

A PHASE I ARCHAEOLOGICAL SURVEY OF THE 10 INCH FORCE MAIN
RELOCATION PROJECT
IN WEST-CENTRAL POLK COUNTY, TEXAS

Texas Antiquities Permit Number 2266

by

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A PHASE I ARCHAEOLOGICAL SURVEY OF THE 10 INCH
FORCE MAIN RELOCATION PROJECT IN WEST-CENTRAL POLK COUNTY, TEXAS

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Project Number 99-12

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ABSTRACT

A Phase I archaeological survey of approximately 6400 linear feet of rerouted force main in west-central Polk County, Texas was conducted in October 1999 by Brazos Valley Research Associates under antiquities permit 2266 issued by the Division of Archeology, Texas Historical Commission with William E. Moore performing the duties of Principal Investigator. No archaeological sites were found within the project area. Copies of the report are on file at the Texas Historical Commission and the Texas Archeological Research Laboratory in Austin, Texas and Brazos Valley Research Associates in Bryan, Texas.

ACKNOWLEDGEMENTS

The contract for this project was awarded to Brazos Valley Research Associates by KSA Engineers, Inc. for the Polk County Fresh Water Supply District No. 2 in Onalaska, Texas. The cooperation of Sue Norris, District Office Manager, is greatly appreciated. I am also grateful to Stephen P. Dorman, E.I.T. of KSA Engineers, Inc. for his help. Ed Baker of the Archeology Division, Texas Historical Commission served as the reviewer for this project. Carolyn Spock, Head of Records, at the Texas Archeological Research Laboratory in Austin, Texas performed the background check. The figures that appear in this report were drafted by Lili Lyddon of Lyddon Illustrations in Wellborn, Texas. Finally, I want to thank James E. Warren, Bobby Jemison, and Art Romine for making the long drive from George West and Beeville to participate in this survey.

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INTRODUCTION

A Phase I archaeological survey of approximately 6400 linear feet of rerouted force main in west-central Polk County, Texas (Figure 1) was conducted on October 28 and 29, 1999 by Brazos Valley Research Associates under antiquities permit 2266 issued by the Division of Archeology, Texas Historical Commission. The field crew consisted of William E. Moore (Principal Investigator), James E. Warren (Project Archaeologist) and two Field Assistants (Bobby Jemison and Art Romine).

Prior to entering the field, a records check was made at the Texas Archeological Research Laboratory (TARL) in order to identify all previously recorded sites, if any, in the project area and vicinity. No sites were found to be present within the project area. However, several significant prehistoric sites have been reported in the vicinity along Kickapoo Creek (now under Lake Livingston) and its tributaries to the south. Based on this records check and personal experience in the area by the Principal Investigator it appeared that there was a chance for the occurrence of archaeological sites in the project area.

The project area is depicted on the topographic quadrangle Onalaska, Texas (3095-441) dated 1961 and photorevised 1972 (Figure 2). It follows the highway right-of-way on the east side of Old Groveton Road for a distance of 4400 feet from north to south. Then it crosses Highway 190 and crosses private land for a distance of 2000 feet until it connects with the existing wastewater treatment plant (Figure 3).

