

**Archaeological Survey Associated
with the Proposed Stadium Field House and Bleachers at
The University of the Incarnate Word,
San Antonio, Bexar County, Texas**

by
Leonard Kemp

Prepared for:
McChesney Architects
315 9th Street, Suite 1
San Antonio, Texas 78215-1525



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Center for Archaeological Research
The University of Texas at San Antonio
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Abstract

On December 21, 2008, the Center for Archaeological Research at The University of Texas at San Antonio conducted an archaeological survey of less than 1.0 acres on the University of Incarnate Word (UIW) campus located in San Antonio, Bexar County, Texas. The archaeological work was completed for McChesney Architects, who planned the construction of a stadium field house and bleachers on the property. A significant portion of the UIW campus is located in the River Archaeological District, listed on the National Register of Historic Places. Multiple prehistoric and historic archaeological sites are located on the campus. Four of these sites are designated State Archaeological Landmarks and located within River Archaeological District. In addition, 41BX284, known as the “Old Mill site,” abuts the project area. Due to the likelihood that other prehistoric and/or historic sites may also be found in the vicinity, it was recommended that an archaeological survey be conducted prior to construction in accordance with the San Antonio Uniform Development Code. There are no federal or state permits, or funds associated with this project. The project occurs on private property, and therefore a Texas Antiquities Permit was not required.

CAR placed two shovel tests, one 50-by-50 test unit, and two backhoe trenches within the footprint of the proposed construction. All shovel tests, the test unit, and backhoe trenches were negative for cultural materials. No features were identified during the survey and no new sites were recorded. Therefore, since no intact cultural deposits available for research were located, no further archaeological work is recommended on this property. We recommend the proposed development proceed as planned.

No artifacts were recovered during this work. All project-associated documentation is curated at the Center for Archaeological Research according to Texas Historical Commission guidelines.

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CHAPTER 1: INTRODUCTION

On December 21, 2008, the Center for Archaeological Research (CAR) of the University of Texas at San Antonio (UTSA) conducted an archaeological survey of approximately 0.85 acres of land associated with the planned construction of a stadium field house and bleachers on the campus of the University of the Incarnate Word (UIW). The campus is located in the City of San Antonio, Bexar, County, Texas. The work was completed for McChesney Architects, who have designed and will oversee the construction of these facilities. This area can be seen on the San Antonio East 7.5 minute series USGS topographic quadrangle (Figure 1-1). A significant portion of the UIW campus is located in the River Archaeological District, listed on the National Register of Historic Places. Multiple prehistoric and historic archaeological sites are located on the UIW campus. According to the Texas Site Atlas, four of these sites are designated as State Archaeological Landmarks. 41BX284 (the Old Mill site) is adjacent to the proposed construction boundary. Because of the archaeological significance of this area, the San Antonio Historic Preservation Office (SAHPO) recommended an archaeological investigation prior to construction in accordance with the San Antonio Uniform Development Code. Therefore, McChesney Architects contracted with CAR to conduct an intensive pedestrian archaeological survey of the proposed footprint of the field house and stadium. The CAR performed the necessary tasks to meet the code requirements. The project does not require a Texas Antiquities Committee Permit because no federal or state owned land or funds will be used on the project, and no other state permits will be required to complete the planned development. CAR conducted fieldwork that included a pedestrian survey using shovel testing, backhoe trenching, and surface inspection. The level of effort meets the minimum standards set forth by the Texas Historical Commission for such undertakings.

Project Area Setting

The project area lies within the urban watershed of the Olmos Basin and the headwaters of the San Antonio River. Roughly fifty percent of the project area has been disturbed by previous construction. The disturbed area included an athletic track, green house, sidewalk, and previous trenching for field lighting (see Figure 1-2). However, a visual inspection of the project area suggested a contiguous section of approximately fifty percent had not been impacted by previous construction. This assumption was confirmed by the UIW Superintendent of Grounds, Bill Mulcahy. Our archaeological investigation focused on this undisturbed section (see Figure 1-3). The following section outlines the environment, the cultural history, and previous archaeological work associated with the project area.

