranch in 1767, which is east of the Supplemental Radar Unit’s electrical line route.

The Spanish land grants, while intended by the government to form a frontier border, represent the origins of large Tejano ranchero culture, and a regional economy rooted in cattle, horse, and sheep ranching. Early ranchers were expected to act as military defenders of the frontier. Because of the presence of large livestock herds and developing wealth, numerous Indian raids by Comanche and Lipan Apaches began in the 1770s. By 1775, a military post was required (Cuellar 2014). There were never enough soldiers and the problem was compounded in the 1810-1820 period when soldiers were removed to fight revolutionaries and filibusterers.

Historic Indians in the area first recorded by the Spanish, and later, by the early settlers known as Texians, were the Carrizos. They were recorded by tribal name as Carrizos in the 1789 census (Hinojosa 1983). At that time, most had been baptized, and had Spanish names and all had very low status and occupied menial positions. The census data suggest that the local Indians entered Spanish society at the lowest level as servants, laborers, and pastoralists. The Indians could migrate upward in society through acculturation and by economic success. Their descendants likely form a part of the regional population today.

Borrados and Lipans also appeared in the area on occasion. Native American groups remained in the region until the late 1780s (Garza and Long 2014). During the Indian hostilities from 1810 to 1822, citizens of the frontier were the first line of dense for the *Villas de Norte*. Outlying rancheros were abandoned due to Indian hostilities and owners returned to more defensible homes in the *Villas del Norte*. In 1805, the Mexican State of Tamaulipas began issuing land grants for the region, reducing Spanish control and in 1821, after Mexico’s independence from Spain, eliminating the issuance of any further Spanish land grants (Pena 2006).

In 1833, the State of Tamaulipas issued Article 3 of Law 24, which granted five leagues of land to each *ciuandao* residing in the Villas del Norte for their military service. The *Albercas De Arriba* Ranch was founded in 1830 by Valentin de las Fuentes and wife, Thomasa de la Pena at a spring located below the top of the Bordas Escarpment. By 1859, the ranch contained 40 structures and became a cross roads stop on wagon trails from Laredo, TX to the Gulf Coast and to the north. Of the structures, three remain today and are a schoolhouse, chapel/commissary, and the *casa mayor* (Guerra 2013). The *Las Albercas* buildings are constructed in Mexican-Spanish Colonial Style (Echols 2000). The buildings were surrounded by *jacales* or huts made of wood and mud and were occupied by indigenous peoples (Tijerina 1998; Jordan 1985). The *Las Albercas* ranch is located 4.5 miles northwest of the Supplemental Radar Unit. Closer to the Supplemental Radar Unit is the Summers Ranch headquarters, where the remains of a Mexican-Spanish Colonial buildings are present (Summers 2015).

The mid-to late 19<sup>th</sup> century brought political change to the region resulting in territorial disputes as Anglo, Mexican, and Spanish settlement melded into south Texas. In 1836, the new Republic of Texas claimed the Rio Grande River as its western boundary, although there was no historic precedent for that claim. The Spanish colonial and Mexican boundary of Texas was the Medina and San Antonio Rivers. Thus, Laredo was claimed by Texas even though it was a part of Tamaulipas. Initially, Texas could not enforce its claim to northern Tamaulipas. In 1838, the local rancheros revolted and declared the short-lived Republic of the Rio Grande.

**Republic, Statehood, and Economic Development (AD 1836 to 1880).** In 1836, the new Republic of Texas claimed the Rio Grande River as its western boundary, although there was no historic precedent for that claim. Zapata, TX was first known as *Habitacion de Redmond*, was created in 1839, and would become the Zapata County seat (Garza and Long 2014). The 1842 Somervell expedition passed through Laredo (Cuellar 2014).

Texas was annexed to the United States in 1846 which did enforce Texan claims. In 1848 the Texas legislature formed the county of Webb and it was formally annexed into the United States (Leffler and Long 2014). Texas Rangers entered the town of Laredo and raised the United States flag, followed in November by a garrison under Mirabeau B. Lamar. Several local families moved across the river, founding the community of Nuevo Laredo. Fort McIntosh was established in 1849 on the west side of Laredo. American troops were able to reduce the Indian threat and the town prospered.

Meanwhile, Laredo, as a part of Texas, was involved in the political and economic power struggles internal to the United States, which led to the Civil War in 1861 after a minority candidate became president. Laredo and Webb County contributed a number of men to the army of the Confederacy, a distinguished unit of which was led by Captain Santos Benavides. Laredo served the Confederacy in an important economic aspect, as an export port for southern cotton. In 1864, federal troops attempted to invade Laredo and cut off the port. They were defeated by troops under Benavides at Zacate Creek (Cuellar 2014).

Texas was annexed to the United States in 1845 which did enforce Tejano and Texan claims. Texas Rangers entered the town of Laredo and raised the United States flag, followed with the creation of a federal garrison under Mirabeau B. Lamar. Several local families moved across the river, founding the community of Nuevo Laredo. Fort McIntosh was established in 1849 on the west side of Laredo. American troops were able to reduce the Indian threat and the town of Laredo and surrounds prospered. At San Ignacio, Fort Trevino was established in 1830 (Lease 2001).

The state of Texas recognized and honored Spanish and Mexican land grants issued from the 1740s-1830s for the region with conditions (Alonzo 1998). Tejanos were forced to provide proof of ownership and payment of taxes to the state of Texas to verify their claims to the grants. The vast Tejano ranching enterprises continued, although in smaller numbers, as Anglo Americans took advantage of legalities to acquire land. In 1858, Zapata County was formed from Starr and Webb counties.

In 1852, as required by the state of Texas, most grants were re-surveyed by county surveyors and patents were issued. The presence of the ranches and natural resources such as salt beds drew travelers and settlers in the 1700s establishing transportation. Along these 18<sup>th</sup> century roads, ranches were founded about every ten miles or about a one day ride apart. As the region transitioned from disputed territory to state and to locally controlled governments, population influxes began in earnest in the 1880s. Stock from south Texas ranch herds, including from inside the Supplemental Radar Unit area provide the beebes to begin the herds of the United States. *El Randado* was one of the largest 19<sup>th</sup> century south Texas Ranches and probably produced more cattle, horses, and sheep for longer uninterrupted time span than any other ranch in Texas and became a model (Tijerina 1998:12).

**Ranching, Mining, Oil and Gas, Farming, and Commerce (AD 1880 to 1960).** The region's economy began to recover in 1881 when the Texas Mexican Railroad and International and Great Northern Railroad arrived. In 1882, the Rio Grande and Pecos Railroad was completed to the newly opened Canal Coal Fields up river from Laredo, TX. The mining towns of Santo Tomás, Darwin, and Dolores were established to exploit the seam of canal coal exposed in the river bank. Darwin was named for David Darwin Davis, the head of the Canal Coal Company and continued in existence until 1939 when the mines closed (Gratke 2014a).

Dolores began as a Mexican village called San José before 1860, and became Dolores when the Canal Coal Company established the mines and railroad in 1882 (Gratke 2014b). Santo Tomás began in about 1873 when Charles Callaghan, a local sheep rancher, and Refugio Benavides, mayor of Laredo, began exploiting the coal. The railroad siding of Leyendecker was established in 1882 as a railroading siding and ranching center (Leffler and Long 2014). New architectural styles were introduced into the region, including Victorian (Maddex 1985).

By 1887, the Mexican National Railroad made connection with Laredo. The railroads brought prosperity and a new influx of Anglo/Celts into the area (Cuellar 2014). As the Mexican Revolution began in 1910, Laredo was a center for anti-Porfirio Diaz sentiment and activity. It accepted many refugees from the war who became contributing citizens in the community. An agricultural economy became established when commercial cotton farming began in 1910 and irrigation was put into practice (Leffler and Long 2014). Cotton and watermelon farmers attempted to produce in a similar fashion as successful Rio Grande River valley farms to the east. Due to arid climate and poor sandy soils, truck farming was not feasible and commercial farming failed, as well. It is widely believed that this initial farming effort resulted in the considerable lowering of the water table in the region (Russell 2014).

Discovery of oil and gas in Texas occurred first in south Texas in 1918, before the large fields of east Texas were found and changed the landscape and the region economy when the Standard Oil Company leased and drilled wells and discovered the Aviator and Las Animas Fields. For the first time, an economic boom was experienced in south Texas. As oil and gas wells went into production, compressor stations and pipelines were needed, and were constructed in the 1910s-1920s. A negative impact, during this time was the lowering of the water table for the second time and resulted in the loss of area springs, lakes, *lagunas*, and intermittent streams. By the mid-20<sup>th</sup> century, cotton farming was greatly decreased due to low prices, soil depletion, boll weevil infestations, and aridity (Garza and Long

2014). Large scale commercial farming failed, while ranching continued and the number of ranches and cattle steadily increased from 1920 to 1940.

During World War II, the Laredo Army Airfield was an important training base. It later became the Laredo Municipal Airport. Construction of the Interstate Highway System hugely affected the region. The highways connected the Laredo inland port of entry and railroad hub with markets in Mexico, the United States and Canada. Today, Laredo is the largest inland port of entry in the United States in terms of the number of people making daily entry and exit and in terms of the amount and value of goods imported and exported. Ranching reemerged as the region's chief economy.

With the construction of Falcon Reservoir on the Rio Grande River in Zapata County, TX in 1955, area residents experienced their first-ever displacement from land grants and *porciones*. As many as 3,800 residents of the towns of Zapata, Falcon, and Lopeno were displaced and their properties and historic towns were inundated. After the lake filled, tourists and "Winter Texans" were drawn to the area and recreational and seasonal tourism were added to area economies. Large seasonal hunting leases were developed by many property owners. By 1960, recreational tourism bolstered the economy and today some of the ranches have six figure annual hunting operations in addition to large stock operations, extensive oil and gas production, and natural resources quarrying. The Supplemental Radar Unit area remained rural ranch land, with a decrease in large acreage holdings and increase in smaller ranching.

## PREVIOUS ARCHAEOLOGY

Several authors (Black 1989; Hester 1995; Quigg *et al.* 2000; Quigg *et al.* 2002) provide background on the archeology of lower south Texas. Professional archeology began in this region with investigations associated with the construction of Falcon Reservoir along the Rio Grande River in the 1950s (Krieger and Hughes 1950; Hartle and Stephenson 1951). Limited development throughout during the decades following the construction of Falcon Reservoir reduced the need for professional investigations. In the 1970s, larger survey activities began in the region and included surveys supplemented by testing at Choke Canyon Reservoir along the Frio River in Live Oak and McMullen counties (Brown *et al.* 1982; Hall *et al.* 1982; Hall *et al.* 1986). Similarly, the development of Interstate 37 spurred the archaeological investigations conducted at the Loma Sandia Site near Three Rivers, TX (Taylor and Highley 1995).

In addition to these larger activities, some significant testing and surveys have also been conducted throughout Webb County and adjacent Jim Hogg County (Cox 1983; Hickman 1996; Kotter and Prewitt; 1981; Warren 1986; Warren 1989a; Warren 1989b). These activities have significantly contributed to the documentation of low visibility archaeological sites often consisting of no more than a sparse scatter of lithic debris. They have also provided important regional-level information on prehistoric land use (Warren 1989a; Warren 1989b).

A survey for the Rural Electrification Agency found a prehistoric lithic scatter, possible campsites, a historic cemetery and farmstead (Warren 1986). At the Silverlake Mining Permit Area, a burned rock midden, campsites, lithic scatter, and a quarry work shop were the prehistoric sites found. A historic county dump and a grain silo were also found (Kotter and Prewitt 1981). Numerous archaeological surveys in Webb County have been conducted in conjunction with the development, operation and expansion of the Palafox coal mine west of the Supplemental Radar Unit area (Kelly and Hester 1979; Perino 1982; Paull and Zavaleta 1979).

Warren (1992a and 1992b) conducted additional work as the Palafox and Rachal mines continued to expand though the 1990s. The surveys of two large tracts (3264 and 2091 acres) resulted in the

documentation of 38 archaeological sites, and surveys of several other smaller tracks resulted in the documentation of additional sites. The sites were primarily prehistoric in nature, consisting of burned rock scatters, lithic debitage, a variety of projectile points and stone tools, and freshwater mussel shell. In general, subsurface testing at the prehistoric sites encountered no deposits or only shallowly buried cultural materials.

Studies of local geomorphology have been done from the Rio Grande River to the Gulf of Mexico (Gustavson and Collins 1998). Based on the data compiled from soils, geology, topographic maps, and the known locations of archaeological sites, backhoe trenching was undertaken to assess the potential for buried cultural deposits. As a result of these investigations, the majority of prehistoric sites within the Palafox and Rachal mine areas were determined to be situated on upland soils that have been stable surfaces since aboriginal occupations. This fact indicates a low potential for the presence of buried cultural deposits and a high probability that the deposits present represent numerous overlapping occupations of differing ages.

However, in small upland stream valleys in the Palafox mine area, the presence of apparent Holocene alluvium, particularly associated with the Catarina soil series, appeared to have the potential to contain buried cultural deposits. Despite this fact, none of the tests conducted in these areas yielded any buried cultural deposits. While Archaic period sites in the region have been investigated by several archeologists, there is a remarkable lack of information on the Late Prehistoric period in the area. Few Late Prehistoric sites have been recorded in the local area and what is known about this period is surmised from the surrounding region.

Cultural resources management studies have been conducted in the area since the 1970s. Among these have been work on the Mirando City Water System Extension (Cox 1983), Zacate Creek (Hall 1973), at a uranium mine (Bement and Rowan 1988) and uranium prospects (Ellis and Dodt-Ellis 1988), at Arroyo de los Muertos (McGraw 1991), along Mines Road (Wormser and Clark 1992), at the historic locale of Darwin (Davis 1992; Miller et. al. 2000), and work along State Highway 16 (Hickman 1996). Drought brought reduced water levels at Falcon Reservoir, which exposed submerged Spanish Colonial Communities. This situation spurred investigation and inventory at the reservoir and included the documentation of buildings and archaeological sites previously inundated by the creation of the lake (Perttula *et al.* 1996).

## 4.0 CULTURAL RESOURCES SURVEY

### RESEARCH DIRECTION

The focus of the survey was to collect new cultural resources data for the Supplemental Radar Unit area by inspecting the APE that would be affected by project construction. The area contained historic locales and roads, ridge tops and hilltops, seeps, springs, tributaries, and/or *lagunas* that could be High-Probability Areas (HPAs) for the presence of cultural resources. Survey goals were to identify, inventory, and describe cultural resources, and any eligible properties present that could be affected by the proposed Supplemental Radar Unit. Data were also collected to better define HPAs for future avoidance. Lastly, using new data gathered, inferences were made regarding settings with the potential to contain HPAs with significant cultural resources important to local, regional, or national prehistory and history.

### BACKGROUND RESEARCH

Before the survey, APC reviewed records from the Texas Archaeological and Historical Sites Atlas, the THC, and Texas State Library (TSL). A desktop search was performed to determine if any historic properties listed on the NRHP and SALs were present in the area planned for development that may be directly affected by the new construction. In addition, in order to identify any potential historic properties that may be indirectly visually affected by the erection of a 40 foot tall radar tower, the desktop survey covered an area within 0.25 miles of the development. An overlay of archaeological and historic properties within 0.25 miles was generated for planning and design purposes.

### METHODS

The cultural resources survey and site recording were conducted by two archeologists between March 16-18, 2015 and April 7-8, 2015. Pedestrian transects at 10-10 meters were walked across the survey area generally north to south and back to achieve 100 percent coverage of the direct effects APE. The rate of survey averaged 15 acres per person per day. Survey coverage began with the 2 acre radar locale, where cultural resources material was observed inside the northeastern part of the radar locale. Coverage was extended outside the radar locale when it was determined that a prehistoric campsite site and lithic procurement area were present and constituted an archaeological site. To determine the limits and contents of the cultural material and features encountered, random and zig-zag transects following material were also walked. Vegetation, although moderate to dense, allowed for high surface visibility of more than 60 percent in the areas surveyed. As a result of high visibility, no shovel testing was performed during transect coverage. Shovel testing was conducted related to the newly found archaeological site 41WB798. Features were mapped using a Garmin GPSMAP78, and by walking random transects between features. Spatial data, size, depth, condition, and artifact associations were documented for each fire-cracked rock (FCR) feature observed. Photographs of typical feature types were taken.

**Shovel Testing and Artifact Collection.** Surface visibility exceeded 60 percent at all locations walked, exposing gravel pavements and shallow clay and sandy soils. Subsurface soils were exposed by active erosion, sheet washing, and down cutting. All erosion rills, arroyos, tributary cut banks, quarry pit walls, and gravel pit subsurface exposures encountered were examined.

Many animal burrows were present showing the content of upper subsurface strata. No settings with the potential to contain buried deposits were observed in the direct effects APE. For these reasons, no shovel testing was performed while walking transect. During site recording, shovel testing was used to delineate the horizontal extent and vertical depths of the deposits.

Qualified archaeological personnel dry-screened soil from all shovel tests through 1/4 inch dry mesh in arbitrary 10 cm levels. Artifacts identified from shovel tests were judged to be scientifically redundant. The specimens were quantified and were subjected to limited field analysis, and returned to the test hole. Soil profiles exposed in shovel tests were described and test holes were backfilled and each location was added to the site map.

A no-collection policy was adopted for surface artifacts, with the possible exception of diagnostic artifacts with research potential. Isolated diagnostics were found out of their original context on the surface. Spatial data were collected and items photographed/described, but no artifacts were collected for analysis or curation.

**Historic Buildings.** Locations of standing buildings 45 years old or older falling within a 0.25 mile radius of the proposed Supplemental Radar Unit locale were identified during the desktop search using aerial photographs (SHPO 2014a; SHPO 2014b), oral history (Summers 2015), early 20<sup>th</sup> century topographic maps (USACE 1937; USACE 1940), and late 20<sup>th</sup> century county highway maps (USDOT 1984). A cultural overlay was created with the locations of 18<sup>th</sup> and 19<sup>th</sup> century standing buildings.

The visual effects APE for historic buildings was determined from specifications presented in Stipulation IV.E.1, CBP Section 106 Review Process for Towers and Infrastructure to Support Communications and Surveillance Undertakings. The visual effects APE for the Supplemental Radar Unit extends out in a 0.25 mile radius for a radar tower 40 feet tall, per the March 2015 Programmatic Agreement (ACHP 2015). No standing structures were present inside the 0.25 mile visual effects APE. Therefore, a historic resources survey by a qualified architectural historian was not considered necessary.

**Archaeology.** The direct effects APE for archaeological resources included a 10.9 acre horizontal area, and is comprised of the radar facility locale (2 acres), the electrical line (8.3 acres), fiber optic line (0.4 acres by four feet deep), and access road (0.2 acres). The direct effects APE also included trenching to depths of about 4 feet and widths of 3 to 4 feet wide.

**New Archaeological Site Documentation.** The extent of the newly found site 41WB798 within the direct effects APE was determined by visual inspection and by shovel testing. Hearth remnants and FCR features were mapped using hand-held Garmin GPSMAP78 unit and a measured site plan was compiled. Descriptive data were collected for each feature. Shovel testing was implemented inside and outside the archaeological site boundaries to assess integrity of archeological deposits present in the hearth fields and the quarry.

A random surface collection of representative artifacts was implemented to identify types and categories. A site sketch map of features present and site limits were made for the site. The data collected were summarized on state of Texas Archaeological and Historical Site Data Forms, and registered into the TexSite automated system. Site records and documentation were temporarily housed at APC and will be permanently stored at the Texas Archaeological Research Laboratory (TARL) at the University of Texas.

**Native American Consultation and Public Input.** Under the NHPA Section 106, consultation with the regional appropriate Native American groups and members of the public is required. Multiple Native American groups have established areas of interest in south Texas (SHPO 2015). CBP initiated tribal consultation and solicited comments from other interested parties as well. To date, three comments have been received that indicate no resources are in the proposed action area. See Attachment III for copies of the letters received.

## 5.0 RESULTS

### INTRODUCTION

Based upon desktop data search results, no previously recorded cultural resources or historic properties would be affected by the proposed action. Survey findings yielded positive results. One new archeological site was found and assigned the designation Site 41WB798. Site 41WB798 is composed of discrete components: a large hearth field, a small hearth field, a quarry, and an artifact scatter which surrounds the margins of the site. Of the site components at Site 41WB798, the large and small hearth fields could be contributing factors to the NRHP or SAL eligibility status of Site 41WB798, while the quarry and the artifact scatter are non-contributing factors,

The Supplemental Radar Unit was moved outside of the part of Site 41WB798 that could be a contributing factor to NRHP or SAL eligibility status. The southwestern margin of the site's non-contributing artifact scatter fell inside the eastern limits of the direct effects APE of the Supplemental Radar Unit. The direct effects APE of the fiber optical cable and access road would cross through the quarry part of the site. The direct effects APE fell outside the hearth fields at Site 41WB798 that could contain contributing factors to the site's NRHP or SAL eligibility status. Therefore, construction of the Supplemental Radar Unit and its ancillary features would not affect any historic properties which are eligible for listing in the NRHP or SAL. The proposed action can proceed without further cultural resources survey investigation. The Supplemental Radar Unit CRS resulted in the collection of new data about the cultural history and prehistory of uplands in the Chargos Creek drainage, a minor tributary of the Rio Grande River of south Texas.

### DESKTOP SEARCH

No known significant historic properties listed in the NRHP or designated as SALs were present inside the 0.25 mile visual effects APE of the proposed Supplemental Radar Unit and ancillary features. No known archaeological sites were present within the 0.25 miles radius searched for the Supplemental Radar Unit location. No historic buildings were situated within 0.25 miles of the Supplemental Radar Unit.