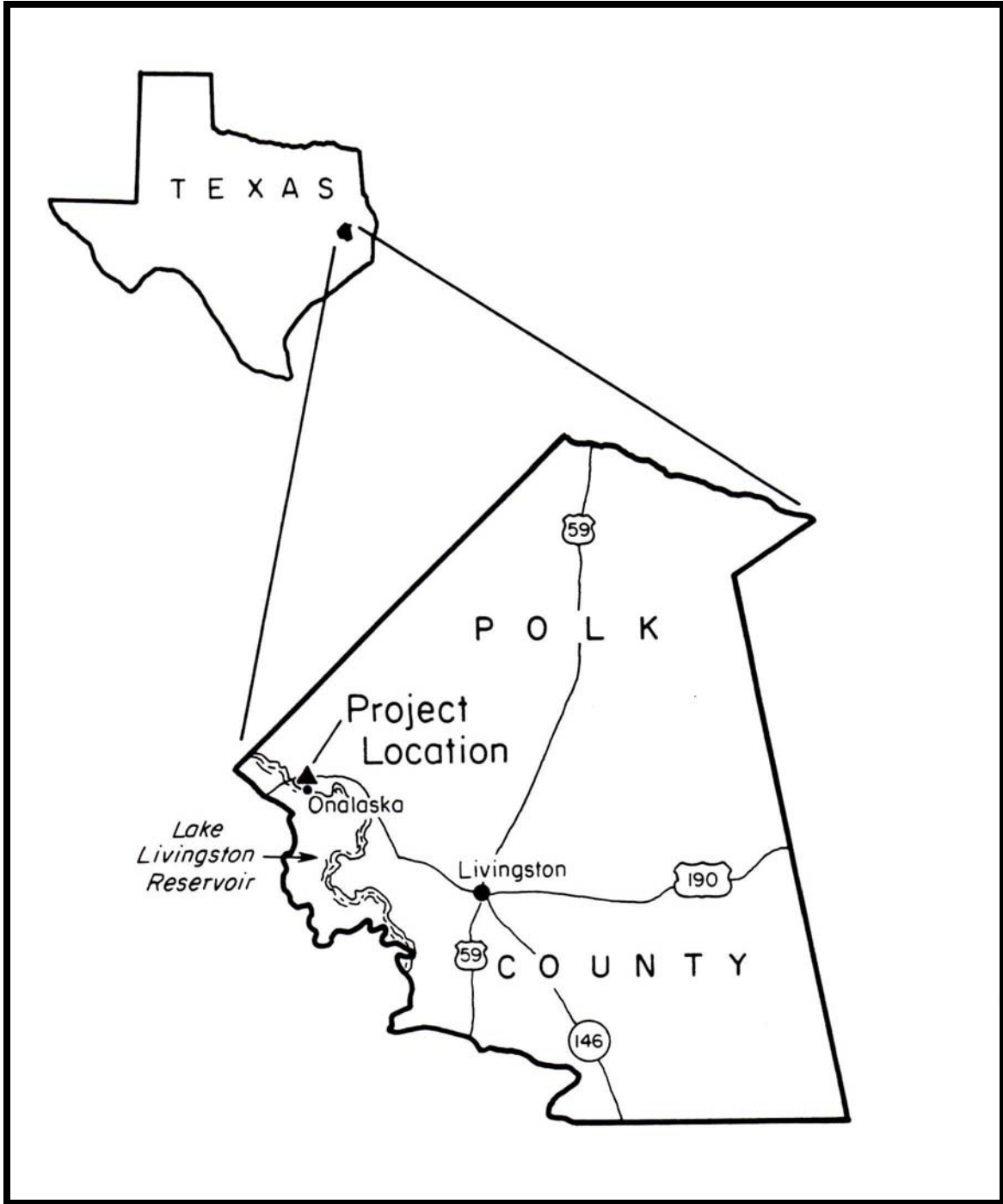


Figure 1. General Location Map

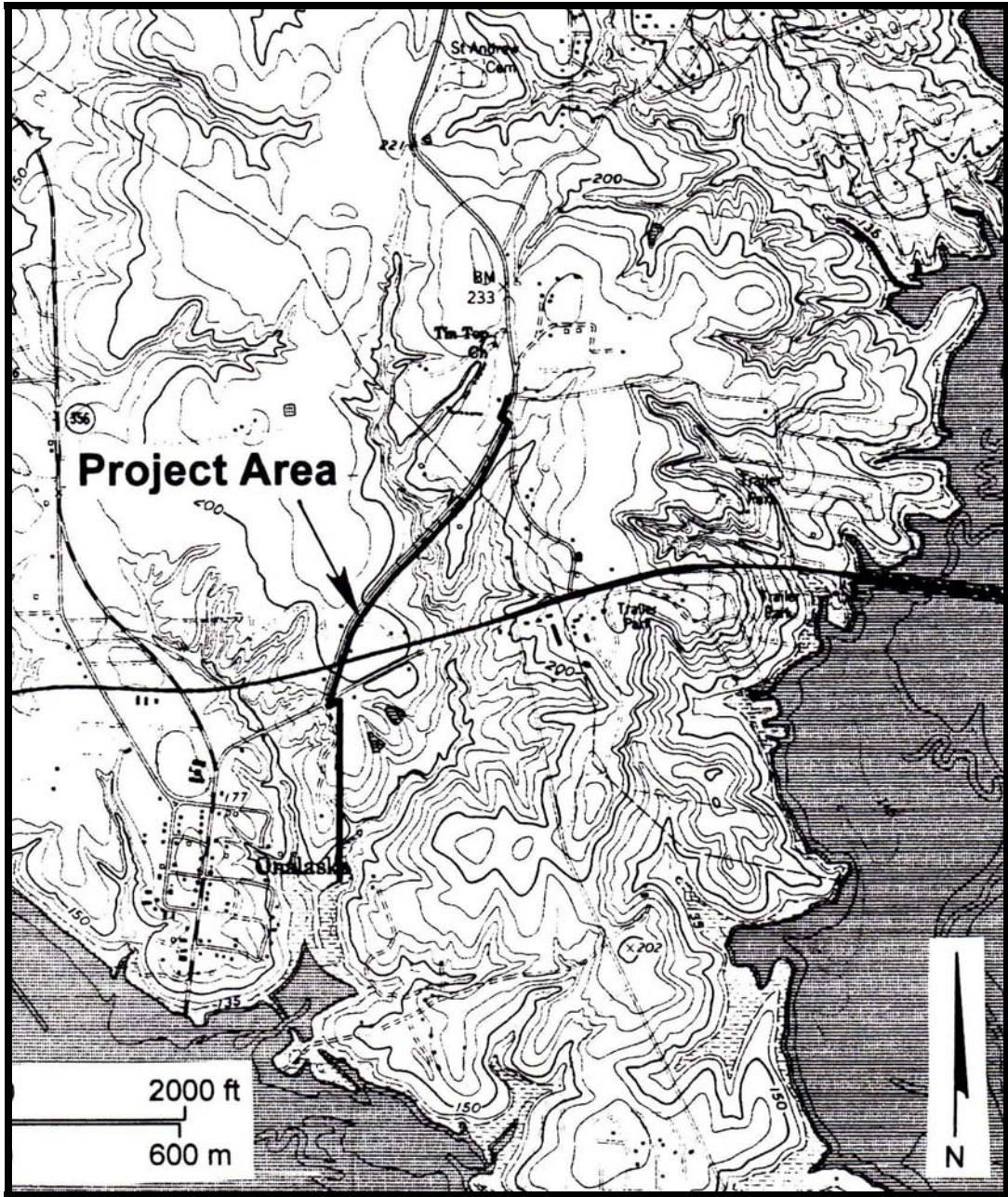


Figure 2. Project Area on Topographic Map

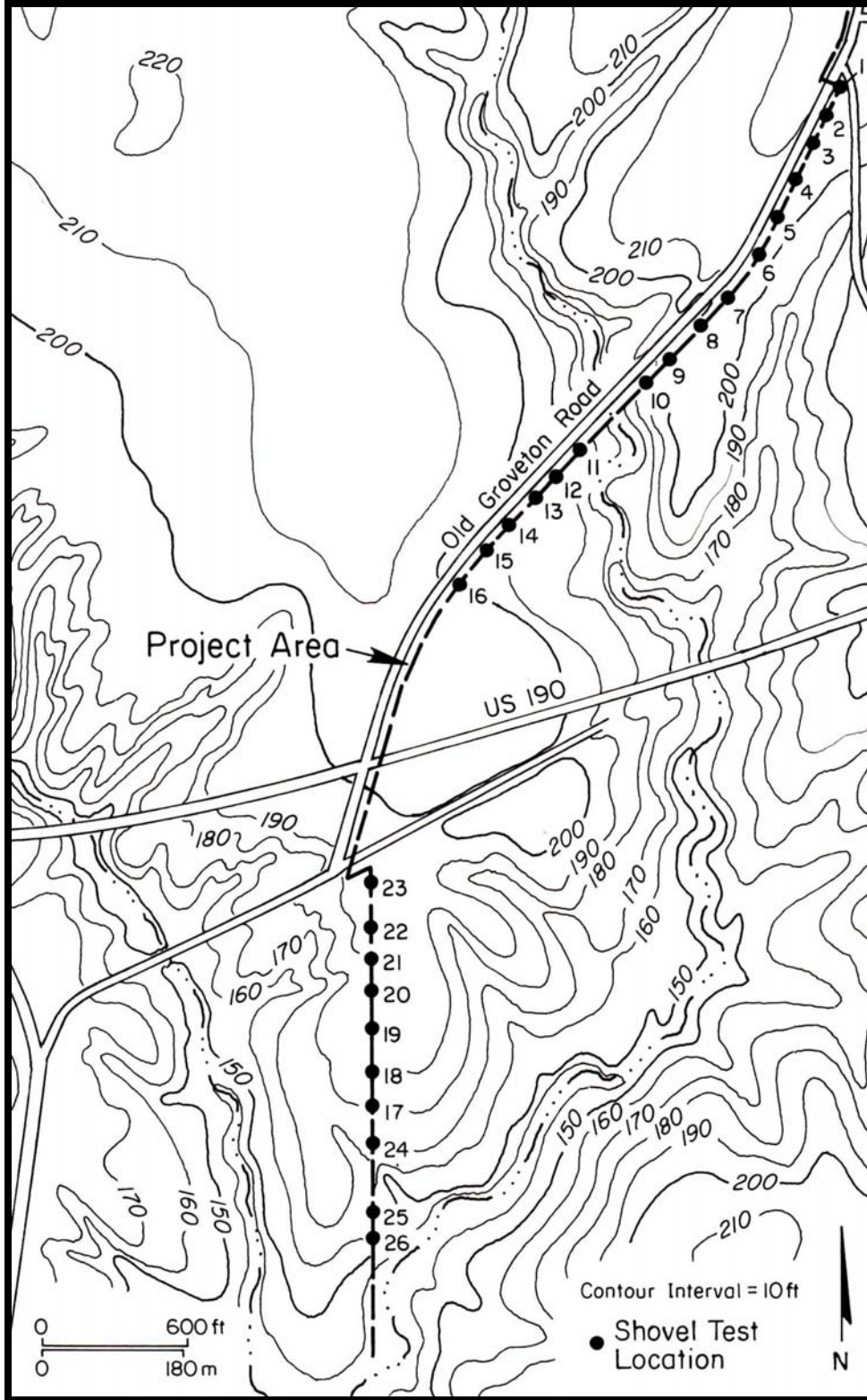


Figure 3. Project Area Map

FIELD METHODS

The Phase I survey was conducted utilizing the pedestrian survey method supported by shovel testing and probing. During the field survey, the entire project area was examined for surface and subsurface evidence of archaeological sites with emphasis on those areas believed to be high probability for site occurrence. Virtually all of the project area was obscured by ground cover; therefore, few exposed surfaces were observed. Limited shovel probing was also conducted to find out the depth of clay in the various areas.