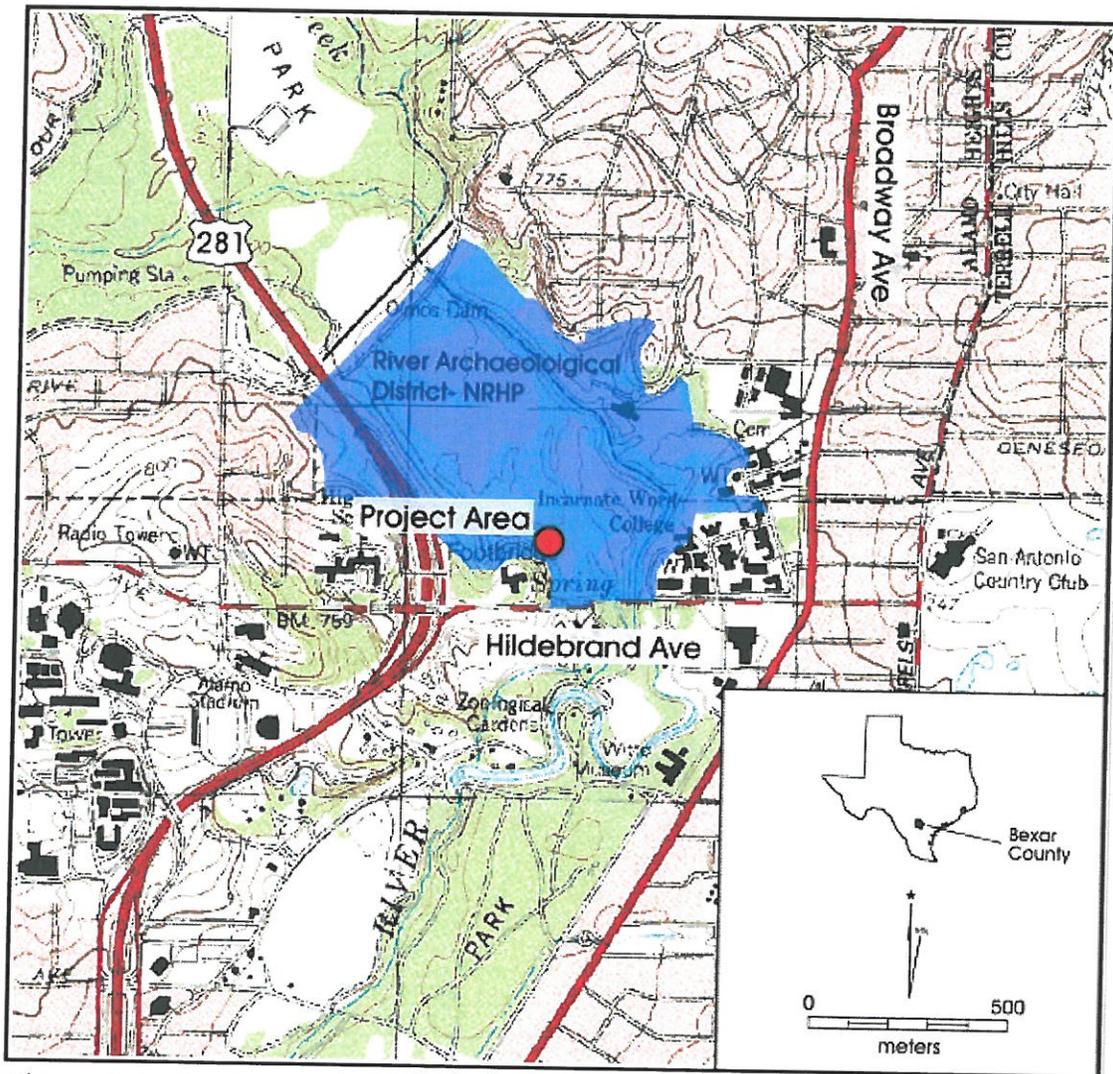


Figure 1-1. Project area on the San Antonio East, 7.5 Minute Series, USGS quadrangle map.



Figure 1-2. *Photograph showing the project area and extent of previous construction.*



Figure 1-3. *Photo showing area of archaeological investigation*

Environment

The project area sits within the southern end of the Olmos Basin, near the headwaters of the San Antonio River. Olmos Creek flows from northwest San Antonio approximately 15 miles southeast and flows into the San Antonio River on the campus near the San Antonio Spring, an area also known as the "Blue Hole." The creek is dammed midway through its course by the Olmos Dam. Presently the majority of this land is dedicated to urban use. Prior to historic and modern development, this section of the basin could be characterized as a riparian zone consisting of oak-juniper-hickory, and mesquite (Stoother 1989:5).