### CULTURAL RESOURCES SURVEY

The existing rural cultural landscape is made up of oil and gas production facilities, with the exception of one residence visible on the southwestern horizon. The Supplemental Radar Unit is located on a stream terrace and has higher landforms around it in all directions, except to the west where it overlooks an ephemeral stream. During the survey, one new prehistoric archaeological site was found in the landscape. Parts of the new site fall inside the direct effects APE of Supplemental Radar Unit and ancillary features. However, because this portion of Site 41WB798 possesses poor stratigraphic context, it is recommended as not eligible for listing in the NRHP under Criterion D related to the ability to provide new information about prehistory.

**Historic Resources.** No historic resources were observed during the survey inside the visual effects APE.

**New Archaeological Site 41WB798.** One new prehistoric archaeological site was found during the pedestrian survey. Site 41WB798 is a 34.3-acre open upland prehistoric campsite containing two hearth fields, a quarry, and artifacts scatter. The hearth fields were made up of 95 fire-cracked rock features. The quarry was associated with an outcrop of Uvalde gravels and contained 4 discernable flint

knapping stations. Native plants known to be important to Native American culture and religion were present within the limits of the site. Diagnostic artifacts were found at the locale and were relatively dated to the Middle Archaic Period (6000-4500 BP) and the Late Prehistoric Period (1200-400 BP), indicating multiple occupations.

## SHOVEL TESTING

Nine shovel tests were dug at newly found Site 41WB798 to examine subsurface contents, vertical extent, and integrity of deposits. Three were placed inside the large hearth field (6.8 acres), two inside the small hearth field (1.3 acres), and three were placed at the direct effects APE. Artifacts were identified from Shovel Tests 1 to 4 and 8 inside the hearth fields. Shovel Tests 5 through 7 inside the radar locale and Shovel Test 9 inside the small hearth field were negative. A relatively small number of artifacts were identified (Table 2). Materials were identified from Levels 1 to 2 only to depths of 20 cm below the surface. Levels 3 and 4 in all tests were unproductive in terms of artifact recovery. Shovel test results show that no buried material was present where the proposed Supplemental Radar Unit would be constructed.

**Table 2. Summary of Shovel Test Data From Site 41WB798**

Site No.	Location	Soils	Cultural Contents
1	NW Large Hearth Field	Grey Brown Silty Clay 0-18 cm Light Grey Silty Clay 18-38 cm Yellowish Gray Clay 38-45 cm	Flakes and FCR on Surface Level 2 (10-20 cm) Shatter (1)
2	NW Large Hearth Field	Grey Brown Silty Clay 0-23 cm Light Grey Silty Clay 23-40 cm	Flakes and FCR on Surface Level 1 (0-10 cm) Tertiary Flakes (2)
3	SW Large Hearth Field	Grey Brown Silty Clay 0-16 cm Light Grey Silty Clay 16-27 cm Yellowish Gray Clay 37- cm	Level 1 (0-10 cm) Shatter (1)
4	SE Large Hearth Field	Grey Brown Silty Clay 0-19 cm Light Grey Silty Clay 19-30 cm Yellowish Gray Clay 30-40 cm	Flakes and FCR on Surface Level 1 (0-10 cm) Flakes (4) Level 2 (10-20 cm) Flakes (2)
5	NW Radar Locale	Grey Brown Sandy Clay Loam 0-8 cm; Light Grey Brown Silty/Sandy Clay Loam 8-25 cm; Light Grey Silty Clay 25-40 cm	None
6	SW Radar Locale	Grey Brown Sandy Clay Loam 0-10 cm; Light Grey Brown Silty/Sandy Clay Loam 10-28 cm; Light Grey Silty Clay 28-40 cm	Isolated Scraper on Surface
7	N Radar Locale	Grey Brown Sandy Clay Loam 0-8 cm; Light Grey Brown Silty/Sandy Clay Loam 8-22 cm; Light Grey Silty Clay 22-40 cm	None
8	S Small Hearth Field	Grey Brown Sandy Clay Loam 0-5 cm; Light Grey Silty Clay 5-28 cm	Level 1 (0-10 cm) Shatter (1)
9	N Small Hearth Field	Light Grey Brown Silty/Sandy Clay Loam 0-8 cm; Grey Silty Clay 8-32 cm	None

## **TRIBAL CONSULTATION**

Requests for tribal comments were sent out by CBP in May 2015. To date, three comments have been received that indicate no resources are in the proposed action area. See Attachment III for copies of the letters received.

## **RESOURCE SIGNIFICANCE**

Archeological deposits and features found at Site 41WB798 appeared to have been previously disturbed by erosion, deflation, ranch road improvements, and oil and gas well pad construction. However, the large number of features present could contain datable materials and could have the potential to provide important new chronological information. Geomorphic study of soils present could have the potential to generate important new data about the development of habitation sites in the Chargos stream valley. Residue analysis of diagnostic artifacts could be performed yielding new chemical data. For these reasons, the small and large hearth fields at Site 41WB798 could be eligible for listing in the NRHP under Criterion D relating to archaeological sites providing important new information about prehistory. Additional work in the form of archaeological testing should be performed to determine the eligibility status of the hearth fields. No further work is recommended for the quarry section or the artifact scatter at Site 41WB798.

## **DISCUSSION**

Construction of the Supplemental Radar Unit would not affect any known historic properties listed in or eligible for listing in the NRHP or designated as a SAL. Construction of the Supplemental Radar Unit would affect parts of newly found archeological Site 41WB798. However, the part of Site 41WB798 that would be affected is not a contributing factor to the site's NRHP or SAL eligibility status. The 2-acre Supplemental Radar Unit is situated within the southwestern margin of the site and contained three isolated artifacts on the surface, possessed no subsurface deposits, and lacked features making it ineligible for listing in the NRHP or SAL. For these reasons, no further archaeological work would be needed at Site 41WB798 related to the construction of the Supplemental Radar Unit and construction can proceed as planned.

Outside of the direct effects APE of the proposed action, deposits at the newly found Site 41WB798 possess poor stratigraphic context, but do contain datable materials and could have the potential for data recovery. Geomorphic study could also provide new data about multiple component stream valley sites. Lastly, the complete boundaries of Site 41WB798 and its contents to the southeast and northeast are not yet known. For these reasons, the part of Site 41WB798 located outside the direct effects APE of the Supplemental Radar Unit is judged to have undetermined or unknown NRHP or SAL eligibility status.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

### **CONCLUSIONS**

The intensive pedestrian CRS resulted in the identification, documentation, and evaluation of newly found Site 41WB798, located on a low ridge top overlooking an ephemeral stream valley. It is a prehistoric site with two hearth fields, a quarry, and an artifact scatter with diagnostics from the Middle Archaic Period and the Late Prehistoric period.

The hearth fields at Site 41WB798 were not tested, and therefore, possess undetermined NRHP or SAL eligibility status. Additional archeological investigation, unrelated to the Supplemental Radar Unit, would be needed to ascertain if the deposits in the hearth field are eligible for NRHP or SAL listing. The hearth fields fell outside the direct effects APE, would be avoided, and would not be affected by construction. Therefore, no additional archeological investigation would be performed related to the Supplemental Radar Unit.

The surficial quarry and artifact scatter at Site 41WB798 did not meet NRHP or SAL criteria. For these reasons, the quarry and artifact scatter at Site 41WB798 are recommended as not eligible for listing in the NRHP under Criterion D relating to archaeological sites providing new information about prehistory. As a result, no additional archaeological work would be needed at the ineligible parts of Site 41WB798. Therefore, construction of the Supplemental Radar Unit would not affect any historic properties or potential historic properties. Affects to the quarry and artifact scatter at Site 41WB798 would not be adverse or trigger additional archaeological investigation. Related to cultural resources, construction of the Supplemental Radar Unit in Webb County can proceed, as planned.

### **RECOMMENDATIONS**

APC recommends that construction of the Supplemental Radar Unit proceed, as planned, without additional survey work under the following conditions. First, if any unexpected archaeological deposits are inadvertently discovered during construction, activity should stop until evaluated by a qualified cultural resources person. Construction personnel should notify the Proponent (CBP OAM/AMF), who will contact EED of the inadvertent discovery. OAM/AMF shall notify EED of the discovery of historic properties or unanticipated adverse effects within 24 hours. CBP shall immediately cease all operations for the portion of the Undertaking with the potential to adversely affect a historic property. EED shall notify the appropriate SHPO/THPO, tribe, and other affected parties of the post-review discovery via letter or electronic correspondence within two (2) business days. CBP protocol should be implemented as outlined in Stipulation X of its March 2015 Programmatic Agreement (ACHP 2015). Second, if human remains are uncovered, digging must cease and local law enforcement and authorities and CBP/EED should be notified. The discovery of human remains in Texas is covered under Chapter 711-715 of the Texas Safety and Health Code, and damage or destruction inflicted on human burial sites is a state felony under Section 28.03(1) of the Texas Penal Code.

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## Attachment I – Stipulations IV and V

The following are excerpts for terms and conditions of Section IV and Section V of the March 2015 Programmatic Agreement (ACHP 2015).

### STIPULATION IV. CBP SECTION 106 PROJECT REVIEW PROCESS

Pursuant to this agreement, CBP will carry out its Section 106 review of a proposed action as outlined below.

- A. The Proponent shall determine if there is an Undertaking and coordinate with and gather information from the affected SHPO/THPO, tribes, and, as appropriate, other affected Parties. Based upon this information, the Proponent shall determine and document the APE; coordinate with any impacted land or facilities manager or tribes; and conduct a review of existing information on historic properties located within the individual Undertaking's APE.
- B. The Proponent, with assistance from a Cultural Resources Specialist, shall complete and submit to EED a project initiation form that will document the steps taken to fulfill Stipulation IV.A, provide information on any potential historic property issues and recommend if the Undertaking fully meets Stipulations VI or VII of this Agreement.
- C. Cultural Resources Specialists who meet the Secretary of the Interior's *Professional Qualifications Standards*, as defined in Stipulation II.C, shall review the project initiation form to recommend that either:
  - a. The Undertaking is within the scope of Stipulations VI or VII of this Agreement. The project initiation form will constitute the necessary documentation that the agency has fulfilled its Section 106 obligations and CBP will maintain the documentation in the project file; or
  - b. The Undertaking has no potential to cause effects as defined in 36 CFR Part 800.3(a)(1). The project initiation form will constitute the necessary documentation that the agency has fulfilled its Section 106 obligations and CBP will maintain the documentation in the project file; or
  - c. The Undertaking is not fully within the scope of Stipulations VI or VII of this Agreement and has the potential to cause effects on historic properties. CBP will proceed in accordance with 36 CFR Parts 800.3 thru 800.7, using the process outlined in Stipulation V when conducting identification and evaluation efforts, or the processes and procedures of another Federal agency, when applicable and appropriate.
- D. For all Undertakings meeting Stipulation IV.C.3, EED shall ensure that the Section 106 consultation process is carried out by the Proponent and Cultural Resources Specialists in accordance with 36 CFR Parts 800.3 thru 800.7 and the timeframes specified therein.
- E. For Towers and Infrastructure to Support Communications and Surveillance Undertakings, the following additional Stipulations shall apply:
  - a. The visual APE for all Towers and Infrastructure to Support Communications and Surveillance Undertakings shall be as follows: For heights less than 25', a 750' radius shall be used. For heights equal to or more than 25' but less than 100', a ¼ mile radius shall be used. For heights equal to or more than 100' but less than 200', a ½ mile radius shall be used. For heights equal to or more than 200' but less than 300', a ¾ mile radius

shall be used. For heights equal to or more than 300' but less than 400', a 1 mile radius shall be used. For heights greater than 400', a 1-½ mile radius shall be used. In the event CBP determines, or Parties recommend during coordination and information gathering activities conducted in accordance with Stipulation IV.A, that an alternative APE for visual effects is necessary, the affected Parties may mutually agree to an alternative APE.

- b. If CBP cannot determine if a commercial or non-commercial tower is in compliance with Section 106 CBP shall consult on the collocation of its equipment in accordance with 36 CFR Parts 800.3 thru 800.7 and the timeframes specified therein. CBP shall use the visual APE defined in Stipulation IV.E.1 and consultation shall be limited to CBP's collocation Undertaking. CBP shall not be responsible for bringing another party's tower into compliance with Section 106.

#### **STIPULATION V. IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES**

- A. This Stipulation shall be followed when CBP conducts identification and evaluation efforts within the APE for this Agreement.
- B. In accordance with 36 CFR Part 800.4(b), CBP shall make a reasonable and good faith effort to carry out the identification of historic properties, including Traditional Cultural Properties, on an Undertaking-by-Undertaking basis. CBP's identification effort shall be guided by the nature and extent of the Undertaking; the potential for the project to impact historic properties; the condition of the individual Undertaking's APE (e.g., has the ground been previously disturbed); if the area has the potential to contain unknown historic properties; the likely nature and location of historic properties, if present; if previous survey data is available; and the extent of CBP's involvement. When justified by an assessment of the specific circumstances of the Undertaking, as described above, or when justified by previous research, appropriate sampling strategies may be considered for large geographic areas to determine the likelihood of archeological or historic resources.
- C. CBP shall determine the extent of its identification efforts based on the scope and scale of an individual Undertaking and its APE in coordination with the affected SHPO/THPO, tribes, and other affected Parties, as appropriate, and obtain any appropriate permits and/or licenses for such activities prior to beginning any field survey activities.
- D. CBP shall conduct all surveys in accordance with the appropriate state, tribal, facility managing or land managing agency survey guidelines. In the absence of tribal or land managing agency survey guidelines, CBP shall follow the appropriate state guidelines.
- E. CBP shall evaluate all properties more than 45 years of age for National Register eligibility and shall reassess the findings of all existing reports and survey data that are more than five (5) years old. CBP shall update older survey data as necessary to address deficiencies or reevaluation of previous eligibility determinations. If CBP is in agreement with older findings, it shall document that decision in correspondence to the SHPO/THPO, tribes, and other affected Parties, as appropriate.
- F. CBP shall survey the properties for which it has property management responsibilities and maintain the information in accordance with the agency's "Historic Preservation and Identification and Evaluation Plan" for compliance with Section 110 of NHPA. Per this plan, CBP will regularly update and internally maintain the information, seek SHPO/THPO concurrence with its findings, and provide its survey data to the SHPO/THPO according to the appropriate SHPO/THPO guidelines. Upon request, CBP will provide an electronic copy of the

“Historic Preservation and Identification and Evaluation Plan” to any Party for informational purposes only.

- G. When CBP proposes an Undertaking on lands or properties held by another Federal agency, the affected facility managers or land managers shall provide within 60 days of CBP request readily available information on the condition of the individual Undertaking’s APE (e.g., has the ground been previously disturbed); if the area has the potential to contain unknown historic properties; the likely nature and location of historic properties if present; and previous survey data to CBP to inform the identification efforts, if previous survey data or eligibility determination(s) are available. CBP shall not maintain this data within its systems upon completion of the Undertaking, but it shall retain copies of survey data prepared by CBP. CBP shall consult with the affected facility manager or land manager on its draft findings prior to the submission of releasable survey data to the SHPO/THPO, tribes, or other consulting parties. Submitted survey data to other parties will include any facility manager or land manager comments or concerns provided to CBP.
- H. When CBP proposes an Undertaking on tribal lands, the affected THPO or tribe shall provide as much information as possible given cultural sensitivity concerns, within 60 days of CBP request. CBP will request readily available information on the condition of the individual Undertaking’s APE (e.g., has the ground been previously disturbed); if the area has the potential to contain unknown historic properties; the likely nature and location of historic properties if present; and previous survey data to CBP to inform the identification efforts. At minimum, affected tribes shall provide information on areas of concern. The affected tribe shall also indicate if Traditional Cultural Properties are present in the APE, but are not required to disclose the nature or boundaries of Traditional Cultural Properties. CBP shall not maintain this data within its systems upon completion of the Undertaking, but it shall retain copies of survey data prepared by CBP. CBP shall consult with the affected THPO or tribe on its draft findings prior to the submission of releasable survey data to other consulting parties. Submitted survey data to other parties will include any THPO or tribe comments or concerns provided to CBP.
- I. Any designated SHPO/THPO, tribe, facility manager, land manager, or their representative shall have access to the project area or APE during CBP Undertaking for the purpose of historic property monitoring or to carry out other mission-related management activities. For monitoring on CBP property, the monitor must provide seven (7) days advance notice to CBP to allow any necessary security clearances to be obtained. Access to any project area or APE for the purpose of historic property monitoring may be denied by CBP if it is determined that such access would hinder law enforcement operations or present safety concerns. CBP shall not fund monitoring costs unless specifically stated in a separate agreement.
- J. CBP will provide copies of all reports and evaluations to the affected SHPO/THPO, tribe, facility manager or land manager for their records.
- K. All Parties shall attempt to resolve disputes regarding CBP’s identification and evaluation efforts in a timely manner, not to exceed 60 days.
  - 1. If a dispute regarding any finding of no historic properties affected cannot be resolved, CBP shall obtain ACHP comments pursuant to 36 CFR Part 800.4(d)(1)(ii).
  - 2. If a dispute regarding eligibility findings cannot be resolved, CBP shall obtain a determination of eligibility from the Keeper of the National Register pursuant to 36 CFR Part 63.

## Attachment II – New Archaeological Site Description

### Site 41WB798

**Site Description.** Site 41WB798 is an extensive prehistoric Archaic period hearth field or campsite made up of than 95 hearth remnants and FCR concentrations, five knapping stations, and a lithic procurement area (Figure 5). The site is roughly oval in shape, and measures 502.6 meters southwest to northeast by 642.1 meters from northwest to southeast, or 28.3 acres. The large hearth field is 6.8 acres in size, the small hearth field is 1.3 acres, and the quarry is about 14.4 acres total. Site boundaries generally follow the landform, with the quarry situated at a slightly higher elevation than the campsite

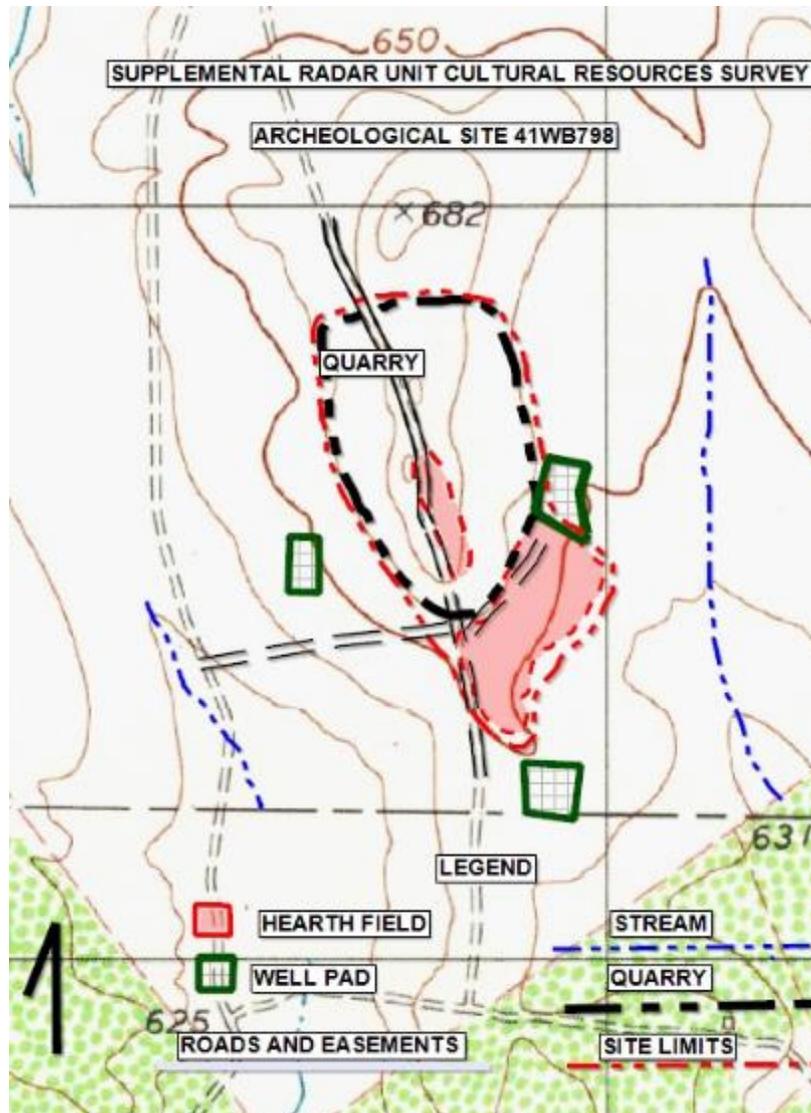


Figure 5. Portion of Folley, TX Topographic Map Showing Site 41WB798 Boundary and Components (USGS 1967).

The proposed Supplemental Radar Unit location was found to extend into the southwestern edge of Site 41WB798 where a disturbed, surficial artifact scatter was present. Oil and gas well pads sites were present around the site to the north, south, and west, and existing ranch/oil field roads cross through Site 41WB798. Cleared easements crisscrossed the north part of the site (Figure 6). The previous disturbances have moved and mixed archeological parts of the deposits from their original context.



**Figure 6. Plan Map Showing the Location of the Supplemental Radar Unit Locale, Archaeological Site 41WB798, and Disturbance From Well Pads, Ranch Roads, and Existing Easements.**

**Environmental Setting.** Site 41WB798 is located in an upland setting and is situated on the southern end of a low ridgetop at elevations ranging from 680-645 feet above mean sea level below the Bordas Escarpment overlooking tributaries of Chargos Creek 782 meters to the southwest and 394 meters to the southeast. The hearth field sits in a location covered with Maverick-Catarina Complex sediments made up of silty clay soils.

