AN ARCHAEOLOGICAL SURVEY OF THE OLNEY WATER LINE PROJECT IN ARCHER COUNTY, TEXAS

by

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Prepared for

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by

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#### ABSTRACT

An archaeological survey was conducted along a 17 mile proposed water line with a 20 foot right-of-way for the City of Olney, Texas. Fieldwork required four days and was conducted on June 16-17 and 23-24, 1992. This project was performed by Brazos Valley Research Associates with William E. Moore acting as Principal Investigator and Farmers Home Administration the federal regulatory agency. A pedestrian survey accompanied by shovel testing and use of a mechanical auger located five prehistoric localities and two historic localities. The prehistoric sites consist of flakes observed on the surface ranging in number from one to three. The two historic sites include a possible early 20th century trash dump and a root cellar and cistern, the remains of a house site. These localities are not considered significant, and no additional work is recommended. They were not asssigned formal site numbers.

It is recommended by Brazos Valley Research Associates that the City of Olney be allowed to proceed with their construction plans. Monitoring by an archaeologist is not recommended. All records of this project have been placed in permanent curation at the Texas Archeological Research Laboratory in Austin, Texas.

#### ACKNOWLEDGMENTS

I am appreciative of the cooperation I received during this project. Beginning with the City of Olney, Jack Northrup - City Administrator - provided me with maps and assistance throughout my stay in Archer County and Ronnie Stroud - Utilities Superintendent - drove me to some of the more difficult areas and arranged for rental of a power auger. Johnny Clayton and Rick McMorris, also City employees, followed me around and operated the auger so we could test stream crossings more effectively. Johnny stayed with me on the last day to make sure I had no difficulties walking across the rugged terrain of Archer County on a day when the heat index reached 111 degrees.

Richard K. Boyd, P.E. of Corlett, Probst & Boyd, an engineering firm in Wichita Falls, Texas, surveyed and flagged the area where the water line leaves the road and traverses rugged terrain, sometimes in dense stands of mesquite. Their efforts made my work much easier. Lili Lyddon drafted the figure that appears in this report.

Conversations with citizens in the area were also useful in the preparation of this report. I wish to thank David H. Penn of Olney, Jack Loftin of Windthorst, and John Rife of Loving, Texas for taking time to talk with me. David L. Carlson of the Archeological Research Laboratory, Texas A&M University, and Beverly Guster of his staff are thanked for allowing me to copy relevant parts of their recently published South Bend survey report.

At the State level I was assisted by Carolyn Spock, Head of Records, and her assistant, Rosario Casarez, who supported the project by checking county and site records and giving me advice regarding proper curation procedures. As usual, Deputy State Historic Preservation Officer, James E. Bruseth, and his staff were very supportive.

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#### INTRODUCTION

The City of Olney, Texas proposes to construct a water line from Lake Kickapoo to treatment facilities at Lake Cooper (Olney), a distance of approximately 17 miles (Figure 1). The width of the permanent easement is 20 feet with no provisions for additional construction easement. The line will be a PVC 12 inch diameter line buried to a depth with a minimum cover of 30 inches. At stream crossings the depth may be much greater, possibly as deep as six feet. This line is necessary for the City of Olney to obtain raw water in times of dry weather when nearby Lake Cooper is low. Engineering firm Corlett, Probst & Boyd, Inc. of Wichita Falls, Texas performed the survey and flagged the route of the proposed water line.

Plans for the proposed project were sent to the Farmers Home Administration (FHA) office in Vernon, Texas by the City of Olney in order to obtain a permit to begin construction. This project was reviewed by James E. Bruseth, Deptuty State Historic Preservation Officer. In a letter dated November 21, 1991, Dr. Bruseth recommended that an archaeological survey be conducted prior to issuance of a permit by FHA.

In order to comply with this requirement, the City of Olney contracted with Brazos Valley Research Associates (BVRA) to perform the archaeological survey and prepare a report that documents the results of this project. This work was conducted by BVRA in June of 1992. The project number assigned by BVRA is 92-5.

Archer County is in a region known to contain significant cultural resources. Work by professional archeologists in the county has been, however, virtually non-existent. Prior to this study only one archaeological survey had been conducted in the county, and this document stands as the second published report for Archer County.

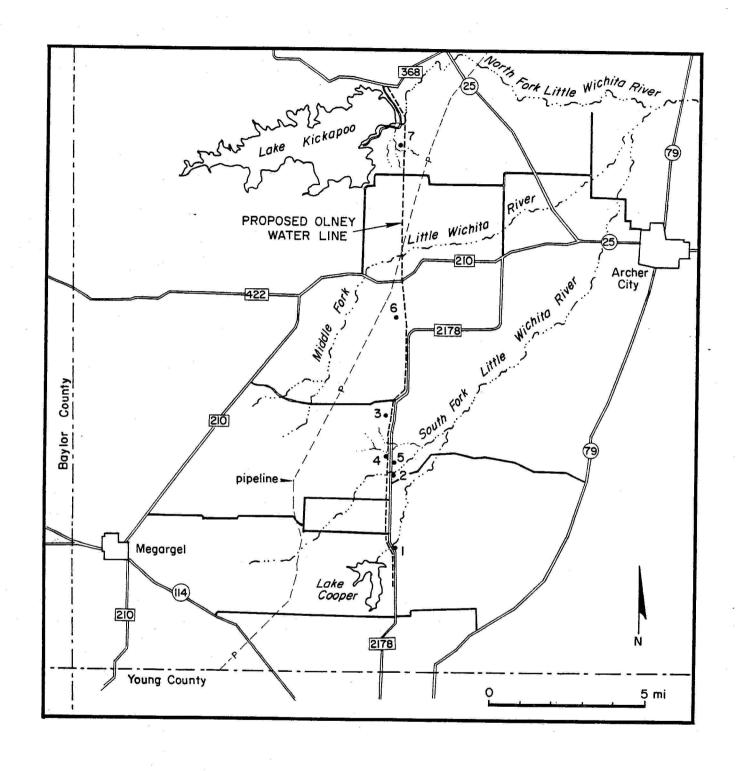


Figure 1. General Location of Project Area. (Localities indicated by dots)