All earth excavated during shovel testing was screened through 1/4 inch hardware cloth. In all, 26 shovel tests were dug throughout the project area (Appendix I). Each shovel test was 30 x 50 cm in size and was dug in arbitrary 10 cm levels. Of this number, 16 were dug along Old Groveton Road, and 10 were dug south of Highway 190 (Figure 3). Selected shovel tests were profiled (Appendix II). Along Old Groveton Road shovel tests were dug in the least disturbed areas. It should be noted that this route was very disturbed due to buried sewer lines and a telephone cable. According to the surveyors working for KSA Engineers, Inc. on this project, a buried water line was also present. There was a built-up, paved area on both sides of Highway 190, and no shovel tests were dug in this location (Figure 3). The existing wastewater treatment plant was found to be in the floodplain of the creek that contained no water (only muddy areas due to seepage). No shovel tests were dug in this low probability area. There was a steep 30 foot bank overlooking the creek that was examined for *in situ* cultural materials. A backhoe was not considered necessary due to the overall shallow soils and negative results of all 26 shovel tests. In addition to the topographic quadrangle and engineering map, the soils book for Polk and San Jacinto counties was consulted during the survey (McEwen, et al. 1988). The project area map (Figure 3) was taken from a blowup of the topographic map prepared by KSA Engineers, Inc. dated October 1999.

