AN ARCHAEOLOGICAL SURVEY FOR THE CITY OF MONTGOMERY 1097 SEWER PLANT RELOCATION PROJECT IN MONTGOMERY COUNTY TEXAS

By
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AN ARCHAEOLOGICAL SURVEY FOR THE CITY OF MONTGOMERY 1097 SEWER PLANT RELOCATION PROJECT IN MONTGOMERY COUNTY, TEXAS

Project Number: BVRA 06-17

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ABSTRACT

An archaeological survey was conducted at an eight acre site in Montgomery County, Texas by Brazos Valley Research Associates (BVRA) on August 10, 2006 for LEFCO Environmental Technology, Inc. (LEFCO). The area was investigated through shovel testing, and no archaeological sites were identified. One primary cortex flake was recovered in a shovel test, and the area is defined in the report as an isolated find. It is recommended that construction of the sewer treatment plant be allowed to proceed as planned. No artifacts were collected.

ACKNOWLEDGMENTS

The authors are appreciative of those who participated in this project. Maps and logistical support were provided by Philip LeFevre of LEFCO. Jean Hughes at the Texas Archeological Research Laboratory (TARL) checked the site records for previously recorded archaeological sites in the project area and vicinity. Jennifer McMillan provided technical support, and Nora Rogers assisted in the editing and proofreading of this report.

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INTRODUCTION

BVRA was retained by LEFCO of Montgomery, Texas to conduct an archaeological investigation at an eight acre tract of land adjacent to Town Creek in west-central Montgomery County, Texas (Figure 1). The proposed construction is associated with an 800 to 1000 acre Planned Community known as Buffalo Springs. When completed, the eight-acre tract within this development may be deeded by LEFCO to the City of Montgomery to be used as a site for a sewer treatment plant. This is a privately funded project with the money for construction of the subdivision and this study provided by LEFCO. In 2005, a similar study was performed at a three acre tract on the south bank of Town Creek. Since that time, a permit has been issued by the Texas Commission for Environmental Quality (TCEQ) for this project. The location of the proposed sewer treatment plan has been moved to the opposite side of the creek necessitating a second visit by a professional archaeologist.

The area examined is depicted on the USGS 7.5' topographic map Montgomery, Texas dated 1976 (Figure 2). The project area is located on the north side of Town Creek about 1.2 kilometers northeast of the corporate limits of Montgomery, Texas. It is approximately 1.1 kilometer south of F.M 1097 where this road turns to the northeast and 540 meters east of Montgomery Cemetery.

Montgomery County is located in Southeast Texas, an area known to contain significant archaeological sites. A summary of previous work by professional archaeologists in the county is summarized in the *Archaeological Background* section below. Because of the potential of the project area to contain significant prehistoric and/or historic sites, a cultural resource study by a professional archaeologist was required by the Texas Historical Commission, Archeology Division. At the time of this study, the land was privately owned. Therefore, an Antiquities Permit was not required.

The project number assigned by BVRA is 06-17. The field survey was conducted on August 10, 2006. William E. Moore was the Principal Investigator, and Edward P. Baxter was the Project Archaeologist.