#### ENVIRONMENTAL SETTING

#### General

The project area is located in a transitional area of the state in regard to biotic provinces as defined by Blair (1950). In this part of Texas the Texan and Kansan provinces meet. The boundaries for these provinces are not rigid and should be viewed as gradually changing from one to the other. Therefore, flora and fauna listed as typical for one province may be found in the other also, especially along the boundary between the two. This region is referred to as the Cross Timbers and Prairies by Gould (1975).

The term Texan province is defined by Dice (1943) as the broad ecotone between the forests of the Austroriparian and Carolinian provinces of eastern Texas and Oklahoma and the grasslands of the western parts of these states. The western boundary of the Texan province in North Texas is viewed by Blair (1950:100) as corresponding to the western boundary of the Western Cross Timbers. He states that the district of the Kansas changes gradually to the Texan province to the east.

The area is in the southern part of the well-dissected uplands common to north-central Texas. The relief varies from 100 to 300 feet. The land was dissected by a series of north-south trending streams which flow into the Brazos River south of the project area. Ridge tops are flat to gently rolling and capped by resistant formations.

Archer County is drained by the Little Wichata River and its tributaries (Kingston and Harris 1985:172). No major or minor freshwater aquifers are located in the county (Arbingast et al. 1976:15).

## Climate

Rainfall in the Texan province, according to Blair (1950:100), is "barely in excess of water need." In the Kansan province moisture is deficient throughout, and there is a decrease in available moisture from east to west (Blair 1950:110). Thornthwaite (1948) classifies the eastern part of the Kansan province as dry subhumid. The Texan province is classified by Thornthwaite (1948) as moist subhumid with a moisture surplus of 0 to 20%.

In general, the climate of Archer County is characterized as subtropical subhumid with hot and dry summers. Annual rainfall for the county is 25.26 inches with a January minimum temperature of 28 degrees Fahrenheit and a maximum July temperature of 98 degrees Fahrenheit. The growing season is 220 days (Kingston and Harris 1985:172).

Climatic data for this part of Texas during the post-glacial period, past 10,000 years, are lacking. Preserved fossil pollen, necessary for climatic reconstruction, has not been found in the area. It is believed that peat bogs which often contain fossil pollen may not exist in this part of North Texas (Bryant and Holloway 1985).

The nearest locality to the project area where fossil pollen has been found is the Coob-Poole site just southeast of Dallas, Texas (Raab and Woosley 1982). Data from this site indicate that during late post glacial times vegetation in North Texas consisted primarily of an oak savannah.

## Vegetation

The vegetation of the region included in the Texan province has been described in detail by Tharp (1926). In the Western Cross Timbers and Eastern Cross Timbers sandy soils support a forest of oak-hickory in which the principal dominants are post oak (Quercus stellata), blackjack oak (Quercus marilandica), and hickory (Carya buckley). The clay soils originally supported a tall-grass prairie, but much of this area has been cultivated.

The majority of Archer County lies within a vegetation region known as the Mesquite Savannah as outlined in the Atlas of Texas (Arbingast et al. 1976:13). This region is characterized by bunch grass and short grasses accompanied by mesquite trees.

Gould (1975) provides a detailed checklist of plants for the Cross Timbers and Prairies in which several hundred plants in the region are identified. A detailed bibliography of other relevant sources is also included (Gould 1975:98-99).

#### Soils

According to the General Soils Map for Archer County prepared by the Soil Conseration Service in 1977, the majority of the project area contains soils of the Kamay-Bluegrove-Deandale association with a small part in the Owens-Vernon association.

Soils of the Kamay-Bluegrove-Deandale association are classified as deep and moderately deep and are found on nearly level to gently sloping erosional uplands throughout the county. These soils formed in weathered sandstone, weathered calcareous red beds, and clayey sediments of alluvial origin. The surace layer of Kamay soils is a brown, friable silt loam about nine inches thick with a subsoil of reddish-brown, very firm, calcareous clay. The surface layer of Bluegrove soils is a brown, very friable loam about six inches thick with a subsoil of reddish-brown, firm clay loam in a stratum of about thirty inches in thickness. Below this is a weakly cemented interbedded gray, yellow, and red sandstone and clay. The surface layer of Deandale soils is a grayish brown, friable, silt loam about nine inches thick with a subsoil of dark brown, very firm clay.

Soils of the Owens-Vernon association are classified as deep and moderately deep and are found on gently sloping to steep upland plains in the western part of the county. These soils formed in clayey material apparently weathered from red bed shale and clay. The surface layer of Owens soils is light yellowish-brown, extremely firm, calcareous clay about six inches thick with a subsoil of pale-olive, extremely firm calcareous clay about eighteen inches thick. The surface layer of Vernon soils is reddish-brown, very firm, calcareous clay about seven inches thick with a subsoil of reddish-brown, very firm, calcareous clay about eighteen inches thick.

#### Fauna

According to Blair (1950:101), at least 49 species of mammals have been identified in the Texan province in recent times. Of these species, eight range into the Texan from the grassland regions to the west (Kansan province), southwest, or north. Both species of Terrapene known from the Austroriparian province occur in the Texan. Of these, T. ornata, is a grassland species that ranges into the area from the west (Kansan province). Additional information concerning mammals for the area may be obtained from Davis (1960).

