Volume 2015 Article 106

2015

Annual Report to Texas State University, San Marcos, Hays County, Texas, for Texas Antiquities Permit No. 6775

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Technical Report No. 60

CENTER FOR ARCHAEOLOGICAL STUDIES
Texas State University

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The following information is provided in accordance with the General Rules of Practice and Procedures, Title 13, Chapter 26, Texas Administrative Code:

1. Type of investigation: Archaeological monitoring

2. Project name: Annual Report to Texas State University, San Marcos, Hays County, Texas, forTexas Antiquities Permit No. 6775

3. County: Hays

4. Principal Investigator: Amy E. Reid

5. Name and location of sponsoring agency: Texas State University

6. Texas Antiquities Permit No. 6775

7. Published by the Center for Archaeological Studies, Texas State University, 601 University Drive, San Marcos, Texas, 78666-4616 (2015)

Texas State University is a member of the Texas State University System

For further information on this and other publications by
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CENTER FOR ARCHAEOLOGICAL STUDIES
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San Marcos, TX 78666-4616
www.txstate.edu/anthropology/cas/

Technical Editor: Pamela Cobb

Cover Photograph: Historic bottles recovered from the Moore Street Housing Project

Printed in the United States of America
by
Ginny's Printing Inc., Austin

MANAGEMENT SUMMARY

Project Title: Annual Report to Texas State University, San Marcos, Hays County, Texas, for Texas Antiquities Permit No. 6775

Project Description: Archival Research, Archaeological survey and monitoring.

Local Sponsor: Texas State University

Institution: Center for Archaeological Studies, Texas State University

Principal Investigator: Amy E. Reid

Project Archaeologist: Jacob Hooge

Crew Members: Patricia Christmas

Texas Antiquities Permit: 6775

Dates of Work: Archaeological investigations associated with 8 University-sponsored undertakings on property owned by the University under Texas Antiquities Permit No. 6775 during the year 2014.

Number of Sites: 5 – State Antiquities Landmark (SAL) 41HY160, SAL 41HY161, 41HY37, 41HY447 and site 41HY518

Curation: All artifacts collected were processed and curated at CAS.

Comments: Archaeological survey, monitoring, and archival research effectively assessed the locations subject to construction activities on Texas State University property in 2014. No further work is recommended for any of the University construction projects.

ABSTRACT

The Center for Archaeological Studies (CAS) at Texas State University (University) conducted archaeological investigations for eight proposed undertakings on property owned by the University under Texas Antiquities Permit No. 6775 during the year 2014. Investigations were conducted to determine if intact cultural resources were present within the project areas and if they would be adversely affected by construction and development. Under a Memorandum of Agreement (MOA) between the Texas Historical Commission (THC) and the University, CAS is authorized to determine whether proposed undertakings have the potential to negatively impact cultural resources, and if so, to recommend to the University courses of future action that may avoid or offset that impact.

As a result of archaeological monitoring, one previously unrecorded archaeological site, 41HY518, was documented. The boundaries of sites 41HY447 and 41HY37 have been revised to include associated deposits identified during archaeological investigations. No intact, significant cultural deposits were encountered or impacted during the University undertakings of 2014. Accordingly, CAS recommends that no additional investigations are warranted. CAS continues to recommend that the University avoid adversely impacting SALs 41HY160 and 41HY161, as well as sites 41HY37 and 41HY447. If avoidance of intact features and deposits of these sites is not possible, then additional work is recommended to offset the potential loss of information.

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AKNOWLEDGEMENTS

The Center for Archaeological Studies at Texas State University would like to acknowledge the assistance and support of Nancy K. Nusbaum, Associate VP, Planning, Finance and Support Services; and Juan Guerra, Associate VP, Facilities. Their commitment to protecting and preserving the cultural resources of Texas State University-San Marcos is greatly appreciated! The authors would also like to thank the staff at Facilities for their assistance on many occasions. Pamela Cobb was very helpful with editing, formatting and designing this report. Thanks also go to the Habitat Conservation Plan staff for their support and to CAS staff archaeologists Caitlin Gulihur for her hard work and help in the lab.

INTRODUCTION

The following report describes cultural resource management projects conducted during 2014 by the Center for Archaeological Studies (CAS) at Texas State University (University), in San Marcos, TX. As an institution of higher education receiving funds from the State of Texas, the University is obligated under the Texas Antiquities Code to consider the impact of its development activities on potentially important cultural (historic and prehistoric) resources that may be present in those project areas. Under a Memorandum of Agreement (MOA) between the Texas Historical Commission (THC) and the University, CAS is authorized to assist in determining whether proposed University undertakings have the potential to negatively impact cultural resources, and if so, to recommend to the University courses of future action that may avoid or offset that impact; these Investigations were conducted under Texas Antiquities Annual Permit No. 6775, issued by the THC to CAS for 2014.

CAS conducted eight cultural resource investigations on behalf of the University during 2014 (Figures 1 and 2). Projects included: an archaeological survey in advance of a new fence at Freeman Ranch for the Forensic Anthropology Research Facility, archaeological investigations and monitoring for the Moore Street Housing construction project, monitoring for ADA upgrades to the ticket kiosk building at Spring Lake, monitoring excavations associated with a new fence installation for a divers yard at Spring Lake, monitoring the demolition of the Clear Springs Apartments, archival research and monitoring for the demolition of the Long and Holland houses, monitoring a Habitat Conservation Plan bank stabilization project, and site form updates and archival research investigations in advance of possible stabilization plans for the Spring Lake Dam. All archaeological investigations were conducted on either the

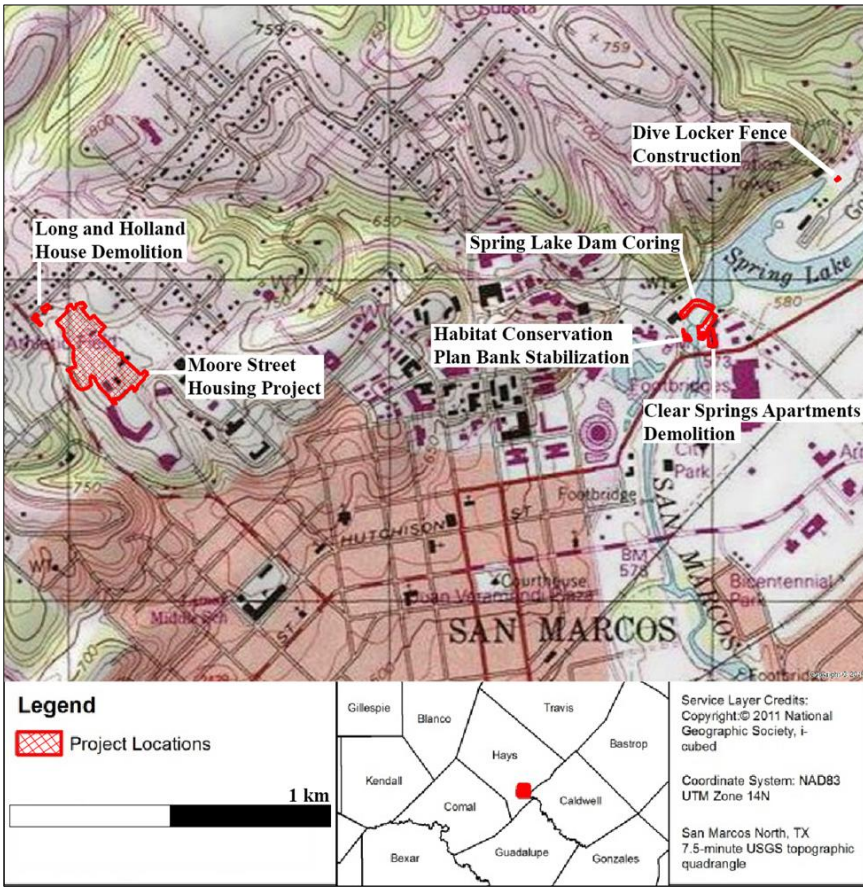

Figure 1. Project locations

central campus of Texas State University-San Marcos or on properties owned by the University.

The purpose of the above-listed archaeological investigations were: first, to identify cultural resources that could potentially be impacted by the proposed construction/development projects; and, second, to make recommendations on identified cultural resources in regards to eligibility for designation as a State Archeological Landmark (SAL).

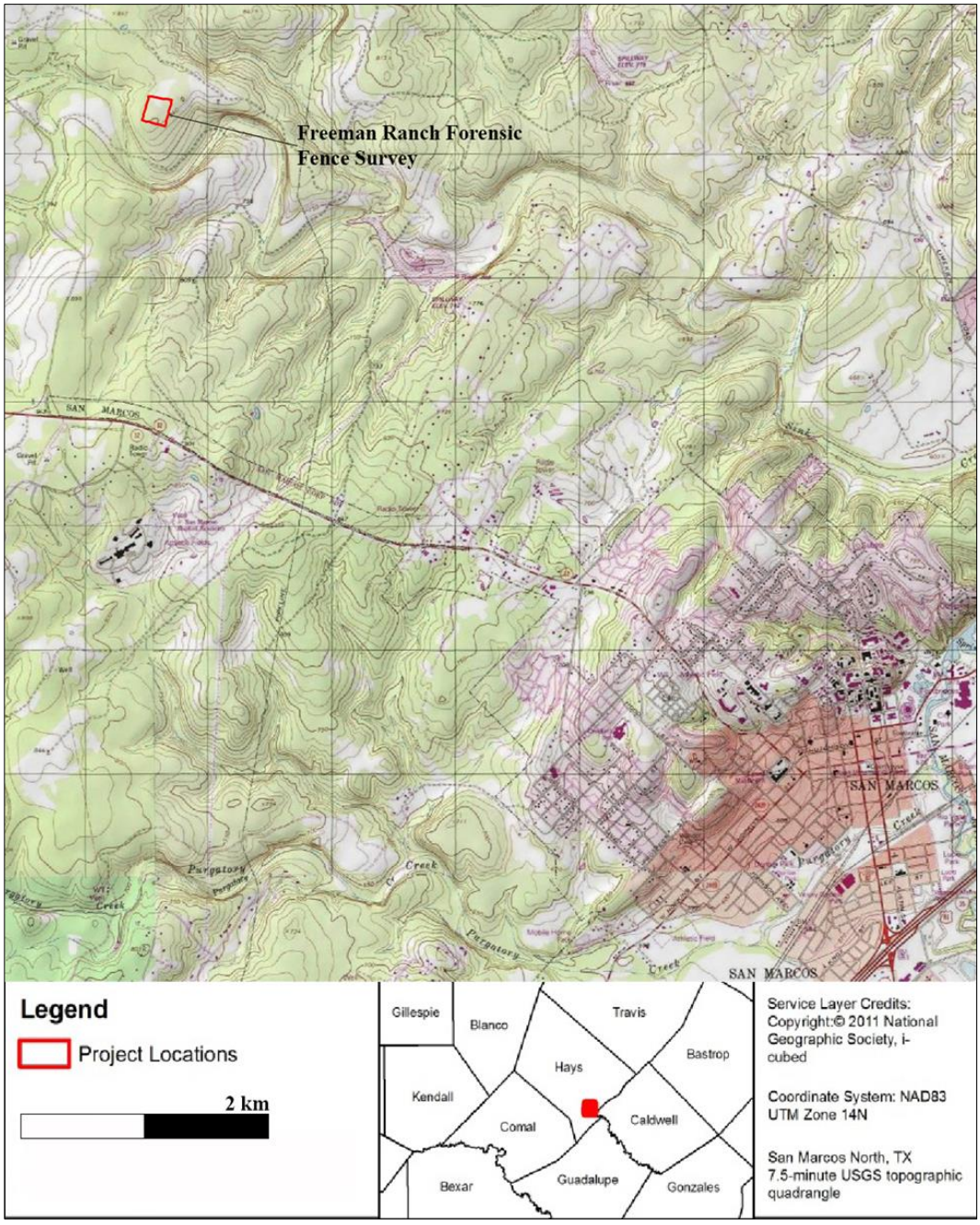

Figure 2. Freeman Ranch survey location.

EVALUATION CRITERIA

There are two main cultural properties categories (historic structures and archaeological sites) that are utilized in the evaluation of sites for SAL designations. The evaluation criteria are found in Chapter 26 Rules and Procedures for administering the Antiquities Code of Texas.