The soils within the project area are described in the USDA Soil Survey as the Trinity and Frio (Tf) series (Taylor et al. 1991). The Tf series is an alluvial clay loam to gravelly clay loam with moderate depth 3 to 5 feet (Taylor et al. 1991). These soils occur along minor streams and are subject to flooding with some deposition, scouring, and/or shifting (Taylor et al. 1991).

Average annual rainfall varies between 750 to 1,150 mm with the majority of the precipitation falling in spring and early fall (USDA 1981). Average annual temperature ranges between 17 to 21°C (USDA 1981). Climate in this general area is classified as humid subtropical with hot, humid summers and mild, dry winters (Taylor et al. 1991).

Culture History

Bexar County has a rich prehistoric and historic archaeological record that begins approximately 9000 B.C. Mr. C.D. Orchard, an avocational archaeologist, reported finding numerous prehistoric sites in the Olmos Basin in the 1920s and 1930s (Orchard and Campbell 1954). The area surrounding the Olmos dam has been "known to collectors in San Antonio as a good place for finding Indian artifacts" (Orchard and Campbell 1954:415). The project area is located within two archaeological chronologies used to describe the prehistoric context of the region, that of South and Central Texas (see Collins 1995; Hester 1995). Four commonly accepted periods describe technological and material culture changes in Bexar County. These periods are the Paleoindian (ca. 10,000 B.C. to 7000 B.C.), the Archaic (ca. 7000 B.C. to A.D. 800), and the Late Prehistoric (ca. A.D. 800 to A.D. 1700), and the Historic, which dates from the development of the missions through the early twentieth century.

Clovis and Folsom fluted projectile points, commonly thought to have been used to hunt megafauna such as mammoth and Bison, generally characterize material culture from the Paleoindian period. The construction of the Olmos Dam (1925-1927) revealed bone beds of

extinct fauna that included mastodon, horse, and bison, as well as deer. In addition, numerous hearths have been found as well as Paleoindian artifacts. Nearby, a significant Paleoindian site (41BX229) is located at St. Mary's Hall's School with projectile points that are distinctive of a later Paleoindian period and marks a transition artifact to the Archaic period (Stothert 1989).

The Archaic period is well represented by archaeological sites in Bexar County. This period is long, spanning from 6,000 BC to roughly AD 700. It is generally described as a period characterized by adaptations to changing environment, resource shifts, an increase in population density, and a broader array of material culture (Prewitt 1985 in Johnson and Goode 1994:36). Intensification of subsistence resources is a hallmark of this epoch and included features such as hearths, ovens, and burned rock middens (Collins 1995). It was not until 1979 that a small portion of the Olmos Dam site (41BX1) was formally excavated by archaeologists (Lukowski 1988; Stothert 1989). This investigation revealed Early, Middle and Late Archaic material culture. In addition, the burials of 13 individuals with assorted grave goods dating to the Late Archaic period were found during this investigation (Lukowski 1988).

The Late Prehistoric period (AD700 – AD1700) is subdivided into two periods, the Austin Phase that marks the transition from the Late Archaic period, and the Toyah horizon (Collins 1995). Prehistorically, the Late Prehistoric is distinguished by change in material culture, including the use of the bow and arrow and the adoption of ceramics (Collins 1995). Site 41BX291 is a multi component site located on the campus, which includes both Late Archaic as well as Late Prehistoric material (Stothert1989:26). It was formally investigated in the 1980's through a series of field schools initiated by Incarnate Word College (Stothert1989).

The Spanish are reported to have visited the San Antonio region in 1691 and 1709 (The Handbook of Texas Online 2008). The European expansion coincided with the southward migration of the Comanche and Apache, who displaced many of the area's indigenous groups (Campbell 1979; Newcomb1961). Some Native Americans moved to the protective environment of the various missions that were established in the area in the early eighteenth century. The move to the missions significantly impacted the hunter-gatherer way of life and the material culture (Campbell 1979; Newcomb 1961).

The City of San Antonio has its roots in the establishment of San Antonio de Bexar Presidio in 1718 and San Fernando de Bexar Church in 1731 (The Handbook of Texas Online 2008). Five missions would eventually be built between 1718 and 1738. By 1773, the population of Europeans, Mestizos and converted Native Americans was estimated at 2,060 (The Handbook of

Texas Online 2007). San Antonio, because of its political, economic, and logistical significance, was often the site of conflict. During the first half of the nineteenth century, these included conflicts involving Mexico and Spain, Mexico and Texans/ Tejanos, and between Mexico and the United States. Artifacts have been found in the vicinity of Olmos Dam that date to this early historic period. These include a metal projectile point and a gunflint (Stothert 1989:50).