A typical soil profile is 6 inches of very light grayish brown silty with gravels over grayish brown silty clay to 15 inches and yellowish grey clay at 16-25 inches. Vegetation is mesquite, black brush, Spanish dagger, creosote, acacia, prickly pear, and other cacti (Figure 7). Erosional rills are present down-cutting through the locale. The quarry locale is on a ridgetop prominence that overlooks the proposed Supplemental Radar Unit locale. The hill top is covered in a cobble “pavement” (Figure 8). Soils are absent due to deflation and sheet wash. Vegetation is low creosote, acacia, and cacti.



**Figure 7. Photograph, Facing Northeast, Showing Surface Visibility and Vegetation inside the Hearth Field at Site 41WB798.**



**Figure 8. Photograph, Facing North, Showing Gravel Covered Ground Surface Inside the Prehistoric Quarry at Site 41WB798.**

**Features.** Site 41WB798 contains two hearth fields. The large hearth field is located in the eastern and southern part of the archaeological site. It measures 300 meters northwest to southeast by about 175 meters east to west, and is about 6.8 acres in size. The hearth features are visible on the surface and are shallowly buried at less than 10 cm deep. Fifty-eight (58) are remnants consisting of circular groupings of fire-fractured cobble rocks 1 to 3 meters in diameter were mapped in the large hearth field (Figure 9). The small hearth field is inside the western part of the quarry. It measures 1.3 acres and contains 12 hearth remnants. The hearth features are adjacent to each other, separated by 3 to 5 meters, clustered in small groups, and isolated. No evidence of in situ burning was observed in association with features such as burned soils or clay, charred material, and/or charcoal.

An isolated peyote (*Lophophora Williamsii*) cactus plant is present in the large hearth field. Small colonies were observed inside the quarry part of Site 41WB798. Prehistoric peyote use has been documented in the south Texas region from 3780-3660 BP (El-Seedi *et al.* 2005).

FCR concentrations, numbering 28, are also present inside the large hearth field and consist of scatters covering 5 to 10 meters or more in diameter. Due to scattering, the exact distribution and original context is not discernable (Figure 10). Tested, worked, and exhausted cores and cobbles in moderate quantity (2-5 specimens per square meter) were observed in association with large primary flakes and FCR (Figure 11). Knapping stations at the site are about 2 meters in diameter and adjacent to hearth areas (Figure 12).

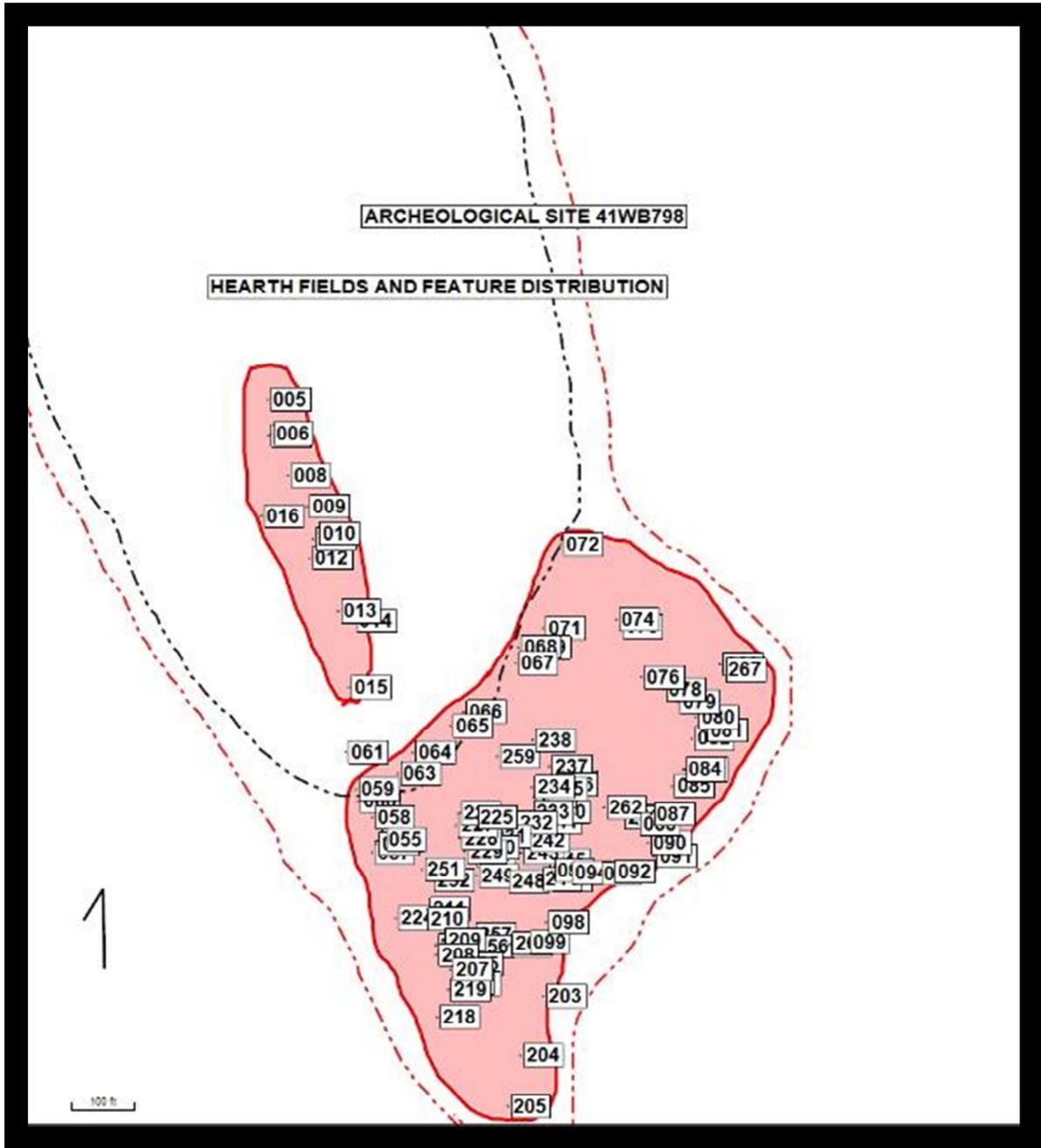


Figure 9. Plan Drawing Showing the Hearth Remnants Mapped at Site 41WB798.



**Figure 10. Photograph Facing West, Showing a Hearth Feature Inside the Large Hearth Field at Site 41WB798 and a Garmin GPSMAP78 Unite for Scale.**



**Figure 11. Photograph, Facing West Showing a Fire-Cracked Rock Scatter Inside the Large Hearth Field at Site 41WB798.**



**Figure 12. Photograph, Facing North, Showing a Knapping Station Feature Inside the Large Hearth Field at Site 41WB798.**

About 20 meters northwest of the large field is the small hearth field (175 meters northwest to southwest and 50 meters wide). The small hearth field is about 1.3 acres, and is inside the western part of the quarry part of the site. Twelve (12) FCR concentrations were mapped in this part of the site. The features are surficial, irregularly shaped, and vary in size from 3 to 8 meters in diameter. Hearths are located in close proximity to each other. The small hearth field is associated with a colony of peyote cactus known to be used by indigenous groups. Due to erosion and scattering exact distribution and original context is not discernable and the site does not retain stratigraphic integrity.

**Artifacts.** Two diagnostic projectile points and one distal tip were observed in the large hearth field portion of the site. One isolated scrapper was found outside the hearth field and the quarry. Other lithics observed were tested cores, large early stage reduction corticate flakes, late stage decorticate flakes, and small numbers of thinning flakes.

The first diagnostic was found in the southwest part of the hearth field and was not directly associated with a feature. The specimen is a Middle Archaic period dart point with the remains of a square or rectangular base and its dimension of 4.0 millimeter (mm) long by 2.5 mm by 0.6 mm thick (Figure 13). It exhibits characteristics of a *Langtry* and *Travis* types of projectile point, both of which date to the Middle Archaic (4650-4600 BP). Flaking is fine, shoulders are not prominent, barbs are absent and the edges are almost serrated. The material is fine-grained tan to brown colored chert. Reddish brown coloring on the distal tip may reflect heat treating.

The second time diagnostic artifact was found in the northeast part of the hearth field and was directly associated with a hearth remnant feature. The specimen is a stemless Archaic period dart point and its dimension of 4.5 mm long by 2.5 mm by 0.8 mm thick (Figure 14). It exhibits characteristics of highly reworked *Matamoros* type projectile point, which dates to the Late Prehistoric (AD 1000). Flaking is crude, the point is thick, edges are alternately beveled, and the based is thinned. The material is fine-grained dark gray to black-colored chert and was possibly heat treated or burned.



**Figure 13. Photograph, Facing West, Showing a Middle Archaic Projectile Point Found Inside the Hearth Field at Site 41WB798.**



**Figure 14. Photograph Showing Late Prehistoric *Matamoros* Projectile Point Found With a Hearth Remnant at Site 41WB798.**

The third diagnostic artifact is fragmentary and is a distal tip (Figure 15). The dimensions are 4.5 mm long by 1.8 mm wide by 0.8 mm thick. In cross section, its shape is elliptical appears crude due to the material of which it is made. The specimen raw material is not chert but is instead a very coarse-grained, crystalline, basalt-like material. The proximal end of the specimen is dark reddish brown in color while the distal portion is brown. It is not known if color is natural or a result of heat treating. The specimen is believed to be Archaic in age due to its size.



**Figure 15. Photograph, Facing West, Showing a Projectile Point Distal Tip Found Inside the Hearth Field at Site 41WB798.**

One more artifact of interest was observed at the site and is an apparent abrading stone. It is a grooved pebble made of sandstone (Figure 16). The specimen is roughly circular and its dimensions are 7 cm by 5 cm by 0.15 cm thick. The groove is longitudinal and about 0.05 cm deep 0.07 cm wide and 5 cm long. In cross-section, the groove is “v-shaped.” Abrading stones were in use from the Middle Archaic through the Late Prehistoric Period and were used for straightening arrow and dart point shafts and for sharpening deer bone awls.



**Figure 16. Photograph Showing Sandstone Abraded Pebble at Site 41WB798.**

The lithic debitage is evenly distributed through the site and concentrated around some FCR features. The artifact scatter extends outside the quarry and hearth field for about 10 meters on all sides. Shovel testing resulted in the recovery of 11 lithic specimens from 0-20 cm below the surface in Shovel Tests 1 through 4 inside the large hearth field and Shovel Test 8 in the small hearth field. Outside the hearth field but inside the Supplemental Radar Unit locale the shovel tests were negative.

**Shovel Testing.** Nine shovel tests were dug at the site to examine subsurface contents and vertical extent of deposits at Site 41WB798 (Figure 17). Three were placed inside the large hearth field. Two were inside the small hearth field and three were placed at the proposed Supplemental Radar Unit locale. Artifacts were identified from Shovel Tests 1 through 4 inside the hearth field, while Shovel Tests 5 through 7 inside the Supplemental Radar Unit locale was negative. One specimen was identified from Shovel Test 8 in the small hearth field and Shovel Test 9 had no recovery. A relatively small number of artifacts were identified and totaled 11. Materials were identified from Levels 1 to 2 only to depths of 20 cm below the surface. Levels 3 and 4 in all tests were unproductive in terms of artifact recovery. Shovel test results show that no buried material is present where the proposed Supplemental Radar Unit would occur.

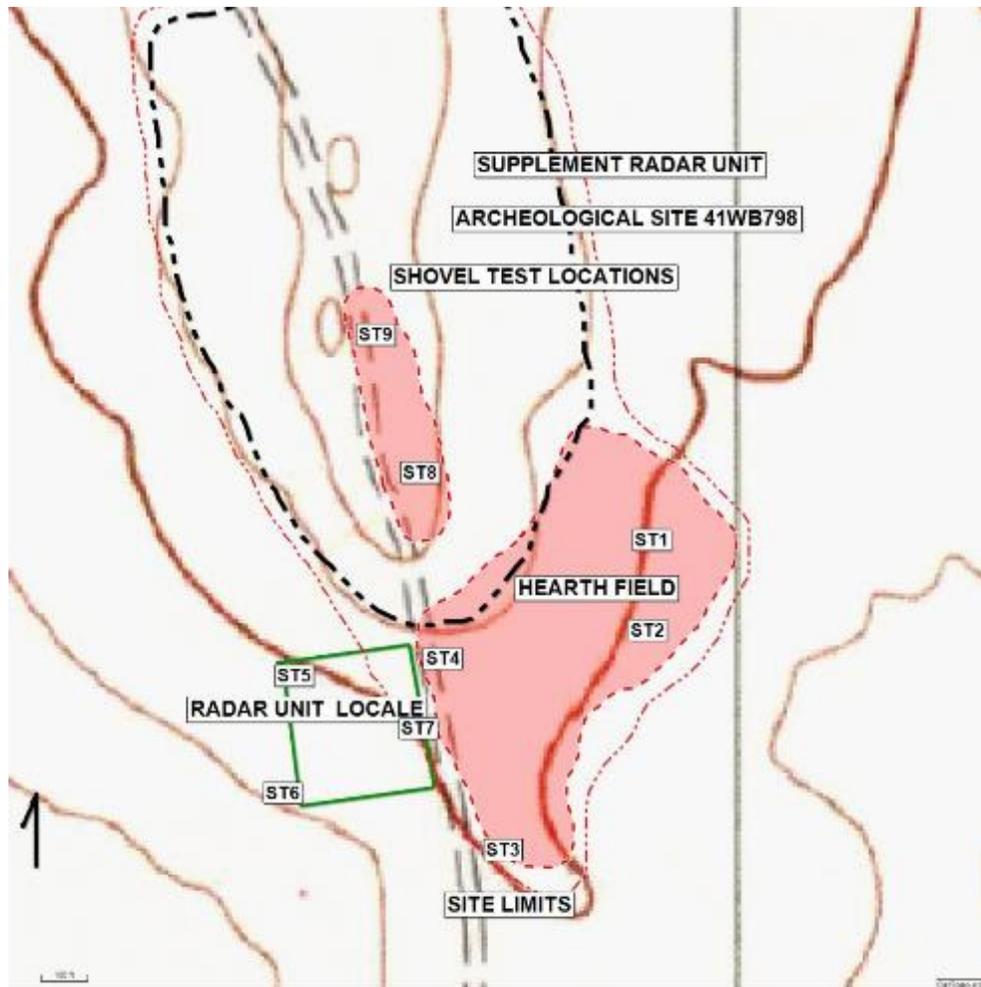


Figure 17. Map Showing the Locations of Shovel Tests Dug at Site 41WB798.

**Research Significance.** The overall research value of Site 41WB798 is high related to prehistoric occupation. Few upland stream valley habitation sites have been investigated in the region. The site contains a very high number of FCR features believed to be hearth remnants made of quartzite cobble rock. The features are associated with diagnostic artifacts from the Middle Archaic and Late Prehistoric period, which can be used to assign a relative date to the deposits. The features, although disturbed, could contain dateable components and soils and specimens that are candidates for residue analysis.

Within the large hearth field is a small peyote plant cluster. Colonies are also present in the quarry. The plant is usually found at slightly higher, rockier locales. Its presence within the hearth field and quarry may represent use by the occupants. Methods of processing the plant include heating and cooking. The hearth field could represent a seasonal food processing locale. Paleo botanical data could be associated with the hearth remnants. Little work has been done at such stream valley sites in Webb County, and additional study of the hearth field features and deposits unrelated to the Supplemental Radar Unit could produce new information.

**Eligibility Status.** Archaeological sites are eligible for listing in the NRHP under Criteria D and as a SAL under Criteria 1 related to the fact that deposits have yielded or may be likely to yield important new information about prehistory. Site 41WB798 components are considered as individual factors which

contribute or do not contribute to the NRHP or SAL eligibility status of the site. The two hearth field components contain large numbers of features and could contain deposits with the potential to provide important data recovery. The hearth fields could be contributing factors to the NRHP or SAL eligibility of Site 41WB798. However, the eligibility status at this time is classed as undetermined. Further archaeological testing would be needed at Site 41WB798 hearth fields in the future, unrelated to the construction of the Supplemental Radar Unit, to determine their eligibility status. The archaeological deposits and knapping station features inside the quarry and the artifact scatter around the limits of Site 41WB798 are surficial, disturbed, and contained no intact buried deposits. The two areas would not have the potential for recovery of data. For these reasons, the quarry and artifact scatter at Site 41WB798 would not be eligible for listing in the NRHP or SAL.

**Discussion.** Site 41WB798 is of interest, because it is a localized occupation site with evidence of intensive use during different time periods. The earliest occupation reflected by the diagnostics observed is during the Middle Archaic period from 4500-2500 BP and the latest period represented is the Late Prehistoric 1200 to 400 BP. During these times, multiple activities were undertaken at the site and included lithic procurement, raw material extraction and reduction, tool making and reworking, food processing, and heating/cooking.

The large number of features present sheds light on the frequency and numbers of occupations using the locale. These hearths are generally thought to represent single use episodes due to the fact that they were constructed from Uvalde gravels cobbles, which when heated to high temperatures fracture along natural cleavage lines, producing angular fractured material that does not hold heat well. At Site 41WB798, a minimum of 95 FCR features were identified and could represent single episode use. Presumably, a minimum of one individual tended or used the hearths, but when is not clear, possibly indicating a fairly large group or frequent reuse by a smaller groups.

Fires were used for cooking, food processing, heat treating lithic material, heating, and light. Present in the large hearth field is an isolated peyote cactus, while adjacent to the small hearth field to the northeast is a colony of peyote cactus. A large colony is located within the north part of the quarry. Peyote use has been documented in prehistoric sites in south Texas. Large colonies grow along the eastern edge of the Bordas Escarpment which is located less than 1 mile to the north of the site. It is within the realm of possibility that site 41WB798 represents a seasonal camp used annually to process the cacti used in spiritual and religious ceremonies.

**Research Recommendations.** In terms of additional archaeological research unrelated to the Supplemental Radar Unit construction, the recorded limits of Site 41WB798 to the east and north were not determined. Additional hearths were observed on the ground surface during ingress, and to the radar locale east of the site. In addition, the mapping cut off for features was arbitrary due to the fact the known limits are well outside the Supplemental Radar Unit APE. Hearths continued to the north following the ridge. Additional intensive survey and feature mapping would be warranted in the future should construction activities extend beyond its current limits. The hearth field and any newly found features would warrant significance testing to ascertain eligibility of any undisturbed deposits. Associations with other nearby sites with hearth fields should be further studied. Low-level ephemeral stream valleys should be considered HPAs and be intensively surveyed.

**Construction Recommendations.** Based on the findings that no eligible archaeological deposits at Site 41WB798 would be affected by the construction of the Supplemental Radar unit or its ancillary features, it is recommended that construction proceed, as planned. Due to the close proximity to the undetermined parts of Site 41WB798 which could be affected by the new construction, the SHPO requested the development and implementation of an Avoidance Plan, as described below.

**Site 41WB798 Impact Avoidance Plan.** During project design, Javelina Wind Energy LLC moved the radar unit locale outside the undetermined part of Site 41WB798 (Figure 18). The electrical overhead line was routed away from potentially eligible archeological features. The fiber optic was placed inside non-contributing parts of the site. These actions eliminated any adverse effects to potentially eligible parts of Site 41WB798. It is agreed by Javelina Wind Energy LLC the following actions will be undertaken prior to construction to ensure that the undetermined components of Site 41WB798 will be avoided and no adverse effects will result.

- Archeologists will conduct a pre-construction field briefing for personnel working near Site 41WB798.
- All construction activity will be restricted to the currently disturbed parts of the Site 41WB798 (Refer to Figure 19 Showing Disturbed Parts of Site 41WB798).
- Temporary fencing will be erected to eliminate any vehicle and personnel access to undetermined parts of Site 41WB798 (Refer to Figure 20 Showing Undetermined Parts of Site 41WB798 for Avoidance).
- Archeologists will be present for fencing to monitor fence placement and post hole digging.
- "No Unauthorized Personnel" signage will be posted on the road running roughly east to west of the project access road to eliminate project traffic.
- Signage will not be used to draw attention to the location as an archaeological resource to discourage artifact collecting.

See Attachment IV for copies of SHPO correspondence.

