



# INDEX OF TEXAS ARCHAEOLOGY

*Open Access Gray Literature from the Lone Star State*

---

Volume 2018

Article 50

---

2018

## Archaeological Investigations for the Planned Escondido Creek Linear Park, City Of Kenedy, Karnes County, Texas

Antonio E. Padilla

Rhiana D. Ward

Kristi M. Nichols

Chris Matthews

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



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

Tell us how this article helped you.

---

### Cite this Record

Padilla, Antonio E.; Ward, Rhiana D.; Nichols, Kristi M.; and Matthews, Chris (2018) "Archaeological Investigations for the Planned Escondido Creek Linear Park, City Of Kenedy, Karnes County, Texas," *Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State*: Vol. 2018, Article 50. ISSN: 2475-9333

Available at: <https://scholarworks.sfasu.edu/ita/vol2018/iss1/50>

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

---

## Archaeological Investigations for the Planned Escondido Creek Linear Park, City Of Kenedy, Karnes County, Texas

Creative Commons License



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

**ARCHAEOLOGICAL INVESTIGATIONS FOR THE PLANNED  
ESCONDIDO CREEK LINEAR PARK, CITY OF KENEDY,  
KARNES COUNTY, TEXAS**

**FINAL REPORT (Redacted)**

**Prepared for:**

DUNAWAY Associates, L.P.  
118 Broadway, Suite 201  
San Antonio, Texas 78205

**Prepared by:**

Antonio E. Padilla and Rhiana D. Ward  
with contributions by Kristi M. Nichols and Chris Matthews



**RABA-KISTNER ENVIRONMENTAL, INC.**

12821 West Golden Lane  
San Antonio, Texas 78254

**Principal Investigator**

Antonio E. Padilla, M.A., RPA

Texas Antiquities Committee Permit Number 8435

**Cultural Resources Report No. 18-010**

ASF17-099-00

July 5, 2018

## MANAGEMENT SUMMARY

**Raba Kistner Environmental, Inc. (RKEI)**, was contracted by DUNAWAY Associates, L.P. (CLIENT), on behalf of San Antonio River Authority (SARA), to perform cultural resources investigations for the proposed Escondido Creek Linear Park Project in Kenedy, Karnes County, Texas. The project is sponsored by SARA, with public funding from the City of Kenedy. The undertaking will consist of the construction of a hike and bike trail, trailhead parking areas, a small amphitheater, parking spaces, picnic units, a playground, pavilion, associated restroom facilities, and two pedestrian bridges/weirs, within a 24.7 acre tract, along the banks of Escondido Creek. The undertaking will impact portions of Escondido Creek, a water of the United States, and lands owned by the City of Karnes. As such, the proposed undertaking is subject to review under Section 106 of the National Historic Preservation Act (NHPA) (16 United States Code 470) and its implementing regulations (36 Code of Federal Regulation 800), as well as the Antiquities Code of Texas (ACT).

The purpose of the investigations were to identify any surface-exposed or buried cultural deposits within the Area of Potential Effects (APE) and, if feasible, assess their significance and eligibility for inclusion on the National Register of Historic Places (NHRP). Investigations included an intensive pedestrian survey augmented with shovel testing and backhoe trenching, and a Historic Resources Assessment. All work was performed in compliance with Section 106 of the NHPA and the ACT under ACT Permit No. 8435.

The cultural resources investigations were conducted over the course of three days, May 18, 22, and 23, 2018. Antonio E. Padilla served as the Principal Investigator for the project. Staff Archaeologist Chris Matthews and Archaeologist Jason Whitaker conducted the pedestrian survey and shovel testing. Backhoe trenching was conducted by Project Archaeologist Rhiana D. Ward, with the assistance of Staff Archaeologist Chris Matthews. Rhiana D. Ward also conducted the Historic Resources Assessment.

A background review of the direct and indirect APE was conducted prior to investigations. The background review revealed that no previous cultural resource investigations or archaeological sites have been conducted or recorded within the direct or indirect APE. In addition to the background review, a review of the 1950, 1955, 1961, 1981, 1989, 1995, 2004, 2008, 2012, and 2016 historical aerial photographs of the area was conducted. The historical aerial photograph review revealed potential

historic resources along the eastern and central portions of the indirect APE. Additionally, the historical aerial photographs revealed that the majority of the direct APE along Escondido Creek has been mechanically altered due to the construction of US Highway 181, the realignment of the creek channel, and during flood prevention activities sometime prior to 1981.

During the pedestrian survey, evidence of disturbance from the mechanical impacts were observed. Impacts consisted of grading and widening of the flood plain along the creek channel. Visual inspection of the surface identified modern trash scattered along areas near the US Highway 181 Bridge and along North 5<sup>th</sup> Street. Scatters of modern trash were also observed in areas where two-track roads intersected the two surface roads. Modern trash observed consisted of clear and brown glass sherds, paper, and plastic fragments.

As part of the pedestrian survey, **RKEI** excavated 13 shovel tests (CM01–CM07 and JW01–JW06) along transects no greater than 98 feet (30 m) apart. Shovel tests were excavated at intervals between 328 and 492 feet (100 and 150 m) in areas where surface visibility was below 30 percent. Of the 13 shovel tests excavated, one (JW04) was positive for cultural materials. Cultural materials were encountered at a depth between 7.87 inches and 1.97 feet (20 and 60 cm) below surface and consisted of an two sherds of undecorated white earthenware and a piece of clear glass at a depth of 3.94 to 7.87 inches (10 to 20 cm), a piece of clear glass and an unidentifiable metal fragment at a depth of 11.81 to 15.75 inches (30 to 40 cm) and a bovine tooth at a depth of 1.64 to 1.97 feet (50 to 60 cm). Due to the presence of possible historic material encountered at a depth between 3.94 to 7.87 inches (10 to 20 cm), six additional shovel tests (CM08-CM10 and JW07-JW09) were excavated to further investigate the findings. During the excavation of the six additional shovel tests, one (JW09), was positive for cultural materials. Cultural materials encountered within JW09 consisted of a metal can top with can piercer (church key) punctures, an undecorated white earthenware sherd, and single pieces of clear and brown glass, at a depth between 3.93 and 7.87 inches (10 and 20 cm). An unidentified metal fragment and a piece of clear glass was encountered at a depth of 11.81 inches and 1.31 feet (30 and 40 cm). Due to the historic age cultural materials encountered within the two shovel tests within 30 meters of each other and more than three artifacts being recovered from a shovel test, the findings were designated as site 41KA216.

Site 41KA216 is a 150 feet east/west by 39 feet north/south (46 m east/west by 12 m north/south) ephemeral historic scatter. The historic cultural materials encountered are most likely related to an early twentieth century homestead that is depicted on the 1950, 1955, and 1967 historical aerial photographs of the area. During the investigations, the historic cultural materials were encountered, mixed with modern cultural materials within two shovel tests at a depth of 3.93 to 7.87 inches (10 to 20 cm) below surface. Due to the mixed context and limited historic cultural materials, lack of a structure or other cultural features, and previous impacts within the APE, site 41KA216 lacks potential to provide additional information contributing to the regional history of the area. As such, **RKEI** assesses site 41KA216 as NOT ELIGIBLE for listing on the NRHP and no further work is recommended.

In addition to the excavation of 20 shovel tests within the direct APE, **RKEI** excavated eight backhoe trenches (BHTs). BHT were excavated to a depths reaching 6 to 8.43 feet (1.83 to 2.57 m) below surface. Of the eight BHTs excavated, six were located along the channel of Escondido Creek, one was located within the proposed area of the amphitheater, and one was located in the area of the proposed restrooms. Excavation of the BHTs revealed evidence of disturbance along the channel of Escondido Creek. As previously mentioned, the central portion of the channel within the direct APE had been realigned during the construction of the US Highway 181 Bridge, realignment of the creek channel, and flood prevention activities. During the excavation of BHT03–BHT06, evidence of disturbance was observed, with the mixing of modern materials and historic materials reaching depths of 7.87 to 4.5 feet (20 cm to 1.37 m) below surface. No significant cultural materials or cultural features were observed.

In compliance with Section 106, the indirect effects of the proposed project was considered. **RKEI** conducted a Historic Resource Assessment of a 150-foot (46 m) radius of the direct APE. Right-of-entry was not obtained for any properties beyond the direct APE, therefore the survey was conducted from the public right-of-way. As a result of the assessment, six historic resources (HR 1–6) were identified, including three commercial buildings, two residential dwellings, and one shed. No resources were considered potentially eligible for listing on the NRHP.

In accordance with 33 CFR 800.4, **RKEI** has made a good faith effort in identifying cultural resources within the direct and indirect APE. Based on the results of the investigations, **RKEI** recommends that a NO HISTORIC PROPERTIES AFFECTED determination be made for the proposed undertaking and no

further cultural resources investigations area warranted within the defined APE of the project. However, should changes be made to the project APE, further work may be required.

# TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION .....	1
Area of Potential Effects .....	3
CHAPTER 2. ENVIRONMENTAL SETTING .....	6
Geology and Soils .....	6
Flora and Fauna.....	6
Karnes County Climate.....	8
CHAPTER 3. CULTURAL CONTEXT.....	9
Paleoindian Period .....	10
Archaic Period .....	10
Late Prehistoric Period.....	12
Protohistoric and Historic Period.....	12
Karnes County.....	13
Previous Archaeology.....	14
Historic Aerial Photography Review .....	16
CHAPTER 4. METHODS OF INVESTIGATION .....	27
Pedestrian Survey with Shovel Testing .....	27
Backhoe Trenching Excavations .....	28
Artifact Collection Policy.....	28
Historic Resources Assessment.....	29
Laboratory Methods .....	29
CHAPTER 5. RESULTS OF INVESTIGATIONS .....	30
Pedestrian Survey with Shovel Testing .....	30
Site 41KA216.....	38
Backhoe Trenching Investigations .....	42
Backhoe Trench 1.....	48
Backhoe Trench 2.....	49
Backhoe Trench 3.....	51
Backhoe Trench 4.....	53
Backhoe Trench 5.....	54
Backhoe Trench 6.....	56
Backhoe Trench 7.....	60
Backhoe Trench 8.....	62
Historic Resources Assessment.....	63
Historic Resource 1 .....	64
Historic Resource 2 .....	64
Historic Resource 3 .....	69
Historic Resource 4 .....	71
Historic Resource 5 .....	73
Historic Resource 6 .....	74
CHAPTER 6. SUMMARY AND RECOMMENDATIONS.....	76
REFERENCES CITED.....	79
APPENDIX A: SHOVEL TEST LOG.....	A-1



## LIST OF FIGURES

Figure 1-1.	Project area location in Karnes County, Texas. ....	2
Figure 1-2.	Conceptual design of the Escondido Creek Park .....	4
Figure 1-3.	Map of the Area of Potential Effect with Direct and Indirect Effects.....	5
Figure 2-1.	Soils within the indirect and direct Area of Potential Effect. ....	7
Figure 3-1.	Known cultural resources within 1-mile (1.62 kilometers) of the indirect and direct Area of Potential Effects. ....	15
Figure 3-2.	The project footprint projected on a 1950 aerial photograph. ....	17
Figure 3-3.	The project footprint projected on a 1955 aerial photograph. ....	18
Figure 3-4.	The project footprint projected on a 1961 aerial photograph. ....	19
Figure 3-5.	The project footprint projected on a 1968 aerial photograph. ....	20
Figure 3-6.	The project footprint projected on a 1981 aerial photograph. ....	21
Figure 3-7.	The project footprint projected on a 1995 aerial photograph. ....	23
Figure 3-8.	The project footprint projected on a 2004 aerial photograph. ....	24
Figure 3-9.	The project footprint projected on a 2008 aerial photograph. ....	25
Figure 3-10.	The project footprint projected on a 2016 aerial photograph. ....	26
Figure 5-1.	Results of the investigations. ....	32
Figure 5-2.	Overview of the direct Area of Potential Effect, facing south/southwest. ....	33
Figure 5-3.	Overview of the direct Area of Potential Effect, facing north/northeast.....	33
Figure 5-4.	Buried AT&T line along the western side of US Highway 181; facing south. ....	34
Figure 5-5.	Small picnic area near North 5 <sup>th</sup> Street, facing east. ....	35
Figure 5-6.	Two-track on the southern terrace of the direct APE, facing northwest. ....	35
Figure 5-7.	Overview of vegetation within the direct Area of Potential Effect from the southern terrace, facing north. ....	36
Figure 5-8.	Vegetation along the northern boundary of the Area of Potential Effect, facing east. ....	36
Figure 5-9.	Shovel test CM01 at a depth of 1.97 feet (60 cm).....	37
Figure 5-10.	Cultural materials encountered between 7.87 inches and 1.97 feet (20 cm and 60cm) within shovel test JW04.....	38
Figure 5-11.	Overview of site 41KA216, facing southwest. ....	39
Figure 5-12.	Cultural material recovered from shovel test JW09 at a depth between 3.93 and 7.87 inches (10 and 20 cm).....	41
Figure 5-13.	Cultural material recovered from shovel test JW09 at a depth between 11.81 inches and 1.31 feet (30 and 40 cm).....	41
Figure 5-14.	Area of Potential Effects overlain the 1950 historical aerial photograph showing the location of the structure.....	43
Figure 5-15.	Area of Potential Effects overlain the 1955 historical aerial photograph showing the location of the structure.....	44
Figure 5-16.	Area of Potential Effects overlain the 1961 historical aerial photograph showing the location of the structure.....	45
Figure 5-17.	Area of Potential Effects overlain the 1968 historical aerial photograph showing the structure area. ....	46
Figure 5-18.	Area of Potential Effects overlain the 1981 historical aerial photograph showing the structure area. ....	47
Figure 5-19.	West wall profile of BHT01 reaching a depth of 8 feet (2.44 cm), facing west. ....	48
Figure 5-20.	Profile of the west wall of BHT01. ....	49

Figure 5-21. South wall profile of BHT02 reaching a depth of 8.43 feet (2.57m), facing south. ....	50
Figure 5-22. Profile of the north wall of BHT02. ....	51
Figure 5-23. East wall profile of BHT03 reaching a depth of 8 feet (2.44 m), facing east. ....	52
Figure 5-24. Base of a brown glass bottle, encountered at a depth of 3.5 feet (1.07 m) within BHT03. ...	53
Figure 5-25. South wall profile of BHT04, reaching a depth of 8 feet (2.44 m), facing south. ....	54
Figure 5-26. Cultural materials and faunal materials encountered within BHT04 from 6.2 to 7.54 feet (1.9 to 2.3 m) below surface. ....	55
Figure 5-27. Profile of the north wall of BHT05. ....	55
Figure 5-28. Fragment of a brown bottle base and bottle cap encountered in the upper 7.87 inches (20 cm) of BHT05. ....	56
Figure 5-29. East wall profile of BHT06 reaching a depth of 8 feet (2.44 m), facing southeast. ....	57
Figure 5-30. Cultural materials encountered within the upper 4.5 feet (1.37 m). ....	59
Figure 5-31. Embossed 32 over an inverted triangle with W/T on a bottle base. ....	60
Figure 5-32. North wall profile of BHT07 reaching a depth of 8 feet (2.44 m), facing northwest. ....	61
Figure 5-33. East wall profile of BHT07. ....	62
Figure 5-34. East wall profile of BHT08 reaching a depth of 6 feet (1.83 m), facing east. ....	63
Figure 5-35. Map of the historic resources within the indirect APE. ....	65
Figure 5-36. Overview of mobile home park located along the northeastern right-of-way of North 5th Street, northwest of Escondido Creek, facing north. ....	66
Figure 5-37. Modern mobile home at the corner of McGoldrick and North 5th Street, with Historic Resource 6 in background, facing southwest. ....	66
Figure 5-38. Modern mobile home located to the northwest of Historic Resource 6 (background), facing east. ....	67
Figure 5-39. Southeastern and southwestern elevations of Historic Resource 1, facing north. ....	67
Figure 5-40. Southwestern and northwestern elevations of Historic Resource 1, facing east. ....	68
Figure 5-41. Northeastern and northwestern elevation of Historic Resource 2, facing south. ....	68
Figure 5-42. Northeastern and southeastern elevations of Historic Resource 1, facing west. ....	69
Figure 5-43. Northwestern and northeastern elevations of Historic Resource 3, facing south. ....	70
Figure 5-44. Northeastern and southeastern elevations of Historic Resource 3, facing west. ....	70
Figure 5-45. Northwestern and northeastern elevations of Historic Resource 4, facing south. ....	72
Figure 5-46. Southeastern elevation of Historic Resource 4 (background) and southeastern elevation of Historic Resource 5 (middle ground), facing northwest. ....	72
Figure 5-47. Northwestern elevation of Historic Resource 5, facing south-southeast. ....	73
Figure 5-48. Northeastern and southeastern elevations of Historic Resource 5, facing west. ....	74
Figure 5-49. Southeast and northeast elevations of Historic Resource 6, facing west. ....	75
Figure 5-50. Southwest elevation of Historic Resource 6, facing north. ....	75

## CHAPTER 1. INTRODUCTION

**Raba Kistner Environmental, Inc. (RKEI)**, was contracted by DUNAWAY Associates, L.P. (CLIENT), on behalf of San Antonio River Authority (SARA), to perform cultural resources investigations for the proposed Escondido Creek Linear Park Project (hereafter referred to as the Escondido Creek Project) in Kenedy, Karnes County, Texas (**Figure 1-1**). Investigations consisted of an intensive pedestrian survey augmented with shovel testing and backhoe trenching excavations, and included a Historic Resources Assessment. The purpose of the investigations were to identify any surface-exposed or buried cultural resources and assess their significance and eligibility for inclusion on the National Register of Historic Places (NHRP).

The Escondido Creek Project was sponsored by SARA, with public funding from the City of Kenedy. The undertaking will impact portions of Escondido Creek, a water of the United States, and lands owned by the City of Karnes. As such, the proposed undertaking is subject to review under Section 106 of the National Historic Preservation Act (NHPA) (16 United States Code 470) and its implementing regulations (36 Code of Federal Regulation 800), as well as the Antiquities Code of Texas (ACT). All proposed work was performed in compliance with Section 106 of the NHPA and the ACT under ACT Permit No. 8435.

The cultural resources investigations were conducted over the course of three days. Antonio E. Padilla served as the Principal Investigator for the project. Staff Archaeologist Chris Matthews and Archaeologist Jason Whitaker conducted the pedestrian survey and shovel testing. Backhoe trenching was conducted by Project Archaeologist Rhiana D. Ward, with the assistance of Staff Archaeologist Chris Matthews.

This report summarizes the results of the field investigations, and provides recommendations regarding the proposed project. Following this introductory presentation and the description of the project area, Chapters 2 and 3 detail the environmental setting, and provide a culture history and previous archaeological investigations that have taken place in the vicinity of the project area. Chapter 4 outlines the field and laboratory methods employed during the project, and Chapter 5 summarizes the results of the field investigations. Chapter 6 provides a summary of the investigations and provides recommendations regarding the planned project.

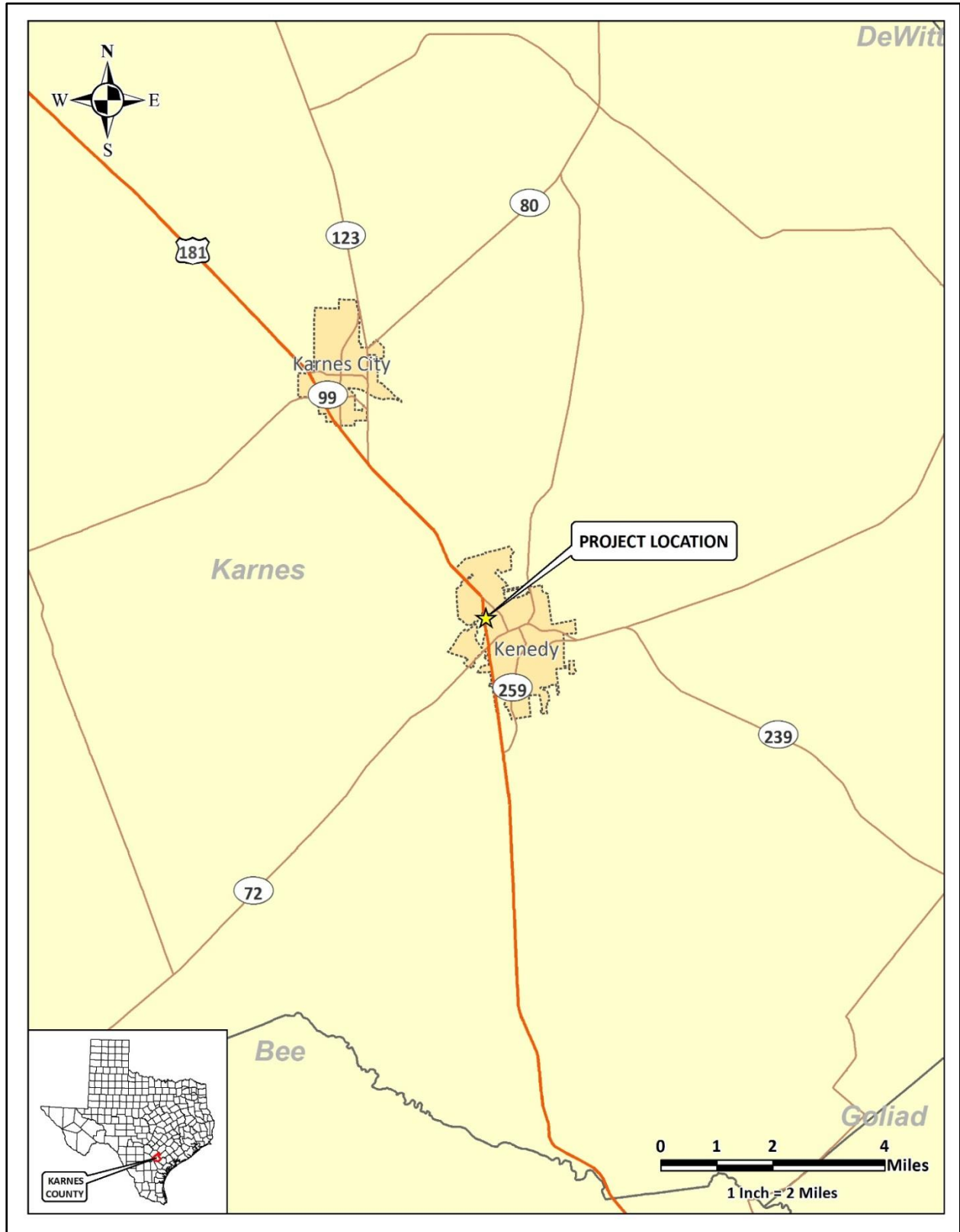


Figure 1-1. Project area location in Karnes County, Texas.

## **Area of Potential Effects**

The Escondido Creek Project was located within a mechanically modified landscape on the banks of Escondido Creek, where U.S. Highway 181 (US 181) crosses the creek in north-central Kenedy, Karnes County, Texas. The park will connect Joe Gulley Park on the west side of US 181 to North 5<sup>th</sup> Street, on the east side of US 181. The undertaking will consist of the construction of a hike and bike trail, trailhead parking areas, a small amphitheater, parking spaces, picnic units, a playground, pavilion, associated restroom facilities, and two pedestrian bridges/weirs within a 24.7 acre tract, along the banks of Escondido Creek (**Figure 1-2**).