Previous Surveys and Archaeological Sites

Formal archaeological investigations of the immediate area have been few and generally limited to cultural resource surveys. In 1975, the Center for Archaeological Research conducted archaeological surveys of the UIW campus owned by the Sisters of Charity of the Incarnate Word (Fox 1975:1). During that survey, thirteen sites were identified and recorded. Between 1976 and 1982, UIW initiated a program of summer field schools that resulted in the investigation of the following sites: 41BX284, 41BX291, 41BX509, 41BX510, 41BX24, and 41BX338 (Stothert 1989:26). In 1978, the Congregation of the Sisters of the Incarnate Word, and the then named Incarnate Word College, listed a large portion of the campus on the National Register of Historic Places (NRHP) as a district. Known as the "River Archaeological District," the goal was to preserve and foster research of known archaeological sites in the area (Stothert 1989:80-82). There are thirteen prehistoric and historic sites in this district, with four of these sites designated as State Archaeological Landmarks on the Texas Site Atlas (Table 1).

Site Number	Name or Type	Status
41BX24	prehistoric midden	SAL- unknown
41BX261	prehistoric site and 19th century refuse area	unknown
41BX282	San Antonio Spring ("The Blue Hole")	unknown
41BX283	Historic Quarry	unknown
41BX284	"Old Mill" site	within protected area
41BX285	historic foundations	presumed destroyed
41BX286	prehistoric quarry/ lithic workshop	unknown
41BX287	19th century refuse area	SAL- unknown
41BX288	prehistoric midden	SAL- unknown
41BX289	Brackenridge Villa	unknown
41BX290	prehistoric midden	SAL- unknown
41BX291	prehistoric site	unknown
41BX292	prehistoric site	unknown

In the intervening thirty years, the University of Incarnate Word has grown with the unfortunate result that the rationale for establishing the "River Archaeological District" has been somewhat neglected. Recently, however, UIW has initiated archaeological investigation to examine the impacts of construction occurring on campus. Kemp (2007) surveyed an area for the construction of two new buildings. He found no subsurface cultural materials in the area of the old St Joseph's Convent. During the course of this investigation, CAR archaeologists search for site 41BX285, consisting of foundations of limestone house(s). No evidence was found, and we presume that the site has been destroyed by earlier construction.

CHAPTER 2: ARCHAEOLOGICAL FIELD AND LABORATORY METHODS

Based on the area impacted by construction (equal or less than 2 acre), three shovel tests were required to fulfill the THC minimum survey standards. Two shovel tests, one 50-by-50 cm test unit, and two backhoe trenches were proposed across the footprint of construction. In addition, one hand dug test unit was excavated next to the maintenance facility to determine the depth of disturbance and intact soils. As discussed in Chapter 1, a visual inspection of the area suggested the majority of the project area has been impacted by previous construction. One area, approximately 120 m² in size, appeared to have little to no previous construction impacts. Our investigation focused on this section due to the likelihood that it offered relatively intact subsurface integrity (see Figure 1-3 and 3-1). In addition, site 41BX284 (the Old Mill site), was revisited to determine any potential construction impacts at this location.

Shovel tests measured 30 cm in diameter and were excavated to a depth of 60 cm below surface (cmbs) in 10-cm increments. All soil from each level was screened through ¼ inch hardware cloth. If artifacts were found, they were to be recorded with appropriate provenience for laboratory processing, analysis, and curation. A shovel test form was completed for every excavated shovel test. Data collected from each shovel test included the final excavation depth, a tally of all materials recovered from each 10-cm level, and a brief soil description (texture, consistence, color, inclusions). The location of every shovel test was recorded with Trimble GeoXT GPS units. Shovel test locations were also sketched onto aerial photographs as a backup to GPS provenience information.

A third test excavation measuring 50 cm by 50 cm wide and 1 m deep was performed to note the level of disturbance adjacent to the maintenance facility. In this area, the maximum depth of construction impact is estimated to be 3 feet (ca. 91cm). This test excavation was hand dug due to the possibility of subsurface water and power lines. Machine excavation was therefore not an option. The disturbed portion of the excavation was not screened. Only if intact soils were noted would sediments be screened and thoroughly documented.

