AN ARCHAEOLOGICAL SURVEY FOR THE ED KHARBAT DRIVE EXTENSION, PHASE II PROJECT IN MONTGOMERY COUNTY, TEXAS

Antiquities Permit 4733

By

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Contract Report Number 185

2008

AN ARCHAEOLOGICAL SURVEY FOR THE

ED KHARBAT DRIVE EXTENSION, PHASE II PROJECT

IN MONTGOMERY COUNTY, TEXAS

Project Number: BVRA 07-34

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ABSTRACT

An archaeological survey was conducted along the route of the proposed Ed Kharbat Drive extension in the city limits of Conroe in central Montgomery County, Texas by Brazos Valley Research Associates (BVRA) on December 4, 2007 for the City of Conroe under Antiquities Permit 4733. No archaeological sites were identified, and no artifacts were collected. In all, 4560 feet (12.6 acres) were investigated. It is recommended that construction be allowed to proceed as planned.

ACKNOWLEDGMENTS

I appreciate the assistance of those who participated in this project. Maps and logistical support were provided by Troy Toland, P.E. of the Capital Division, City of Conroe. I was assisted in the field by C. J. Locklear and Tanner Singleton. Jean Hughes at the Texas Archeological Research Laboratory (TARL) checked the site records for previously recorded archaeological sites in the project area and vicinity. Lili G. Lyddon prepared the cover and figures that appear in this report. Nora Rogers assisted in the editing and proofreading of this report.

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INTRODUCTION

The City of Conroe proposes to extend Ed Kharbat Drive from Loop 336 to Foster Drive in the city limits of Conroe in central Montgomery County (Figure 1). The total length of the new road will be 4560 feet with a construction easement of 120 feet (12.6 acres). This road will cross Stewarts Creek, the only stream crossing in the project area. The area examined is depicted on the USGS 7.5' topographic map Conroe, Texas (Figure 2).

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. The project area is owned by the City of Conroe.