Historic structures may be recommended for designation as SALs following the criteria in Section 26.7, Criteria for Evaluating Historic Structures, provided that the following conditions are met:

1) the structure, or building is listed in the National Register of Historic Places; and

2) the structure, or building fits within at least one of the following criteria:

    a) is associated with events that have made a significant contribution to the broad patterns of our history;

    b) is associated with the lives of persons significant in our past;

    c) is important to a particular cultural or ethnic group;

    d) is the work of a significant architect, master builder, or craftsman;

    e) embodies the distinctive characteristics of a type, period, or method of construction, possesses high aesthetic value, or represents a significant and distinguishable entity whose components may lack individual distinctions;

    f) has yielded or may be likely to yield information important to the understanding of Texas culture or history.

In Section 26.8, Criteria for Evaluating Archeological Sites, THC uses the following criteria when assessing the appropriateness of official landmark designation, and/or the need for further investigations under the permit process:

1) the site has the potential to contribute to a better understanding of the prehistory and/or history of Texas by the addition of new and important information;

3) the site's archaeological deposits and the artifacts within the site are preserved and intact, thereby supporting the research potential or preservation interests of the site;

4) the site possesses unique or rare attributes concerning Texas prehistory and/or history;

5) the study of the site offers the opportunity to test theories and methods of preservation, thereby contributing to new scientific knowledge;

6) the high likelihood that vandalism and relic collecting has occurred or could occur, and official landmark designation is needed to insure maximum legal protection, or alternatively further investigations are needed to mitigate the effects of vandalism and relic collecting when the site cannot be protected.

ENVIRONMENTAL SETTING

The main campus of Texas State University-San Marcos and the location of the cultural resources investigations conducted under Texas Antiquities Permit No. 6775 are located within the City of San Marcos. San Marcos is located in Hays County, in southeastern Central Texas. The area is characterized as an ecotonal zone (a transition area between two adjoining large-scale environmental provinces) capable of supporting a tremendous diversity of fauna and flora (Crumley 1994). The city lies on the boundary between the Edwards Plateau (Hill Country) and the Blackland Prairie (Figure 3). The San Marcos River and the San Marcos Springs (dammed in 1849 to form Spring Lake), located at the base of the Balcones Escarpment, mark the boundary between these areas. The San Marcos Springs have attracted human populations for over 11,500 years. They were known to the Tonkawa Indians as Canocanayesatetlo, to early European settlers as St. Mark's, and are today called Aquarena Springs (Brune 2005). They are the second largest springs in Texas, support a tremendous amount of wildlife, and served as an important stop on the El Camino Real and the Chisholm cattle trail. The springs serve as the headwaters of the San Marcos River, which has provided power to gin, corn, saw, and grist mills, and an ice factory in recent history (Brune 2005).

The Edwards Plateau was formed 10–20 million years ago during the Miocene period, during which tremendous tectonic activity uplifted regions north and west of the Balcones fault to 2,000 feet in elevation (Spearing 1991:113). Numerous natural springs arose in areas where the Balcones Escarpment had perforated underground aquifers. Since the Late Pleistocene, erosion off of the Edwards Plateau stripped sediments and deposited them below the Balcones Escarpment to form deep Late Pleistocene fills that are both dark and rich in nutrient content. Areas in which dark deposits accumulated below the Edwards Plateau are geographically known as the Blackland Prairie physiographic province (Black 1989). Since the Balcones Escarpment runs through the northern portion of San Marcos, northern San Marcos falls within the elevated Edwards Plateau, while the central and southern

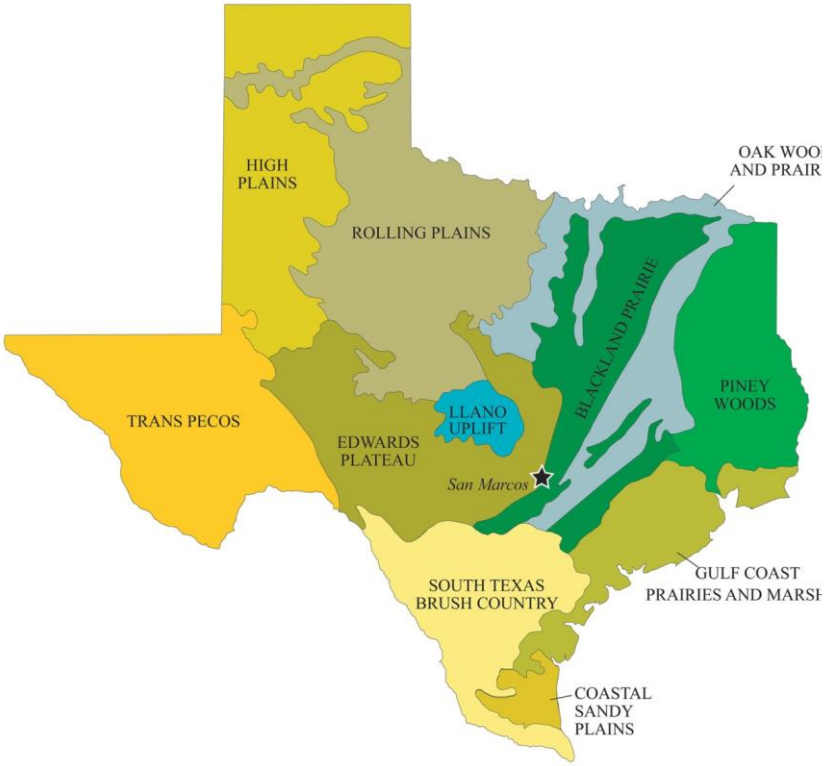

Figure 3. Physiographic map of Texas.

portion of San Marcos falls within the Blackland Prairie physiographic province.

The Edwards Plateau is characterized by hot summers and fairly warm winters. The average winter temperature is 52°F, and the average temperature in the summer is 84°F. The total annual precipitation for this area is 33 inches, with 57 percent occurring between the months of April and September (Batte 1984:3). The Edwards Plateau falls under the Juniper-Oak-Mesquite Savanna vegetative region (Black 1989) and the Edwards Plateau vegetative region as defined by Gould (1962). Typical flora that characterize this upland setting include: Texas oak (*Quercus buckleyi*), cedar elm (*Ulmus crassifolia*), mesquite (*Prosopis juliflora*), ash juniper (*Juniperus ashei*), buffalo grass (*Buchloe dactyloides*), grammas (*Bouteloua* spp.), prickly pear (*Opuntia lindheimeri*), various mosses, and greenbriar (*Smilax bona-nox*).

Early pioneering settlers to the Edwards Plateau described the area as being vast grasslands in which numerous large cedars (a.k.a., ash juniper) grew on hill and mountain peaks (Tomka and Leffler 1998:32–33). After the colonization of the Edwards Plateau, cedars that were originally confined to hilltops (where they were not destroyed by natural fires) began to migrate down into the valleys. Cedar is now commonly seen in all areas of the Edwards Plateau region. Overgrazing by cattle resulted in an increase in invader species (e.g., mesquite and buffalo grass) that rapidly displaced indigenous flora species (Ellis et al. 1995) following the settlement and development of ranching on the Edwards Plateau during the mid-nineteenth century. Overgrazing by cattle is the main reason behind the drastic reduction of indigenous flora on the Edwards Plateau.

Fauna noted within the Edwards Plateau region fall within the Balconian Biotic Province as described by Blair (1950; Figure 4). The Balconian Biotic Province corresponds with the Edwards Plateau physiographic region. Typical fauna observed in this province include: raccoon, nine-banded armadillo, opossum, fox, squirrel, skunk, and white-tailed deer.

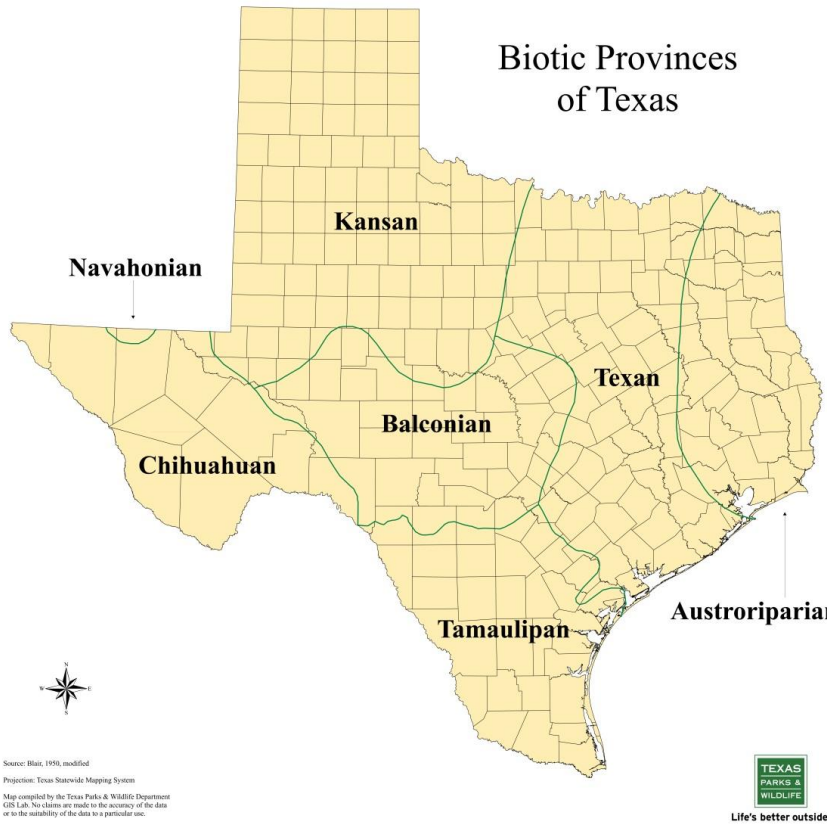

Figure 4. Biotic provinces of Texas (http://www.tpwd.state.tx.us/landwater/land/maps/gis/map_downloads/map_gallery/bio/).

The Blackland Prairie vegetative region is characterized by deep, dark, clay soils that have been accumulating since the end of the Miocene (Black 1989). The deep soil deposits of the Blackland Prairie support numerous tall–mid grasses such as grammas (*Bouteloua spp.*), and bluestem (*Schizachyrium scoparium* var. *frequens*), which are the natural vegetative species for this environment (Ellis et al. 1995). In addition, mesquite (*Prosopis glandulosa*), pecan (*Carya illinoinensis*), hackberry (*Celtis laevigata*), junipers (*Juniperus ashei*), and live oak (*Quercus virginiana*) are often observed within the low flat woodlands along streams located within the Blackland Prairie. Since the mid-nineteenth century, human land modifications along with ranching/grazing activities have resulted in a dramatic increase in invader flora species (e.g., mesquite, blackjack oak, buffalo grass, and post oak) (Ellis et al. 1995). Today, only isolated patches of intact Blackland Prairies, unaffected by human activities, survive in the Oak Woods and Prairies region to the east. This portion of the Blackland Prairie is located in the transitional zone between the Balconian and Tamaulipan biotic provinces (Blair 1950). Therefore, the area is likely to have species from both of these provinces utilizing the natural resources.

Typical fauna associated with this region include: white-tailed deer (*Odocoileus virginianus*), badger (*Taxidea taxus*), eastern cottontail (*Sylvilagus floridanus*), raccoon (*Procyon lotor*), and opossum (*Didelphus virginiana*). In prehistoric times, large numbers of bison (*Bison bison*) were commonly observed in the Blackland Prairie environment.

CENTRAL TEXAS CULTURAL CHRONOLOGY

Human presence within the region is divided into three periods: Prehistoric (including Paleoindian, Archaic, and Late Prehistoric), Protohistoric and Historic. Evidence for prehistoric occupation in and around the San Marcos area extends from the Clovis period, approximately 11,500 radiocarbon years ago up until the arrival of Spanish explorers almost 400 years ago. Historic documents record the use of the San Marcos springs by Spanish and Native American groups in the seventeenth, eighteenth, and nineteenth centuries, and as early as the mid-nineteenth century by Anglo settlers such as General Edward Burleson.

Prehistoric

The Prehistoric period is divided into three major temporal stages, the Paleoindian, Archaic, and Late Prehistoric. The Paleoindian stage begins with the earliest known human occupation of North America and extends to approximately 8800 BP. The Archaic stage follows, extending from ca. 8800 to 1250 BP, and is generally seen as a time during which humans made successful adaptations to changing environmental conditions. The Late Prehistoric stage begins ca. 1250 BP and is characterized by a resurgence of grassland habitats and the development of bow and arrow and ceramic technologies.