Of the 16 species of lizards, 7 known to occur in the Texan province are grassland forms that range into the Texan from the west (Kansan province) or north (Blair 1950:102-103). Common species in this group include <u>Crotaphytus</u> <u>collaris</u>, <u>Sceloporus olivaceus</u>, <u>Phrynosoma cornutum</u>, and <u>Eumeces</u> <u>obsoletus</u>.

At least 39 species of snakes occur in the Texan province. Of these, 12 species range into the Texan from the west and apparently reach their eastern limits in this province. Common species in this group include <a href="Arizona elegans">Arizona elegans</a>, <a href="Thamponis marcianus">Thamnophis marcianus</a>, <a href="Pituophis catenifer">Pituophis catenifer</a>, and <a href="Crotalus atrox">Crotalus atrox</a>.
Only five species of urodeles are known from this area. The most common urodeles of this province include <a href="Ambystoma texanum">Ambystoma tigrinum</a>, and <a href="Siren intermedia">Siren intermedia</a> (Blair 1950:102).

The anuran fauna is made up mostly of species from the Austroriparian province with 13 of the 18 known species occurring in that province. Five species, however, have western affinities and are not found in the Austroriparian. The most common of these are <u>Scaphiopus couchii</u>, <u>Pseudacris clarkii</u>, <u>Pseudacris streckeri</u>, and <u>Microbyla olivacea</u> (Blair 1950:102).

The mammalian fauna of the Kansan province includes at least 59 species. Of these, five are restricted to this province and include <u>Vulpes velox</u>, <u>Geomys lutescens</u>, <u>Perognathus flavescens</u>, <u>Dipodomys elator</u>, and <u>Peromyscus comanche</u>.

Characteristic mammals of the Kansan province include Mustela migripes, Spiologale interrupta, Mephitis mephitis, Taxidea taxus, Canis latrans, Citellus spilosoma, Cynomys ludovicaianus, Cratogeomys castanops, Perognathus bispidus, Perognathus merriami, Onychomys leucogaster, Peromyscus leucopus,

Neotoma albigula, Neotoma micropus, Lepus californicus, Sylvilagus audubonii, and the now extinct Bison bison (Blair 1950:111). Important species of mammals that occur on sandy soils include Dipodomys ordii, Peromyscus maniculatus, Geomys lutescens, and Scalopus aquaticus (Blair 1950:111).

Fourteen species of lizards are known from this province but none is restricted to it. Common lizards are <u>Holbrookia</u> maculata, <u>Holbrookia</u> texana, <u>Crotaphytus</u> collaris, <u>Sceloporus</u> undulatus, <u>Phrynosoma cornutum</u>, <u>Phrynosoma modestum</u>, <u>Eumeces obsoletus</u>, <u>Cnemidophorus gularis</u>, and <u>Cnemidophorus sexlineatus</u> (Blair 1950:111-112).

Thirty-one 31 species of snakes have been identified in the Kansan province. Only 1 species (Natrix barteri), with a restricted range in the Mesquite Plains district, is limited to this province (Blair 1950:112). Representative snakes of the Kansan include Leptotyphlops dulcis, Coluber flagellum, Elaphe laeta, Arizona elegans, Pituophis catenifer, Rhinocheilus lecontei, Natrix erythrogaster, Thamnophis marcianus, Thamnophis sirtalis, Thamnophis sauritus, Tantilla nigriceps, Crotalus atrox, and Crotalus virdis (Blair 1950:112).

Fourteen species of anurans are known from the Kansan, and not one is restricted to it. Typical anurans include <u>Scaphiopus conchii</u>, <u>Scaphiopus hammondii</u>, <u>Bufo compactilis</u>, <u>Bufo cognatus</u>, <u>Bufo debilis</u>, <u>Bufo punctatus</u>, <u>Bufo woodhousii</u>, <u>Acris gryllus</u>, and <u>Rana pipiens</u>.

#### PREVIOUS INVESTIGATIONS

#### General

Archer County is located in the Lower Plains region as defined by Biesaart et al. (1985:76) in a statistical overview of Texas published by the Texas Historical Commission. This is an area well documented in terms of numbers of sites when compared to other regions in Texas. When the statistical overview was compiled in 1985, a total of 1302 sites (6.44% of the state) was recorded in the entire region. Only seven of the thirteen regions reported more sites or had a higher percentage statewide.

In terms of county statistics, however, the area is not well known as 28 of the 37 counties in the region had as many or more reported sites as Archer County in 1985 according to the overview (Biesaart et al. 1985:81). Only five sites were reported for the county in 1985, a total of .38% of the region and .02% of the state. In 1985, only one of the five recorded sites in the county had been assigned to a temporal period. This site (41AR5) is identified as Late Prehistoric (Biesaart et al. 1985:108). The reader is referred to the overview for additional statistical information concerning Archer County and its relation to the rest of Texas.

## Previous Investigations in Archer County

Prior to this investigation, only two archaeological studies had been conducted in Archer County. In 1965, the construction of Halsell Reservoir, now Lake Arrowhead, in east-central Archer County and adjacent Clay County prompted an archaeological survey of by the Texas Archeological Salvage Project (TASP). Personnel from TASP under the direction of Harry J. Shafer (1965) examined the area to be inundated and found five prehistoric sites, two of which are in Archer County. Shafer's report does not state how much of the area was surveyed, nor does it discuss the methods utilized except that in order to have maximum coverage in a minimum amount of time, "much of the survey was done by jeep" (Shafer 1965:47). The survey crew apparently was working against a deadline and only had time to visit the most promising or high probability areas. In addition they examined as many vertical exposures along the river as possible. It is assumed that this was not a 100% pedestrian survey, and some sites may have been missed.

