AN ARCHAEOLOGICAL SURVEY OF THE PROPOSED VETERANS RETIREMENT HOME PROJECT IN CENTRAL SOMERVELL COUNTY, TEXAS

Texas Antiquities Permit Number 2950

by

William E. Moore

Brazos Valley Research Associates

Contract Report Number 107

2002

AN ARCHAEOLOGICAL SURVEY OF THE PROPOSED VETERANS RETIREMENT HOME PROJECT IN CENTRAL SOMERVELL COUNTY, TEXAS

Principal Investigator

William E. Moore

Project Number

BVRA 02-15

Prepared for

Somervell County Commissioners Court
Post Office Box 28
Glen Rose, Texas 76043

Prepared by

Brazos Valley Research Associates
813 Beck Street
Bryan, Texas 77803

ABSTRACT

A Phase I cultural resources survey of a 12 acre tract in central Somervell County, Texas was conducted by Brazos Valley Research Associates (BVRA) of Bryan, Texas under Texas Antiquities Permit Number 2950 in September 2002 with William E Moore the Principal Investigator. This work was done at the request of the Somervell County Commissioners Court. No archaeological sites were found to be within the boundaries of the project area, and it is recommended that Somvervell County be allowed to proceed with construction as planned. Copies of the final report are on file at the Texas Historical Commission (THC), Archeology Division, Texas Archeological Research Laboratory (TARL), and BVRA.

ACKNOWLEDGMENTS

The following are acknowledged for their participation in this project. The Honorable Judge Walter Maynard and the Somvervell County Commissioners Court are thanked for their participation in this project. Foy Edwards (Somervell County Commissioner Precinct 2) was our principal contact, providing maps and other support. Also, Lloyd Wirt (County Commissioner Precinct 3) took an active role in the project and assisted the survey crew during the backhoe trenching. Mark H. Denton of the THC served as the reviewer. At TARL, Adrianne Mraz, Assistant Curator of Records conducted the background study. The figures were prepared by Lili Lyddon of LL Technical Services in North Zulch, Texas. James E. Warren assisted supervised the backhoe trenching and identified the soils in the project area.

CONTENTS

Figures

INTRODUCTION

The County of Somervell is developing a tract of 12 acres of land on the north side of Wheeler Branch in the central part of the county (Figure 1). This parcel is destined to become a retirement community for Texas veterans. If this site is selected by the Veterans' Land Board of the State of Texas for construction of a Veterans' Retirement Home, the property will be donated by the County to the State of Texas. A cultural resources survey of the site was requested by the Veterans' Land Board as part of the background information regarding this parcel of land prior to selecting or rejecting it for the retirement home. The Somervell County Commissioners Court contracted with BVRA to conduct a Phase I cultural resources survey in order to identify and assess the archaeological potential of this area. The survey was conducted under Antiquities Permit 2950, and the BVRA project number is 02-15. The field survey was performed on September 6, 2002.

The project area is bounded on all sides by private property. The nearest stream is Wheeler Branch, a tributary of the Paluxy River. It flows from west to east less than 50 meters to the south of the project area (Figure 2). The project area is depicted on the USGS 7.5' topographic quadrangles Glen Rose East, Texas dated 1967 (photoinspected 1977) and Glen Rose West dated 1966 (photorevised 1979) (Figure 3).

