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A Cultural Resources Survey for Timber Thinning Along CR 2133 Smith County, Texas

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A Cultural Resources Survey for Timber Thinning Along CR 2133 Smith County, Texas

> Antiquities Permit #7376 FINAL REPORT

> > Prepared for: City of Tyler 511 W. Locust St. Tyler, Tx 75702

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ABSTRACT

In October 2015 Deep East Texas Archaeological Consultants (DETAC) conducted a cultural resource management survey for the City of Tyler, Texas of three tracts totaling 57 hectares (141 acres) at the east end of CR 2133 west of the Lake Tyler West for timber thinning operations. The pedestrian survey was conducted under Texas Antiquities Permit #7376 in compliance with the Antiquities Code of Texas. The visual examination of the tracts found two clearings with debris, a segment of South Hillcreek Road, and three segments of a logging road. No artifacts were collected. Shovel testing of the project area did not recover any cultural material. No artifacts were collected or curated. DETAC is requesting concurrence with the determination of "no effect" to State Archaeological Landmarks or National Register of Historic Places eligible properties and SAL as defined by the Antiquities Code of Texas for the proposed timber thinning.

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INTRODUCTION

In October 2015, Deep East Texas Archaeological Consultants (DETAC) conducted a cultural resources survey for the City of Tyler, Texas of three tracts at the east end of CR 2133 near the Lake Tyler West (Figure 1). The survey was conducted upon request of the City of Tyler for timber thinning operations in compliance with the Texas Antiquities Code. The project was reviewed by the Texas Historical Commission (THC) under Texas Antiquities Permit #7376. All terms of the permit were carried out pursuant of the Texas Antiquities Code.

The purpose of this survey was to locate, describe and record any cultural resources within the project area boundaries. The pedestrian survey found two clearings with road building debris and abandoned boats near the northwest corner, a segment of South Hillcreek Road in the north central section, and three segments of a logging road in the south central portion of the project area. No historic period sites were found in association with the clearings or the road segments. No artifacts were collected from the surface inspection and no artifacts, historic or prehistoric, were found in shovel tests in the project area; therefore, no artifacts were curated.

The report was prepared following the short report format outlined by the Council of Texas Archaeologist (CTA) (2005a). Based on fieldwork, DETAC recommends a determination of "no effect" to cultural resources eligible to the National Register of Historic Places or State Archaeological Landmarks for the proposed timber thinning operations.

DEFINITION OF STUDY AREA

The proposed timber thinning includes removing select trees from the three tracts totaling 57 hectares (141 acres (ac)) with heavy machinery. The three tracts include the summit and backslope of an upland ridge along with an ancient stream terrace. The tracts are surrounded by Slack Road and South Point Road with modern residences outside of the roads adjacent to the lake shore. There is no obvious modern development in the project area. Vegetation includes mixed hard and soft wood trees with moderate to dense understory of various bushes, shrubs, and vines. Ground cover is leaf litter and deadfall. Soils are include Bowie (BoB), Kirvin (KgC), and pits (Px) on the ridge summit with



Figure 1. Project area on Troup West (032095b2) 7.5' Quad.

Gallime (GaB) and Delry-Besner (Db) complex on the backslope and terrace (NRCS 2015). Bowie, Cuthbert, and Kirvin soil series have A and E horizons of fine sandy loam between 10 and 28 cm (4 and 11 in) over a Bt horizon of sandy clay loam. Gallime series soils have roughly 65 cm (28 in) of fine sandy loam over sandy clay loam. Derly series soils are in swales with 35 cm (14 in) of silt loam over clay loam interspersed with ridges of Besner fine sandy loam 155 cm (63 in) deep over silty clay loam.