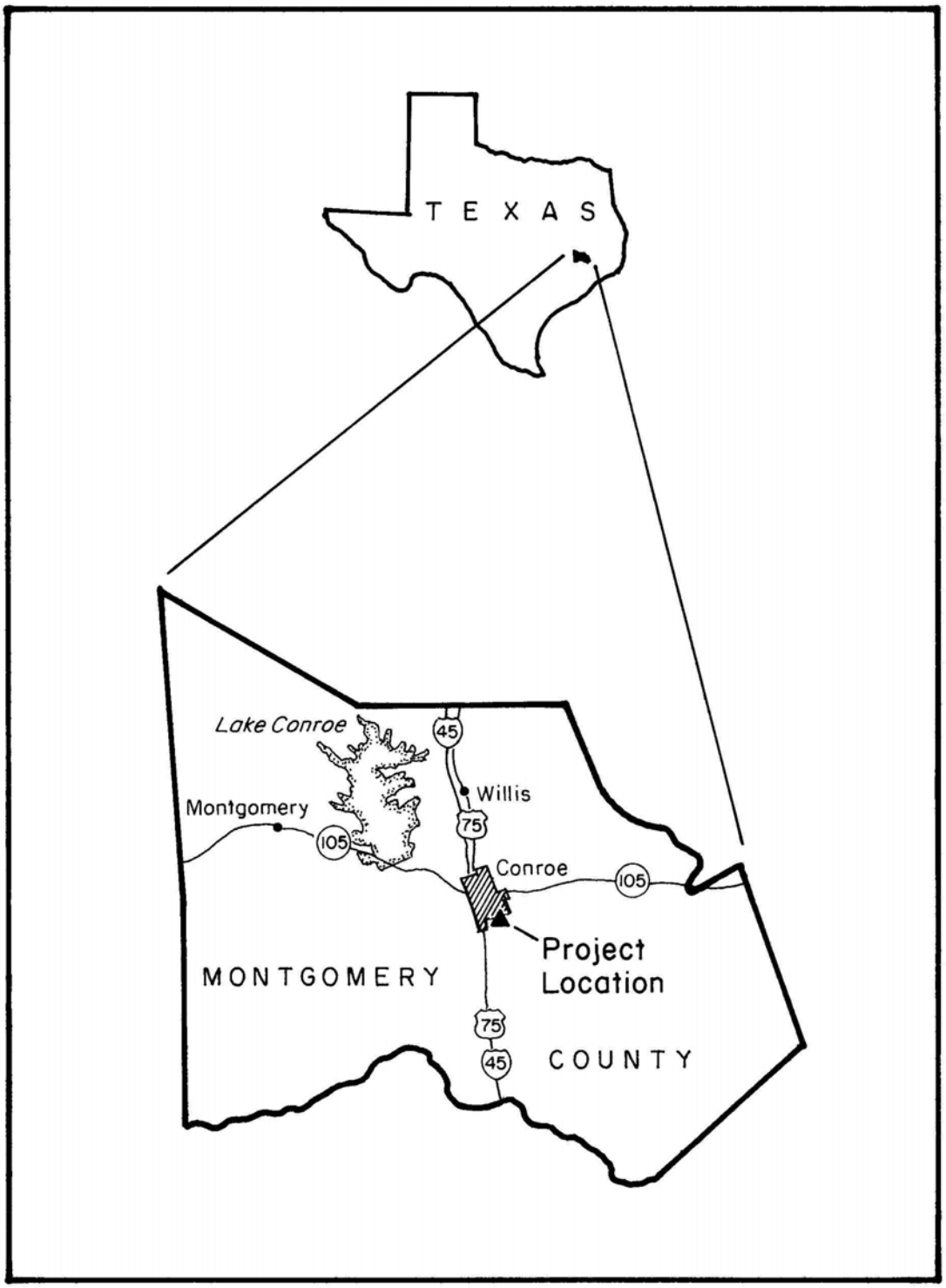

Figure 1. General Location

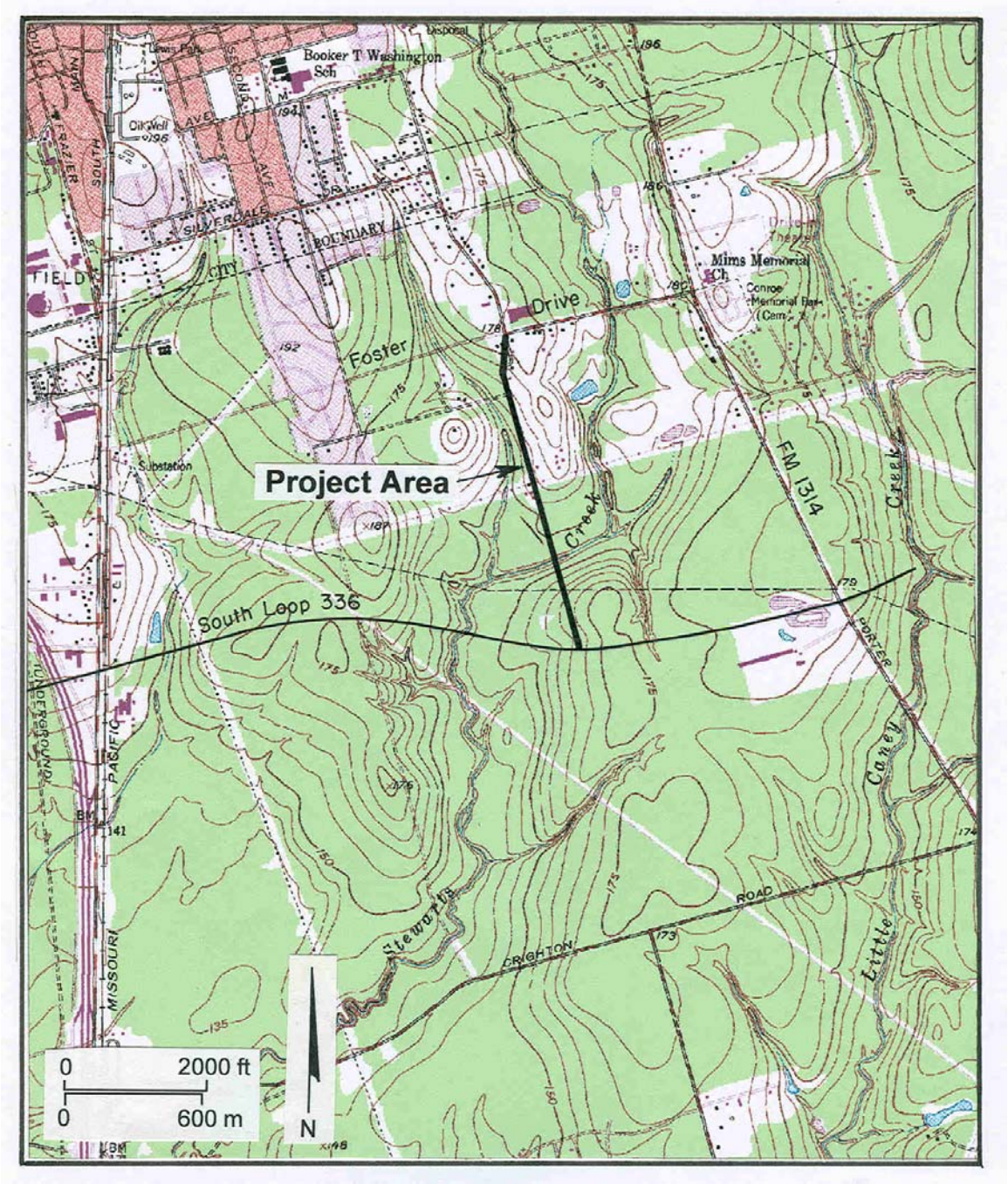

Figure 2. Project Area on Topographic Map Conroe

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).

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 1968). 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 (1975); 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.

Investigations Near the Project Area

According to the Archeological Sites Atlas, there have been several surveys by professional archaeologists in the immediate area. Two area surveys have been conducted in the general vicinity with negative results. In 2000, a study for the proposed Conroe Golf Course was conducted by archaeologists from Moore Archeological Consulting (Terneny and Beck 2000). They investigated 300 acres on an unnamed tributary of Little Caney Creek 1.7 km to the northeast of the current project area. In 2007, a study for a proposed Habitat for Humanity Housing Development was carried out by archaeologists from American Archaeology Group (Bradle and Griggs 2007). They investigated 36 acres on Stewarts Creek 2.3 km to the north of the current project area.

According to the Archeological Sites Atlas, there have been professional investigations along portions of Stewarts Creek. In 1980, that section of Stewarts Creek within the project area was examined for the Environmental Protection Agency (EPA). The Atlas does not state who performed the survey, and no report documenting this work was located. This study examined the creek and a portion of the landform above the creek on the north bank. No sites were recorded.