The Area of Potential Effects (APE) for direct effects of the Escondido Creek Project was defined as the entire 24.7-acre footprint of the proposed park (**Figure 1-3**). The anticipated depth of impacts was unknown at the time of investigations; however, impacts most likely would not exceed a depth of 6 feet (2 meters [m]) in depth for pilings and associated utilities. Due to the requirements of Section 106, indirect effects of the undertaking on historic properties must also be taken into consideration. Therefore, all parcels within a 150-foot (46 m) radius of the 24.7-acre park footprint were included for the assessment of indirect effects on above ground historic resources (**see Figure 1-3**).

At the time of investigations, the APE was located in a minimally developed rural area between Joe Gulley Park and North 5<sup>th</sup> Street, within a riparian setting along Escondido Creek. A two-track road follows the southern edge of the project area, extending east from Pullin Road on the west side near North 5<sup>th</sup> Street to the north end of Joe Gulley Park. The APE for direct effects was bound by open agricultural areas to the east and west, the Karnes County Airport, an RV Park, and some residential development to the north, and athletic fields and residential development to the south (**see Figure 1-3**).



Figure 1-2. Conceptual design of the Escondido Creek Park.

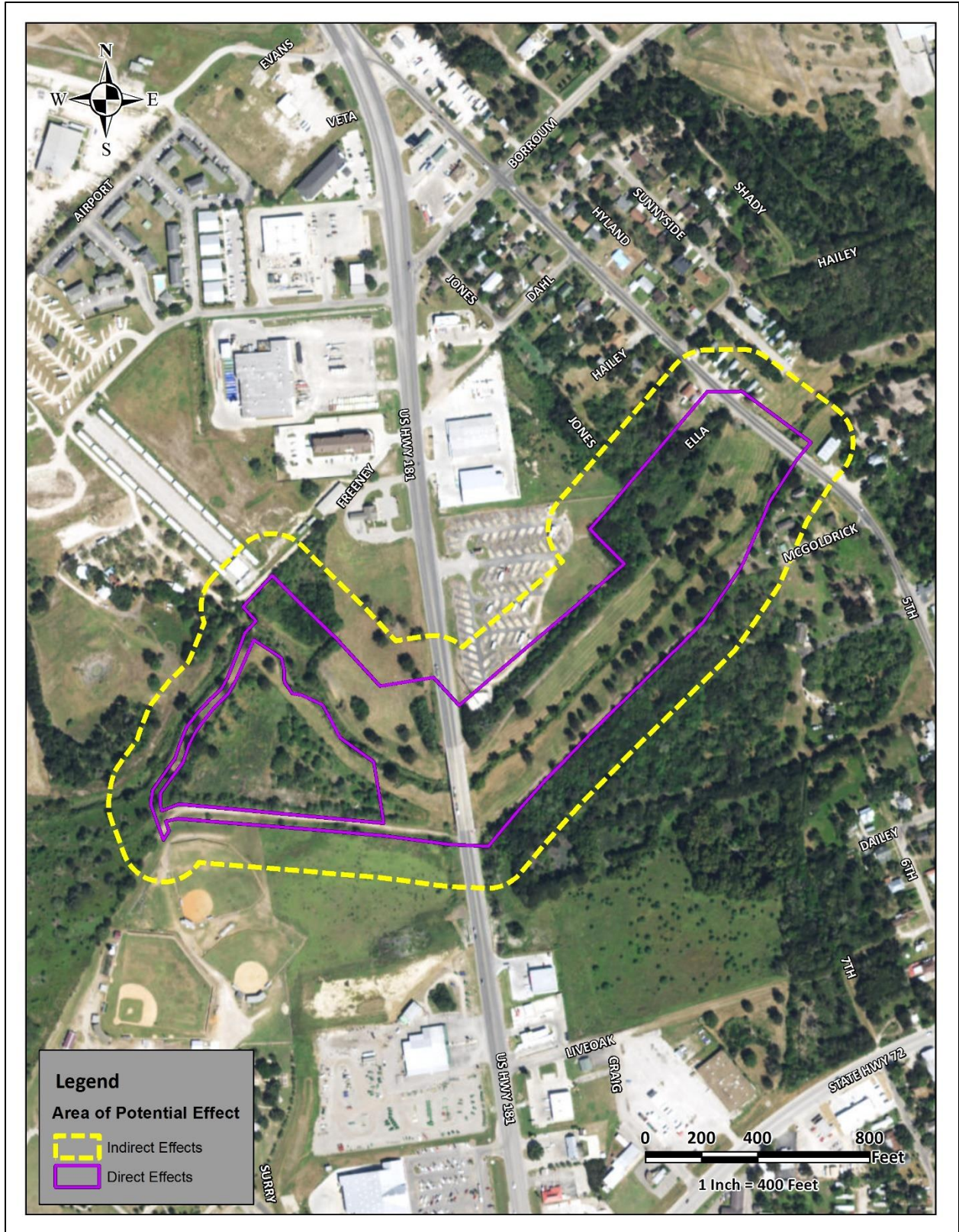


Figure 1-3. Map of the Area of Potential Effect with Direct and Indirect Effects.

## CHAPTER 2. ENVIRONMENTAL SETTING

The Escondido Creek Project is located in the south Texas geographic region within the Post Oak Savannah ecoregion. The Post Oak Savannah is the extension of an oak belt that extends through the central United States, from Canada to Central America. In Texas, the ecoregion is associated with clay loam to clay, bottomlands associated with water and sandy loam to sandy uplands that separate the Blackland Prairies to the west and the Pinewoods to the east (Texas A&M Forest Service 2018). The Southern Post Oak Savannah is characterized as a gently rolling to hilly with patches of woodland intermixed with prairies of grassland. Historically, the regions consisted of scattered hardwoods (post oaks, blackjack oak, black hickory) and native bunch grasses and forbs. Currently, the Post Oak Savannah is comprised of woods, pastures, and rangeland (Griffith et al. 2007).

### Geology and Soils

The entire APE is underlain by Holocene-age alluvium (Qal) composed of unconsolidated sand, silt, clay, and gravels, which typically occur along streams (Barnes 1975). Soils within the APE consist of Buchel clay (Bw), Coy clay loam (CoB), and Clareville clay loam (CoA) which are derived from the underlying alluvium (**Figure 2-1**). Buchel clay is comprised of clay and sandy clay loam to sandy loam soils from the Buchel, Sinton, and Odem Series (Natural Resources Conservation Services [NRCS] 2018). All three soil series are characterized as very deep well drained soils that occur on nearly level to gently sloping flood plains that range in depth from 6.6 to 7.2 feet (203 to 218 centimeters [cm]) below surface. Coy soils are characterized as very deep well drained soils that occur around drainage ways. These soils reach a depth of 6.6 feet (203 cm) below surface. Clareville soils are characterized as very deep and well drained loams that can reach depths up to 6.6 feet (203 cm) below surface (NRCS 2017).

### Flora and Fauna

The APE is located near the juncture of the Balconian and Taumaulipan biotic provinces (Blair 1950). Because the project is situated at the ecotone of two biotic provinces, its floral and faunal resources consist of a mix of the two. Trees, plants, and grasses in this region include cedar (*Juniperus ashei*), live oak (*Quercus fusiformis*), Texas mountain laurel (*Sophora secundiflora*), mesquite (*Prosopis glandulosa*), prickly pear (*Optunia* sp.), agarita (*Berberis trifoliolata*), cat claw (*Smilax bona-nox*), mustang grape (*Vitis mustangensis*), sotol (*Dasyilirion texanum*), and Spanish dagger (*Yucca* sp.) (Blair 1950).



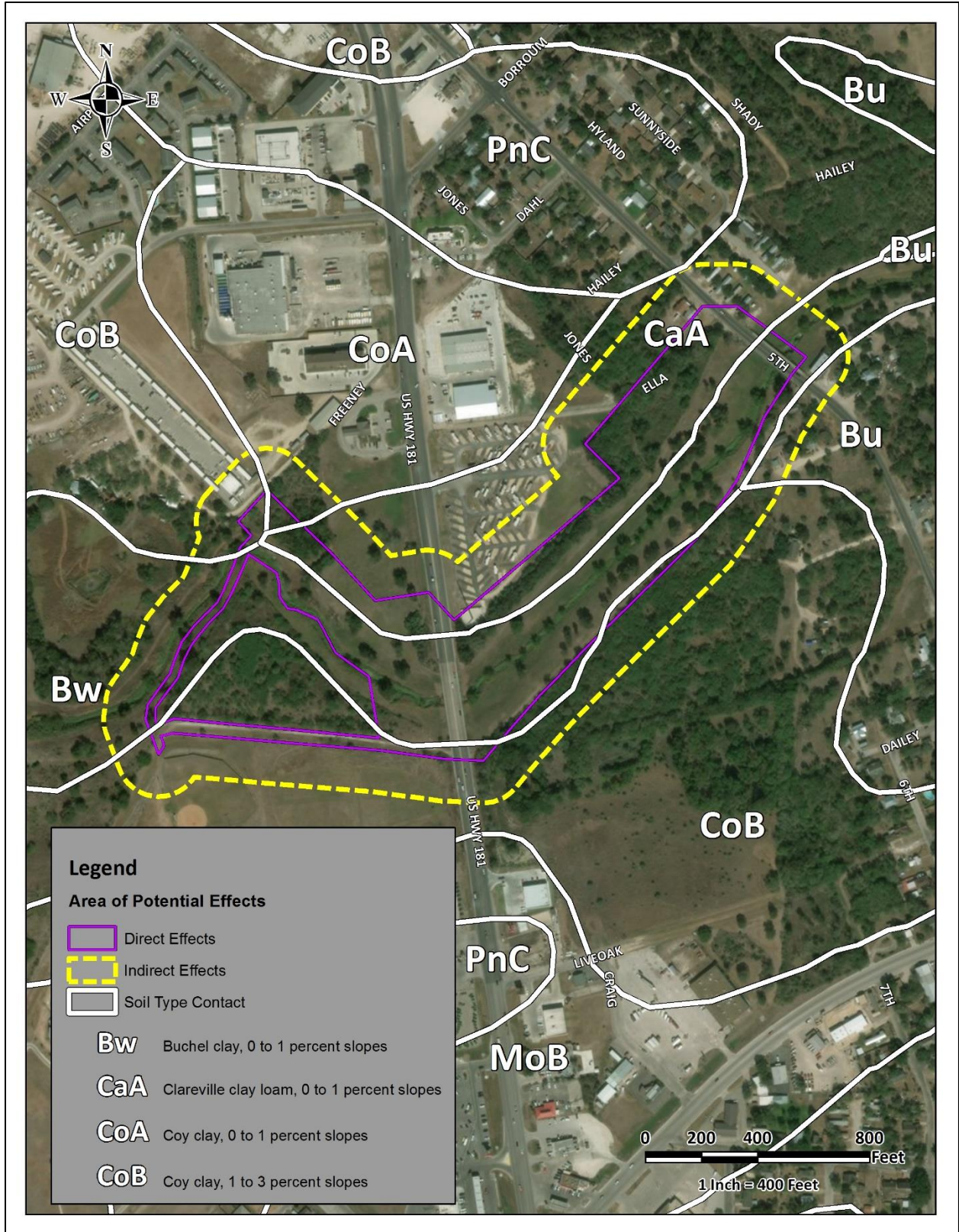


Figure 2-1. Soils within the indirect and direct Area of Potential Effect.

The fauna that inhabit the south-central Texas region includes at least 95 bird and 29 mammal species (Blair 1950). The area also contains a wide array of reptiles, fish, and amphibians. Mammal species that were noted within the APE include white-tailed deer (*Odocoileus virginianus*), nine-banded armadillo (*Dasybus novemcinctus*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), coyote (*Canis latrans*), cottontail rabbit (*Sylvilagus audubonii*), feral hog, domestic and feral cat, and squirrel (Blair 1950).

### **Karnes County Climate**

The climate in Karnes County is characterized subtropical with summers that are typically hot and humid. From May through September, the average temperature 92.78 degrees with an average maximum temperature of 102.4. Temperatures during the weather are typically mild, with an average temperature of 66 degrees, from the months of December through February. Annual precipitation within Karnes County is 27 inches with approximately 62 percent or 17 inches occurring from April to September (Molina 1999).

## CHAPTER 3. CULTURAL CONTEXT

The Escondido Creek Project is located at the cusp of Central Texas and South Texas archeological regions (Turner and Hester 1999). Based on extensive research conducted by Black (1989), Collins (2004), Hester (2004), Johnson et al. (1962), Prewitt (1981, 1985), Sorrow et al. (1967), Suhm (1957, 1960), Suhm et al. (1954), and Weir (1976), Central Texas has a well-established chronological sequence beginning 12,000 years ago. The sequence for South Texas is less defined, though the project area likely shares many of the attributes identified for central Texas. The chronological sequence of central Texas is divided into four cultural periods: Paleoindian (11,500–8,800 B.P.), Archaic (8,000–1,200 B.P.), Late Prehistoric (1,200–400 B.P.), and Historic (400 B.P. to present).

Although the South Texas Plains archeological region is generally considered a distinct archaeological entity, much of what is known of the area is in part derived from comparisons and extrapolation with adjacent areas that been the subjected to more intensive investigation, particularly the Central Texas archeological region. Similar to the cultural chronology provided by the Central Texas region, the South Texas chronology follows the same fourfold divisions. The chronology for South Texas is similar. Following Hester's (2004) chronology, the four prehistoric cultural periods in South Texas include the Paleoindian (11,200–8,000 B.P), Archaic (8,000–1,200 B.P.), Late Prehistoric (1,200–400 B.P.), and Protohistoric (400–300 B.P).

These divisions are not absolute, but represent contrived temporal categories based on perceived cultural expressions reflected in lithic technology, subsistence practices, mortuary behavior, and other sorts of material remains. These material expressions further reflect boarder patterns in the environment and human behavior.

The most commonly recorded sites in South Texas are open occupation sites. In some cases, meaningful excavation of these sites has proven to be a challenge to archaeologists (Hester 2004). This vexing situation stems from the exclusively horizontal patterning of many open occupation sites in the region. These sites tend to exist as laterally extensive occupation and use areas where temporally separated components occur on a single surface without overlapping (Hester 2004). Other open occupation sites, especially in upland settings, occur on stable ancient surfaces with very shallow or deflated cultural deposits that are sometimes impossible to conclusively attribute to a particular time period.

Comparatively few deeply stratified occupation sites have been excavated in South Texas. Black (1989) posits that this is the result of both settlement patterning and depositional context. Common site types in South Texas include lithic procurement and reduction sites, rock shelters, artifact caches, and burials. By contrast, the Central Texas archaeological region is one of the most intensively studied in Texas (Black 1989). More sites have been recorded and excavated in Central Texas than any other region. Aside from procurement and reduction sites, burned rock middens, located on hilltops or upland settings are the most characteristic prehistoric site type in Central Texas. However, site types also include buried terrace occupation sites, sites in rock shelters, and burials.

### **Paleoindian Period**

The Paleoindian period was commonly characterized throughout Texas by nomadic big-game hunters who heavily relied on megafauna of the Pleistocene (e.g., mammoth, mastodon, bison, camel, and horse) for subsistence (*sensu* Willey 1966). However, a more accurate description of this period is presented by Bousman et al. (1990:22): "...this period may have seen use by small, mobile bands of nonspecialized hunters and gathers occasionally utilizing megafauna perhaps only as the opportunity arose." Thus, according to Bousman et al. (1990), Paleoindians used a wider variety of resources than previously thought. Evidence of this broader resource subsistence is based on the works of Johnson (1977), Collins (1998:155–156), and Collins and Brown (2000). Johnson (1977) reviewed reports on numerous Paleoindian sites that indicated a range of small and medium fauna were harvested in addition to big game. Investigations at the Wilson-Leonard site (41WM235), the Gault site (41BL323), and Lubbock Lake (41LU1) provide evidence of small and medium faunal remains (i.e., turtle, rabbit, squirrel, snakes, gopher, and deer) associated with megafaunal remains (i.e., bison and mammoth) (Collins 1998:155–156). Clovis and Folsom points are the primary diagnostic artifacts associated with this period (Turner and Hester 1999; Collins 2004).

### **Archaic Period**

The Archaic period spans nearly 7,000 years of prehistory. The primary cultural marker of this time period is the burned rock midden (Collins 2004:119). These piles of burned limestone, sandstone, and other lithic debris represent the remains of multiple ovens that were used, reused, and discarded over time. Their appearance signifies a shift from a big-game hunting subsistence strategy to a less mobile,

generalized subsistence strategy. Projectile point technology also changed; lanceolate-shaped points gave way to dart points that were stemmed and barbed (Black 1989). During the Archaic Period, the climate changed from wet and mild conditions seen in the Paleoindian period, to warmer and drier conditions. Researchers believe that the changes in climate influenced prehistoric subsistence strategies (Story 1985: 38–39; Weir 1976).

The Archaic period is typically divided into three sub-periods: early, middle and late. The Early Archaic period is still relatively obscure in the archeological record. The majority of Early Archaic sites are distributed around the Edwards Plateau along the eastern and southern margins, suggesting concentrations near reliable water sources with a variety of food resources. These sites are generally described as small with highly diverse tool assemblages. Cultural material associated with Early Archaic sites are points (specifically Angostura, Early Split Stem, and Martindale-Uvalde) (Collins 2004), Clear Fork and Guadalupe bifaces, manos, hammerstones, burins, metates, circular scrapers, and various biface styles (Osburn et al. 2007), suggesting specialized tool usage. Also burials have been found associated with this period, although very few (Prewitt 1981; Story 1985).

During the Middle Archaic, the climate became very warm and dry. The number and size of burned rock middens from this period increases dramatically, leading many archeologists to posit not only a population increase but also an intensification in the types of food processing typically done in earth ovens. Types of projectile points that frequently occur on Middle Archaic sites are Bulverde, Langtry, and Kinney dart points (Hall et al. 1986). Other materials found among Middle Archaic assemblages are an increase of wooden and bone implements, plant processing implements, and the intensive use of large burned rock features. Burials during this period become more frequent than in the previous period.

During the Late Archaic, climatic conditions once again became more mesic. Cultural traditions observed in the Middle Archaic carry over in to the Late Archaic. There is an intensification of the Middle Archaic traditions. Trade is observed during this period with the exchanging of material from different localities. Coastal materials, such as shells used as ornaments, have been reported to have been exchanged for both finished tools and raw material (Story 1985). Rock ovens and hearths were continuously used as a means to prepare food, and bison once again became available. Ritualized mortuary practice became more common during the Late Archaic, with interments becoming quite elaborate in terms of associated burial furniture. Large cemeteries established along drainages suggested the importance of the location,

and perhaps territorial ties by groups to these localities (Story 1985). Location of these cemeteries “are believed to be the result of the same cultural group using a place on the landscape to reaffirm their rights of descent and control/access to critical resources” (Osburn et al. 2007:15; see Taylor et al. 1995:627–631 and Taylor 1998).

### **Late Prehistoric Period**

Of the prehistoric periods, the Late Prehistoric period is the best defined, marked by the adoption of the bow and arrow and by the production of small arrow points (Hester 1981:122). The emergence of agriculture and ceramics also occurred in the Late Prehistoric. While incipient agricultural and ceramic use is evident in South Texas, most researchers believe that these technologies diffused into South Texas from other regions (Bousman et al. 1990). Late Prehistoric hunter-gathers exploited a wide range of animal and plant resources. Food processing techniques relied heavily on manos, metates, and earth ovens for cooking. Diagnostic artifacts of this time period include Scallorn, Edwards and Perdiz arrow points. Sites tend to be more closely clustered to creeks, rather than dispersed along other landforms, suggesting intensifying nucleation around reliable natural resources.

### **Protohistoric and Historic Period**

The Protohistoric period (ca. A.D. 1528–1700) is ushered in by the arrival of the Spanish explorer Cabeza de Vaca in 1528 into south and southeast Texas. Hester (2004) generally considers the period prior to 1700 as Protohistoric. Archeological sites dated to this sub-period contain a mix of European (e.g., metal and glass arrow points, trade beads, and wheel-made or glazed ceramics) and traditional Native American artifacts (e.g., manufactured stone tools). The effect the Spanish presence in Mexico had on Indians in Texas prior to about 1700 is not well-understood. What is known is that the initial arrival of Spanish missionaries and explorers spread severe disease that killed, displaced, and fragmented a huge percentage of the population. As colonization spread from Mexico, some of the Native American groups moved northward to avoid the Spanish. Many others formed extensive confederacies to protect each other, resist against the Spanish settlers, and maintain access to Central Texas bison hunting territories (Tomka, personal communication 2018). At the same time, invading Indian groups from the north put pressure on Native American groups in North Texas (Nickels et al. 1997). Historians believe that these pressures led to intense territorial disputes, further destabilizing Native American populations.

## **Karnes County**

Occupation of the Karnes County area began with two Spanish Land Grants issued to Andres Hernandez and Luis Antonio Menchaca, dated April 12, 1758 (Long 2018). The two settlers set up ranching operations with the San Antonio River Valley, which set the foundation for what would become the center for ranching activity between the San Antonio de Béxar and La Bahia settlements in the mid-eighteenth century. In 1770, the Spanish established Fuerte de Danta Cruz del Cibolo in what would become northern Karnes County, near present day Czystochowa, Texas. The fort was established as a means of protection for Spanish ranchers from Indian raids, but was abandoned in 1783 (Long 2018).

The first Anglo settlers to Karnes County arrived in the 1840s, with the first Anglo-American settlement being established in 1852 at Helena (Long 2018). Helena was founded at the site of Alamita, a former Mexican settlement, roughly 11 miles (19 km) north of the Escondido Creek Project. On February 4, 1854, Karnes County was established by state legislature. The new county was named for Texas Revolutionist Henry Wax Karnes. Anglo settlement in Karnes County continued with the settlement of Panna Maria in 1854. Panna Maria was settled by a group of Upper Silesia Poles, led by Franciscan priest Leopold Moczygamba. It was the first Polish colony in United States (Long 2018).

Cattle ranching continued to be the foundation of the Karnes County economy leading up to the Civil War (Long 2018). Because the area had not yet divulged in the agricultural industry, enslaved peoples formed a small percentage of the county population (15-percent, or 327 individuals, in 1860). As a result, the Karnes County economy was minimally impacted by emancipation. However, the arrival of the railroad in the mid-1880s did have an impact on the county's economy. Readily available transportation and access to new markets prompted a diversified farming economy, including a rise in cotton, sorghum, and potatoes crops. By the late-nineteenth to early-twentieth century the number of farms had quadrupled, and by the 1930s more than half of Karnes County farmland was worked by tenant farmers (Long 2018).

Today, Karnes County continues to be a rural landscape dominated by agricultural fields and ranchland (Long 2018). Beef cattle, hay, wheat, corn, and sorghum are among the chief agricultural products produced in the county, with uranium-mining also present. In 2014 the population of Karnes County was estimated at 14,906, with a predominantly Hispanic heritage (Long 2018).

## **Previous Archaeology**

A review of the Texas Archaeological Site Atlas (*Atlas*), an online data based maintained by the Texas Historical Commission (THC), revealed that no cultural resource surveys or archaeological sites have been conducted or recorded within the APE footprint (**Figure 3-1**) (THC 2018). Additionally, no previously conducted cultural resource surveys or previously recorded archaeological sites are located within a 1-mile radius of the APE. Within a 1-mile (1.6 kilometer [km]) radius of the project footprint, two cemeteries and three Official Texas Historical Markers (OTHMs) were identified (THC 2018).

The two cemeteries (Butler Family Cemetery and an unknown cemetery) are adjacent to each other and located approximately 0.50 mile (0.8 km) northeast of the eastern end of the APE (**see Figure 3-1**) (THC 2018). The Butler Family Cemetery contains 40 interments with dates ranging from 1853 to 2014. The first interment, Emmet W. Butler, who was killed in a Helena shoot-out, took place in 1848. Earlier dates seen within the cemetery are from family members who have been moved to the cemetery. An unknown cemetery is located approximately 65 feet (20 m) south of Butler Family Cemetery. Unfortunately, no other information is available on the THC's sites Atlas (THC 2018).

