

**CULTURAL RESOURCES SURVEY FOR THE
HOWARD LANE WATER MAIN EXTENSION,
TRAVIS COUNTY, TEXAS**

Final Report
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Texas Historical Commission
TAC Permit # 8372

Submitted to:

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Abstract

On March 21, 2018, aci consulting conducted a cultural resources survey for the Howard Lane Water Main Extension in Travis County, Texas. The proposed water line will be constructed along Howard Lane from Gregg lane to Cameron Road and will be approximately 3,400 feet in length, with a 50-foot Right-of-Way (ROW) (Figures 1 and 2). The Area of Potential Effect (APE) for the project is approximately 3.9 acres (1.58 hectares).

This work was conducted in compliance with Texas Administrative Code (13 TAC 26) under Texas Antiquities Code permit number 8372, as well as Section 106 of the National Historic Preservation Act of 1966, as amended. The survey did not result in the location of any new archeological sites, historic structures, or additional historic properties. Based on these results, no further archeological work is recommended. Records from this investigation will be curated at the Texas Archeological Research Laboratory. Julie Shipp served as Principal Investigator.

TABLE OF CONTENTS

Abstract..... i
 1.0 INTRODUCTION 1
 2.0 ENVIRONMENTAL SETTING 4
 2.1 Physiography 4
 2.2 Geology and Soils 4
 3.0 LITERATURE REVIEW 6
 5.0 FIELD METHOD 10
 6.0 RESULTS OF INVESTIGATION 10
 7.0 CONCLUSIONS AND RECOMMENDATIONS 12
 8.0 REFERENCES CITED 13

