AN ARCHAEOLOGICAL SURVEY FOR THE BELL-MILAM-FALLS WATER SUPPLY CORPORATION USDA RURAL DEVELOPMENT PROJECT IN MILAM COUNTY, TEXAS

Antiquities Permit 5728



Ву

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Brazos Valley Research Associates Contract Report 244

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BVRA Project Number 10-23

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ABSTRACT

The Bell-Milam-Falls Water Supply Corporation located in Cameron, Texas plans to install a four-inch water transmission line along the east side of County Road 104 on private land. In response to a request by the Texas Historical Commission, an archaeological survey was performed by Brazos Valley Research Associates on August 11, 2010 under Antiquities Permit 5728. The length of the area where the pipeline is to be installed is 10,400 feet with a twenty-foot easement for a total of 4.8 acres. No prehistoric or historic sites were found within the project area. On area with exposed gravels on the surface was observed, but analysis revealed that these gravels were fractured due to natural causes such as freezing and thawing. Copies of the report are on file at the Texas Historical Commission, Texas Archeological Research Laboratory, Brazos Valley Research Associates, the Texas State Library, and the client.

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DEFINITION OF STUDY AREA

The Bell-Milam-Falls Water Supply Corporation plans to install a four-inch water transmission line along the east side of County Road 104 in eastern Milam County on private property within an easement of twenty feet (Figure 1). The water transmission line will be placed in a trench eight inches wide and forty inches deep. The area investigated is depicted on the USGS 7.5' topographic quadrangle Rogers (3097-443) (Figure 2).

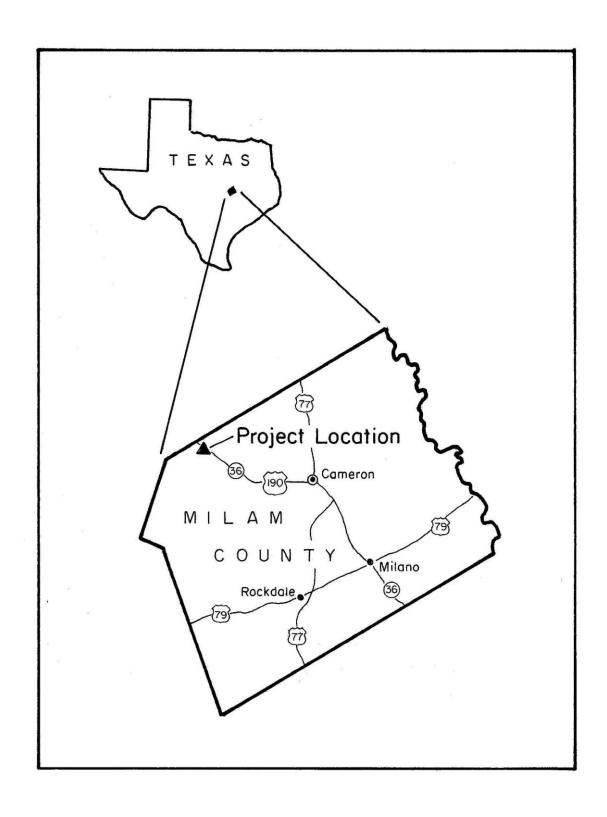


Figure 1.General Location

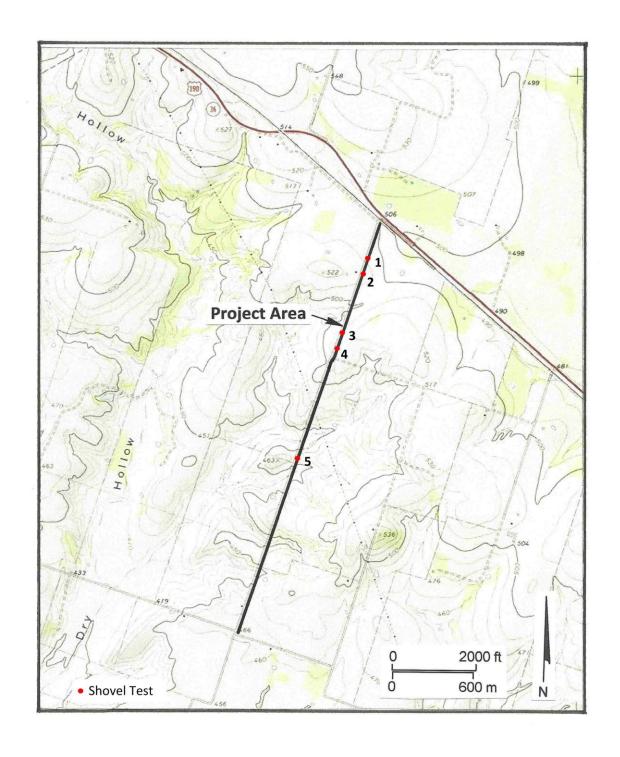


Figure 2. Project Area on Topographic Quadrangle Rogers

MANAGEMENT SUMMARY

This project was performed in order to identify any cultural resources that might be present within the project area. The client is the Bell-Milam-Falls Water Supply Corporation. The Principal Investigator was William E. Moore, and he supervised the field survey. The survey involved 16 person hours and was performed on August 11, 2010. The field crew consisted of John Connally and Christal McMillion. This project is regulated by the United States Department of Agriculture, Rural Development, and the reviewing agency is the Texas Historical Commission, Archeology Division.