PREVIOUS RESEARCH AND CULTURAL HISTORY

Overall, Smith County was part of broad studies and investigated in both larger examinations and numerous small surveys. The large area investigations in the area are limited to those along Lake Fork Reservoir (e.g., Brusheth *et al* 1977) to the northwest and Lake Palestine (e.g., Keith 1971) to the south. Large linear surveys were conducted for new roads (e.g., Campbell et al. 2008). The smaller surveys were typically for road improvements (e.g., Nelson and Perttula 2012). These investigations found, tested, and conducted data recovery efforts on a variety of historic and prehistoric sites. Most of the surveys mentioned above focused on low lands and areas adjacent to perennial streams and well developed floodplains. The numerous small surveys in the area include both upland and lowland settings. The investigations that documented archaeological sites found that prehistoric and early historic sites were found adjacent to stream channels in the floodplains on first terraces or along the toe slopes of higher ridges.

In addition to the fieldwork referenced above, several documents have added significantly to available information on the archaeological record in this region. Initially, D.A. Story and others (1990) and J.A. Guy's (1990) describe the prehistoric cultures of the Gulf Coastal Plain from southwest Oklahoma to the Gulf Coast. The Texas Historical Commission, Department of Antiquities Protection developed a document for the eastern Texas portion of the Texas State Plan (Perttula and Kenmotsu 1993). This document includes several historic contexts, each of which deals with a particular facet of northeast Texas prehistory. More recently, Perttula (2004:370-407) describes the Caddoan archaeology of northeast Texas which encompasses the area between the Red River in the north, the Trinity River in the west, and Angelina River in the south.

The occupation of the area ranges from the Paleoindian (ca. pre-7000 B.C.) to Archaic foraging cultures (ca. 7000-200 B.C.), Early Ceramic Period groups (ca. 200 B.C. - A.D. 800), the sedentary Caddoan occupation (A.D. 800 - 1680), and ends in the historic Euro American settlement (Perttula and Kenmotsu 44:1993). The Paleo-Indian period (ca. 10,000-7000 B.C.) is characterized by small, mobile bands of hunters and gatherers that consumed a variety of native plants and animals (Story 1990). The Archaic (7000-200 B.C.) refers to hunter-gatherers who implemented more regionally specialized approaches toward exploiting their environment (Story 1990). The Early Ceramic (200 B.C.-A.D. 800) stage, also referred to as the Woodland period, represents an increasing utilization of the environment by local groups to include a greater reliance on cultigens, prolonged occupations at specific locales indicating an increasingly sedentary lifestyle, and the emergence of social and ritual ceremonies (Story 1990). The prehistory of northeast Texas in the Late Prehistoric period essentially concerns the Caddoan culture (A.D. 800-1600). This culture is an indigenous development strongly influenced by the Mississippian tradition of the Lower Mississippi Valley (Story 1990:323). Larger aggregates of people became sedentary and constructed villages with public ceremonial areas. Cemeteries are found in association with large ceremonial mounds (Perttula 2004:379). A stratified social structure developed, corresponding to the chiefdom level as first defined by Service (1962, 1975). Extensive commercial networks were also established. The Historic period (1680-present) describes both the history behind the current cultural setting of the area and marks the expulsion of native populations and the progression of the American immigrants as they established farms, towns, and counties. The earliest American moved into the Neches Saline area in the late 1820's. Smith County was officially formed on 11 April 1846 with Tyler as the County Seat. Local farmers grew cotton, fruit, and vegetables. Cash crops became more prevalent with the arrival of the International-Great Northern Railroad in Whitehouse in the 1870's. Surviving the Civil War, the area remained rural until the East Texas oil boom. Industry, the growth of Tyler, and the creation of Lake Tyler in the 1960's all contributed to the growth and maintenance of the area although, chicken, cattle, and siviculture still dominate the local economy (Smith 2010).

RESEARCH DESIGN AND METHODOLOGY

The investigations were performed in compliance with the Texas Antiquities Code following survey standards described by the Texas Historic Commission (2015) and report guidelines set forth by the CTA (2005b). The purpose of these investigations was to locate prehistoric and historic cultural resources within the project area, delineate the vertical and horizontal extent of each site, and make a preliminary evaluation of each site's integrity and potential for State Archaeological Landmark (SAL) designation and/or National Register of Historic Properties (NRHP) eligibility. All fieldwork and reporting comply with the ethics standards of the Texas Archaeological Society and the Register of Professional Archaeologists.