LIST OF TABLES

Table 1. Previously recorded sites within one kilometer of the APE 9

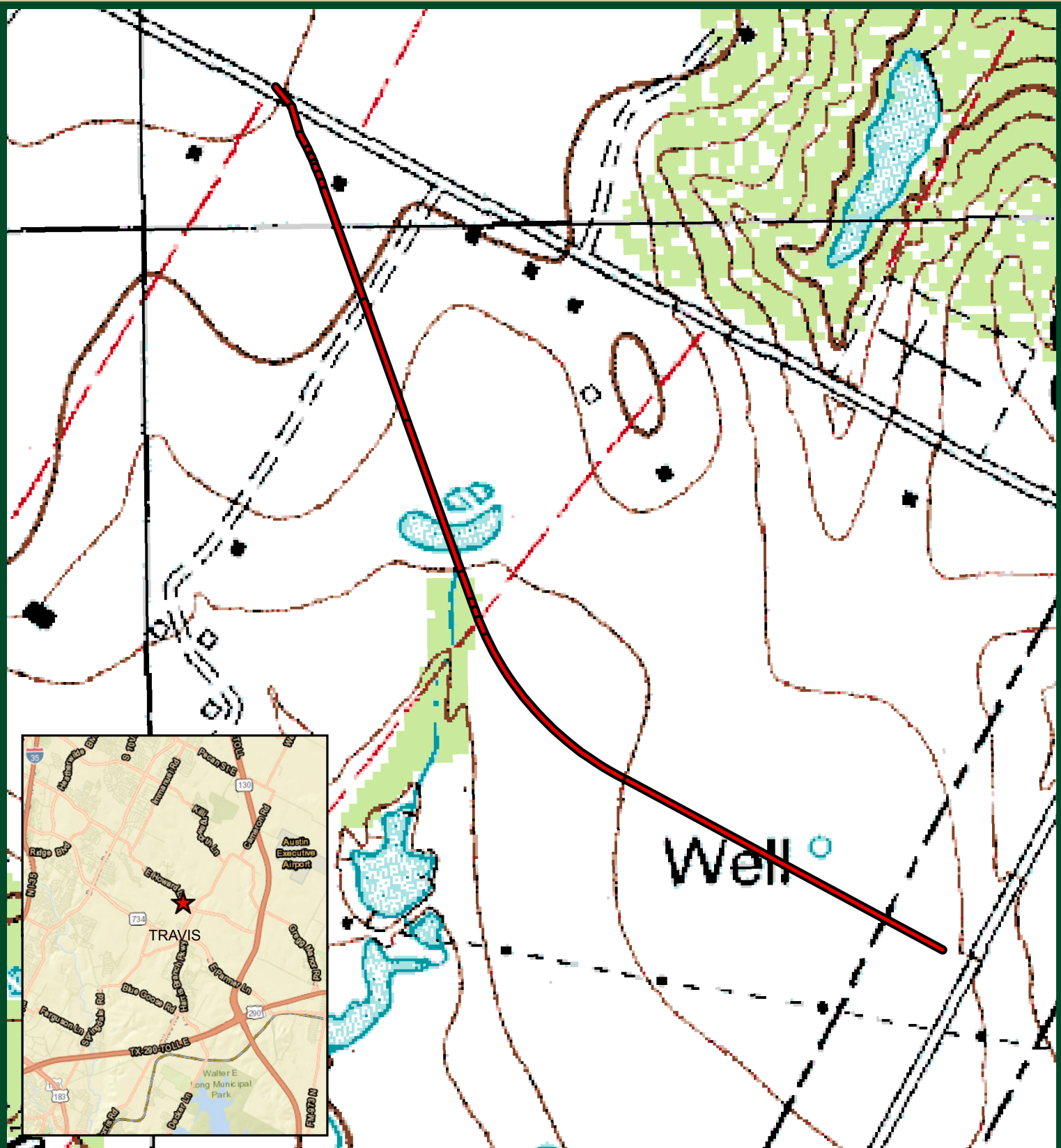
LIST OF FIGURES

Figure 1. Proposed project area on USGS 7.5' topographic map background 2
 Figure 2. Proposed project area on aerial photograph background. 3
 Figure 3. Project area soils..... 5
 Figure 4. Austin Hybrid Potential Archeological Liability Map (HPALM). 7
 Figure 5. Archeological sites and previous investigations..... 8
 Figure 6. Overview of APE from south end, facing northeast. 11
 Figure 7: Unnamed tributary of Harris Branch at Howard Lane, facing northwest.
 12

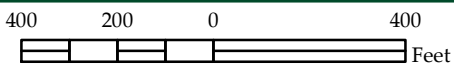
1.0 INTRODUCTION

On March 21, 2018, aci consulting conducted a cultural resources survey for the Howard Lane Water Main Extension in Travis County, Texas. The proposed water line will be constructed along Howard Lane from Gregg lane to Cameron Road and will be approximately 3,400 feet in length, with a 50-foot Right-of-Way (ROW) (Figures 1 and 2). The Area of Potential Effect (APE) for the project is approximately 3.9 acres (1.58 hectares).

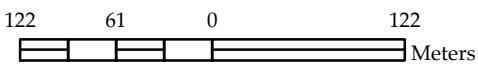
The project is conducted in compliance with Texas Administrative Code (13 TAC 26) under Texas Antiquities Code permit number 8372, as well as Section 106 of the National Historic Preservation Act of 1966, as amended. The investigation will consist of an intensive pedestrian survey, shovel testing, site recording, assessment of sites for listing on the national Register of Historic Places (NRHP) or for designation as a State Antiquities Landmark (SAL), data analysis, and reporting in accordance with THC and Council of Texas Archaeologists (CTA) standards.



This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



1:4,800 1 inch = 400 feet



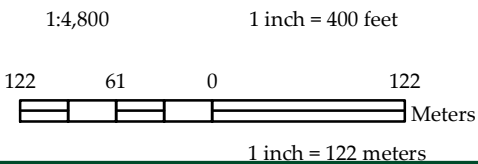
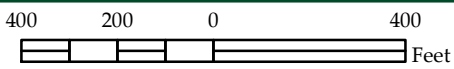
1 inch = 122 meters

 Alignment





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 Alignment



2.0 ENVIRONMENTAL SETTING

2.1 Physiography

The project is located northeast of Harris Branch in Travis County in central Texas in the Texas Blackland Prairie. The Blackland Prairie lies on the eastern side of the Balcones Escarpment, a fault zone with hills to the west and north and low relief to the east and south. The Blackland Prairie supports prairie vegetation along with small woods often found along low-gradient streams. The Edwards Plateau is located to the west of the project area.

2.2 Geology and Soils

Two soils are mapped within the APE (Figure 3).

- *Houston Black clay, 1 to 3 percent slopes (HnB)*

The Houston Black component makes up 80 percent of the map unit and is clay from zero to six inches BGS, clay from six to 70 inches BGS, and clay 70 to 80 inches. Slopes are 1 to 3 percent. This component occurs on interfluves and side slopes on upland ridges and plains on dissected plains. The series formed in clayey residuum derived from calcareous mudstone of Cretaceous Age. Depth to a paralithic layer is 100 inches. Depth to the water table is more than 80 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low to moderately low. The soil is not flooded. It is not ponded. This soil does not meet hydric criteria. The minor components of this map unit include Heiden (15 percent) and Fairlie (5 percent) (NRCS 2017).