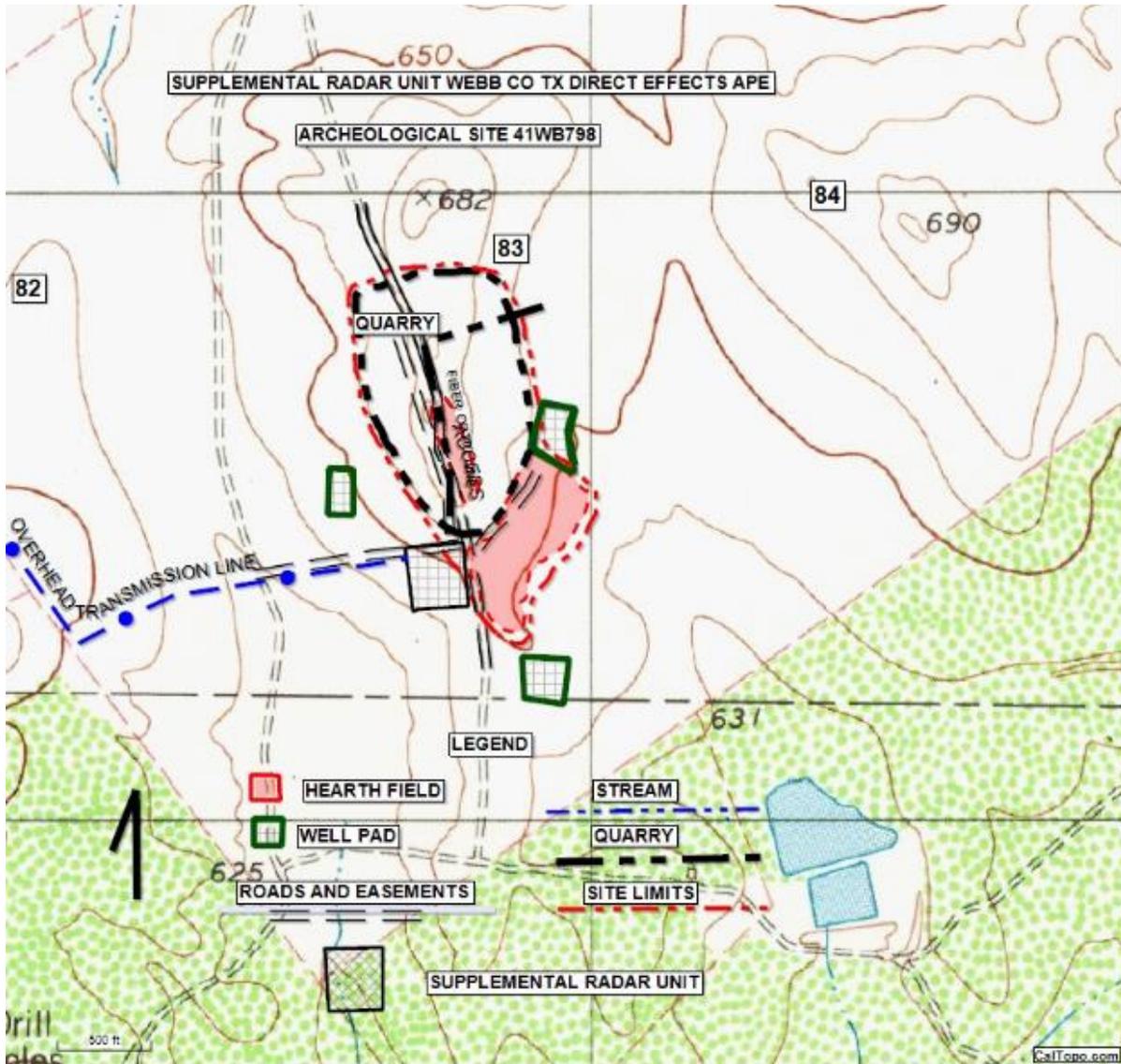
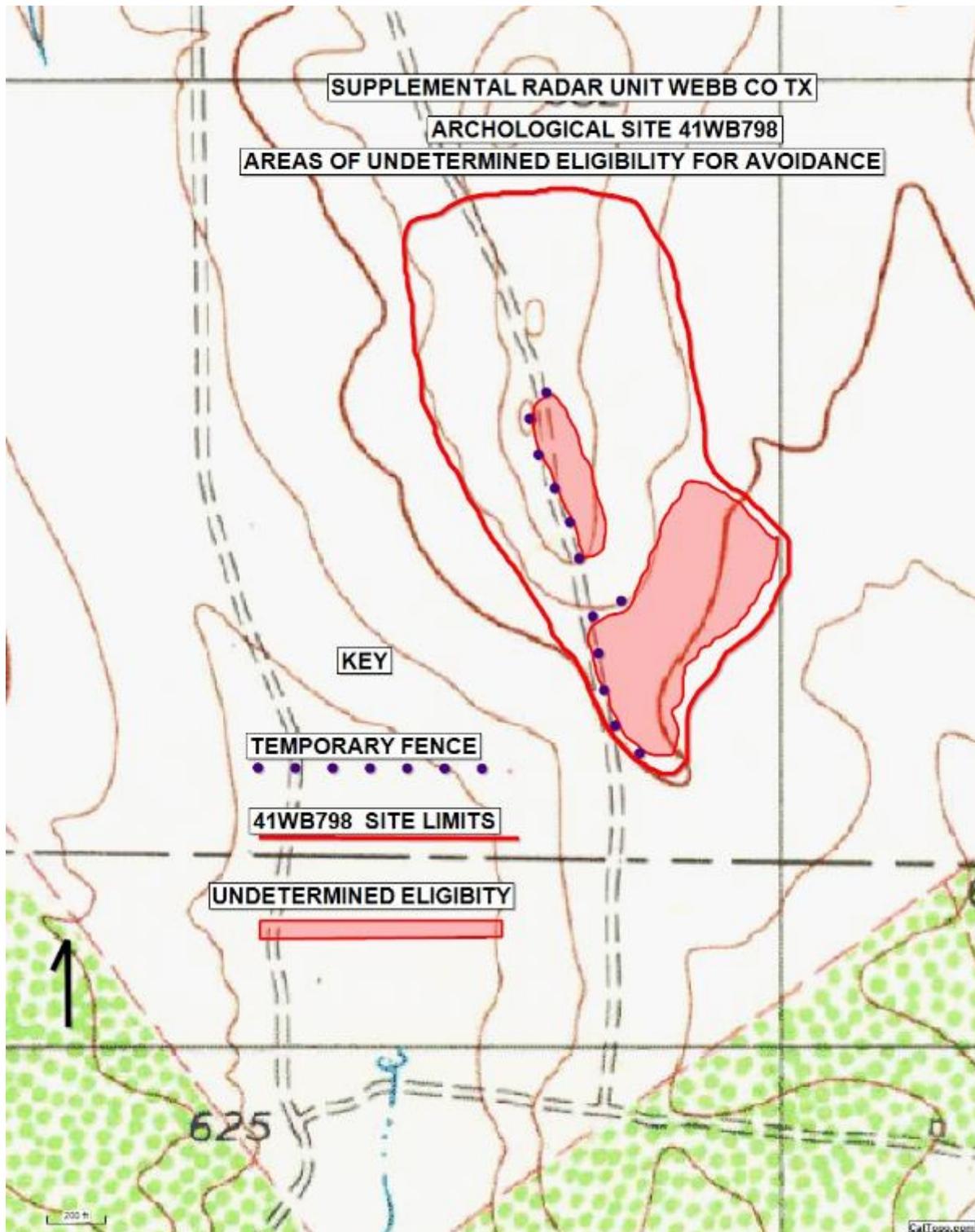
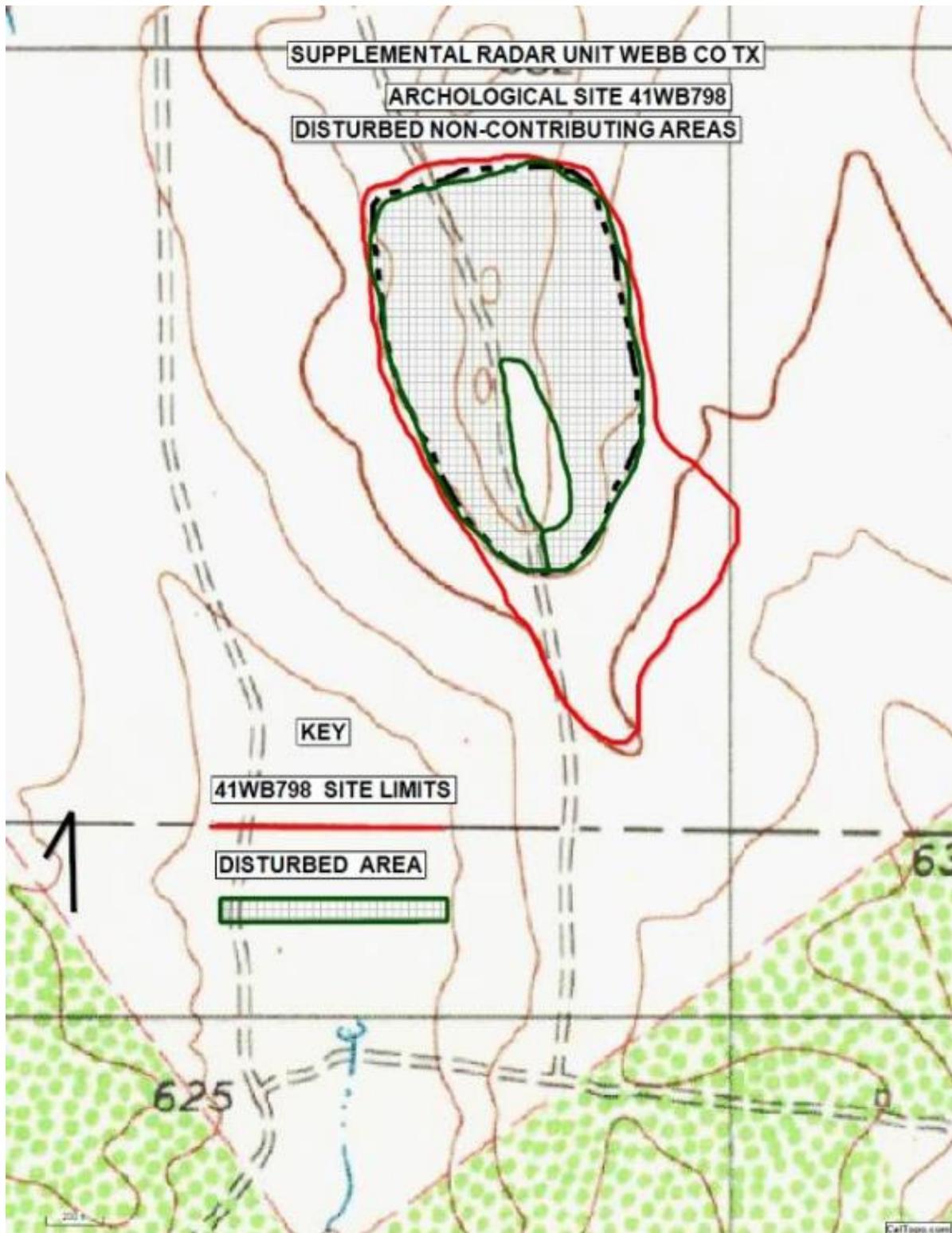


Figure 18. Portion of Folley, TX Topographic Map Showing Placement of the Radar Unit Outside Site 41WB798 and Ancillary Features Inside Site 41WB798 (USGS 1967).  
 CONFIDENTIAL NOT FOR PUBLIC DISCLOSURE



**Figure 19. Portion of Folley, TX Topographic Map Showing the Boundaries of Site 41WB798 and Areas With Undetermined Eligibility Status (USGS 1967).**  
 CONFIDENTIAL NOT PUBLIC DISCLOSURE



**Figure 20. Portion of Folley, TX Topographic Map Showing the Boundaries of Site 41WB798 and Non-Contributing Disturbed Areas (USGS 1967).**  
 CONFIDENTIAL NOT FOR PUBLIC DISCLOSURE

## Dewey, Keith

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**From:** LEW, DENNIS <dennis.lew@cbp.dhs.gov>  
**Sent:** Tuesday, June 16, 2015 9:19 AM  
**To:** Jimmy Arterberry  
**Cc:** MARTIN, PAUL (CTR); Dewey, Keith  
**Subject:** RE: Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas

Thank you for your response.

*Dennis*

Dennis J. Lew, REM (contractor)  
Chenega Government Consulting, LLC  
in support of  
Air and Marine Facilities Program Management Office  
U.S. Customs and Border Protection  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

202.302.3302 – mobile  
202.344.1715 – office  
202.325.7010 – facsimile



**Every Day is Earth Day**

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**From:** Jimmy Arterberry [<mailto:jimmya@comanchenation.com>]  
**Sent:** Tuesday, June 16, 2015 10:17 AM  
**To:** LEW, DENNIS  
**Subject:** Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas

In response to your request, the above referenced project has been reviewed by staff of this office. Based on the information provided and a search within the Comanche Nation Site Files, we have determined that there are ***no properties*** affected by the proposed undertaking.

If you require additional information or are in need of further assistance, please contact this office at (580) 595-9960 or 9618.

This review is performed in order to identify and preserve the Comanche Nation and State's cultural heritage, in conjunction with the State Historic Preservation Office.

Jimmy W. Arterberry, THPO  
Comanche Nation  
#6 SW 'D' Avenue, Suite C  
Lawton, Oklahoma 73502  
(580) 595-9960 or 9618  
(580) 595-9733 FAX



# ALABAMA-COUSHATTA TRIBE OF TEXAS

571 State Park Road 56 • Livingston, Texas 77351 • (936) 563-1100

May 29, 2015

U.S. Customs & Border Protection  
Air and Marine Facilities Program Management  
90K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

Dear Program Manager:

On behalf of Mikko Colabe III Clem Sylestine and the Alabama-Coushatta Tribe, our appreciation is expressed on your efforts to consult us regarding the Javelina Wind Farm supplemental radar proposal in Webb County.

Our Tribe maintains ancestral associations throughout the state of Texas despite the absence of written records to completely identify Tribal activities, villages, trails, or burial sites. However, it is our objective to ensure significances of American Indian ancestry, especially of Alabama-Coushatta origin, are administered with the utmost considerations.

Upon review of your May 20, 2015 submission, we decline the opportunity to participate in this consultation. Webb County exists beyond our scope of interest for the state of Texas. Therefore, no impacts to cultural assets of the Alabama-Coushatta Tribe of Texas will occur in conjunction with this proposal.

Should you require further assistance, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryant J. Celestine".

Bryant J. Celestine  
Historic Preservation Officer



## Ysleta del Sur Pueblo

Tribal Council – Javier Loera (War Captain/Tribal Historic and Preservation Officer) E-mail [jloera@ydsp-nsn.gov](mailto:jloera@ydsp-nsn.gov)

117 South Old Pueblo Road \* P.O. Box 17579 \* El Paso, Texas 79917 \* (915) 859-8053 \* Cell (915) 497-3876

June 23, 2015

MS. Janet D. Piston  
Acting Director  
Environmental and Energy Division  
U.S Customs and Border protection  
Department of Homeland security  
1300 Pennsylvania Avenue NW  
Washington, DC 20229

Dear Ms. Piston

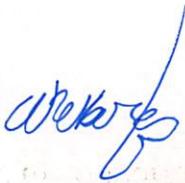
This letter is in response to correspondence in which you provide Ysleta Del Sur Pueblo the opportunity to comment on the Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, In Webb County, Texas.

The Ysleta Del Sur Pueblo does not have any comments nor does it request consultation on this project due to its location being outside of our Pueblos NAGPRA area of interest and/or relevance.

Thank you for allowing us the opportunity to comment on this project.

Sincerely,

Javier Loera  
War Captain/Tribal Historic and Preservation officer  
Ysleta Del Sur Pueblo  
Phone:(915)859-8053

Tribal Council Assistant :   
Adam Nevarez

TEXAS HISTORICAL COMMISSION

*real places telling real stories*

May 29, 2015

Dennis Lew  
U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, D.C. 20229-1400

Re: Comments for the proposed Environmental Assessment for a Supplemental Air Route Surveillance Unit, Javelina Wind Farm, Webb County (US CBP Service; Tracking #201508806)

Dear Mr. Lew:

Thank you for your correspondence describing the above referenced project. We look forward to the opportunity to review and comment on the proposed EA. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer (SHPO), the Executive Director of the Texas Historical Commission.

The review staff, led by David Camarena Garcés, has examined our records. According to our maps, no archeological sites or historical buildings are recorded within the Area of Potential Effects (APE) for the proposed 2.0-acre restricted area and the associated linear infrastructure. However, the majority of the project area is on an upper terrace near several ephemeral streams; these micro-topographic features are prime prehistoric site locations in the region. Since the proposed project constitutes new construction we recommend that the proposed 2.0-acre restricted area and the 1,750 foot fiber optic line and the 1,180 foot long access road, be surveyed by a Secretary of the Interior qualified professional archeologist.

This cultural resource survey should include a 100% pedestrian survey that conforms to the "Archeological Survey Standards for Texas" (available online at: <http://www.thc.state.tx.us/project-review/statutes-regulations-rules>). Additionally, a report of the investigations should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation, and submitted to this office for review. Please also submit shapefiles showing the boundaries of the project area to: [archeological\\_projects@thc.state.tx.us](mailto:archeological_projects@thc.state.tx.us).

Please consider these comments while developing your EA for the proposed project and thank you for your cooperation in this federal review process. If you have any questions concerning our review or if we can be of further assistance, please contact David Camarena Garcés at 512/463-6252 or [david.camarena@thc.state.tx.us](mailto:david.camarena@thc.state.tx.us).

Sincerely,



for  
Mark Wolfe, State Historic Preservation Officer



**Attachment IV - State Historic Preservation Officer Consultation Letters**

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<p>DHS CBP CBP HO EMO 1331 PENNSYLVANIA AVE, NW WASHINGTON DC 20229</p> <p><b>SHIP TO:</b> MR. MARK WOLFE, SHPO TEXAS HISTORICAL COMMISSION 1511 COLORADO STREET AUSTIN TX 78701-1664</p>	<p style="text-align: center;">0.0 LBS LTR</p> <p style="text-align: center;">1 OF 1</p>	<p style="font-size: 2em; font-weight: bold;">TX 787 9-09</p> 	<p style="font-size: 3em; font-weight: bold;">2</p> <p style="font-weight: bold;">UPS 2ND DAY AIR</p> <p>TRACKING #: 1Z R86 17F 02 9896 1827</p> 	<p style="text-align: center;">BILLING: P/P</p>  <p style="font-size: 0.8em;">CS 17.5.21. WNTNVS0 63.0A.04/2015</p>
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**U.S. Customs and  
Border Protection**

**JUL 16 2015**

Mr. Mark Wolfe  
State Historic Preservation Officer  
Texas Historical Commission  
1511 Colorado Street  
Austin, TX 78701

Reference: Tracking #201508806; Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas, Office of Air and Marine, U.S. Customs and Border Protection ([Latitude] 27°16'20.39550", [Longitude 99°02'35.37120"]).

Dear Mr. Wolfe:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and its implementing regulations 36 Code of Federal Regulations (C.F.R.) Part 800, U.S. Customs and Border Protection (CBP) is transmitting this letter and accompanying enclosures initiate consultation and identify historic properties for the above referenced Undertaking.

The Undertaking is located adjacent to the planned Javelina Wind Farm, approximately 12 miles south of Mirando City on the southern edge of Webb County, Texas. The proposed radar site - Site 19 - is 5.4 miles west of Farm-to-Market Road 649 and is 4.2 miles southwest of Vaquillas Road. Site 19 is owned by EMB Ranchito, Ltd. (Parcel Center is at Latitude 27°16'20.39550", Longitude 99°02'35.37120".) The property upon which the Proposed Action would be situated is currently used for oil and gas activities and livestock grazing. Please see enclosure 1, the May 20, 2015 letter from CBP to the Texas Historical Commission, "REFERENCE: Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas" for photos and site plans for the Undertaking. In response to your request of May 29, 2015, we are including, "A Cultural Resources Survey of the Proposed Supplemental Air Surveillance Radar Unit Webb County, TX," at enclosure 2.

**Description of Undertaking:**

The purpose of the Undertaking is to provide supplemental radar coverage to the Oilton Air Route Surveillance Radar (ARSR-4) unit seen in Figure 2 of enclosure 1. The Oilton ARSR-4 is already surrounded by an existing and operating wind farm - Whitetail - as shown in Figure 3 of enclosure 1. The effectiveness of the Oilton ARSR-4 will, however, be adversely affected by the operation of a new development of wind turbines (Javelina Wind Farm) near the Oilton ARSR-4. Accordingly, the need for the Undertaking is to provide additional radar coverage to ensure that CBP can maintain sufficient radar coverage upon the completion of the proposed Javelina Wind Farm. The ARSR-4 site is a part of the Long Range Radar, Joint Program that supports the CBP mission. The Undertaking would provide necessary infill radar coverage and mitigate the adverse affect of the Javelina Wind Farm.

CBP proposes to construct and operate the new radar unit mounted on a tower not to exceed 40 feet in height on a 2-acre parcel of land located in southern Webb County, Texas. Construction activities would be restricted to an area of approximately 2.0 acres, as well as 8,016 feet of linear infrastructure connections (electricity, fiber optic, access road). The radar site would consist of two concrete pads for the radar unit, electronic equipment, a backup generator, a communications antenna, a 5,086 feet long, aerially-mounted electrical supply line, a 1,750 feet long, buried fiber optic communications line, and a 1,180 feet long gravel access road. The 2.0 acre site would be fenced and unmanned. Electrical power would connect to the existing grid, and a fiber optic data connection would be made to one of the proposed wind turbines that will be a part of the Javelina Wind Farm. Vehicular access to the 2.0 acre site would be provided by existing roadways. The proposed site plan is included as Figure 4 of enclosure 1. The specific equipment to be installed at the site would be similar to units shown in Figure 5 of enclosure 1. The. Neither the radar nor supporting facilities would be a significant source of air pollutants, wastes, or water pollutants through construction, operation, or ongoing maintenance.