Paleoindian

Collins (1995:381–385, 2004) dated the Paleoindian period in Central Texas to 11,500–8800 BP. The Paleoindian period is further divided into Early (ca. 11,500–10,200 BP) and Late (ca. 10,200–8800 BP) phases. Diagnostic Early Paleoindian point types include Clovis, Folsom and Midland. The Clovis culture is also characterized by well-made prismatic blades (Collins 1995; Green 1964). The Early Paleoindian stage is generally characterized by nomadic cultures that relied heavily on hunting large game animals (Black 1989). However, recent research has suggested that early Paleoindian subsistence patterns were considerably more diverse than previously thought and included reliance on local fauna, including turtles (Black 1989; Bousman et al. 2004; Collins and Brown 2000; Hester 1983; Lemke and Timperley 2008). Folsom cultures are considered to be specialized bison hunters, as inferred from the geographic location and artifactual composition of sites (Collins 1995).

The Late Paleoindian substage occurred from ca. 10,200 to 8800 BP. Reliable evidence for these dates was recovered from the Wilson-Leonard site north of Austin (Bousman et al. 2004; Collins 1998). At Wilson-Leonard, archaeologists excavated an occupation known as Wilson, named for the unique corner-notched projectile point. The dense occupation also included a human burial (Bousman et al. 2004; Collins 1998). In addition to the Wilson occupation, Golondrina-Barber and St. Mary's Hall components, dating between 9500 and 8800 BP, were excavated. Collins (1995) suggested the Wilson, Golondrina-Barber, and St. Mary's Hall components represent a transitional period between the Paleoindian and Archaic Periods due to the subtle presence of notched projectile points and burned rock cooking features.

Archaic

According to Collins (1995, 2004), the Archaic stage in Central Texas lasted approximately 7500 years, from 8800 to 1200/1300 BP. He has divided the stage into Early, Middle, and Late Archaic based on Weir's (1976) chronology. The Archaic stage is

characterized by several transitions including a shift in hunting focus from Pleistocene megafauna to smaller animals, the increased use of plant food resources and use of ground stones in food processing, increased implementation of stone cooking technology, increased use of organic materials for tool manufacturing and an increase in the number and variety of lithic tools for woodworking, the predominance of corner- and side-notched projectile points, greater population stability and less residential mobility, and systematic burial of the dead. The markedly increased emphasis on organic materials in tool technologies and diet is likely a reflection of preservation bias. Traditionally, scholars define the end of the Archaic period by the appearance of bow and arrow technology around 1200 BP. However, Lohse and Cholak (2013) argue that this shift, while important, was relatively insignificant in comparison with other evidence for strong cultural continuity until approximately 650 years ago (Figure 5). Accordingly, the current project considers the Archaic period as the 5,000 years encompassing the end of the Early Archaic to the beginning of the Late Prehistoric Toyah interval (Table 1). This range is based on the timing of projectile point styles, sporadic periods of bison hunting, and, to a lesser degree, some environmental conditions in the region. The Archaic starts with the Calf Creek horizon (including Bell and Andice types), representing the terminal Early Archaic, and ends with Scallorn.

Early Archaic

The Holocene marked a significant climate change associated with the extinction of

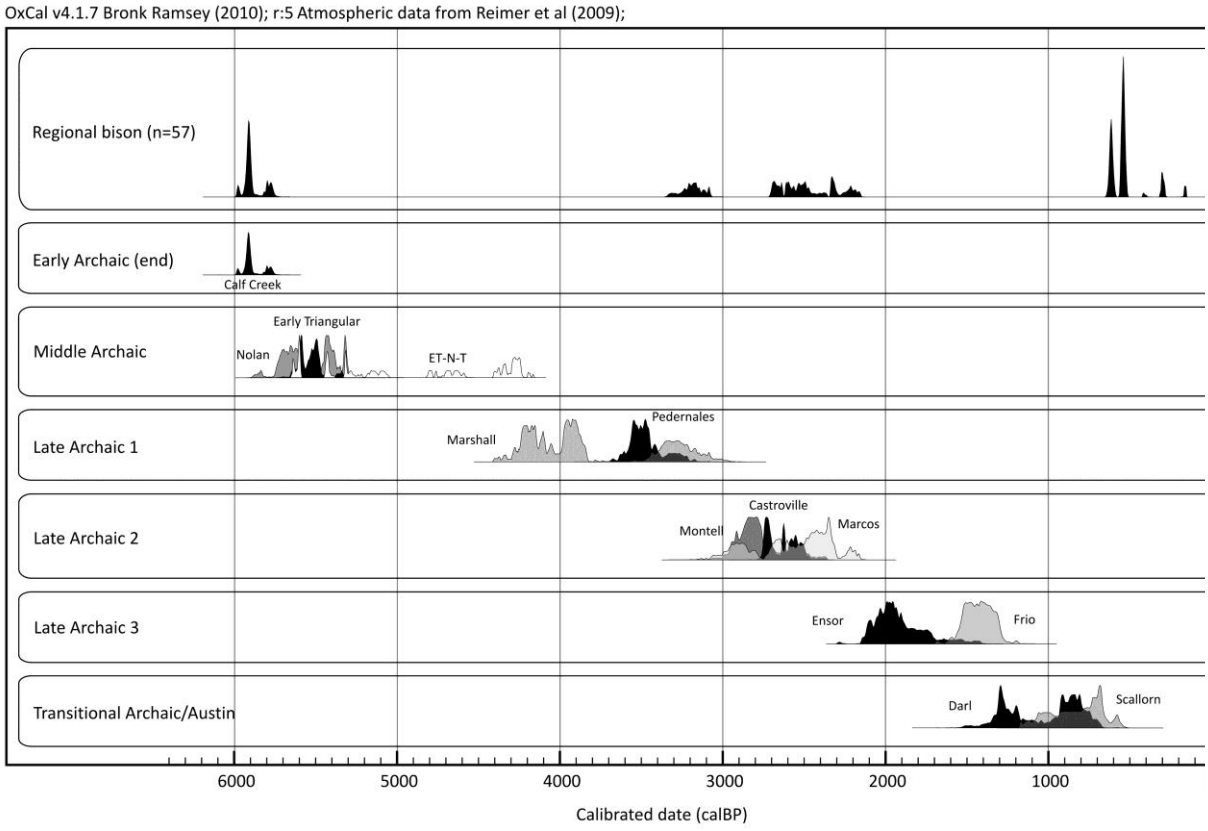

Figure 5. Cultural chronology, shown as published radiocarbon probability distributions for some key point types, for Central Texas for the period from the end of the Early Archaic (Calf Creek horizon) to the end of the Archaic, called the Transitional Archaic/Austin period.

Table 1. Cultural chronology for Central Texas (from Lohse et al. 2013).

Epoch	Period	Certain Diagnostic Types	Age (years Before Present)
Holocene	Historic		~AD 1550
	Late Prehistoric/Toyah	Perdiz	650- ≤300
	Transitional Archaic/Austin	Darl, Scallorn, Edwards	1270-650
	Late Archaic III	Ensor, Fairland, Frio, Ellis	2150-1270
	Late Archaic II	Montell, Castroville, Marcos	3100-2150
	Late Archaic I	Bulverde, Pedernales, Marshall, Lange, Williams	4200/4100-3100
	Middle Archaic	Early Triangular (Baird, Taylor), Nolan, Travis	5750-4200/4100
	Early Archaic III	Calf Creek (Bell, Andice), Martindale, Bandy	6000(?)-5750
	Early Archaic II	Uvalde, Gower, Hoxie, Jetta	8000-6300 (?)
	Early Archaic I	Angostura	8800-8000
Pleistocene	Late Paleoindian	Golondrina, St. Mary's Hall	10,200-8800
	Early Paleoindian	Clovis, Folsom	13,500-10,200

megafauna, which stimulated a behavioral change in land use. Early Archaic groups focused more intensively on the exploitation of local resources such as deer, fish, and plant bulbs. This dietary adjustment is evidenced by the increased number of ground stone artifacts, burned-rock middens, and wood-working tools such as Clear Fork gouges and Guadalupe bifaces (Turner and Hester 1993:246–256). Projectile points are dominated by bifurcated or split-stem morphologies that often grade into one another in terms of style and design. Dillehay (1974) argued that bison were widely available across Texas, although confirming data are often lacking.

The end of the Early Archaic dates to ca. 5750 B.P. (Lohse and Cholak 2013). This date places the wide-spread Calf Creek horizon, a brief period closely associated with bison exploitation across the Southern Plains (Wyckoff 1994, 1995) at the very end of the Early Archaic. This placement reflects the close stratigraphic association at nearby Spring Lake of Calf-Creek-related point types (Bell and Andice) with bison remains as well as immediately preceding types in the regional sequence, including Merrell and Martindale. These two types are typical Early Archaic forms in Central Texas, while the Calf Creek horizon is very poorly dated here; this component at Spring Lake may represent the best known instance in the entire state.

Middle Archaic

The Middle Archaic in Central Texas dates from 5750-4200/4100 and is generally associated with the Altithermal, a prolonged period during which the climate fluctuated from arid to mesic, then back to arid in Central Texas. Vegetation and wildlife regimes all fluctuated in response to these

environmental oscillations, with human groups responding accordingly. Large ungulates (bison) are absent from the record during this time. The Middle Archaic is characterized by two primary projectile point style intervals: Early Triangular (Taylor and Baird types), and Nolan and Travis. Taylor bifaces are broad and triangular, similar to the earlier Calf Creek Styles, but lacking any basal notches. By the latter part of the Middle Archaic, Nolan and Travis points predominate; both are technologically and stylistically dissimilar to the preceding styles (Collins 1995, 2004). The Nolan-Travis interval was also a period when temperature and aridity were at their peaks. Prehistoric inhabitants acclimated themselves to peak aridity as seen through increased utilization of xerophytes such as sotol (Johnson and Goode 1994). These plants, typically baked in earthen ovens, also reflect the development of burned rock middens. During more arid episodes, the aquifer-fed streams and resource-rich environments of Central Texas were extensively utilized (Story 1985:40; Weir 1976:125, 128).

Late Archaic

The Central Texas Late Archaic spanned the period of ca. 4200/4100-1270 BP. Bison returned episodically to the southern Plains (Dillehay 1974), strongly influencing subsistence during periods of visibility. Cemeteries at sites such as Ernest Witte (Hall 1981) and Olmos Dam (Lukowski 1988) provide some evidence that populations increased and that groups were becoming territorial (Story 1985:44–45), although this pattern had begun by ca. 6,500-7,000 B.P. (Hard and Katzenberg 2011; Ricklis 2005). Numerous projectile point styles during this period suggest increases in population pressure and social and technological divisions between bands. Common styles include Bulverde, Pedernales, and Marshall (Late Archaic 1); Montell, Castroville, and Marcos (Late Archaic 2); and Ensor, Fairland, and Frio (Late Archaic 3). The Transitional Archaic and Austin periods, together, represent the last phase of Archaic lifeways in the region. Except for the gradual (and poorly dated) appearance of the bow and arrow, subsistence practices, settlement patterns, and technological behaviors appear to change slowly throughout this period (see Black and Creel 1997; Houk and Lohse 1993). Point styles that define this final transitional interval include Darl and Scallorn. Burials from this time reveal a high proportion of arrow-wound deaths (Black 1989; Prewitt 1974), perhaps suggesting some disputes over resource availability.

Late Prehistoric

Historically, following J. Charles Kelley (1947), archaeologists divide the Late Prehistoric is into two phases, Austin and Toyah. However, the present authors consider the Central Texas Late Prehistoric to be limited to the Toyah interval beginning at approximately AD 1300 based on a sudden appearance of bison in the regional record (Table 1). Dating the end of Toyah is complicated, since material traits clearly extend into the early part of the Historic period (Arnn 2012). In general, this period is marked by the (apparently) complete shift away from the dart and atlatl to the bow and arrow, and by the incorporation of pottery throughout the region (Black 1989:32; Story 1985:45–47). Importantly, Toyah peoples were interacting in a broad network of exchange focused on bison and bison by-products. This network appeared in Southern Plains areas to the north (Spielman 1991), stretched from Pueblo areas to the west to Mississippian villages in the east, and involved agricultural goods, people (especially women), exotic materials like obsidian, ceramics, and other resources. Evidence for the movement of peoples into the study area comes from stable isotope values from a human burial from the University campus; data show this woman from coastal regions had moved to Central Texas as an adult (Muñoz et al. 2011).