The three OTHMs are within 0.30 to 0.50 mile (0.5 to 0.8 km) of the eastern end of the APE footprint (**see Figure 3-1**) (THC 2018). One is located northeast of the APE and marks the Butler Family Cemetery. The other two are located southeast of the APE and documents the founding of the Kenedy and Saint Matthew's Episcopal Church. These five cultural resources are well outside the limits of the APE and will not be impacted (THC 2018).

The closest archaeological site to the APE (41KA101) is approximately 1.50 miles (2.4 km) northwest of the western end of the APE (THC 2018). The site, 41KA101, is a prehistoric artifact scatter located within an agricultural field approximately 1,600 feet (488 m) north of the confluence of Escondido Creek and Doe Branch. The site has been plowed and collected on for over 30 years and contains cultural materials that include a Perdiz type projectile point, three ceramics, 30 plus broken bifaces, 15 plus scrapers, deer bone, bison bone and teeth, an alligator mandible, mussel shell, and several hundred flakes (THC 2018).



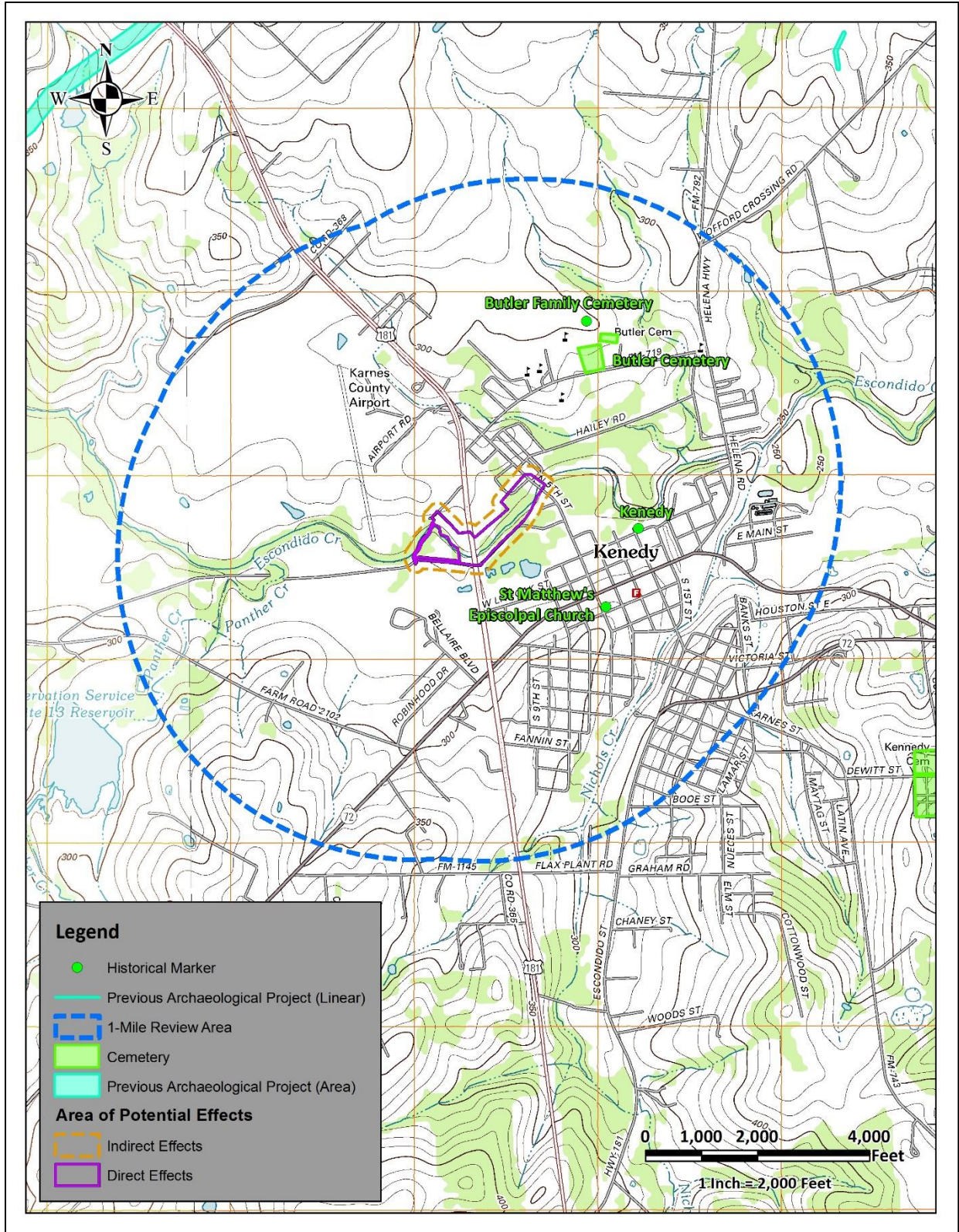


Figure 3-1. Known cultural resources within 1-mile (1.62 kilometers) of the indirect and direct Area of Potential Effects.

## **Historic Aerial Photography Review**

Aerial photographs provide insight into the history of land use over time. The first aerial image taken of the project foot print was captured in 1950 (**Figure 3-2**). In the 1950 aerial, the entire project foot print was comprised of agricultural fields with a majority of residential and commercial development located on N. 5<sup>th</sup> Street. Development of the area surrounding the project footprint is limited, and consisted of few structures located outside the eastern and central portions of the project footprint. At the time, US Highway 181 had not yet been constructed; however, the two-track road that currently borders the southern edge of the proposed project footprint is shown as a well-established road. The road is shown as a continuation of Pullin Street, extending west/southwest, following the alignment of Escondido Creek. The eastern and central portions of the road is shown to be on the edge of the southern bank of the creek (**see Figure 3-2**).

In 1955, the aerial photograph depicts the establishment of U.S. Highway 181. During the construction of the highway, the northern bank of Escondido Creek, at the intersection of the highway, had been heavily impacted (**Figure 3-3**). The impacts of the northern bank consisted of the cutting of approximately 50 to 250 feet (15 to 76 m) north/south to approximately 750 feet (229 m) east/west, of the landform and the realignment of the portion of the creek channel that intersects the highway (**see Figure 3-3**). The image of the realigned creek channel is faint; however, it can be seen shifted north of the original alignment, intersecting US Highway 181, at the center of the bridge (**see Figure 3-3**). Despite the grainy appearance of the aerial photograph from 1961, a clearer depiction of the realigned channel can be seen (**Figure 3-4**).

Aerial photographs from 1961 and 1968 are grainy; however, some changes to the area can be seen. The structures along the eastern and central portions of the APE are no longer present in 1968 and the well-defined road on the southern boundary of the project footprint is heavily vegetated (**Figure 3-5; see Figure 3-4**). No aerial photographs during the 1970s were available. During a conversation with a local resident familiar with the area, it was revealed that, in 1971, the majority of northern and southern banks of the creek within and outside of the project footprint had been widened, scraped, and leveled for flood control purposes. Evidence of the widening, scraping, and leveling of the banks is depicted in the 1981 aerial photograph, exposing the creek channel (**Figure 3-6**).

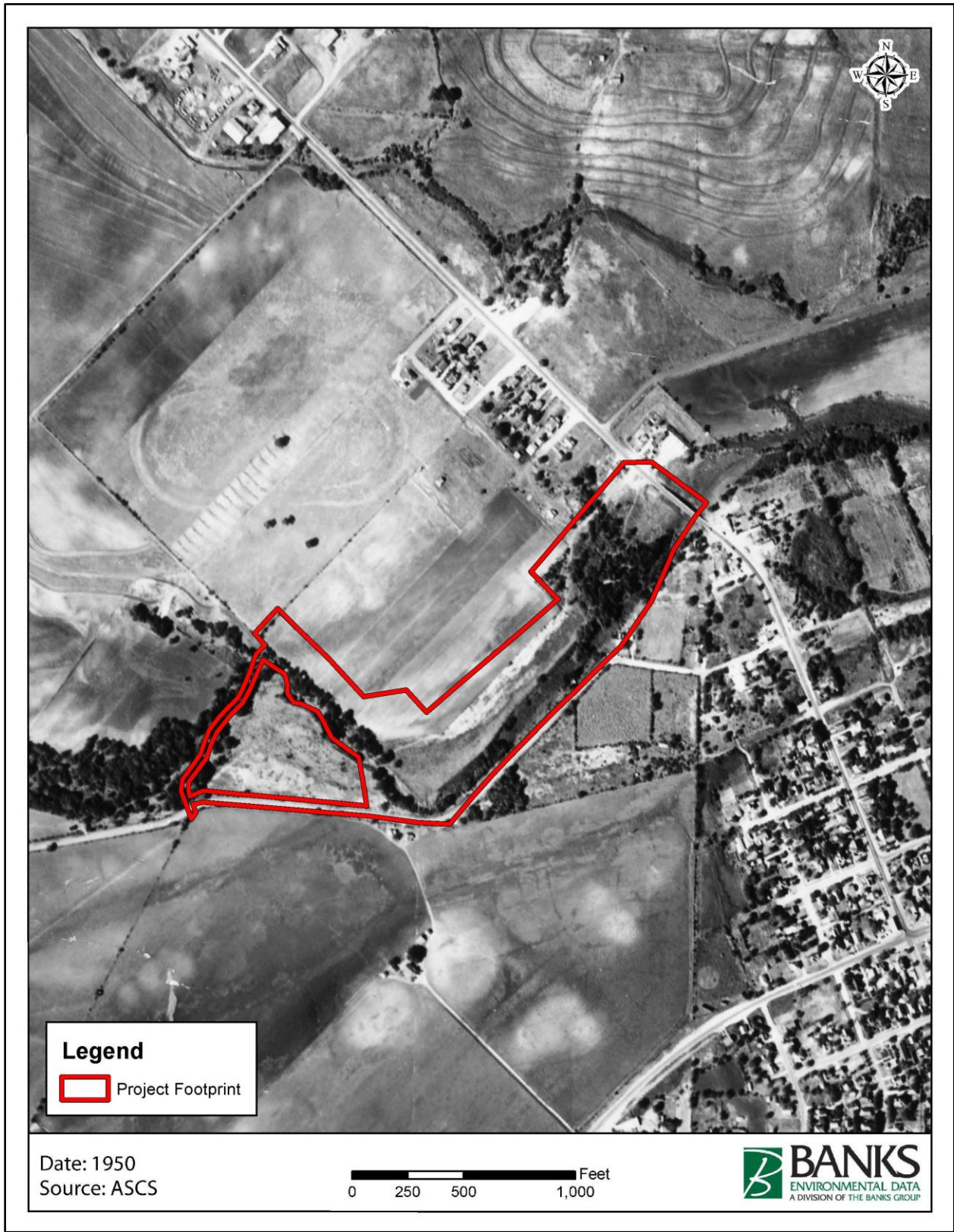


Figure 3-2. The project footprint projected on a 1950 aerial photograph.

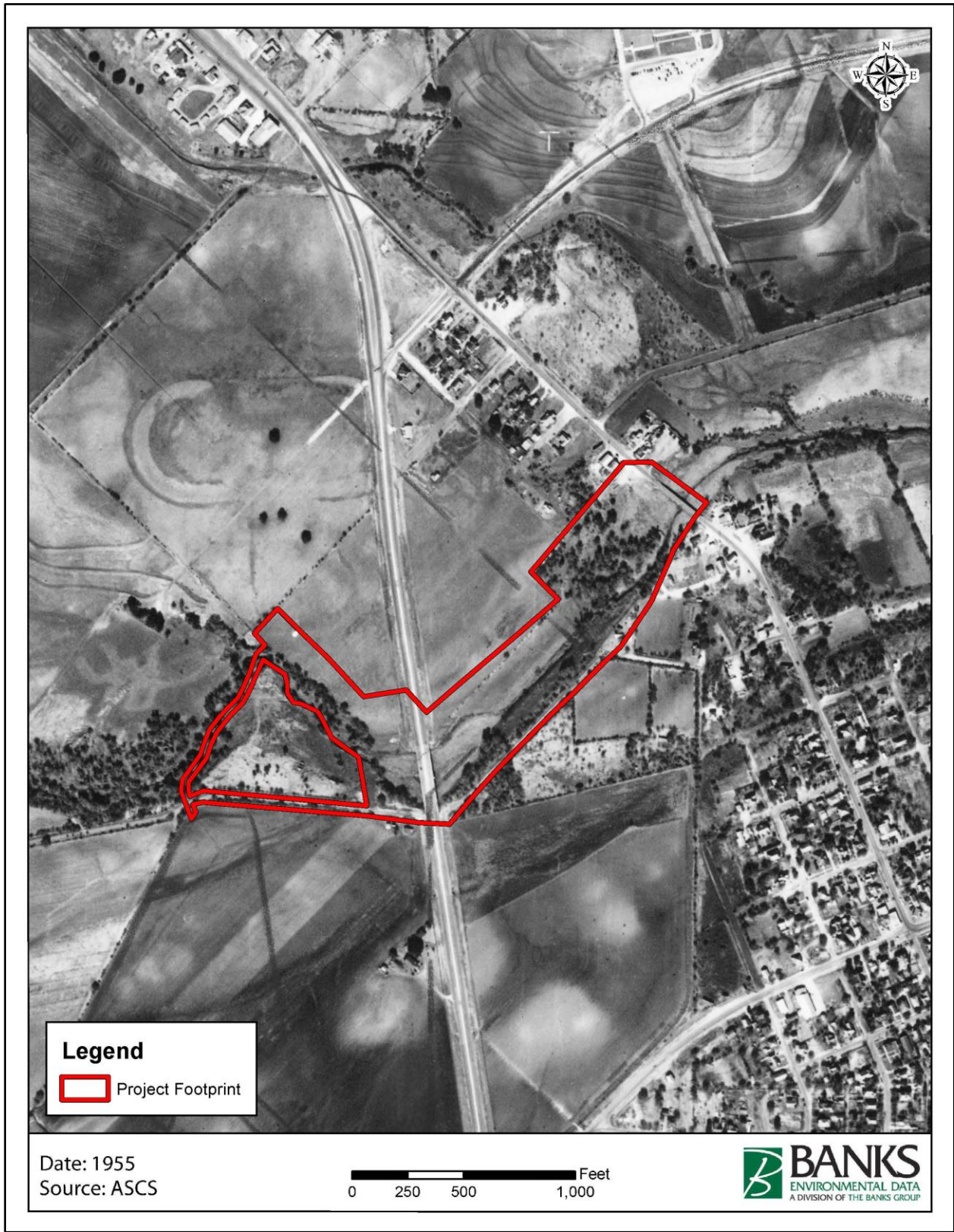


Figure 3-3. The project footprint projected on a 1955 aerial photograph.

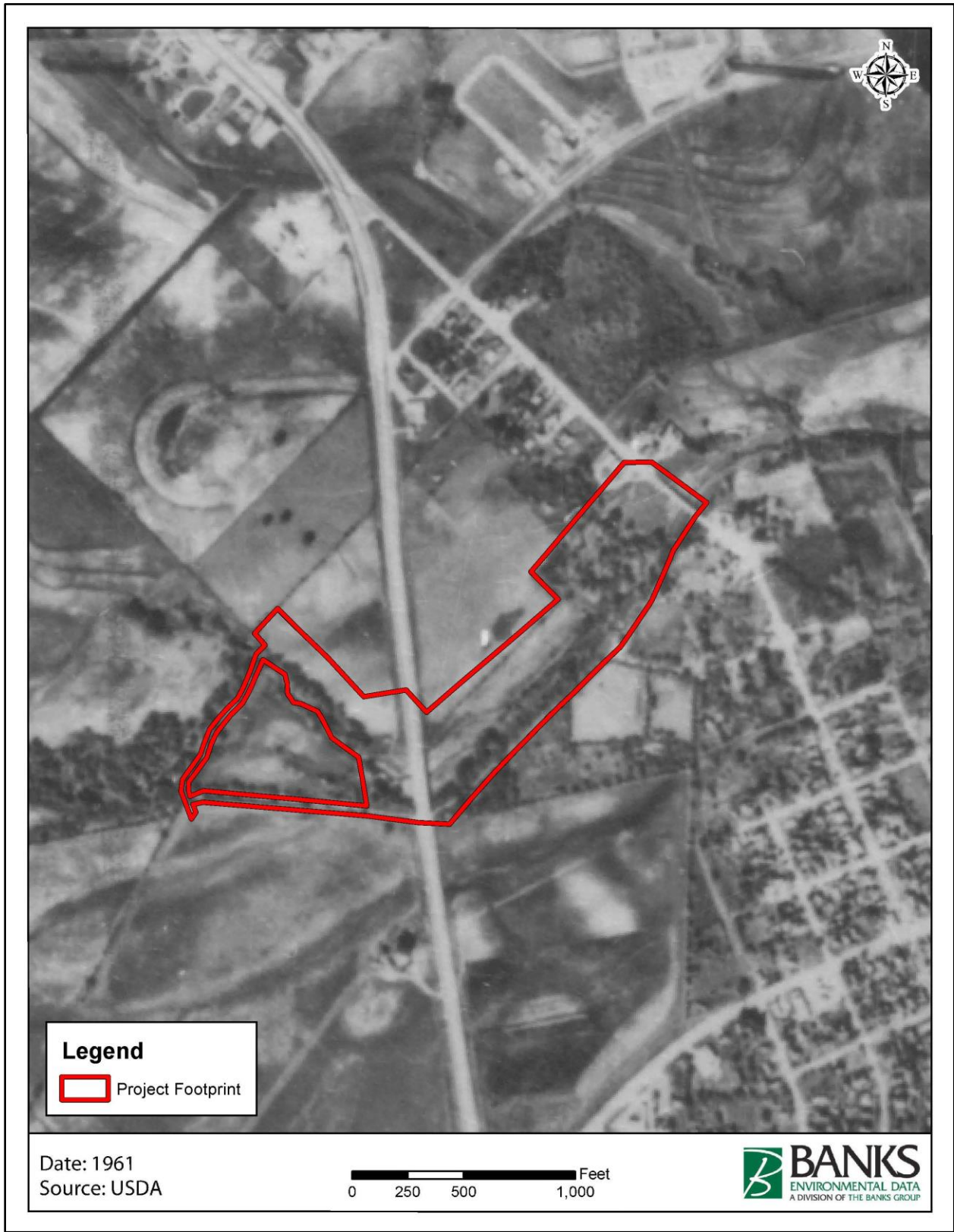


Figure 3-4. The project footprint projected on a 1961 aerial photograph.

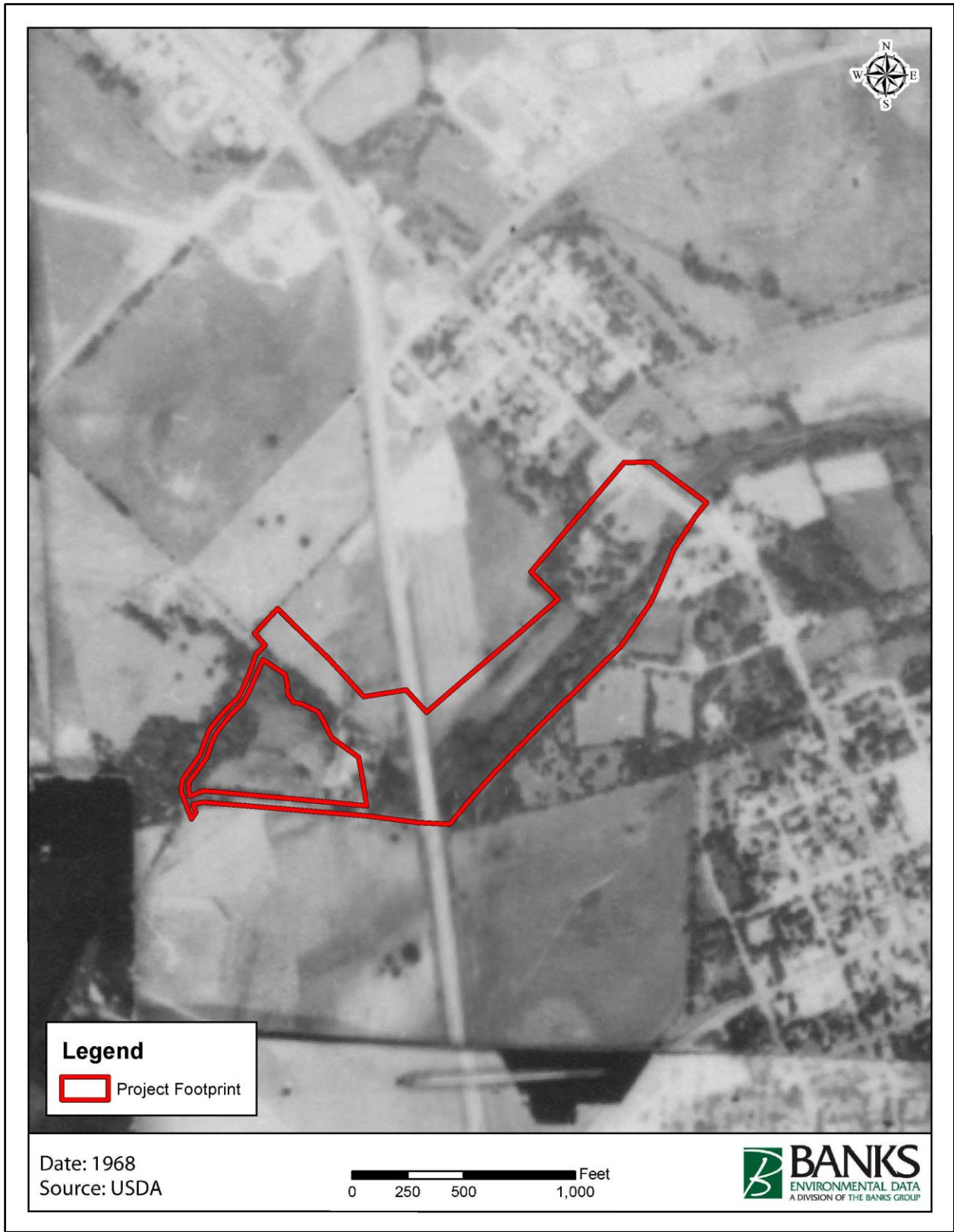


Figure 3-5. The project footprint projected on a 1968 aerial photograph.