Both sites recorded in Archer County by TASP, 41AR1 and 41AR2, were considered not significant with no further work recommended. No temporally diagnostic artifacts were found at either site; however, surface finds of arrow points and dart points at 41CY1 and 41CY2 in Clay County indicate the presence of Archaic and Neo-American (Late Prehistoric) components in the area. No evidence of Paleo-Indian or Historic occupation was found during this survey.

Perhaps the most interesting site yet to be documented in Archer County was investigated by P. S. Colee of Midwestern State University in Wichita Falls, Texas in 1978. Mr. Colee excavated the remains of a cairn burial on a low rise above the Little Wichita River just north of Scotland, Texas. According to the site form, little (if any) excavation was found to be present into the clay of the rise; the burial being covered with unworked sandstone slabs. The diagnostic features were badly crushed, so sex and age could not be determined. It was believed that the entire burial was in danger of being destroyed. Therefore, it was removed to the University. Two arrow points, described by Colee as the Harrell type, were found associated with the burial; one inside the chest cavity and the other near the forehead. Based on the presence of arrow points, this site was estimated to be Late Prehistoric, possibly belonging to the Henrietta Focus. No mention is made of a published report or the final disposition of the remains and artifacts from 41AR5.

The remaining two sites, 41AR3 and 41AR4, were assigned TARL numbers based on correspondence with a local collector. Only approximate locations are known, as they have not been field checked by TARL personnel.

## Previous Investigations in Adjacent Areas

Since so little work has been conducted in Archer County, the results of efforts in adjacent counties are very important to an understanding of the project area. The following works are presented in chronological order.

One of the earliest archaeological efforts in the region was a survey of the Possum Kingdom Dam basin in 1937 under the supervision of A. T. Jackson (TARL site files). This survey was sponsored by Project 10662 of the Work Projects Administration (WPA) and involved portions of Palo Pinto, Stephens, and Young counties. This survey was part of a nation-wide program designed to obtain data likely to be destroyed by construction of reservoirs. Sixty-six sites were recorded; however, with the exception of two brief articles published in newsletters (Texas Archaeological News 1940a, 1940b), the results of this survey were never formally published and exist only in the files at TARL. According to Jack Hughes (1942), several sites found during the Possum Kingdom survey were excavated by the WPA. However, a check of the files at TARL only revealed data for 41YN1 (the Harrell Site) and 41YN2 (the O. W. Hill Site).

A study of boat-shaped mortars in the region of the upper end of the Possum Kingdom Dam basin was conducted by George Fox (n.d.a). His monograph disscusses sites in Jack, Young, Palo Pinto, and Stephens counties. Fox concluded that there is no evidence that the mortars were used for grinding. He, therefore, believes they probably served a religious function. Studies of boat-shaped and oval mortar holes from various sites in Texas were conducted by Cyrus N. Ray (1930, 1931). Although these sites are located outside of the project area, Ray's work represents the only formally published documentation of boat-shaped mortar holes in Texas found during the literature search portion of this project.

One of the best collections of data from the area is from the Harrell Site (41YN1) in Young County, one of the sites recorded during the Possum Kingdom Dam basin survey. Excavations were carried out under the supervision of George R. Fox and lasted from October 12, 1938, to April 24, 1939. This is a major site in terms of understanding the prehistory of Archer County and adjacent areas. The permanence of this site is indicated by the presence of 32 burials, 135 hearths, pottery, massive amounts of mussel shell, agricultural implements, possible trade items, and a vast array of stone tools including the distinctive <u>Harrell</u> arrowpoint. An unpublished report describing the Harrell Site was written by Fox (n.d.b) and is on file at TARL. Jack Hughes (1942) reported on the Harrell Site excavations for his M.A. thesis.

Later, Alex D. Krieger (1946) checked the work done by Hughes against the original notes of Fox and the artifact collections at TARL. His results were summarized in his overview of northern Texas. Based on this work, Krieger proposed the Henrietta Focus with 41YN1 as the type site. His work represents a major contribution to the archaeology of this area. discussion, data and artifacts from other sites are compared to the Harrell Site findings. Basically, the Henrietta Focus was defined according to a list of traits consistently found with plain, shell-tempered pottery which he considers the main indicator of this focus. Krieger (1946:137) states that "if one takes the occurrence of shell-tempered pottery as a guide, many other artifacts tend to be consistently associated with it." Some of these other artifacts or traits include hunting of bison and other animals, cultivation of corn, fishing, absence of houses, snub-nosed and side scrapers, flint drills and knives, bone awls, triangular arrow points, sandstone elbow pipes, and burials with stone slabs.

The date of the Henrietta Focus is suggested by Krieger as between A.D. 1400 and A.D. 1450, possibly as late as A.D. 1600, and is based partly on examples of Puebloan pottery found at some Henrietta Focus sites. Through use of ethnological and archaeological data, Krieger discounts the Wichita as the people responsible for this focus. Henrietta Focus sites are classified generally as belonging to the Plains culture.

Krieger realized that there were problems with this classification. A lack of controlled excavations other than at the Harrell Site, the existence of other late sites with pottery and agricultural complexes in north-central Texas, and discrepancies between sites in the Red River basin and those farther south in the upper Brazos and Trinity drainages are

specifically mentioned. Krieger (1946:141) suggests that the material listed above may belong to two complexes rather than one. He views his work as a starting point toward organization in this region.

The Conner Creek site (41YN9) in Young County, near the town of Graham, was excavated in 1981 by the Texas State Department of Highways and Public Transportation in (Moore 1992). Artifacts from this site date it to sometime between the Late Archaic Period and Late Prehistoric Period of Texas prehistory. Of special note is the presence of boat-shaped mortar holes at the site.