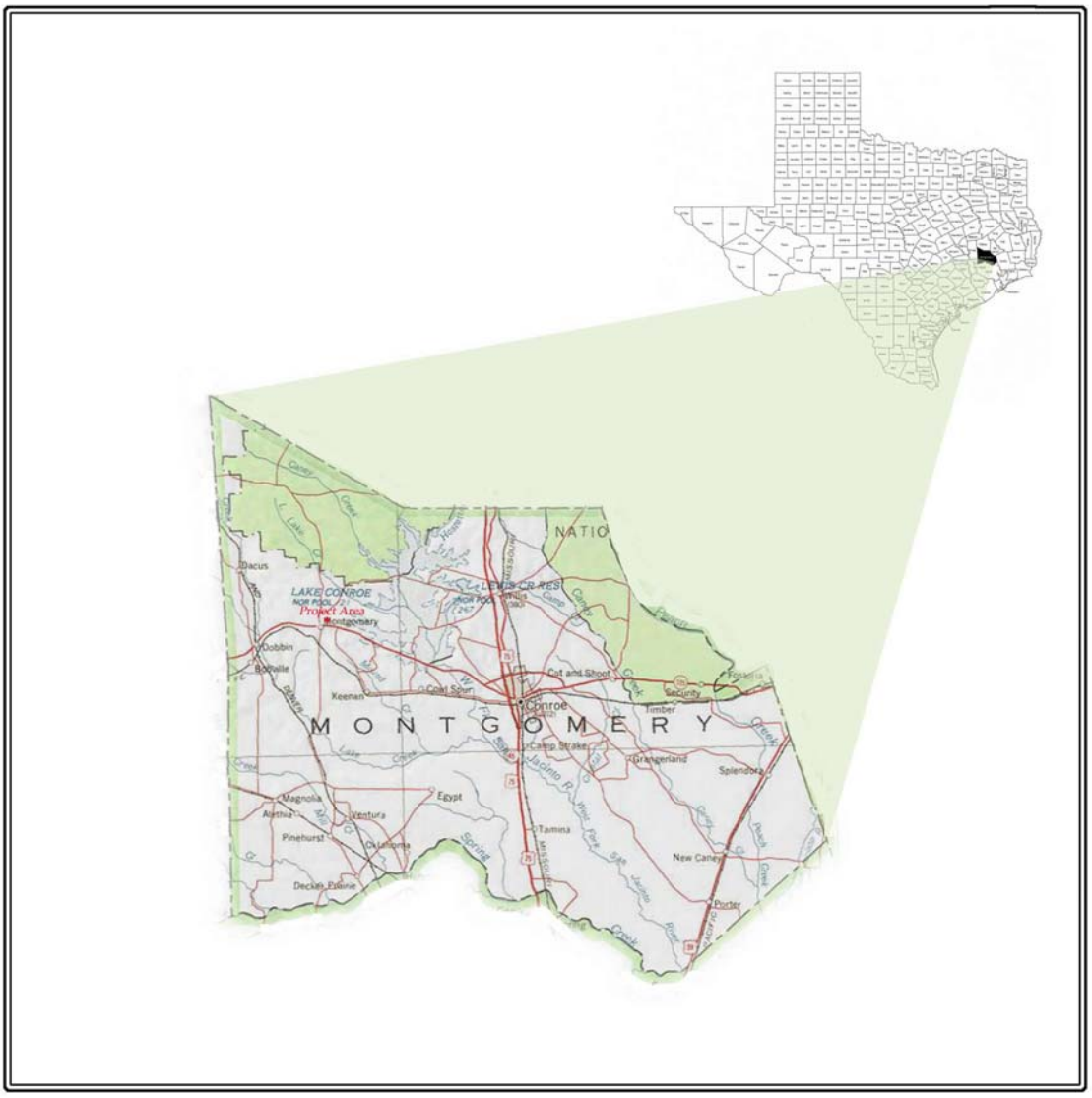

Figure 1. General Location

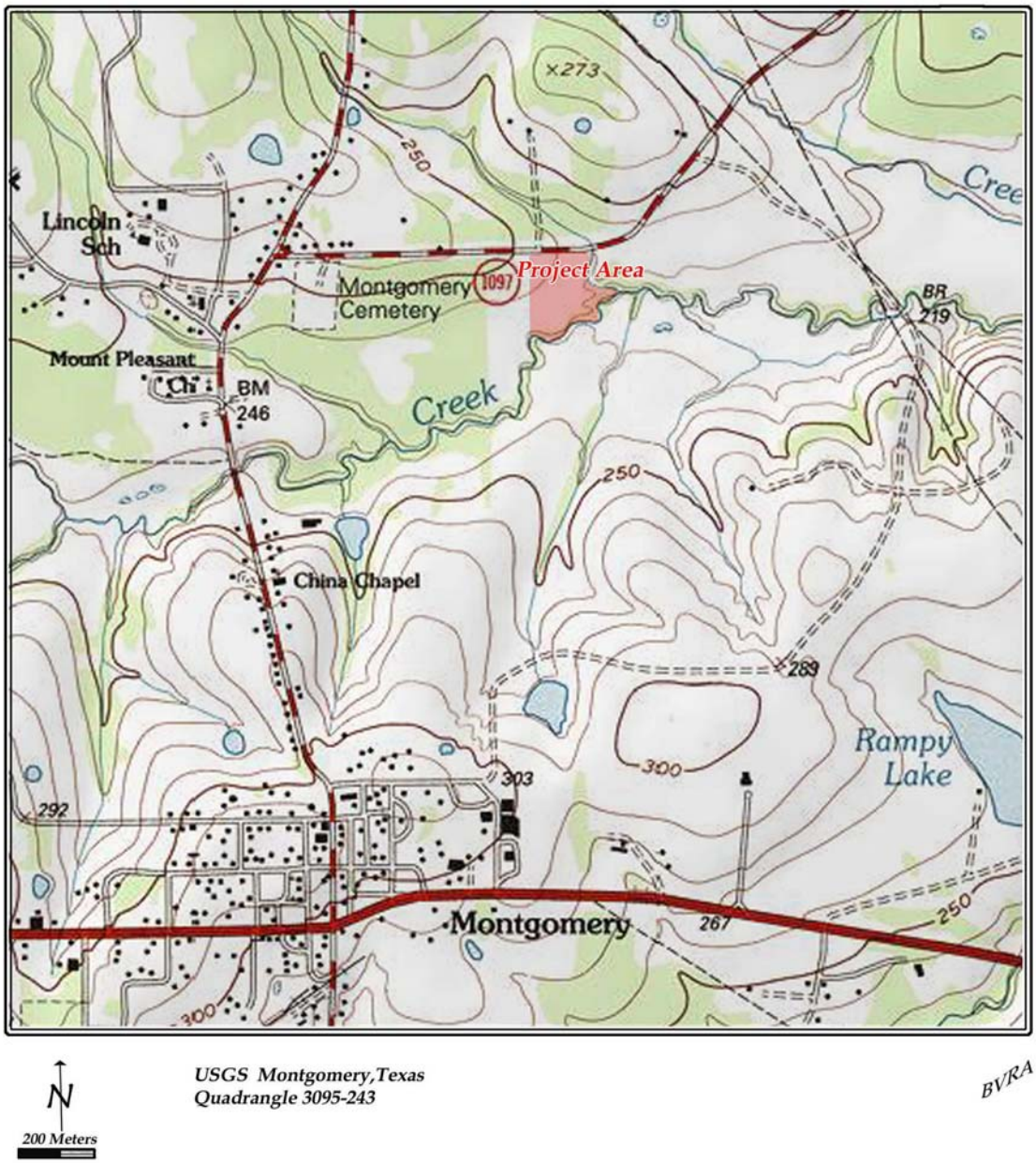

Figure 2. Project Area on Topographic Map

ENVIRONMENTAL SETTING

The following statements were summarized from the *Handbook of Texas* (Webb 1952) and the *Soil Survey of Montgomery County* (McClintock et al. 1972**:**1). Montgomery County, in the East Texas Timberlands Region, is bounded on the north by Walker and San Jacinto counties, on the east by Liberty County, on the south by Harris County, and on the west by Waller and Grimes counties. Montgomery County covers 1047 square miles of flat to gently rolling terrain. The county's principal water source is the San Jacinto River basin drainage system, which includes Peach, Caney, Spring, and Bushy creeks. Montgomery County is in the southeastern part of Texas in the land resource area of the East Texas Timberlands, Blackland Prairie, and the Gulf Coast Prairies. The northern and western parts of the county are undulating and the south and southeastern parts are level to gently sloping. Elevation varies between 79 feet in the southern part of the county to 330 feet in the northwestern part.

Vegetation is typical of the Piney Woods area with thick stands of longleaf, shortleaf, and loblolly pines; hickory; maple, sweet gum and black gum; oak, and magnolia trees. Grasses include Virginia Wildrye, blackseed needle grass, and purpletop.

Wildlife in the county includes eastern gray and fox squirrels, various species of bats and skunks, and small herbivores such as gophers, mice, rabbits, and armadillos, as well as raccoons, white-tailed deer, opossum, bobcat, coyote, and red and gray fox. Alligators, frogs, toads, and numerous species of snake, including the poisonous copperhead, cottonmouth, coral snake, and rattlesnake, are found in abundance. A wide variety of birds such as mockingbirds, cardinals, doves, quail, blue jays, and roadrunners, to name a few, are also native to the area.

The climate is subtropical humid with warm summers and mild winters. The average annual relative humidity is 73%, and the average rainfall is 47.44 inches. The average annual temperature is 68° Fahrenheit. Temperatures in January range from an average low of 39° to an average high of 61° and in July range from 72° to 95°. The growing season averages 270 days per year with the last freeze in early March and the first freeze in late November (Webb 1952).