- *Heiden clay, 3 to 5 percent slopes, eroded (HeC2)*

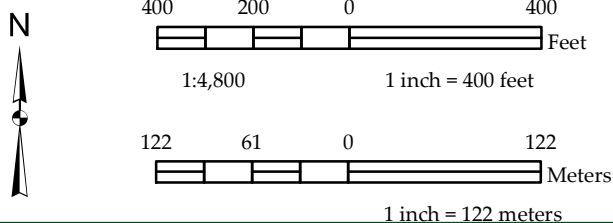
The Heiden component makes up 85 percent of the map unit and is clay from zero to 13 inches BGS, clay from 13 to 22 inches BGS, clay from 22 to 58 BGS, and clay 58 to 80 inches BGS. Slopes are 3 to 5 percent. This component occurs on footslopes of base slopes, shoulders of interfluves, and backslopes of side slopes of ridges on dissected plains. The series formed in calcareous clayey residuum weathered from mudstone. Depth to a paralithic layer is 100 inches. Depth to the water table is more than 80 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low to moderately low. The soil is not flooded. It is not ponded. This soil does not meet hydric criteria.



Soils

- FhF3: Ferris-Heiden complex, 8 to 20 percent slopes, severely eroded
- HeC2: Heiden clay, 3 to 5 percent slopes, eroded
- HeD2: Heiden clay, 5 to 8 percent slopes, eroded
- HnB: Houston Black clay, 1 to 3 percent slopes
- HnC2: Houston Black clay, 3 to 5 percent slopes, moderately eroded
- Tw: Tinn clay, 0 to 1 percent slopes, frequently flooded

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Alignment



Houston Black makes up 10 percent while Ferris makes up 5 percent of this map unit (NRCS 2017).

Both Houston Black and Heiden have been previously determined to have a low probability to contain archeological sites according to the Potential Archeological Liability Maps (PALM) model created by TxDOT ENV for highway projects in the Austin District, (Abbott 2013) (Figure 4).

The subject area lies within two geologic units (BEG 1992):

- Navarro and Taylor Groups, undivided (Knt)
- High gravel deposits (Qhg)

