

ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS
AT SITE 41 BX 1,
NORTH OF OLMOS DAM, BEXAR COUNTY, TEXAS

Thomas C. Kelly and Jack D. Eaton

Center for Archaeological Research
The University of Texas at San Antonio
Archaeological Survey Report, No. 86

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ACKNOWLEDGMENTS

Many persons were involved in the preliminary assessment of the recently discovered portions of site 41 BX 1. Jack Ferguson brought the site to our attention and has since watched the situation with interest. Curtis Tunnell, State Archeologist, and Alton Briggs of the State Historical Commission, are thanked for their contributions to the project. Dorian French of the San Antonio River Authority provided research funding, a backhoe for site testing, protection for the site and various other assistance. Members of The University of Texas at San Antonio archaeological field course, under the direction of Dr. Thomas R. Hester, assisted in the investigations in Zone 2 of the site; a report will be issued on that work at a later date. Fred Valdez, Jr. prepared the test trench profiles in the field and supplied that information for this report.

INTRODUCTION

In June and July 1979, archaeological investigations were carried out at site 41 BX 1 under terms of a contract between the Center for Archaeological Research (CAR), The University of Texas at San Antonio (UTSA) and the San Antonio River Authority (SARA). A deeply buried portion of the site, including a series of prehistoric burials, was unexpectedly uncovered by recent soil borrowing activities in connection with the repair of Olmos Dam. This deeply buried portion of 41 BX 1 is located about 35 m north of the dam and to the northeast of the site area defined by Assad (1979) during earlier testing. Upon discovery of the burials, borrowing in the immediate area of the site was suspended.

Although spaced backhoe testing done by Assad (*ibid.*) in the borrow area did not reveal extensive site remains, the recently discovered deposits appear to be a small portion of what had once been a more extensive site left intact after original dam building activities in the 1920s. Possibly it was one of a series of discontinuous prehistoric occupations in the area. A third small area, possibly also one of a series of sites, was found farther to the north during current additional testing.

Responding to the notification of the burials, an inspection of the site was made by archaeologists from the Center for Archaeological Research in the company of Mr. Dorian French, Chief Engineer for SARA. As a result of the inspection, it was agreed that the actual extent of the site would have to be established and that the probable site limits should be marked off and protected until plans could be made for ultimate mitigation of the site.

As an emergency expediency, students from the UTSA Summer Field School, under the direction of Dr. Thomas R. Hester, excavated and documented the exposed burials. This was followed by a program of backhoe testing designed to define the extent of the site. A backhoe was provided by SARA, and the testing was carried out under the supervision of Thomas C. Kelly assisted by Fred Valdez, Jr., both of the CAR staff. All field work was done under the supervision of Thomas R. Hester, Center Director, and Jack D. Eaton, Associate Director.

This report will summarize the results of the backhoe testing and provide interpretations and recommendations.

PREVIOUS ARCHAEOLOGICAL WORK IN OLMOS BASIN

In a recent Center for Archaeological Research publication, Assad (1979) has summarized the work of Woolford (1935), Orchard and Campbell (1954, 1960), Fawcett (1972), Fox (1975), Brown (1977) and Assad (1978). These reports describe the area of Olmos Basin and the cultural materials recovered through private collecting and controlled surface surveys and excavations. The results of these studies indicate occupation of the Olmos Basin, particularly in the area of Olmos Dam, to span from Paleo-Indian to Historic times. Archaeological site 41 BX 1, the first Bexar County site formally recorded, was evidently a large site prior to its disturbance during construction of Olmos Dam in the early 1920s.

The most recent archaeological work carried out in Olmos Basin prior to the present study was that of Assad (1979) undertaken in early 1978. During that testing, 13 backhoe trenches designated T-1 through T-13 were placed in the borrow area north of the dam. The additional backhoe tests described in this report and supervised by Kelly are designated T-14 through T-23. The locations of these tests are shown in Fig. 1.