**Identification of Historic Properties:**

In accordance with the “Programmatic Agreement Among U. S. Customs and Border Protection, the Historic Preservation Officers of the States of Arizona, California, New Mexico, and Texas, General Services Administration, U.S. Department of Agriculture, U.S. Department of the Interior, U.S. International Boundary and Water Commission, New Mexico State Land Office, California Valley Miwok Tribe, Cocopah Indian Tribe, Delaware Nation, Fort Yuma-Quechan Tribe, Pechanga Band of Luiseno Mission Indians, Rincon Band of Luiseno Mission Indians, Tohono O’odham Nation, Tonkawa Tribe of Oklahoma, Yavapai-Prescott Indian Tribe, and The Advisory Council on Historic Preservation Regarding CBP Undertakings in States Located Along the Southwest Border of the United States,” the visual effects Area of Potential Effect (APE) for the Supplemental Radar Unit was determined from specifications presented in Stipulation IV.E.1, CBP Section 106 Review Process for Towers and Infrastructure to Support Communications and Surveillance Undertakings. For a radar tower 40 feet tall, it extends out in a 0.25 mile radius. The direct effects APE for archaeological resources included a 10.9 acre horizontal area, and is comprised of the radar facility locale (2 acres), the electrical line (8.3 acres), fiber optic line (0.4 acres by four feet deep), and access road (0.2 acres). The direct effects APE also included trenching to depths of about 4 feet and widths of 3 to 4 feet wide.

The cultural resources survey covered the direct effects APE where new construction would take place and includes a 10.9 acre horizontal area and trenching to depths of about 4 feet (primarily for archaeological resources) and a visual effects APE above-the-ground area of 0.25 miles (primarily for historic architectural resources). The survey area covered additional acreage outside the direct effects APE to determine the limits of a newly found archaeological site (34.3 acres – Site 41WB798). The contract archaeology firm APC conducted the intensive pedestrian survey on March 16-18, 2015 and April 7-8, 2015 in accordance with the Secretary of the Interior Guidelines and Texas Archaeological Survey Standards. Per Stipulation V., Identification and Evaluation of Historic Properties of the aforementioned programmatic agreement, this level of survey conducted is also consistent with the 36 CFR Part 800.4(b) requirement that agencies make a reasonable and good faith effort to carry out the identification of historic properties on an Undertaking-by-Undertaking basis.

The extent of the newly found site 41WB798 within and outside the direct effects APE was determined by visual inspection and by shovel testing. Hearth remnants and FCR features were mapped using hand-held Garmin GPSMAP78 unit and a measured site plan was compiled. Descriptive data were collected for each feature. Shovel testing was implemented inside and outside the archaeological site boundaries to confirm that eligible and /or potentially eligible 41WB798 deposits would not be affected by the proposed construction to assess integrity of archeological deposits present in the hearth fields and the quarry. A random surface collection of representative artifacts was implemented to identify types and categories. A site sketch map of features present and site limits were made for theeach newly found site. The data collected were summarized on state of Texas Archaeological and Historical Site Data Forms, and registered into the TexSite automated system. Site records and documentation ill be permanently stored at the Texas Archaeological Research Laboratory (TARL) at the University of Texas.

A database search with of the Texas Archaeological and Historical Sites Atlas maintained by the Texas State Historic Preservation Officer (SHPO) and Texas Historical Commission (THC) showed that no historic properties listed on the National Register of Historic Places (NRHP), State Antiquities Landmark (SAL), or standing buildings more than 45 years old fall inside or the within the 0.25 miles of the visual effects APE for the Supplemental Radar Unit locale. This information is confirmed in the May 29, 2015 correspondence from the Texas Historical Commission "Re: Comments for the proposed Environmental Assessment for a Supplemental Air Route Surveillance Unit, Javelina Wind Farm, Webb County (US CBP Service; Tracking #201508806)."

APC found one new prehistoric archaeological site during the pedestrian survey. Site 41WB798 could have a high research value related to regional prehistory, however; it contains archaeological deposits that were disturbed by both natural and manmade processes and lacked good stratigraphic context. The Supplemental Radar Unit location and ancillary features fall inside the parts of Site 41WB798 that do not contain intact deposits. Therefore, no further investigation is warranted at Archaeological Site 41WB798. During the survey, artifacts were not collected for analysis and, no artifacts will be curated. More details are provided within the enclosure 2.

**Assessment of Effects:**

The intensive pedestrian CRS resulted in the identification, documentation, and evaluation of newly found Site 41WB798, located on a low ridge top overlooking an ephemeral stream valley. It is a prehistoric site with two hearth fields, a quarry, and diagnostics from the Middle Archaic Period and the Late Prehistoric period. The features, deposits, and diagnostic artifacts have been subjected to previous effects of erosion, deflation, ranch roads improvements, and construction of oil and gas well pads.

Construction of the Supplemental Radar Unit would occur along the western margins of Archaeological Site 41WB798 where a surficial sparse artifact scatter absent of features was present. The fiber optic route, as planned would pass through parts of the quarry at Site 41WB798. The artifact scatter and the quarry have been disturbed by natural and man-made activity and do not possess good stratigraphic context and do not retain integrity. For these

Mr. Mark Wolfe  
Page 4

reasons, Site 41WB798 is recommended as not eligible for listing in the NRHP under Criterion D relating to archaeological sites providing new information about prehistory.

**Finding of No Historic Properties Affected:**

CBP has determined that there are no historic properties located within the APE for the proposed Undertaking. Therefore, pursuant to 36 C.F.R. 800.4(d)(1), CBP has determined that there are No Historic Properties Affected by the proposed undertaking. In accordance with Section 106 of the National Historic Preservation Act, CBP has also notified the following tribal governments of its determination:

Alabama-Coushatta Tribe of Texas	Kiowa Tribe of Oklahoma
Apache Tribe of Oklahoma	Mescalero Apache Tribe of the Mescalero Reservation
Comanche Nation of Oklahoma	Tonkawa Tribe of Oklahoma
Kickapoo Traditional Tribe of Texas	Ysleta del Sur Pueblo
Kickapoo Tribe of Oklahoma	

As of June 29, 2015 only the Alabama-Coushatta Tribe of Texas has responded and it declined to participate in further consultation for the project.

Your prompt attention to the request is greatly appreciated. If CBP has not received a response from your office within 30 days of your receipt of this determination letter, CBP will consider its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted to me by mail to the following address:

U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact Dennis Lew via email at [dennis.lew@dhs.cbp.gov](mailto:dennis.lew@dhs.cbp.gov) or by telephone at (202) 302-3302.

Sincerely,



Janet D. Piston  
Acting Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
Department of Homeland Security

Enclosures

TEXAS HISTORICAL COMMISSION  
*real places telling real stories*

July 28, 2015

Dennis Lew  
U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911 Mailstop 1400  
Washington, DC 20229-1400

Re: Draft Report: *Cultural Resources Survey of the Proposed Supplemental Air Surveillance Radar Unit, Webb County* (U.S. CBP; Track No. 201510762)

Dear Mr. Lew:

Thank you for allowing us to review the report referenced above. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by David Camarena Garcés has completed our review of the Draft Report. We do not concur that site 41WB798 is not eligible for listing on the National Register of Historic Places (NRHP) or as a State Antiquities Landmark (SAL) at this time. The survey level of effort was insufficient to fully evaluate the data potential of the site. The presence two hearth fields with a combined 96 fire-cracked rock features in association with multiple Middle Archaic dart points represents a site type and time period that remains very poorly known in this area. Burned rock features are rare among Middle Archaic period open-air campsites in this region. Furthermore, several shovel tests in the hearth fields revealed buried artifacts, therefore indicating a potential for further subsurface cultural deposits.

Test excavations would be needed to complete the identification process, so site 41WB798 is considered **undetermined** for NRHP eligibility or SAL designation. However, since the Supplemental Radar Unit locale, expansion of the gravel road, and the fiber optic line are located in areas that have been deflated by erosional processes, this office believes these areas do not contain elements that would contribute to the site's National Register eligibility due to the lack of contextual integrity. As long as construction is kept entirely within these disturbed areas, we believe that the proposed undertaking will not have an adverse effect on historic properties. If this cannot be accomplished, this office must be consulted and a testing plan implemented in order to ascertain the eligibility of potentially affected property. Please have your client submit an avoidance plan to ensure protection of the site 41WB798 outside of the areas of impact.

Once this office approves of the avoidance plan this project may proceed without further consultation with this office, provided that significant archeological materials are not encountered during construction. As always, if human remains are encountered during construction, work must cease and U.S. Customs and Border Protection and THC should be notified immediately.

We look forward to receiving the final copy of the report with the above referenced change in eligibility along with an electronic version in the form of a tagged PDF. Please also insure that a digital shapefile of the project area is forwarded to [archeological\\_projects@thc.state.tx.us](mailto:archeological_projects@thc.state.tx.us) if you have not already done so. Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If we may be of further assistance, please contact David Camarena Garcés at 512/463-6252 or [david.camarena@thc.state.tx.us](mailto:david.camarena@thc.state.tx.us).**

Sincerely,



for Mark Wolfe, State Historic Preservation Officer

GREG ABBOTT, GOVERNOR • JOHN L. NAU, III, CHAIR • MARK WOLFE, EXECUTIVE DIRECTOR

P.O. BOX 12276 • AUSTIN, TEXAS • 78711-2276 • P 512.463.6100 • F 512.475.4872 • [www.thc.state.tx.us](http://www.thc.state.tx.us)



Attachment IV - State Historic Preservation Officer Consultation Letters

1300 Pennsylvania Avenue NW  
Washington, DC 20229

**CONCUR**  
by *William A. Mark*  
for Mark Wolfe  
State Historic Preservation Officer  
Date 7/30/15  
Track# \_\_\_\_\_



**U.S. Customs and  
Border Protection**

**JUL 30 2015**

Mr. Mark Wolfe  
State Historic Preservation Officer  
Texas Historical Commission  
1511 Colorado Street  
Austin, TX 78701

Reference: Tracking #201508806; Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas, Office of Air and Marine, U.S. Customs and Border Protection ([Latitude] 27°16'20.39550", [Longitude 99°02'35.37120]).

Dear Mr. Wolfe:

U.S. Customs and Border Protection (CBP) is in receipt of the July 28, 2015 correspondence from your agency regarding the project referenced above. The purpose of this letter is to transmit the requested Avoidance Plan for Site 41WB798 that will be implemented during the construction phase of the project. As you are aware, Site 41WB798 contains two components, a small and a large hearth field, which possess undetermined eligibility status related to the National Register of Historic Places (NRHP) and two components, a quarry and an artifact scatter, which are disturbed and are not contributing factors to the site's eligibility status. In order to ensure the undetermined part of Site 41WB798 is not adversely affected, the following actions will be undertaken prior to and during construction.

**Site 41WB798 AVOIDANCE PLAN**

During the project design phase, Javelina Wind Energy LLC moved the radar unit locale outside the undetermined part of Site 41WB798. The electrical overhead line was routed away from potentially eligible archeological features. The fiber optic was placed inside non-contributing parts of the site. These actions eliminated any adverse effects to potentially eligible parts of Site 41WB798.

It is agreed by CBP and Javelina Wind Energy LLC that the following actions will be undertaken prior to construction to ensure that the undetermined components of Site 41WB798 will be avoided and further ensure that no adverse effects will result:

- Archeologists will conduct a pre-construction field briefing for personnel working near Site 41WB798.
- All construction activity will be restricted to the currently disturbed parts of the Site 41WB798 (see Attachment 1: Map Showing Disturbed Areas of Site 41W798 Where Construction Activity Will Be Allowed).

Mr. Mark Wolfe  
Page 2

- Temporary fencing will be erected to eliminate any vehicle and personnel access to undetermined parts of Site 41WB798 (see Attachment 2: Map Showing Areas of Site 41W798 with Undetermined Eligibility and Proposed Fence Locations).
- Archeologists will be present for fencing to monitor fence placement and post hole digging.
- "No Unauthorized Personnel" signage will be posted on the road running roughly east to west of the project access road to eliminate project traffic.
- Signage will not be used to draw attention to the location as an archaeological resource to discourage artifact collecting.

At this time, concurrence is requested that the Avoidance Plan for Site 41WB798 is approved for implementation. Your prompt attention to the request is greatly appreciated. If CBP has not received a response from your office within 30 days of your receipt of this determination letter, CBP will consider your office to be in concurrence with this plan and its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted to me by mail to the following address:

U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

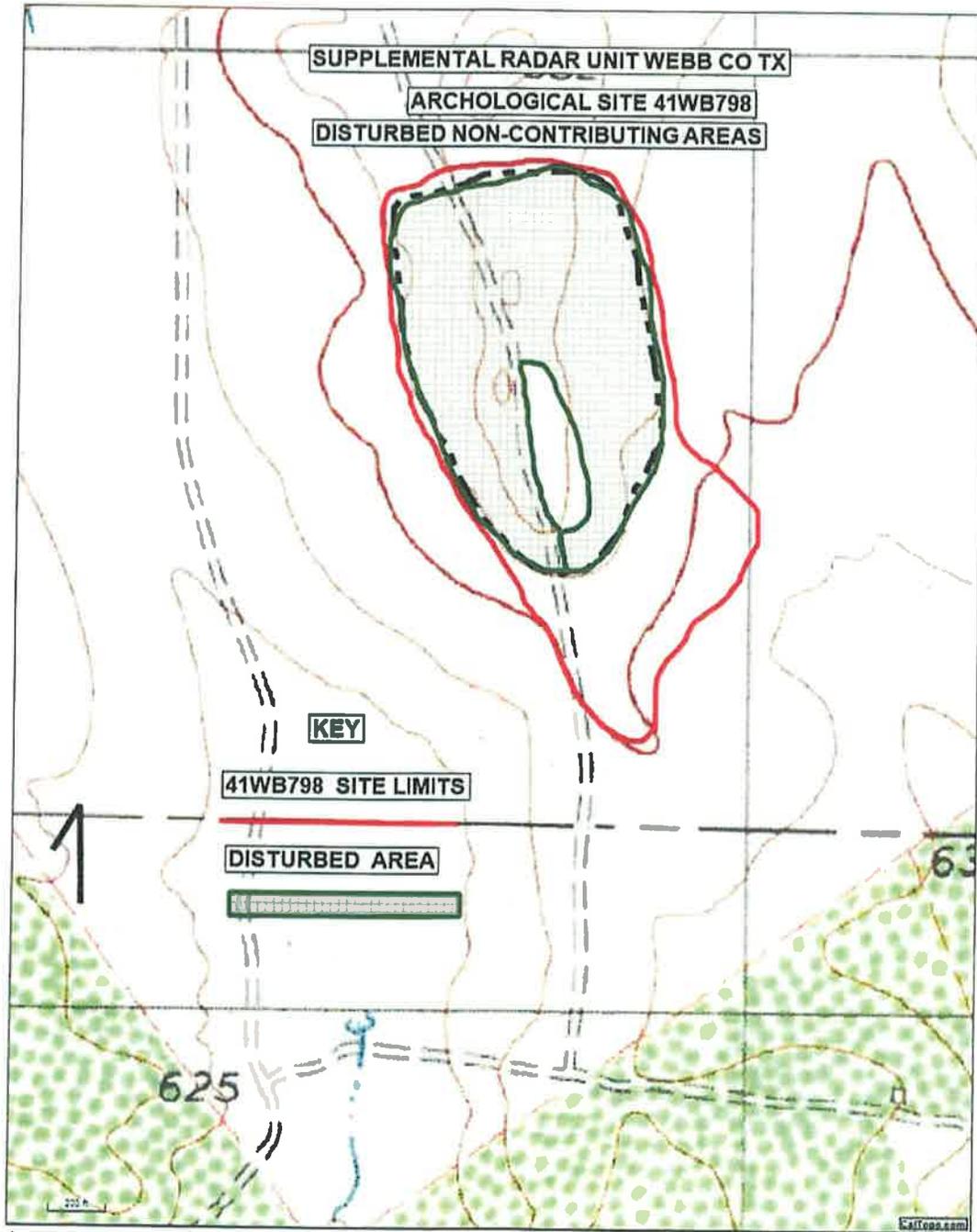
We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact Dennis Lew via email at [dennis.lew@cbp.dhs.gov](mailto:dennis.lew@cbp.dhs.gov) or by telephone at (202) 302-3302.

Sincerely,

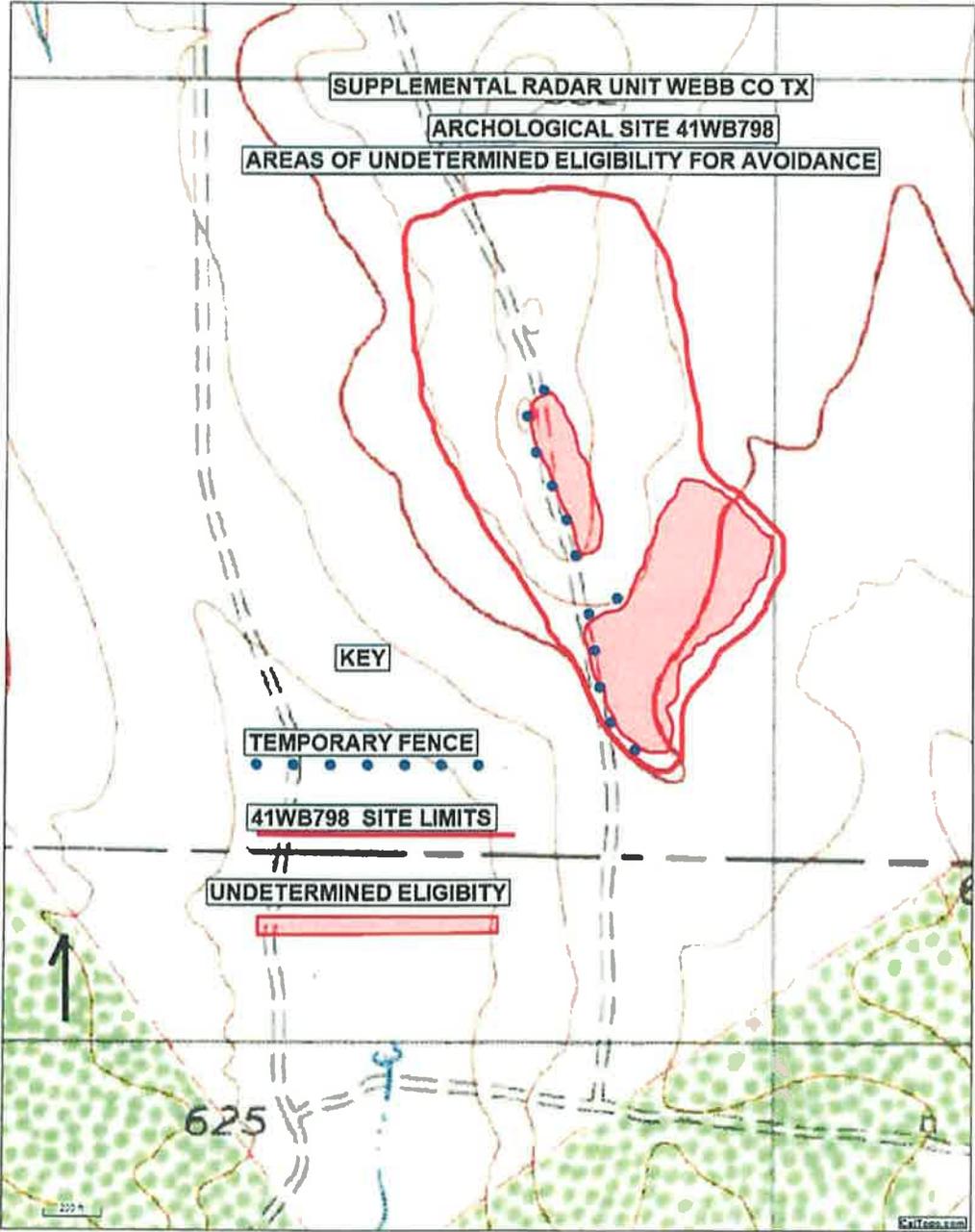


Janet D. Piston  
Acting Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
Department of Homeland Security

Enclosures



Attachment 1: Map Showing Disturbed Areas of Site 41W798 Where Construction Activity Will Be Allowed



Attachment 2: Map Showing Areas of Site 41W798 with Undetermined Eligibility and Proposed Fence Locations



**U.S. Customs and  
Border Protection**

Mr. Mark Wolfe  
State Historic Preservation Officer  
Texas Historical Commission  
1511 Colorado Street  
Austin, TX 78701

**AUG 12 2015**

Reference: Tracking #201510762; Cultural Resources Survey of the Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas, Office of Air and Marine, U.S. Customs and Border Protection ([Latitude] 27°16'20.39550"; [Longitude 99°02'35.37120"]).

Dear Mr. Wolfe:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and its implementing regulations, 36 Code of Federal Regulations (C.F.R.) Part 800, U.S. Customs and Border Protection (CBP) is transmitting this letter and the accompanying revised cultural resources survey in response to the July 28, 2015 letter from the Texas Historical Commission (THC) requesting a correction to the determination for site 41WB798 and incorporation of the avoidance plan that CBP submitted to and accepted by your office on July 30, 2015.

Per the direction provided in the aforementioned July 28 letter from the THC, CBP understands that no further Section 106 consultation is required for this action. If you require additional information or have any questions or concerns, please feel free to contact Dennis Lew via email at [dennis.lew@cbp.dhs.gov](mailto:dennis.lew@cbp.dhs.gov) or by telephone at (202) 302-3302.

Sincerely,

A handwritten signature in black ink, appearing to read "Clifton W. Greenhow".

