Cultural Resource Survey For The Nameless Electrical Alignment, Travis County, Texas

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CULTURAL RESOURCES SURVEY FOR THE NAMELESS ELECTRICAL ALIGNMENT, TRAVIS COUNTY, TEXAS

Final Report
November 2020

TAC Permit # 8055

Prepared for:
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aci Project No.: 35-17-042
Abstract

On September 9, and December 14, 2017, and January 11, 2018, archeologists from aci consulting conducted a cultural resources survey for the proposed Brushy Creek Regional Utility Authority (BCRUA) Nameless Electrical Alignment project between the Nameless substation and the proposed Phase 2 pump station location between Nameless and Volente in northern Travis County, Texas. The Nameless Electrical Alignment is part of a larger project being conducted by the BCRUA who is developing a deep water intake structure to ensure the availability of a reliable water supply for the BCRUA Regional Water System. The Area of Potential Effect (APE) for the Antiquities Permit consists of the 2.69-mile sections of the alignment, with a 20-foot buffer, resulting in approximately 4.67 acres.

The project will be funded through the BCRUA, thus the work was conducted in compliance with Texas Administrative Code (13 TAC 26) under Texas Antiquities Code permit number 8055, 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.
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1.0 INTRODUCTION

On September 9, and December 14, 2017, and January 11, 2018, archaeologists from aci consulting conducted a cultural resources survey for the proposed Brushy Creek Regional Utility Authority (BCRUA) Nameless Electrical Alignment project between the Nameless substation and the proposed Phase 2 pump station location between Nameless and Volente in northern Travis County, Texas. The Area of Potential Effect (APE) for the Antiquities Permit consists of the 2.69-mile sections of the alignment, with a 20-foot buffer, resulting in approximately 4.67 acres (Figures 1 and 2).

The Nameless Electrical Alignment will be constructed beginning at the Nameless substation operated by Pedernales Electrical Cooperative (PEC). The New Overhead Line will be constructed in three areas: between the Nameless substation and FM 1431 (Western Alignment; Figure 2), between FM 1431 and North Rim Drive (Central Alignment; Figure 3) and along Trails End Road (Eastern Alignment; Figure 4).

The project will be funded through the BCRUA, thus the project was conducted in compliance with Texas Administrative Code (13 TAC 26) under Texas Antiquities Code permit number 8055, as well as Section 106 of the National Historic Preservation Act of 1966, as amended, for any additional compliance for impacts to US Army Corps of Engineers (USACE) regulated waters. 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.

No archaeological sites were recorded during the survey and no previously recorded archaeological sites, cemeteries, NRHP properties, SALs, or Registered Texas Historic Landmarks (RTHLs) were identified during the background review. As such, the following report is presented in the short report format defined by the CTA for small projects with negative results.
Project Area on Nameless and Mansfield Dam USGS 7.5-minute Topographic Quadrangles

Scale: 1" = 2,000'  1 inch = 610 meters

Western Alignment
Central Alignment
Eastern Alignment

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Folders 35-17-042 BCRUA Nameless Electrical Alignment gis maps Task_2.2.5_Cultural Task_2.2.5.4_Report Figure1_Topo.mxd, 1/30/2018 8:59:07 AM, kcanavan

T.B.P.E. Registration No. 8053

CLIENT NAME: BCRUA
PROJECT NAME: PHASE 2 LAND RIGHTS & STAKEHOLDER COORDINATION
DATE: 01/19/2018
REVISION: 01

Walker Partners
engineers surveyors
T.B.P.E. Registration No. 8053

aci consulting
austin • denver
2.0 BACKGROUND REVIEW

2.1 Physiography
The project area is located in central Texas along the eastern edge of the Edwards Plateau in the Balcones Canyonlands. The Balcones Canyonlands are approximately 1000 feet higher in elevation than the Gulf Coastal Plain to the east. Erosion along the edge of the Edwards Plateau has resulted in steep, stair-step topography characterized by canyons, sinkholes, and karsts. The Balcones Canyonlands are relatively well watered in comparison to the larger Edwards Plateau and the Blackland Prairie to the east (Wermund 1995).

2.2 Geology and Soils
The Bureau of Economic Geology classified the general surface geology of the subject area as being primarily dominated by the Glen Rose Formation (Kgr). This group is described by Barnes (1974) as: Glen Rose Formation (Kgr): “Limestone dolomite, and marl subdivided into two units by Corbula bed C; alternating resistant and recessive beds forming stairstep topography; limestone aphanitic to fine grained, hard to soft and marly, light gray to yellowish gray; dolomite, fine grained, porous, yellowish brown; marine megafossils include molluscan steinkerns, rudistids oysters, and echinoids; upper part, relatively thinner bedded, more dolomitic, and less fossiliferous than the lower part, thickness about 200 feet; lower part more massive and about 160 feet thick, includes at top Corbula bed C, with abundant steinkerns of Corbula Harvey (Hill) in an interval up to 5 feet thick; thickness of Glen Rose Formation 380 +/- feet.”