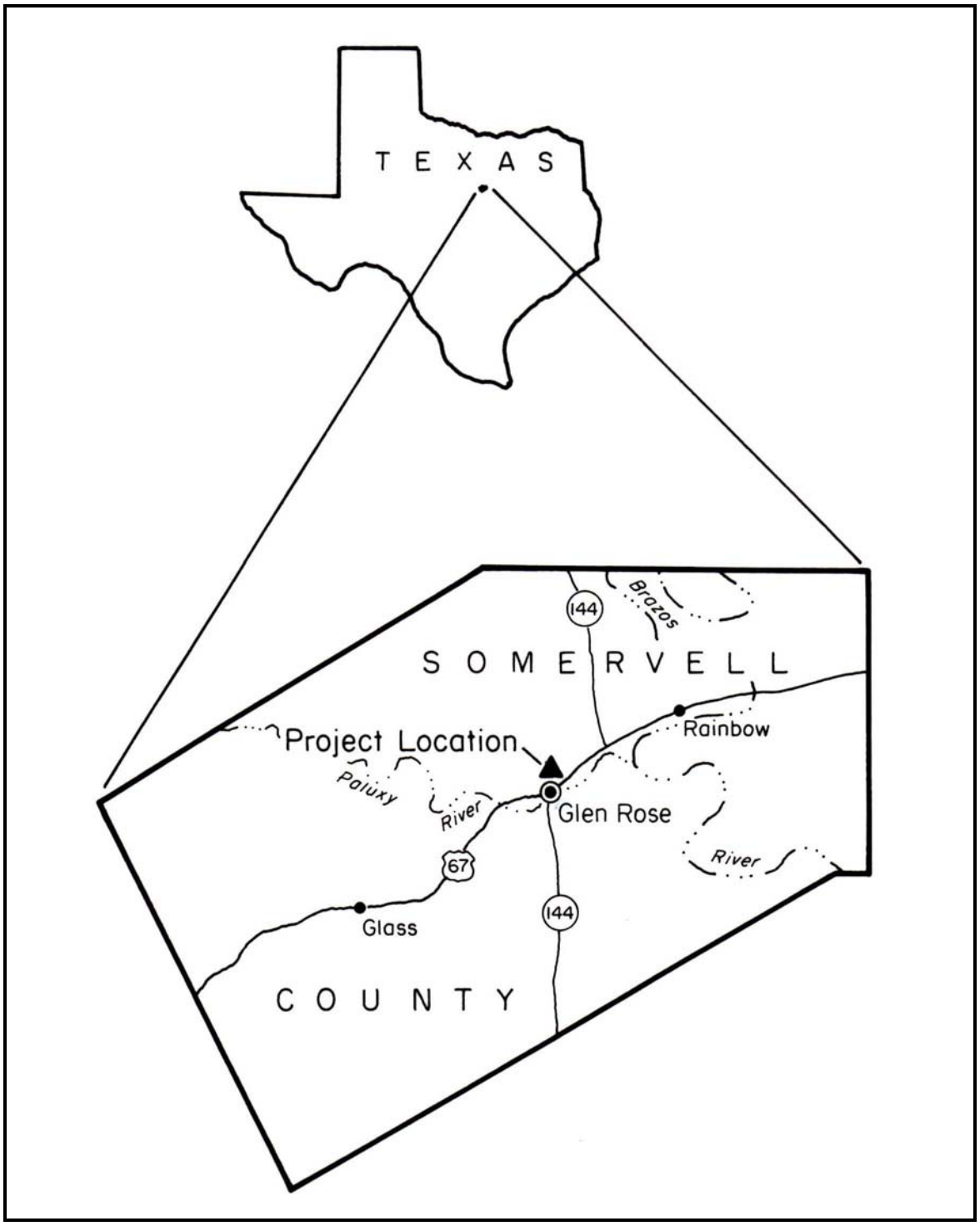


Figure 1. General Location Map

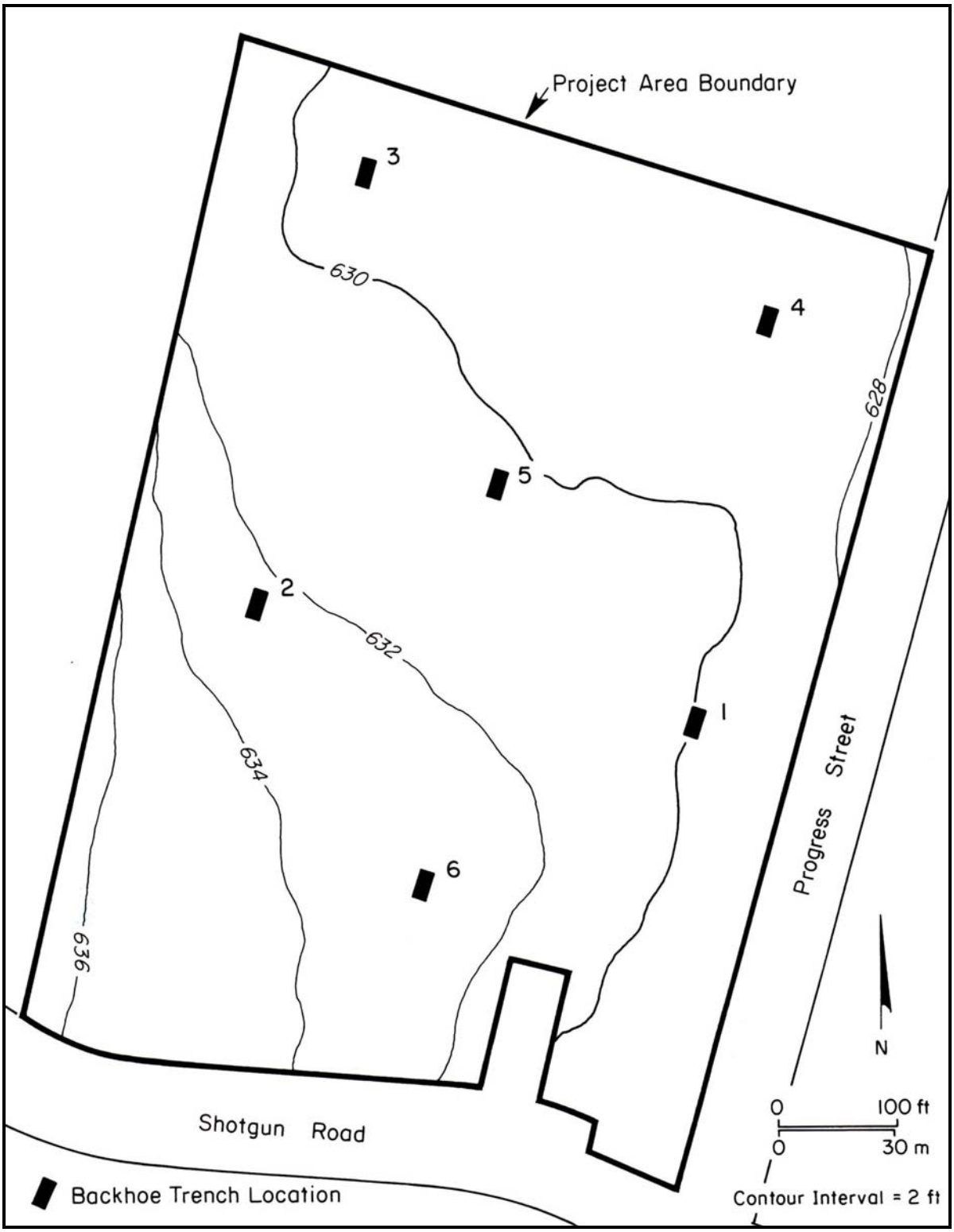


Figure 2. Project Area Map

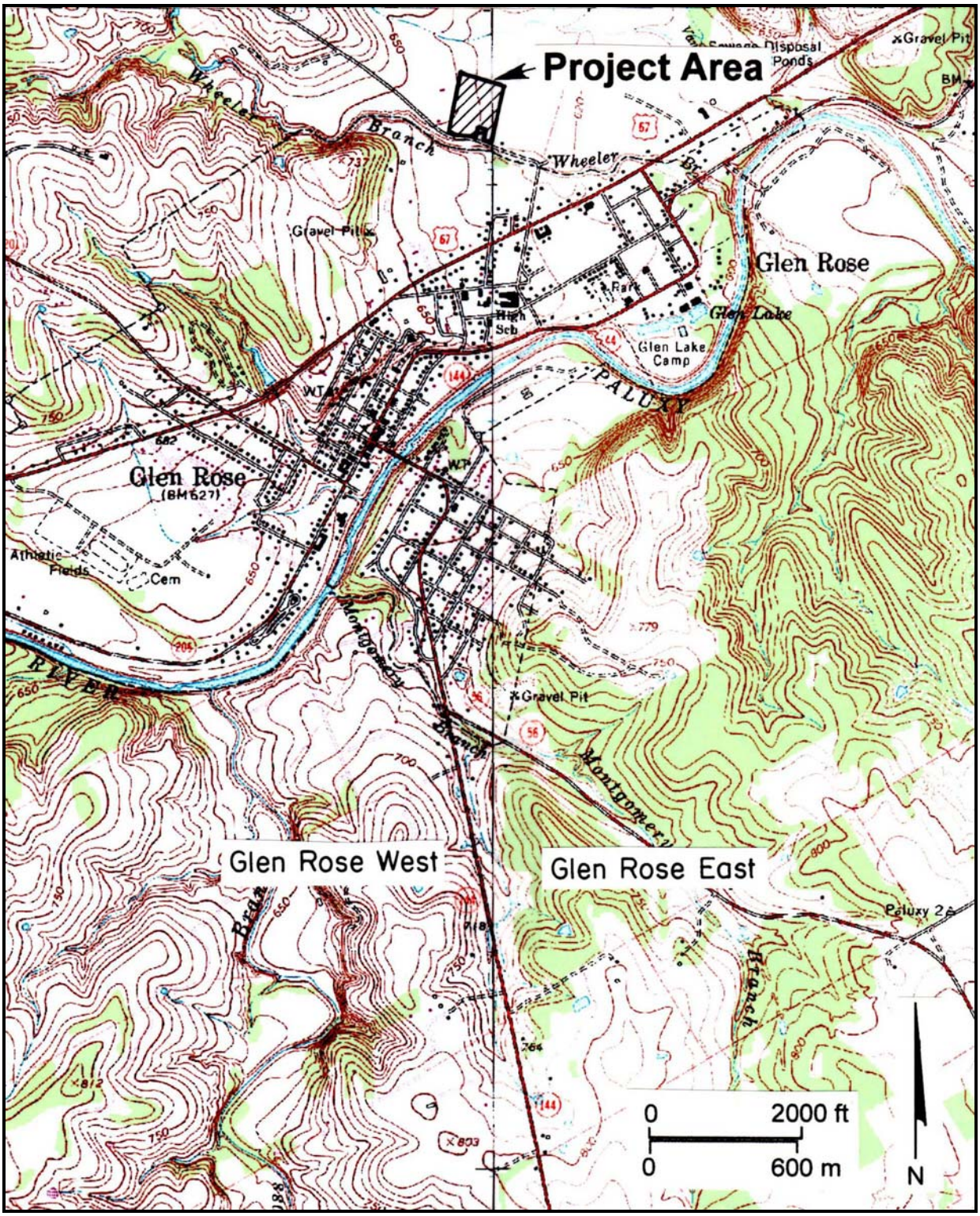


Figure 3. Project Area on Topographic Maps

ENVIRONMENTAL SETTING

At 197 square miles, Somervell County is the third smallest county in Texas (Moore 1975). It is included as part of the Grand Prairie geographic zone (Hill 1901, Carter 1931). Altitude ranges from 600 feet to 1300 feet and is 630 feet throughout the project area (Kingston and Harris 1983). Overall, the county is hilly with rugged areas such as eroded plateaus and ravines where cut by the Brazos and Paluxy rivers. Squaw and Kickapoo creeks are the two other major streams in the county.

Rain falls throughout the year, but is highest in spring and fall with an annual average of 32.65 inches. Snow is infrequent. This is an area that is hot in summer and cold in winter. The July maximum temperature is 98 degrees Fahrenheit, and the January minimum temperature is 32 degrees Fahrenheit. A growing season of 236 days is normal.

According to the soil survey for Somervell County (Coburn 1978;Sheet 41), two soil types are present in the project area (Figure 4). They are Krum clay, 0 to 1 percent slopes (30) and Venus loam, 0 to 1 percent slopes (53). Krum clay (30) is a deep, well-drained, nearly level soil located in broad, filled valleys adjacent to stream drainage ways (Coburn 1978:19). Venus loam (53) is a deep well-drained gently sloping soil on geologic terraces along small streams (Coburn 1978:27)

