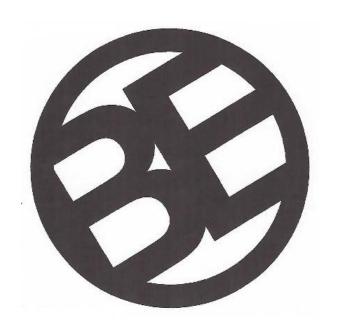
AN ARCHAEOLOGICAL SURVEY FOR THE BRUCEVILLE-EDDY WATER SYSTEM PROJECT IN MCLENNAN AND FALLS COUNTIES, TEXAS

Antiquities Permit 7510



Ву

William E. Moore

Brazos Valley Research Associates

Contract Report Number 278

AN ARCHAEOLOGICAL SURVEY FOR THE BRUCEVILLE-EDDY WATER SYSTEM PROJECT IN MCLENNAN AND FALLS COUNTIES, TEXAS

BVRA Project Number 15-13

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ABSTRACT

An archaeological survey at the site of a proposed water treatment plant was performed by Brazos Valley Research Associates (BVRA) on January 13, 2016 for the city of Bruceville-Eddy in McLennan and Falls counties, Texas. The project area consisted of two miles of highway right-of-way and a tract of land 103 acres in size. The soil throughout the 103 acre tract consists of firm black and brown clay at or near the surface (see Environmental Setting for description of soil). In some areas, marl was present at depths of 30 cm or less. No evidence of a prehistoric site was found. Two historic sites were recorded. These include a farmstead (41ML309) that consists of a collapsed house, a pole barn, brick lined well, and storm cellar. Other minor outbuildings were observed in other areas at least 40 m distant. The second historic site (41ML310) is a wooden house that had been added onto at one time. It is not known if it is associated with the farmstead to the north. This project was performed under Antiquities Permit 7510 issued by the Texas Historical Commission (THC), Archeology Division. No artifacts were collected. Copies of the report are on file at the THC, Texas Archeological Research Laboratory (TARL), BVRA, Texas State Library, various repositories and agencies, and the City of Bruceville-Eddy.

ACKNOWLEDGMENTS

I am grateful to those who made the successful completion of this project possible. Chris Hill of Tabor & Associates, Inc. was my initial contact with the City of Bruceville-Eddy. Koni Billings is the City Manager and she was very cooperative. Per her orders, three city workers accompanied us to the project area and helped when needed. They were Andrew Klarmann, Calvin Schaeper, and Colt Kilgo. Jesse Todd performed the survey along the frontage road of IH 35 and the proposed pipeline route north of 1st Street and west of the railroad. The Principal Investigator was in charge of the survey of the 103-acre tract and he was assisted by Micah Pullen and three city employees. Lili G. Lyddon of LL Technical Services in North Zulch, Texas prepared the figures and edited the report. Michele Amason provided technical advice regarding formatting of the report and creating shapefiles. I am especially grateful to Koni Billings, City Manager, for helping ferret out details regarding the history of the project area.

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INTRODUCTION

The city of Bruceville-Eddy plans to improve its wastewater system by constructing a sewage treatment facility and installing 70,000 linear ft. of sewer line. One-half of the sewer line will be within the right-of-way of Interstate Highway 35 and/or the railroad. The new pipe will vary from 6" to 10" and will be placed in a trench 16 inches to 20 inches wide and 4 ft. to 12 ft. deep. The wastewater treatment facility will be within a 103 acre tract but the exact location has not been determined. The majority of the project area is located in the southeastern part of McLennan County while a small portion is just across the county line in the northeastern part of Falls County (Figure 1). The project area is depicted on the USGS 7.5' topographic quadrangles Bruceville (3197-142) and Moody (3197-131) (Figure 2). Figure 3 depicts the project area, sites recorded as a result of this survey (41ML309 and 41ML31), and shovel tests within the 103-acre tract on an aerial photograph (date of photo not known).