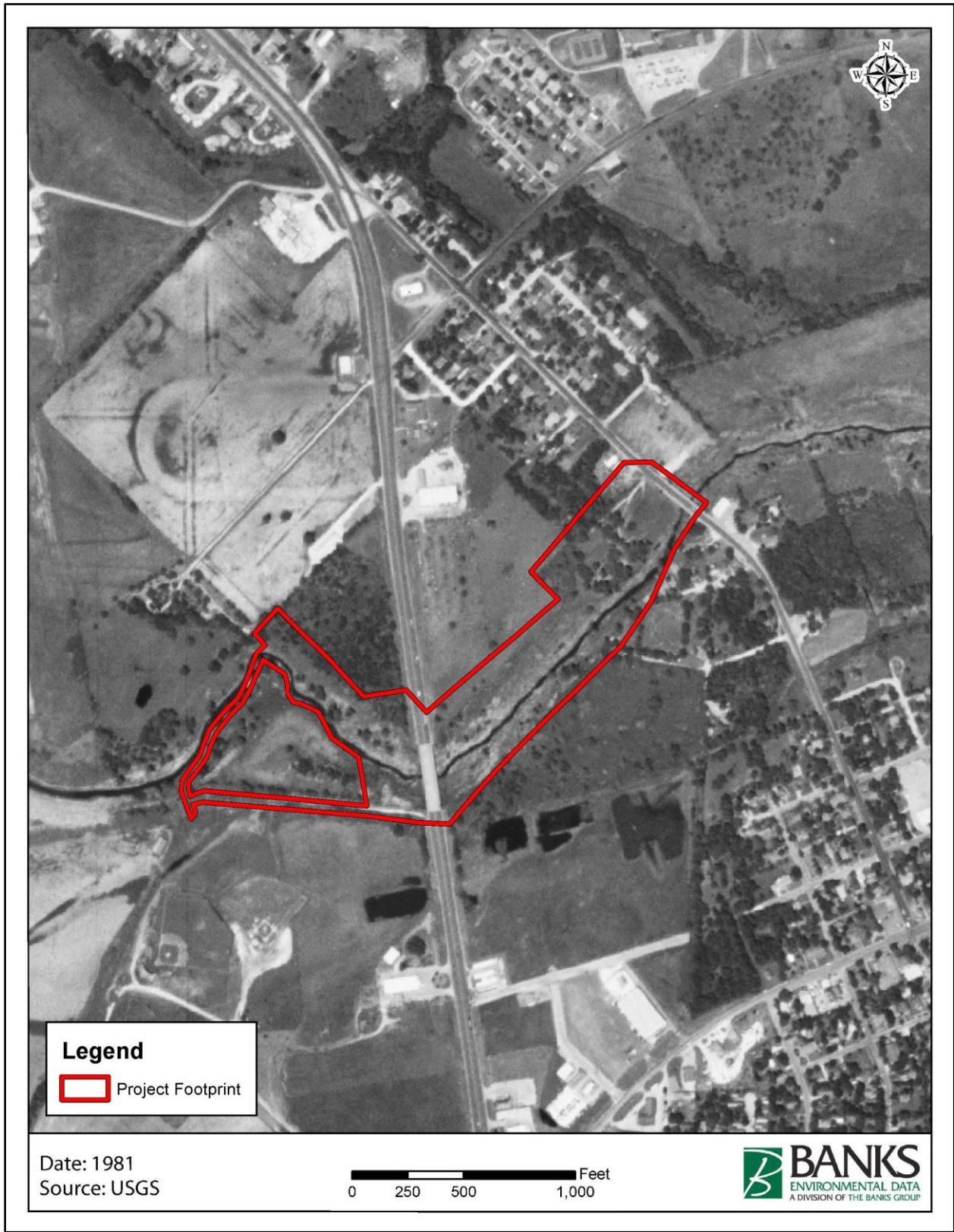


Figure 3-6. The project footprint projected on a 1981 aerial photograph.

In 1981, commercial and recreational development occurred within the agricultural fields to the north and south of the APE and continued through to 1995 (**Figure 3-7; see Figure 3-6**). The 1995 aerial photograph depicts a sparsely vegetated APE with few trees and the eastern portion of the road depicted in 1950, 1955, and 1961, becomes a two-track (**see Figures 3-2, 3-3, 3-4, and 3-7**). By 2004, the APE became more densely vegetated (**Figure 3-8**). The 2008 aerial depicts the APE within a maintained floodplain corridor along the northern and southern banks of Escondido Creek with few stands of trees and continued development to the north and south of the APE (**Figure 3-9**). Maintenance of the floodplain within the APE continued through 2016 and has remained the same for the past 10 years (**Figure 3-10**).





Figure 3-7. The project footprint projected on a 1995 aerial photograph.

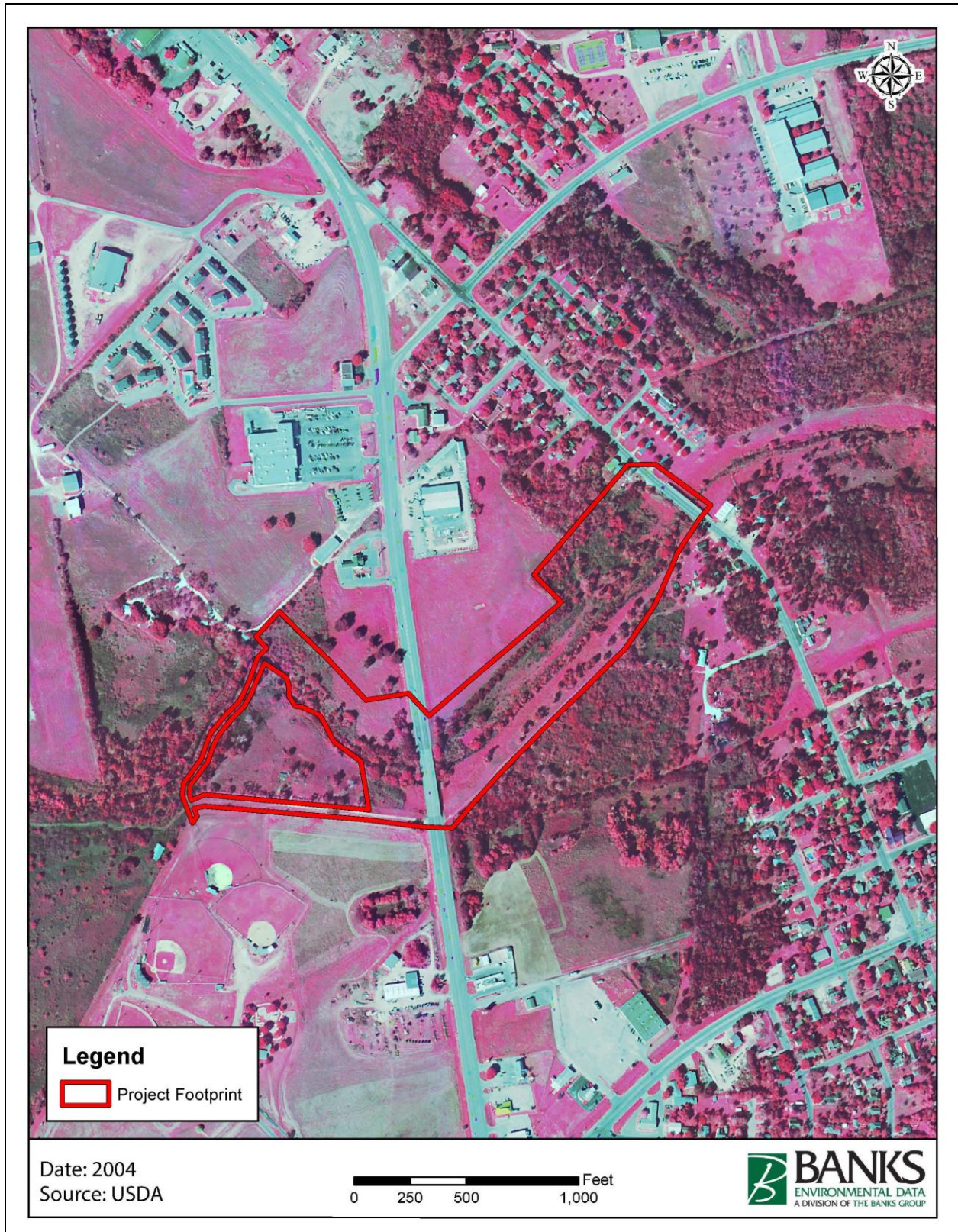


Figure 3-8. The project footprint projected on a 2004 aerial photograph.

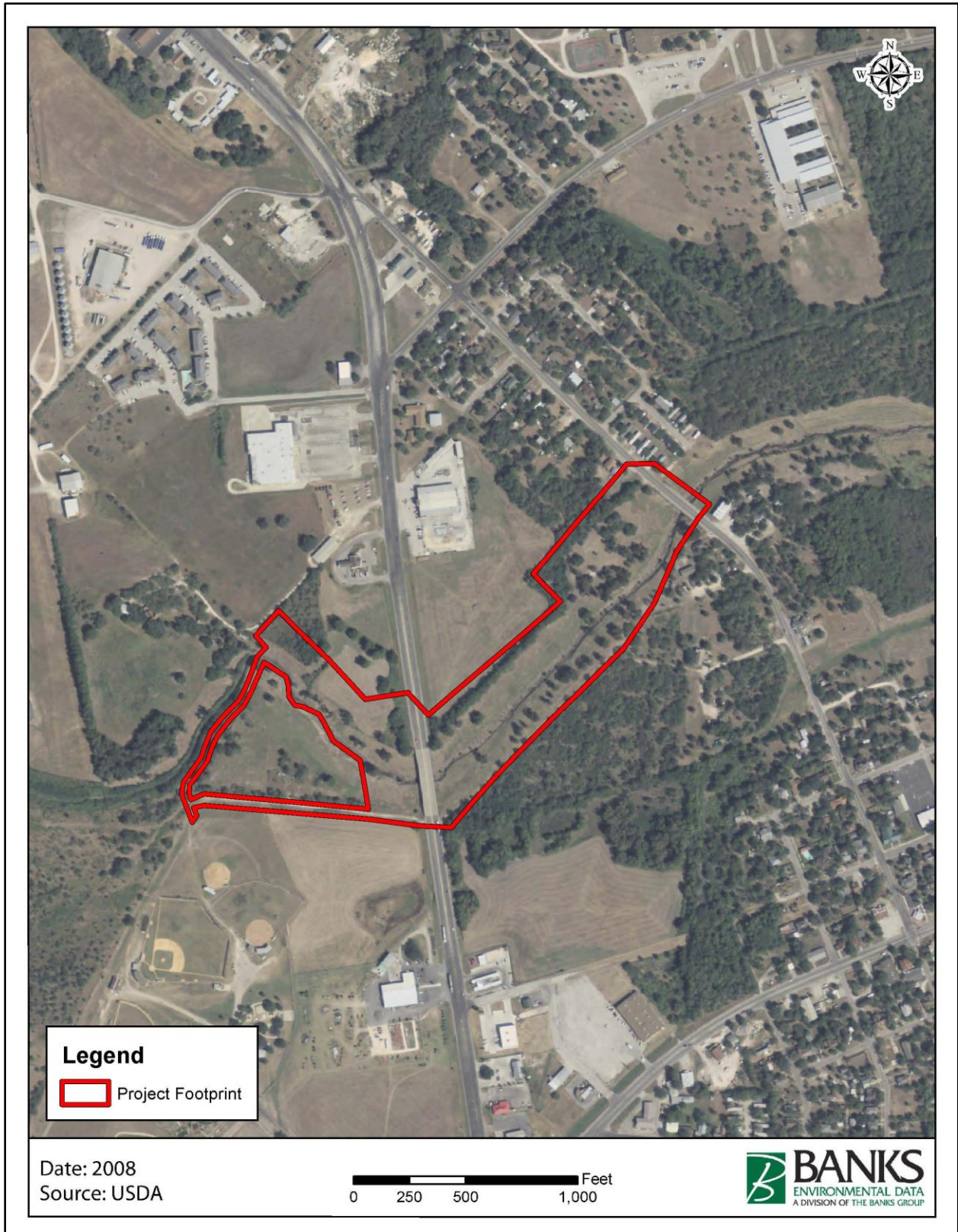


Figure 3-9. The project footprint projected on a 2008 aerial photograph.

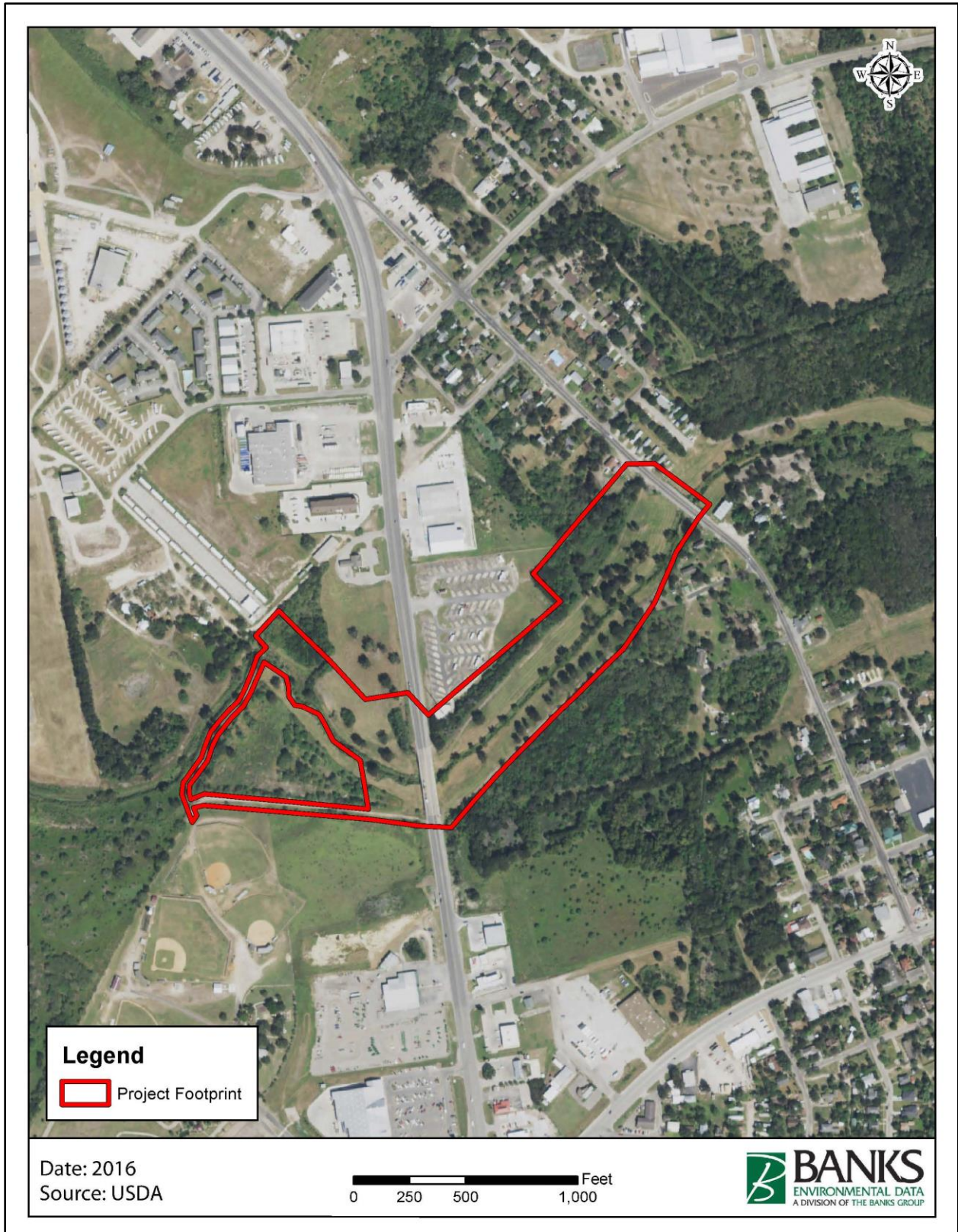


Figure 3-10. The project footprint projected on a 2016 aerial photograph.

## **CHAPTER 4. METHODS OF INVESTIGATION**

**RKEI** conducted archaeological investigations in compliance with Section 106 of the NHPA and the ACT administered by the THC. Investigations examined the direct APE, totaling 24.7 acres, as well as the indirect APE that included all properties that fall within a radius of 150-feet (46 m) surrounding the direct APE. Investigations within the direct APE included an intensive pedestrian survey coupled with shovel testing and excavation of backhoe trenches. Investigation of the indirect APE included an assessment of eligible standing historic resources within the surrounding adjacent parcels. All work was conducted in accordance with the Archeological Survey Standards for Texas as set forth by the Council of Texas Archeologists (CTA) and the THC under Texas Antiquities Committee Permit Number 8435.

### **Pedestrian Survey with Shovel Testing**

The pedestrian survey was conducted along two transects that were spaced no greater than 98 feet (30 m) apart. Shovel tests were excavated at intervals ranging from 325 to 492 feet (100 to 150 m) in areas where surface visibility was below 30 percent. **RKEI** conducted shovel tests at a rate of one every two acres per THC minimum standards. Based on the THC minimum standards for projects such as these, 13 shovel tests were excavated within the direct APE (24.7 acres). An additional six shovel tests were excavated around a positive shovel test to determine the horizontal extent of cultural materials. The additional shovel tests were placed within 32.8 feet (10 m) of the positive shovel test, as limited by the boundary of the direct APE.

All shovel tests were approximately 11.8 inches (30 cm) in diameter and, unless prevented by obstacles or buried features, extended to a depth of 1.97 feet (60 cm) below surface. Each shovel test was excavated in 3.93-inch (10-cm) intervals. All soil from each level was screened through ¼ inch hardware cloth. Any collected artifacts were to be labeled with appropriate provenience information for laboratory processing and analysis. A shovel test form was completed for each excavated shovel test. Data collected from the shovel test included the final excavation depth, a tally of all materials encountered from each 3.93-inch (10-cm) level, and a brief soil description (texture, consistency, Munsell color, inclusions). The location was recorded using a Garmin, hand-held, GPS unit. Shovel test locations were sketched onto a current aerial photograph of the APE as a backup to the GPS

information. Any additional observation considered pertinent was included as comments on the standard shovel test excavation form.

### **Backhoe Trenching Excavations**

The APE was located within a topographic setting that had potential for containing deeply buried archaeological sites. The primary method for quickly and efficiently exploring these locations was backhoe trenching. Backhoe trenches were excavated once the initial pedestrian survey was completed. Backhoe trenches were located in areas where depths of impact would exceed the depths of shovel tests and in areas deemed to contain intact soils.

Backhoe trenches measured 15 feet (4.5 m) in length, 3 feet (91 cm) in width, and were excavated to depths ranging from 6 to 8.43 feet (1.83 to 2.57 m). Spoils from the backhoe trench were examined to assess the presence or absence of cultural material. During the excavation of the trenches, mechanical excavation was temporally stopped at a depth of 4.5 feet (1.38 m) so an archaeologist could safely get in to examine the profiles and document what was observed within the trenches. During the inspection of the trenches, the walls were scraped down to better identify strata changes, features, and artifacts. A selected wall profile was photographed with a scale, and a detailed profile drawing was made of the soil strata noted. Any artifacts noted in the representative trench wall segment were shown on the profile. Once the trench was documented, excavations continued to assess the potential for deeply buried cultural deposits.

Excavation of the trenches were conducted by an experienced backhoe operator and monitored by an experienced archaeologist. Excavations were performed in accordance with Occupational Safety and Health Administration (29 CFR Part 1926) and the Texas Trench Safety Act (H. B. 1569). After each trench was examined and documented, the backhoe operator backfilled and compacted the area, returning it, as much as possible, to its original state.

### **Artifact Collection Policy**

During the archaeological investigations, only temporally diagnostic artifacts were to be collected from the surface, shovel tests, and backhoe trenches. Artifacts possessing little scientific value were discarded pursuant to Chapter 26.27(g)(2) of the ACT. No temporally diagnostic artifacts were encountered during the investigations. Artifacts possessing little scientific value that were

encountered during the subsurface investigations were photographed, their province was noted on appropriate forms, and were returned when backfilling.

### **Historic Resources Assessment**

In addition to the excavation of shovel tests and backhoe trenches, a project historian photo-documented any above ground resources (i.e., buildings, structures, and objects) believed to be older than 45 years old within the direct APE and the 150-foot (46 m) indirect APE. As the above ground resources were located on private property, access of the project historian was limited to public access areas such as roads.

### **Laboratory Methods**

All project related documentation produced during the investigations was prepared for curation in accordance with federal regulation 36 CFR Part 79, and THC requirements for State Held-in-Trust collections. Field notes, field forms, photographs, and field drawings were placed into labeled archival folders and converted into electronic files. Digital photographs were printed on acid-free paper, labeled with archivally appropriate materials, and were placed in archival-quality plastic sleeves when needed. All field forms were completed with pencil. Ink-jet produced maps and illustrations were placed in archival quality plastic page protectors to prevent against accidental smearing due to moisture. A copy of the report and all digital materials was saved onto a CD and stored with field notes and documents.

## CHAPTER 5. RESULTS OF INVESTIGATIONS

In May 2018, RKEI conducted an intensive cultural resources survey of 24.7 acres for the proposed Escondido Creek Linear Park in Kenedy, Karnes County, Texas. The cultural resources investigations were conducted over the course of three days and consisted of an intensive pedestrian survey augmented with shovel tests, backhoe trenching, and a Historic Resources Assessment. The intensive pedestrian survey augmented with shovel tests was conducted on May 18, 2018, while backhoe trench excavations were conducted on May 22–23, 2018. The Historic Resources Assessment was conducted on May 22, 2018.

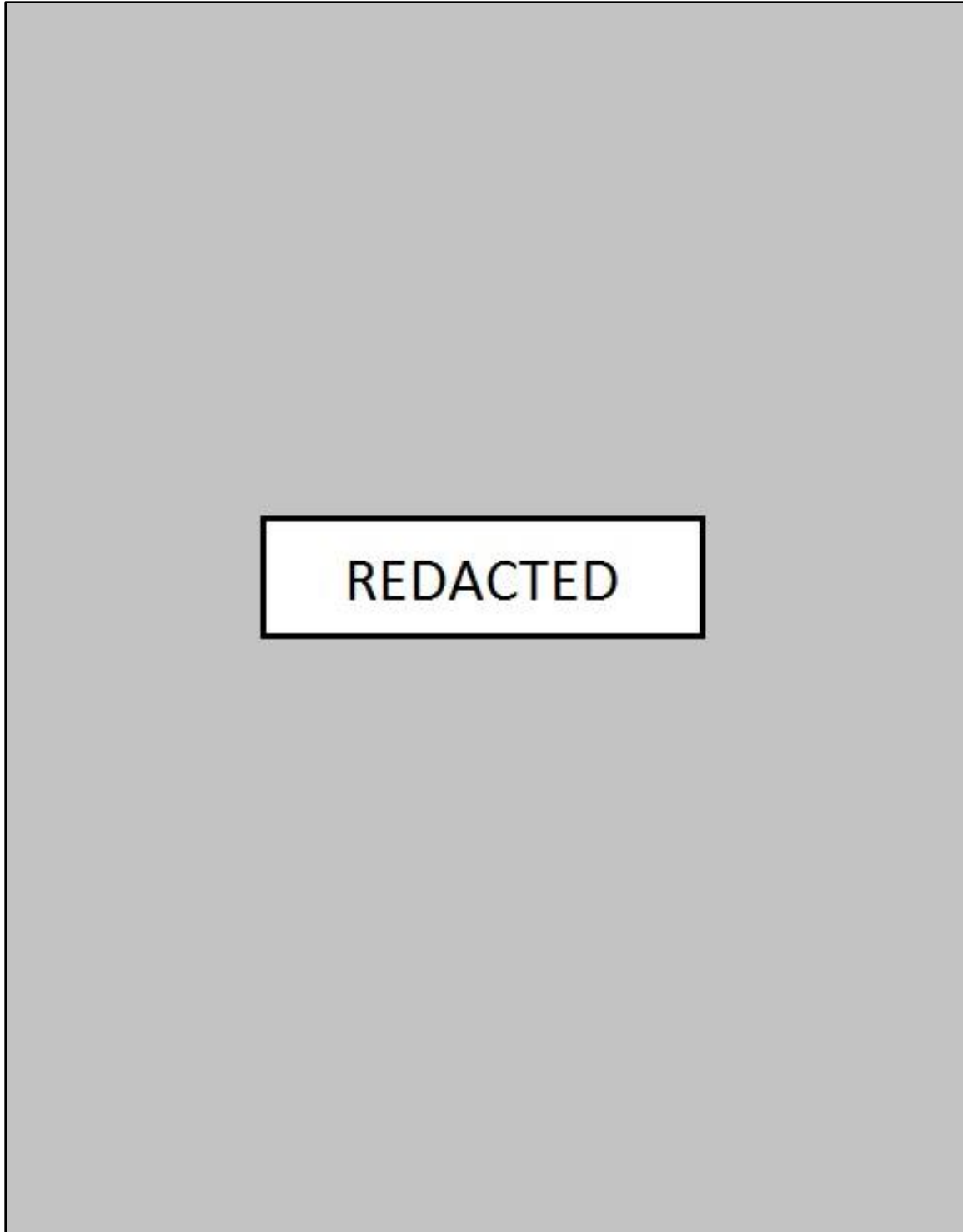
During the course of the investigations, **RKEI** examined the direct and indirect APE (**Figure 5-1**). Investigations of the direct APE consisted of the excavation of 13 shovel tests (CM01–CM07 and JW01–JW06). Of the 13 shovel tests excavated, one shovel test (JW04) was positive for cultural materials. Due to the positive shovel test, six additional shovel tests (CM08–CM10 and JW07–JW09) were excavated to further examine the findings. In addition to the excavation of the 20 shovel tests, eight backhoe trenches (BHT01–BHT08) were excavated along the creek channel and areas where the proposed amphitheater and restrooms will be located. Examination of the indirect APE consisted of the documentation of standing structures located on properties within the 150-foot (46-m) boundary around the direct APE. As a result of the investigations within the direct APE, **RKEI** excavated 20 shovel test and eight backhoe trenches, and recorded one archaeological site (41KA216). Investigations within the indirect APE documented, six historic resources. Investigations and discussion of site 41KA216 and the six historic resources are presented below.