Before initiating fieldwork, DETAC conducted a records and literature review using the Texas Archaeological Site Atlas (THC 2015). The atlas contains a current database with published and unpublished data regarding cultural resource surveys, archaeological site location maps, and cultural resources records. In addition, these records show State Archaeological Landmarks (SAL) and NRHP eligibility of previously recorded sites.

DETAC conducted an intensive pedestrian survey of the project area relying on shovel testing and visual examination to locate archaeological sites within the Area of Potential Effect (APE). Shovel testing included excavating an area approximately 30 centimeters (cm) square in 10 cm (4 in) levels down to the clay substrate or 90 cm (35 in). Following to the THC guidelines, the pedestrian survey included a surface inspection focused on areas with exposed soil (e.g., erosional features and ant mounds) along with a minimum of 47 shovel tests in the 57 ha (141 ac) area. Shovel test locations were recorded with Ashtech GPS units with sub-meter post-processing accuracy. Notes were made about soil color, texture, and shovel test depth.

RESULTS

The project area includes three tracts totaling 57 ha (141 ac) encircled by Slack Road and South Point Road. There is no modern development on the tracts but the area outside the roads is dominated by modern residences adjacent to the lake shore. Topographically, the project area is on the summit, shoulder, backslope of a wide upland ridge with an ancient terrace overlooking Lake Tyler West. Vegetation across the tracts is dominated by mixed hardwood and pine trees with a moderate to dense understory of various bushes, shrubs, and vines. Ground cover is leaf litter and deadfall.

The literature search and records review of the Texas Archaeological Site Atlas (2015) found four professional archaeological survey but no archaeological sites recorded within 1.6 kilometers (km) (1 mile (mi)) of the project area (Appendix B). The previous investigations include a survey along F.M. 3341 roughly one mile east of the project area by the TDHPT in 1976, a survey of Forest Stewardship Area (FSA) 7 between F.M. 3341 and Lake Tyler East by DETAC (Galan 2013), a second FSA survey south of the Lake Tyler West Dam (Galan2015) roughly 0.8 miles to the south, and a survey for water lines by AR Consultants (Skinner 2005) roughly 1.1 miles southwest of the project area. Only the survey south of Lake Tyler Dam West found an isolated find (a nutting stone) on a sandy natural levee adjacent to Prairie Creek. The closest recorded sites are roughly 1.7 miles to the east under the pool level of Lake Tyler East.

The archaeological investigations included a visual examination and shovel testing in the project area. The visual examination resulted in the mapping of several surface features: two clearings, a segment of South Hillcreek Road, and three segments of a logging road (Figure 2). Surface inspection of the two clearings found road building rubble in the western clearing and discarded boats in the north end of the eastern clearing. Examination of the South Hillcreek road segment found a wide level road cut with ditches on the lateral edges. The logging road cuts were generally 3 m (10 ft) wide with depths between a few centimeters to roughly 90 cm (36 in) deep depending on the slope of the surrounding landscape. Examination of the Google Earth history photos extend to 1995. The 1995 photo shows the two clearings in the project area and the houses along the lake shore outside of the project area which are no different from the August 2015 photo.



Road rubble in western clearing



Discarded boats in eastern clearing



South Hillcreek Road segment



Logging road looking west



Delry soil profile on terrace

Figure 2. Project area photographs and soil profile



Ridge/swail topography on terrace



Figure 3. Project area shovel tests and surface features

A total of 109 shovel tests were excavated across the project area with an emphasis on ridge tops of the ridge/swale topography on the ancient terrace along the east side of the project area (Figure 3 and Appendix A). Soils on the terrace include Gallamie fine sandy loam and Delry-Besner complex (Db). Gallamie series soils consist of fine sandy loam with a poorly defined Bt horizon. The Delry series are silty soils in swales while Besner series are fine sandy loam soils on the low ridges. Delry soils were visually examined. Besner soils were shovel tested at a high probability interval. Shovel tests on the terrace were typically 60 to 80 cm (24 to 30 in) deep over a poorly defined Bt horizon. Shovel testing on the upland ridge backslope and summit were excavated at a low probability interval because of the distance to water and generally shallower soils over a well-developed Bt horizon. Upland ridge summit and backslope tests ranged from 10 to 50 cm (4 to 20 in) deep in fine sandy loam over sandy clay. No artifacts were found in the shovel tests and no material was collected from the debris areas locations. No artifacts were curated.