THE CURRENT INVESTIGATIONS

During summer 1979, three separate areas of prehistoric occupation north of Olmos Dam were identified. These will be referred to as distinct archaeological zones: Zone 1 is the area of 41 BX 1 defined by Assad (1979) and located adjacent to the dam; Zone 2 is the area of the burials and midden located just to the north which was uncovered during recent borrowing activities; and Zone 3 is the midden discovered farther to the north during the additional backhoe tests.

During recent testing, 10 backhoe test trenches (T-14 through T-23) were excavated for the purpose of determining the extent of the burials and midden (Zone 2) and to test for any other significant cultural remains in the borrow area. Trenches T-14, T-15, and T-19 through T-23 were excavated in the area of Zone 2 to delineate its extent. Trench T-16 was located more than 45 m to the west of Zone 2 to test a possible site (this test was negative), and trenches T-17 and T-18 were dug roughly 50 m to the north of Zone 2 where another occupation area (Zone 3) was discovered (Fig. 1).

The first five trenches were dug to more than 3 m in depth; however, the lower 1.5 m were consistently in sterile homogeneous light brown soil. Therefore, the remaining trenches were dug only to a depth of 1.5 m in order to save time and to enable the sampling of a broader area.

The walls of each backhoe trench were carefully examined for evidence of cultural resources. Where cultural materials were encountered in the profiles, a 2 m long section of the trench wall was cleaned with a hand trowel and the profile was recorded.

The map (Fig. 1) which resulted from UTSA field school investigations and the backhoe tests indicates the approximate locations of important cultural resources in the borrow area. It was drawn using an alidade and plane table that was set up at the primary station (100.00 m assumed).

DESCRIPTION OF THE TRENCHES

Trench T-14

This was the longest and deepest trench excavated. It was located at the northern side of Zone 2 and was dug to help define the north side of the zone as well as the depth of cultural deposit. The trench was approximately 30 m in length, with a mean depth of 3 m, and was oriented east-west. The eastern end of the trench was actually dug to about the creek level, a depth of around 4 m. A rock wall was encountered at the eastern end of the trench which appears to be a retaining

Figure 1. *Borrow Area North of Olmos Dam.* Shown are the locations of archaeological zones and test trenches.

This page has been redacted because it contains restricted information.

wall, probably put in place when the dam was constructed in the 1920s. No cultural material was observed until a point 8 m from the east end. Here a thin lens of darker soil indicated an old ground surface which contained scattered flint flakes, an occasional burned rock, and lots of snail shells (Fig. 2,a). This lens continues for 22 m to the west end of the trench and is interpreted as being near the outer edge of Zone 2.

As noted in the soil profile of T-14, recorded near the middle of the trench, there are about 23 cm of recent alluvial deposit of brown topsoil and 34 cm of yellow gravelly clay fill which overlay a cultural stratum in 30 cm of gray-brown soil. Below this was a sterile light brown soil to a depth of 3 m below the surface (4 m at the eastern end of the trench), which was the extent of the excavation.

Trench T-15

This trench was located 10 m north of T-14. No cultural strata could be distinguished. The only cultural material found along the entire length of the trench consisted of four chert flakes and a chert chunk. Except for a cultural level, the soil stratigraphy was the same as for T-14.