Clifton W. Greenhow  
Acting Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
Department of Homeland Security

Enclosures

## Attachment V – Qualifications

<p><b>Molly Godwin, MSIS, RPA</b>  <b>Prehistoric and Historic Archeology</b></p>	
<p><b>Owner, Principal Investigator</b>  Antiquities Planning &amp; Consulting</p> <p><b>Education</b>  M.S., 1994, Interdisciplinary  Studies/Environmental Planning, Southwest Texas  State University  B.A., 1975, Archaeological Studies, University of  Texas</p> <p>Registration  Registered Professional Archeologist 1996-2015</p> <p><b>Memberships</b>  American Cultural Resources Association  Council of Texas Archeologists  Texas Archaeological Society</p> <p><b>Pertinent Projects</b>  Mountain Creek Power Plant, EPA  Panda Temple Power Plant, EPA</p> <p><b>Pertinent Regional Projects</b>  Javelina Wind Farm, Webb County, TX  Sendero Wind Farm, Jim , Zapata, and  Webb County, TX  Valero Pipeline, Webb County TX</p>	<p><b>Experience</b>  Ms. Godwin is the owner of Antiquities Planning &amp; Consulting, Kyle, TX, and has over 30 years of cultural resource management, field experience, and archaeological report preparation following Section 106 of the National Historic Preservation Act and various state antiquities laws. Project types conducted by Godwin include: environmental assessments and impact studies, archival and historical research, intensive pedestrian cultural survey, significance testing, archaeological monitoring, and data recovery or mitigation.</p> <p>Ms. Godwin is skilled at archaeological investigation, technical reporting, and cultural resource regulatory affairs. Godwin acts as Principal Archaeological Investigator for Antiquities Planning &amp; Consulting, including contract oversight, archaeological field work, analysis, data interpretation, and technical reporting. Representing Antiquities Planning &amp; Consulting, she discussed historical and archaeological concerns of various projects with the appropriate federal, state, local officials, landowners, the public, and the press.</p> <p>Ms. Godwin has directed archaeological projects conducted prior to the construction of waterlines, wastewater lines, pipelines, transmission lines, county parks, municipal preserves, wind farms, flood control projects, reservoirs, highways, public facilities, housing developments, and for projects related to energy exploration. Under her direction, Antiquities Planning &amp; Consulting contracted to city, county, federal and state agencies, and the private sector groups located in Texas, Oklahoma, Missouri, Arkansas, Louisiana, Mississippi, and Georgia.</p> <p>In addition to field work Ms. Godwin's has extensive regulatory experience with the Texas Historical Commission. Ms. Godwin served as manager of the agency's state-wide Antiquities Permit and State Antiquities Landmark programs for more than eight years.</p>

## Dewey, Keith

---

**From:** LEW, DENNIS <dennis.lew@cbp.dhs.gov>  
**Sent:** Monday, June 08, 2015 9:34 AM  
**To:** Weaver, Frank  
**Cc:** MARTIN, PAUL (CTR); Dewey, Keith  
**Subject:** TX9999/TX12008L-Javelina Radar: USFWS Contact

Frank,

Thanks for the follow-up. I think the email address listed in the letter had transposed CBP and DHS. We send out so many of this kind of letter that we become blind to little glitches like that. I am happy that we could talk.

I was lucky enough to have had the chance to work closely with USFWS during the development of iPAC when I was doing work for the CBP organization that would become Border Patrol Facilities and Tactical Infrastructure (BPFTI) when we were furiously building the fence. I had a chance to get training on iPAC from some of the folks at HQ USFWS and DOI. I did receive an official list back in February, so it is good to know that will be helpful.

Thanks again,

*Dennis*

Dennis J. Lew, REM (contractor)  
Chenega Government Consulting, LLC  
in support of  
Air and Marine Facilities Program Management Office  
U.S. Customs and Border Protection  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

202.302.3302 – mobile  
202.344.1715 – office  
202.325.7010 – facsimile



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IMPORTANT NOTICE: This information is the property of the Department of Homeland Security and may contain sensitive data that is confidential or proprietary. If you have received this email in error, please notify the originator immediately. Your assistance is appreciated.

**From:** Weaver, Frank [[mailto:frank\\_weaver@fws.gov](mailto:frank_weaver@fws.gov)]  
**Sent:** Monday, June 08, 2015 10:19 AM  
**To:** LEW, DENNIS  
**Subject:**

Good morning Dennis,

Thanks for taking the time to talk with regarding the radar project.

I tried sending an email to the address listed in the letter but was rejected. This is my second attempt with a variation to your email address.

For natural resources at risk please use IPaC.

The Information, Planning, and Conservation (IPaC) decision support system is a conservation planning tool for streamlining the environmental review process. It provides you-our partners-with the ability to explore the landscape and help you to site your projects in a way that minimizes conflicts with natural resources. With IPaC's landscape explorer tool, you can view wetlands, GAP land cover, USFWS critical habitat, and other nature resource map layers. Through IPaC, you can get a USFWS Official Species list. Available, too, are links to species life history information, the USFWS Migratory Bird program, Bald and Golden Eagle Protection Act information, and more. IPaC can be access at: <http://ecos.fws.gov/ipac/>

If you request an official species list from the IPaC website you will also get a Fish and Wildlife Service project tracking number. This will speed up the consultation process.

Again I appreciate you taking the time to talk with me about the project. If you have any questions please feel free to contact me.

**Frank Weaver**  
**Fish and Wildlife Biologist**  
**Texas Coastal Ecological Services Field Office**  
**U.S. Fish and Wildlife Service**  
**6300 Ocean Drive, Unit 5837**  
**Corpus Christi, Texas**  
Office (361)994-9005 ext. 224  
Fax (361)994-8262  
Cell (361)533-6051

Mahatma Gandhi — '**Speak only if it improves upon the silence.**'

On Mon, Jun 8, 2015 at 9:09 AM, Weaver, Frank <[frank\\_weaver@fws.gov](mailto:frank_weaver@fws.gov)> wrote:

Good morning Dennis,

Thanks for taking the time to talk with regarding the radar project.

For natural resources at risk please use IPaC.

The Information, Planning, and Conservation (IPaC) decision support system is a conservation planning tool for streamlining the environmental review process. It provides you-our partners-with the ability to explore the landscape and help you to site your projects in a way that minimizes conflicts with natural resources. With IPaC's landscape explorer tool, you can view wetlands, GAP land cover, USFWS critical habitat, and other nature resource map layers. Through IPaC, you can get a USFWS Official Species list. Available, too, are

links to species life history information, the USFWS Migratory Bird program, Bald and Golden Eagle Protection Act information, and more. IPaC can be access at: <http://ecos.fws.gov/ipac/>

If you request an official species list from the IPaC website you will also get a Fish and Wildlife Service project tracking number. This will speed up the consultation process.

Again I appreciate you taking the time to talk with me about the project. If you have any questions please feel free to contact me.

**Frank Weaver**

**Fish and Wildlife Biologist**

**Texas Coastal Ecological Services Field Office**

**U.S. Fish and Wildlife Service**

**6300 Ocean Drive, Unit 5837**

**Corpus Christi, Texas**

Office (361)994-9005 ext. 224

Fax (361)994-8262

Cell (361)533-6051

Mahatma Gandhi — '**Speak only if it improves upon the silence.**'

## Dewey, Keith

---

**From:** LEW, DENNIS <dennis.lew@cbp.dhs.gov>  
**Sent:** Tuesday, June 16, 2015 9:19 AM  
**To:** Jimmy Arterberry  
**Cc:** MARTIN, PAUL (CTR); Dewey, Keith  
**Subject:** RE: Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas

Thank you for your response.

*Dennis*

Dennis J. Lew, REM (contractor)  
Chenega Government Consulting, LLC  
in support of  
Air and Marine Facilities Program Management Office  
U.S. Customs and Border Protection  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

202.302.3302 – mobile  
202.344.1715 – office  
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**From:** Jimmy Arterberry [<mailto:jimmya@comanchenation.com>]  
**Sent:** Tuesday, June 16, 2015 10:17 AM  
**To:** LEW, DENNIS  
**Subject:** Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas

In response to your request, the above referenced project has been reviewed by staff of this office. Based on the information provided and a search within the Comanche Nation Site Files, we have determined that there are ***no properties*** affected by the proposed undertaking.

If you require additional information or are in need of further assistance, please contact this office at (580) 595-9960 or 9618.

This review is performed in order to identify and preserve the Comanche Nation and State's cultural heritage, in conjunction with the State Historic Preservation Office.

Jimmy W. Arterberry, THPO  
Comanche Nation  
#6 SW 'D' Avenue, Suite C  
Lawton, Oklahoma 73502  
(580) 595-9960 or 9618  
(580) 595-9733 FAX



# ALABAMA-COUSHATTA TRIBE OF TEXAS

571 State Park Road 56 • Livingston, Texas 77351 • (936) 563-1100

May 29, 2015

U.S. Customs & Border Protection  
Air and Marine Facilities Program Management  
90K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

Dear Program Manager:

On behalf of Mikko Colabe III Clem Sylestine and the Alabama-Coushatta Tribe, our appreciation is expressed on your efforts to consult us regarding the Javelina Wind Farm supplemental radar proposal in Webb County.

Our Tribe maintains ancestral associations throughout the state of Texas despite the absence of written records to completely identify Tribal activities, villages, trails, or burial sites. However, it is our objective to ensure significances of American Indian ancestry, especially of Alabama-Coushatta origin, are administered with the utmost considerations.

Upon review of your May 20, 2015 submission, we decline the opportunity to participate in this consultation. Webb County exists beyond our scope of interest for the state of Texas. Therefore, no impacts to cultural assets of the Alabama-Coushatta Tribe of Texas will occur in conjunction with this proposal.

Should you require further assistance, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryant J. Celestine".

Bryant J. Celestine  
Historic Preservation Officer

TEXAS HISTORICAL COMMISSION

*real places telling real stories*

May 29, 2015

Dennis Lew  
U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, D.C. 20229-1400

Re: Comments for the proposed Environmental Assessment for a Supplemental Air Route Surveillance Unit, Javelina Wind Farm, Webb County (US CBP Service; Tracking #201508806)

Dear Mr. Lew:

Thank you for your correspondence describing the above referenced project. We look forward to the opportunity to review and comment on the proposed EA. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer (SHPO), the Executive Director of the Texas Historical Commission.

The review staff, led by David Camarena Garcés, has examined our records. According to our maps, no archeological sites or historical buildings are recorded within the Area of Potential Effects (APE) for the proposed 2.0-acre restricted area and the associated linear infrastructure. However, the majority of the project area is on an upper terrace near several ephemeral streams; these micro-topographic features are prime prehistoric site locations in the region. Since the proposed project constitutes new construction we recommend that the proposed 2.0-acre restricted area and the 1,750 foot fiber optic line and the 1,180 foot long access road, be surveyed by a Secretary of the Interior qualified professional archeologist.

This cultural resource survey should include a 100% pedestrian survey that conforms to the "Archeological Survey Standards for Texas" (available online at: <http://www.thc.state.tx.us/project-review/statutes-regulations-rules>). Additionally, a report of the investigations should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation, and submitted to this office for review. Please also submit shapefiles showing the boundaries of the project area to: [archeological\\_projects@thc.state.tx.us](mailto:archeological_projects@thc.state.tx.us).

Please consider these comments while developing your EA for the proposed project and thank you for your cooperation in this federal review process. If you have any questions concerning our review or if we can be of further assistance, please contact David Camarena Garcés at 512/463-6252 or [david.camarena@thc.state.tx.us](mailto:david.camarena@thc.state.tx.us).

Sincerely,



for  
Mark Wolfe, State Historic Preservation Officer



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**U.S. Customs and  
Border Protection**

**JUL 16 2015**

Mr. Mark Wolfe  
State Historic Preservation Officer  
Texas Historical Commission  
1511 Colorado Street  
Austin, TX 78701

Reference: Tracking #201508806; Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas, Office of Air and Marine, U.S. Customs and Border Protection ([Latitude] 27°16'20.39550", [Longitude 99°02'35.37120"]).

Dear Mr. Wolfe:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and its implementing regulations 36 Code of Federal Regulations (C.F.R.) Part 800, U.S. Customs and Border Protection (CBP) is transmitting this letter and accompanying enclosures initiate consultation and identify historic properties for the above referenced Undertaking.

The Undertaking is located adjacent to the planned Javelina Wind Farm, approximately 12 miles south of Mirando City on the southern edge of Webb County, Texas. The proposed radar site - Site 19 - is 5.4 miles west of Farm-to-Market Road 649 and is 4.2 miles southwest of Vaquillas Road. Site 19 is owned by EMB Ranchito, Ltd. (Parcel Center is at Latitude 27°16'20.39550", Longitude 99°02'35.37120".) The property upon which the Proposed Action would be situated is currently used for oil and gas activities and livestock grazing. Please see enclosure 1, the May 20, 2015 letter from CBP to the Texas Historical Commission, "REFERENCE: Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas" for photos and site plans for the Undertaking. In response to your request of May 29, 2015, we are including, "A Cultural Resources Survey of the Proposed Supplemental Air Surveillance Radar Unit Webb County, TX," at enclosure 2.

**Description of Undertaking:**

The purpose of the Undertaking is to provide supplemental radar coverage to the Oilton Air Route Surveillance Radar (ARSR-4) unit seen in Figure 2 of enclosure 1. The Oilton ARSR-4 is already surrounded by an existing and operating wind farm - Whitetail - as shown in Figure 3 of enclosure 1. The effectiveness of the Oilton ARSR-4 will, however, be adversely affected by the operation of a new development of wind turbines (Javelina Wind Farm) near the Oilton ARSR-4. Accordingly, the need for the Undertaking is to provide additional radar coverage to ensure that CBP can maintain sufficient radar coverage upon the completion of the proposed Javelina Wind Farm. The ARSR-4 site is a part of the Long Range Radar, Joint Program that supports the CBP mission. The Undertaking would provide necessary infill radar coverage and mitigate the adverse affect of the Javelina Wind Farm.

CBP proposes to construct and operate the new radar unit mounted on a tower not to exceed 40 feet in height on a 2-acre parcel of land located in southern Webb County, Texas. Construction activities would be restricted to an area of approximately 2.0 acres, as well as 8,016 feet of linear infrastructure connections (electricity, fiber optic, access road). The radar site would consist of two concrete pads for the radar unit, electronic equipment, a backup generator, a communications antenna, a 5,086 feet long, aerially-mounted electrical supply line, a 1,750 feet long, buried fiber optic communications line, and a 1,180 feet long gravel access road. The 2.0 acre site would be fenced and unmanned. Electrical power would connect to the existing grid, and a fiber optic data connection would be made to one of the proposed wind turbines that will be a part of the Javelina Wind Farm. Vehicular access to the 2.0 acre site would be provided by existing roadways. The proposed site plan is included as Figure 4 of enclosure 1. The specific equipment to be installed at the site would be similar to units shown in Figure 5 of enclosure 1. The. Neither the radar nor supporting facilities would be a significant source of air pollutants, wastes, or water pollutants through construction, operation, or ongoing maintenance.

#### **Identification of Historic Properties:**

In accordance with the "Programmatic Agreement Among U. S. Customs and Border Protection, the Historic Preservation Officers of the States of Arizona, California, New Mexico, and Texas, General Services Administration, U.S. Department of Agriculture, U.S. Department of the Interior, U.S. International Boundary and Water Commission, New Mexico State Land Office, California Valley Miwok Tribe, Cocopah Indian Tribe, Delaware Nation, Fort Yuma-Quechan Tribe, Pechanga Band of Luiseno Mission Indians, Rincon Band of Luiseno Mission Indians, Tohono O'odham Nation, Tonkawa Tribe of Oklahoma, Yavapai-Prescott Indian Tribe, and The Advisory Council on Historic Preservation Regarding CBP Undertakings in States Located Along the Southwest Border of the United States," the visual effects Area of Potential Effect (APE) for the Supplemental Radar Unit was determined from specifications presented in Stipulation IV.E.1, CBP Section 106 Review Process for Towers and Infrastructure to Support Communications and Surveillance Undertakings. For a radar tower 40 feet tall, it extends out in a 0.25 mile radius. The direct effects APE for archaeological resources included a 10.9 acre horizontal area, and is comprised of the radar facility locale (2 acres), the electrical line (8.3 acres), fiber optic line (0.4 acres by four feet deep), and access road (0.2 acres). The direct effects APE also included trenching to depths of about 4 feet and widths of 3 to 4 feet wide.

The cultural resources survey covered the direct effects APE where new construction would take place and includes a 10.9 acre horizontal area and trenching to depths of about 4 feet (primarily for archaeological resources) and a visual effects APE above-the-ground area of 0.25 miles (primarily for historic architectural resources). The survey area covered additional acreage outside the direct effects APE to determine the limits of a newly found archaeological site (34.3 acres – Site 41WB798). The contract archaeology firm APC conducted the intensive pedestrian survey on March 16-18, 2015 and April 7-8, 2015 in accordance with the Secretary of the Interior Guidelines and Texas Archaeological Survey Standards. Per Stipulation V., Identification and Evaluation of Historic Properties of the aforementioned programmatic agreement, this level of survey conducted is also consistent with the 36 CFR Part 800.4(b) requirement that agencies make a reasonable and good faith effort to carry out the identification of historic properties on an Undertaking-by-Undertaking basis.

The extent of the newly found site 41WB798 within and outside the direct effects APE was determined by visual inspection and by shovel testing. Hearth remnants and FCR features were mapped using hand-held Garmin GPSMAP78 unit and a measured site plan was compiled. Descriptive data were collected for each feature. Shovel testing was implemented inside and outside the archaeological site boundaries to confirm that eligible and /or potentially eligible 41WB798 deposits would not be affected by the proposed construction to assess integrity of archeological deposits present in the hearth fields and the quarry. A random surface collection of representative artifacts was implemented to identify types and categories. A site sketch map of features present and site limits were made for theeach newly found site. The data collected were summarized on state of Texas Archaeological and Historical Site Data Forms, and registered into the TexSite automated system. Site records and documentation ill be permanently stored at the Texas Archaeological Research Laboratory (TARL) at the University of Texas.

A database search with of the Texas Archaeological and Historical Sites Atlas maintained by the Texas State Historic Preservation Officer (SHPO) and Texas Historical Commission (THC) showed that no historic properties listed on the National Register of Historic Places (NRHP), State Antiquities Landmark (SAL), or standing buildings more than 45 years old fall inside or the within the 0.25 miles of the visual effects APE for the Supplemental Radar Unit locale. This information is confirmed in the May 29, 2015 correspondence from the Texas Historical Commission "Re: Comments for the proposed Environmental Assessment for a Supplemental Air Route Surveillance Unit, Javelina Wind Farm, Webb County (US CBP Service; Tracking #201508806)."

APC found one new prehistoric archaeological site during the pedestrian survey. Site 41WB798 could have a high research value related to regional prehistory, however; it contains archaeological deposits that were disturbed by both natural and manmade processes and lacked good stratigraphic context. The Supplemental Radar Unit location and ancillary features fall inside the parts of Site 41WB798 that do not contain intact deposits. Therefore, no further investigation is warranted at Archaeological Site 41WB798. During the survey, artifacts were not collected for analysis and, no artifacts will be curated. More details are provided within the enclosure 2.

**Assessment of Effects:**

The intensive pedestrian CRS resulted in the identification, documentation, and evaluation of newly found Site 41WB798, located on a low ridge top overlooking an ephemeral stream valley. It is a prehistoric site with two hearth fields, a quarry, and diagnostics from the Middle Archaic Period and the Late Prehistoric period. The features, deposits, and diagnostic artifacts have been subjected to previous effects of erosion, deflation, ranch roads improvements, and construction of oil and gas well pads.

Construction of the Supplemental Radar Unit would occur along the western margins of Archaeological Site 41WB798 where a surficial sparse artifact scatter absent of features was present. The fiber optic route, as planned would pass through parts of the quarry at Site 41WB798. The artifact scatter and the quarry have been disturbed by natural and man-made activity and do not possess good stratigraphic context and do not retain integrity. For these

Mr. Mark Wolfe  
Page 4

reasons, Site 41WB798 is recommended as not eligible for listing in the NRHP under Criterion D relating to archaeological sites providing new information about prehistory.

**Finding of No Historic Properties Affected:**

CBP has determined that there are no historic properties located within the APE for the proposed Undertaking. Therefore, pursuant to 36 C.F.R. 800.4(d)(1), CBP has determined that there are No Historic Properties Affected by the proposed undertaking. In accordance with Section 106 of the National Historic Preservation Act, CBP has also notified the following tribal governments of its determination:

Alabama-Coushatta Tribe of Texas	Kiowa Tribe of Oklahoma
Apache Tribe of Oklahoma	Mescalero Apache Tribe of the Mescalero Reservation
Comanche Nation of Oklahoma	Tonkawa Tribe of Oklahoma
Kickapoo Traditional Tribe of Texas	Ysleta del Sur Pueblo
Kickapoo Tribe of Oklahoma	

As of June 29, 2015 only the Alabama-Coushatta Tribe of Texas has responded and it declined to participate in further consultation for the project.

Your prompt attention to the request is greatly appreciated. If CBP has not received a response from your office within 30 days of your receipt of this determination letter, CBP will consider its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted to me by mail to the following address:

U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact Dennis Lew via email at [dennis.lew@dhs.cbp.gov](mailto:dennis.lew@dhs.cbp.gov) or by telephone at (202) 302-3302.

Sincerely,



Janet D. Piston  
Acting Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
Department of Homeland Security

Enclosures

TEXAS HISTORICAL COMMISSION  
*real places telling real stories*

July 28, 2015

Dennis Lew  
U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911 Mailstop 1400  
Washington, DC 20229-1400

Re: Draft Report: *Cultural Resources Survey of the Proposed Supplemental Air Surveillance Radar Unit, Webb County* (U.S. CBP; Track No. 201510762)

Dear Mr. Lew:

Thank you for allowing us to review the report referenced above. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by David Camarena Garcés has completed our review of the Draft Report. We do not concur that site 41WB798 is not eligible for listing on the National Register of Historic Places (NRHP) or as a State Antiquities Landmark (SAL) at this time. The survey level of effort was insufficient to fully evaluate the data potential of the site. The presence two hearth fields with a combined 96 fire-cracked rock features in association with multiple Middle Archaic dart points represents a site type and time period that remains very poorly known in this area. Burned rock features are rare among Middle Archaic period open-air campsites in this region. Furthermore, several shovel tests in the hearth fields revealed buried artifacts, therefore indicating a potential for further subsurface cultural deposits.