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 Principal Investigator visited the project area on December 4, 2007 with Tanner Singleton and City of Conroe employee C. J. Locklear. The project area was divided into two segments based on the crossing of Stewarts Creek. Area A is that portion of the project area from Loop 336 to the creek, and Area B is that portion from the creek to Foster Drive. Although the main focus of this investigation was Area A, both sides of the creek were investigated.

Area A is 1400 feet in length (3.9 acres). First, the creek bank containing exposed sand was investigated for displaced cultural materials, but no artifacts were observed. The initial shovel test in this area was excavated on the south bank 15 meters from the creek). The remaining tests in this area were dug at intervals of 20 meters to 45 meters in a southerly direction to Loop 336. In all, eight tests were excavated, and the excavated soil was passed through ¼" hardware cloth. Six of the eight tests were dug to clay, and the remaining two were terminated at 100 cm in sandy soil. The depth of the tests dug in Area A varied in depth from 35 cm to 100 cm. A shovel test log was kept and is part of the field notes (Appendix I). The approximate location of the eight tests is shown in Figure 3. The project was documented with field notes and digital photography. At the time of this survey, Area A was wooded with pines and mixed hardwoods. A clearing had been established along the proposed route of the road. According to the Archeological Sites Atlas, this area has not been investigated by a professional archaeologist.