A major survey for this part of Texas was conducted in 1987 and 1988 by the Archeological Research Laboratory of Texas A&M University of the proposed South Bend Reservoir in Stephens, Throckmorton, and Young counties, Texas (Saunders, et al. 1992). This project investigated more than 37,000 acres along the Clear Fork of the Brazos and the Brazos rivers. As a result of the survey, 541 prehistoric sites, 168 historic sites, and 522 isolated finds were identified. The prehistoric sites date from the Paleo-Indian through Late Prehistoric periods (circa 7000 B.C. to the period of European contact); while historic sites date from European contact to the 1930s.

This study produced data that suggest cultural affinities of this area were closest to Central Texas throughout the Archaic based on projectile point types and the presence of burned rock middens. During the Later Prehistoric period longer-distance contacts occurred. Some indication of contact with Caddoan groups was found, but ties to the Southern Plains to the north were strongest during the Late Prehistoric period. Although this study was not able to discern a clear indication of settlement pattern change through time, some information on subsistence practices was available.

#### CULTURE SEQUENCE

#### Prehistoric Sequence

#### PALEO-INDIAN STAGE

The oldest period of Texas prehistory is referred to as the Paleo-Indian Stage and may date to 12,000 years before present (B.P.) until circa 8500 B.P. Evidence of Paleo-Indian remains are not yet documented for Archer County. This absence of known sites of this period in the county is probably due to the paucity of work by archaeologists rather than an avoidance of the area by Paleo-Indians. During the recent survey of the South Bend Reservoir by Texas A&M University, a similar situation was encountered. According to Saunders et al. (1992:4), "No Paleoindian sites were previously reported for the three counties of the study area, but so little work has been done in this region that this is not surprising."

Typically, this time period is represented in the region by surface finds of projectile points such as the <u>Folsom</u> point on display at a local museum in Loving, Texas. According to John Rife (personal communication, June 17, 1992), this specimen was found in Young County. Surface-collected specimens were also reported by local collectors to the South Bend Reservoir project (Saunders et al. 1992:4). A discussion of the Paleo-Indian Stage in north-central Texas is found in Etchieson et al. (1978), and general overviews of Paleo-Indian archaeology in Texas have been prepared by Suhm, Krieger, and Jelks (1954), Hester and Birmingham (1976), and Saunders et al. (1992).

#### ARCHAIC STAGE

At this time the earliest known prehistoric sites in Archer County date to the Archaic Stage (circa 8500 B.P. - A.D. 750). No sites in the county containing Archaic materials have been formally recorded, but photographs in the TARL site files of artifacts collected from sites 41AR3 and 41AR4 by Powell Goodwin, former professor of history at the University of Texas at Austin, and in a county history written by Jack Loftin (1979:19) illustrate specimens that appear to be Archaic dart points. The presence of Archaic sites in the area is also suggested by the recovery of dart points from 41CY1 found during the Halsell Reservoir study (Shafer 1965) and data collected during the South Bend Reservoir survey (Saunders et al. 1992).

In a discussion by Saunders et al. (1992:4), distinguishable site types for the north-central Texas Archaic are described. According to this source, sites of this period consist of seasonal or more permanent campsites, usually at the confluence of streams and rivers as well as activity-specific sites such as hunting or fishing camps, manufacturing stations, and temporary campsites. Archaic hunters may have been involved in pursuing bison during the seasonal north-south movement of the herds on

the Southern Plains, and this may be reflected in distribution of Archaic sites in the area (McCormick 1976).

In spite of the fact that the majority of sites in north-central Texas appear to belong to the Archaic Stage, there is very little documentation of this period of north-central Texas prehistory. Relevant discussions of the north-central Texas Archaic are provided by Suhm, Krieger, and Jelks (1954); McCormick (1976); Etchieson et al. (1978), and Saunders et al. (1992).

## NEO-AMERICAN STAGE (LATE PREHISTORIC)

Late Prehistoric occupation (circa A.D. 750 A.D - A.D. 1750) has definitely been confirmed in Archer County. A cairn burial (41AR5) where skeletal material associated with triangular arrow points identified as <a href="Harrell">Harrell</a> provides site specific evidence of this period. Again, referring to Loftin's (1979:19) Archer County history, arrow points in local collections provide additional evidence for the presence of Late Prehistoric sites in the area, as well as data recovered during the South Bend Reservoir study (Saunders et al. 1992). According to Saunders et al. (1992:4), this stage is "not well defined for north-central Texas." They state that prevous work in the region suggests that the area (South Bend Reservoir) is extremely promising for understanding Late Prehistoric cultural dynamics.

Selected sources for additional reading concerning this period (also referred to as the Neo-Archaic Stage) include Suhm, Krieger, and Jelks (1954); Etchieson et al. (1978); Prewitt (1981); and Saunders et al. (1992).

Many artifact types and cultural features present in Central Texas sites are similar to those found at sites in Archer County. Since the distance between the project area and the northern limits of Central Texas as defined by Prewitt (1981) is about 100 miles, chronologies developed for Central Texas must be considered important sources for this area. Relevant studies concerning Central Texas chronology have been developed by Johnson (1967), Kelley (1947), Prewitt (1981, 1983), and Weir (1976). Recently, the status of Central Texas chronology has been reviewed by Johnson (1987).

### Historic Sequence

#### HISTORIC INDIANS

At the time of contact with Europeans, several Indian groups were living in north-central Texas. According to local historian Jack Loftin (1979:8), Archer County in the 18th century was under Apache control even though its southeast corner was claimed by the Keechie, a division of the Caddo stock. In 1723, Comanche bands moved to the area from the Rockies to ally with the Caddo group, mainly Wichita (Tavoyas) and Keechie (Loftin 1979:8). In the latter part of the 18th century, the Kiowa also passed

through the area while raiding into the Texas interior (Webb 1952b:901). North-central Texas became the hunting grounds for the Comanche, Wichita, and Kiowa.