The beginning of the Toyah period (650 B.P.) in Central Texas is marked by contracting stem points and flaring, barbed shouldered points. Perdiz is the most common example (Black 1989:32; Huebner 1991:346), and this type occasionally occurs on glass in mission contexts (Lohse 1999:268). Toyah is also characterized by its tools, like prismatic blades and blade cores, which are considered part of a specialized bison hunting and processing toolkit (Black and McGraw 1985; Huebner 1991; Ricklis 1994). However, wide technological variability is present, including both lithics and ceramics, suggesting a diverse social landscape (Arnn 2012).

Protohistoric (Spanish Entrada Period)

In Texas, the Protohistoric period was marked by Spanish entradas, the formal expeditions from established forts and missions in Northern Mexico into Central, Coastal, and East Texas in the late seventeenth and early eighteenth centuries. These encounters began with the venture into Texas by the Spanish explorer Cabeza de Vaca and the Narvaez expedition in 1528. The period is generally dated between AD 1500 and 1700 (or 1528, the date of the Cabeza de Vaca/Narvaez expedition, to the establishment of Mission San Antonio de Valero in 1718).

With Alonso de León's expedition of 1680, El Camino Real (the King's Road) was established from Villa Santiago de la Monclova in Mexico to East Texas. This roadway followed established Native American trade routes and trails and became a vital link between Mission San Juan Bautista in Northern Mexico and the Spanish settlement of Los Adaes in East Texas (McGraw et al. 1991). Spanish priests accompanying entradas provided the most complete information of indigenous cultures of early Texas. Those documented during the early entradas include the Cantona, Muruam, Payaya, Sana, and Yojuane, who were settled around the springs at San Marcos and described as semi-nomadic bands. Other tribes encountered at San Marcos included mobile hunting parties from villages in South and West Texas, including Catequeza, Cayanaaya, Chalome, Cibolo, and Jumano, who were heading toward bison hunting grounds in the Blackland Prairies (Foster 1995:265–289; Johnson and Campbell 1992; Newcomb 1993). Later groups who migrated into the region and displaced the earlier groups or tribes included the Tonkawa from Oklahoma and Lipan and Comanche from the Plains (Campbell and Campbell 1985; Dunn 1911; Newcomb 1961, 1993).

Archaeological sites dated to this period often contain a mix of both European imported goods, such as metal objects and glass beads, and traditional Native American artifacts, such as manufactured stone tools.

Historic

Spanish settlement in Central Texas first occurred in San Antonio with the establishment of Mission San Antonio de Valero (the Alamo) in 1718, and the later founding of San Antonio de Béxar (Bolton 1970; de la Teja 1995; Habig 1977). Some researchers have demarcated the transition in Texas between the Entrada (Protohistoric) and Historic periods by the construction of the first Spanish missions in Texas. Most knowledge of this period has been gained through the written records of the early Spanish missionaries. Besides the mission town of San Antonio, the only other Spanish settlement in the region was San Marcos de Neve, established in 1808, four miles south of present-day San Marcos. San Marcos de Neve was abandoned in 1812 as a result of constant raids by local tribes (Dobie 1932). During this time, massive depopulation occurred among the Native Americans, mostly due to European diseases to which the indigenous people had little resistance. Those few indigenous people remaining were nearly all displaced to reservations by the mid-1850s (Fisher 1998).

European presence in the region increased as settlers received land grants from the Mexican government until 1835. Settlement was difficult, however, due to continuation of hostilities with and raids by Native American tribes. The Texas Rangers provided protection from these conflicts after Texas secured independence from Mexico in 1836. Settlement in the region increased until 1845, when Texas gained admission to the United States, resulting in the formation of Hays County three years later (Bousman and Nickels 2003).

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

Twelve archaeological sites have been recorded either on or adjacent to the University. These are 41HY37, 41HY133, 41HY135, 41HY147, 41HY160, 41HY161, 41HY165, 41HY306, 41HY318, 41HY319, 41HY432 and 41HY447. Work has been conducted off and on at some of these sites for a number of years (Table 2).

Based on the results of previous archaeological investigations within and adjacent to the University, cultural materials in good contexts are undeniably present and may be impacted by planned construction/development on University property. Components and assemblages encountered in these areas may date from the Paleoindian or Early Archaic periods through to the Archaic and Late Prehistoric periods, even into the Colonial and Historic eras, and provide the greatest potential to provide high-quality data sets that would contribute to a better understanding of prehistoric occupations within the San Marcos area.

Table 2. Previously Recorded Archaeological Sites.

Site	When Investigated	Components	SAL Eligibility	Citations
41HY37	1983, 2000, 2010	Historic Burleson homestead; Late Prehistoric and Late Archaic (Late Archaic: Pedernales and Edgewood points)	SAL	Bousman and Nickels 2003; Garber and Orlof 1984; Yelacic and Lohse 2010
41HY133	1977	Prehistoric open camp site, midden	SAL	Warren 1977a
41HY135	1977	Prehistoric open camp site	SAL	Warren 1977b
41HY147	1979, 1990, 1990	Archaic, late and early Paleoindian, Pleistocene fauna	SAL	Shiner 1983; Takac 1990, 1991a, 1991b
41HY160	1982, 1983, 1991, 1997, 1998, 2001, 2002, 2003, 2004, 2006, 2010-2012	discrete components from Late Prehistoric through Early Archaic, Calf Creek, domestic features, human burial	SAL	Aery 2007; Nickels and Bousman 2010; Garber et al. 1983; Oksanen 2006; Ramsey 1997; Leezer e al. 2011; Leezer et al. 2012; Lohse et al. 2013
41HY161	1978, 1997, 1998, 2000, 2004, 2008, 2009, 2011-2012	mixed historic and Archaic, late Archaic, late and early Paleoindian, human remains, Pleistocene fauna	SAL	Garber and Glassman 1992; Ford and Lyle 1998; Jones 2002; Leezer et al. 2010; Lyle et al. 2000; Oksanen 2008; Shiner 1979, 1981, 1984; Stull 2009; Yelacic et al. 2008; Reid 2013; Laurence et al. 2013
41HY165	1984, 1996-1998, 2000-2001; 2010-2012	prehistoric, middle Archaic, bison, historic, mixed historic and prehistoric	SAL	Giesecke 1998; Ringstaff 2000; Soucie and Nickels 2003; Soucie et al. 2004; Leezer et al. 2011; Leezer et al. 2012; Leezer et al. 2013
41HY306	1999	Late Archaic, late paleoindian	SAL	Arnn and Kibler
41HY318	2001	Unidentified Historic Structure (ca 1890)	Undetermined	Jones 2002
41HY319	2001	Prehistoric lithic scatter	Undetermined	Barrera 2002
41HY432	2007	unknown prehistoric	Ineligible	King 2007
41HY447	2008, 2010	Prehistoric lithic scatter	Ineligible	Yelacic and Lohse 2008, Leezer 2010

2014 ARCHAEOLOGICAL INVESTIGATIONS

In 2014, CAS conducted archaeological investigations for eight University projects under Texas Antiquities Annual Permit No. 6775. These projects included: an archaeological survey in advance of a new fence at Freeman Ranch for the Forensic Anthropology Research Facility, archaeological investigations and monitoring for the Moore Street Housing construction project, monitoring for ADA upgrades to the ticket kiosk building at Spring Lake, monitoring excavations associated with a new fence installation for a divers yard at Spring Lake, monitoring the demolition of the Clear Springs Apartments, archival research and monitoring for the demolition of the Long and Holland houses, monitoring a Habitat Conservation Plan bank stabilization project, and site form updates and archival research investigations in advance of possible stabilization plans for the Spring Lake Dam.

Freeman Ranch Fence Survey

On January 22, 2014, CAS archaeologists conducted a pedestrian survey to assess a 9.8 acre area within the Freeman Ranch property where two new fence lines will be installed in order to extend the Forensic Anthropology Research Facility (FARF) area (Figure 2). The FARF is a 26 acre outdoor human decomposition research laboratory at Texas State's Freeman Ranch. The construction of the new fence is planned to involve removing trees and other vegetation along the proposed fence route and excavation for the fence post holes.

Previous investigations of the Freeman Ranch property have located and recorded sites described as ephemeral surface upland lithic scatters (Leezer 2011, Yelacic and Lohse 2008). Therefore, CAS conducted a pedestrian survey in order to identify areas containing cultural remains and assess the impact of the proposed fence installation on those areas. The survey involved 100 percent visual inspection of the proposed land parcel addition, focusing on the linear perimeters where the new fence lines will be installed. Artifact concentrations were recorded with a Trimble GPS unit and marked with a pin flag so that they could be avoided.

A karst/sinkhole feature was identified outside of the APE (Figure 6). The sinkhole consisted of large limestone bedrock exposures and boulders (Figure 7). This area seems to have been a location for lithic procurement as evidenced by scatters of chert debitage, tested cobbles, cores as well as modified flakes within and surrounding the sinkhole. There was also clear evidence of impact damage on the limestone boulders where chert nodules may have been quarried (Figure 8). The roadway on the west side of the sinkhole contained a heavy concentration of lithic artifacts.

Various surficial lithic scatters were located within the parcel containing chert debitage as well as both formal and expedient tools (Figure 6). The lithic tools encountered include bifaces, hammerstones, unifacial scrapers and modified flakes. All prehistoric cultural material encountered was present on the surface and no diagnostic artifacts were observed.

Figure 6. Map showing lithic scatters located during survey.

Figure 7. Karst sink hole feature; possible lithic procurement site.

Figure 8. Evidence of impact damage to large limestone cobble.

41HY447

Site 41HY447 was initially identified and recorded by CAS in 2008 as a deflated, sparse upland prehistoric lithic scatter of unknown age located just north of the present project area. The site measured 10 x 10 meters and extended no more than 20 cmbs. Site 41HY447 was not considered significant or eligible to be listed as a State Antiquities Landmark (SAL). Therefore, CAS recommended that the project be granted regulatory clearance to proceed (Yelacic and Lohse 2008). Additional investigations at Freeman Ranch of an area to the southeast of site 41HY447 were conducted by CAS in 2010 involving four backhoe trench excavations. Although cultural materials were identified on the surface, none were encountered within the four trenches, suggesting a lack of buried cultural material in this location. Nonetheless, with the confirmed presence of cultural materials present at the Freemen Ranch, CAS recommended that future impacts either be monitored or preceded by archaeological survey (Leezer 2011).

The lithic surface scatters recorded during the present survey are considered to be an extension of site 41HY447 increasing the site's area to approximately 59890 m^2 (Figure 9). The site boundaries have been adjusted accordingly and updated on the Texas Archaeological Sites Atlas. Currently, the available information suggests that the cultural deposits for site 41HY447 are not deeply buried (no deeper than 20 cmbs) and exist mostly on the surface. Furthermore, the age of site 41HY447 remains unknown.

Recommendations

Although cultural material associated with previously recorded site 41HY447 was encountered during the above described survey, the surficial context and lack of diagnostic artifacts limits what can be learned about the lithic scatters and the prehistory of 41HY447. Although one of the artifact concentrations in the southernmost portion of the project area is located within the proposed fence route (Figure 6), the fence will be constructed on the surface only and no clearing, digging, or moving of surficial artifacts will take place in this area. Overall, the fence installation will involve minimal ground disturbance in areas devoid of cultural material. The fence construction does not pose an immediate threat to site 41HY447; CAS recommends that the fence project proceed without further concern for cultural resources.

The Freeman Ranch, with its proximity to water (Sink Creek) and readily available chert resources, may have been an ideal location for supporting prehistoric inhabitants. A display case located inside the Freeman Ranch headquarters contains a collection of diagnostic projectile points; many are Pedernales points from the Late Archaic. If it could be confirmed that these artifacts were collected from Freeman Ranch, it would suggest that there may be a habitation site somewhere within the 3500 acre Freeman Ranch Property. The lithic tools found during the present survey augment this hypothesis. It should also be noted that the intended use of the extended forensic research area could impact cultural deposits associated with 41HY447. Because of this possibility, CAS recommends that all future ground-disturbing work within or near the boundaries of site 41HY447 continue to be coordinated with CAS.

Figure 9. Site 41HY447 new boundaries.

Moore Street Housing

In August of 2014, CAS conducted archival and archaeological investigations of a 9.5 acre area in preparation for the Moore Street Housing Project. The Moore Street Housing project will involve the construction of new student housing and a parking garage located on the far west campus at the end of Moore Street (Figure10). Based on the proximity of the project area to several known historic sites, CAS and the THC determined that the project contained a moderate potential to impact cultural resources. At the time, no survey-level investigations had been conducted on the project area. Therefore, CAS conducted archaeological investigations in advance of the proposed construction that consisted of archival research as well as 3 backhoe trench excavations strategically positioned where the larger ground disturbances were to take place.

