Cultural Resources Survey of the Proposed North 2 Elevated Storage Tank and Access Road, El Paso County, Texas

Texas Antiquities Permit No. 7831

Submitted to:

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ABSTRACT

On 23 November 2016, Versar Inc. performed a pedestrian survey for the proposed No 2. Elevated Storage Tank and access Road. The inventory followed the standards outlined under THC’s *Archaeological Survey Standards for Texas* and *Rules of Practice and Procedure for the Antiquities Code of Texas* for 5.94 acres of land in northeast El Paso, El Paso County, Texas. The proposed survey parcel is positioned adjacent to U.S. Highway 54-along the east-northeast margin of the highway. The rectangular parcel terminates immediately south of the existing Kinder Morgan pipeline ROW corridor. The area of potential effect is on property owned by El Paso Water, a sub-entity of the City of El Paso. The project goal was to identify all prehistoric and historic archaeological sites in the survey parcel and make National Register of Historic Places (NRHP) eligibility recommendations for any newly discovered sites. The survey documented no cultural resource sites and no isolated finds. Due to the lack of cultural resources and a general absence of geomorphic/cultural context, no further work is recommended for the APE proposed for the No. 2 Elevated Storage Tank and access Road.
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TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION .................................................................................................................................................. 1

CHAPTER 2 CULTURAL, ENVIRONMENTAL, AND GEOMORPHIC CONTEXT ........................................................................... 5

CHAPTER 3 PREVIOUS RESEARCH AND METHODOLOGY .................................................................................................................. 7

  BACKGROUND HISTORY AND ESTIMATED SITE COUNTS ........................................................................................................... 7
  FIELD SURVEY AND SITE DOCUMENTATION PROCEDURES ........................................................................................................ 7
  Prefield Research ........................................................................................................................................................................... 7
  Pedestrian Transect Survey .................................................................................................................................................................. 7

CHAPTER 4 RESULTS OF INVESTIGATION ......................................................................................................................................... 9

CHAPTER 5 SUMMARY AND RECOMMENDATIONS ............................................................................................................................. 13

REFERENCES .................................................................................................................................................................................. 15

APPENDIX A LOCATION MAP USGS 1:24,000 ........................................................................................................................................ 15
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LIST OF FIGURES AND TABLES

Figure 1-1. Location map showing the project area and nearby archaeological sites.................. 2
Figure 1-2. Map showing the proposed survey parcel within El Paso County, Texas................. 3
Figure 2-1. Photograph showing the general environmental condition of the project area, looking northwest. Note U.S. Highway 54 in the background and alluvial lag deposits in the foreground................................................................. 5
Figure 4-1. Southwest portion of the survey parcel, looking east-northeast......................... 9
Figure 4-2. Survey parcel looking northeast along U.S. Highway 54. .................................... 10
Figure 4-3. Survey parcel looking northwest, parcel boundary demarcated by wooden lathes.... 10
Figure 4-4. Eastern portion of the parcel, looking north-northeast....................................... 11
Figure 4-5. Survey parcel, looking east northeast. Note alluvial gravel deposits in foreground... 11
Figure A-1. Map showing location of the Project Area at 1:24,000 scale................................. 17
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CHAPTER 1
INTRODUCTION

Essco Environmental, Inc. contracted with Versar, Inc., to conduct a cultural resources inventory of 5.94-acres in El Paso County, Texas. The proposed survey parcel was positioned adjacent to U.S. Highway 54 along the east-northeast margin of the highway. The rectangular parcel terminates south of the existing Kinder Morgan pipeline ROW corridor (Figure 1-1). The area of potential effect is on property owned by El Paso Water, a sub-entity of the City of El Paso. The proposed impact to the municipal lands, which entails the construction of an elevated water storage tank and access road, has generated the requirement for a Texas Antiquities Permit and cultural resource inventory. As such, the project goal was to identify all prehistoric and historic archaeological sites in the survey parcel and develop National Register of Historic Places (NRHP) eligibility recommendations for any newly discovered sites (Figure 1-2).

On November 23, 2016 archaeologists with Versar Inc. carried out the inventory of the 5.94-acres in northeast El Paso. Versar employed a pedestrian transect method for inventorying the landscape and documenting artifact concentrations and features which represent potential sites. This method used global positioning system (GPS)-based locational data, along with integrated ArcPad Software and tabulated attribute pull-down menus. The integration of the pedestrian survey and digital recording techniques provided a complete and consistent inventory of visible cultural resources within the survey parcel. The inventory identified no archaeological sites and no isolated occurrences.