The soils in the majority of the APE are mapped as Brackett-Rock outcrop complex, Tarrant and Volente. Also mapped within the APE are Brackett-Rock outcrop-Real complex, Altoga, Tarrant and Speck, and Mixed alluvial land, however these make up a significantly lower percentage of the APE (NRCS 2017) (Figure 3).
Alignment
- Western Alignment
- Central Alignment
- Eastern Alignment

Soil
- AgB: Altoga silty clay, 1 to 3 percent slopes
- AgC2: Altoga silty clay, 3 to 6 percent slopes, eroded
- BID: Brackett-Rock outcrop complex, 1 to 12 percent slopes
- BoF: Brackett-Rock outcrop-Real complex, 8 to 30 percent
- LcB: Lewisville silty clay, 1 to 3 percent slopes
- Md: Mixed alluvial land, 0 to 1 percent slopes, frequently flooded
- PuC: Purves silty clay, 1 to 5 percent slopes
- TaD: Tarrant soils, 5 to 18 percent slopes
- TcA: Tarrant and Speck soils, 0 to 2 percent
- VoD: Volente silty clay loam, 1 to 8 percent slopes

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1" = 2,000'
All of the soils formed in situ over limestone. Brackett and Real soils are shallow, gravelly, calcareous, loamy soils overlying interbedded limestone and marl. Tarrant soils are very shallow, stony, calcareous, clayey soils intermingled with shallow soils overlying limestone. Speck soils are shallow, clayey soils. Volente and Altoga are deeper than the other soils but also formed on sloping uplands.

- **Brackett-Rock outcrop complex, 1 to 12 percent slopes (BID)** - The Brackett series consists of shallow to paralithic bedrock, well drained soils formed in residuum weathered from limestone of Cretaceous age, mainly from the Glen Rose formation. These nearly level to very steep soils are located on backslopes of ridges on dissected plateaus of the Edwards Plateau.

- **Tarrant soils, 5 to 18 percent slopes (TaD)** - The Tarrant series consists of soils that are very shallow and shallow to indurated limestone bedrock, interbedded with marl and chalk. These well drained soils formed in residuum derived from limestone of Cretaceous age. These nearly level to very steep soils are on summits, shoulders, and backslopes of ridges on dissected plateaus.

- **Volente silty clay loam, 1 to 8 percent slopes (VoD)** - The Volente series consists of deep, well drained, moderately slowly permeable soils that formed in calcareous clayey sediments. These soils are on nearly level to sloping uplands.

- **Brackett-Rock outcrop-Real complex, 8 to 30 percent slopes (BoF)** The Brackett-Rock outcrop-Real complex consists of 38% Brackett, 25% Real, and 22% rock outcrop series. The Real series consists of soils that are very shallow to paralithic limestone bedrock interbedded with marl and chalk. These well drained soils formed in residuum derived from limestone of Cretaceous age.

- **Altoga silty clay, 1 to 3 percent slopes (AgB)** – The Altoga series consists of very deep, well drained, moderately permeable soils that formed in calcareous clayey alluvium derived from mudstone. These gently to strongly sloping soils are on risers on stream terraces.
• **Tarrant and Speck soils, 0 to 2 percent slopes (TcA)** – The Tarrant and Speck soils consists of 63% Tarrant and 32% Speck soils. The Speck series consists of shallow, well drained, slowly permeable soils formed in residuum and colluvium derived from indurated limestone. These soils nearly level to moderately sloping soils occur on interfluves, side slopes, and base slopes of hills and ridges.

• **Mixed alluvial land, 0 to 1 percent slopes, frequently flooded (Md)** – The land series consists of very deep, somewhat poorly drained soils that formed in silty alluvium derived from mixed sources. Land soils are on smooth flood plains, stream terraces, and alluvial flats. The mixed alluvial land mapped within the APE follows Sandy Creek.

### 2.3 Cultural Review

A literature review of the THC Archeological Sites Database (the Atlas) revealed no archeological sites have been previously recorded within the APE. Furthermore, no previously recorded sites are within one kilometer of the APE (Figure 4). The nearest recorded site is approximately 1.35 kilometers to the south. The site was recorded in 1974 as a surficial prehistoric lithic scatter.

In 2007, a small portion of the eastern segment of the APE was surveyed by aci consulting for BCRUA. Additionally, a small portion of the western segment crosses a survey from May 1977; unfortunately, no further information regarding this survey is currently available.

Lastly, Nameless Cemetery is located approximately 650 feet (0.20 kilometers) northwest of the western segment terminus. The cemetery dates from 1884 to present. The cemetery is located outside of the APE and will not be disturbed by this project.
3.0 FIELD METHODS
On September 9, and December 14, 2017, and January 11, 2018, archeologists from aci consulting conducted a cultural resources survey of the APE to locate any archeological sites or other historical properties that may be adversely affected by construction. The pedestrian survey was conducted within the entire APE. Shovel testing was not required due to good ground surface visibility (ranging from approximately 30-50 percent), and shallow and eroded soils at the surface.

4.0 RESULTS OF INVESTIGATION
The survey was conducted under pleasant conditions in the morning of all three days. The Western Alignment crosses Nameless Creek twice and crosses Big Sandy Creek (Figure 5). The Central Alignment also crosses Big Sandy Creek and slopes downward on a hill. The Eastern Alignment runs parallel to Trails End Road (Figure 6).

The vegetation within the APE consisted primarily of ashe juniper and some deciduous vegetation (Figure 7). Ground surface visibility was generally good and ranged from 30 - 70 percent (Figure 7).
Figure 5 Big Sandy Creek crossing on Western Alignment.
Figure 6. Trails End Road near Eastern Alignm
Figure 7. Typical vegetation and ground surface visibility within the APE
5.0 CONCLUSIONS AND RECOMMENDATIONS
On September 9, and December 14, 2017, and January 11, 2018, archeologists from aci consulting conducted a cultural resources survey for the proposed BCRUA Nameless Electrical Alignment project in Travis County, Texas. The APE consists of the 1.84-mile sections of the alignment, with a 20-foot buffer, resulting in approximately 4.53 acres.

No archaeological sites were recorded during the survey and no previously recorded archaeological sites, cemeteries, NRHP properties, SALs, or RTHLs were identified during the background review. Based on these results, no further archeological work is recommended. If any cultural resources are observed during the course of construction for this project, the BCRUA is advised to contact a professional archeologist.
6.0 REFERENCES CITED

Barnes, V.E.

(NRCS)

Wermund, E.G.