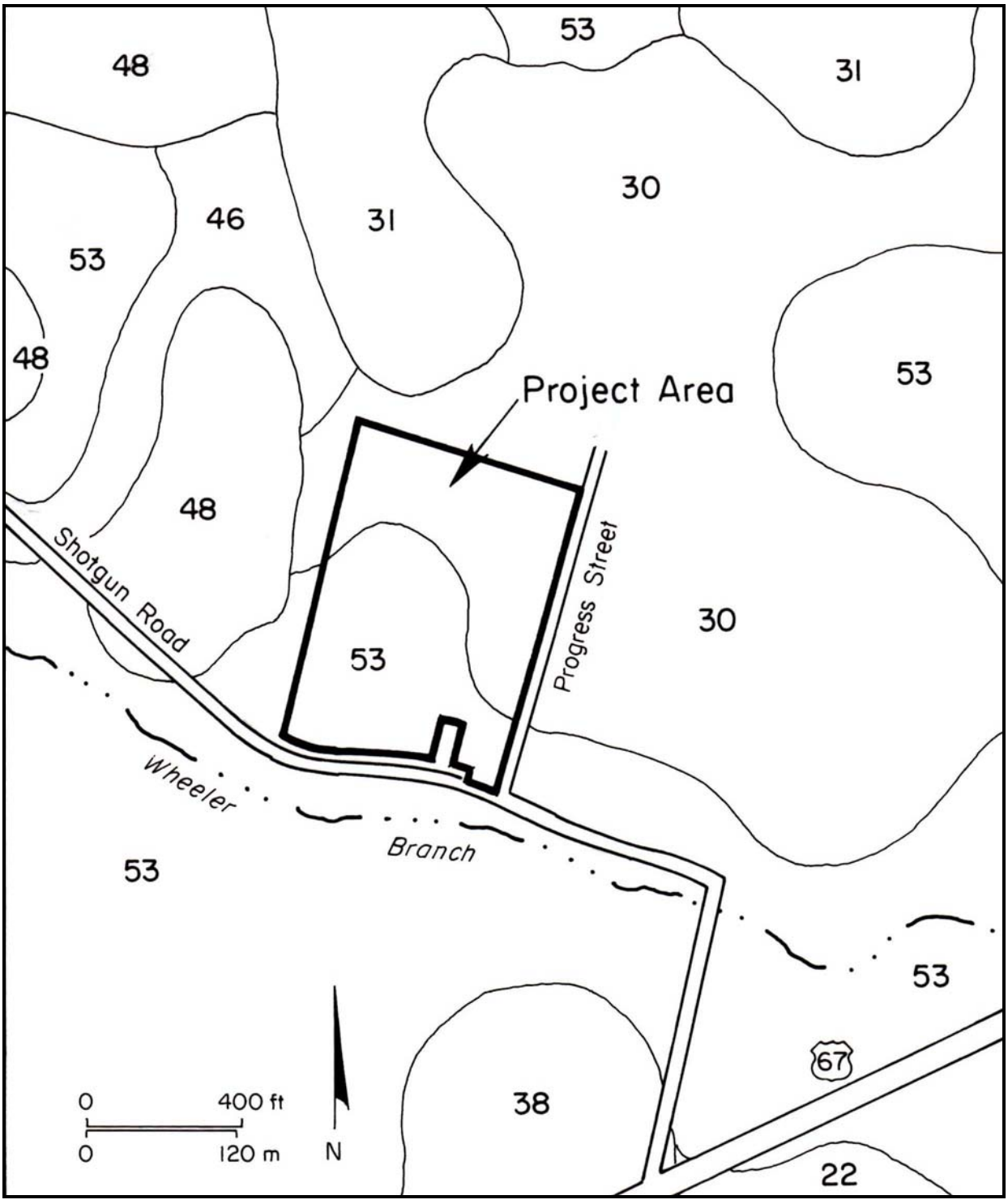


Figure 4. Project Area Soils

PREVIOUS INVESTIGATIONS

Somervell County is located in the North Central Texas cultural-geographical region as defined by Biesaart et al. (1985:76) in a statistical overview published by the THC. 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, 2678 sites (13.25% of the state) were recorded in the entire region. Only one other region (Central Texas) reported more sites or had a higher percentage statewide. In terms of county statistics, twenty-one of the thirty-nine counties in the region had as many or more reported sites as Somervell County in 1985 (Biesaart et al. 1985:35). The forty-seven sites known to exist in 1985 comprised 1.76% of the region and .23% of the state. The reader is referred to the overview for more statistical information concerning Somervell County and its relation to the rest of Texas. At the time of the survey, 151 archaeological sites had been recorded in Somervell County (Jean Hughes, personal communication, September 4, 2002).

According to Biesaart et al. (1985:185), all major periods of Texas prehistory are documented in Somervell County. Sites classified as General Archaic and Late Prehistoric are the most numerous with 26 examples. The rest of the inventory includes Paleoindian (n=3), Early Archaic (n=1), Middle Archaic (n=3), and Late Archaic (n=6). Four sites have been designated as State Archeological Landmarks. Information for the county comes primarily from surface collections at 27 sites with little data from testing at 2 sites and excavation at 1 site.

The first professional archaeological work in Somervell County consisted of an intensive survey and preliminary testing program within the proposed Squaw Creek Reservoir by the Archaeology Research Program at Southern Methodist University (SMU) in 1972 (Skinner and Humphreys 1973). This project examined an area that, when flooded, will cover approximately 3200 surface acres along a six mile segment of the Squaw Creek valley. Twenty-four prehistoric and historic sites (41SV26, 41SV28 - 41SV46, 41SV48, 41SV52 - 41SV53) were recorded within the boundaries of the proposed reservoir in Somervell County, and three sites (41HD55-41HD57) were recorded in Hood County. In addition to a surface survey, controlled surface collecting and testing were conducted at sites 41SV30 and 41SV40 in Somervell County, and testing was conducted at site 41HD55 in Hood County.

Assistance from various individuals, some of them members of avocational societies, played a large part in the Squaw Creek survey. Their efforts resulted in the recording of 24 sites (41SV6 - 41SV25, 41SV27, 41SV49 - 41SV51) out of the reservoir limits.