ARCHAEOLOGICAL BACKGROUND

The project area is located in a county that contains significant archaeological sites, both prehistoric and historic. A file search conducted by the Texas Archeological Research Laboratory (TARL) in Austin, Texas revealed no previously recorded sites in the project area. Several sites have been reported south of the area along Lake Livingston. No sites in the vicinity are listed in the National Register of Historic Places 1993 update or as State Archeological Landmarks. There is, however, a State Archeological Landmark referred to the Lake Livingston Recreation Area to the south of the current project area, but it appears that only one site (41PK21) may be included.

According to a planning document prepared by the Department of Antiquities Protection (now Division of Antiquities Protection), the project area is located in the Southeast Texas Archeological Study Region of the Eastern Planning Region (Kenmotsu and Perttula 1993:Figure 1.1.2). At the time this document was prepared Polk County contained 0.001 to 0.1 sites per square mile. This is the lowest recorded site density of any county in Texas except for two counties with no recorded sites.

The three archeological regions in the Eastern Planning Region exhibit greater internal environmental homogeneity than does the planning region as a whole and is characterized by considerable cultural diversity, both through time and space (Kenmotsu and Perttula 1993:13). Early cultures in the region exhibit a greater degree of similarity in lifeways than was the case for later cultures. These early groups were probably hunters and gatherers utilizing site areas for brief periods based on the widespread distribution of point styles, the frequent occurrence of exotic raw materials, and the meagerness of occupational debris found at excavated campsites (Kenmotsu and Perttula 1993:13-14). Through time, group territories appear to have been reduced, perhaps due to increased population. As territoriality of groups increased, greater internal diversity is evidenced in the archeological record of the region (Kenmotsu and Perttula 1993:14). The diversity in the archeological record becomes quite pronounced by the Late Prehistoric period, enabling researchers to distinguish the Late Prehistoric from earlier periods.

The discussion above was taken largely from the planning document by the Department of Antiquities Protection. Interested researchers are encouraged to consult this comprehensive document for additional background information regarding the archaeology of Polk County and Southeast Texas.

Much of our current knowledge of the prehistory and history of Polk County has resulted from cultural resource studies, primarily involving Lake Livingston. The first major project to involve the reservoir area was the initial survey (Nunley 1963), testing (McClurkan 1967), and mitigation (McClurkan 1968) of the proposed lake area by the Texas Archeological Salvage Project (TASP) in the 1960s. Since that time a number of small projects have been conducted. Typically, these are small area surveys by private contractors working with the Corps of Engineers (COE) or in-house projects by COE staff. Since the TASP investigations in the 1960s, only one major excavation project has been conducted in the county.

The Crawford site (41PK69) was excavated by the Archeological Research Laboratory, Texas A&M University, under the direction of H. Blaine Ensor and David L. Carlson (1988) in 1984-1985. Their work provided evidence that deeply stratified upland sites exist within the region. The Crawford site was determined to have been inhabited during much of the Holocene as Early, Middle, and Late Archaic occupations, as well as Early and Late Ceramic Period components, were defined. The data suggest that the latest deposits are Caddo related, and some occupational debris may be attributed to the historic Bidai (Ensor and Carlson 1988:iii). The interested researcher is advised to consult the above-mentioned sources for previous work in Polk County.

In 1998, Brazos Valley Research Associates conducted a Phase I archaeological survey of a wastewater system improvement project for the Polk County Fresh Water Supply District Number 2 approximately 3.5 km northwest of the current project area (Moore 1998). One multi-component site (41PK122) was located.

RESULTS AND RECOMMENDATIONS

A 100% pedestrian survey of the project area (6440 feet) did not locate any archaeological sites. The segment along Old Groveton Road (4400 feet) was in a very disturbed area due to a buried sewer line, telephone cable, and water line. Much of this segment was in a ditch that was created when the highway was constructed. This was obvious when the natural contour of the landforms paralleling the highway were compared to the road. Shovel tests in the undisturbed areas along the highway revealed a hard clay above the roadbed. The center of the project area was built up and paved; it is in this area that Highway 190 crosses the project area alignment and several parking lots and businesses are located. The area south of Highway 190 contained fairly shallow soils (average depth 40-50 cm) on a landform that sloped gradually to the creek to the south. It appears, after the fact, that the project area crossed the landform in an area that was on the slope rather than at the top. The highest probability areas for an archaeological site are believed to be east (near shovel tests 18-21) and west (shovel tests 24-26) of the current alignment.