As such, this document presents the methods and results of the investigations conducted during the survey process. As presented, Chapter 1 provides a general summary of the undertaking. Chapter 2 presents a brief overview of the environmental and cultural setting of the study area. Chapter 3 summarizes previous work conducted on the site and the methods utilized during this project. Chapter 4 presents the results of the survey and Chapter 5 includes a summary of these investigations and recommendations for future work. Appendix A provides a 1:24,000 scale map of the project area.
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Figure 1-1. Location map showing the project area and nearby archaeological sites.
Figure 1-2. Map showing the proposed survey parcel within El Paso County, Texas.
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CHAPTER 2
CULTURAL, ENVIRONMENTAL, AND GEOMORPHIC CONTEXT

A cultural and environmental overview of the project area has been presented in several previous publications. For a more detailed overview of the regional prehistory and historical sequences associated with the region, the reader is referred to Goar et al. (2006), Miller, Kenmotsu, and Landreth (2009), and Swanson et al. (2014). In brief, the project area lies along the eastern margins of the Franklin Mountains within a low-gradient alluvial fan that empties onto the Hueco Bolson. The survey parcel falls within the Mexican Highland Section of the Basin and Range physiographic province (Fenneman 1931) and prehistorically within the Jornada Mogollon region of south-central New Mexico (Lehmer 1948).

Current landforms consist of poorly-developed mesquite-stabilized dune fields, areas of interdunal deflation, and shallow sand sheets characterized by gravelly alluvium (Figure 2-1). Impacts to the parcel currently noted result from ongoing eolian and erosional deflation and previous highway development; a graded easement parallels the current survey corridor. The Kinder Morgan pipeline corridor demarcates the northern edge of the survey parcel. The soils throughout the project area consist of unconsolidated eolian sediments, light tan sandy loams, and low to moderate amounts of alluvium-related gravels and cobbles.

Figure 2-1. Photograph showing the general environmental condition of the project area, looking northwest. Note U.S. Highway 54 in the background and alluvial lag deposits in the foreground.
The vegetative community in the area is described as a desert scrubland and is dominated by mesquite (*Prosopis glandulosa*). The mesquite is generally found on coppice-dune formations, which range from 2-to-3 m in height. Other vegetation includes four-wing saltbush (*Atriplex canescens*), soaptree yucca (*Yucca elata*), tarbush (*Flourensia cernua*), broom snakeweed (*Gutierrezia sarothrae*), Russian thistle (*Salsola kali*), and dropseed (*Sporobolus cryptandrus*) (Powell 1998).

The proposed construction will impact 5.94-acres of land adjacent to U.S. Highway 54 on lands owned by the City of El Paso. Visibility approximates 80 percent. Impacts to the parcel are currently noted, resulting from past development and public access.
CHAPTER 3
PREVIOUS RESEARCH AND METHODOLOGY

BACKGROUND HISTORY AND ESTIMATED SITE COUNTS

Previous investigations are primarily limited to surveys covering the lands adjacent to the proposed inventory parcel (Goar et al. 2006; Swanson et al. 2014; Condon ARMS electronic database query 9 November 2016).

No previously recorded sites are present in the current survey parcel.

FIELD SURVEY AND SITE DOCUMENTATION PROCEDURES

In accordance with the intensive survey parameters set forth by the CTA and approved by the Texas THC, the following field procedures were implemented during the survey.

Prefield Research

The staff at Versar Inc., El Paso, Texas conducted a comprehensive search of the online Texas Atlas database, obtaining existing Texas Archaeological Research Laboratory site files and researching pertinent literature to identify any previously recorded prehistoric and historic sites within the survey parcel. In addition, aerial photographs, USGS 7.5-minute quadrangles, geologic maps, and soil survey maps were examined prior to the field investigation. These additional research avenues augmented the background research and provided relevant information on topography, soils, vegetation, geology, the local environment, and levels of development within the vicinity of the project area. A thorough search revealed three sites within a one-quarter mile of the proposed survey parcel, the majority are on lands managed by the City of El Paso. Included in this search is 41EP5741 (Prices Diary Farm), a large historic site located approximately 100-m northeast of the survey parcel. None of the sites fall within the pipeline corridor.

Pedestrian Transect Survey

Versar carried out the pedestrian survey using a 10-m (~32 ft.) transect interval and started in the southwestern portion of the parcel; survey crews worked in a north-to-south direction. The survey process was contiguous leaving no unsurveyed areas remaining within the corridor. The amount of area covered, including recording time did not exceed a rate of 15 acres per person, per eight hour day calculated for the entirety of the project; ground visibility approximates 80 percent.