Area B is 3160 feet in length (8.7 acres). There was a very good exposure of sand on this bank, and it was investigated for displaced cultural materials. No artifacts were observed. The first shovel test (ST 9) was excavated 15 meters from the creek). This test was terminated at 30 cm when clay was encountered. According to Mr. Locklear, there was a pipeline that in this area that paralleled the creek. The test was dug through a dark soil that he believed was intrusive. We stopped at this point believing the area had been disturbed. The last test (ST 10) was dug in the floodplain and terminated at 50 cm when clay and wet soil was encountered. The only high ground on the north side of the creek is at the extreme end of the project area at Foster Drive. At the time of this survey, most of Area B was in pasture, and a segment at the north end was in maintained yards in a residential area and was adjacent to a paved road (2250 feet). According to the Archeological Sites Atlas, a portion of this area was visited by archaeologists for the EPA in 1980. They examined the creek and a portion of the landform adjacent to the creek with negative results (see *Archaeological Background* above).

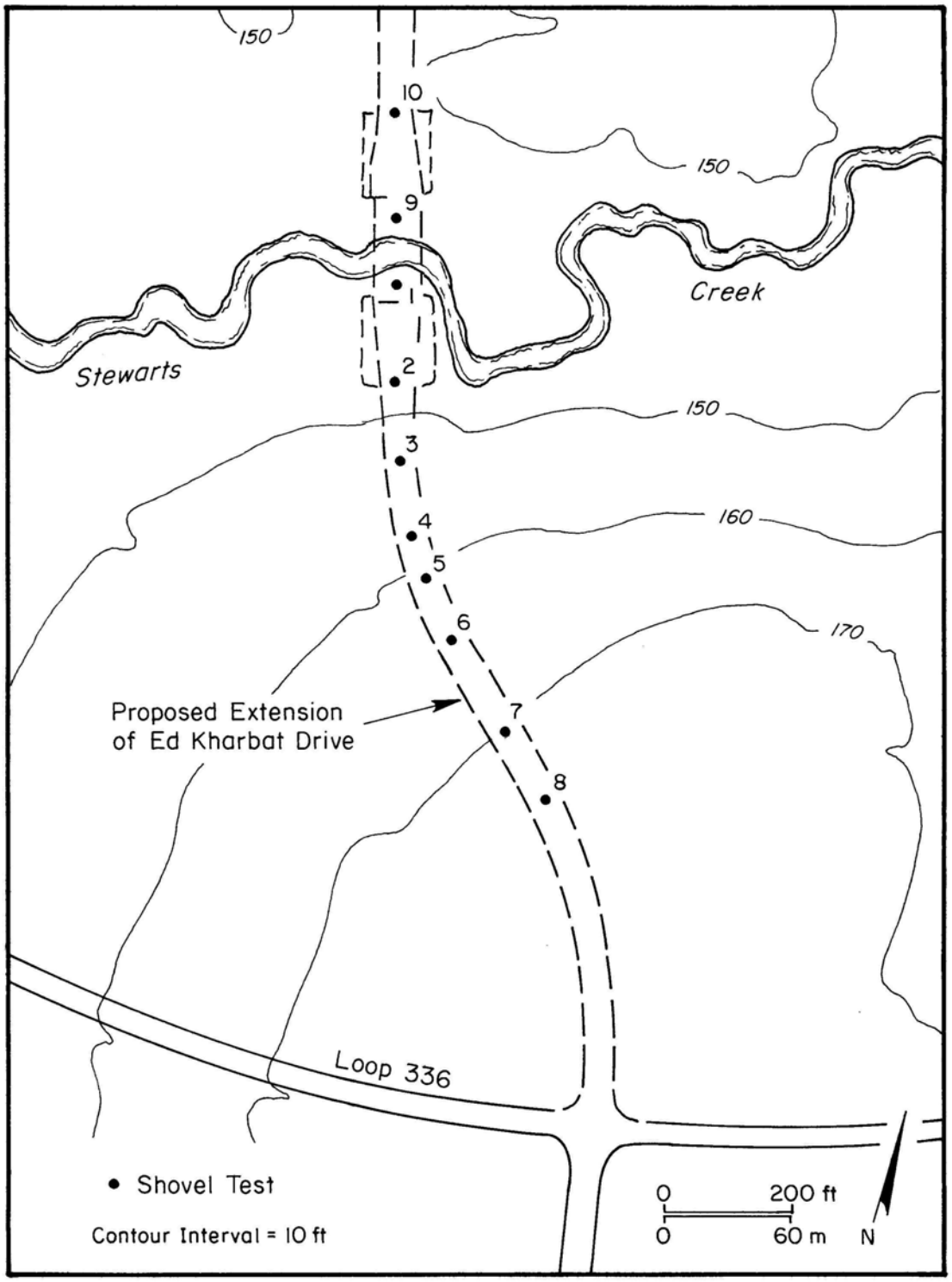

Figure 3. Shovel Test Locations

RESULTS AND CONCLUSIONS

This survey did not identify any prehistoric or historic archaeological sites within the 4560-foot project area. At the time of this survey, the area south of the creek (Area A) consisted of a forest containing stands of pines and hardwoods (Figure 4), and the soil was sandy loam over clay. The creek contained water, and the banks contained exposed sand making a surface inspection possible (Figure 5). The route for the proposed road had been cleared and flagged making it easy to take accurate measurements between shovel tests. Although the landform, as it appears on the topographic map, appears to be a good setting for a prehistoric site no cultural materials were recovered. Shovel tests were excavated for a distance of 285 meters south of the creek because of the higher ground in this direction and the presence of a tributary of Stewarts Creek on the east side. The apex of the landform is to the south and east of the proposed road, and this may be the most likely setting for a site if one is present in this area. Area B passed through a low-lying area and ended at the creek. The soils were wet and contained clay at a shallow depth. Only the extreme northern segment of this area was on a higher elevation. There is a hill just to the east of the proposed road in this area; this is a much more probable setting for a prehistoric site than the current route as proposed by the City of Conroe.