It is recommended that the client be allowed to proceed with construction as planned. It is always possible that cultural resources are missed during any archaeological survey. Should, however, evidence of a site be encountered during construction all work should cease until a decision can be made by the Division of Archeology, Texas Historical Commission in consultation with the Polk County Fresh Water District Number 2 and Brazos Valley Research Associates.

REFERENCES CITED

Ensor, H. Blaine, and David L. Carlson

- 1988 *The Crawford Site, 41PK69, Central Trinity River Uplands, Polk County, Texas*. Department of Highways and Public Transportation, Highway Design Division, Contract Reports in Archaeology, Report Number 4.

Kenmotsu, Nancy Adele, and Timothy K. Perttula

- 1993 *Archeology in the Eastern Planning Region, Texas: A Planning Document*. Department of Antiquities Protection, Cultural Resource Management Report 3. Texas Historical Commission.

McClurkan, Burney B.

- 1967 Excavations at Livingston Reservoir - 1965 Season. Mimeographed report submitted to the National Park Service by the Texas Archeological Salvage Project.
- 1968 *Livingston Reservoir, 1965-66: Late Archaic and Neo-American Occupations*. Papers of the Texas Archeological Salvage Project, Number 12.

McEwen, Harry, Kirby Griffith, and Jessee D. Deshotels

- 1988 *Soil Survey of Polk and San Jacinto Counties, Texas*. United States Department of Agriculture, Soil Conservation Service in cooperation with the United States Department of Agriculture, Forest Service and the Texas Agricultural Experiment Station.

Moore, William E.

- 1998 *A Phase I Archaeological and Historical Survey of the Polk County Fresh Water Supply District No. 2, Onalaska, Texas Wastewater System Improvements - Spray Irrigation Site and Collection System*. Brazos Valley Research Associates, Contract Report 56.

Nunley, John P.

- 1963 Appraisal of the Archeological Resources of Livingston Reservoir, Polk, San Jacinto, Trinity, and Walker Counties, Texas. Report submitted to the National Park Service by the Texas Archeological Salvage Project.

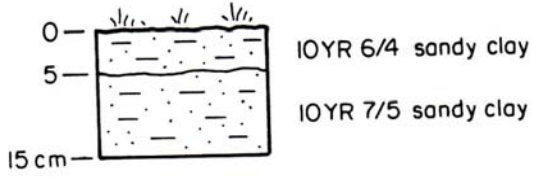
Appendix I: Shovel Test Log *

Test	Depth	Profile
1	20 cm	0-10 cm, 10YR 6/3; fine sandy loam 10-20 cm, 2.5YR 5/5; clay
2	15 cm	0-5 cm, 10YR 6/3; fine sandy loam 5-15 cm, 2.5YR 5/5; clay
3	25 cm	0-15 cm, 10YR 6/3; fine sandy loam 15-25 cm, 10YR 7/5; clay
4	5 cm	0-5 cm, 2.5YR 5/5; clay
5	15 cm	0-5 cm, 10YR 6/4; sandy clay 5-15 cm, 10YR 7/5; sandy clay
6	20 cm	0-10 cm, 10YR 6/3; fine sandy loam 10-20 cm, 10YR 7/5; clay
7	80 cm	0-70 cm, 10YR 6/3; fine sandy loam 70-80 cm, 10YR 7/5; clay
8	110 cm	0-90 cm, 10YR 6/3; loamy fine sand 90-110 cm, 10YR 7/5; clay with gravels
9	25 cm	0-10 cm, 10YR 6/3; fine sandy loam 10-25 cm, 2.5YR 5/5; clay
10	30 cm	0-15 cm, 10YR 6/3; fine sandy loam 15-30 cm, 2.5YR 5/5; clay
11	60 cm	0-40 cm, 10YR 6/3; fine sandy loam 40-60 cm, 10YR 7/5; clay
12	80 cm	0-70 cm, 10YR 6/3; fine sandy loam 70-80 cm, 10YR 7/5; fine sandy loam
13	30 cm	0-20 cm, 10YR 6/3; fine sandy loam 20-30 cm, 10YR 7/5; fine sandy loam
14	50 cm	0-40 cm, 10YR 6/3; fine sandy loam 40-50 cm, 10YR 6/3; fine sandy loam