### **Pedestrian Survey with Shovel Testing**

The APE is situated within a mechanically modified landscape along the banks of Escondido Creek, consisting of a broad floodplain bound sloped back terraces to the north and south (**Figures 5-2 and 5-3**). The surrounding area of the APE is partially developed consisting of an RV park and the Karnes County Airport along the northern boundary, Joe Gully Park along the southwestern boundary, undeveloped land along eastern and southeastern boundaries, and some residential development along the northeastern boundary (**see Figure 5-1**). The entire APE had been heavily impacted by the construction of US Highway 181 in 1952, realignment of the creek channel, and flood control



preventative measures that occurred during the 1970s. In addition to these impacts, an underground AT&T line had been installed parallel to the western side of US. Highway 181 (**Figure 5-4**).



**Figure 5-1. Results of the investigations.**



Figure 5-2. Overview of the direct Area of Potential Effect, facing south/southwest.



Figure 5-3. Overview of the direct Area of Potential Effect, facing north/northeast.



**Figure 5-4. Buried AT&T line along the western side of US Highway 181; facing south.**

The majority of the direct APE is undeveloped with the exception of a small picnic area on the eastern side, near North 5<sup>th</sup> Street (**Figure 5-5**). The northern and southern terraces exhibited two-track roads along the tops providing access to the creek (**Figure 5-6**). Vegetation within the direct APE was comprised of short-manicured grasses and short to medium grasses with small clusters of oak trees scattered throughout (**Figure 5-7**). The boundaries of the direct APE contained thicker vegetation comprised of mesquite, tall grasses, and scrub brush (**Figure 5-8**). Due to the vegetation within the direct APE, the ground surface visibility varied from 0 to 30 percent.

During the pedestrian survey, modern trash was observed, scattered along areas near the US Highway 181 Bridge and along North 5<sup>th</sup> Street. Scatters of modern trash were also observed in areas where the two-track roads intersected the two roadways. Modern trash observed consisted of clear and brown glass fragments, paper, and plastic fragments. No prehistoric or historic cultural materials were observed.



**Figure 5-5. Small picnic area near North 5<sup>th</sup> Street, facing east.**



**Figure 5-6. Two-track on the southern terrace of the direct APE, facing northwest.**



**Figure 5-7. Overview of vegetation within the direct Area of Potential Effect from the southern terrace, facing north.**



**Figure 5-8. Vegetation along the northern boundary of the Area of Potential Effect, facing east.**

During the pedestrian survey of the direct APE, 13 shovel tests (CM01–CM07 and JW01–JW06) were excavated along the two transects. Shovel tests were spaced at intervals between 328 and 492 feet (100 and 150 m) in areas where surface visibility was below 30 percent (see **Figure 5-1 and Appendix A**). Shovel tests CM01–CM03, CM06–CM07, JW01, and JW05–06 were located within the floodplain, while shovel tests CM04–CM05 and JW02–JW04 were located along the southern terrace. Soils within the shovel tests located across the floodplain and terraces were fairly similar, consisting of very dark grayish brown (10YR 3/2) or dark grayish brown (10YR 4/2) sand clay loams to silty clay loams (**Figure 5-9**). All but one shovel test (CM05) reached a depth of 1.97 feet (60 cm). Shovel test CM05 was terminated due to an impassable root at 1.37 feet (40 cm). Soils encountered within the shovel tests were compact in the upper 7.87 inches (20 cm) and became less compact as excavations continued. Inclusions observed within the shovel tests consisted rootlets mostly within the upper 1.31 feet (40 cm) with few gravels present. Calcium carbonate leaching and few nodules were observed in the lower 7.87 inches of the shovel tests.



**Figure 5-9. Shovel test CM01 at a depth of 1.97 feet (60 cm).**

Of the 13 shovel tests excavated, one (JW04) was positive for cultural materials. Cultural materials were encountered at a depth between 3.94 inches and 1.97 feet (10 and 60 cm) below surface and consisted of two sherds of undecorated white earthenware and a piece of clear glass at a depth of 3.94 to 7.87 inches (10 to 20 cm), a piece of clear glass and an unidentifiable metal fragment at a depth of 11.81 to 15.75 inches (30 to 40 cm), and a bovine tooth at a depth of 1.64 to 1.97 feet (50 to 60 cm) (**Figure 5-10**). Due to the presence of possible historic material encountered at a depth between 3.94 to 7.87 inches (10 to 20 cm), six additional shovel tests (CM08-CM10 and JW07-JW09) were excavated to further investigate the find. As a result, site 41KA216 was recorded.



**Figure 5-10. Cultural materials encountered between 7.87 inches and 1.97 feet (20 cm and 60cm) within shovel test JW04.**

### **Site 41KA216**

Site 41KA216 is an ephemeral subsurface historic scatter that measures 150 feet east/west by 39 feet north/south (46 m east/west by 12 m north/south) (see **Figure 5-1**). The site is situated on the top of the



southern terrace of the direct APE, immediately east of US Highway 181 (**Figure 5-11**). Vegetation of the site consisted of short manicured grasses along the eastern and northern portions of the site and tall



**Figure 5-11. Overview of site 41KA216, facing southwest.**

grasses, secondary growth, and trees along the southern and western portions. Disturbances within the site include a two-track road and mechanical alteration of the direct APE. Surface visibility ranged from 0 to 30 percent due the vegetation and disturbances associated with the site. No cultural materials were observed on the surface of the site.

Site 41KA216 was encountered during the excavation of JW04. Cultural materials encountered within JW04 consisted of an undecorated white earthenware sherd and clear glass at a depth between 3.93 and 7.87 inches (10 and 20 cm), clear glass and metal at a depth between 11.81 inches and 1.31 feet (30 and 40 cm), and a bovine tooth at a depth between 1.64 and 1.97 feet (50 and 60) (**see Figure 5-1**). Due to the presence of the two undecorated white earthenware sherds, six additional shovel tests (CM08-CM10 and JW07-JW09) were excavated.

During the excavation of the additional shovel tests, four (CM08–CM10 and JW09) reached a depth of 1.97 feet (60 cm), while two (JW07 and JW08) reached a depth of 7.87 inches (20 cm). The shallow

shovel tests were terminated due to the presence of large gravels and cobbles. Soil profiles of the six shovel tests varied across the site. Shovel tests (CM08, CM09, and JW09) were homogenous to a depth of 1.97 feet (60 cm). Shovel test CM08 and CM09 had a profile that consisted of very dark grayish brown (10YR 3/2) sandy clay loam and shovel test JW09 had a profile of a very dark brown (10YR 2/2) clay loam. The soil profile for shovel test CM10 consisted of a very dark grayish brown (10YR 3/2) sandy clay loam in the upper 7.87 inches (20 cm) and transitioned to a grayish brown (10YR 5/2) sandy loam to a depth of 1.97 feet (60 cm). The soil profile of JW07 exhibited disturbance of a light reddish brown (2.5YR 7/3) silty clay in the upper 3.93 inches (10 cm), underlain by a very dark grayish brown (10YR 3/2) to a depth of 7.87 inches (20 cm). Shovel test JW08 exhibited a soil profile of a dark grayish brown (10YR 4/2) silty clay underlain by large cobbles at a depth of 7.87 inches (20 cm).

Of the six additional shovel tests excavated, one (JW09) was positive for cultural materials (**see Figure 5-1 and Appendix A**). Cultural materials encountered within JW09 consisted of a metal can top with can piercer (church key) punctures, an undecorated white earthenware sherd, single pieces of clear and brown glass at a depth between 3.93 and 7.87 inches (10 and 20 cm), and an unidentified metal fragment and a piece of clear glass, at a depth of 11.81 inches and 1.31 feet (30 and 40 cm) (**Figures 5-12 and 5-13**). Due to the possible historic age cultural materials encountered within the two shovel tests within 30 m of each other and more than three artifacts being recovered from a shovel test, the findings were designated as site 41KA216

Temporal periods of the cultural materials encountered within JW04 and JW09 were mixed and ranged in age from modern to potentially historic. The modern materials consisted of clear glass and unidentified metal fragments. The potentially historic materials encountered consisted of a metal can top with can piercer (church key) punctures and the three undecorated white earthenware sherds. Can piercer (church key) type of openers came in to use in the mid-1930s, with the introduction of flat topped cans. These types of openers remained in use up until the mid-1960s and are still present today. The use of undecorated white earthenware spans over 180 years, with dates ranging from 1830 to present (Fox et al. 1997); however, in the region, an influx of white earthenware became more abundant with the introduction of the railroad during the mid-1880s. The association of the undecorated white earthenware and the metal can top with can piercer (church key) punctures encountered, indicate that the materials are most likely historic in age.



Figure 5-12. Cultural material recovered from shovel test JW09 at a depth between 3.93 and 7.87 inches (10 and 20 cm).



Figure 5-13. Cultural material recovered from shovel test JW09 at a depth between 11.81 inches and 1.31 feet (30 and 40 cm).

A review of the 1950, 1955, and 1961 historical aerial photographs depicted a structure approximately 98.42 feet (30 m) south of the site boundary (**Figures 5-14 – 5-16**). Evidence of the structure is difficult to discern in the 1968 aerial photograph, as it is heavily pixelated. However, it appears that clearing of some vegetation has occurred in the area (**Figure 5-17**). By 1981, much of the landscape within the direct APE and area of the structure had been completely modified and the structure was no longer present (**Figure 5-18**). Due to the proximity of the site and the structure depicted on the 1950, 1955, and 1961 historical aerial photographs, the cultural materials encountered are most likely associated with the structure.

Site 41KA216 is a 150 feet east/west by 39 feet north/south (46 m east/west by 12 m north/south) ephemeral historic scatter. The historic cultural materials encountered are most likely related to an early twentieth century homestead that is depicted on the 1950, 1955, and 1961 historical aerial photographs of the area. During the investigations, the historic cultural materials were encountered, mixed with modern cultural materials within two shovel tests at a depth of 3.93 to 7.87 inches (10 to 20 cm) below surface. Due to the mixed context and limited historic cultural materials, lack of a structure or other cultural features, and previous impacts within the direct APE, site 41KA216 lacks potential to provide additional information contributing to the regional history of the area. As such, **RKEI** assess site 41KA216 as NOT ELIGIBLE for listing on the NRHP and no further work is recommended

### **Backhoe Trenching Investigations**

The direct APE is within a topographic setting that has the potential for containing deeply buried archaeological sites. As such, subsurface investigations required deep testing via a backhoe. In addition to the shovel testing of the direct APE, **RKEI** mechanically excavated eight backhoe trenches (BHTs). Of the eight BHTs excavated, six were located along the channel of Escondido Creek, one was located within the proposed area of the amphitheater, and one was located in the area of the proposed restrooms. BHTs measured 15 feet (4.5 m) in length, 3 feet (91 cm) in width, and were excavated to depths ranging from 6 to 8.43 feet (1.83 to 2.57 m) below surface, depending on their locations. The following presents the results of the backhoe trenches.

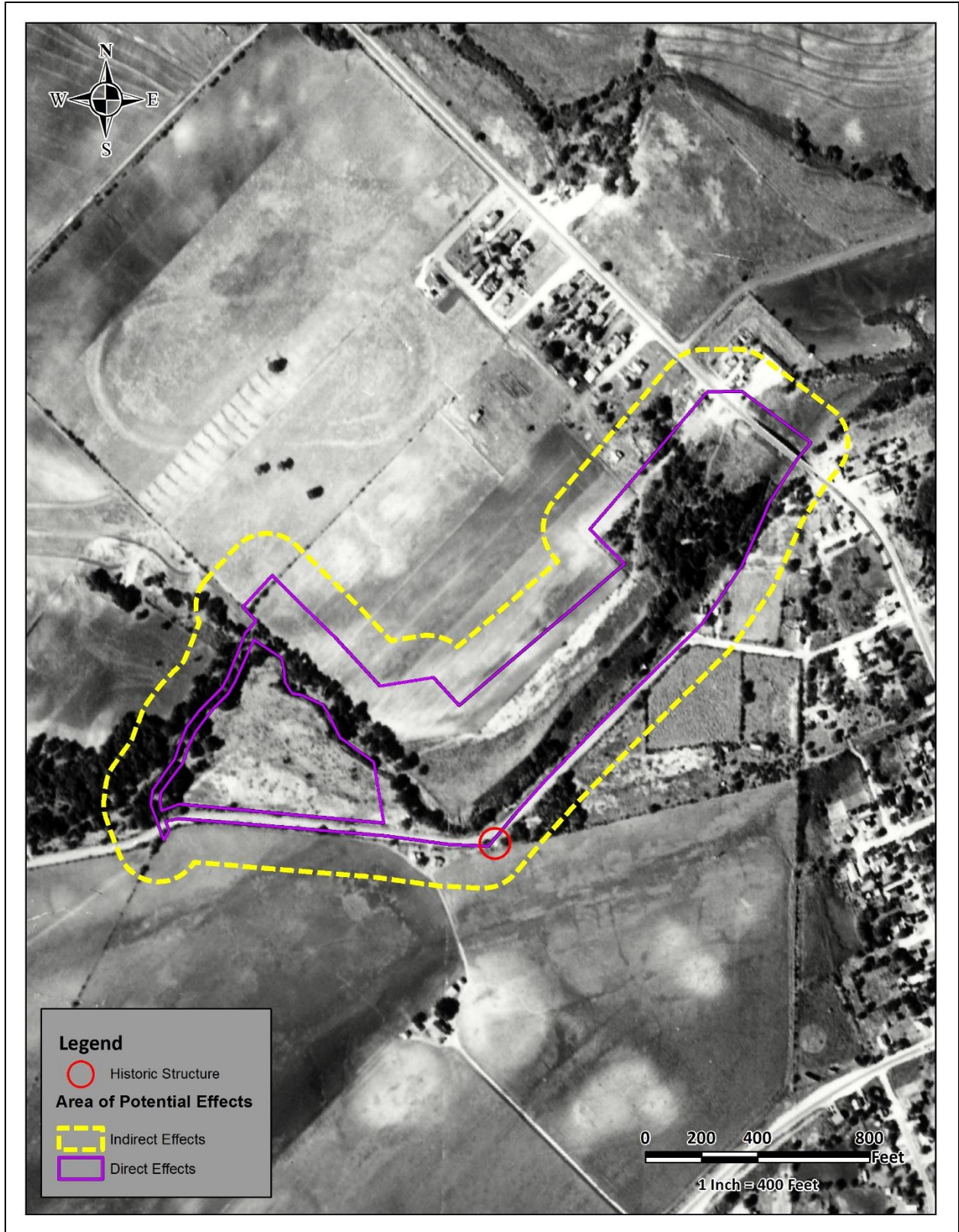


Figure 5-14. Area of Potential Effects overlain the 1950 historical aerial photograph showing the location of the structure.

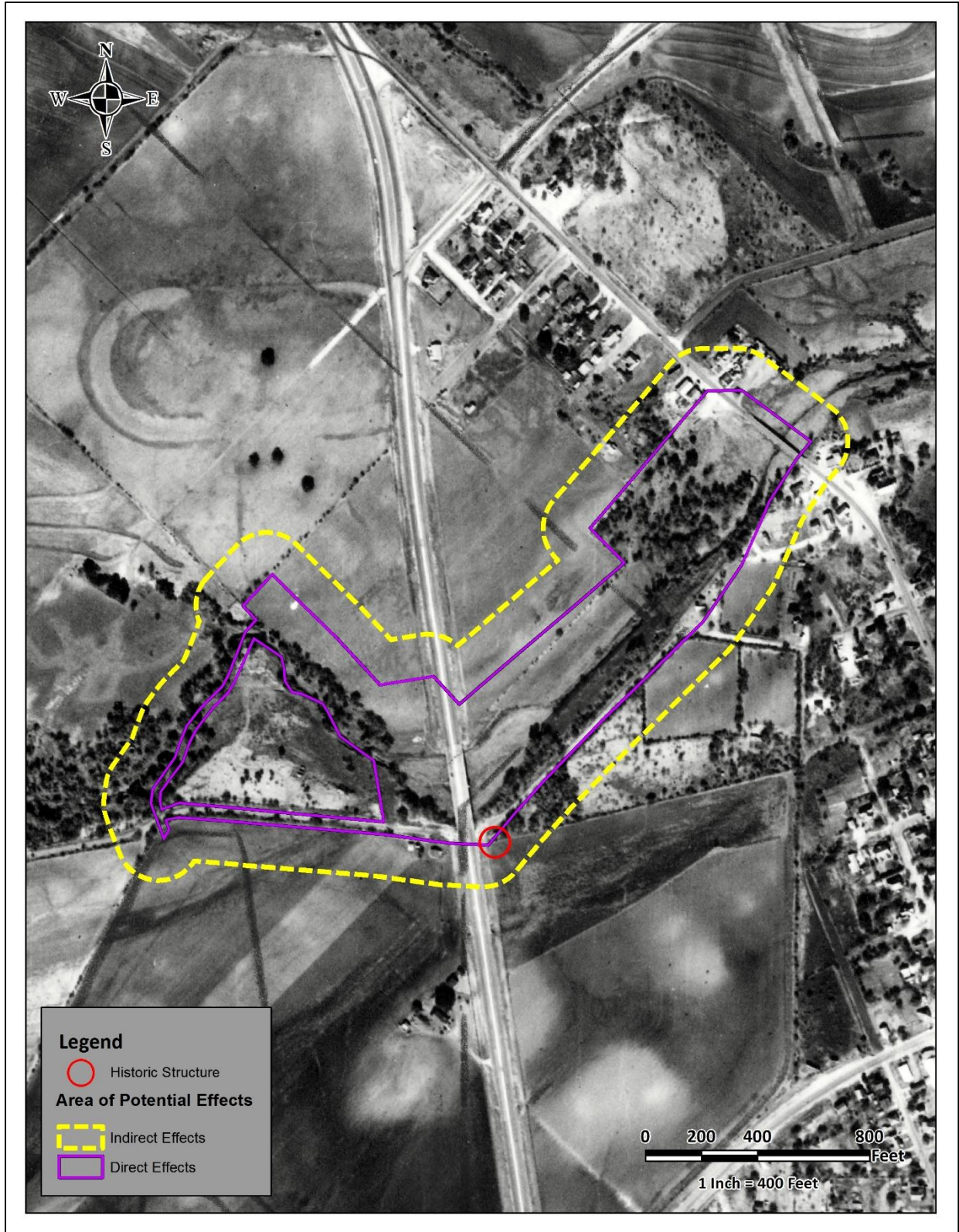


Figure 5-15. Area of Potential Effects overlain the 1955 historical aerial photograph showing the location of the structure.

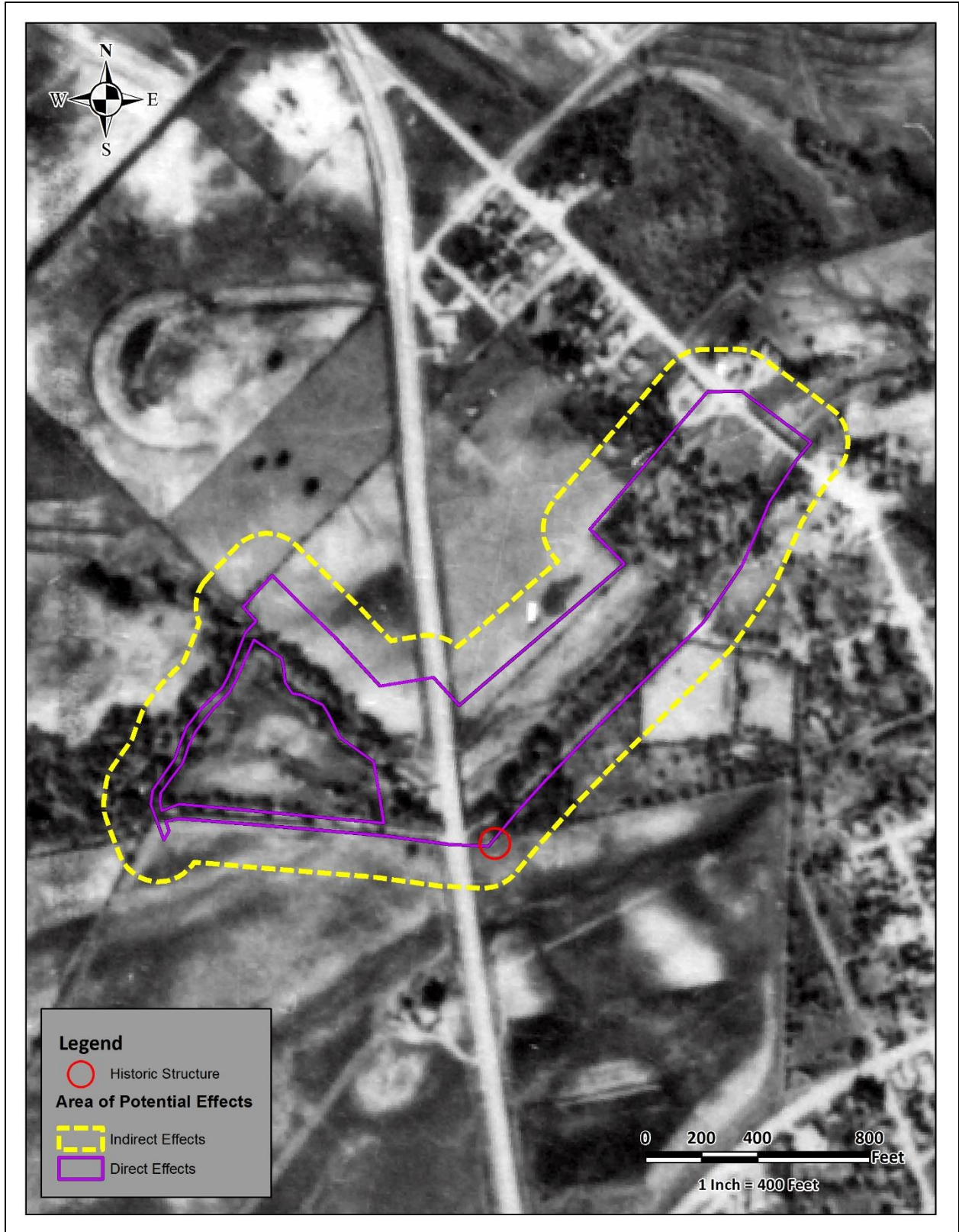


Figure 5-16. Area of Potential Effects overlain the 1961 historical aerial photograph showing the location of the structure.