SUMMARY AND RECOMMENDATIONS

The City of Tyler, Texas will conduct timber thinning on three tracts of land at the east end of CR 2133 near Lake Tyler West. DETAC performed a cultural resources survey of the tracts in compliance with the Texas Antiquities Code under Texas Antiquities Permit #7376. The project was reviewed by the Texas Historical Commission.

The purpose of this survey was to locate, describe and record any cultural resources within the project area boundaries. The surface inspection found two clearings, a segment of South Hillcreek Road, and three segments of a logging road. Road rubble and discarded boats were found in the clearings. No cultural material was found along the road segments. A total of 109 shovel tests were excavated across the project area with an emphasis on several low ridges on an ancient terrace of Pine Creek. Shovel test found deep fine sandy loam on the ridges and shallow silty loam soil in the swales. Upland ridge and backslope shovel tests found shallow sandy loam over a well-defined Bt horizon. No cultural material was collected from the clearings and no artifacts were found in shovel tests. No artifacts were curated.

Based on the shovel test results and the visual examination, there is little chance of encountering any additional undiscovered cultural resources in the project area. In the event that human remains and/or archaeological materials are discovered during timber thinning, then the project activity will cease in the immediate area and DETAC shall be notified of the discovery. DETAC requests concurrence with a determination of "no effect" to properties listed or eligible for the NRHP as defined by the National Historic Preservation Act and State Archaeological Landmarks as defined by the Antiquities Code of Texas.