Considered by some to be the fiercest Indians of the Plains, the word Comanche is, according to Newcomb (1961:155), "synonymous with Indian." In Archer County encounters between Anglo-Americans and Comanches have been well documented. In a letter from A. T. Jackson to Professor J. E. Pearce at the University of Texas at Austin dated August 11, 1934 (TARL site files) artifacts taken from Comanche Indians killed in the county (Appendix I). Other references to conflicts between the Comanche and Anglo settlers are found in Loftin (1979).

Evidence of historic Indian activity in Archer County exists in the form of battle sites, historic accounts by the military, and occasional artifacts such as a steel arrow point made from a barrel hoop (Loftin 1979:18). A major battle between the United States Army and the Kiowa took place on July 12, 1870 about one mile southeast of the project area where the line turns to the northwest near the spillway at Lake Kickapoo (Jack Loftin, personal communication, June 24, 1992).

Historic Indian settlements and campsites are difficult to identify without the presence of items of European manufacture such as gunflints trade beads; and/or metal objects such as knives and gun parts. Saunders et al. (1992:5) believe that such sites are "seasonal in nature, relatively small, and located so as to fully exploit the natural resources." No historic Indian camps sites in the county have been recorded with TARL at this time.

#### EUROPEAN EXPLORERS

North-central Texas witnessed the traverses of many early explorers that included Coronado in 1540, Moscoso in 1542, Don Juan Onate in 1598, LaHarpe in 1687, and DeMezieres in 1770. Although each of these expeditions came close to the present day boundaries of Archer County, and some may have actually passed through the area, the earliest recorded European explorers to visit Archer County were Pedro Vial and Jose Mares. They crossed the county in 1786 and 1787 while working out trails from San Antonio to Santa Fe. According to a map prepared by Jack Loftin (1979:3), the route of these explorers parallels the project right-of-way, especially where it leaves F.M. 2178 to its terminus at Lake Kickapoo.

## UPPER-SOUTH ANGLO II PERIOD

This period (1836-1880) is defined by Saunders et al. (1992:5) as a time of European immigration and strife with the native Indians. In 1854, Captain Randolph B. Marcy of the United States Army and Major R. S. Neighbors of the Texas Army embarked on the Marcy-Neighbors Expedition commissioned by the federal government to locate a suitable place for Indian reservations in

Texas. Their route crossed the project area probably at the South Fork of the Little Wichita River and continued until the left the county.

During the early part of this the major activity was that of subsistence farming with small mills the only industry present. The greatest number of sites present are probably the remains of the many small farmsteads.

Archer County, named for Branch T. Archer, was created during this period in 1858 form the old Fannin Land District, originally part of the Peters' Colony grant of 1841. At the time of the county's creation there was no white population and it could not be organized. It remained under the jurisdiction of Montague County until 1873 and then was attached to Clay County (Webb 1952a:63).

The first permanent settlement in the county was by Dr. R. O. Prideaux in 1874. His home, built in 1876, is the oldest standing structure in the county (Loftin 1979:94). About 1875, Indian problems ceased to exist and the ranchers gave way to the farmers. Evidence of this economy may be found in larger sites that include associated features such as troughs and stock tanks.

Various sites of this period are known to exist in Archer County. Loftin's (1979) history of the county provides a more in-depth look at this period.

#### WEST TEXAS CONTEMPORARY

It was during this period from 1880 to the present that settlement increased along with industrial development. A population increase allowed for the organization of Archer County in 1880. Two unique sites of this period still present are the remains of the Mathews dugout, the 1885 homestead 1.5 miles northeast of Scotland (Loftin 1979:126-137) and a section of the oldest fence in Archer County, circa 1880-1881 (Loftin 1979:93).

The Wichita Valley Railway built the first railroad in the county in 1890. It was followed by Wichita Falls and Southern (1908), Southwestern Railway (1909), and the Gulf, Texas, and Western (1909) (Webb 1952a:63). The area prospered in the 1920s when oil was discovered. In 1925, production reached its peak at 13,579,000 barrels. Today the economy is based on diversity that includes production of oil, gas, and stone; beef and dairy cattle along with wheat and other grains; and recreation centered around hunting and lakes Arrowhead and Kickapoo.

The above is only an outline of general events that have taken place in Archer County. An excellent discussion of Archer County history has been prepared by Jack Loftin (1979), and the reader is advised to consult this source for more details. An earlier study was made by Loftin and Winnie D. Nance (1927) in the 1920s. This work provides an early look at the history of this interesting part of Texas.

#### METHODS

The project was divided into three phases - background study and archival research, field reconnaissance, and report writing. Prior to commencement of the field survey, the files at the Texas Archeological Research Laboratory (TARL) in Austin, Texas were checked for previously recorded sites in the project area and vicinity. Data concerning soils were obtained by consulting the General Soils Map of Archer County prepared by the Soil Conservation Service. No published soils book for the county was available. County highway maps were reviewed, and local citizens possessing knowledge of the history and archaeology of the project area were interviewed.

William E. Moore, SOPA conducted the field survey and served as Principal Investigator. A pedestrian survey of the 17 mile water line was performed. Subsurface investigation included testing with a shovel and power auger. All surface exposures such as cut banks, animal burrows, and cleared areas were examined for the presence of cultural materials. The survey was supported by the soils map; an engineering plan of the proposed water line; a county highway map dated 1963; and topographic quadrangles Dundee Southeast, Lake Kickapoo, and Lake Olney.