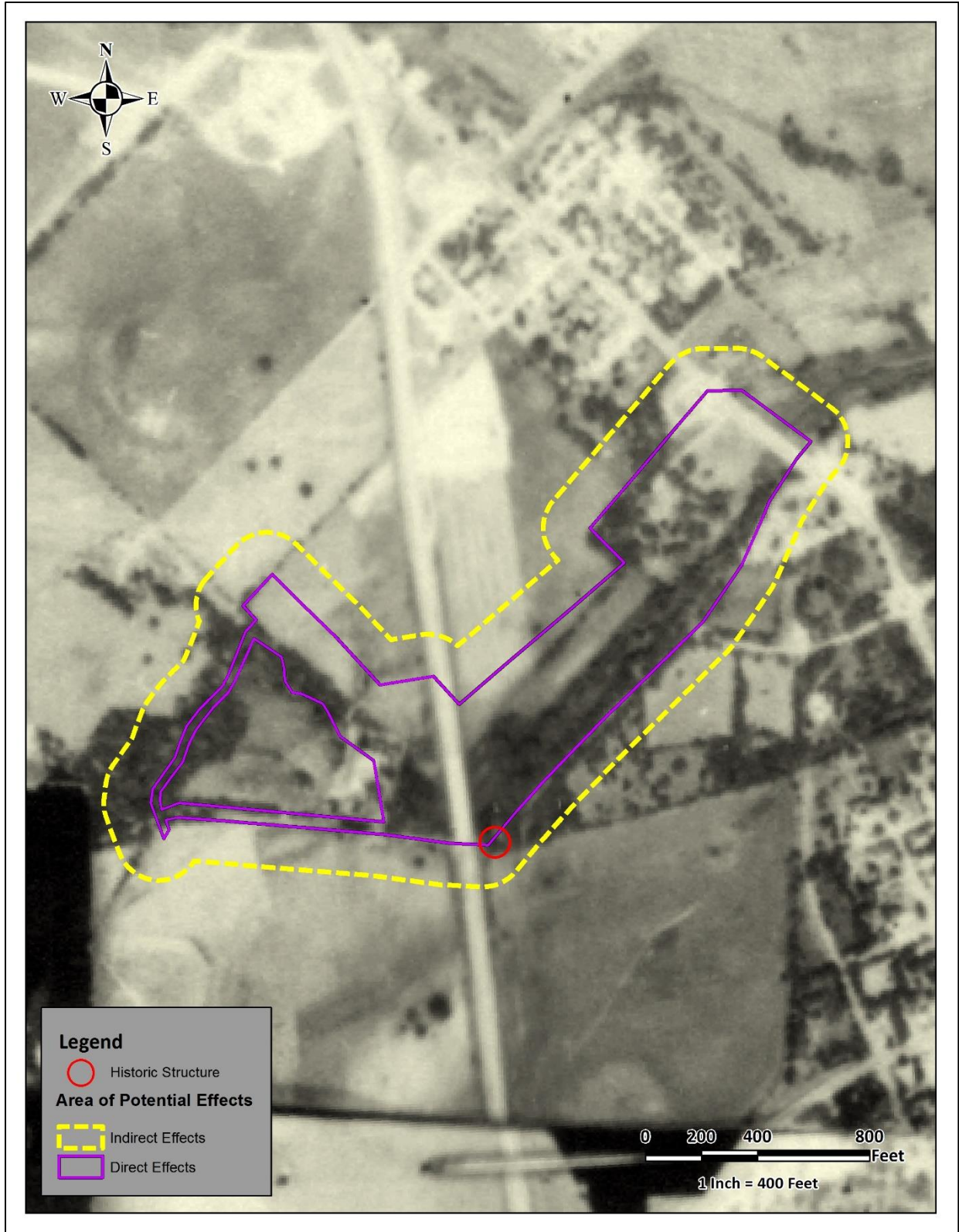


Figure 5-17. Area of Potential Effects overlain the 1968 historical aerial photograph showing the structure area.



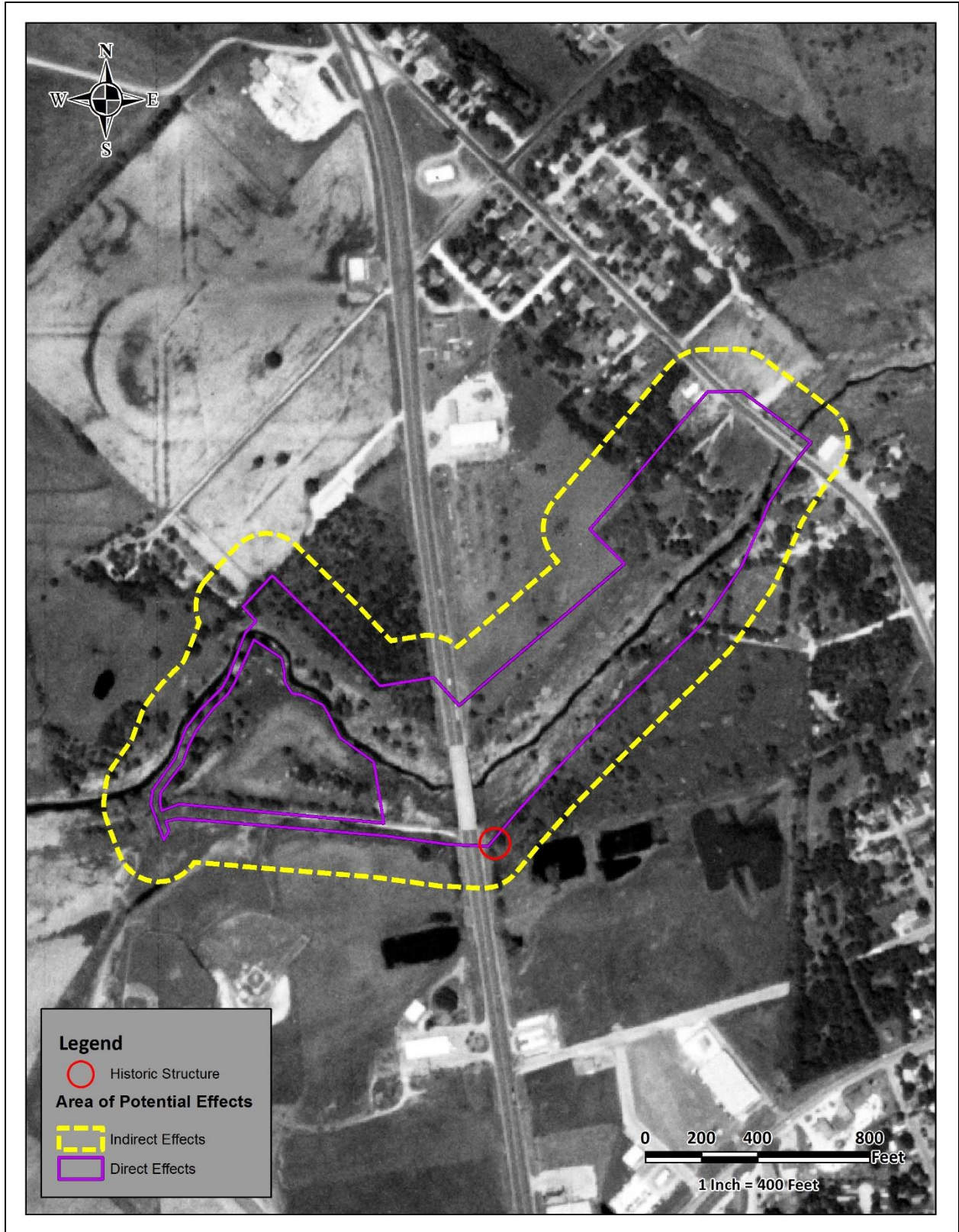


Figure 5-18. Area of Potential Effects overlain the 1981 historical aerial photograph showing the structure area.

### **Backhoe Trench 1**

Backhoe Trench 1 (BHT01) was excavated on the west side of US Highway 181, on the northwest side of the channel (see **Figure 5-1**). The trench was excavated perpendicular to the channel, measured 15 feet (4.5 m) long, 3 feet (1 m) wide, and was excavated to a depth of 8 feet (2.44 m) below surface (**Figure 5-19**). During the excavation BHT01, four distinct zones were observed (**Figure 5-20**). Zone I was comprised of a compact very dark grayish brown (10YR 3/2) silty clay that reached a depth of 1.47 feet (45 cm) below surface. Inclusions observed within Zone I consisted of less than two percent flecking of calcium carbonate. Zone I was underlain by Zone II, a compact, very dark grayish brown (10YR 3/2) silty clay with pockets of very pale brown (10YR 7/3) sand. Zone II reached a depth of 2.88 feet (88 cm) and contained inclusions of approximately 40 percent rootlets. Beneath Zone II was Zone III, a hard packed, very dark gray (10YR 3/1) silty clay that reached a depth of 5.9 feet (1.8 m). Inclusions within Zone III consisted of less than five percent of fine rootlets. The final zone observed was Zone IV, a compact grayish brown (10YR 5/2) fine sandy clay that reached a depth of 8 feet (2.44 cm). No inclusion were observed within Zone IV. Additionally, no prehistoric, historic cultural materials, or cultural features were observed during the excavation and examination of BHT01.



**Figure 5-19. West wall profile of BHT01 reaching a depth of 8 feet (2.44 cm), facing west.**

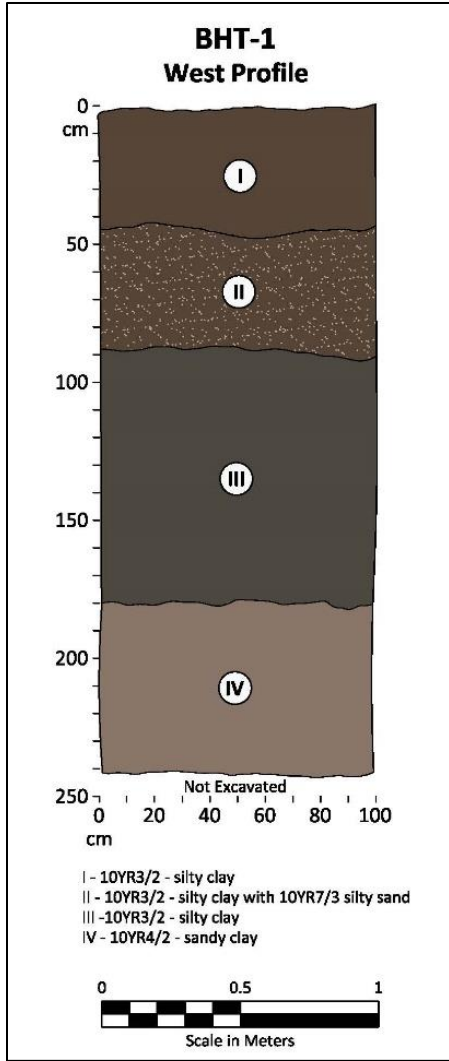


Figure 5-20. Profile of the west wall of BHT01.

### ***Backhoe Trench 2***

Backhoe Trench 2 (BHT02) was excavated on the west side of US Highway 181, approximately 30 m southeast of BHT01, on the north side of the channel. The trench was excavated parallel to the channel, measured 15 feet (4.5 m) long, 3 feet (1 m) wide, and was excavated to a depth of 8.43 feet (2.57 m) below surface (**Figure 5-21**). Unlike BHT01, where four distinct zones were observed, BHT02 contained seven distinct zones (**Figure 5-22**). Zone I reached a depth of 9.8 inches (25 cm) and was comprised of a loose, dark grayish brown (10YR 4/2) silty clay, mottled with a gray (10YR 6/1) silt. Inclusions within Zone II consisted of approximately 10 percent rootlets. Underlying Zone I was Zone II, a compact, very dark grayish brown (10YR 3/2) silty clay with less than two percent rootlet inclusions. Zone II reached a depth



**Figure 5-21. South wall profile of BHT02 reaching a depth of 8.43 feet (2.57m), facing south.**

of 1.97 feet (60 cm) and was underlain by a Zone III. Zone III was a 1.97 inch (5 cm) zone of a compact, very dark grayish brown (10YR 3/2) silty clay mottled with pockets of very pale brown (10YR 7/3) sand. Underlying Zone III was Zone IV, a compact, very dark grayish brown (10YR 3/2) silty clay with less than two percent rootlet inclusion. Zone IV reached a depth of 3.28 feet (1 m) and was underlain by Zone V. Zone V reached a depth of 4.27 feet (1.30 m) and consisted of a very dark grayish brown (10YR 3/2) silty clay with pockets of very pale brown (10YR 7/3) sand. Inclusions observed within Zone V consisted of less than two percent of very fine rootlets. Beneath Zone V was Zone VI, a compact, very dark gray (10YR 3/1) silty clay that reached a depth of 7.38 feet (2.25 m). Inclusions within Zone VI consisted of less than two percent of very fine rootlets. The final zone observed within BHT02 was Zone VII that reached a depth of 8.43 feet (2.57 m). Zone VII consisted of a compact, grayish brown (10YR 5/2) sandy clay void of any inclusions. No cultural material or cultural features were observed within BHT02.

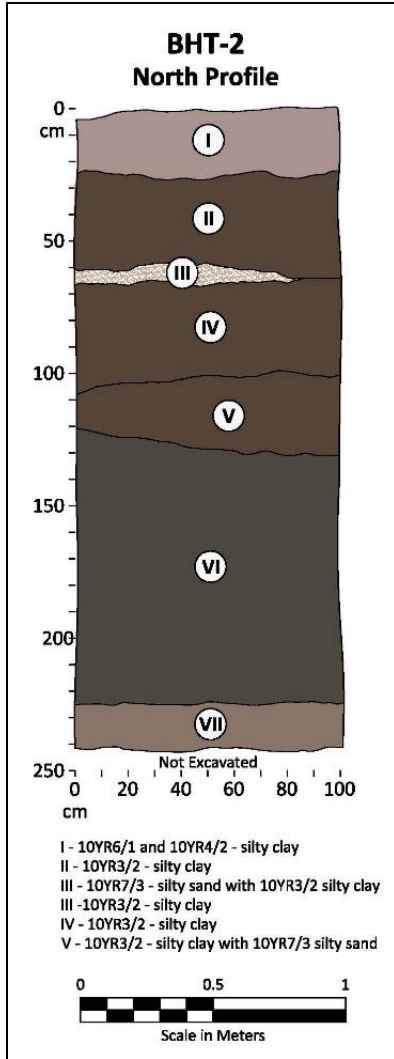


Figure 5-22. Profile of the north wall of BHT02.

### Backhoe Trench 3

Backhoe Trench 3 (BHT03) was located on the north side of the channel, east side of US Highway 181, approximately 213 feet (65 m) east of BHT02. The trench was excavated perpendicular to the channel, measured 15 feet (4.5 m) long, 3 feet (1 m) wide, and was excavated to a depth of 8.3 feet (2.53 m) below surface. During the excavation of BHT03, five distinct zones were observed (**Figure 5-23**). Zone I consisted of a loose very dark grayish brown (10YR 3/2) sandy clay that reached a depth of 1.12 feet (34 cm). Zone I was underlain by Zone II, a compact, very dark brown (10YR 2/2) silty clay. Zone II reached a depth of 1.74 feet (53 cm) and had inclusions of less than two percent rootlets. Beneath Zone II was Zone III that reached a depth of 2.13 feet (65 cm). Zone III consisted of a very dark gray (10YR 3/1) hard

silty clay with less than two percent inclusions. Zone III was underlain by Zone IV, a compact, very dark gray (10YR 3/1)



**Figure 5-23.** East wall profile of BHT03 reaching a depth of 8 feet (2.44 m), facing east.

silty clay that reached a depth of 4.5 feet (1.38 m). Zone IV was underlain by Zone V, a very dark grayish brown (10YR 3/2) coarse grained sand that reached a depth of 8.3 feet (2.53 m). Inclusion observed within Zone V consisted of tiny pebbles. No significant cultural materials or features were encountered within BHT03.

During the excavation of BHT03, a base of a brown beer bottle was encountered at a depth of 3.5 feet (1.07 m) below surface (**Figure 5-24**). The bottle was modern in appearance, indicating the upper 3.5 feet (1.07 m) of the trench had been disturbed.



Figure 5-24. Base of a brown glass bottle, encountered at a depth of 3.5 feet (1.07 m) within BHT03.

#### ***Backhoe Trench 4***

Backhoe Trench 4 (BHT04) was excavated north of the channel approximately 20 m northeast of BHT03, on the east side of US Highway 181. BHT04 was excavated perpendicular to the channel and measured 15 feet (4.5 m) long, 3 feet (1 m) wide, and was excavated to a depth of 8 feet (2.44 m) below surface. Excavation of BHT04 revealed six distinct zones (**Figure 5-25**). Zone I reached a depth of 7.09 inches (18 cm) below surface. Zone I consisted of a loose, very dark grayish brown (10YR 3/2) loamy clay with inclusions of 10 percent roots. Zone I was underlain by Zone II, a compact very dark grayish brown (10YR 3/2) silty clay. Zone II reached a depth of 2.43 feet (74 cm) and contained inclusions of less than five percent roots and calcium carbonate. Beneath Zone II was Zone III, a compact, very dark gray (10YR 3/1) mottled with gray (10YR 6/1) silt. Zone III reached a depth of 3.25 feet (99 cm) and included inclusion of less than five percent roots. Zone III was underlain by Zone IV that reached a depth of 6.23 feet (190 cm). Zone IV consisted of a compact, gray (10YR 4/1) silty clay with very few root inclusions. Zone IV was underlain by Zone V a grayish brown (10YR 5/2) course grained sand that reached a depth of 7.55 feet (2.3 m). Zone V transitioned in to Zone VI, a grayish brown (10YR 5/2) sandy clay, reaching a depth of 8 feet (2.44 m). No significant cultural materials or features were encountered within BHT04.



**Figure 5-25.** South wall profile of BHT04, reaching a depth of 8 feet (2.44 m), facing south.

During the excavation of BHT04, cultural materials were encountered from depths between 6.2 to 7.54 feet (1.9 to 2.3 m) below surface. Cultural materials included a clear glass fragment, a red brick fragment, and a piece of an unidentifiable metal object. In addition to the cultural material, a small animal bone and two mussel shell umbos were encountered (**Figure 5-26**). Based on the presence of modern materials encountered within Zone V, soils within BHT04 appear to be disturbed.

### ***Backhoe Trench 5***

Backhoe Trench 5 (BHT05) was excavated approximately 995 feet (303 m) northeast of BHT04, on the north side of the channel, within the area of the proposed amphitheater. BHT05 measured 15 feet (4.5 m) long, 3 feet (1 m) wide, and was excavated to a depth of 6.23 feet (1.90 m) below surface. During the excavation of BHT05, six zones were observed (**Figure 5-27**). Zone I consisted of a loose, very dark grayish brown (10YR 3/2) silty clay with inclusion of 10 percent roots. Zone I reached a depth of 1.15 feet (35 cm) and contained a bottle cap and brown bottle base within the upper 7.87 inches (20 cm) (**Figure 5-28**). Zone I was underlain by Zone II, a dark grayish brown (10YR 4/2) hard sandy loam. Inclusions within Zone





Figure 5-26. Cultural materials and faunal materials encountered within BHT04 from 6.2 to 7.54 feet (1.9 to 2.3 m) below surface.

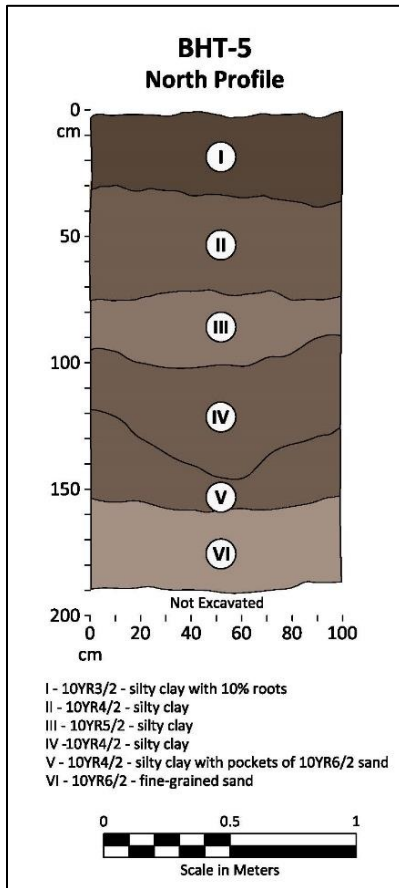


Figure 5-27. Profile of the north wall of BHT05.



**Figure 5-28. Fragment of a brown bottle base and bottle cap encountered in the upper 7.87 inches (20 cm) of BHT05.**

II consisted of less than two percent snail shell and roots and reached a depth of 2.46 feet (75 cm). Beneath Zone II was Zone III, a grayish brown (10YR 5/2) compact sandy clay that reached a depth of 3.11 feet (95 cm). Inclusions observed within Zone III consisted of calcium carbonate. Zone III was underlain by Zone IV, a dark grayish brown (10YR 4/2) compact sandy clay. Zone IV reached a depth of 3.93 feet (1.20 m) where Zone V began. Zone V reached a depth of 5.06 feet (1.55 m) and consisted of a compact, dark grayish brown (10YR 4/2) sandy clay with light brownish gray (10YR 6/3) sand pockets. Zone V was underlain by a loose, light brownish gray (10YR 6/3) fine grained sand. Zone V reached a terminating depth of 6.23 feet (1.90 m). No significant cultural materials or features were encountered within BHT05.

### ***Backhoe Trench 6***

Backhoe Trench 6 (BHT06) is located on the east side of US Highway 181, on the south side of the channel, approximately 100 feet southwest of BHT02. BHT06 was excavated perpendicular to the channel, measured 15 feet (4.5 m) long, 3 feet (1 m) wide, and was excavated to a depth of 8 feet (2.44

m) below surface. Excavation of BHT06 revealed seven distinct zones (**Figure 5-29**). Zone I consisted of a loose, very



**Figure 5-29. East wall profile of BHT06 reaching a depth of 8 feet (2.44 m), facing southeast.**

dark gray (10YR 3/1) sandy clay loam that reached a depth of 9 inches (23 cm). Inclusions observed within Zone I consisted of approximately 25 percent roots. Zone I was underlain by Zone II, a compact, very dark grayish brown (10YR 3/2) sandy clay with five percent root inclusions. Zone II reached a depth of 1.31 feet (40 cm) where Zone III began. Zone III consisted of a mottled very dark grayish brown/dark grayish brown (10YR 3/2/10YR 4/2) compact sandy clay that reached a depth of 2.33 feet (71 cm) and contained less than five percent roots. Zone III was underlain by Zone IV, a 3.15 inch (8 cm) a very dark grayish brown (10YR 3/2) compact sandy clay mottled with a grayish brown (10YR 5/2) sandy clay. Zone IV is underlain by Zone V, a very dark gray (10YR 3/1) compact silty clay with small pockets of a grayish brown (10YR 5/2) silty clay throughout the zone. Zone V reaches a depth of 4.1 feet (1.25 m) and transitions to Zone VI. Zone VI consisted of a very dark grayish brown (10YR 3/2) compact silty clay that reaches a depth of 5.31 feet (1.62 m). Zone VI is underlain by Zone VII, a light brownish gray (10YR 6/2) loose sand, that reached a depth of 8 feet (2.44 m). No significant cultural materials or features were encountered within BHT06.