Trench T-16

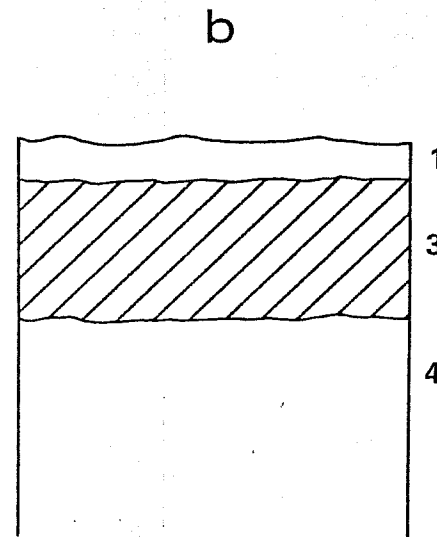
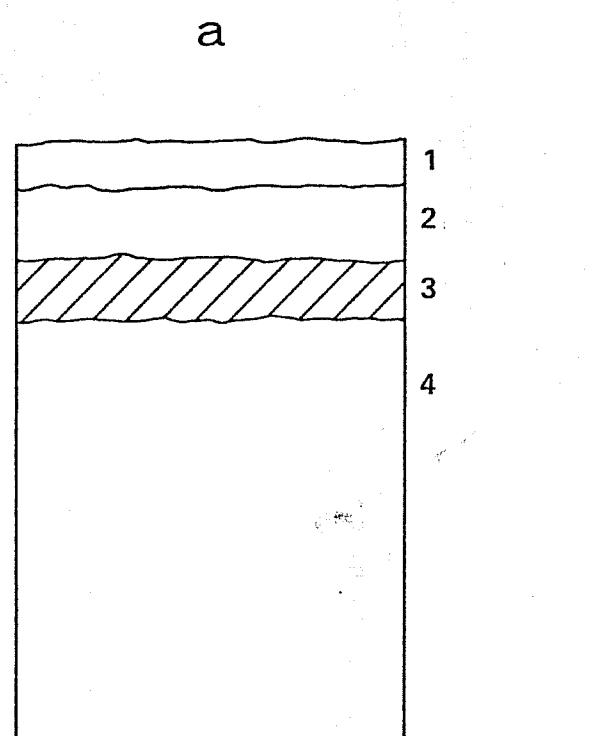
A few chert flakes were noted on the surface about 45 m west of Zone 2. Trench T-16 was dug to a depth of 3 m, but no more cultural material was found. Nearly all of the topsoil had been removed mechanically, and a yellow gravelly clay extended uniformly to the bottom of the excavation.

Trench T-17

In order to examine an area not previously tested for verification of the presence or absence of cultural materials, trench T-17 was located roughly 50 m north of Zone 2. The trench was oriented north-south about 6 m south of a dirt road (Fig. 1). Beginning 3 m from the south end of the trench, an ancient occupational stratum was encountered at a depth of 20 to 90 cm below the surface. This 70-cm deep stratum continued to the north end of the trench, a distance of about 10 m. Fig. 2,b is a section of the west wall profile which indicates brown alluvial topsoil to a depth of 20 cm. From 20 to 90 cm is a darker gray brown soil containing chert flakes, chert chunks, bifaces, burned rocks, animal bone and land snail shells. Below the cultural level was a homogeneous brown sterile clay which extended to the bottom of the trench, a depth of 2 m. This appears to be a separate area of site 41 BX 1 and has been designated Zone 3.

Trench T-18

This trench was situated about 6 m north of T-17, oriented east-west and located close to the dirt road (Fig. 1). The purpose of the trench was to further test the cultural deposit located there and to find the approximate width of the site.



- 1 BROWN ALLUVIAL TOPSOIL
- 2 YELLOW GRAVEL
- 3 BROWN-GREY SOIL, CULTURAL ZONE
- 4 LIGHT BROWN SOIL

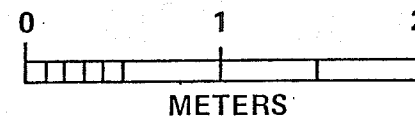


Figure 2. Test Trench Profiles. a, trench T-14, northeast profile; b, trench T-17, west profile.

The trench was dug to a depth of 2 m and uncovered a cultural stratum similar to that found in T-17. This cultural deposit was 6.5 m in width. Fig. 1 indicates the estimated area of the site located in Zone 3 on the south side of the construction road. The extent north of the road is unknown.

Fig. 3,a shows a section of the trench north wall profile. The topsoil is ca. 20 cm of brown alluvium which covers a cultural stratum of chert flakes, animal bone, burned rocks and land snail shells. Also recovered was a large bone awl fragment. Below the cultural zone is sterile brown soil. Cutting through the cultural strata on the west side of the profile is yellow gravelly clay fill which may indicate destruction of the western part of the site by the original dam construction.