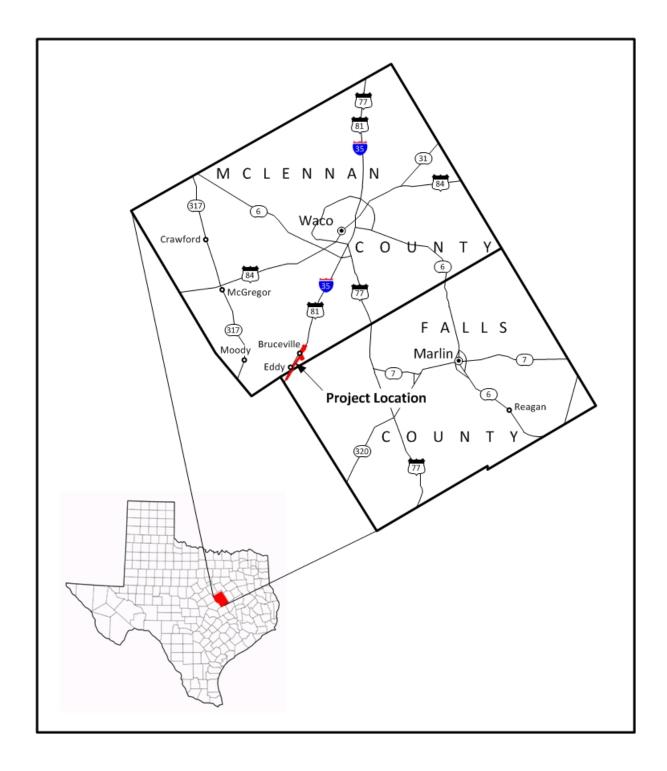


Figure 1.General Location Map

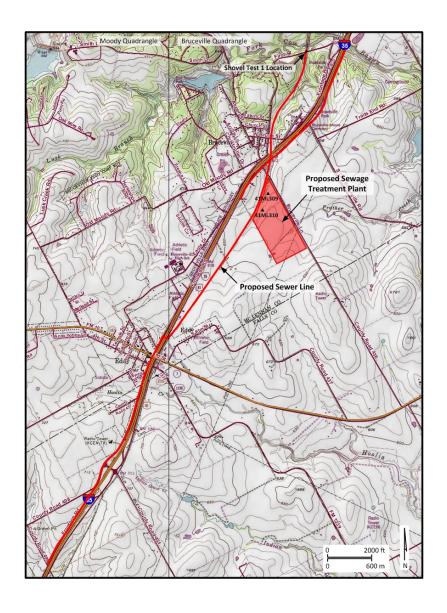


Figure 2. Project Area on Topographic Quadrangles



Figure 3. Project Area, Recorded Sites, and Shovel Tests

ENVIRONMENTAL SETTING

Falls and McLennan counties are located in the east-central part of the state. In general, the relief is undulating to rolling with some broad flatlands. The major drainage in the area is the Brazos River and its tributaries. Elevations vary throughout the two counties from 200 ft. to 500 ft. above mean sea level. There is one elevation, however, in the northwest corner of Falls County that is about 700 ft. In winter, the average temperature in the general area is 49.8 ° F. and the average daily minimum temperature is 39.2 ° F. In summer, the average temperature is 82.4 ° F. and the average daily maximum temperature is 93.2 ° F. The total annual precipitation is 33.85 inches. The growing season occurs from April through September. It is during this time that rainfall is the greatest. July is generally the driest month of the year. The average date of the last occurrence of freezing temperatures in spring is March 9th, and the first occurrence of freezing temperatures in the fall occurs on November 24th.

According to the soil survey for McLennan County (Miller and Greenwade 2011), the soil in the 103 acre tract is identifed on their General Soil Map as loamy and clayey soils formed in residuum derived from chalk and marl on uplands. The pasture portion of the project area consists of Fairlie clay, 1 to 3 percent slopes (FaB). These soils are described by in the soil survey of McLennan County (Miller and Greenwade 2011:49) as having been formed on gently sloping landforms of Lower Cretaceous age. The authors describe a typical profile of FaB soils as very dark gray clay in the surface and subsurface layers. The subsoil is also clay to a depth of 42 inches. The underlying material is white, platy chalk interbedded with chalky marl (loose or crumbling earthy deposits of sand, silt, or clay that contain a large amount of calcium carbonate). Two of the major land uses are as cropland and pasture. The rest of of the project area consists of soils described by Miller and Greenwade (2011:84) as Stephen-Eddy complex, 2 to 5 percent slopes (StC). These soils are described as having been formed on gently sloping landforms of Upper Cretaceous age. The authors describe a typical profile of StC soils as consisting of a surface layer (0-8 inches) of dark brown silty clay. The subsoil is platy chalk interbedded with dark brown silty clay from 8 to 12 inches. The underlying material is pink and white platy chalk. Typical uses for this soil are rangeland, cropland, and pasture.