The prehistoric remains at Squaw Creek were found to range in age from 8000 B.C. to A.D. 1500 with the majority of this occupation belonging to the Late Archaic period. Historic use of the area was found to have begun about 1855. No evidence of historic Indian occupation was found.

Excavation at the Hopewell School site (41SV30) was undertaken by SMU in the summer of 1974 following the earlier pedestrian survey that recorded this site. Over 300 square meters were excavated to bedrock in large block areas. The site was found to contain a temporally mixed occupation, although the Late Archaic period was best represented (Gallager and Bearden 1976:iii).

A reconnaissance survey of Dinosaur Valley State Park was performed by SMU in September of 1974 (Gallagher 1974). This study was initiated partly to add to the growing body of data for the region and partly out of concern for the archaeological resources of the park that are potentially threatened by an increase in tourism. The survey was intended primarily to examine portions of the park thought most likely to contain archaeological material, and no attempt was made to systematically investigate the entire park. As a result of this reconnaissance, four archaeological sites (41SV56-41SV59) were located. No artifacts were collected, and no shovel tests were dug. The sites found consist of buried middens and lithic scatters with no diagnostic artifacts observed.

In 1991, Brazos Valley Research Associates examined an approximate 200 acre tract of land, the site of the proposed Glen Rose Golf Club (Moore 1991). This site is south of and adjacent to the current project area. As a result of this study, one previously recorded site (41SV51) was relocated, and four new sites (41SV3 - 41SV5 and 41SV47) were recorded. Four of the sites had been disturbed through golf course construction that was ongoing at the time of this project. Only site 41SV47 appeared to contain intact deposits, and it was recommended for Phase II significance testing if it could not be avoided. Of special note, was the presence of two obsidian flakes at site 41SV5. The source for this material was traced to the Jemez Mountains in New Mexico (Thomas R. Hester, personal communication).

An archaeological assessment of the 3000 acre Fossil Rim Wildlife Center was conducted by Brazos Valley Research Associates in 1992 and 1993 (Moore 1995). This tract, on private land, was not subject to federal or state review. The owners were interested in obtaining information regarding the cultural resources on their property and hired BVRA to perform this service. Although parts of the property were off limits because of dangerous animals, the project recorded 11 prehistoric sites, 3 historic sites, and 5 isolated finds at Fossil Rim. Two prehistoric sites and one historic site were recorded on private land with the permission of the landowner. Artifacts ranged from Paleoindian to historic.

Two sites recorded by Gallagher in Dinosaur Valley State Park (41SV56 and 41SV57) were tested by the Texas Parks and Wildlife Department (Turpin 1994). In addition, historic site 41SV63 was assessed, and four new sites (41SV117 - 41SV120) were recorded. Both sites tested date to the Late Prehistoric period.

The last archaeological site recorded in Somervell County was 41SV151, a prehistoric hearth that was found buried on an ancient terrace adjacent to a former channel of Squaw Creek (Moore and Bradle 1997). Fragments of burned rock, bone, and charcoal were found between 95 and 110 centimeters in an adjacent trench.

PROJECT METHODS

Prior to the beginning of the field survey, a check was made of the site files at TARL and the library at BVRA. This task revealed that no previously recorded archaeological sites have been recorded in the current project area.

The current field survey was conducted under the direction of William E. Moore (Principal Investigator) and James E. Warren (Project Archaeologist). The survey crew utilized several maps during the field survey. They are a project map supplied by the County of Somervell; the 7.5' topographic map, Glen Rose East; an aerial photograph taken in 1939; and the soil survey aerial photograph taken in the 1970s.

A 100% pedestrian survey was conducted on September 6, 2002. Surface visibility in the pasture was very poor due to the extensive grass cover. Surface visibility in the corral was excellent, and this area was examined for surface evidence of an archaeological site.

Since the county had made a backhoe and operator available, we decided to use it initially in order to open up a large area. The first trench dug through hard clay to a depth of 200 cm and exposed an area of 4 m x 1.3 m. Each 30 cm level of dirt was screened using 1/4 inch hardware cloth. It soon became apparent that only a portion of the dirt would pass through the screen due to the hardness of the clay. Some of the clay lumps had to be broken apart by hand. Because the pasture appeared to be rather uniform, probably containing the same soil throughout, it was decided to use the backhoe instead of relying on hand excavated shovel tests. This method would allow for a greater amount of the subsurface to be examined and, most importantly, would enable us to penetrate deeper into the subsoil. We were searching for intact features rather than isolated and/or scattered artifacts. The six backhoe trenches exposed at least 24 square meters instead of approximately 9 square meters that would have been exposed through backhoe trenching. Since the area had been disturbed over the years through various forms of cultivation, it was decided that the plow zone would not contain intact deposits. In all, 6 backhoe trenches (BT) were excavated (Figure 2), and all were dug to the subsoil between 140 and 230 cm. A backhoe trench log was maintained (Appendix I), and field sketches of each backhoe trench were drawn (Appendix II).

RESULTS AND RECOMMENDATIONS

The project area consisted of an open pasture that had been planted in Kleingrass and recently mowed and a small farmstead area that was being used as a corral for livestock. An aerial photograph taking in 1939 showed that the project area had been cleared for cultivation at that time. This was consistent with conversations from local residents who stated that it had been used for agricultural purposes as long as they could remember. Overall, the soils consisted of a clay or loamy clay that was found to exist from the surface to a maximum depth of 230 cm based on backhoe trenches. One of the backhoe trenches (BT 2) revealed a stratum of limestone bedrock at 140 cm. No evidence of an archaeological site was found in the project area, and it is recommended that construction on the site be allowed to proceed as planned.