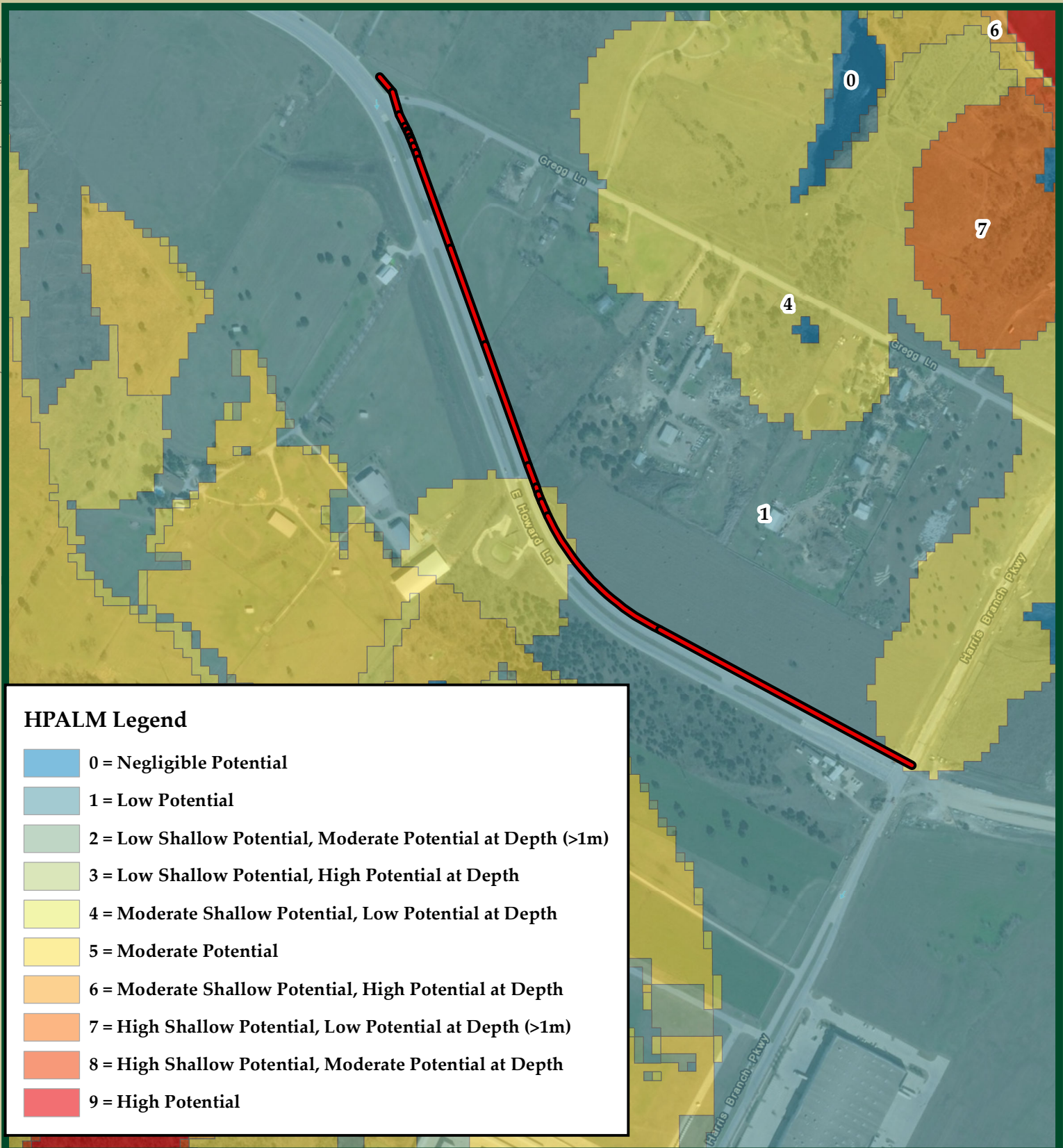
Navarro and Taylor Groups, undivided is in areas where Pecan Gap Chalk is not present because of gradation to marl similar to that of the Marlbrook and Ozan Formations. The upper 250 feet is mostly silty clay with sandst beds and concretionary masses near the top.

High gravel deposits is commonly composed of upper silty clay unit for crop productive and a lower coarse unit that yields some water. Thickness of limestone gravel ranges from five to twenty-five feet.

3.0 LITERATURE REVIEW

A literature review of the Texas Archeological Sites Atlas (Atlas) revealed that no previously recorded sites are within the APE but that a previous survey crosses a small section in the center of the proposed alignment. The survey was conducted in 2003 by Blanton and Associates, Inc. for the City of Pflugerville. The southern portion of the proposed alignment ends adjacent to two previously conducted surveys. One was conducted by APC, Inc. in 2003 running along Cameron Road, and the other was sponsored by Housing and Urban Development in 1989.

While no known recorded archeological sites are within the APE, eight sites are within one kilometer of the alignment (Atlas 2018) (Figure 5). A summary of all sites can be found in Table 1.

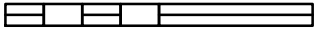


HPALM Legend


- 0 = Negligible Potential
- 1 = Low Potential
- 2 = Low Shallow Potential, Moderate Potential at Depth (>1m)
- 3 = Low Shallow Potential, High Potential at Depth
- 4 = Moderate Shallow Potential, Low Potential at Depth
- 5 = Moderate Potential
- 6 = Moderate Shallow Potential, High Potential at Depth
- 7 = High Shallow Potential, Low Potential at Depth (>1m)
- 8 = High Shallow Potential, Moderate Potential at Depth
- 9 = High Potential

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400 200 0 400
 Feet

1:6,000 1 inch = 500 feet

122 61 0 122
 Meters

1 inch = 152 meters

Alignment



Table 1. Previously recorded sites within one kilometer of the APE

| <i>Site</i> | <i>Site Type</i> | <i>NRHP Eligibility</i> | <i>Distance from APE</i> | <i>Recommendations</i> |
|-------------|---|-------------------------|---|------------------------|
| 41TV88 | Prehistoric burial | Unknown | 713 meters (2,339feet) southwest | Unknown |
| 41TV89 | Prehistoric lithic scatter | Unknown | 615 meters (2,017 feet) southwest | Unknown |
| 41TV1325 | Historic homesite | Unknown | 752 meters (2,467 feet) west | Archival research |
| 41TV1326 | Historic homesite | Unknown | 806 meters (2,644 feet) west | No further work |
| 41TV1327 | Preshistoric campsite; Historic homesite | Unknown | 781 meters (2,562 feet) southwest | No further work |
| 41TV1418 | Historic homesite | Unknown | 978 meters (3,208 feet) south | Unknown |
| 41TV1419 | Historic homesite | Unknown | 226 meters (741 feet) southeast | Unknown |
| 41TV1738 | Prehistoric campsite | Ineligible | 938 meters (3,077 feet) southwest | No further work |