Test excavations would be needed to complete the identification process, so site 41WB798 is considered **undetermined** for NRHP eligibility or SAL designation. However, since the Supplemental Radar Unit locale, expansion of the gravel road, and the fiber optic line are located in areas that have been deflated by erosional processes, this office believes these areas do not contain elements that would contribute to the site's National Register eligibility due to the lack of contextual integrity. As long as construction is kept entirely within these disturbed areas, we believe that the proposed undertaking will not have an adverse effect on historic properties. If this cannot be accomplished, this office must be consulted and a testing plan implemented in order to ascertain the eligibility of potentially affected property. Please have your client submit an avoidance plan to ensure protection of the site 41WB798 outside of the areas of impact.

Once this office approves of the avoidance plan this project may proceed without further consultation with this office, provided that significant archeological materials are not encountered during construction. As always, if human remains are encountered during construction, work must cease and U.S. Customs and Border Protection and THC should be notified immediately.

We look forward to receiving the final copy of the report with the above referenced change in eligibility along with an electronic version in the form of a tagged PDF. Please also insure that a digital shapefile of the project area is forwarded to [archeological\\_projects@thc.state.tx.us](mailto:archeological_projects@thc.state.tx.us) if you have not already done so. Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If we may be of further assistance, please contact David Camarena Garcés at 512/463-6252 or [david.camarena@thc.state.tx.us](mailto:david.camarena@thc.state.tx.us).**

Sincerely,



for Mark Wolfe, State Historic Preservation Officer

GREG ABBOTT, GOVERNOR • JOHN L. NAU, III, CHAIR • MARK WOLFE, EXECUTIVE DIRECTOR

P.O. BOX 12276 • AUSTIN, TEXAS • 78711-2276 • P 512.463.6100 • F 512.475.4872 • [www.thc.state.tx.us](http://www.thc.state.tx.us)



1300 Pennsylvania Avenue NW  
Washington, DC 20229

**CONCUR**  
by *William A. Metz*  
for Mark Wolfe  
State Historic Preservation Officer  
Date 7/30/15  
Track# \_\_\_\_\_



**U.S. Customs and  
Border Protection**

**JUL 30 2015**

Mr. Mark Wolfe  
State Historic Preservation Officer  
Texas Historical Commission  
1511 Colorado Street  
Austin, TX 78701

Reference: Tracking #201508806; Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas, Office of Air and Marine, U.S. Customs and Border Protection ([Latitude] 27°16'20.39550", [Longitude 99°02'35.37120]).

Dear Mr. Wolfe:

U.S. Customs and Border Protection (CBP) is in receipt of the July 28, 2015 correspondence from your agency regarding the project referenced above. The purpose of this letter is to transmit the requested Avoidance Plan for Site 41WB798 that will be implemented during the construction phase of the project. As you are aware, Site 41WB798 contains two components, a small and a large hearth field, which possess undetermined eligibility status related to the National Register of Historic Places (NRHP) and two components, a quarry and an artifact scatter, which are disturbed and are not contributing factors to the site's eligibility status. In order to ensure the undetermined part of Site 41WB798 is not adversely affected, the following actions will be undertaken prior to and during construction.

#### **Site 41WB798 AVOIDANCE PLAN**

During the project design phase, Javelina Wind Energy LLC moved the radar unit locale outside the undetermined part of Site 41WB798. The electrical overhead line was routed away from potentially eligible archeological features. The fiber optic was placed inside non-contributing parts of the site. These actions eliminated any adverse effects to potentially eligible parts of Site 41WB798.

It is agreed by CBP and Javelina Wind Energy LLC that the following actions will be undertaken prior to construction to ensure that the undetermined components of Site 41WB798 will be avoided and further ensure that no adverse effects will result:

- Archeologists will conduct a pre-construction field briefing for personnel working near Site 41WB798.
- All construction activity will be restricted to the currently disturbed parts of the Site 41WB798 (see Attachment 1: Map Showing Disturbed Areas of Site 41W798 Where Construction Activity Will Be Allowed).

Mr. Mark Wolfe  
Page 2

- Temporary fencing will be erected to eliminate any vehicle and personnel access to undetermined parts of Site 41WB798 (see Attachment 2: Map Showing Areas of Site 41W798 with Undetermined Eligibility and Proposed Fence Locations).
- Archeologists will be present for fencing to monitor fence placement and post hole digging.
- "No Unauthorized Personnel" signage will be posted on the road running roughly east to west of the project access road to eliminate project traffic.
- Signage will not be used to draw attention to the location as an archaeological resource to discourage artifact collecting.

At this time, concurrence is requested that the Avoidance Plan for Site 41WB798 is approved for implementation. Your prompt attention to the request is greatly appreciated. If CBP has not received a response from your office within 30 days of your receipt of this determination letter, CBP will consider your office to be in concurrence with this plan and its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted to me by mail to the following address:

U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

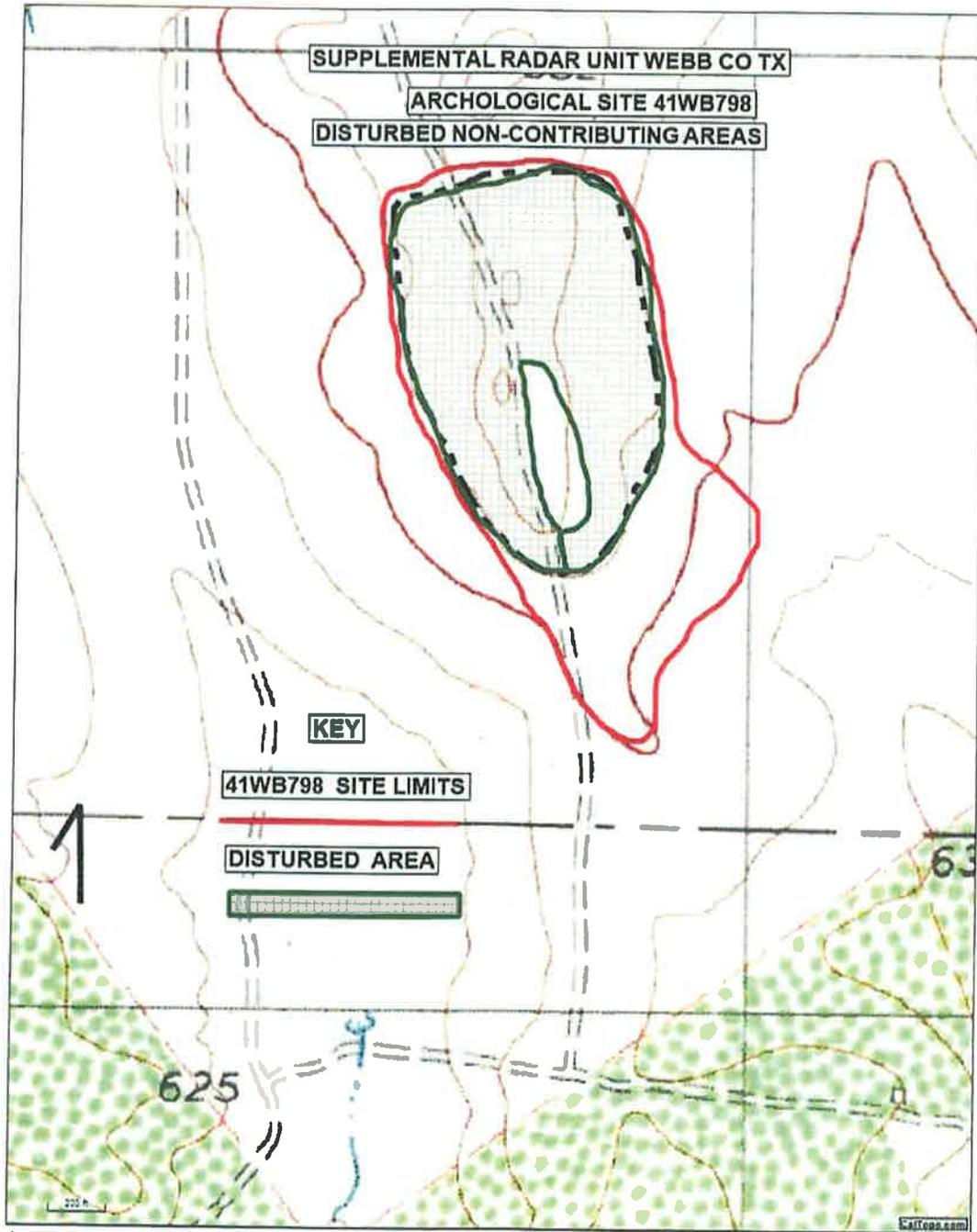
We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact Dennis Lew via email at [dennis.lew@cbp.dhs.gov](mailto:dennis.lew@cbp.dhs.gov) or by telephone at (202) 302-3302.

Sincerely,

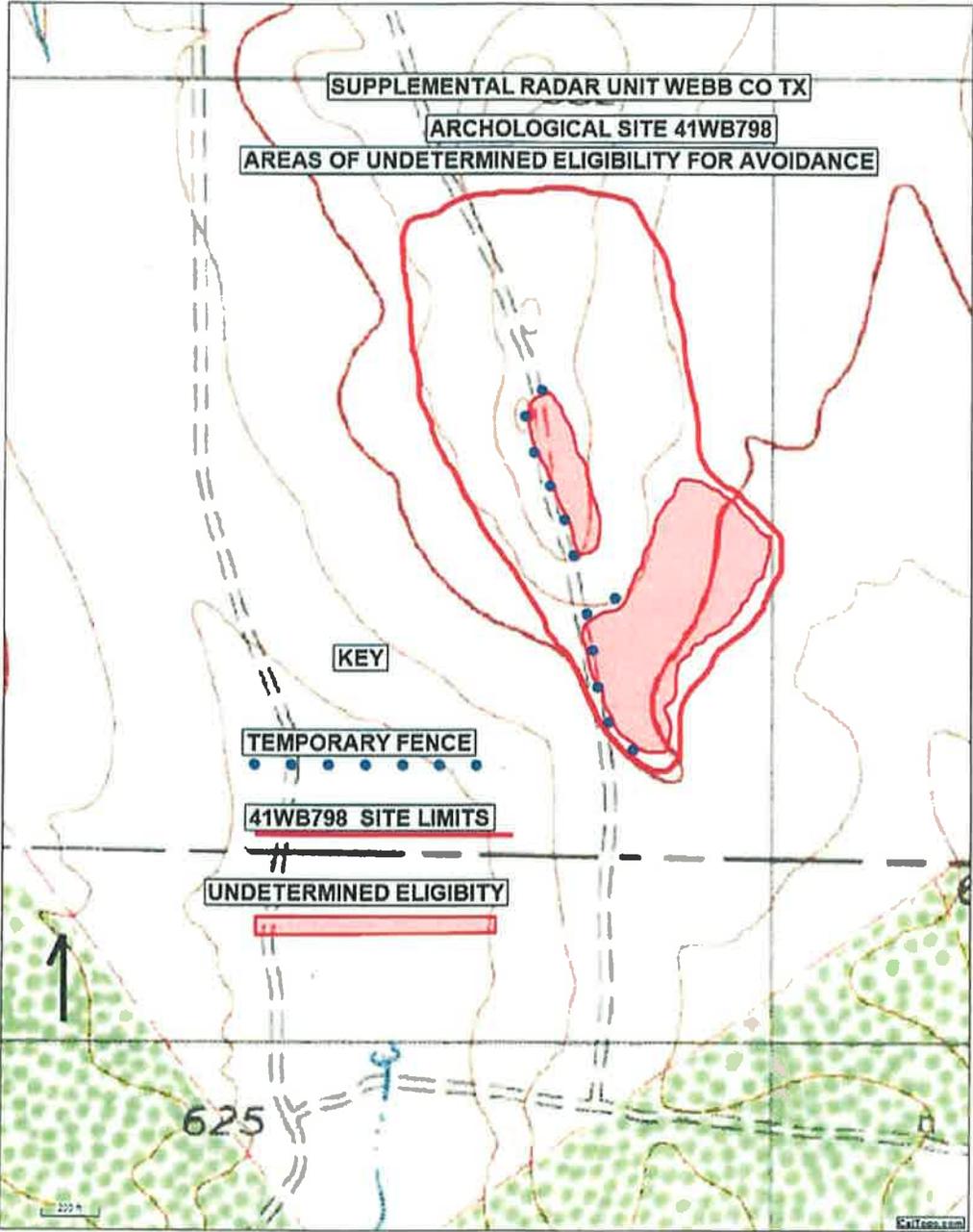


Janet D. Piston  
Acting Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
Department of Homeland Security

Enclosures



Attachment 1: Map Showing Disturbed Areas of Site 41W798 Where Construction Activity Will Be Allowed



Attachment 2: Map Showing Areas of Site 41W798 with Undetermined Eligibility and Proposed Fence Locations



**U.S. Customs and  
Border Protection**

Mr. Mark Wolfe  
State Historic Preservation Officer  
Texas Historical Commission  
1511 Colorado Street  
Austin, TX 78701

**AUG 12 2015**

Reference: Tracking #201510762; Cultural Resources Survey of the Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, Webb County, Texas, Office of Air and Marine, U.S. Customs and Border Protection ([Latitude] 27°16'20.39550"; [Longitude 99°02'35.37120"]).

Dear Mr. Wolfe:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and its implementing regulations, 36 Code of Federal Regulations (C.F.R.) Part 800, U.S. Customs and Border Protection (CBP) is transmitting this letter and the accompanying revised cultural resources survey in response to the July 28, 2015 letter from the Texas Historical Commission (THC) requesting a correction to the determination for site 41WB798 and incorporation of the avoidance plan that CBP submitted to and accepted by your office on July 30, 2015.

Per the direction provided in the aforementioned July 28 letter from the THC, CBP understands that no further Section 106 consultation is required for this action. If you require additional information or have any questions or concerns, please feel free to contact Dennis Lew via email at [dennis.lew@cbp.dhs.gov](mailto:dennis.lew@cbp.dhs.gov) or by telephone at (202) 302-3302.

Sincerely,

A handwritten signature in black ink, appearing to read "Clifton W. Greenhow".

Clifton W. Greenhow  
Acting Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
Department of Homeland Security

Enclosures



WATT BECKWORTH

WATT BECKWORTH THOMPSON HENNEMAN & SULLIVAN LLP  
1800 PENNZOIL PLACE, SOUTH TOWER  
711 LOUISIANA STREET  
HOUSTON, TEXAS 77002  
TEL: (713) 650-8100 FAX: (713) 650-8141  
WATTBECKWORTH.COM

M. BRADFORD MOODY  
(713) 333-9108  
BMOODY@WATTBECKWORTH.COM

June 20, 2015

*Via Federal Express and Certified Mail-RRR*

U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, D.C. 20229-1400

Re: Proposed Supplemental Air Route Surveillance Radar Unit,  
Javelina Wind Farm, Webb County

Dear Sir or Madam:

I represent Jacalon Ranch Company Ltd., a Texas limited partnership ("Jacalon Ranch") whose President of the General Partner is Mr. Al Allred. On May 20, 2015, you wrote Mr. Allred regarding your agency's proposed installation of the referenced radar facility immediately adjoining the Jacalon Ranch. In your letter, you reviewed several potential environmental impacts that the facility would have on and around the site, summarizing results of studies that your agency apparently commissioned outlining impacts on vegetation, threatened and endangered species and historic resources. You then solicited input from Mr. Allred on the proposed radar facility. Mr. Allred appreciates the opportunity to respond to your proposal. He asked me to reply on behalf of Jacalon Ranch.

By way of background, the Jacalon Ranch comprises 4,666 acres, adjoining immediately to the south the EMB Ranchito LTD property where you propose to locate the radar. I enclose two plats showing the location and boundaries of the Jacalon Ranch for your convenience. See Exhibits 1A and 1B. The Jacalon Ranch currently is used primarily for ranching and recreation, with seasonal hunting the predominant recreational use. To promote access to the property, Jacalon Ranch operates an FAA identified airport called the Jacalon Ranch Airport (FAA Identifier TE89) with two runways: 9/27 and 12/30. See Exhibit 2. The eastern approach to and the western departure from Runway 9/27 is almost directly over your proposed radar facility.

Over the last several years, Jacalon Ranch has talked to several companies interested in constructing a wind driven electrical generation project on the property. Those discussions even advanced to the point where the attached development proposal was made that included a pro-forma turbine layout on the property showing a total of twenty (20) turbines. See Exhibit 3. Because Jacalon Ranch has since sold a portion of the land where these turbines were sited, there are now only thirteen (13) turbine locations on the property. The royalty estimated from these twenty (20) turbines was estimated at that time to be approximately \$300,000.00 per year.

On June 11, 2015, I wrote Dennis Lew at the email address that you provided for him in your letter. I asked him to provide me with copies of the impact studies that were referenced in your letter. When the email was returned as undeliverable because you transposed “dhs” and “cbp” in the domain name, I re-sent this email at what I believe to be the correct address: [dennis.lew@cbp.dhs.gov](mailto:dennis.lew@cbp.dhs.gov). See Exhibit 4. To date, Mr. Lew has not responded to my email.

Because Jacalon Ranch does not have the benefit of reading the complete impact studies and reports that were only briefly summarized in your letter, it is impossible to determine whether these summations are accurate and complete, especially with respect to the Jacalon Ranch. Any response to your letter regarding the impacts addressed in your letter would be incomplete and premature without access to these studies and reports. My clients reserve the right to supplement their response until such time as the information requested has been provided.

There is, however, one impact not addressed in your letter that is significant and which is important to Jacalon, namely the environmental and economic impact of the proposed radar on existing and future wind power development in the area. In the last five years, this part of Webb County has become a significant source of wind-driven electrical generation. These new wind farms are being built to serve rapidly growing load centers in South Texas, Central Texas and the Texas Gulf Coast. In addition to the Javelina Wind Farm (250 MW) and White Tail Wind Farms (92 MW) in Webb County, both referenced in your letter, there is the Randado Wind Farm (80 MW) in Jim Hogg County and the Cedro Hill Wind Farm (150 MW) in Webb County. All are either currently operational or about to become operational.

Moreover, there are active development plans for two additional projects: Torrecillas A (200 MW) and Torrecillas B (200 MW), both of which appear in the most recent “Generation Interconnect Status Report” published by the Electric Reliability Council of Texas (“ERCOT”). See Exhibit 5. There are likely to be other projects in this vicinity that are “dark,” meaning that they are currently undisclosed to ERCOT while preliminary land acquisition and permitting activities are undertaken. Many of these projects are taking advantage of a regional topographic feature called the Bordas Escarpment. This escarpment runs generally northeast to southwest all the way from north of Oilton in Webb County through Randado in Jim Hogg County to Guerra in Zapata County. See Exhibit 6.

These wind projects have avoided or displaced or will avoid or displace conventional electrical generation facilities that use coal and natural gas for fuel, thereby making a significant contribution to national policy to reduce greenhouse gas emissions. According to the American Wind Energy Association (“AWEA”), on average across the regions of the U.S., wind generation will avoid roughly 0.6 metric tons (1,300 pounds) of CO<sub>2</sub> for every megawatt-hour (MWh) of wind generation produced. AWEA says that a single typical wind turbine of average size would avoid over 3,500 metric tons of CO<sub>2</sub> annually, the equivalent of taking more than 600 cars off the road. See Exhibit 7.

These wind projects also represent a major source of economic development in a region that has long been recognized as disadvantaged. They pay hundreds of thousands of dollars in property taxes each year to the counties where they are located. These taxes are available to pay for

schools, hospitals, roads, and other infrastructure. The construction and operation of these farms also boost local payrolls both by direct employment and also by indirect employment and royalty payments to local landowners where the turbines are situated. The value of lands subject to future wind development is also enhanced by the expectation of future bonus and royalty payments and correspondingly depressed when permitting difficulties (like the FAA issues addressed below) delay or prevent development. Some of the positive effects from wind power development that I describe are set forth in greater detail in a recent application for property tax abatement in Webb County by Torrecillas Wind LLC. See Exhibit 8.

If the proposed radar facility will have no impact on any aspect of existing and future wind power projects in the area, then your agency should state this conclusion in its Environmental Assessment. If instead this proposed radar, like the existing radar in Oilton, will be used as a basis for you (acting through the Federal Aviation Administration civil aviation regulations set forth at 14 C.F.R. Part 77 et seq.) to stop issuing "Determination of No Hazard" findings for wind turbines sited within some defined (but unknown to the public) distance from the facility, then you should disclose this fact in your Economic Assessment. Because these determinations are a known requirement to obtain financing and insurance for a wind energy project, the refusal to issue them sounds a death knell for a project. From that standpoint, there is a significant impact that you have not addressed on the environment, the local economy and Jacalon Ranch from placing the proposed radar on the Bordas Escarpment next to the Jacalon Ranch in the center of a major wind power development area.

Another potential impact that you failed to address relates to the operation of the Jacalon Ranch Airport. If you intend to restrict airspace around the radar facility, then the existing eastern approach to and western departure from Runway 9/27 could be adversely affected, potentially to the point of being closed. You need to disclose your intentions with respect to the use of airspace in an around the Jacalon Ranch Airport and also your analysis under 14 CFR 77.9 regarding construction or alteration of facilities in the vicinity of certain airports.