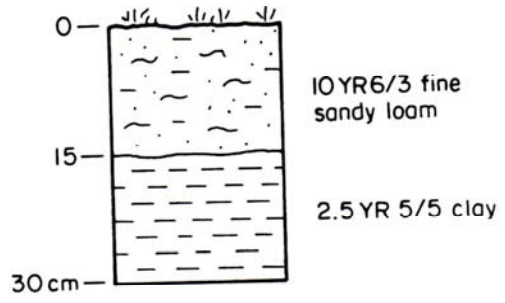
Test	Depth	Profile
14	50 cm	0-40 cm, 10YR 6/3; fine sandy loam 40-50 cm, 10YR 6/3; fine sandy loam
15	40 cm	0-30 cm, 10YR 6/3; fine sandy loam 30-40 cm, 10YR 7/5; clay
16	50 cm	0-40 cm, 10YR 6/3; fine sandy loam 40-50 cm, 10YR 7/5; clay
17	60 cm	0-50 cm, 10YR 6/3; fine sandy loam 50-60 cm, 10YR 7/5; clay
18	60 cm	0-50 cm, 10YR 6/3; fine sandy loam 50-60 cm, 10YR 7/5; clay
19	60 cm	0-50 cm, 10YR 6/3; fine sandy loam 50-60 cm, 10YR 7/5; clay
20	60 cm	0-50 cm, 10YR 6/3; fine sandy loam 50-60 cm, 10YR 7/5; clay
21	50 cm	0-40 cm, 10YR 6/3; fine sandy loam 40-50 cm, 10YR 7/5; clay
22	20 cm	0-10 cm, 10YR 6/3; fine sandy loam 10-20 cm, 10YR 7/5; clay
23	60 cm	0-50 cm, 10YR 6/3; fine sandy loam 50-60 cm, 10YR 7/5; clay
24	40 cm	0-20 cm, 10YR 6/3; fine sandy loam 20-40 cm, 10YR 7/5; clay
25	40 cm	0-30 cm, 10YR 6/3; fine sandy loam 30-40 cm, 10YR 7/5; clay
26	30 cm	0-20 cm, 10YR 6/3; fine sandy loam 20-30 cm, 10YR 7/5; clay

APPENDIX II
REPRESENTATIVE SHOVEL TEST PROFILES

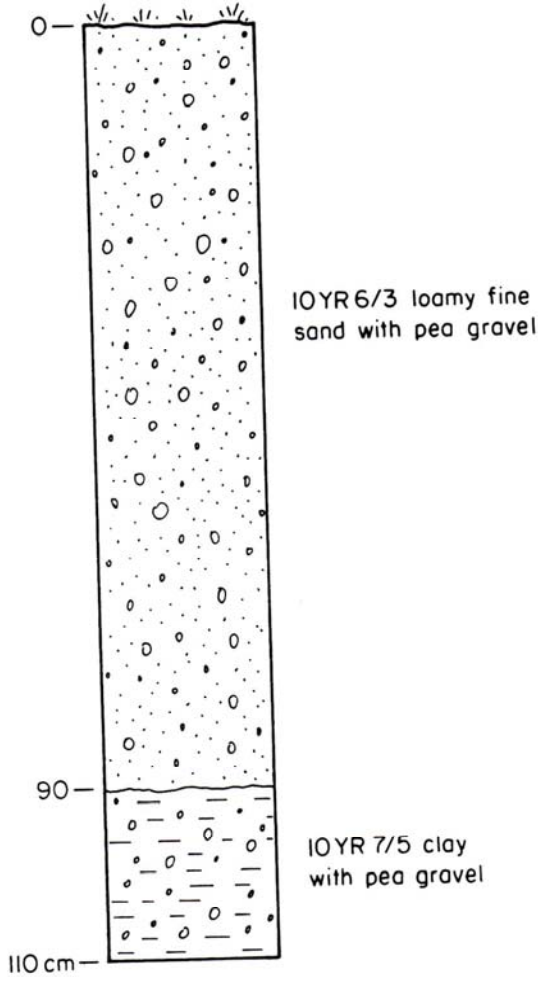
ST-5



ST-10



ST-8



ST-19