Given the possibility of deeply buried cultural deposits, CAR placed two mechanically excavated trenches adjacent to the San Antonio River and within the undisturbed area. These trenches were 5 meters long and 1.5 meters deep. Both walls of each trench were scraped with shovel and trowel to determine if cultural materials were present, as well as to note any changes in sediments or the presence of buried soils. Photographs were taken of each wall of each trench and a 1 m profile section was drawn of Backhoe Trench 1. Soil samples were taken from each stratigraphic level for further analysis and description at the CAR laboratory. Both trench locations were

recorded with a GPS unit and drawn onto an aerial of the project area.

For the purposes of this survey, an archaeological site would contain a certain number of cultural materials or features that at least 50 years old within a given area. The definition of a site used for this project is as follows: (1) five or more surface artifacts within a 15-meter radius, (2) a single cultural features such as a hearth, observed on the surface or within a shovel test, (3) a positive shovel test containing at least three artifacts within a single 10-cm level, (4) a positive shovel test containing at least five total artifacts or (5) two positive shovel tests located within 30 meters of each other.

In the course of the investigation, site 41BX284 was found to be in the near vicinity of the project area. Based upon the demolition plan provided by McChesney Architects, the site lies within The Headwaters Sanctuary. This Headwaters Sanctuary is an urban nature trail created by the Sisters of the Incarnate Word and is dedicated to the preservation and restoration of fifty-three acres adjoining University property. 41BX284 should be buffered by this “no construction permitted area” and should suffer no impact from construction activities. The site was revisited to determine its location and the accuracy of this assumption.

No artifacts or new sites were recorded as a result of this work. All records generated during the project were prepared in accordance with federal regulation 36 CFR part 79 and THC requirements for State Held-in-Trust collections. Additionally, these materials were curated in accordance with current CAR guidelines. Digital photographs were printed on acid-free paper, labeled with archival appropriate materials, and placed in archival-quality sleeves. All field forms were completed with pencil. All records are housed at CAR.

CHAPTER 3: RESULTS

Two backhoe trenches and two shovel tests were excavated within the proposed area of construction and were excavated in the previously described undisturbed section. In addition one test pit was excavated immediately adjacent to the maintenance building to determine the depth of disturbance in this area of the project. Figure 3-1 and 3-2 show the location of the backhoe trenches, shovel test and test excavation.

The results of the shovel tests demonstrated that soil was relatively deep and had a similar composition. Both shovel tests contained modern (not collected) artifacts in the first level (0-10cmbs). Soils were a dark brown silty loam to a depth of approximately 40 to 50 cmbs. Below this depth, a light brown clayey sediment was present. No cultural materials were found in either shovel test, although snail fragments were noted in all levels.



Figure 3-1. Area where investigation occurred and the excavation of BHT 2.