Additionally, CAS archaeologists monitored the demolition of four structures. The proposed demolition of the San Saba Hall, Canyon Hall, and West Maintenance buildings was approved to proceed by the THC based on the unmet Criteria for Evaluating Historic Structures (Section 26.7) (See Appendix A).

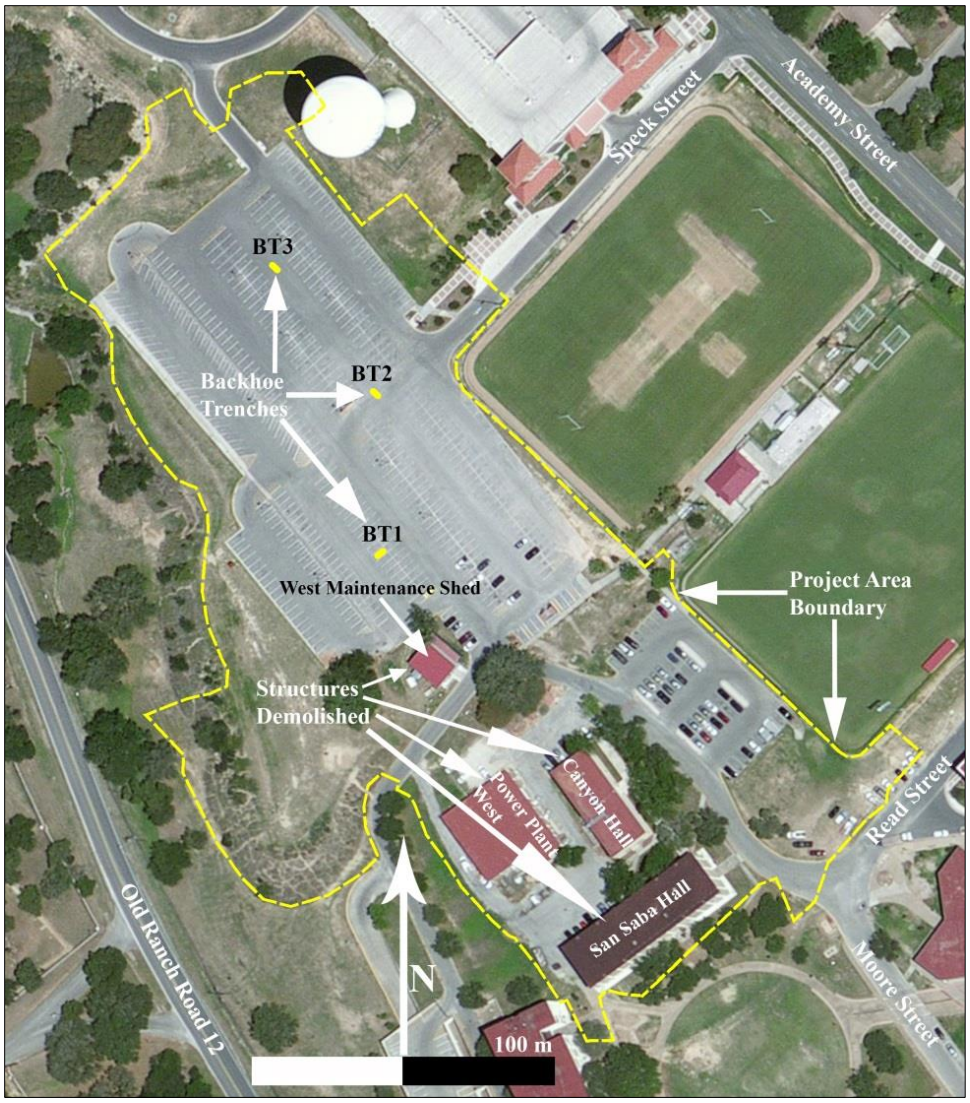

Figure 10. Satellite photo of project area showing locations of archaeological backhoe trenches and structures to be demolished.

Archival Research

The Moore Street Housing project area is located within a portion of Texas State University campus that was formerly part of the San Marcos Baptist Academy (SMBA) campus. The Academy was established in 1907 and opened its doors on September 24, 1908. The SMBA buildings and property totaling 78.5 acres were purchased by Southwest Texas State University on June 19, 1979. A gradual transfer ensued over the following three years, allowing the Academy to continue to operate while constructing a new campus on a 200-acre property several miles northwest of San Marcos (Toma 2009). The history of the SMBA has been well documented (Shand 1990; Smith 1954).

A review of the available documentation and historic aerial photos showed little development has occurred in the north half of the project area other than the construction of the West Campus Commuter Parking Lot (Figure 11). This information, combined with construction plan maps, helped inform the placement of the three backhoe trench excavations described below.

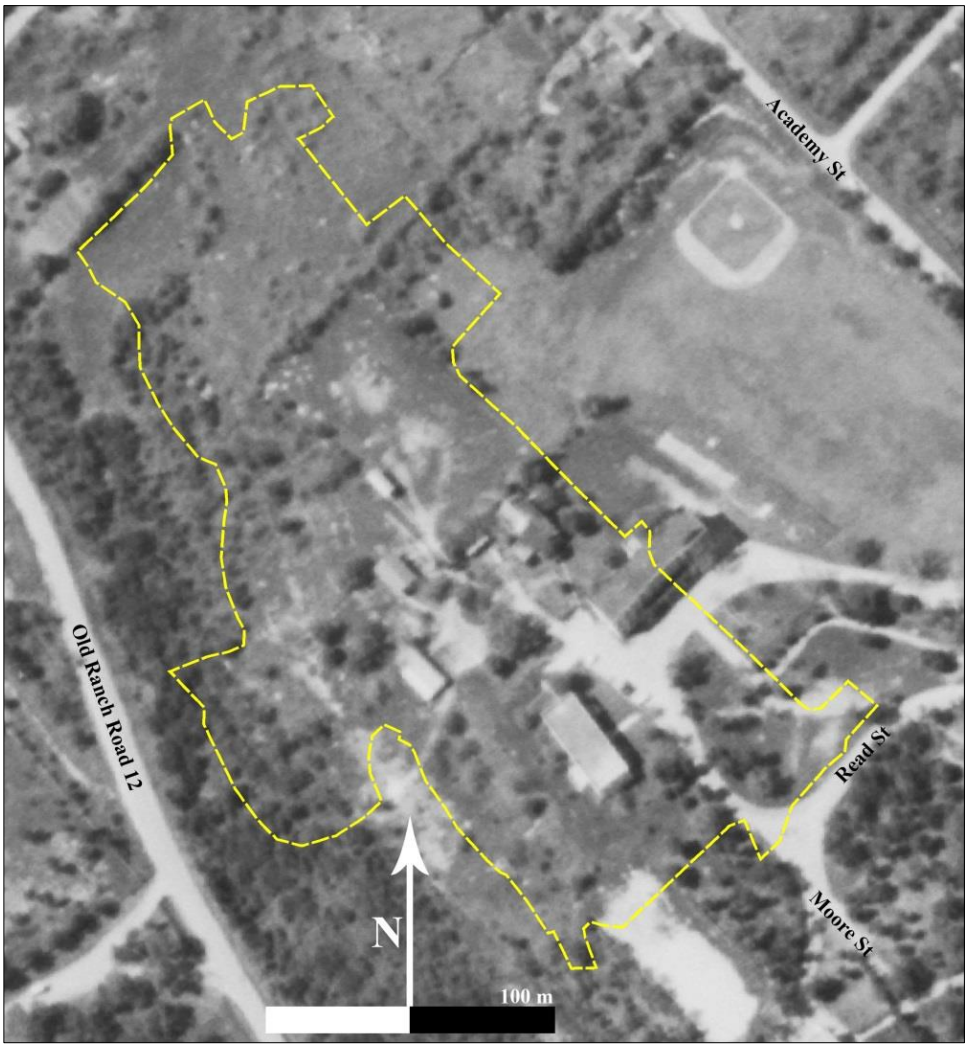

Figure 11. Historic aerial photo of the project area showing lack of development in Northern portion of project area

Backhoe Trench Excavations

Based on the results of the archival research, 3 backhoe trenches were excavated across the parking lot to determine the potential for that area to contain previously unknown historic or prehistoric cultural features (Figure 9). The results of these backhoe trenches are presented in Tables 3, 4 and 5. Overall, the southern 2/3 of the parking lot appear to contain little if any soil between the imported parking lot fill and the underlying Cretaceous bedrock. Located at the north end of the parking lot, BHT3 contained approximately 1 meter of historic fill between the parking lot roadbase and Cretaceous bedrock. This historic fill consists of a highly mixed A to B-horizon soil containing many fragments of cement/asphalt and brick. At one end of BHT3 a 3-inch diameter steel pipe running east-west was encountered at approximately 120 cmbs.

BHT1

- Described by: Jacob Hooge
- Excavated on: 26 August 2014
- Location: West Campus Commuter Parking Lot
- Remarks: North wall exposure description

Table 3. Backhoe Trench 1 Description

Zone	Depth (cmbs)	Horizon	Description
Ia	0-5	Fill	Cement/asphalt
I	5-10	Fill	Roadbase fill beneath cement/asphalt
II	10+	R	Bedrock. Del Rio and/or Eagle Ford Clay

BHT2

- Described by: Jacob Hooge
- Excavated on: 26 August 2014
- Location: West Campus Commuter Parking Lot
- Remarks: East wall exposure description

Table 4. Backhoe Trench 2 Description

Zone	Depth (cmbs)	Horizon	Description
Ia	0-3	Fill	Cement/asphalt
I	3-20	Fill	Roadbase beneath cement/asphalt
II	20+	R	Bedrock. Del Rio and/or Eagle Ford Clay

BHT3

- Described by: Jacob Hooge
- Excavated on: 26 August 2014
- Location: West Campus Commuter Parking Lot
- Remarks: East wall exposure description

Table 5. Backhoe Trench 3 Description

Zone	Depth (cmbs)	Horizon	Description
Ia	0-3	Fill	Cement/asphalt
I	3-30	Fill	Roadbase beneath cement/asphalt
II	30-130	Fill	Historic fill/highly disturbed A to B horizon; contains cement/asphalt fragments, brick fragments, and bottle glass. 3-inch diameter steel pipe at 120 cmbs running east-west.
III	130+	R	Bedrock. Del Rio and/or Eagle Ford Clay

Demolition Monitoring

CAS archaeologists monitored the demolition of the foundations for San Saba Hall, Canyon Hall and West Maintenance buildings in September of 2015. No cultural resources were encountered during these demolition events. The largest foundation removed was that of San Saba Hall. San Saba Hall, formerly known as Crook Hall, is located in the southernmost portion of the project area (Figure 10). The building was constructed in 1963 and acquired by the University in 1979. Interestingly, the dormitory contained a basement that was originally built to function as a nuclear fallout shelter. The basement extended approximately 6 meters below ground level (Figure 12). Although historic fill containing dark soil was visible behind the San Saba basement walls, all four structures appear to have been sunk entirely into Cretaceous bedrock, and therefore, no intact cultural deposits were disturbed by the demolition.

Electrical Line Trench Monitoring

In late October 2014, the senior construction inspector for the Moore Street Housing project notified CAS archaeologists that a number of historic glass bottles were found within a deposit of construction fill that was being moved in the southwest end of the project area. A burned trash midden exposed in both profiles of an electrical line trench (Figure 13) was determined to be the source of the glass bottles. The midden was buried beneath 30 to 40 cm of roadbase/fill and showed some stratification indicating it was used on more than one occasion.

Figure 12. Demolition of San Saba Hall foundation facing West

Figure 13. Electric trench facing South showing midden deposit.

In order to determine the age of the trash midden, a sample of 53 diagnostic glass bottles and jars was collected (Figure 14). The range of manufacture dates from identifiable maker's marks on the glass bottles falls between the 1930s and 1960s (Toulouse 1971). Additionally, a stamped aluminum souvenir coin was recovered from the excavated sediment just outside the trench (Figure 15). Upon close inspection, the coin was stamped with the name M C Enfield. A search through SMBA attendance records showed a Morris Conrad Enfield to have been enrolled from 1949 to 1956. A complete horse metacarpal was also recovered from the electrical line trench, although not clearly associated with the midden. No other bones or bone fragments were observed. Figure 16 shows the present day location of the electrical line trench compared with a 1958 aerial photo when the midden was likely to have been in use.