The soils in Area A are identified in the soil survey for Montgomery County (McClintock et al. 1972:Sheet 48) as Albany fine sand (Ab) and Fuquay loamy fine sand (Fs). Albany fine sand is found on convex ridges overlooking stream terraces. Soils in the Albany series are somewhat poorly drained soils that are sandy to a depth of 40 to 60 inches. Fuquay loamy fine sand consist of deep, well-drained soils that are sandy to a depth of 20 to 38 inches. These soils developed in loamy deposits on stream terraces. The soils next to the creek in Area B are Bibb soils, frequently flooded (Bb). These soils are found in the floodplains of streams draining sandy and loamy soils. The inland area north of the creek contains soils described as Conroe loamy fine sand, 0 to 5 percent slopes (CoC). This soil is found on broad ridges that have convex slopes. The loamy soils are about 30 inches thick and overlay clay containing ironstone concretions.

Figure 4. View of Woods in Area A

Figure 5. Stewarts Creek (looking north)

RECOMMENDATIONS

No archaeological sites were found to be present within the boundaries of the project area. It is, therefore, recommended that construction of the extension of Ed Kharbat Drive be allowed to proceed as planned without further consultation with the Texas Historical Commission. Should cultural materials be discovered during the construction of the extension of Ed Kharbat Drive, work in the area of the find must cease until the situation can be assessed by the Texas Historical Commission. Also, should the route of the proposed road be changed, the Texas Historical Commission must be notified as additional survey by a professional archaeologist may be necessary. 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)	Comments
		Area A
1	100	dug through wet sand; did not encounter clay
2	100	dug through wet sand; did not encounter clay
3	60	dug through damp sand; clay at 60 cm*
4	50	dug through damp sand; clay at 50 cm*
5	50	dug through damp sand; clay at 50 cm*
6	35	dug through damp sand; clay at 35 cm*
7	80	dug through damp sand; clay at 80 cm*
8	80	dug through damp sand; clay at 80 cm*
		Area B
9	30	dug through dark humus (possibly intrusive); gray clay at 30 cm
10	75	dug through wet sand; clay at 75 cm

*small pebbles present above and within the clay