During the excavation of BHT06, cultural materials were encountered within a mixed context from a depth between 0 and 4.5 feet (0 and 1.37 m). The cultural materials consisted of a yellow/tan brick, a red brick fragment, a heavily patinated clear glass bottle base with a makers' mark, a metal nail, an undecorated white earthenware rim sherd, three clear glass bottle fragments, a piece of a cobalt colored jar with a threaded rim, 4 pieces of unidentifiable metal fragments, a green glass bottle fragment, a porcelain rim sherd, a window glass fragment, and pieces of plastic (**Figure 5-30**).



**Figure 5-30.** Cultural materials encountered within the upper 4.5 feet (1.37 m).

The makers' mark on the patinated bottle base was marked with an embossed number 32 above an inverted triangle with the letter W above the letter T (**Figure 5-31**). The makers' mark is from Whitall Tatum Company that was in existence from 1901 to 1938 before the company was sold to Armstrong Cork Company (Lockhart et al 2006). In 1924 Whitall Tatum Company began using the W/T inverted triangle logo with numbers above the triangle and continued to use the logo until 1938. It is suggested that the number indicates the year the bottle was produced (Lockhart et al. 2006). Based on the number 32 embossed it is assumed that the bottle was produced some time in 1932.



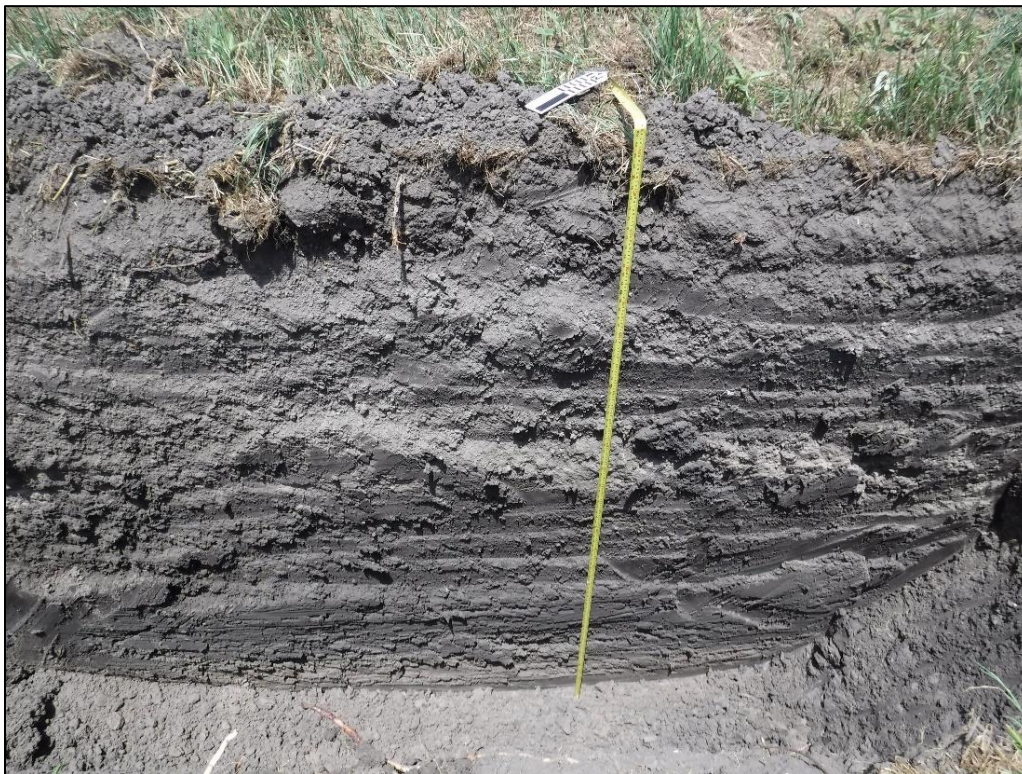
**Figure 5-31. Embossed 32 over an inverted triangle with W/T on a bottle base.**

The presence of the historic-aged bottle base suggests that material encountered within BHT06 most likely consist of both historic and modern materials. The 1950 and 1955 historical aerial photographs of the APE depict a homestead located on the southern terrace on the south side of the current two-track. The homestead was located outside the direct APE, approximately 221 feet (67 m) southeast of BHT06 and was at an elevation of 272 above mean sea level (amsl) while BHT06 is at an elevation of 263 amsl. The 1961 historic aerial photograph no longer depicts the homestead suggesting that it had been razed sometime prior. Given the land modifications that had occurred within the direct APE during the 1970s, it is possible that some materials associated with the structure were redeposited with other trash in the area.

### ***Backhoe Trench 7***

Backhoe Trench 7 (BHT07) was excavated on the south side of the channel, east side of US Highway 181, approximately 334 feet (101 m) east of BHT06. BHT07 was excavated perpendicular to the channel and measured 15 feet (4.5 m) long, 3 feet (1 m) wide and was excavated to a depth of 8 feet (2.44 m) below surface (**Figure 5-32**). During the excavation of BHT07, seven zones were observed (**Figure 5-33**). Zone I

consisted of a very dark brown (10YR 2/2) clay loam with over 20 percent root inclusions. Zone I reached a depth of 11.8 inches (30 cm) and was underlain by Zone II. Zone II was a dark grayish brown (10YR 4/2) compact silty clay, intermixed with ribbons of light brownish gray (10YR 6/2) sand. Zone II reached a depth of 2.79 feet (85 cm) and contained inclusion of less than 2 percent roots. Zone II was underlain by Zone III, a light brownish gray (10YR 6/2) compact sand, mottled with a dark grayish brown (10YR 4/2) silty clay. Zone reached a depth of 3.38 feet (103 cm) and was underlain by Zone IV. Zone IV was a dark grayish brown (10YR 4/2) compact silty clay with pockets of a light brownish gray (10YR 6/2) sand that reached a depth of 4.1 feet (125 cm). Zone IV was underlain by Zone V, a very dark gray (10YR 3/1) compact clay loam. Zone V reached a depth of 4.99 feet (1.52 m), where it transitioned into Zone VI. Zone VI consisted of a very dark gray (10YR 3/1) moist sand that reached a depth of 7 feet (2.13 m). Zone VI was underlain by Zone VII, a very dark gray (10YR 3/1) moist sandy clay that reached a depth of 8 feet (2.44). No significant cultural materials or features were encountered within BHT07.



**Figure 5-32. North wall profile of BHT07 reaching a depth of 8 feet (2.44 m), facing northwest.**

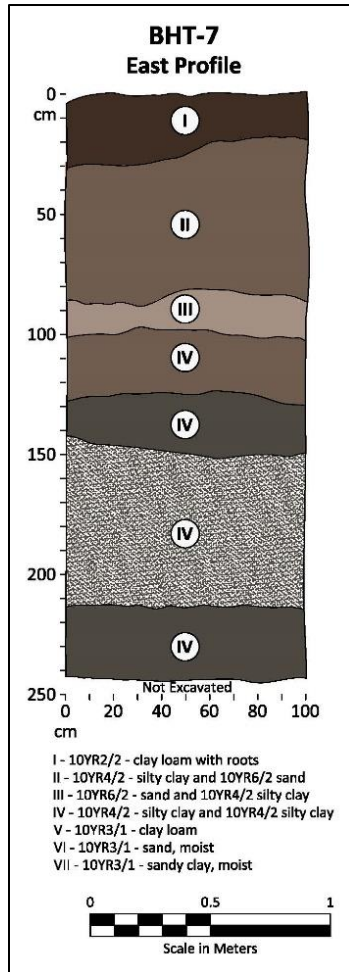
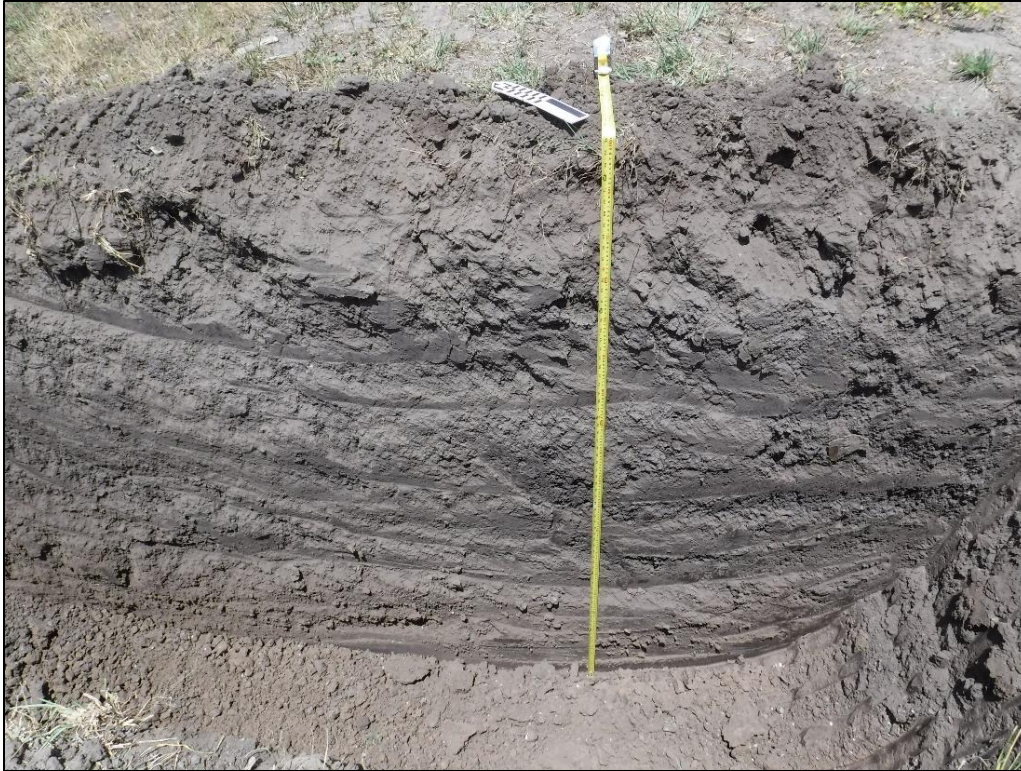


Figure 5-33. East wall profile of BHT07.

### Backhoe Trench 8

Backhoe Trench 8 (BHT08) was excavated approximately 607 feet (185 m) northeast of BHT07, on the south side of the channel, within the area of the proposed restrooms. BHT08 measured 15 feet (4.5 m) long, 3 feet (1 m) wide and was excavated to a depth of 6 feet (1.83 m) below surface. During the excavations of BHT08, two distinct zones were observed (**Figure 5-34**). Zone I consisted of a very dark gray (10YR 3/1) friable sandy clay with moderate calcium carbonate leaching that reached a depth of 4.5 feet (1.37 m). Within Zone I, an undecorated white earthenware sherd was observed within the upper 1 foot (30 cm). No other cultural materials were observed within Zone I. Zone I was underlain by Zone II that consisted of a dark grayish brown (10YR 4/2) sandy clay with less than five percent calcium carbonate inclusions. Zone II reached terminating depth of the trench of 6 feet (1.83 m) below surface. No significant cultural materials or features were encountered within BHT08.





**Figure 5-34.** East wall profile of BHT08 reaching a depth of 6 feet (1.83 m), facing east.

Excavation of the BHTs revealed evidence of disturbance along the channel of Escondido Creek. As previously mentioned, the central portion of the channel within the direct APE had been realigned during the construction of the US Highway 181 Bridge. During the construction of the bridge and realignment of the channel, a majority of the central portion to the north/northeast had been removed. Additionally, sometime in the 1970s, modification consisting of leveling and widening of the flood plain occurred along the channel. Evidence of disturbance is seen in BHT03–BHT06 where modern materials and a mix of modern and historic materials were encountered within a mixed context from a depth of 7.87 to 4.5 feet (20 cm to 1.37 m) below surface.

### **Historic Resources Assessment**

No historic buildings or structures were located within the direct APE. Right of entry was not obtained for any properties beyond the direct APE. As a result, Historic Resource Assessments were conducted from the public right of way of North 5<sup>th</sup> Street, McGoldrick Street, and the boundary of the direct APE. The Historic Resources Assessment was conducted for six potentially historic-age buildings within the 150-foot indirect APE (**Figure 5-35**). Resources included three commercial buildings, two residential

dwellings, and one shed. Non-historic buildings located within the indirect APE consisted of modern mobile homes, sheds, and other outbuildings (**Figures 5-36–5-38; see Figure 5-35**). These were not assessed for historical significance due to their age of construction.

### ***Historic Resource 1***

Historic Resource 1 (HR 1) (Karnes County Parcel 72546) is a rectangular, metal building located on the northeastern right-of-way of North 5<sup>th</sup> Street, 104 feet southeast of Escondido Creek at 610 North 5<sup>th</sup> Street (**Figures 5-39 and 5-40; see Figure 5-35**). The building measures 80 feet northeast/southwest by 40 feet northwest/southeast at a 40-degree orientation. The building is constructed of ribbed metal siding with a low pitch, corrugated metal gable roof. Three rolling garage bay doors and one hinged access door adorn the southeastern elevation of the building, and two rolling garage bay doors adorn the northwestern elevation. The northeastern elevation was not visible from the street. The southwestern elevation displayed a single air conditioning window unit. The name “KRAMER BODY AND FRAME” was painted on the southwestern elevation of the building, and mounted block letters displaying the same name were observed on the southwestern elevation, just above the hinged access door. The building appears to be a single story with a slab on grade foundation; however, no access was granted to the interior of the building to confirm the interior construction style. The Karnes County Appraisal District (KCAD) records indicate that the commercial building was constructed circa 1979. Although the building is considered historic age, it does not meet the criteria for listing on the National Register of Historic Places or as a State Antiquities Landmark.

### ***Historic Resource 2***

Historic Resource 2 (HR2) (Karnes County Parcel 61259) is a corrugated metal building located on the southwestern right-of-way of North 5<sup>th</sup> Street, roughly 370 feet northwest of the creek at 610 North 5<sup>th</sup> Street (**Figures 5-41 and 5-42; see Figure 5-35**). The building measures 50 feet northeast/southwest by 30 feet northwest/southeast at a 225-degree orientation. The building is constructed of corrugated metal siding and a moderate pitched gable roof. The building is likely of wood-frame construction, as indicated by wood-beams rafters observed along the roof eave overhang. A double sliding track door adorns the northeastern elevation. No doors or windows were observed along the northwestern elevation, and only

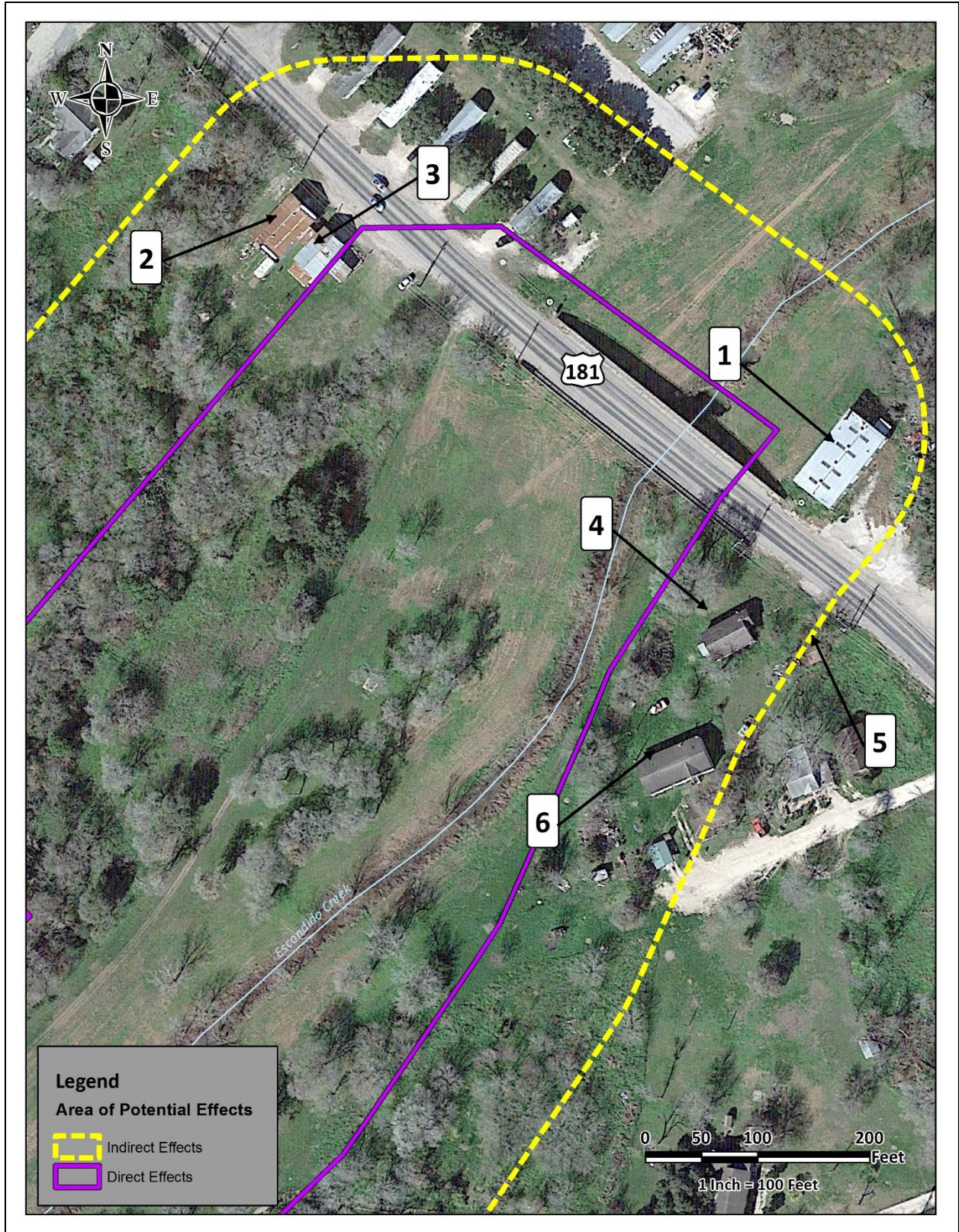


Figure 5-35. Map of the historic resources within the indirect APE.



**Figure 5-36.** Overview of mobile home park located along the northeastern right-of-way of North 5th Street, northwest of Escondido Creek, facing north.



**Figure 5-37.** Modern mobile home at the corner of McGoldrick and North 5th Street, with Historic Resource 6 in background, facing southwest.



Figure 5-38. Modern mobile home located to the northwest of Historic Resource 6 (background), facing east.



Figure 5-39. Southeastern and southwestern elevations of Historic Resource 1, facing north.



**Figure 5-40. Southwestern and northwestern elevations of Historic Resource 1, facing east.**



**Figure 5-41. Northeastern and northwestern elevation of Historic Resource 2, facing south.**



**Figure 5-42. Northeastern and southeastern elevations of Historic Resource 1, facing west.**

one hinged door was observed along the southeastern elevation; however, a wooden privacy fence that connects HR 2 to HR 3 obstructed a full view of the southeastern elevation of the building. The southwestern elevation could not be observed from the road. The KCAD does not have any improvements listed on the tax role for this property. The date of construction is unknown, but is likely late 1900s or early 2000s. HR 2 does not meet the criteria for listing on the National Register of Historic Places or as a State Antiquities Landmark.

### ***Historic Resource 3***

Historic Resource 3 (HR 3) (Karnes County Parcel 61259) is a cinder block building connected to HR 2 by a flat, corrugated metal awning and wooden privacy fence (**Figures 5-43 and 5-44; see Figure 5-35**). The building is located 310 feet northwest of Escondido Creek and measures 50 feet northeast/southwest by 45 feet northwest/southeast at a 225-degree orientation. The building is constructed of concrete cylinder block walls constructed on a slab on grade concrete foundation, with a moderate pitch, corrugated metal roof. A double sliding track door adorns the center, northeastern elevation, with an additional double



Figure 5-43. Northwestern and northeastern elevations of Historic Resource 3, facing south.



Figure 5-44. Northeastern and southeastern elevations of Historic Resource 3, facing west.



sliding track door and a hinged access door along the southeastern elevation. A concrete ramp slopes up to the southeastern track door, which is covered by a corrugated metal awning supported on a metal pipe frame. A concrete curb foundation supporting a wooden patio is also located along the southeastern elevation, which provides a landing for the hinged access door near the eastern corner of the building. The northwestern and southwestern elevations were not visible from the public road. HR 3 is currently used as a second hand retail shop. The KCAD does not have any improvements listed on the tax role for this property. The date of construction is unknown, but is likely late 1900s or early 2000s. HR 3 does not meet the criteria for listing on the National Register of Historic Places or as a State Antiquities Landmark.

#### ***Historic Resource 4***

Historic Resource 4 (HR 4) is located on the southeastern side of Escondido Creek, along the southwestern right-of-way of North 5<sup>th</sup> Street (**Figures 5-45 and 5-46; see Figure 5-35**). The KCAD records indicate that the structure is on Parcels 66800 and 66801, which contain three structures. One structure, likely HR 4, is recorded as being constructed in 1932. The single-story dwelling is constructed of wooden clapboard siding with a moderate pitch gable roof. The roof is covered with an unknown type of shingling. The house is of pier and beam construction with a corrugated metal skirt and wood post footings. Three sets of windows adorn both the northwestern and southeastern elevations of the house. Windows throughout the house appear to be a combination of double-pane, wood-frame windows mixed with modern aluminum, single pane sliding windows. The northeastern elevation is fixed with a single hinge door with an exterior screen door, flanked with windows to the southeast and northwest. The door can be accessed by a wood beam set of stairs that connects to a gable awning patio. The southwestern elevation of HR 4 was not visible from the public road.

Although HR 4 meets the requirement for age, the structure is not unique or in a condition that would warrant listing on the National Register of Historic Places, or as a State Antiquities Landmark. Furthermore, the private property is located outside of the direct APE and will not be directly impacted by the proposed improvements project.



**Figure 5-45. Northwestern and northeastern elevations of Historic Resource 4, facing south.**



**Figure 5-46. Southeastern elevation of Historic Resource 4 (background) and southeastern elevation of Historic Resource 5 (middle ground), facing northwest.**

### **Historic Resource 5**

Historic Resource 5 (HR 5) (Karnes County Parcels 66800 and 66801) is roughly 200 feet southeast of Escondido Creek, along the southwestern edge of North 5<sup>th</sup> Street (**Figures 5-47 and 5-48; see Figure 5-35**). The shed measures 20-x-20 feet in a 240-degree orientation, with a corrugated metal gable roof. The shed falls on Karnes County Parcels 66800 and 66801, same as HR 4. The building is of wood-frame construction; however, only the northeastern elevation appears to be of original construction. The northeastern elevation is of vertical wood-board siding, while the remaining elevations are constructed of recently constructed particle board and vertical wood-board siding. The northeastern half of the building consists of breeze way with openings to the northwest and southeast, and the southwestern half of the building is an enclosed room with an unknown number of interior chambers. The southwestern elevation of the building could not be observed from the public roadway. It is possible that the structure is an outbuilding of HR 4, and possibly contemporaneous, although the improvements to the building have dramatically impacted the historic integrity. Due to the impacts of the improvements to the structure, which have affected the integrity of the fabric, HR 5 does not meet the criteria for listing on the National Register of Historic Places or as a State Antiquities Landmark.



**Figure 5-47. Northwestern elevation of Historic Resource 5, facing south-southeast.**



Figure 5-48. Northeastern and southeastern elevations of Historic Resource 5, facing west.