The entire three acres is located within one soil type, Oktibbeha soils, 2 to 5 percent slopes, eroded (ObC2) as defined below by McClintock et al. (1972:23-24). These gently sloping soils are in irregular areas that range from 10 to 50 acres in size. The texture of the surface layer is variable. It is a mixture of the original loamy surface layer and the underlying clayey layer. In some places it is clay loam, and in other places it is fine sandy loam. Most areas of Oktibbeha soils were formerly cultivated, but now they are used for pasture.

ARCHAEOLOGICAL BACKGROUND

General

Montgomery County is located in the Southeast Texas Archeological Study Region of the Eastern Planning Region as defined by the Department of Antiquities Protection in *Archeology in the Eastern Planning Region, Texas: A Planning Document* (Kenmotsu and Perttula 1993). It is located in the Southeast Texas cultural-geographical region (Region 6) as defined by Biesaart et al. (1985:88-90) in a statistical overview. At the time the overview was published, Montgomery County was 14th in the region with 62 recorded archeological sites. The 62 sites comprised 3.81% of the region and .31% of the state. As of August 11, 2006 there were approximately 205 recorded prehistoric and historic sites in Montgomery County (TARL site files). No prehistoric sites are listed in the National Register of Historic Places, but one prehistoric site (41MQ73) has been determined to be eligible (TARL files). The *Archeological Bibliography for the Southeastern Region of Texas* (Moore 1989) cites 87 references for the county. Although many of these investigations have been small area surveys, often resulting in no sites being recorded, several projects involving larger areas have been conducted. The following is a discussion of previous work in Montgomery County.

Prehistoric Overview

A detailed discussion of the culture sequence of the project area is beyond the scope of this negative report. An excellent summary of some of the major efforts to describe and synthesize Montgomery County prehistory is presented in the Lake Creek Reservoir report (Bement et al. 1987). Although brief discussions of Montgomery County prehistory are presented in the various contract reports for the area, only two deal with major excavations of prehistoric sites. These are the Scott's Ridge site (41MQ41) by Shafer and Stearns (1975) and sites 41MQ4 – 41MQ6 in the San Jacinto River Basin, Lake Conroe (Shafer 1968).

Shafer and Stearns (1975:8-11) divide the prehistoric past of this area into two temporal periods. These are the Lithic Period (8000 B.C. to 200 B.C.) and the Ceramic Period (200 B.C. to A.D. 1700). The Lithic Period is that time prior to the invention and use of the bow and arrow and pottery. Very little is known regarding the early sites of this period except sites are found on the crests of high ridges overlooking stream valleys or old geomorphic features where original surfaces are reasonably intact. Later in the period, sites are found on recent geomorphic features such as sandy ridges, knolls, and low bluffs along permanent streams of all sizes. In general, subsistence data for this period is lacking.

The Ceramic Period began with the introduction of pottery in Southeast Texas. The Early Ceramic Period is characterized by the same kinds of lithic artifacts used during the previous period, and sites are found on the same landforms. The only discernible difference is the use of pottery. Site locations were the same during the Late Ceramic Period, and the bow and arrow was now being utilized.

Prehistoric Investigations

The first site to be recorded in the county is a Late Prehistoric site (41MQ1) on the West Fork of the San Jacinto River documented by E. Mott Davis of the Anthropology Department, The University of Texas at Austin, during a field trip to Montgomery County in 1956. Following this visit by E. Mott Davis, the county remained virtually unexplored until 1965 when archaeologists working for the Texas Archeological Salvage Project (TASP) surveyed an area to be affected by the proposed Conroe Reservoir (Shafer 1966). As a result of this survey, 32 sites (41MQ4-41MQ36) were recorded and three were recommended for testing. In the spring of 1967, three sites (41MQ4 - 41MQ6) recorded during the Lake Conroe survey were tested by TASP (Shafer 1968). These excavations provided the first substantial body of data for Montgomery County and made it possible for the first time to discuss the archaeology of the area based on artifacts excavated under controlled conditions.

In 1975, eight years after the Lake Conroe excavations, an archaeological survey was conducted in the Sam Houston National Forest adjacent to Lake Conroe (Shafer and Baxter 1975). Three sites (41MQ41 - 41MQ43) were recorded in Montgomery County, and two sites (41WA81 - 41WA82) were recorded in Walker County.

During the summer of 1975, site 41MQ41 was tested by archaeologists from Texas A&M University (Shafer and Stearns 1975). This site is located in the area to be affected by construction of the Scott's Ridge Recreational Area. This effort was very significant at the time as it provided an opportunity for archaeologists to test and confirm the hypothesis that "prehistoric sites having considerable antiquity do occur on older landforms in the area" (Shafer and Stearns 1975:37).