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Appendix A Shovel Test Data

| Number | Depth | Color | Texture | Number | Depth | Color | Texture |
|--------|-------|-----------------------|------------|--------|-------|-----------------------|---------------------|
| v1 | 60 | Light brown | Sandy loam | v56 | 60 | Light brown | Sandy loam |
| v2 | 70 | Light brown | Sandy loam | v57 | 70 | Light brown | Sandy loam |
| v3 | 80 | Light brown | Sandy loam | v58 | 70 | Light brown | Sandy loam |
| v4 | 30 | Pale brown | Sandy loam | v59 | 70 | Light yellowish brown | Sandy loam |
| v5 | 30 | Yellowidh brown | Sandy loam | v60 | 60 | Light brown | Sandy loam |
| v6 | 60 | Light brown | Sandy loam | v61 | 70 | Light reddish brown | Sandy loam |
| v7 | 80 | Light yellowish brown | Sandy loam | v62 | 60 | Light brown | Sandy loam |
| v8 | 70 | Light brown | Sandy loam | v63 | 50 | Light reddish brown | Sandy loam |
| v9 | 80 | Light brown | Sandy loam | v64 | 20 | Light brown | Sandy loam |
| v10 | 70 | Light brown | Sandy loam | v65 | 50 | Light brown | Sandy loam |
| v11 | 30 | Light reddish brown | Sandy loam | v66 | 60 | Light brown | Sandy loam |
| v12 | 50 | Light brown | Sandy loam | v67 | 60 | Light brown | Sandy loam |
| v13 | 10 | Red | Clay | v68 | 60 | Light brown | Sandy loam |
| v14 | 70 | Light brown | Sandy loam | v69 | 30 | Reddish brown | Sandy loam |
| v15 | 70 | Light brown | Sandy loam | v70 | 30 | Light brown | Sandy loam |
| v16 | 60 | Light brown | Sandy loam | v71 | 30 | Reddish brown | Sandy loam |
| v17 | 60 | Light brown | Sandy loam | v72 | 30 | Reddish brown | Sandy loam |
| v18 | 70 | Light brown | Sandy loam | v73 | 30 | Reddish brown | Sandy loam |
| v19 | 60 | Light brown | Sandy loam | v74 | 20 | Reddish brown | Gravelly sandy loam |
| v20 | 70 | Light brown | Sandy loam | v75 | 30 | Reddish brown | Gravelly sandy loam |
| v21 | 50 | Light brown | Sandy loam | v76 | 40 | Light brown | Gravelly sandy loam |
| v22 | 70 | Light brown | Sandy loam | v77 | 50 | Light brown | Sandy loam |
| v23 | 70 | Light brown | Sandy loam | v78 | 20 | Pale brown | Sandy loam |
| v24 | 70 | Light brown | Sandy loam | v79 | 50 | Light brown | Sandy loam |
| v25 | 70 | Light brown | Sandy loam | v80 | 40 | Light brown | Sandy loam |
| v26 | 70 | Light brown | Sandy loam | v81 | 30 | Light brown | Sandy loam |
| v27 | 70 | Light yellowish brown | Sandy loam | v82 | 30 | Light brown | Sandy loam |
| v28 | 60 | Light yellowish brown | Sandy loam | v83 | 10 | Red/yellow | Clay |
| v29 | 60 | Light yellowish brown | Sandy loam | v84 | 20 | Light brown | Sandy loam |
| v30 | 70 | Light yellowish brown | Sandy loam | v85 | 40 | Light brown | Sandy loam |
| v31 | 60 | Light yellowish brown | Sandy loam | v86 | 50 | Light brown | Sandy loam |
| v32 | 70 | Light yellowish brown | Sandy loam | v87 | 50 | Light brown | Sandy loam |
| v33 | 50 | Light brown | Sandy loam | v88 | 30 | Light brown | Gravelly sandy loam |
| v34 | 60 | Light brown | Sandy loam | v89 | 40 | Light brown | Sandy loam |
| v35 | 60 | Light brown | Sandy loam | v90 | 10 | Light brown | Gravelly sandy loam |
| v36 | 60 | Light brown | Sandy loam | v91 | 40 | Yellowish brown | Sandy loam |
| v37 | 60 | Light brown | Sandy loam | v92 | 50 | Light brown | Sandy loam |
| v38 | 70 | Light brown | Sandy loam | v93 | 10 | Reddish brown | Gravelly sandy loam |
| v39 | 60 | Light brown | Sandy loam | v94 | 40 | Lght brown | Sandy loam |
| v40 | 70 | Light brown | Sandy loam | v95 | 40 | Lght brown | Sandy loam |
| v41 | 50 | Light brown | Sandy loam | v96 | 30 | Lght brown | Sandy loam |
| v42 | 50 | Light brown | Sandy loam | v97 | 20 | Lght brown | Gravelly sandy loam |
| v43 | 60 | Light brown | Sandy loam | v98 | 30 | Lght brown | Gravelly sandy loam |
| v44 | 10 | Light gray | Sandy loam | v99 | 60 | Lght brown | Sandy loam |
| v45 | 60 | Light brown | Sandy loam | v100 | 30 | Lght brown | Sandy loam |
| v46 | 60 | Light brown | Sandy loam | r1 | 70 | Light brown | sandy loam |
| v47 | 70 | Light brown | Sandy loam | r2 | 70 | Light brown | sandy loam |
| v48 | 70 | Light brown | Sandy loam | r3 | 30 | Light brown | sandy loam |
| v49 | 50 | Light brown | Sandy loam | r4 | 30 | Light brown | sandy loam |
| v50 | 70 | Light brown | Sandy loam | r5 | 50 | Light brown | sandy loam |
| v51 | 60 | Light brown | Sandy loam | r6 | 50 | Light brown | sandy loam |
| v52 | 70 | Light brown | Sandy loam | r7 | 20 | Brown | sandy loam |
| v53 | 60 | Light brown | Sandy loam | r8 | 40 | Light brown | sandy loam |
| v54 | 70 | Light brown | Sandy loam | r9 | 40 | Light brown | sandy loam |
| v55 | 70 | Light brown | Sandy loam | | | | |



Appendix B. Previously recorded archaeological sites and surveys within one mile of the project area.