REFERENCES CITED

Biesaart, Lynne A., Wayne R. Roberson, and Lisa Clinton Spotts
1985 *Prehistoric Archeological Sites in Texas: A Statistical Overview.* Office of the State Archeologist, Texas Historical Commission, Special Report 28.

Carter, W. T.
1931 *The Soils of Texas.* Texas Agricultural Experiment Station Bulletin 431. College Station.

Coburn, Winfred C.
1978 *Soil Survey of Hood and Somervell Counties, Texas.* United States Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Experiment Station.

Gallagher, Joseph G.
1974 *A Reconnaissance Survey of the Dinosaur Valley State Park.* Southern Methodist University, Archaeology Research Program, Research Report Number 44.

Gallagher, Joseph G., and Susan E. Bearden
1976 *The Hopewell School Site: A Late Archaic Campsite in the Central Brazos River Valley.* Southern Methodist University, Institute for the Study of Earth and Man Contributions in Anthropology Number 19.

Hill, R. T.
1901 Geography and Geology of the Black and Grand Prairies, Texas with Detailed Description of the Cretaceous Formations and Special Reference to Artesian Waters. In *Twenty-First Annual Report to the United States Geological Survey 1899-1900, Part 7 - Texas.*

Kingston, Michael T., and Ruth Harris (Editors)
1983 *Texas Almanac and State Industrial Guide.* A. H. Belo Corporation. Dallas.

Moore, Bill
1975 *A Guide to Texas Counties.* Tejas Publishing Company. Houston and Huntsville.

Moore, William E.
1991 *An Archaeological Survey of the Glen Rose Golf Club Project, Somervell County, Texas.* Brazos Valley Research Associates, Contract Report Number 11.

1995 *An Archaeological Assessment of the Fossil Rim Wildlife Center, Somervell County, Texas.* Brazos Valley Research Associates, Contract Report Number 16.

Moore, William E., and Michael R. Bradle
1997 *An Archaeological Survey of the Proposed Squaw Valley Golf Course Expansion Project, Somervell County, Texas.* Brazos Valley Research Associates, Contract Report 51.

Skinner, S. Alan, and Gerald K. Humphreys
1973 *The Historic and Prehistoric Archaeological Resources of the Squaw Creek Reservoir.* Southern Methodist University, Institute for the Study of Earth and Man Contributions in Anthropology Number 10.

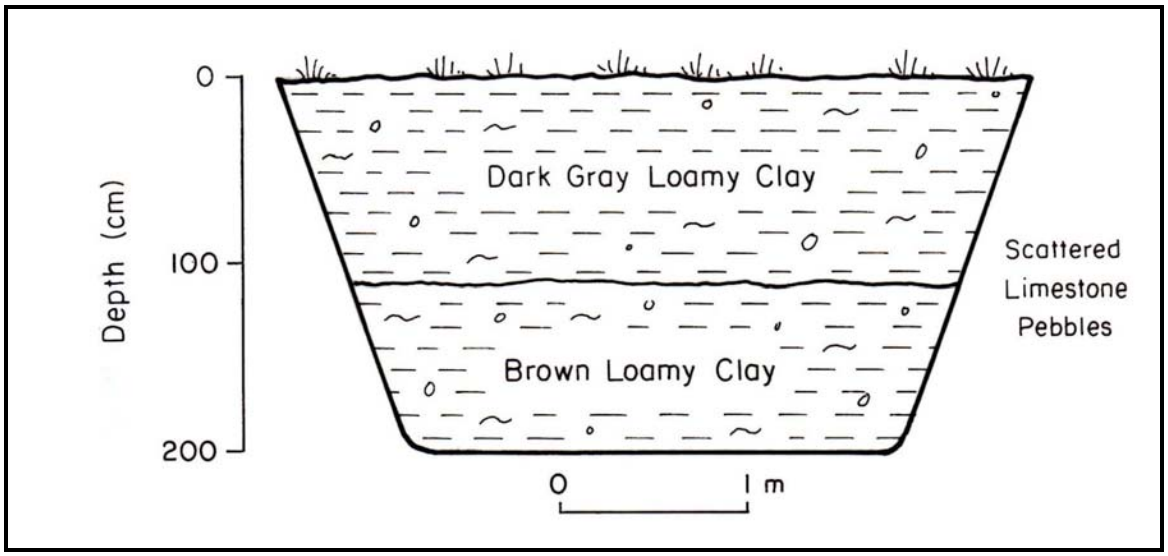
Turpin, Jeff
1994 *Where the Dinosaur Roam: Testing of 41SV56 and 41SV57, Dinosaur Valley State Park, Somervell County, Texas.* Texas Parks and Wildlife Department, Cultural Resource Program, Report 94-1. Austin.