In summary, my client would like to see the complete studies that you have or intend to rely upon in issuing the Economic Assessment, including but not limited to the studies on vegetation, threatened and endangered species and historic resources referenced in your May 20, 2015 letter. My client reserves the right to provide further comments after these studies are disclosed to and reviewed by it.

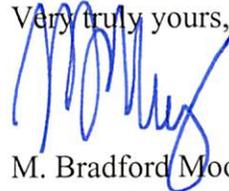
In addition, my client believes that your Economic Assessment will be incomplete and misleading if you fail to address the impact of the proposed radar facility on existing and future wind power development in the area, including development on the Jacalon Ranch. In addressing the impact, you need to state how the radar will affect your evaluation and response to requests for "Determination of No Hazard" under the civil aviation regulations governing the construction of wind turbine towers and other objects over 200 feet in height. If these determinations will be affected in a manner that adversely affects the operation or future construction of wind energy facilities, then you need to describe the area so affected and quantify these adverse effects, particularly with regard to the proposed wind turbine locations shown on the development plan for Jacalon Ranch attached as Exhibit 3.

U.S. Customs and Border Protection  
June 20, 2015  
Page 4 of 4

Finally, my client would like for you to disclose the impact if any on operations at the Jacalon Ranch Airport.

Thank you for your attention to this matter.

Very truly yours,



M. Bradford Moody  
Counsel for Jacalon Ranch Company Ltd.

MBM/mbm  
Encl.

cc: Mr. Al Allred

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**U.S. Customs and  
Border Protection**

Mr. M. Bradford Moody  
Watt Beckworth Thompson Henneman & Sullivan  
1800 Pennzoil Place, South Tower  
711 Louisiana Street  
Houston, TX 77002

JUL 16 2015

Reference: Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm

Dear Mr. Moody:

Thank you for your letter dated June 20, 2015, regarding the proposed deployment of a supplemental U.S. Customs and Border Protection (CBP) Air Route Surveillance Radar Unit (the Supplemental Radar Unit) on what you have identified as the Bordas Escarpment. I apologize for the error in the e-mail address. I am pleased that you were able to determine the correct way to contact CBP in the meantime. In CBP's May 20, 2015 letter, CBP contacted "Jacalon Ranch" as an adjacent landowner to the proposed project site to solicit input which could help inform our analysis of potential environmental impacts of the proposed Supplemental Radar Unit.

Your letter raises two specific issues concerning the proposed deployment of the Supplemental Radar Unit:

1. The potential for airspace restrictions around the proposed Supplemental Radar Unit facility (specifically as it relates to the operation of the Jacalon Ranch Airport);and
2. The potential impacts of the proposed Supplemental Radar Unit on future wind power development in the area.

**Potential Airspace Restrictions**

With respect to potential impacts to operation of the Jacalon Ranch Airport, the Supplemental Radar Unit will not result in additional airspace restrictions being implemented around the proposed radar facility. The proposed Supplemental Radar Unit site is over 4.25 miles from the Jacalon Ranch airstrip and the the actual operation of the radar unit will not be an issue relative to over-flying aircraft. The proposed Supplemental Radar Unit is only 40 feet tall. Thus, when compared to the adjacent wind turbines, which are in excess of 300' tall, there should be no requirement for additional restrictions within the area of the proposed Supplemental Radar Unit Site. Accordingly, CBP does not believe that the proposed Supplemental Radar Unit would impact the operation of the air strip on the Jacalon Ranch.

Mr. M. Bradford Moody

Page 2

**Potential Impacts to Existing and Future Wind Power Projects**

As noted in CBP's June 20<sup>th</sup> letter, the proposed Supplemental Radar Unit would be in an extension of CBP's existing Oilton Air Route Surveillance Radar (ASR-4). The ASR-4 is already surrounded by an operating windfarm, and the purpose and need of the proposed Supplemental Radar Unit is to provide infill radar coverage to offset impacts from the proposed development of an additional wind farm development in the area.

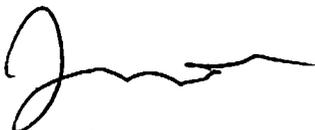
As evidenced by the proposed action, then, the presence of CBP radar in the area does not limit or prohibit existing or future wind power projects. Rather, going forward, as new wind power projects are proposed, such projects will be evaluated under the same review and permitting processes, including the Federal Aviation Administration (FAA) Obstruction Evaluation Process, 14 C.F.R. Part 77 et seq., as previous developments. CBP cannot address potential individual wind farm proposals that are not publically disclosed or otherwise not reasonably foreseeable. Again, though, to the extent that future develop impacts federally-owned radar units, the developer may need to work with the impacted federal entities to offset such impacts.

To the extent that future windfarm development impacts CBP radar, it is worth pointing out that the Department of Homeland Security (DHS) is committed to working with any pary working to enhance the use of renewable energy sources, which can contribute to resilience of our energy infrastructure, improve environmental conditions, and reduce our dependence on foreign fossil-fuel sources. It is the policy of DHS to manage the risks posed by domenstic wind farms by mitigating potential interference to radar systems while at the same time facilitating responsible alternative energy strategies, particularly as they apply to wind farms. As a component of DHS, CBP implements this policy to ensure the integrity of its radar surveillance capabilities through constructive engagement with all parties involved in wind farm development.

CBP will consider your comments and input as it moves forward with its environmental assessment of the proposed Supplemental Radar Unit.

If you have any additional questions or concerns, please feel free to contact Paul Martin via email at [paul.martin@cbp.dhs.gov](mailto:paul.martin@cbp.dhs.gov) or by telephone at (202) 344-3405.

Sincerely,



Janet D. Piston  
Acting Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
Department of Homeland Security



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Carter P. Smith  
Executive Director

July 02, 2015

Janet D. Piston  
U.S. Customs and Border Protection  
Air and Marine Facilities Program Management Office  
90 K Street, NE  
Suite 911, Mailstop 1400  
Washington, DC 20229-1400

RE: Proposed Supplemental Air Route Surveillance Radar Unit, Javelina  
Wind Farm, Webb County, Texas

Dear Ms. Piston:

This letter is in response to your request for information to assist the U.S. Customs and Border Protection (CBP) prepare an Environmental Assessment (EA) for the proposed project referenced above.

### **Project Description**

The proposed project would construct and operate a new radar tower on a 2-acre parcel of land located in southern Webb County, Texas, adjacent to the Javelina Wind Energy Development. The new radar would ensure sufficient radar coverage in the area is maintained. The effectiveness of the Oilton Air Route Surveillance Radar (ARSR-4) north of Javelina Wind would be adversely affected when Javelina Wind is operational. The new radar facility would consist of two concrete pads for the radar unit and equipment. Aerial electrical lines, buried fiber optic lines and an access road would also be constructed or installed.

As part of its initial work on the EA, CBP has examined potential impacts of the project on vegetation, threatened and endangered species, and historic resources.

TPWD staff has reviewed the information provided and offers the following comments and recommendations.

### **Rare and Protected Species Review**

Based on the project as presented, the TPWD annotated county list of rare species for Webb County, and presently known Texas Natural Diversity Database (TXNDD) records for the general project area, the following listed species could be impacted by proposed project activities *if suitable habitat is present*:

#### **Federal and State Listed Endangered**

Ocelot (*Leopardus pardalis*)

Ashy dogweed (*Thymophylla tephroleuca*)

Johnston's frankenia (*Frankenia johnstonii*)

**Federal (Similarity of Appearance) and State Listed Threatened**  
Black bear (*Ursus americanus*)

**State Listed Threatened**

Peregrine Falcon (*Falco peregrinus*)  
Reticulate collared lizard (*Crotaphytus reticulatus*)  
Texas horned lizard (*Phrynosoma cornutum*)  
Texas indigo snake (*Drymarchon melanurus erebennus*)  
Texas tortoise (*Gopherus berlandieri*)

**Species of Concern**

Audubon's Oriole (*Icterus graduacauda audubonii*)  
Mexican Hooded Oriole (*Icterus cucullatus cucullatus*)  
Cave myotis bat (*Myotis velifer*)  
Yuma myotis bat (*Myotis yumanensis*)  
Spot-tailed earless lizard (*Holbrookia lacerata*)  
McCart's whitlow-wort (*Paronychia maccartii*)

For additional information regarding the TXNDD or data requests, please contact the TXNDD database administrator at [texasnatural.diversitydatabase@tpwd.texas.gov](mailto:texasnatural.diversitydatabase@tpwd.texas.gov).

Please be aware that the TXNDD is intended to assist users in avoiding harm to rare species or significant ecological features. Absence of information in an area does not imply that a species is absent from that area, but instead that little information is available to date. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Although it is based on the best data available to TPWD regarding rare species, the data from the TXNDD do not provide a definitive statement as to the presences, absence or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and **cannot be used as presence/absence data**. They represent species that could potentially be in your project area. This information cannot be substituted for on-the-ground surveys.

Please review the most current TPWD annotated county list of rare species, as other rare species could be present depending upon habitat availability. These lists are available online at: <http://www.tpwd.texas.gov/gis/rtest/>

For the U.S. Fish and Wildlife Service (USFWS) rare species lists please visit: <http://ecos.fws.gov/ipac/>.

## **Federal Regulations**

### *Endangered Species Act (ESA)*

Federally-listed animal species and their habitat are protected from “take” on any property by the ESA. Take of a federally-listed species can be allowed if it is “incidental” to an otherwise lawful activity and must be permitted in accordance with Section 7 or 10 of the ESA. Federally-listed plants are not protected from take except on lands under federal/state jurisdiction or for which a federal/state nexus (i.e., permits or funding) exists. Any take of a federally-listed species or its habitat without the required take permit (or allowance) from the USFWS is a violation of the ESA.

Although the most recently documented individuals/populations of ocelots (*Leopardus pardalis*) are located in the Lower Rio Grande Valley, their absence from the project area cannot be presumed. Also, Ashy dogweed (*thymophylla tephroleuca*) and Johnston’s frankenia (*Frankenia johnstonii*) have been documented in the general area, including within the Javelina Wind wind lease.

**Recommendation:** TPWD recommends, to the greatest extent practicable, locating the access road, concrete pad sites, buried fiber optic lines, equipment storage and staging areas, etc. in areas that would avoid the clearing of dense patches of thornscrub or dense brush corridors along drainages in order to preserve ocelot habitat and habitat connectivity corridors.

The soils and vegetation community structure in the general project area are suitable to support federally-listed plants. Because much of the project area has not been surveyed for rare plants, TPWD recommends conducting rare plant surveys in any areas subject to disturbance prior to construction following protocols established by the USFWS.

### *Migratory Bird Treaty Act (MBTA)*

The Migratory Bird Treaty Act (MBTA) implicitly prohibits intentional *and unintentional* take of migratory birds, including their nests and eggs, except as permitted by the USFWS. This protection applies to most native bird species, including ground nesting species. Although not documented in the TXNDD, many bird species which are not listed as *threatened* or *endangered* are protected by the MBTA and are known to be year-round or seasonal residents or seasonal migrants through the proposed project area. Additional information regarding the MBTA is available from the USFWS-Southwest Regional Office (Region 2) at (505) 248-7882.

During the winter, south Texas is the southernmost limit for many migratory birds and it is the northernmost extreme in the breeding season (spring-summer) for other species. Additionally, the proposed project area is in the middle of the Central Migratory Flyway through which millions of birds pass during spring and fall migration.

Biologically, this area of south Texas is highly productive and provides a range of habitats including nearby large contiguous tracts of undeveloped land, grasslands, brush, riparian woodlands and freshwater habitats. The diversity of habitats is suitable to support a diversity of wildlife species. In particular, the range of habitats provides cover, feeding, nesting and loafing areas for many species of birds.

**Recommendation:** Although the footprint of the project is relatively small and located within an area of previous disturbance from oil and gas production activity, brush and groundcover on the project area may provide suitable nesting habitat for birds. If clearing woody vegetation is necessary to construct the new radar site and access road, or create access for machinery or heavy equipment, then TPWD recommends scheduling any necessary vegetation clearing or disturbance to occur outside of the April 1-July 15 migratory bird nesting season in order to fully comply with the MBTA. Contractors should be made aware of the potential of encountering migratory birds (either nesting or wintering) in the proposed project site and be instructed to avoid negatively impacting them.

If vegetation clearing and/or construction in a potential bird nesting area must be scheduled to occur during the nesting season, TPWD recommends the vegetation or area to be impacted should be surveyed for active nests by a qualified biologist in order to fully comply with the MBTA. If active nests are observed during surveys, TPWD recommends a 150-foot buffer of vegetation remain around the nests until the young have fledged or the nest is abandoned.

The construction and operation of multiple wind energy developments in the area may result in displacing birds to adjacent areas. Structures that could present a potential hazard for birds in those adjacent areas should be designed to avoid or minimize avian impacts. As proposed, the project would include approximately one mile of overhead electrical power supply line. The fiber optic line would be buried.

**Recommendation:** TPWD typically recommends power lines around wind energy developments be buried to avoid additional potential avian impacts. If burying the electrical line is not feasible, TPWD recommends installing bird

flight diverter (BFD) to mark the lines. At a minimum, the line should be designed to incorporate recommendations from the recently revised:

Avian Power Line Interaction Committee (APLIC). 2012. *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*. Edison Electric Institute and APLIC. Washington, D.C. (<http://www.aplic.org/index.php>)

In particular, the energized lines and support structures should be designed to avoid and/or minimize electrocution and collision risks.

### **State Regulations**

#### *Parks and Wildlife Code*

State law prohibits any take (incidental or otherwise) of state-listed species. Laws and regulations pertaining to state-listed endangered or threatened animals are contained in Chapters 67 and 68 of the Texas Parks and Wildlife (TPW) Code; laws pertaining to endangered or threatened plants are contained in Chapter 88 of the TPW Code. There are penalties, which may include fines and/or jail time in addition to payment of restitution values, associated with take of state-listed species. Please see "Laws and Regulations Applicable to TPWD Review" at:

[http://www.tpwd.state.tx.us/huntwild/wild/wildlife\\_diversity/habitat\\_assessment/laws.phtml](http://www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/habitat_assessment/laws.phtml).

In addition to state- and federally-protected species, TPWD tracks special features, natural communities, species of concern (SOC), and species of greatest conservation need (SGCN) in the TXNDD and actively promotes their conservation. TPWD considers it important to evaluate and, if necessary, minimize impacts to rare species and their habitat to reduce the likelihood of endangerment.

For purposes of relocation, surveys, monitoring, and research, terrestrial state-listed species may only be handled by persons permitted through the TPWD Wildlife Permits Program. For more information regarding Wildlife Permits, please visit TPWD's wildlife permit website at: <http://www.tpwd.state.tx.us/business/permits/land/wildlife/>. For the above-listed activities that involve aquatic species please contact the TPWD Kills and Spills Team (KAST) for the appropriate authorization. For more information on KAST please visit [http://www.tpwd.state.tx.us/landwater/water/environconcerns/kills\\_and\\_spills/regions](http://www.tpwd.state.tx.us/landwater/water/environconcerns/kills_and_spills/regions).

Suitable habitat for the state-listed Texas tortoises, Texas horned lizard, and reticulate collared lizard, and the SOC spot-tailed earless lizard, likely occurs in the project area. Small wildlife such as the Texas tortoise, lizards and snakes are susceptible to falling into open pits, trenches, bore holes, etc. left open and/or uncovered in a project area and are susceptible to collisions with vehicles.

**Recommendation:** TPWD recommends that any excavations created on site during construction (e.g., trenching for the fiber optic cable) should not be left open overnight in order to prevent wildlife from potentially being trapped. If excavated holes or trenches must be left unfilled at the end of the work day, they should either be covered, have escape ramps placed in them (fashioned from boards or soil), or fenced off with an exclusion fence. Any holes or trenches left open overnight should be inspected the following morning for wildlife that may have been trapped. If any state-listed species are trapped in trenches, they should be removed by personnel permitted by TPWD to handle state-listed species.

TPWD recommends that contractors be made aware of the potential for state-listed species to occur in the area. If a Texas tortoise is located in the project corridor, it should be permitted to move from the area on its own. If it must be relocated, it should only be moved as far from the proposed construction activity as necessary to protect it from being negatively impacted but within a 5 to 10 acre area which is the typical home range of a tortoise. After tortoises are removed from the immediate project area, an exclusion fence should be constructed with metal flashing or drift fence material; regular silt fence material may be used. The exclusion fence should be buried at least six-inches deep and be 24-inches high. Additional information regarding Texas tortoise best management practices is available on the TPWD website at: [http://www.tpwd.state.tx.us/huntwild/wild/wildlife\\_diversity/habitat\\_assessment/tools.phtml](http://www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/habitat_assessment/tools.phtml). This fence is also effective in excluding other state-listed reptiles from entering an active construction area.

Sparse vegetation consisting of grass, cactus, and scattered brush that occurs in the project area could potentially support the state-listed threatened Texas horned lizard (*Phrynosoma cornutum*). An additional indication of suitable habitat for this species is the presence of its primary food source, the Harvester ant (*Pogonomyrmex* sp.). Texas horned lizards are generally most active in this part of Texas from March through October. During those months, horned lizards may be able to avoid slow (less than 15 miles per hour) moving equipment. During the remainder of the year, this species hibernates only a few inches (6 to 12 inches) underground and will be much more susceptible to earth moving equipment and compaction.

**Recommendation:** TPWD recommends avoiding disturbance of the Texas horned lizard and colonies of the Harvester ant during clearing and construction. TPWD recommends a biological monitor be present during construction to try to relocate Texas horned lizards if found. If the presence of a biological monitor during construction is not feasible, state-listed threatened species observed during construction should be allowed to safely leave the site.

Reticulate collared lizards are known to bask on elevated dirt mounds such as those created along the edges of maintained dirt roads. Also, both reticulate collared lizards and the Texas horned lizards are especially active during the spring (April-May) mating season and are more likely to be negatively impacted by construction activities during this period.

**Recommendation:** Contractors should be made aware that reptiles, including the reticulate collared lizard, Texas horned lizard, Texas indigo snake and the Texas Tortoise, become more active during the spring and may be more susceptible to being negatively impacted. If possible, TPWD recommends scheduling construction activities involving grading or bulldozing to occur outside of the spring to avoid and or minimize potential impacts to these species. Also, completing major ground disturbing activities before October when reptiles become inactive and could be utilizing burrows in areas subject to disturbance would minimize potential negative impacts. Reduced speed limits should be established and enforced in areas in which state-listed reptiles could occur. These speed limits should apply during the construction and operation of the project.

The Texas indigo snake may occur near aquatic habitats in the general project area (e.g., near the multiple detention ponds in the area). Although this species is closely associated with aquatic environments, this species has a large home range, particularly when prey is scarce, and could occur in the project area. While not listed, rattlesnakes are also known to occur in the area.

**Recommendation:** Because snakes are generally perceived as a threat and killed when encountered during vegetation clearing, TPWD recommends project plans include comments to inform contractors of the potential for the state-listed snakes to occur in the project area. Contractors should be advised to avoid impacts to snakes as long as the safety of the workers is not compromised. For the safety of workers and preservation of a natural resource, attempting to catch, relocate and/or kill venomous snakes is discouraged by TPWD. If encountered, snakes should be permitted to safely leave project areas on their own. TPWD encourages construction sites to have a “no kill” policy in regard to wildlife encounters.

Ms. Janet D. Piston  
Page 8  
July 02, 2015

If during construction the project area is found to contain rare species, natural plant communities or special features, TPWD recommends that precautions be taken to avoid, minimize, and compensate for impacts to them.

TPWD strives to respond to project review requests within a 45 day comment period. Responses may be delayed due to workload and lack of staff. Failure to meet the 45 day review timeframe does not constitute a concurrence from TPWD that a proposed project will not adversely impact fish and wildlife resources.

TPWD appreciates the opportunity to review and comment on the proposed project and looks forward to receiving a copy of the EA. Please contact me at (361) 825-3240 or [russell.hooten@tpwd.texas.gov](mailto:russell.hooten@tpwd.texas.gov) if you have any questions regarding our comments.

Sincerely,



Russell Hooten  
Wildlife Habitat Assessment Program  
Wildlife Division

rh/ 34678



## Ysleta del Sur Pueblo

Tribal Council – Javier Loera (War Captain/Tribal Historic and Preservation Officer) E-mail [jloera@ydsp-nsn.gov](mailto:jloera@ydsp-nsn.gov)

117 South Old Pueblo Road \* P.O. Box 17579 \* El Paso, Texas 79917 \* (915) 859-8053 \* Cell (915) 497-3876

June 23, 2015

MS. Janet D. Piston  
Acting Director  
Environmental and Energy Division  
U.S Customs and Border protection  
Department of Homeland security  
1300 Pennsylvania Avenue NW  
Washington, DC 20229

Dear Ms. Piston

This letter is in response to correspondence in which you provide Ysleta Del Sur Pueblo the opportunity to comment on the Proposed Supplemental Air Route Surveillance Radar Unit, Javelina Wind Farm, In Webb County, Texas.

The Ysleta Del Sur Pueblo does not have any comments nor does it request consultation on this project due to its location being outside of our Pueblos NAGPRA area of interest and/or relevance.

Thank you for allowing us the opportunity to comment on this project.

Sincerely,

Javier Loera  
War Captain/Tribal Historic and Preservation officer  
Ysleta Del Sur Pueblo  
Phone:(915)859-8053

Tribal Council Assistant :   
Adam Nevarez