The work conducted at Lake Conroe only sampled sites on recent geomorphic features. The Scott's Ridge site, however, represents the first site investigated in the area that could be "tentatively placed in the Early and Middle Lithic Periods" (Shafer and Stearns 1975:37).

Probably the largest area to be investigated in the county was the site of the proposed Woodlands Development, a tract of 23,000 acres in the southern part of the county along Spring Creek. The project was initiated by the Coastal Zone Resources Division of Ocean Data Systems, Inc. under subcontract with Greiner Engineering Sciences, Inc. (1980) of Tampa, Florida in 1979. In all, this project recorded 12 prehistoric sites (41MQ63 - 41MQ74). Six of the sites are associated with the Neo-American or Late Prehistoric (corresponds to the Ceramic Period as defined by Shafer and Stearns); 2 sites contained both Neo-American (Ceramic Period) and Archaic (Lithic Period) components, and 4 sites were classified by the authors as "undifferentiated" prehistoric.

No historic sites or standing structures were encountered. Not one of the 12 sites was eligible for nomination to the National Register of Historic Places. Except for sites 41MQ70 and 41MQ73, no further work was recommended. The majority of sites are described as "small and unproductive, possibly short-term or transitory habitation localities."

In 1981, sites 41MQ70 and 41MQ73 were tested by Greiner Engineering Sciences, Inc. (1981) in order to determine their eligibility for the National Register of Historic Places. Site 41MQ70 was found to be not eligible, and site 41MQ73 was found to be potentially eligible.

In 2002, an archaeological survey of approximately 262 acres in central Montgomery County was conducted by Moore Archeological Consulting (Schubert et al. 2002). The entire development consists of approximately 11,000 acres; however, the Corps of Engineers only required that a smaller sample be examined. A two-stage investigation was conducted; Stage 1 consisted of shovel testing, site delineation, and excavation of test units, while Stage 2 completed site testing and conducted backhoe trenching. The investigation was limited to areas along Fish Creek, one of its tributaries, and the location of two smaller water control structures. Five prehistoric sites (41MQ175 - 41MQ179) were recorded during the Stage I survey, all of them along Fish Creek. Each of the five sites was in settings with deep sandy soil. The sites were not recommended for further work.

The most recent investigation in the immediate area was an archaeological survey for the proposed Montgomery Plaza Ltd. Project (3.176 acres) in the city limits of Montgomery by BVRA (Moore 1993). This study recorded one site (41MQ125) containing sparse amounts of prehistoric and historic components. No additional work was recommended.

Historic Overview

The Historic Period is marked by the introduction of European artifacts and materials into the prehistoric lifestyle. Although no well defined Historic Indian sites have been found in the immediate area, examples are present in the Wallisville area where evidence of French and Spanish interaction is believed to be present (Gilmore 1974; Dillehay 1975) and Lake Livingston where at least two sites containing materials believed to represent Alabama or Koasati Indian settlements have been examined (Hsu 1969). Two historic sites are listed on the National Register of Historic Places. They are the Arnold-Simonton House (possible plantation) and the Kirbee Kiln (a 19th century pottery). Kirbee Kiln is also listed as a State Archeological Landmark.

According to Newcomb (1961), the main indigenous Indian groups in Southeast Texas south of the Caddo were the Bidais, Deadose, Patiri, and Akokisa. These groups were closely related and spoke the Atakapan language. A written document by an early resident of Harris County mentions a group of Bidais or Akokisa in the area in 1918 (Moore 1992).

Montgomery County is located in an area that was divided into colonization contracts eventually administered by Stephen F. Austin. Anglo-American settlers began moving into the area in the 1820s. One of the first pioneers was Andrew Montgomery who established a trading post at the crossing of two historic trails, *Loma del Toro* and the Lower Coushatta Trace about three miles west of the project area. Other settlers joined him, and the area became known as Montgomery Prairie. Montgomery County was created in 1837 with the town of Montgomery as the first seat of government.

The early economy was based on agriculture consisting mainly of subsistence farming and plantations. The Arnold-Simonton home in Montgomery was constructed in 1845 and may have functioned as a plantation. Although cotton was the major crop, corn and tobacco were widely grown. In the early days, the lumber industry provided fuel and building materials.