In addition to the sites and survey, one known cemetery is located within one kilometer of the alignment on the north side of Gregg Lane. Gregg Cemetery (TC-C075) is located approximately 421 meters (1,381 feet) northeast of the APE. The cemetery is approximately 3.9 acres in size and was designated as a cemetery in 2015. According to the Atlas, approximately 73 graves are located within the cemetery. The burials date from 1875 to 1961.

5.0 FIELD METHOD

A pedestrian survey of the entire APE was conducted to locate any archeological sites or other historical properties that may be adversely affected by construction. Potential shovel tests were to be placed judgmentally in settings that had potential for buried cultural horizons and/or if the ground surface visibility is less than 30 percent.

All shovel tests are typically excavated one foot (30 centimeters) in diameter to the bottom of Holocene deposits. Shovel tests are dug in 10 centimeter levels, and the soil screened through ¼-inch hardware cloth unless high clay or water content requires that the material be troweled through or sorted by hand. Shovel tests are recorded on logs and the locations of the tests are recorded on a GPS unit. Other field forms include a daily journal, photograph log, and site forms.

Newly discovered sites are assigned a temporary field designation and digital TexSite Archaeological Data Collection forms will be submitted to TARL for the assignment of trinomials. The location of each archeological site are recorded on a USGS 7.5-minute topographic map, and a sketch map drawn showing the location of all salient features at the site. The site setting and features are photographed.

If surface visibility is less than 30 percent, then a minimum of six shovel tests are excavated to delimit site boundaries. Newly recorded sites are evaluated for potential significance, NRHP inclusion or SAL listing eligibility. The survey methods comply with THC and CTA standards for site investigation.

6.0 RESULTS OF INVESTIGATION

The survey was conducted under pleasant warm conditions in the morning, under a clear sky, with a light breeze. The current APE runs southeast to northwest, following Howard Lane. The centerline of the APE is approximately five feet to the right of the sidewalk. The APE is bound by Howard Lane to the south, and by agricultural use and residential land to the north.

Investigators began the survey at the southeastern end of the APE, at the intersection of Howard Lane and Cameron Road. The ground surface visibility in this area was good, averaging between 50 and 80percent. The majority of the

APE was plowed field with the exception of one creek crossing (Figure 6). Because of the good ground surface visibility and low probability soils, shovel testing was not utilized.



Figure 6. Overview of APE from south end, facing northeast.

Halfway through the APE, the centerline crosses an unnamed tributary of Harris Branch, which runs south under Howard Lane. The stream is an ephemeral, erosional wash with rocky subsoil present at the surface and did not exhibit geoarcheological potential (Figure 7). No cultural resources were located as a result of the approximate .64-mile section of new ROW along Howard Lane.



Figure 7: Unnamed tributary of Harris Branch at Howard Lane, facing northwest.

7.0 CONCLUSIONS AND RECOMMENDATIONS

On March 21, 2018, aci consulting conducted a cultural resources survey for the Howard Lane Water Main Extension in Travis County, Texas. The proposed water line will be constructed along Howard Lane from Gregg lane to Cameron Road and will be approximately 3,400 feet in length, with a 50-foot Right-of-Way (ROW) (Figures 1 and 2). The Area of Potential Effect (APE) for the project is approximately 3.9 acres (1.58 hectares).

The investigation consisted of a pedestrian survey and did not result in the location of new archeological sites, nor any other historic properties. Based on these results, no further archeological work is recommended. It must be noted that no level of survey intensity can be guaranteed to locate all cultural features within a project area. Therefore, should previously-unrecorded cultural resources, including human remains, be discovered during the course of construction for this project, Cobb, Fendley & Associates, Inc. will contact a qualified professional archeologist to assess the findings.

8.0 REFERENCES CITED

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