41HY518

Due to its historic age and contextual integrity, the midden deposit was recorded as site 41HY518. Site 41HY518 is characterized as an historic Mid-20th century refuse midden (see electrical trench monitoring results above) located from approximately 30 cm below surface to at least 100 cm below surface. It is likely that 41HY518 spans horizontally for an unknown distance on both sides of the electrical trench and extends below the bottom of the trench at 100 cm below surface. Although the midden was found within an intact subsurface context, middens typically reflect secondary deposits and therefore, cannot contribute significantly to the understanding of local or regional History. The mid-20th century is a relatively well understood time period, and without the ability to associate the midden with a standing historic occupation, the research value of site 41HY518 is considered to be minimal.

Figure 14. Five of the 53 diagnostic historic bottles from trash midden.

Figure 15. Aluminum souvenir coin stamped with name ‘M C ENFIELD’.

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Figure 16. Location of electrical line trench which cut through burned trash midden. Photo on left taken in January 2015. Photo on Right taken in 1958, likely close to when midden was in use.

Recommendations

Historic cultural remains are clearly present within the project area and site 41HY518, a Mid-20th century trash midden, was recorded as a result of archaeological monitoring. Neither archival nor archaeological investigations revealed cultural resources that could be considered significant to the University's, City's or State's history. Thus, CAS recommends that no further archaeological work is necessary for the current project. However, the eligibility of site 41HY518 for SAL listing should be considered undetermined until further work is completed and any future ground disturbance in the project area, especially near the location of Site 41HY518, should be coordinated with CAS to ensure protection from adverse impacts.

ADA Upgrades to Ticket Kiosk at Spring Lake

On June 4, 2014, the University carried out small-scale (> .01 acres) manual excavations associated with a project to make ADA (Americans with Disabilities Act) upgrades to the Meadows Center for Water and the Environment (MCWE) Ticket Kiosk building at Spring Lake. Since the project area lies within the boundaries of SAL 41HY160, CAS conducted archaeological monitoring in order to protect and record any unanticipated archaeological deposits (Figure 17).

Figure 17. Small-scale manual excavation for ADA upgrades at the MCWE Ticket Kiosk building.

Recent investigations at the Ticket Kiosk location have demonstrated that cultural material associated with SAL 41HY160 is present within and directly beneath the uppermost depositional zone (Lohse et al. 2013). Therefore, CAS closely monitored the excavation and helped the construction crew stay within a safe maximum depth in order to protect the underlying intact sediments. The total depth of excavation reached approximately 20 cmbs. The sediment consisted of mixed caliche and gardening mulch and was sterile of cultural material.

Recommendations

No cultural material was encountered during monitoring and no intact subsurface cultural deposits were impacted during the excavation. CAS recommends no further archaeological work for the above described project. However, CAS does recommend that the University continue to coordinate any future developments in areas within or near the current boundaries of SAL 41HY160.

Divers Yard Fence at Spring Lake

In November of 2014, the University began work to install a new wooden fence connected to the ticket kiosk building at the Meadows Center for Water and the Environment. This fence is part of a project to create a locker room and prep yard for the scuba divers at Spring Lake.

Although there have been previous disturbances associated with the construction of the ticket kiosk and restroom buildings (Lohse et al. 2013), there was a moderate potential for the project to impact intact sediments associated with Sal 41HY160. The depth of the zone of disturbed sediments is currently unknown and likely varies across the project area. Therefore, CAS conducted archaeological monitoring of the excavation

totaling approximately 0.02 acres in order to protect and record the prospective underlying intact archaeological deposits.

Twelve post holes were excavated on the south side of the restroom building (Figure 18). They measured approximately 30 cm in diameter and were excavated in 20 cm levels to an approximate depth of 60 to 100 cm below surface. All sediments were screened through ¼-inch mesh.

Cultural material was encountered within all excavated post holes (Figure 19), including one modern nail, asphalt fragments, lithic debitage, chert tools, burned rock, faunal bone, and one burned clay artifact. No diagnostic artifacts were found however the burned clay artifact has a wood-grain impression on one side indicating it is possibly daub; if verified, this would be the first recognized evidence of a prehistoric habitation structure discovered at 41HY160 (Figure 20). The sediment from 0-30 cmbs was disturbed (mixed deposits with construction fill) and intact sediments were encountered below 30 cmbs in most of the post holes.

Figure 18. Post hole excavations for Divers Yard fence installation at Spring Lake.

Figure 19. Example of cultural material encountered within screened sediment excavated from a post hole.

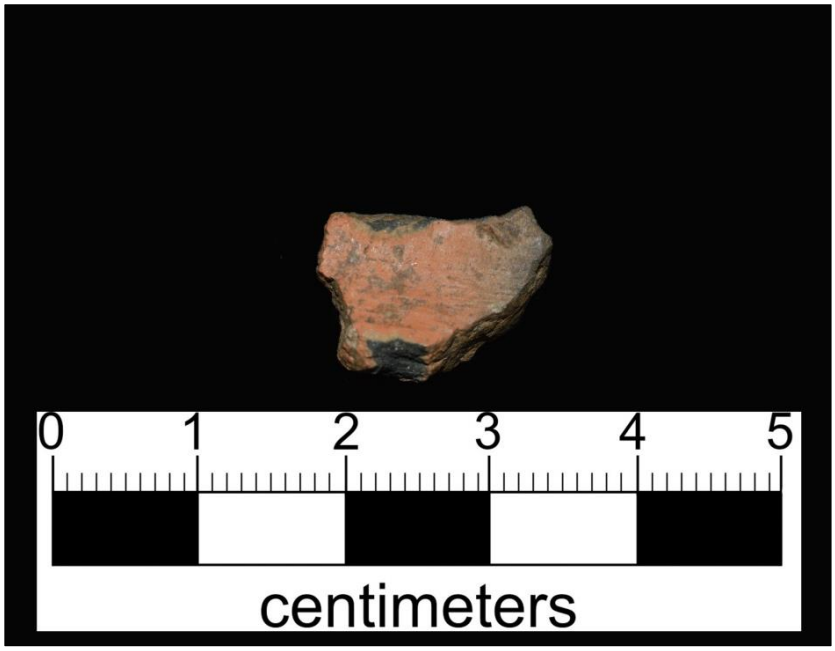

Figure 20. Burned clay artifact with wood-grain impression.

Recommendations

Cultural material was encountered within all excavated post holes and intact sediments containing prehistoric cultural deposits associated with 41HY160 were recorded. However, since the post holes were excavated and recorded systematically and in accordance with the CTA minimum standards for Archaeological Survey in Texas, CAS recommends that no further archaeological work is necessary for the above described project. CAS strongly recommends that the University continue to coordinate any future developments in areas within or near the current boundaries of SAL 41HY160.

Clear Springs Apartments Demolition

Between May 16 and June 10, 2014, CAS archaeologists monitored the demolition and removal of the Clear Springs Apartment buildings. The project area measures approximately 3.05 acres and is located within the boundaries of SAL 41HY161, situated at the intersection of Aquarena Springs Dr., Sessoms Dr., and University Drive (Figure 21). The purpose of the demolition was to restore the area to a more natural state, and to create additional green space as an extension of Sewell Park. The demolition of the apartment complex required the removal of three concrete foundations with stairs to the ground level, and the excavation and removal of a swimming pool that had been filled in and sodded over. The Hillburn House, located on the NE corner of the project area, was also demolished.

The Clear Springs Apartments were built in 1966 and the Hillburn House was built in 1950. The Hillburn House was a mid-Twentieth Century block and beam wood-frame structure originally built in 1950 on a terrace overlooking Spring Lake (Figure 22). The structure was not distinctive architecturally and no individuals of local historic significance lived in the house. The site occupied by the Clear Springs Apartment complex and the Hillburn House was originally part of property owned by the San Marcos Electric Light and Power Company beginning in 1908 under the direction of William Green, the son of prominent local business man and former Hays County Clerk and San Marcos mayor Ed. J. L. Green Sr. William Green was responsible for the planting of the cypress trees at Spring Lake in an attempt at beautifying the area. The power generation facility was located near the dam, approximately in the location of a current convenience store and power station. An inscription on a retaining wall located south of the Hillburn House location, adjacent to the dam, reads “Dec. 2, 1909” indicating a possible association with the construction of the power plant (Figure 23). Prior to the San Marcos Electric Light and Power Company, the parcel was part of the Burleson property, associated with Gen. Edward Burleson.

Since the project was located within the boundaries of SAL 41HY161 and because the general area is considered to be of local and regional historical significance, CAS archaeologists were present for all ground disturbing activities associated with the demolition, including the removal of the Clear Springs Apartments’ foundations and the removal of the concrete patio from the Hillburn House location. The results of the monitoring are presented below.

Figure 21. Location of Clear Springs Apartments, Hillburn House and Spring Lake Dam.

Figure 22. Hillburn House.

Figure 23. Inscription on retaining wall near Burleson Dam.

Demolition Monitoring

The Clear Springs apartments occupied three long buildings connected by a raised and graded parking lot (Figure 24). The removal of the East and Northwest foundations exposed thick layers of imported sediments. A number of concrete piers were found that were associated with the West foundation. During the demolition, these piers were cut off below the ground surface and buried. During the removal of the large concrete foundations, a number of concrete piers were exposed. The excavation of the piers exposed some historic artifacts including a small brooch. The sediments in this area consisted of thick layers of fill with occasional pockets of coal cinders and fragments of lignite coal.

On May 29, 2014, a kidney-shaped swimming pool was removed. The pool had been filled with debris from the removal of the pool-side patio and assorted construction debris before being buried with fill dirt. After the fill containing large pieces of concrete and wood was removed, the sides and bottom of the pool were broken apart and peeled back for removal. CAS archaeologist, Jacob Hooge, recorded the exposed profile, noting a 14 cm layer of sediment mixed with coal cinders associated with a possible buried soil horizon (Figure 25).

The Hillburn house property contained several brick pathways that were removed as well as a small concrete patio. The patio was very thin and rested directly on the surface of the soil. Several inscriptions in the patio, including a small sketch of a house, were recorded (Figure 26). Removal of the patio was performed on June 10, 2014. A backhoe was used to lift the patio off of the ground and break it into manageable pieces, which were removed by hand. The brick walkways were removed by hand at the same time. There was little to no impact to subsurface deposits.

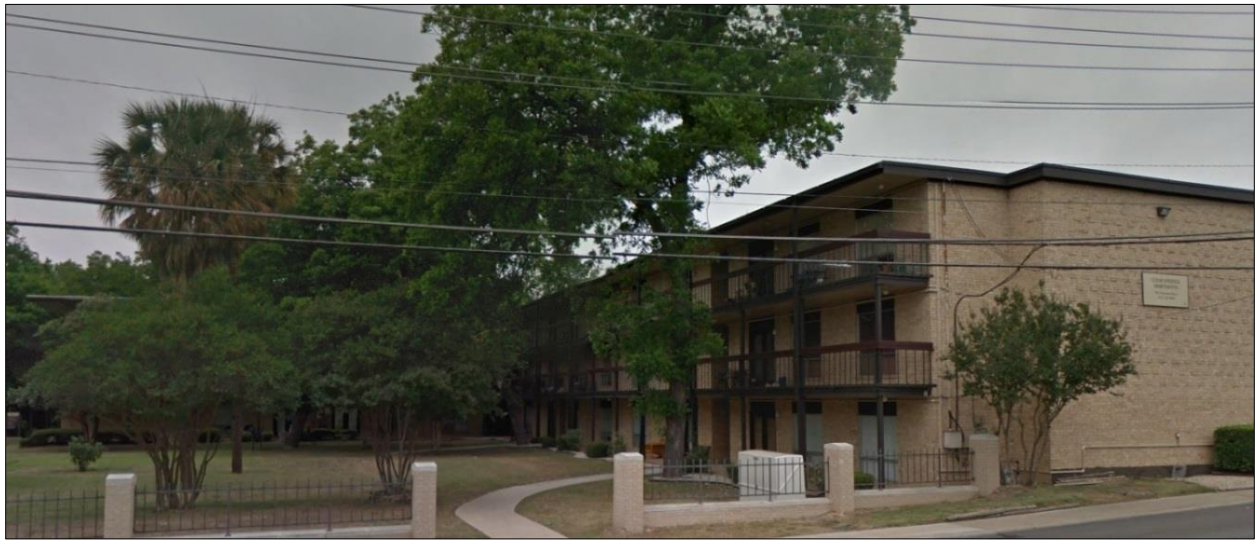

Figure 24. Clear Springs Apartments.