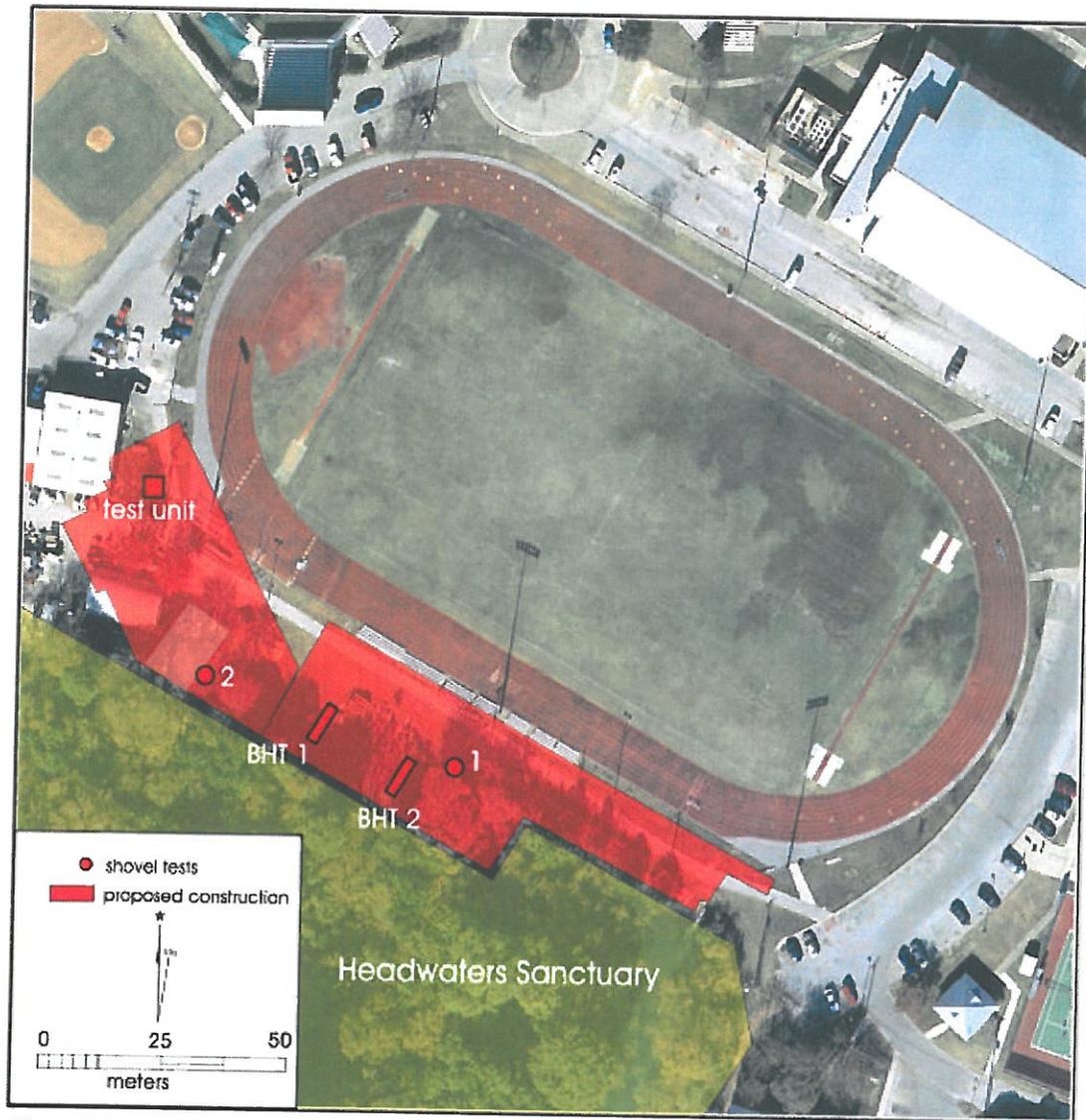


Figure 3-2. Project area depicting proposed construction, Headwaters Sanctuary, and archaeological excavations.

Two mechanically excavated backhoe trenches (BHT) were placed in the footprint of the construction zone and perpendicular to the San Antonio River (see Figure 3-2). No cultural artifacts or feature were found in either backhoe trench. Both backhoe trenches were similar in soil composition and stratigraphy. For purposes of discussion we will only discuss BHT 1 as representative of both excavations. BHT1 was excavated to a depth of 1.5 meters. Soils in the upper 10 cm were composed of organic materials and sediment that transitioned to a very dark grayish brown (10YR 3/2) silty loam between 10 cm down to 40 cmbs. Within this layer, modern artifacts were found to approximately 30 cmbs. The layer transitioned into a strong brown

(7.5YR 4/6) clay level and continued to the bottom of the trench. Snail and snail fragments were present in the three layers. Due to the high water table and location adjacent to the tributary, both trenches were inundated by water.