METHODS

Prior to entering the field, the site records at TARL were checked for the presence of previously recorded archaeological sites in the project area and vicinity. Relevant archaeological reports documenting work in Falls County were reviewed in order to become familiar with the types of prehistoric and historic sites found in the two counties. Other sources of information include interviews with long time residents of the area and a search of available deed records. This survey was conducted in two phases.

Field Survey - Phase I

Jesse Todd conducted the first phase of the field survey on December 21, 2015. He visually inspected much of the footprint of the proposed pipeline and physically walked along the frontage road of Interstate Highway 35 and the proposed pipeline route north of 1st Street and west of the railroad. The terrain along the proposed pipeline route slopes gently north from the road (Figure 4). Only one area was determined to be suitable for digging a shovel test. Shovel Test 1 was excavated approximately 30 m north of 1st Street on a ridge overlooking South Cow Bayou. Shovel testing was not done on the IH 35 North frontage road at the bayou because the area also was investigated by SWCA in 2009. Much of the area had been disturbed by previous construction of the roads and railroad. Figure 5 illustrates the severity of disturbance at the beginning of the project area.



Figure 4. Gently Sloping Terrain along the Proposed Pipeline



Figure 5. Example of Disturbance

Field Survey - Phase II

William E. Moore visited the project area on January 13, 2016. He was accompanied by Micah Pullen who assisted with the mapping and shovel testing. The city provided three employees to take us to the project area and assist as needed. The first task was to locate and document the buildings and other features associated with the farmstead that we knew had existed there at one time. It was located in a wooded area in the northern part of the tract. Thick brush made the task difficult but each building and feature was measured, described, and photographed. The house was in very poor condtion as much of it had collapsed. This, plus the vegetation around and next to the house, made it difficult to identify its actual size and to take measurements such as width of windows and doors and height from the ground to the ceiling. The house was considered the focal point of the farmstead and all nearby outbuildings and features were measured and plotted on a sketch map to be used as the basis for a formal site map. The surface was examined for artifacts and other signs of habitation. This task was also hampered by thick vegetation and ground cover. This site is on level ground above an unnamed intermittent stream that originates at South Cow Bayou to the north and ends just outside the project area. Five shovel tests were dug in the area and no cultural materials, prehistoric or historic, were found. The shovel test locations are depicted in Figure 3.

A second house was observed 229 m (750 ft.) to the southwest. It was in a clearing and there were no obstacles involved in taking pictures and measurements. Photographs were taken from all four angles and the length, width, and height from ground to ceiling were measured. The surface was inspected for cultural materials and none were found. Four shovel tests were excavated around the house and they were negative. The shovel test locations are depicted in Figure 3.

Following the recording of the two historic sites, the pasture area was tested with shovels. The tests were dug in transects when possible. The pasture was divided into the large area north of Prather Creek and the smaller area south of the creek. Twenty tests were dug north of the creek and ten tests were dug on the south side of the creek. The soil consisted of very firm black clay over caliche-like fragments (probably marl) in some tests as shallow as 15 cm. Other tests did not encounter this material until around 30 cm. Each test was dug to 30 cm and the excavated soil was placed in a screen with quarter-inch hardware cloth. In most cases, the soil was too firm or wet to pass through the screen. The landform rises gently from north to south and at the apex of the pasture caliche-like material was found to be the most shallow. This survey was conducted in accordance with the Minimum Survey Standards as outlined by the Texas Historical Commission, Archeology Division.