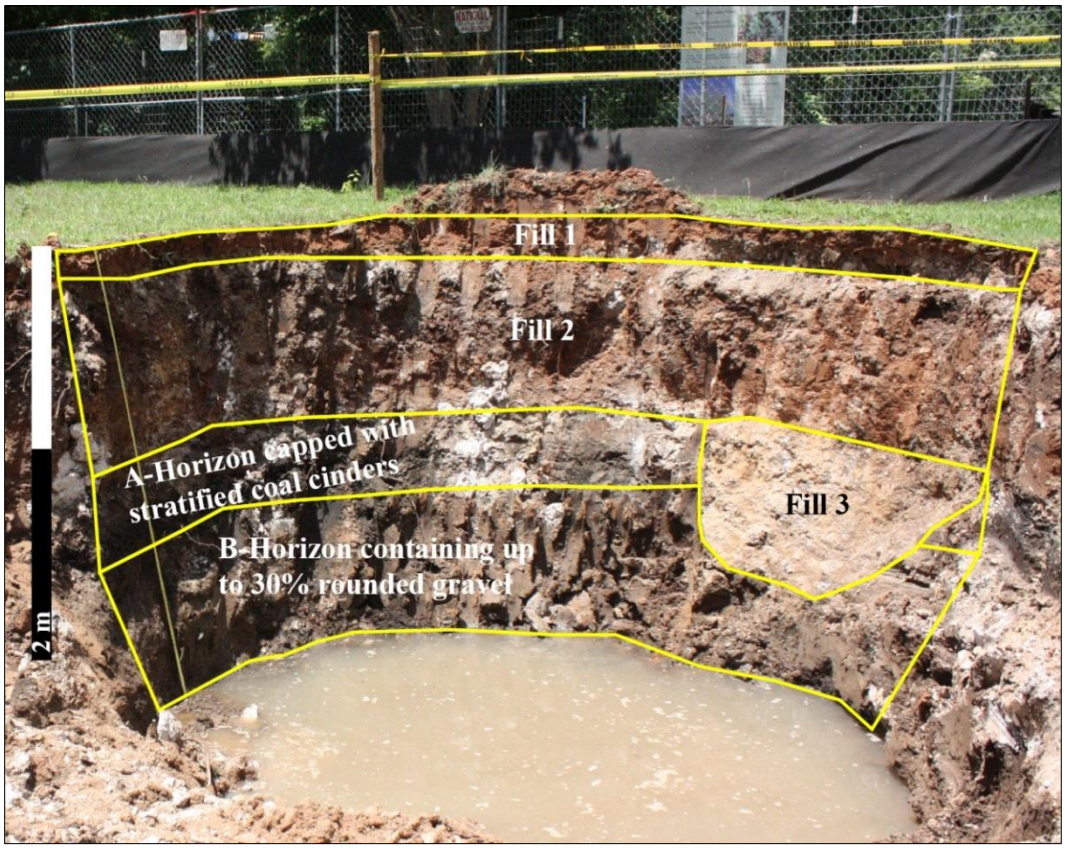

Figure 25. Exposed profile following removal of swimming pool facing west.

Figure 26. Drawing in concrete patio associated with Hillburn House.

CAS archaeologists walked the surface of the lot associated with the Hillburn House looking for any evidence of artifacts on the surface. A small surface scatter was observed near the house footprint, beginning approximately 60 cms south of the power pole and extending to the south and west of the house. A medium-sized bifacial adze was observed on the surface protruding from the soil (Figure 27). Considering the long history of the property as a private residence and the proximity of the artifacts to the main living area, these artifacts were not likely encountered in their original context. However, the contextual integrity of this site would be better evaluated by a more in-depth archaeological investigation such as a systematic phase 1 survey. During the removal of the patio a few historic artifacts were uncovered, including a Dr. Pepper bottle embossed with the 10-2-4 design that was adopted by the company between the 1920s and the 1960s (Figure 28). This is in keeping with the period during which the house was built and used as a residence.

Recommendations

Because of the thick layers of fill sediments and the relatively shallow depth of the demolition efforts, no archaeological deposits were impacted by the removal of the structures; no further work is recommended for the present project. However, this does not preclude the existence of intact archaeological deposits below the fill sediments. The layer of coal cinders that appears to mark the ground level at the time of the San Marcos Electric Light and Power Company's operation is a good indicator that sediments at that level and below may contain undisturbed deposits. Any future work that has the potential to disturb these buried deposits should be coordinated with CAS, especially any attempt to remove the currently buried concrete piers.

Since the Hillburn House was of pier and beam construction the demolition had no impact on intact archaeological deposits; CAS recommends that no further work is necessary at this time. However, the presence of a surface lithic scatter suggests that this area of the property is likely to contain additional archaeological deposits. Therefore, CAS recommends that an archaeological survey be conducted prior to any future development in this area.

Figure 27. Biface sticking out of ground near Hillburn House

Figure 28. Dr. Pepper bottle, left: obverse; right: reverse

Long and Holland House Demolition

In August of 2014, CAS conducted archival research and archaeological monitoring for the demolition of two University buildings located on the corner of Holland St. and Old Ranch Road 12 in the City of San Marcos, Hays County, Texas (Figure 1). This project area measures approximately 0.6 acres. No survey-level investigations have been conducted on the project area. However, there are several historic and archaeological sites in close proximity to the parcels (Figure 29). The nearest boundary of the historic San Marcos City Cemetery lies 138 meters from the Long House. Archaeological site 41HY478, an early twentieth century farmstead, is located approximately 800 meters from the project area. Historic site 41HY318 is located approximately 965 meters away. Because there is so little information about the property and because of its proximity and association with several known historic and archaeological sites including the Ivey-Moore House, an unrecorded early 20th century structure located on Academy Street, CAS conducted archival research in advance of the demolition. Archival research did not indicate that either house was associated with any significant persons. Furthermore, both were subject to several renovations throughout the years and are therefore not considered architecturally significant. As a result of these findings, the demolition was recommended to proceed; archaeological monitoring of all ground disturbing activities associated with this project was conducted by CAS. The results of the archival research and archaeological monitoring are described below.

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Figure 29. Location of project area (blue arrow) with nearby sites and historic cemetery (red).

Archival Research

The two properties, known as the Long and Holland Houses, were at one time part of the same parcel that is currently associated with the Ivey-Moore House, an early twentieth century structure located on Academy Street. The original parcel was 7.15 acres, purchased in 1905 by C. S. and Fannie B. Ivey (OPR/00053/619). The Long House parcel was sold by Fannie Ivey in 1947 and the Holland House parcel in 1948.

Long House

The Long House was built in 1956 by Bobby S. Gordon (Figure 30). The house was described in the Mechanics and Materials Lien as a five room frame house on a concrete slab foundation, with brick veneer and an asphalt shingle roof (ML, Vol. 00012, pg. 405). The house and land were purchased by Kenneth and Wilma Jean Long in 1978, and renovations were performed on the house between 1978 and 1981, including the addition of central air and heat, and the installation of carpeting and burglar bars. In 1986, the house was deeded by the Longs to the State of Texas for the use of Texas State University. Based upon archival research, it was determined that no persons of historical significance lived on the property.

Figure 30. Long House.

Holland House

The Holland House (Figure 31) was built in 1954 by the Irving S. and Willis Joyce Cobb, according to a Mechanics and Materials Lien, which described the proposed structure as a "frame dwelling 30 ft. by 40 ft., having 210 lb. asphalt shingle roof, Oak floors, steel casement windows, sheetrock inside walls, concrete foundation piers (ML, Vol. 00010, pg. 393)". The land and house were sold to Harry C. and Elinor Ham in 1964, and was inherited by Elinor Ham's son Anthony Bruce Ham in 2011. Anthony Bruce Ham (aka Bruce Wayne) sold the property to Texas State University in 2013. No persons of local historical significance lived on the property.

Archaeological Monitoring

CAS archaeologist Senna Thornton-Barnett monitored the demolition of the foundations on August 8 and August 11, 2014. Modern debris was observed on the surface of the house sites and construction fill consisting of modern brick and window glass fragments was observed in the exposed sediment along the perimeter of the foundations. The foundations extended 50 – 120 cmbs and were set into a layer of sandy fill. No prehistoric or historic cultural remains were observed.

Recommendations

Although no cultural remains were observed while monitoring the above described project, CAS recommends that future construction requiring ground disturbance within or near this parcel be preceded by a phase one archaeological survey. The Ivey-Moore house and surrounding property is of particular concern; CAS recommends that the site be recorded during the proposed archaeological survey and incorporated into the Texas Sites Atlas.

Figure 31. Holland House.

HCP Bank Stabilization

In June of 2014, the University began work to stabilize the banks of and improve access to a 0.1 acre portion of the San Marcos River located on the Texas State University campus (Figure 1). This project also involved removing sediment that had, over time, accumulated within the river channel. These improvements were proposed as part of the Habitat Conservation Plan (HCP). The HCP is a collaboration between the Edwards Aquifer Authority (EAA), the City of San Marcos, the University of Houston at Clear Lake and the Meadows Center for Water and the Environment at Texas State University to improve the conditions of the San Marcos River, promote the health and habitat of the endangered riverine species and improve water quality through silt removal, native revegetation, invasive animal species removal, and bank stabilization within and adjacent to the San Marcos River. Although the proposed construction plans called for only minimal impact to an area that was unlikely to contain intact cultural deposits, CAS conducted monitoring of the bank stabilization due the location of the construction within the boundaries of SAL 41HY161.

On June 16, 2014, mechanical excavation was conducted in order to sink limestone blocks to a depth level with existing cement steps covering the bank on the north side of the confluence of Sessom Creek and the San Marcos River. This excavation measured approximately 20 m^2 and extended to a depth of 15 to 20 cm below the river's floor (Figure 32). The displaced sediment was a very dark grey clay loam with approximately 50 percent rounded gravel inclusions. Cultural materials observed in the backdirt included bottle glass, pop-top aluminum cans, plastic parts of shoes, a penny dated 1979, and several chert flakes.

Figure 32. Highlighted area where 10 to 15 cm of sediment was removed just north of confluence of Sessom Creek and the San Marcos River (visible in upper right hand corner).

The second phase of the HCP Bank Stabilization Project involved removing a small peninsula of clearly modern fill sediment that had accumulated within the river channel on the south side of the confluence of Sessom Creek and the San Marcos River. Approximately 30 cm of sediment was removed over an area of roughly 100 m^2 in order to take the peninsula down to water level (Figure 33). The sediment displaced from the peninsula was inspected and determined to be composed of more than 50 percent coarse fragments including roadbase and pavement, and appeared to be in a highly mixed condition. Cultural material observed in the backdirt included aluminum cans, bottle glass, plastic scrap, round nails, steel rebar, and several chert flakes.

Recommendations

No significant cultural deposits were encountered during monitoring of the HCP bank stabilization or the removal of the peninsula. Given the very mixed nature of sediments and cultural materials observed in both locations, there is a high likelihood the landforms developed in the past several decades. Therefore, CAS recommends no further archaeological investigations.

Figure 33. Highlighted area where a small peninsula on south side of the confluence of Sessom Creek and the San Marcos River was excavated down to water level.

Spring Lake Dam Archival Research

In late May 2014 the University conducted Core Sampling and Technical Data collection to assess the condition of the Spring Lake Dam. With this data, the University will have a better understanding of the immediate and long term repairs needed for the dam. Ultimately, a stabilization plan for the Dam will be developed by Halff Associates. The University's ongoing efforts to monitor and maintain the general condition of the Dam are in accordance with the Texas Commission on Environmental Quality (TCEQ) inspection requirements (Texas Commission on Environmental Quality 2014). The Core Sampling and Technical Data collection consisted of one sample measuring approximately 2 inches in diameter and 30 feet in depth from the center of the dam structure. Although the core sampling had no negative impact on the Spring Lake Dam, CAS conducted archival research and updated the Texas Sites Atlas to prepare for the possibility that a stabilization plan will require modifications to this historic structure.

The 0.5 acre project area is located within a 40-acre tract of land known as the Mill Tract. The Mill Tract is bounded by the Burleson Homestead tract (41HY37) on the east, by Aquarena Springs Drive to the West and by Sessom Drive to the South. The Abstract of Title for the Mill Tract states that the dam has been periodically repaired

or rebuilt over the years (Spring Lake Abstract of Title, p. 102). The dam is an earth and piling structure measuring approximately 400 feet (122 m) long with a dog-leg to form a forebay or flume that powered the mill wheel that was located on the western side (Figure 34) (McGehee, 1982; Virginia Agricultural Experiment Station, 1999). A Historic Marker for the Mill Tract is situated near the front entrance of the Salt Grass Restaurant (Figure 35).