Trench T-19

This 11-m long trench, dug to a depth of 3 m, was located northwest of Zone 2 to test for any cultural remains (Fig. 1). Nothing of significance was found, indicating that cultural deposits do not extend to that area.

Trench T-20

Starting from the western end of T-19, this trench extended southeast to a point where cultural materials were observed, thus roughly establishing a western boundary of archaeological Zone 2. The trench was 12 m long and dug to a depth of 3 m. Due to flooding from heavy rains, a soil profile was not made.

Trench T-21

This short trench within the cultural zone was widened to produce a 2 m square cut. Fig. 3,b is the profile of the northwest wall of the excavation. Brown alluvial topsoil was 20 cm in depth and lay over a 30 cm level of yellow gravelly clay. Below this was a cultural strata 95 cm in depth and consisting of gray brown soil with inclusions of chert flakes, chert bifaces, burned rock, charcoal and land snail shells. Below the cultural stratum were 25 cm of reddish burned soil containing burned rock and charcoal.

Trench T-22

This 10-m long trench was 3 m in depth and extended southeast to establish the southern boundary of Zone 2 (Fig. 1). About 3 m from the south end of the trench, borrowing activities had cut through and removed the cultural stratum. No profile was drawn for this trench because of flooding.

Trench T-23

This was an extension of testing on the south side of archaeological Zone 2. No remaining cultural materials were found.