ARCHAEOLOGICAL BACKGROUND

General

According to a published planning document for the Eastern Planning Region of Texas (Kenmotsu and Perttula 1993:Figure 1.1.2), Falls and McLennan counties are located within the Prairie Savannah archeological study region. According to the planning document, the prehistory of this region has not received as much attention as many other regions of Texas. According to a statistical overview published by the THC (Biesaart et al. 1985:Figure 15), the two counties are located in the North Central Texas Cultural-Geographical Region (Figure 6). In 1985, Falls County contained 16 recorded sites (Biesaart et al. 1985:114) and today there are 88 known sites. McLennan had 85 recorded sites in 1985 and today there are over 300 sites on file at TARL.

Historic Indian groups known to have occupied this area were the Cherokee, Tawakoni, and Waco (Kenmotsu and Perttula 1993:Figure 2.6.11). In 1845, there was a Cherokee village near the confluence of the Bosque River and the Brazos River. Circa 1809, the Tawakoni had three towns on the Brazos River about 80 miles north of the Camino Real crossing of the Brazos. The Waco may have been derived as a group from the Tawakoni. Circa 1829, they lived on the Brazos River south of the confluence of the Brazos and Bosque rivers. By 1841, they had moved up the Brazos River along with other Wichita-speaking groups and lived near the Tawakoni a few miles below the Clear Fork of the Brazos before moving to the Brazos Indian reservation (Watt 1969).

In 1843, the Torrey brothers created the Torrey Trading Post on the Brazos south of the current project area. The site of the trading post was on the line separating the Indian and white settlements. Here, the Indians signed treaties and received presents until 1854 when they were settled on reservations on the upper Brazos River. According to Dr. Ferdinand Roemer, a German scientist who traveled throughout Texas from 1845 through 1847, the trading post was on a hill covered with oak trees two miles from the Brazos River above Tohawacony Creek (Roemer 1983:191-192).

Sites and Surveys Near the Project Area

Few sites have been recorded in the vicinity of the current project area. The two closest ones are 41ML215 and 41ML278. Albert J. Redder recorded 41ML215 in 1987 on his personal time. He states on the site form that he may have dug in the wrong part of the site because he found very little in his test pit and only a few flint chips were noted on the surface. Site 41ML278 was recorded by Virginia Hatfield in 2008 as a historic feature associated with fishing and grilling. Both sites are approximately 2 km to the north.

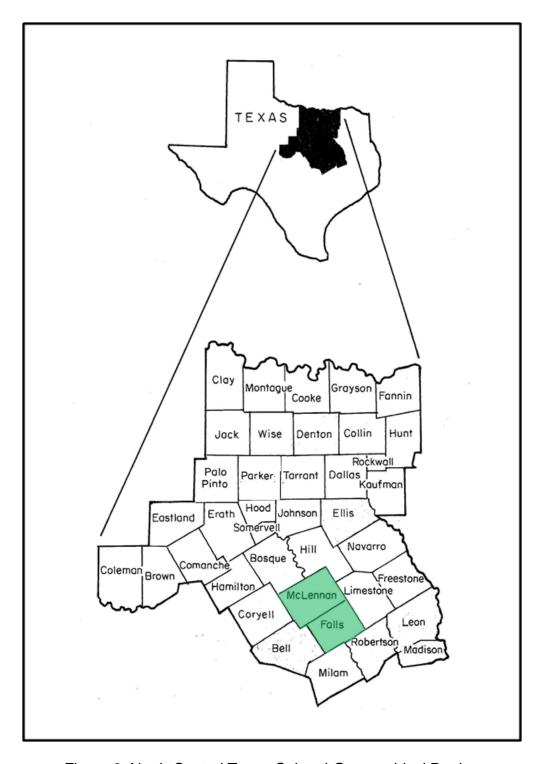


Figure 6. North-Central Texas Cultural-Geographical Region (after Biesaart et al. 1985)

The nearest survey to the current project area was conducted in 2009 by archaeologists from SWCA. This survey was sponsored by TxDOT under TAC permit 4924 and no sites were found. The western end of the SWCA project area is less than .20 km from the northeast corner of the current project area. Their survey area was along the I-35 North frontage road northeast of the intersection of the railroad track and the frontage road and it continued along the frontage road to South Fork Bayou. No report was available at the time of this survey.