METHODS

Prior to entering the field, the site records at the Texas Archeological Research Laboratory and the Texas Archeological Sites Atlas were checked for the presence of previously recorded sites and other archaeological surveys in the project area and vicinity. The online soil survey for Milam County prepared by the United States Department of Agriculture, Natural Resources Conservation Service was reviewed in order to assess the soils in the project area. The report documenting the previous work for the initial phase of this project (Leach-Palm and Rader 1996) was reviewed in order to become familiar with their findings. The field methods consisted of an inspection of the exposed ground surface and shovel tests in selected areas. Most of the project area is in upland settings with clay at or near the surface. Since it is highly unlikely that buried prehistoric sites exist in this setting, shovel tests were excavated mainly to confirm the presence of clay below the surface. All excavated earth was passed through quarter-inch hardware cloth, and a shovel test log (Appendix I) was used to record the data resulting from the tests. The approximate location of the five shovel tests is depicted on the project area map (Figure 2). Gravels were observed on the surface in several areas where shovel tests were excavated. Additional tests were not considered necessary since clay was at the surface throughout the area, and there were no obvious drainages south of Shovel Test 5. A sample of gravels was collected and examined in the laboratory by William A. Dickens, Ph.D. This project was documented by digital photography, notes, and forms.

RESULTS AND CONCLUSIONS

Examination of the files at the Texas Archeological Laboratory in Austin, Texas and the Texas Archeological Sites Atlas revealed that there are no known sites in the project area. A previous survey was conducted in by archaeologists from Horizon Environmental Services (Leach-Palm and Rader 1996) for the same client under Antiquities Permit 1659 as part of the Bell-Milam-Falls Water Supply Corporation 1995 water system improvements project. Areas selected for shovel testing were based on the presence of Holocene soils as defined by the Bureau of Economic Geology maps. These soils were typically found in areas associated with major streams. The majority of the smaller drainages in their survey area were shallow and broad with little evidence of aggrading conditions. These areas were viewed as having little potential for buried cultural resources. In the current project area, the only evidence of drainages consists of what appears to be the upper reaches of ephemeral tributaries that probably only contain water following periods of rainy weather. Leach-Palm and Rader (1996:7-1) cite a study by Sharpless and Yelderman 1993) that states that prehistoric and historic sites in soils associated with the Blackland Prairie have been "constrained by combinations of the lack of perennial water, clay content in the soil, and a low diversity of floral and faunal species within the grasslands." They also state that significantly fewer sites occur along intermittent drainages and those that do occur at confluences with perennial waterways or other intermittent waterways. These sites are usually limited activity areas such as flake scatters situated near sources of stone that are suitable for the manufacture of stone tools. They mention that most of the surface soils in their project area predate human occupation. Therefore, cultural resources (if present) should be restricted to the surface. The survey by Horizon Environmental Services examined four segments in close proximity to the current project area.

According to the online soil survey for Milam County, there are three known soil types in the project area. The majority of these are Houston Black Clay, 1 to 3 percent slopes (HoB) and Ferris-Heiden Complex, 5 to 15 percent slopes, eroded (FeE2). A small area in the approximate center of the project area is described as having Tinn Clay, frequently flooded (Tn). In general, an absence of soils in the current project area is viewed as being directly related to the shallow clay soils and a lack of a dependable water source in the area. Several forms of disturbance were observed. These consist of past agricultural activities over much of the area and construction of five chicken houses and a stock tank. Appendix II contains photographs of the project area. In several areas, chert gravels were observed on the surface. Some of these gravels were fractured and, at first glance, resembled cobbles that were tested by aboriginal groups in order to determine their quality for use as a source for the manufacture of stone tools. An examination of a sample of these cobbles by William A. Dickens revealed that the fractures are the result of natural causes such as freezing and thawing. This survey did not observe any evidence of historic utilization on the east side of County Road 104 except for the chicken houses that were probably constructed in the 1970s, a stock tank that is probably recent, and the fact that much of the area had been cultivated in the past.

RECOMMENDATIONS

No evidence of a prehistoric or historic site was found as a result of this survey. It is recommended that the client be allowed to proceed with construction as planned. Should evidence of an archaeological site be encountered during the construction of the road, all work must stop until the Texas Historical Commission can evaluate the situation. This survey was conducted in accordance with the Minimum Survey Standards as outlined by the Texas Historical Commission.

REFERENCES CITED

Leach-Palm, Laura, and Bert F. Rader
1996 Intensive Cultural Resources Survey, Bell-Milam-Falls Proposed
Water Pipeline Bell, Milam, Falls, and Williamson Counties, Texas.
Horizon Environmental Services, Inc. HJN 960028.

APPENDIX I: SHOVEL TEST LOG

Test	Depth	P/N	Comments
1	30 cm	N	sandy loam over clay (few gravels present) dug in fallow field
2	30 cm	N	sandy loam over clay (few gravels present) dug in front of chicken houses
3	30 cm	N	black clay with numerous gravels dug in area with exposed gravels on the surface
4	30 cm	N	black clay with numerous gravels dug in area with exposed gravels on the surface
5	30 cm	N	clay (no gravels) dug on prominent landform overlooking intermittent stream

P =artifacts present N = no artifacts present

APPENDIX II PROJECT AREA PHOTOGRAPHS



Fallow Field
(Shovel Test 1 dug in this area)



(Area in front has been scraped during construction)



Upland Area
(Shovel Test 3 in Foreground)



Shovel Test 4
(gravels throughout test)



Typical Chert Cobble

(observed near Shovel Test 2)