In order to effectively accomplish the survey Versar provided two experienced personnel to carry out this task: one Project Archaeologist and one field technician. Each crew member was equipped with a Trimble XT handheld GPS unit with integrated ArcPad data dictionaries to document
cultural materials. The Versar personnel who participated in the survey completed the Versar mandated onsite safety training. In addition, each member read and understood the safety protocol outlined for this project (e.g., orange safety vests, eye protection, and safety tail gate meetings). No subsurface investigations were carried out.

Artifact collections during survey were restricted to rare or diagnostic items with each individually plotted on the appropriate site and project area map. Rare artifacts would include unbroken projectile points, whole vessels, decorated ceramics of exotic manufacture (e.g., Casas Grande pottery), and items of personal adornment (e.g., turquoise pendants, shell/bone beads, or shell bracelets). All items that fall under the collection protocol would be photographed with a scale and the location plot recorded using a Trimble XT GPS unit; all collections would be documented and follow policies outlined under CTA guidelines. If warranted, collections would be curated at the Texas Archaeological Research Laboratory, Austin, Texas. If warranted, a curation form, curation packet with original forms, and final technical report deliverables will be sent to the Texas Archaeological Research Laboratory, Austin, Texas upon review and concurrence by the THC.
CHAPTER 4
RESULTS OF INVESTIGATION

This project entailed an intensive pedestrian survey of a 5.94-acre parcel in El Paso County, Texas. The survey was confined to the established footprint, which parallels U.S. Highway 54. The condition of the project area appeared to be generally intact. However, as proximity to the highway increased, the level of disturbance increased. In these areas, disturbance from road development and maintenance were clearly evident (Figure 4-1 through Figure 4-5). Moreover, eolian deflation and alluvial action has, over time, removed and redistributed sediments, creating deflation basins and gravel deposits throughout the project area. Low-to-medium sized mesquite stabilized coppice dunes anchor sediments in the parcel. Ephemeral rills and several shallow arroyos have impacted the landscape. Dune margins and exposed dune facies were closely examined for evidence of buried cultural deposits. No archaeological sites were identified; no isolated finds were encountered.

Figure 4-1. Southwest portion go the survey parcel, looking east-northeast.
Figure 4-2. Survey parcel looking northeast along U.S. Highway 54.

Figure 4-3. Survey parcel looking northwest, parcel boundary demarcated by wooden lathes.
Chapter 4: Results of Investigation

Figure 4.4. Eastern portion of the parcel, looking north-northeast.

Figure 4.5. Survey parcel, looking east northeast. Note alluvial gravel deposits in foreground.
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CHAPTER 5
SUMMARY AND RECOMMENDATIONS

On behalf of ESSCO Environmental, Inc., Versar, Inc. carried out an intensive archaeological survey of 5.94-acres in El Paso County, Texas. The proposed survey parcel was positioned adjacent to U.S. Highway 54 and terminates just south of the existing Kinder Morgan pipeline ROW corridor. The area of potential effect is on property owned by El Paso Water, a sub-entity of the City of El Paso. The proposed impact to the municipal lands, which entails the construction of an elevated water storage tank and access road, generated the requirement for a Texas Antiquities Permit and cultural resource inventory.

The survey parcel encompassed an area of low-gradient alluvial landforms which were characterized by poorly-developed dune fields, eolian deflation, and modern redistribution of sediments. As documented in Goar et al. (2006) and Swanson et al. (2014), this dynamic environment has been influenced by both alluvial impacts and modern disturbances resulting in the movement and displacement of sediments and possibly artifacts. The absence of cultural materials within the survey parcel potentially points toward a dynamic landscape resulting in the loss of contextual integrity.

The absence of cultural deposits and the highly reworked and eroded nature of the project area, indicates that the parcel holds little contextual integrity in regard to the presence and preservation of human activity. As such, the intensive survey resulted in the recording of no archaeological sites and no isolated occurrences.

It is recommended that the information potential of the isolated occurrences has been exhausted through documentation, and no further work is merited. Based upon the results of this process, Versar recommends that the proposed development of the No. 2 Elevated Storage Tank and access road will not have an adverse effect on any historic properties within the proposed APE.
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APPENDIX A
LOCATION MAP USGS 1:24,000
Figure A-1. Map showing location of the Project Area at 1:24,000 scale.