Following the Civil War, the railroad brought major changes to the area. Railroads not only allowed for the creation of new settlements, but they also allowed for a more efficient means of harvesting and marketing the vast amounts of timber in the area. In the latter part of the 19th century and the early part of the 20th century, lumber was a booming industry in Montgomery County. Shipping points along the railroad became communities as the area prospered. In the 1950s, this industry declined due to lack of conservation of timber resources and increased competition in other areas of Texas.

In the 1930s, the discovery of oil created a new era of prosperity with the creation of the Conroe Oil Field. An oil field near Lake Creek eventually became the 6th largest in the country. Evidence of this industry is still found in the form of oil field roads, abandoned oil derrick sites, and wooden structures. Oil is still a major form of revenue for the county. The last major change is the growth associated with the proximity of Montgomery County to the Greater Houston Area.

Historic Investigations

In general, few projects designed to investigate historic sites have been carried out in Montgomery County. Most historic sites have been recorded during archaeological surveys in which prehistoric and historic sites were identified and recorded. Only two sites in the county are listed in the National Register of Historic Places. These are the Arnold-Simonton House on Rankin Street and the Kirbee Kiln archaeological site (41MQ38). One site (41MQ73) has been determined to be eligible for designation as a State Archeological Landmark.

Kirbee Kiln is a 19th century stoneware pottery that operated near the town of Montgomery between 1850 and 1860. It produced utilitarian stoneware pottery used in the preparation and storage of food. This unique historic site is described as a “groundhog kiln” and is the first to be excavated in Texas (Malone et al. 1979).

More information regarding the history of Montgomery County can be found in county histories by William Hardy Gandy (1952), Robin Montgomery (1975), the Montgomery County Genealogical Society (1981), as well as the *Handbook of Texas* (published book and online).

METHODS

Prior to entering the field, a records check for previously recorded sites in or near the project area was conducted by Jean Hughes at TARL. The Project Archaeologist visited the project area on August 10, 2006. Overall, the area was covered in various grasses and trees making a surface inspection impossible. Therefore, the investigation relied on shovel testing. The shovel tests (ST) were excavated at regular intervals when possible with an emphasis on testing those areas with sandy soil. When a flake was found in Shovel Test 6, three additional tests were dug in the vicinity of the find. Since the discovery test was at the western edge of the project area, no tests were dug in this direction. The discovery test was also very close to the creek, which is the southern boundary of the project area. Therefore, only one test (ST 7) was dug in this direction. Two tests (ST 8 and ST 17) were dug to the northeast and southeast. They were negative; so no additional tests in the area were considered necessary. In all, 17 tests were excavated by arbitrary 10 cm levels, and all sandy soil was passed through ¼" hardware cloth. All tests were dug to clay. The soils in the project area vary in depth from 10 cm to 95 cm. A shovel test log was kept and is part of the field notes (Appendix I). The approximate location of the 17 tests is shown on Figure 3. A digital camera was used to document the field conditions present during the survey, and control was achieved by the use of a hand-held GPS.