APPENDIX I: BACKHOE TRENCH LOG

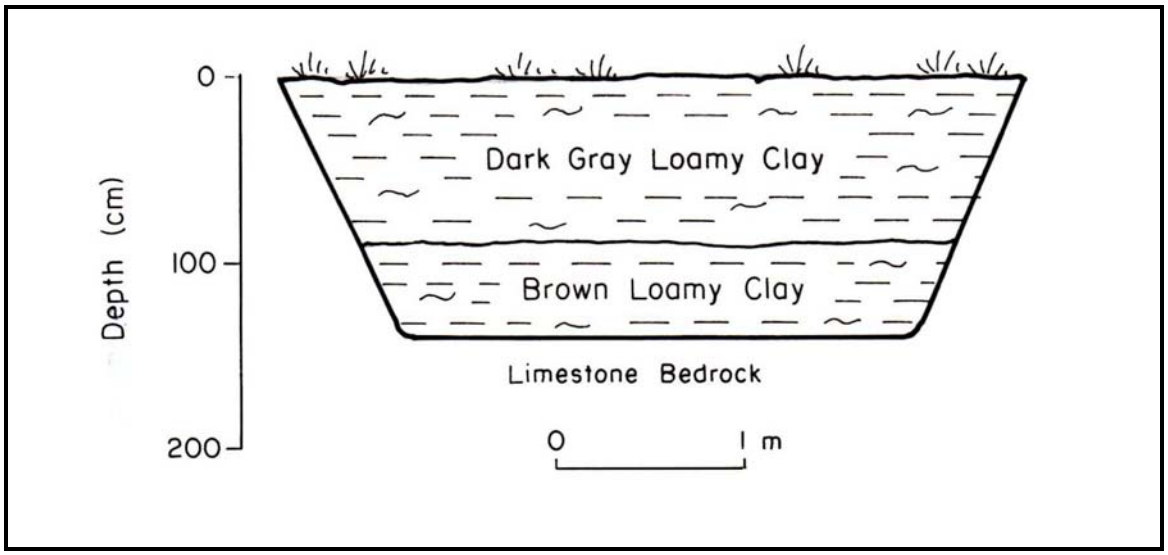
Trench	Depth	Size	Results
01	200 cm	4 m x 1.3 m	clay throughout
02	140 cm	4 m x 1 m	dark gray clay over limestone bedrock
03	230 cm	4 m x 1 m	dark gray clay over brown clay
04	200 cm	4 m x 1 m	dark gray clay over brown clay
05	190 cm	4 m x 1 m	dark gray clay over brown clay
06	210 cm	4 m x 1 m	dark gray clay loam over brown clay