### ***Historic Resource 6***

Historic Resource 6 (HR 6) is a single-story residential dwelling located 140 feet southeast of Escondido Creek, along the northwestern right-of-way of McGoldrick Street (**Figures 5-49 and 5-50; see Figure 5-35**). The structure is situated on Karnes County Parcels 66800 and 66801, same as HR 4 and HR 5, although it does not appear to be listed on the KCAD. The house measures 40 feet northeast/southwest by 30 feet northwest/southeast at a 340-degree orientation. The building is of pier and beam construction with wood post footings, asbestos shingle siding, and a low pitch gable roof covered with asphalt shingles. The house appears to be a manufactured home, and likely may not fall within the historic-age period. HR 6 does not meet the criteria for listing on the National Register of Historic Places or as a State Antiquities Landmark.



**Figure 5-49. Southeast and northeast elevations of Historic Resource 6, facing west.**



**Figure 5-50. Southwest elevation of Historic Resource 6, facing north.**

## CHAPTER 6. SUMMARY AND RECOMMENDATIONS

The cultural resources investigations of the proposed Escondido Creek Linear Park was conducted over the course of three days. The pedestrian survey was conducted on May 18, 2018, while the backhoe trenching was conducted on May 22 and 23, 2018. In addition to the backhoe trenching on May 22, 2018, the Historic Resources Assessment was also conducted. The cultural resources investigations included a pedestrian survey augmented with shovel testing and backhoe trench excavation within the 24.7-acre direct APE, and a Historic Resource Assessment of the indirect APE (150-foot [46 m] radius outside the direct APE).

A background review of the direct and indirect APE was conducted prior to investigations. The background review revealed that no previous cultural resource investigations or archaeological sites have been conducted or recorded within the direct or indirect APE. In addition to the background review, a review of the 1950, 1955, 1961, 1981, 1989, 1995, 2004, 2008, 2012, and 2016 historical aerial photographs of the area was conducted. The historical aerial photograph review revealed potential historic resources along the eastern and central portions of the indirect APE. Additionally, the historical aerial photographs revealed that the majority of the direct APE along Escondido Creek has been mechanically altered due to the construction of US Highway 181, the realignment of the creek channel, and during flood prevention activities sometime prior to 1981.

During the pedestrian survey, evidence of disturbance from the mechanical impacts was observed. Impacts consisted of grading and widening of the flood plain along the creek channel. Visual inspection of the surface identified modern trash scattered along areas near the US Highway 181 Bridge and along North 5<sup>th</sup> Street. Scatters of modern trash were also observed in areas where two-track roads intersected the two surface roads. Modern trash observed consisted of clear and brown glass sherds, paper, and plastic fragments.

As part of the pedestrian survey, **RKEI** excavated 13 shovel tests (CM01–CM07 and JW01–JW06) along transects no greater than 98 feet (30 m) apart. Shovel tests were excavated at intervals between 328 and 492 feet (100 and 150 m) in areas where surface visibility was below 30 percent. Of the 13 shovel tests excavated, one (JW04) was positive for cultural materials. Cultural materials were encountered at a depth between 7.87 inches and 1.97 feet (20 and 60 cm) below surface and consisted of an two sherds

of undecorated white earthenware and a piece of clear glass at a depth of 3.94 to 7.87 inches (10 to 20 cm), a piece of clear glass and an unidentifiable metal fragment at a depth of 11.81 to 15.75 inches (30 to 40 cm) and a bovine tooth at a depth of 1.64 to 1.97 feet (50 to 60 cm). Due to the presence of possible historic material encountered at a depth between 3.94 to 7.87 inches (10 to 20 cm), six additional shovel tests (CM08-CM10 and JW07-JW09) were excavated to further investigate the findings. During the excavation of the six additional shovel tests, one (JW09) was positive for cultural materials. Cultural materials encountered within JW09 consisted of a metal can top with can piercer (church key) punctures, an undecorated white earthenware sherd, and single pieces of clear and brown glass, at a depth between 3.93 and 7.87 inches (10 and 20 cm). An unidentified metal fragment and a piece of clear glass was encountered at a depth of 11.81 inches and 1.31 feet (30 and 40 cm). Due to the historic age cultural materials encountered within the two shovel tests within 30 meters of each other and more than three artifacts being recovered from a shovel test, the findings were designated as site 41KA216.

Site 41KA216 is a 150 feet east/west by 39 feet north/south (46 m east/west by 12 m north/south) ephemeral historic scatter. The historic cultural materials encountered are most likely related to an early twentieth century homestead that is depicted on the 1950, 1955, and 1961 historical aerial photographs of the area. During the investigations, the historic cultural materials were encountered, mixed with modern cultural materials within two shovel tests at a depth of 3.93 to 7.87 inches (10 to 20 cm) below surface. Due to the mixed context and limited historic cultural materials, lack of a structure or other cultural features, and previous impacts within the APE, site 41KA216 lacks potential to provide additional information contributing to the regional history of the area. As such, **RKEI** assess site 41KA216 as NOT ELIGIBLE for listing on the NRHP and no further work is recommended.

In addition to the excavation of 20 shovel tests within the direct APE, **RKEI** excavated eight backhoe trenches (BHTs). BHTs were excavated to depths reaching 6 to 8.43 feet (1.83 to 2.57 m) below surface. Of the eight BHTs excavated, six were located along the channel of Escondido Creek, one was located within the proposed area of the amphitheater, and one was located in the area of the proposed restrooms. Excavation of the BHTs revealed evidence of disturbance along the channel of Escondido Creek. As previously mentioned, the central portion of the channel within the direct APE had been realigned during the construction of the US Highway 181 Bridge, realignment of the creek channel, and flood prevention activities. During the excavation of BHT03–BHT06, evidence of disturbance was

observed, with the mixing of modern materials and historic materials reaching depths of 7.87 to 4.5 feet (20 cm to 1.37 m) below surface. No significant cultural materials or cultural features were observed.

In compliance with Section 106, the indirect effects of the proposed project was considered. **RKEI** conducted a Historic Resource Assessment of a 150-foot (46 m) radius of the direct APE. Right-of-entry was not obtained for any properties beyond the direct APE, therefore the survey was conducted from the public right-of-way. As a result of the assessment, six historic resources (HR 1–6) were identified, including three commercial buildings, two residential dwellings, and one shed. No resources were considered potentially eligible for listing on the NRHP.

In accordance with 33 CFR 800.4, **RKEI** has made a good faith effort in identifying cultural resources within the direct and indirect APE. Based on the results of the investigations, **RKEI** recommends that a NO HISTORIC PROPERTIES AFFECTED determination be made for the proposed undertaking and no further cultural resources investigations are warranted within the defined APE of the project. However, should changes be made to the project APE, further work may be required.



## REFERENCES CITED

Barnes V. E.

- 1975 Beeville – Bay City Sheet. Geologic Atlas of Texas, Bureau of Economic Geology, University of Texas at Austin.

Black, S. L.

- 1989 Central Texas Plateau Prairie. In *From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos, Texas*, by Thomas R. Hester, Stephen L. Black, D. Gentry Steele, Ben W. Olive, Anne A. Fox, Karl J. Reinhard, and Leland C. Bement, pp. 17–38. Research Series No. 33. Arkansas Archeological Survey, Fayetteville.

Blair, W. F.

- 1950 The Biotic Provinces of Texas. *Texas Journal of Science* 2(1):93–117.

Bousman, C. B., S. A. Tomka, and G. L. Bailey

- 1990 *Prehistoric Archaeology and Paleoenvironments in Hidalgo and Willacy Counties, South Texas: Results of the Phase II Test Excavations*. Report of Investigations 76. Prewitt & Associates Inc., Austin.

Collins, M. B.

- 1998 *Early Paleoindian Components*. In *Wilson-Leonard: An 11,000-Year Archeological Record of Hunter-Gatherers in Central Texas*, Volume I, edited and assembled by Michael B. Collins, pp. 123–159. Studies in Archeology 31. Texas Archeological Research Laboratory, The University of Texas at Austin. Archeology Studies Program, Report 10. Environmental Affairs Division, Texas Department of Transportation.

- 2004 *Archeology in Central Texas*. In *Prehistory of Texas*, edited by Timothy K. Perttula, pp.101–126. Texas A&M University Press. College Station, Texas.

Collins, M. B., and K. M. Brown

- 2000 Gault Gisement: Some Preliminary Observations. In *Current Archeology in Texas* 2(1):8–11.

Fox, A. A., M. Renner, and R. J. Hard

- 1997 *Archaeology of the Alamo: Investigations of a San Antonio Neighborhood in Transition*. Volume II. Archaeological Survey Report, No. 238. Center for Archaeological Research, The University of Texas at San Antonio.

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

- 2007 Ecoregions of Texas. Project report to Texas Commission on Environmental Quality. Austin, Texas.

Hall, G. D., T. R. Hester, and S. L. Black

- 1986 *The Prehistoric Sites at Choke Canyon Reservoir, Southern Texas: Results of Phase II Archaeological Investigations*. Choke Canyon Series Volume 10, Center for Archaeological Research, University of Texas at San Antonio.

Hester, T. R.

- 1981 Tradition and Adversity Among the Prehistoric Hunters and Gatherers of Southern Texas. *Plains Anthropologist* 26(92)119–128.
- 2004 The Prehistory of South Texas. In *The Prehistory of Texas*, edited by T. Perttula, pp. 127–151. Texas A&M University Press, College Station.

Johnson, E.

- 1977 Animal Food Resources of Paleoindians. *The Museum Journal* 17:65–77

Johnson, L, Jr., D. A. Suhm, and C. D. Tunnell

- 1962 Salvage Archeology of Canyon Reservoir: The Wunderlich, Footbridge, and Oblate Sites. *Texas Memorial Museum Bulletin No. 5*, The University of Texas at Austin.

Lockhart, B., C. Serr, D. Whitten, B. Lindsey, and P. Schulz

- 2006 The Dating Game: Whitall Tatum and Co. In *Bottles and Extras*, pp. 2–14. Summer 2006.

Long, C.

- 2018 *Texas Archeological Sites Atlas* restricted database, Texas Historical Commission. Available at <http://nueces.thc.state.tx.us/>. Accessed May 2018.

Molina, R.

- 1999 *Soil Survey of Karnes County, Texas*. United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the Texas Agricultural Experiment Station, US Government Printing Office, Washington DC.

Natural Resources Conservation Service (NRCS)

- 2018 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. *Soil Survey of Karnes County, Texas*. Available at <http://websoilsurvey.nrcs.usda.gov/>. Accessed May 2018.

Nickels, D. L., D. W. Pease, and C. B. Bousman

- 1997 *Archaeological Survey of Lackland Air Force Base, Bexar County, Texas*. Archaeological Survey Report No. 248. Center for Archaeological Research, University of Texas at San Antonio.

Osburn, T. L., C. Frederick, and C. G. Ward

- 2007 *Phase II Archaeological Investigations at Sites 41BX254, 41BX256, 41BX1628, and 41BX1621 within the Historical Mission Reach Project Area, San Antonio, Texas*. Miscellaneous Reports of Investigations No. 373, Geo-Marine Inc., U.S. Army Corps of Engineers, Fort Worth District.

Prewitt, E. R.

- 1981 Cultural Chronology in Central Texas. *Bulletin of the Texas Archaeological Society* 52:65-90.
- 1985 From Circleville to Toyah: Comments on Central Texas Chronology. *Bulletin of the Texas Archeological Society* 54:201-238.

Sorrow, W. M., H. J. Shafer, and R. E. Ross

- 1967 *Excavations at Stillhouse Hollow Reservoir*. Papers of the Texas Archeological Salvage Project 11. The University of Texas at Austin, Austin.

Story, D. A.

- 1985 Adaptive Strategies of Archaic Cultures of the West Gulf Coastal Plain. In *Prehistoric Food Production in North America*, edited by R. I. Ford, pp. 19–56. Anthropological Papers 75. Museum of Anthropology, University of Michigan, Ann Arbor.

Suhm, D. A.

- 1957 Excavations at the Smith Rockshelter, Travis County, Texas. *Texas Journal of Science* 9:26–58.

- 1960 A Review of Central Texas Archeology. *Bulletin of the Texas Archeological Society* 29:63–107.

Suhm, D. A., A. D. Krieger, and E. B. Jelks

- 1954 An Introductory Handbook of Texas Archeology. *Bulletin of the Texas Archeological Society* 25.

Taylor A. J.

- 1998 Mortuary Practices and Territoriality: Archaic Hunter-Gatherers of Southern Texas and the Loma Sandia Site (41LK28). Ph.D. dissertation, Department of Anthropology, The University of Texas at Austin.

Taylor, A. J., and C. L. Highley

- 1995 *Archaeological Investigations at the Loma Sandia Site (41LK28): A Prehistoric Cemetery and Campsite in Live Oak County, Texas*. Volume 1. Studies in Archeology 20. Texas Archeological Research Laboratory, The University of Texas, Austin, Texas.

Texas A&M Forest Service

- 2018 Post Oak Savannah. Texas A&M Forest Services. Available at: <http://texastreeid.tamu.edu/content/texasEcoRegions/PostOakSavannah/>. Accessed May 2018.

Texas Historical Commission (THC)

- 2018 *Texas Archeological Sites Atlas* restricted database, Texas Historical Commission. Available at <http://nueces.thc.state.tx.us/>. Accessed May 2018.

Turner, E. S., and T. R. Hester

- 1999 *A Field Guide to Stone Artifacts of Texas Indians*. 3<sup>rd</sup> ed. Texas Monthly Field Guide Series Gulf Publishing, Houston.

Weir, F. A.

- 1976 The Central Texas Archaic. Ph.D. dissertation, Department of Anthropology, Washington State University, Pullman.

Willey, G. R.

- 1966 *An Introduction to American Archaeology*. Prentice Hall, Englewood Cliffs, New Jersey.

**APPENDIX A:  
SHOVEL TEST LOG**

Shovel Test No.	Trinomial	Depth (cmbs)	Munsell	Soil Color	Soil Texture	Inclusions	Mottling	Positive/Negative	Cultural Materials	Reason for Termination/Comments
CM01	NA	0-10	10YR 3/2	very dark grayish brown	sandy clay loam	less than 5% gravels	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	sandy clay loam	less than 5% gravels	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	sandy clay loam	less than 5% gravels	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	sandy clay loam	less than 5% gravels	NA		NA	
		40-50	10YR 4/3	brown	sandy clay loam	less than 5% gravels	NA		NA	
		50-60	10YR 4/3	brown	sandy clay loam	less than 5% gravels	NA		NA	
CM02	NA	0-10	10YR 4/1	dark gray	sandy clay loam	less than 5% roots	NA	Negative	NA	Depth
		10-20	10YR 4/1	dark gray	sandy clay loam	less than 5% roots	NA		NA	
		20-30	10YR 4/1	dark gray	sandy clay loam	less than 5% roots	NA		NA	
		30-40	10YR 4/1	dark gray	sandy clay loam	NA	NA		NA	
		40-50	10YR 4/2	dark grayish brown	sandy clay loam	NA	NA		NA	
		50-60	10YR 4/2	brown	sandy clay loam	NA	NA		NA	
CM03	NA	0-10	10YR 3/2	very dark grayish brown	sandy clay loam	less than 5% roots	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		40-50	10YR 3/2	very dark grayish brown	sandy clay loam	less than 5% calcium carbonate	NA		NA	
		50-60	10YR 3/2	very dark grayish brown	sandy clay loam	less than 5% calcium carbonate	NA		NA	

Shovel Test No.	Trinomial	Depth (cmbs)	Munsell	Soil Color	Soil Texture	Inclusions	Mottling	Positive/Negative	Cultural Materials	Reason for Termination/Comments
CM04	NA	0-10	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	sandy clay loam	5% calcium carbonate	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	sandy clay loam	5% calcium carbonate	NA		NA	
		40-50	10YR 3/2	very dark grayish brown	sandy clay loam	10% calcium carbonate	NA		NA	
		50-60	10YR 3/2	very dark grayish brown	sandy clay loam	10% calcium carbonate	NA		NA	
CM05	NA	0-10	10YR 3/2	very dark grayish brown	sandy clay loam	over 10% caliche	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		40-50	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		50-60	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	

Shovel Test No.	Trinomial	Depth (cmbs)	Munsell	Soil Color	Soil Texture	Inclusions	Mottling	Positive/Negative	Cultural Materials	Reason for Termination/Comments
CM06	NA	0-10	10YR 4/2	dark grayish brown	sandy clay loam	less than 10% roots	NA	Negative	NA	Depth
		10-20	10YR 4/2	dark grayish brown	sandy clay loam	less than 10% roots	NA		NA	
		20-30	10YR 4/2	dark grayish brown	sandy clay loam	NA	NA		NA	
		30-40	10YR 4/2	dark grayish brown	sandy clay loam	NA	NA		NA	
		40-50	10YR 4/2	dark grayish brown	sandy clay loam	NA	NA		NA	
		50-60	10YR 4/2	dark grayish brown	sandy clay loam	NA	NA		NA	
CM07	NA	0-10	10YR 3/2	very dark grayish brown	sandy loam	less than 10% roots	NA	Negative	NA	Impassible roots, terminated at 40 cmbs.
		10-20	10YR 3/2	very dark grayish brown	sandy loam	less than 10% roots	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	sandy loam	less than 10% roots	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	sandy loam	less than 10% roots	NA		NA	
CM08	NA	0-10	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		40-50	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		50-60	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	

Shovel Test No.	Trinomial	Depth (cmbs)	Munsell	Soil Color	Soil Texture	Inclusions	Mottling	Positive/Negative	Cultural Materials	Reason for Termination/Comments
CM09	NA	0-10	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		40-50	10YR 3/2	very dark grayish brown	sandy clay loam	5% calcium carbonate	NA		NA	
		50-60	10YR 3/2	very dark grayish brown	sandy clay loam	5% calcium carbonate	NA		NA	
CM10	NA	0-10	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	sandy clay loam	NA	NA		NA	
		20-30	10YR 5/2	grayish brown	sandy loam	NA	NA		NA	
		30-40	10YR 5/2	grayish brown	sandy loam	5% calcium carbonate	NA		NA	
		40-50	10YR 5/2	grayish brown	sandy loam	5% calcium carbonate	NA		NA	
		50-60	10YR 5/2	grayish brown	sandy loam	5% calcium carbonate	NA		NA	
JW01	NA	0-10	10YR 4/2	dark grayish brown	clay loam	less than 5% roots	NA	Negative	NA	Depth
		10-20	10YR 4/2	dark grayish brown	clay loam	less than 5% roots	NA		NA	
		20-30	10YR 4/2	dark grayish brown	clay loam	less than 5% roots	NA		NA	
		30-40	10YR 4/2	dark grayish brown	clay loam	less than 5% roots	NA		NA	
		40-50	10YR 4/2	dark grayish brown	clay loam	less than 10% roots	NA		NA	
		50-60	10YR 4/2	dark grayish brown	clay loam	less than 10% roots	NA		NA	



Shovel Test No.	Trinomial	Depth (cmbs)	Munsell	Soil Color	Soil Texture	Inclusions	Mottling	Positive/Negative	Cultural Materials	Reason for Termination/Comments
JW02	NA	0-10	10YR 2/2	very dark brown	silty clay loam	less than 5% roots	NA	Negative	NA	Depth
		10-20	10YR 2/2	very dark brown	silty clay loam	less than 5% roots	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	silty clay loam	less than 5% roots	NA		NA	
		30-40	10YR 4/2	dark grayish brown	silty clay loam	less than 5% roots	NA		NA	
		40-50	10YR 4/2	dark grayish brown	silty clay loam	less than 10% roots	NA		NA	
		50-60	10YR 4/2	dark grayish brown	silty clay loam	less than 10% roots	NA		NA	
JW03	NA	0-10	10YR 3/2	very dark grayish brown	silty clay loam	less than 5% calcium carbonate	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	silty clay loam	less than 5% calcium carbonate	NA		NA	
		20-30	10YR 3/2	very dark grayish brown	silty clay loam	less than 15% calcium carbonate	NA		NA	
		30-40	10YR 3/2	very dark grayish brown	silty clay loam	less than 15% calcium carbonate	NA		NA	
		40-50	10YR 3/2	very dark grayish brown	silty clay loam	less than 25% calcium carbonate	NA		NA	
		50-60	10YR 3/2	very dark grayish brown	silty clay loam	less than 25% calcium carbonate	NA		NA	
JW04	41KA216	0-10	10YR 3/2	very dark grayish brown	silty clay loam	NA	NA	Positive	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	silty clay loam	NA	NA		Whiteware and clear glass	
		20-30	10YR 2/2	very dark brown	silty clay loam	NA	NA		NA	
		30-40	10YR 2/2	very dark brown	silty clay loam	NA	NA		Clear glass and metal	
		40-50	10YR 2/2	very dark brown	silty clay loam	NA	NA		NA	
		50-60	10YR 3/2	very dark brown	silty clay loam	NA	NA		bovine tooth	

Shovel Test No.	Trinomial	Depth (cmbs)	Munsell	Soil Color	Soil Texture	Inclusions	Mottling	Positive/Negative	Cultural Materials	Reason for Termination/Comments
JW05	NA	0-10	10YR 3/2	very dark grayish brown	silty clay loam	less than 5% roots	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	silty clay loam	less than 5% roots	NA		NA	
		20-30	10YR 2/2	very dark brown	silty clay loam	less than 5% roots	NA		NA	
		30-40	10YR 2/2	very dark brown	silty clay loam	less than 5% roots	10YR 3/2 silty clay loam		NA	
		40-50	10YR 2/2	very dark brown	silty clay loam	NA	10YR 2/2 silty clay loam		NA	
		50-60	10YR 3/2	very dark grayish brown	silty clay loam	NA	10YR 2/2 silty clay loam		NA	
JW06	NA	0-10	10YR 3/2	very dark grayish brown	silty clay	NA	NA	Negative	NA	Depth
		10-20	10YR 3/2	very dark grayish brown	silty clay	NA	NA		NA	
		20-30	10YR 2/2	very dark brown	silty clay	NA	10YR 4/2 silty clay		NA	
		30-40	10YR 2/2	very dark brown	silty clay	NA	10YR 4/2 silty clay		NA	
		40-50	10YR 2/2	very dark brown	silty clay	NA			NA	
		50-60	10YR 3/2	very dark brown	silty clay	NA	NA		NA	
JW07	NA	0-10	2.5YR 7/3	light reddish brown	silty clay	over 25% gravels	NA	Negative	NA	Heavy gravels and cobbles
		10-20	10YR 3/2	very dark grayish brown	silty clay	over 25% gravels	NA		NA	
JW08	41KA216	0-10	10YR 4/2	dark grayish brown	silty clay	over 25% gravels	NA	Negative	NA	Heavy gravels and cobbles
		10-20	10YR 4/2	dark grayish brown	silty clay	over 25% gravels	NA		NA	

Shovel Test No.	Trinomial	Depth (cmbs)	Munsell	Soil Color	Soil Texture	Inclusions	Mottling	Positive/Negative	Cultural Materials	Reason for Termination/Comments
JW09	41KA216	0-10	10YR 2/2	very dark brown	silty clay	less than 5% roots	NA	Positive	NA	Depth
		10-20	10YR 2/2	very dark brown	silty clay	less than 5% roots	NA		Whiteware, clear glass, and metal	
		20-30	10YR 2/2	very dark brown	silty clay	less than 5% roots	10YR 4/3 silty clay		NA	
		30-40	10YR 2/2	very dark brown	silty clay	less than 5% roots	10YR 4/3 silty clay		Clear glass and metal	
		40-50	10YR 2/2	very dark brown	silty clay	NA	NA		NA	
		50-60	10YR 2/2	very dark brown	silty clay	NA	NA		NA	