For additional information regarding past work in Falls County, the interested reader is advised to consult the planning document by Kenmotsu and Perttula (1993), the statistical overview by Biesaart, et al. (1985), and the *Abstracts in Texas Contract Archeology* series compiled for the THC by William E. Moore (1991, 1992, 1993, 1994). This series provides abstracts for the years 1987 – 1992.

RESULTS AND CONCLUSIONS

General

Examination of the files at TARL in Austin revealed that the majority of the project area had not been examined by a professional archaeologist and there were no known sites there as well. Archaeological surveys have been conducted in the general area and these are discussed in the Archaeological Background section of this report above. No evidence of prehistoric utilization of the area was observed. The entire area consists of dark black and brown clay soils (see Environmental Setting above). The project area is part of a farmstead that may have encompassed a much larger area in the past than the 103 acres investigated during this survey. Most of the 103 acres was in pasture at the time of this project. The area around the farmstead was wooded and this suggests that all major agricultural activities were confined to the areas away from the farmstead. Approximately 600 m to the south of 41ML310, the project area is bisected by Prather Creek. This creek enters the tract from the east and crosses the western boundary of the project area just before ending as a viable drainage. There is a large stock tank just south of the creek and a clump of trees (Figure 7). Two-track dirt roads criss cross the area indicating recent traffic. The stock pond was built by Troy Parker, the last owner of the site, who used the property solely for cattle.



Figure 7. Stock and Fenced Area for Cattle

Recorded Sites

Two historic sites were recorded as a result of this survey. They are a farmstead that includes a house, well, storm cellar, and various outbuildings and an isolated wooden frame house. Both structures are in poor condition. They are described below and their approximate locations are depicted on the topographic quadrangle Brucevile (Figure 2) and the aerial photograph (Figure 3).

41ML309

This site belonged to the Scott family who raised chickens and farmed. This tract had been in their family for many generations and the ones who were responsible for the buildings there today were the last of their lineage because the rest of the family had virtually died out by that time. The house that is now virtually collapsed was their family home. Although the exact date of the construction of the house may never be known, their presence there has been confirmed by photographs on file at the City of Bruceville-Eddy that depicts their children posing for school pictures in 1929 and 1933 and the interviews with Patsy Duty and Laverll Taylor, long time residents of the area who recalled the Scotts being there during that time. The property was purchased by Troy Parker through a trust set up for the Scott family. Mr. Parker used the property soley for cattle and he built the stock tanks for his cattle. The city of Bruceville-Eddy purchased the land from Mr. Parker on September 28, 2015.

The focus of the site is the house that was in very poor condition at the time of this survey (Figure 8). It was difficult to get accurate measurements in places because of vegetation and the collapsed ceiling and walls. The footprint of the house was determined to be approximately 9.7 m across the front and 8.6 m on the sides (83.42 square m). It is a one story dwelling with wood siding attached horizontally to the frame. The front elevation has two large windows and the door is offset to the right. It appears that there was a front porch that has also collapsed. The front of the house probably is the wall that faces to the southwest. This statement is based in part on the fact that the Google Earth map shows two trails or roads that lead to this part of the house.

Figure 9 depicts the placement of the various buildings and features that combine to form site 41ML309. The only other standing structure near the house is a pole barn (Figure 10). It is 12.85 m (45 ft.) from the house. It was measured at 11.73 m across the front and back and 5.4 m on the sides. The opening in the front is 5.93 m wide. The interior was littered with trash and all signs of machinery or implements used for farming were gone. Water was obtained from a circular, brick-lined well between the house and pole barn (Figure 11). The diameter of the well was 1.6 m. A storm cellar (Figure 12) is near the house and on the edge of the unnamed drainage that flows from South Cow Bayou to the north. The cellar is made of poured concrete and appears to have been poured in two sections. The entrance is 1.4 m by 2 m and consists of five steps that descend into the actual shelter that is 3 m by 3.5 m in size and has a interior height of 1.88 m.