Eight shovel tests and seven auger holes were excavated at stream crossings and areas considered to be likely locations for prehistoric or historic sites. Fill from all shovel tests was passed through one-quarter inch hardware cloth. A log documenting the shovel tests was maintained (Appendix II).

On the first day of survey there was only the Principal Investigator present. The method employed was to drive to all stream crossings and high probability areas along the highway. For record keeping purposes, these locations were designated areas and assigned numbers. Later, when accompanied by Ronnie Stroud and Johnny Clayton of the City of Olney, this practice was discontinued. Only locality numbers remain that mark areas where artifacts or features were identified.

The project was documented through field notes, 35 mm color photography, and pertinent forms. Boundaries of the project area and all recorded site locations were noted on topographic maps. All records of this project have been placed in permanent curation at the Texas Archeological Research Laboratory (TARL) in Austin, Texas.

## RESULTS AND CONCLUSIONS

The background study revealed no previously recorded prehistoric or historic sites in the project area. Review of the site records at TARL showed that very little professional work has been conducted in the county, as only three sites (all prehistoric) have been evaluated by archaeologists. The nearest recorded prehistoric site, 41AR3, is located approximately 2.5 miles to the east on the South Fork of the Little Wichita River. Prehistoric campsites are not uncommon in the area. According to Jack Loftin (1979:18), they are found in every section of the county, especially along the streams and rivers and at least 50 such campsites have been found and examined by the Archer County Historical Commission.

Five prehistoric localities were documented during the current study, identified by the presence of from one to three flakes found on the surface of areas that had been eroded or otherwise disturbed. No temporally diagnostic artifacts or evidence of features were observed at any of the five localities. Although the adjacent streams contained water at the time of this survey, local informants state that many of the creeks and rivers in this part of the county are dry much of the year. observations indicate that virtually the entire project area consists of clay or clay loam at or near the ground surface. Based on the low number of artifacts seen at each locality, the presence of clayey soils, and the intermittent nature of nearby water courses, it is believed that these sites probably represent short term or termporary utilization of these localities in prehistoric times. More permanent campsites are most likely to be found along the more dependable streams in other parts of the county. The approximate locations of these prehistoric localities are shown in Figure 1, and they are discussed in Appendix III. At only two localities (6-7) were artifacts found within the project area easement.

Two historic localities were located during the current study, a trash scatter (Locality 3) and the remains of a house site (Locality 4). Both areas are believed to represent historic use of the area from the latter part of the 19th century through the early and middle 20th century. The trash scatter may be the result of local dumping practices; while the house site, containing a cistern and root cellar, was probably associated with ranching activities. According to local historian, Jack Loftin, the house belonged to Graham Campbell and was destroyed at least 30 years ago. Evidence of oil and gas exploration was seen throughout the area in the form of pipelines, wells, and storage tanks. These more recent activities were not assigned locality numbers. The approximate locations of the two historic localities are shown in Figure 1, and they are discussed in Appendix III. Both features at the house site are outside the project area as is all of the trash scatter.

Based on surface finds of fluted projectile points in the area it can be assumed that man was living in Archer County during Paleo-Indian times, possibly as long ago as 10,000 years. Definite evidence of sites of this period, however, have not been found at this time. The earliest known sites in the county belong to the Archaic Stage, circa 6000 B.C. - A.D. 800. Archaic sites have not been recorded in the county, and their presence is based on dart points from sites in adjacent counties and local collections. Therefore, the only prehistoric site in the county to produce temporally diagnostic artifacts is the cairn burial (41AR5) where two arrow points were recovered. It is likely that this burial was interred sometime during the Henrietta Focus of the Neo-American Stage, circa A.D. 1400 - A.D. 1600.

From the first prehistoric occupations, Archer County was undoubtedly inhabited by indigenous groups until the arrival of Europeans and ultimate settlement by Anglo-Americans lasting to the present. Indian sites found in the county include campsites, rock art sites, mortar hole sites, and battle sites. Historic sites are numerous and include isolated finds of Spanish Colonial artifacts; the site of Camp Cureton, a fort of the Confederacy; early cemeteries and isolated graves; and numerous standing structures.

It is evident from the work of the Archer County Historical Commission that the county is rich in archaeological sites, both prehistoric and historic. Although the proposed water line did not pass through any sites considered significant enough to warrant additional work, it should not be construed that this is typical of Archer County as a whole. Numerous significant sites exist in the county and should be recorded with TARL for the benefit of future research.

#### RECOMMENDATIONS

No significant cultural resources were found to be present within the proposed route of the Olney water line during the cultural resources survey conducted by Brazos Valley Research Associates in June of 1992. Therefore, it is recommended that the City of Olney be allowed to proceed with their plans for construction. The presence of an archaeologist to act as monitor during the proposed construction is not considered to be necessary. However, should unexpected cultural resources be uncovered during construction, all work should be terminated until the situation can be properly evaluated by the Department of Antiquities Protection, Texas Historical Commission.

Of particular concern are all stream crossings and those areas where small numbers of flakes were found on the surface with nothing present in any of the shovel tests. Therefore, special attention should be given to Localities 1, 2, 5, 6, and 7 during installation of the water line. The kinds of cultural materials anticipated include flakes, stone tools, pottery fragments, skeletal material, or burned rock that could indicate the presence of a hearth area.