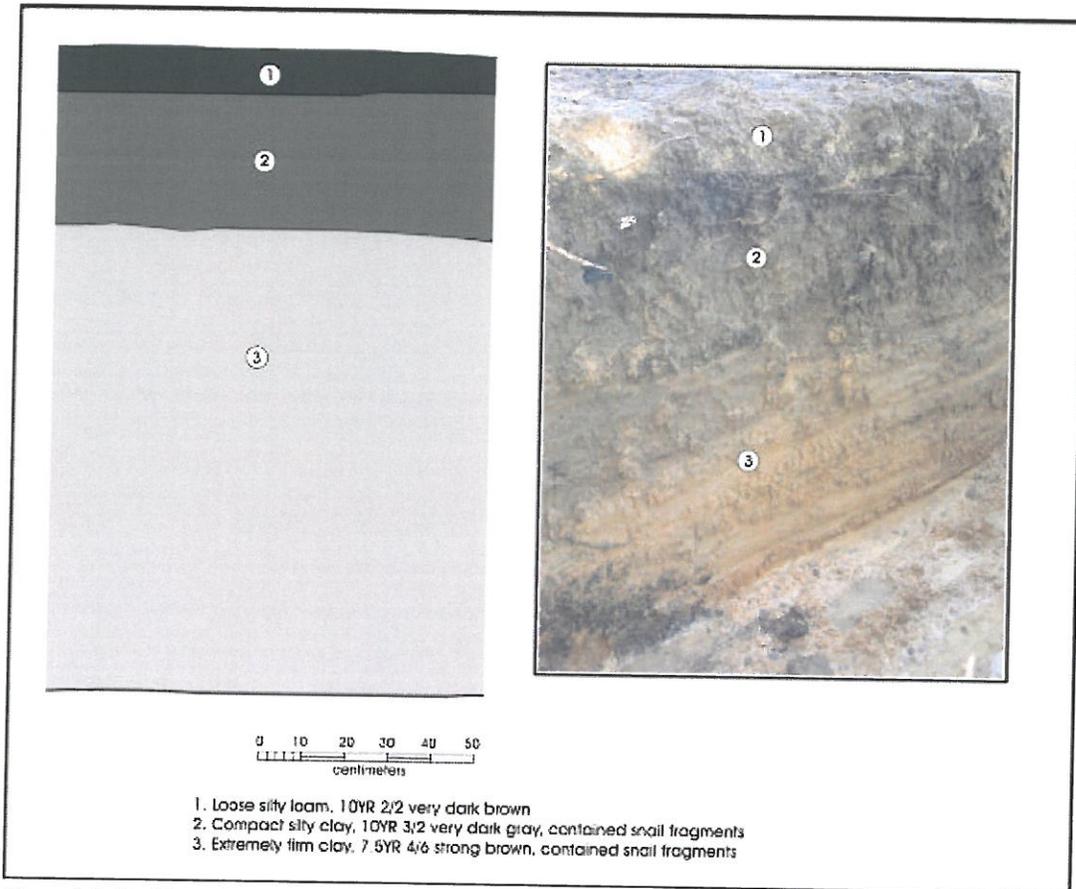


Figure 3-3. Profile and photograph of west wall 1m section of Backhoe Trench 1.

The Old Mill site (41BX284) is located outside the project area but within a short distance of the proposed construction. The site lies within a protected area known as the “Headwaters Sanctuary” and is buffered from construction. A revisit to the site shows it to be intact and not in danger by the proposed construction. The project archaeologist notes that no new research as to the purpose of the structure has been developed since excavation in 1978. The following summarizes our knowledge of the site. In the summer of 1978, 41BX284 was investigated by Susanna and Paul Katz of Incarnate Word College (Stothert1989:65-68). Excavation recovered historic items and revealed the foundation of a limestone structure situated across a minor tributary of the San Antonio River. Conflicting interpretation of this structure suggests that it may have been a mill, a component of the irrigation system, or waterworks (Stothert 1989:64). Based upon historical research, the structure may have existed prior to 1886 and was tentatively

dated to the 1860s (Stothert 1989:64). No conclusive evidence has been found to determine its function since this initial work.



Figure 3-4. *Photograph of site 41BX284.*

CHAPTER 4: SUMMARY AND RECOMMENDATIONS

The Center for Archaeological Research at The University of Texas at San Antonio conducted an archaeological survey of less than one acre on the campus of the University of the Incarnate Word located in San Antonio, Bexar County, Texas, on December 21, 2007. The archaeological work was completed for McChesney Architects, who designed and will oversee the construction of a field house, and bleachers on the property. The SAHPD, in accordance with the City's Uniform Development Code, recommended archaeological investigations prior to construction because the proposed construction partially lies within a National Register of Historic Places archaeological district. There are no federal or state permits, properties, or funds associated with this project. Therefore, a Texas Antiquities Permit was not required.

CAR excavated two shovel tests, one 50-by-50 cm test unit, and two backhoe trenches within the project area and visually inspected the surface of the project area. The shovel tests, test unit, and backhoe trenches were negative for cultural materials. No features were identified during the survey and no new sites were recorded. In the course of the investigation, CAR archaeologists revisited site 41BX284. The site is located just outside of the project area in a protected nature sanctuary. Based upon the demolition plan provided by the client, and given the location of 41BX284, we suggest that the proposed construction will have no effect on the site. As no cultural deposits were identified within the project area, CAR recommends that the proposed development project be allowed to proceed as planned. Finally, note that all project-associated documentation is curated at the Center for Archaeological Research according to Texas Historical Commission guidelines.

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