APPENDIX II

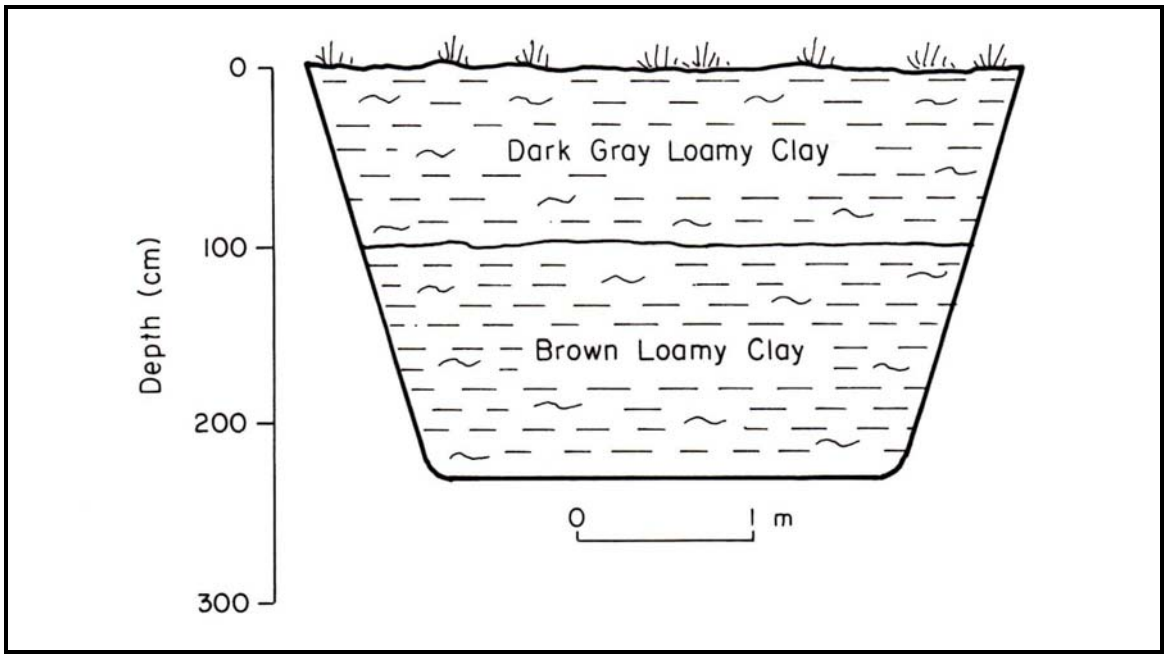
BACKHOE TRENCH PROFILES



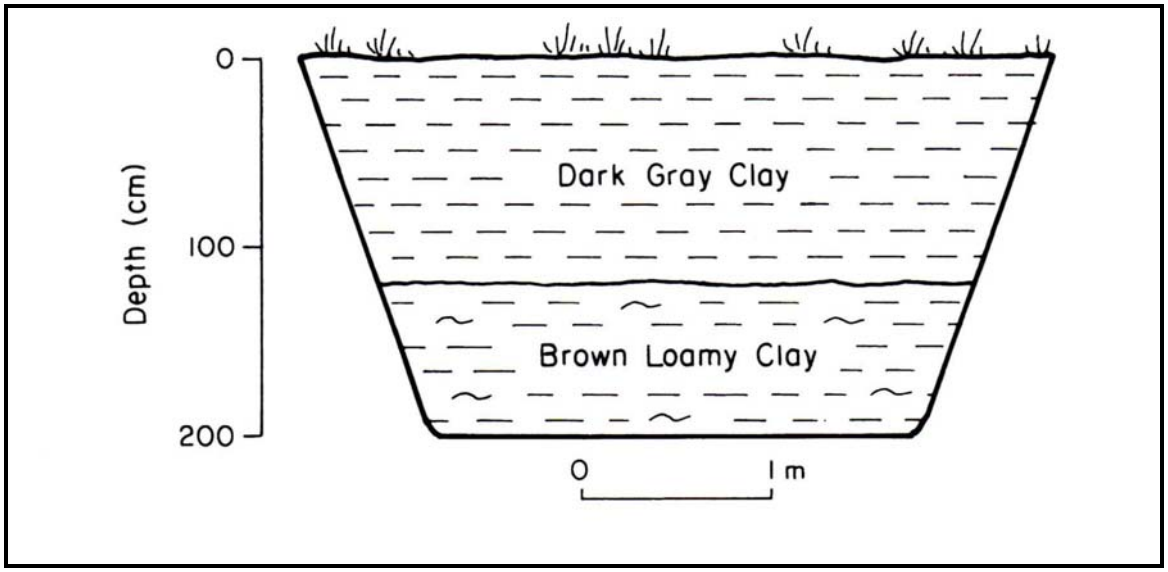
Backhoe Trench 1



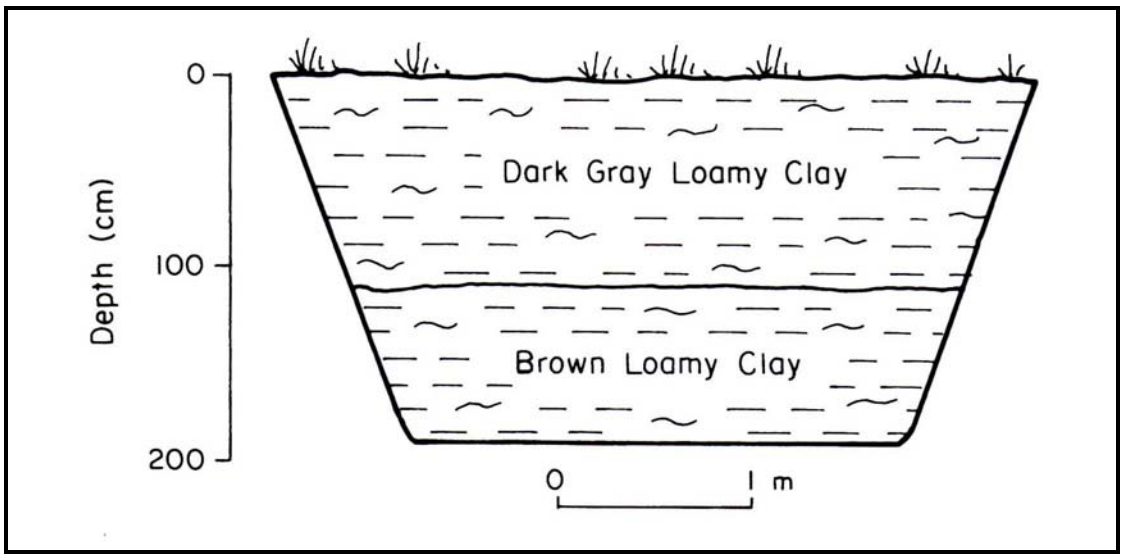
Backhoe Trench 2



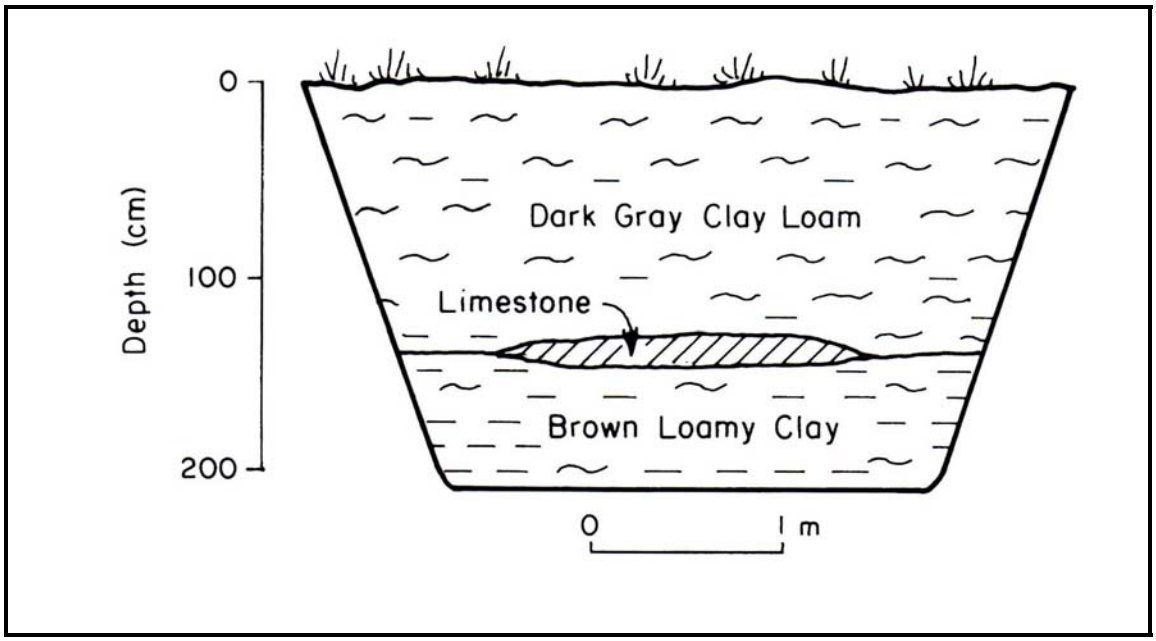
Backhoe Trench 3



Backhoe Trench 4



Backhoe Trench 5



Backhoe Trench 6