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## APPENDIX I

SHOVEL TEST LOG

Test	Depth	Diameter	Area	Results
01	30 cm	25 cm	Area 1	sterile (dug to clay)
02	40 cm	25 cm	Area 1	sterile (dug to clay)
03	30 cm	25 cm	Area 2	sterile (clay at surface)
04	50 cm	25 cm	Area 2	sterile (dug to clay)
05	65 cm	25 cm	Area 2	sterile (clay loam)
06	30 cm	25 cm	Area 2	sterile (clay loam)
07	85 cm	25 cm	Area 3	sterile (clay loam)
80	38 cm	25 cm	Area 6	sterile (clay loam)
09	100 cm	20 cm	Area 2	sterile (clay)
10	100 cm	40 cm	Area 3	sterile (clay loam)
11	100 cm	20 cm	Area 6	sterile (clay loam)
12	100 cm	20 cm	Area 6	sterile (clay)
13	100 cm	20 cm	Area 6	sterile (clay loam)
14	100 cm	20 cm	Area 9	sterile (clay loam)
15	100 cm	20 cm	Area 10	sterile (clay)

Tests 9 -15 were dug with a power auger.

APPENDIX II

## THE UNIVERSITY OF TEXAS AUSTIN

Nocona, Texas, Aug. 11, 1934

#### DEPARTMENT OF ANTHROPOLOGY

Prof. J. E. Pearce 2607 University Ave. Austin, Texas

Dear Mr. Pearce:

Yesterday I had sent you, by registered mail, a package containing two medals and a trade bead. The former were taken from Indians immediately after they were killed. The bead is supposed to be of French origin and, along with others, came from a grave.

The owner of these specimens, Mr. S. D. Schrock, Spanish Fort, Montague County, Texas, is the son of an early-day Texas Ranger. He inherited from his father a number of worth-while Indian relics, not least of which are two arrowshafts with obsidian points in place. They are supposed to have been taken from a Comanche who bit the dust.

Mr. Schrock is somewhat suspicious, as a result of an unfortunate incident with someone else, and merely loaned these three specimens for photographing with request that they be returned at once. They, of course, are not so important; but this may be an entering wedge by which we can get other specimens from him. Hence I recommend you have Barnes photograph them as soon as possible and return them, also sending him prints. I have just written Barnes requesting him to see you about the matter.

Medal with suspension hook was found on an Indian killed by K. W. Schrock, Texas Ranger, 2 miles east of Dundee, Archer County, Texas, in 1876. The dollar of 1842 with writing on reverse side was taken from an Indian 3 1/2 miles south of Spanish Fort, Montague County, Texas.

Sincerely Yours

A. T. Jackson

## APPENDIX III

#### PREHISTORIC AND HISTORIC LOCALITY DESCRIPTIONS

## Locality 1

This locality was identified by the presence of three small thinning flakes in the road cut on the east side of F.M. 2178 and on the south bank of Mesquite Creek just north of Lake Cooper. It appears that these materials have eroded from a small ridge overlooking the creek. Since no cultural materials were found in the right-of-way, it may be that this site was destroyed during highway construction or that these flakes represent the western limits of the site. It is also possible that the flakes are isolated occurrences or representative of a very ephemeral site, probably restricted to the surface. This locality corresponds to Area 2 as described in the project notes.

## Locality 2

This locality was identified by the presence of one small thinning flake in a vertical exposure of the ridge on the east side of F.M. 2178 and on the south bank of the South Fork of the Little Wichita River. Since no cultural materials were found in the right-of-way, it may be that this site was destroyed during highway construction or that the single flake represents the western limits of the site. It is also possible that the flake is an isolated occurrence or representative of a very ephemeral site. The landform to the east projects much closer to the river, and it seems likely that a prehistoric site, if present, would be found there. This locality corresponds to Area 6 as described in the project notes.

## Locality 3

This locality was identified by the presence of a trash scatter on a mesa top above an unnamed tributary. Artifacts observed include unidentified pieces of metal as well as glass and ceramic fragments. It is likely that this scatter is the result of trash dumping and does not reflect the presence of a house site. No artifacts from this scatter were found within the project area. This locality corresponds to Area 7 as described in the project notes.

## Locality 4

This locality was identified by the presence of a cistern and root cellar on a high ridge about one kilometer south of Locality 3. The cistern was constructed of sandstone blocks and covered with cement. It measures one meter across. Sandstone blocks remained only at portions of two walls and the entrance way of the cellar. The rest may have been removed for other purposes, and the entire cavity was filled with water at the time of this survey. A few pieces of possible clear window glass and several ceramic fragments were observed in the vicinity. Both features are outside the proposed right-of-way. This locality corresponds to Area 8 as described in the project notes.

#### Locality 5

This locality was identified by the presence of one flake in the road cut on the west side of F.M. 2178 just to the south of Locality 4. Since no cultural materials were found in the right-of-way, it may be that this site was destroyed during highway construction or that the single flake represents the western limits of the site. It is also possible that the flake is an isolated occurrence or representative of a very ephemeral site. This locality corresponds to Area 10 as described in the project notes.

## Locality 6

This locality was identified by the presence of one flake in a cattle trail on an upland ridge overlooking an unnamed tributary about 1700 meters south of County Road 210. The isolated specimen is a small interior or thinning flake. A careful search of the surrounding terrain failed to produce additional artifacts. Since only one specimen was found in the right-of-way, it is likely the single flake represents an isolated occurrence or a very ephemeral site, although it is possible that a site is present elsewhere on this ridge. The surface where the flake was found was deflated creating excellent visibility, and no hearths or other features were seen. This locality does not correspond to an area number.

## Locality 7

This locality was identified by the presence of three flakes in a very eroded area on the east bank of a tributary of the North Fork of the Little Wichita River. Surface visibility was excellent, but no features were seen and only the three thinning flakes were found in the area. Since additional flakes were not found within the right-of-way, it may be that they are representative of an isolated occurrence or a very ephemeral site. It is also likely that a prehistoric site exists elsewhere along the stream channel or that this site has been virtually destroyed by the extensive erosion that has taken place. This locality does not correspond to an area number.