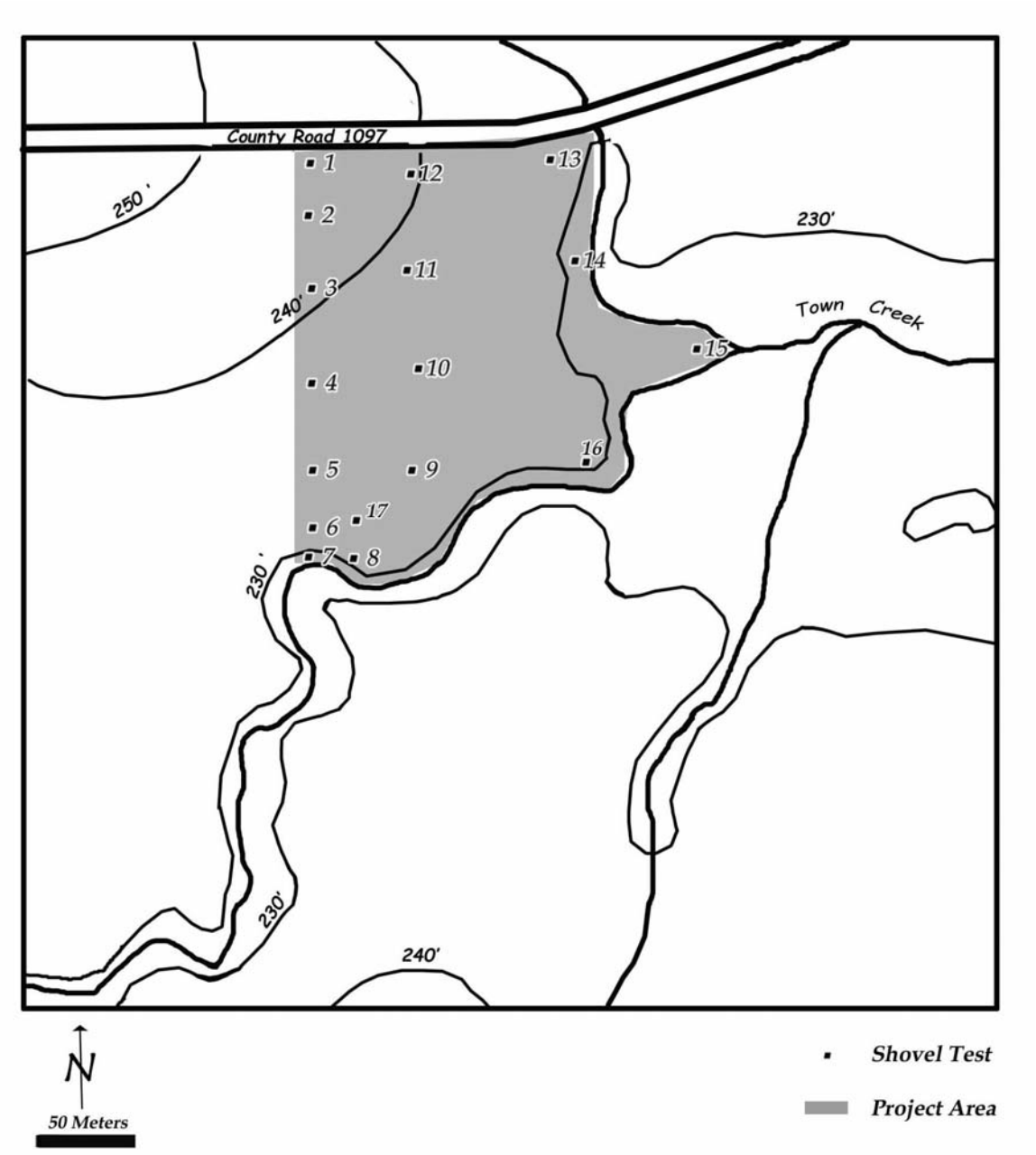

Figure 3. Shovel Test Locations

RESULTS AND CONCLUSIONS

This survey did not identify any prehistoric or historic archaeological sites within the boundary of the eight acre project area. One primary cortex flake was found at approximately 60 cm in Shovel Test 6. This single flake is defined in this report as an isolated find. Additional shovel tests may produce more flakes, but there is no evidence that a significant site is present. The project area was found to be situated on a gentle slope and low-lying areas adjacent to Town Creek and an unnamed tributary (Figure 4). At the time of this survey, most of the eight acres was in pasture, and the soils were predominantly sandy loam and clay loam over clay. In addition to the short grass associated with the pasture, stands of elm, oak, and hackberry were present as well as a thick, thorny brush paralleling the creek. At the time of this survey the area was being used as pasture.

Figure 4. View of Project Area

RECOMMENDATIONS

No archaeological sites were found to be present within the boundaries of the eight acre project area. The presence of a single flake is not considered to be significant. It is, therefore, recommended that construction of the sewer treatment plant be allowed to proceed as planned without further consultation with the Texas Historical Commission. This survey was conducted according to the Minimum Survey Standards as outlined by the Texas Historical Commission, Archeology Division.

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Appendix I. Shovel Test Log

Shovel Test	Depth (cm)	Result	Soils
1	30	Negative	sandy clay loam over clay
2	30	Negative	sandy loam over clay
3	20	Negative	clay loam over clay
4	40	Negative	sandy loam over clay
5	90	Negative	sandy loam over clay
6	95	Positive	sandy loam over clay
7	40	Negative	sandy loam over clay
8	40	Negative	sandy loam over clay
9	30	Negative	clay loam over clay
10	30	Negative	clay loam over clay
11	40	Negative	sandy loam over clay
12	20	Negative	clay loam over clay
13	30	Negative	clay loam over clay
14	10	Negative	clay
15	10	Negative	clay
16	10	Negative	clay
17	90	Negative	sandy loam over clay