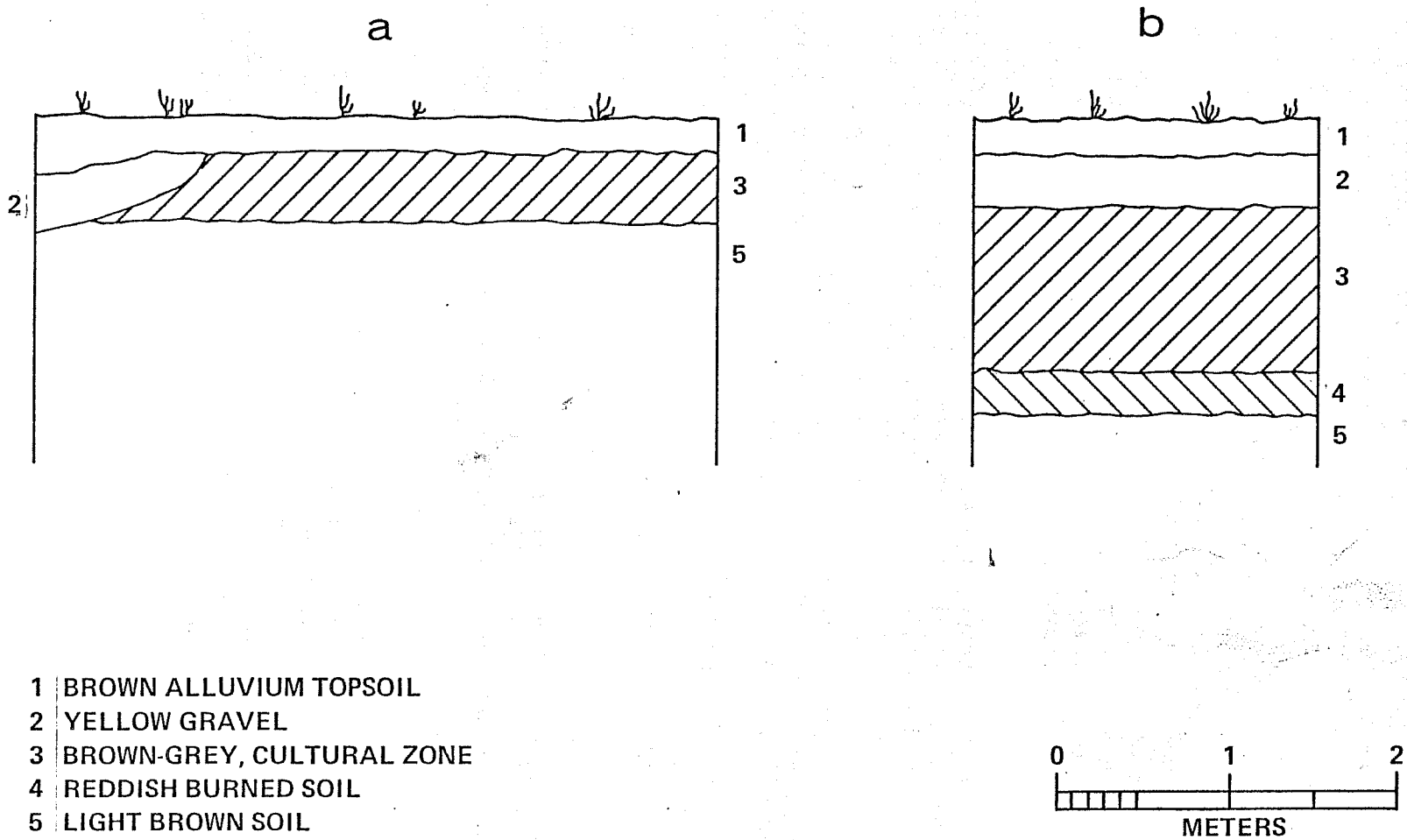


Figure 3. *Test Trench Profiles.* a, trench T-18, north profile; b, trench T-21, northwest profile.

SUMMARY AND RECOMMENDATIONS

The backhoe tests described in this report have roughly defined the limits of the two additional archaeological zones (Zones 2 and 3) at site 41 BX 1, which were discovered during recent soil borrowing activities by the San Antonio River Authority. These zones and the locations of the test trenches are shown in Fig. 1.

Zone 1 of 41 BX 1 is the approximate area of the archaeological site defined by Assad (1979) as a result of testing in the Olmos Dam-Devine Road borrow area during January and February 1978. This zone is located on the northern side of the dam and extends along the western portion from Highway 281 to near Olmos Creek. It will remain protected by SARA. Chronologically, site 41 BX 1 appears to date from the Early to Middle Archaic periods, and possibly to the earlier Paleo-Indian period. This estimate is based upon materials collected during the testing as well as on artifacts from private collections.

Zone 2, a relatively smaller archaeological zone considered part of 41 BX 1, is located roughly 28 m north of Zone 1. This zone was discovered during recent borrowing activities in the area and appears to be a multi-component, stratified site consisting of midden deposits, a burned rock accumulation and human burials. Based upon limited preliminary examination, it appears to have been occupied during the Archaic period. This zone is of particular importance because of the unique preservation of human burials with associated diagnostic features and artifacts which can provide an unparalleled study of the regional Archaic.

Zone 3 is a small midden of unidentified date situated about 45 m north of Zone 2. The presently known area of the cultural zone lies on the south side of a dirt access road extending along the west side of Olmos Creek. Testing was not done on the far side of the road.

The horizontally separate and distinct cultural zones of 41 BX 1 represent an important cultural resource. Site 41 BX 1 is a registered State Landmark protected under the Antiquities Code of Texas. Ideally, the archaeological site should be protected and preserved. However, because of its location--subject to disturbance by borrowing activities, to the expected resultant erosion which will be caused by pedestaling, as well as to probable exposure to vandals and collectors--we would recommend a project of mitigation. The recommended mitigation would consist of a well-designed project of intensive excavations at Zone 2 and additional testing as needed at Zone 3. Zone 1, next to the dam, could be left undisturbed and protected. The archaeological mitigation of the site would be carried out for the purpose of extracting as much information as possible from the cultural resources within the practical limits of time and funding. The ultimate disposition of site 41 BX 1 subsequent to the recommended mitigation would be decided through approved cultural resource management.

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