Figure 8. House at 41ML309

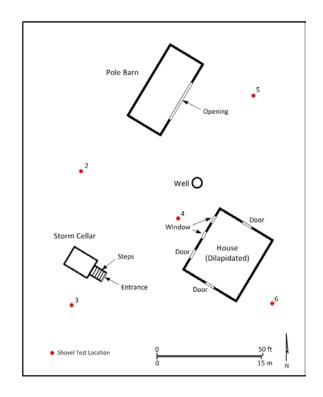


Figure 9. Site Map (41ML309)



Figure 10. Pole Barn



Figure 11. Well



Figure 12. Storm Cellar

41ML310

This small house was built for a family who worked for the Scotts. At the time of this survey, this structure was in very poor condition (Figure 13). Unlike the house at site 41ML309, there were no obstacles to prevent taking accurate measurements. The footprint of the house was determined to be 149 square m (1600 square ft.) Originally, it was a small, one-room building that was built using vertical studs covered on the interior and exterior with milled boards placed in a horizontal pattern. The floor was also constructed using milled boards and the house rests on piers. Later, a small addition was constructed, possibly to accommodate more persons as the family grew in number. The original structure had one door and probably two windows. Only one window could be confirmed at the time of this investigation. The wall between the original house and the addition had been modified. Therefore, it is not known if there was a window on the rear wall of the original structure. The addition has one window on each wall. The attic is quite large and could have served as an extra room as well as for storage. No vents to the attic were observed. The roof was covered with wooden shingles. There is no indication that this building had ever been painted. The floor plan of this house is depicted in Figure 14.



Figure 13. Site 41ML310



Figure 14. Site Map (41ML310)

RECOMMENDATIONS

No prehistoric archaeological sites were found in the APE. Two historic sites were documented and recorded at TARL. They are a farmstead (41ML309) and house (41ML310). Neither site meets the criteria for listing in the National Register of Historic Places or for designation as a State Archeological Landmark. This assessment is based on a lack of association with the following criteria for evaluation.

- Site not known to be associated with events that have made a significant contribution to the broad patterns of prehistory or history.
- Site not known to be associated with the lives of significant persons in the past.
- Site not believed to embody the distinctive characteristics of a type, period, or method of construction, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- Site not likely to yield information important in prehistory or history.

Their condition is poor and it is recommended here that construction be allowed to proceed as planned. During the construction phase, any evidence of a site not mentioned above must be reported and all work should should cease until the situation can be assessed by the Texas Historical Commission, Archeology Division. If the city decides to change its construction plans to include areas not examined during this survey additional investigation by a professional archaeologist may be necessary.

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APPENDIX I: SHOVEL TEST LOG *

Test	Depth	Results

Right-of-Way

Jesse Todd dug Shovel Test 1 on a landform overlooking South Cow Bayou. The first 15 cm consisted of very dark grayish-brown silty clay. At 16 cm, limestone bedrock was encountered.

41ML309

Five shovel tests (2–6) were dug in and around the buildings that comprise the historic site. Much of the ground had been disturbed. The main reason for the tests was to identify evidence of a prehistoric site if present. The soil at the surface was a think layer of clay loam with firm clay at 10 cm on average. At approximately 15 cm, small pieces of marl were encountered. The tests were terminated at 30 cm.

41ML310

Four shovel tests (7-10) were dug around the house. Prehistoric artifacts were not anticipated this far from water. It was obvious that the soil had been disturbed but the tests were excavated in an attempt to recover diagnostic artifacts that might date to the time the house was occupied. The soil was firm clay at the surface with very few pieces of marl in two of the tests. Since the marl was observed very near the surface to the bottom of the tests, the probability that the ground had been disturbed during the time the site was occupied seemed reasonable. The tests were terminated at 30 cm.

Pasture North of Prather Creek

The remainder of the 103 acres was in pasture and the landform sloped gently to the south. Again, firm clay was present at the surface. Marl was encountered and it was closer to the surface as the ground rose in elevation. Twenty shovel tests (11-30) were dug in a grid-like pattern across the pasture. The tests were terminated at 30 cm.

Pasture South of Prather Creek

The soil in this area was virtually identical to that north of the creek except marl was rarely encountered. Ten shovel tests were dug and each one was terminated at 30 cm.

^{*} All tests were negative in terms of yielding cultural materials