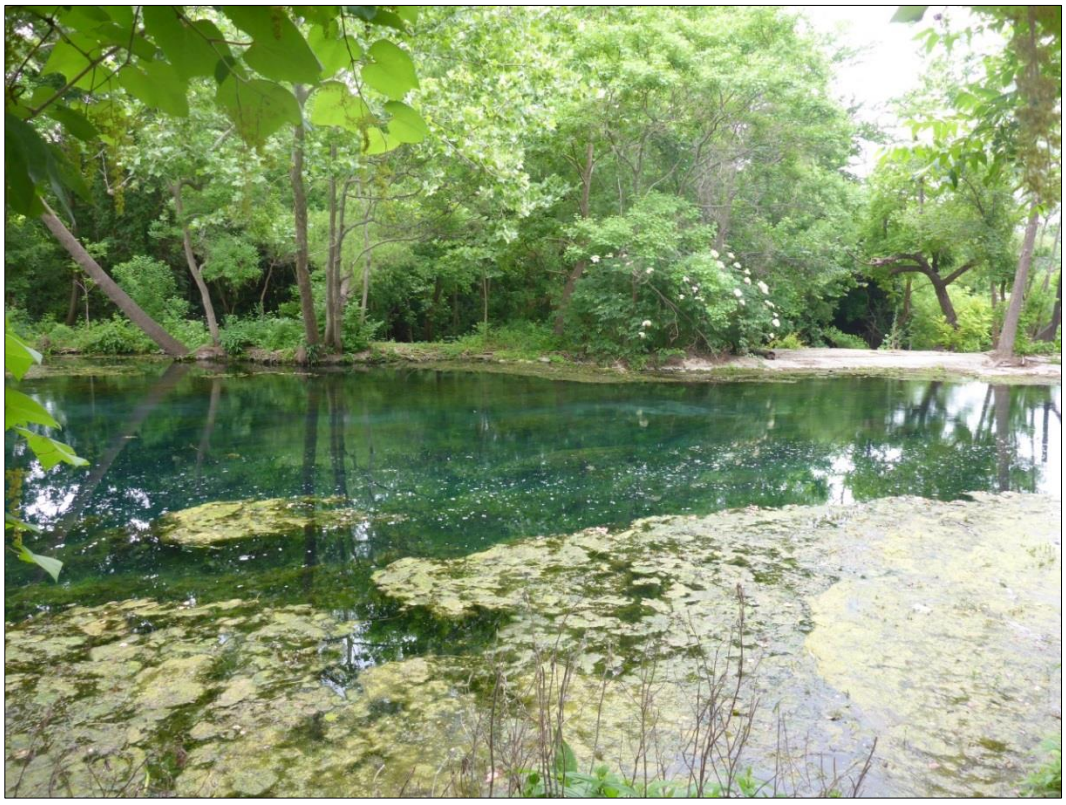

Figure 34. Spring Lake Dam facing South.

Figure 35. Mill Tract Historic Marker

The Spring Lake dam is located approximately 100 yards (91.5 m) north of the southern boundary of the Mill Tract (Spring Lake Abstract of Title, p. 123). It is situated on the southern edge of Spring Lake within the boundaries of State Antiquities Landmark (SAL) 41HY160 and in the vicinity of 41HY37, 41HY147, and 41HY165 (Figure 36). Work has been conducted at these sites for a number of years and has recorded assemblages dating from the Paleoindian and Early Archaic periods continuously to the Late Prehistoric periods and even the Colonial and Historical eras. The Spring Lake Dam was originally built in 1849 by General Edward Burleson to provide power for a grist mill and sawmill. Therefore, from a cultural resource perspective, the structure is more appropriately associated with site 41HY37. Site 41HY37 was first recorded in 1970 by W.L. McClure as a prehistoric site of unknown age consisting of "arrow point fragments, miscellaneous bifacial tools, and worked flint" (McClure 1970). The site location was described to be on the hill behind (west of) the Aquarena Springs Inn (now the Meadows Center for Water and the Environment) and overlooking the golf course to the east. An historic component was added in 1979, when Clark recorded the reconstructed two-room log home of Edward Burleson (Clark 1979). The building was originally constructed in 1848, but had fallen into disrepair and was restored in 1964. The restored cabin was built with the original chimney stones and logs from different structures that dated to the same time period as the original cabin. Clark also noted that the structure had most likely been moved from its original location.

Figure 36. 41HY37 location and extended site boundaries.

In 1983, the Southwest Texas State University archeological field school excavated seven 1 x 1 m units and one 1 x 2 m unit in addition to collecting numerous surface artifacts at 41HY37. Soils were shallow with bedrock encountered between 8 and 40 cm, and most of the more than 700 artifacts were recovered from the surface. Excavations were conducted in areas of noted surface artifact concentrations, which included a large pile of unburned rocks. Collected artifacts included sandstone manos, bifaces, performs, reworked broken performs, scrapers, a Clear Fork gouge, choppers, cores, 682 lithic fragments and 4 diagnostic projectile points dating from the Middle Archaic to the Late Prehistoric period (Garber and Orloff 1984). Site 41HY37 is thought to reflect a number of activities ranging from hunting, hide processing to woodworking and plant processing (Garber and Orloff 1984). Archaeological site 41HY37 was designated a SAL on July 23, 1999 (THC 1999).

In the summer of 2000, Southwest Texas State University conducted an additional field school at 41HY37. The field school was conducted at the request of Dr. Michael Abbott, Special Assistant to the President at Southwest Texas State University, to study the original Edward Burleson Homestead. The objectives of the investigations were to determine if the original site still contained intact archaeological deposits, if the replica constructed in the 1960s was placed on the original site and foundation, and if the information provided by the excavation could be used for the accurate representation and interpretation of the site (Bousman and Nickels 2003). Archival and archaeological investigations indicated that the original location of the Burleson cabin was on the ridge above Spring Lake, most likely the current location of the North Sky Ride building. An oral history in addition to the archaeological investigations indicated the replica structure was not constructed on the original foundations, but the original foundation and chimney were used in its reconstruction (Bousman and Nickels 2003). Recovered historical artifacts indicate that the area investigated was the general location of a mid-nineteenth century residence. In addition to the historical component, four fire-cracked rock features were uncovered. These features were interpreted to represent prehistoric cooking ovens and/or hearths (Bousman and Nickels 2003). A total of 2,265 lithic artifacts were recovered consisting of projectile points, bifaces, unifaces, flakes, and cores. The burned rock features in addition to the recovery of a quantity and variety of stone tools imply that the site was utilized as an open campsite during the Late Archaic and Late Prehistoric period (Bousman and Nickels 2003).

Site 41HY37 was again revisited in 2009, during an intensive archaeological survey for the Spring Lake Preserve Project. This survey revisited the area of the 1983 Southwest Texas State Field School excavations. During the investigations of this area, a small amount of patinated lithic debitage was observed on the surface. Lithic artifacts consisted of small chert flakes or flaked chert cobbles. Additionally, a high amount of debris including plastic, paper, aluminum cans, miscellaneous pieces of metal, glass bottles, and golf balls were present in addition to many distinct piles of rubble, trash, and biomass from Spring Lake. Other recent disturbances include two unimproved roads which have existed since at least since 1983 (Garber and Orloff 1984), and one has been modified for use as the Preserve trail system (Yelacic and Lohse 2010).

Recommendations

Based on its association with the historic Mill Tract, General Edward Burleson, and site 41HY37, it is the opinion of CAS that the dam represents a structure of historical significance. A site revisit form has been completed for site 41HY37 and the site boundaries have been extended to include the Mill Tract and the Spring

Lake Dam on the Texas Sites Atlas (Figure 35). Since 41HY37 is a SAL (designated in 1999), CAS will review both the results of the core sampling and the final stabilization plan and continue to coordinate future undertakings involving the dam with the THC. Because the U.S. Army Corps of engineers (USACE) will likely need to evaluate the potential effects to historic properties and to the waters of the US, CAS will also consult with the USACE on behalf of the University once the final stabilization plan is decided.

SUMMARY

During 2014, CAS conducted eight cultural resource investigations on behalf of the University in accordance with the MOA established between the THC and the University. All investigations were performed under the auspices of Texas Antiquities Permit Number 6775, granted to Amy E. Reid. The purpose of the above-described archaeological investigations were: first, to identify cultural resources that could potentially be impacted by the proposed construction/ development projects; and, second, to make recommendations on identified cultural resources in regards to eligibility for designation as a State Archeological Landmark (SAL).

Archaeological investigations included: an archaeological survey in advance of a new fence at Freeman Ranch for the Forensic Anthropology Research Facility, archaeological investigations and monitoring for the Moore Street Housing construction project, monitoring for ADA upgrades to the ticket kiosk building at Spring Lake, monitoring excavations associated with a new fence installation for a divers yard at Spring Lake, monitoring the demolition of the Clear Springs Apartments, archival research and monitoring for the demolition of the Long and Holland houses, monitoring a Habitat Conservation Plan bank stabilization project, and site form updates and archival research investigations in advance of possible stabilization plans for the Spring Lake Dam.

As a result of archaeological monitoring, site 41HY518, a previously unrecorded historic site, was documented. The boundaries of sites 41HY447 and 41HY37 have been revised to include associated deposits identified during archaeological investigations. No intact, significant cultural deposits were encountered or impacted during the University undertakings of 2014. Accordingly, CAS recommends that no additional investigations are warranted. CAS continues to recommend that the University coordinate all future ground-disturbing work within or near the boundaries of SALs 41HY160 and 41HY161, as well as sites 41HY37 and 41HY447 in order to avoid adverse impacts (Table 6) . If avoidance of intact features and deposits of these sites is not possible, then additional work is recommended to offset the potential loss of information.

Table 6. Summary of sites, projects and recommendations for CAS-TSU 2014 Annual Permit.

Site	Components	SAL Eligibility	Project Name	Recommendations
41HY447	Prehistoric lithic scatter	Ineligible	Freeman Ranch Survey	No further work recommended for present project, continue to coordinate future development.
41HY518	Historic Midden	Undetermined	Moore Street Housing	No further work recommended for present project, continue to coordinate future development.
41HY160	discrete components from Late Prehistoric through Early Archaic, Calf Creek, domestic features, human burial	SAL	ADA Upgrades for Ticket Kiosk at Spring Lake	No further work recommended for present project, continue to coordinate future development.
			Divers Yard Fence at Spring Lake	No further work recommended for present project, continue to coordinate future development.
41HY161	mixed historic and Archaic, late Archaic, late and early Paleoindian, human remains, Pleistocene fauna	SAL	Clear Springs Apartments Demolition	No further work recommended for present project, continue to coordinate future development.
			HCP Bank Stabilization	No further work recommended for present project, continue to coordinate future development.
No sites recorded	Unidentified, unrecorded Historic Site: "Ivey-Moore House"	Undetermined	Long and Holland House Demolitions	No further work recommended for present project. Future work should be preceded by phase I archaeological survey during which the Ivey-Moore house is recorded as a Historic site.
41HY37	Historic Burleson homestead; Late Prehistoric and Late Archaic (Late Archaic: Pedernales and Edgewood points)	SAL	Spring Lake Dam Archival Research	CAS will review both the results of the core sampling and the final stabilization plan and continue to coordinate future undertakings involving the dam with the THC and USACE

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APPENDIX A:
THC NOTIFICATION/CONCURRENCE LETTER FOR MOORE STREET HOUSING PROJECT

TEXAS STATE UNIVERSITY
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RECEIVED
AUG 25 2014
Texas Historical Commission

August 21, 2014

Ms. Sarah K. Birtchet
Texas Historical Commission
Archeology Division
PO Box 12276
Austin, Texas 78711-2276

NO HISTORIC PROPERTIES AFFECTED
PROJECT MAY PROCEED
by _____
for Mark Wolfe
State Historic Preservation Officer
Date 9/23/14

RE: SHPO Track # 201411665 Moore Street Housing Construction Project

Dear Ms. Birtchet:

This notification is sent as required in the Memorandum of Agreement (MOA) signed and enacted between Texas State University-San Marcos (TxState) and the Texas Historical Commission (THC). TxState is proposing to begin the construction of a new housing facility near Moore and Speck Streets in San Marcos, Texas (Figure 1). Construction will result in a six-story dormitory building with a multi-story commons area in the center of the building and a basement level underneath (Figure 2). Additionally, San Saba Hall, Canyon Hall and West Maintenance Buildings are to be demolished.

As requested for review, please find enclosed a map notating the locations of the San Saba Hall, Canyon Hall and West Maintenance buildings (Figure 3) as well as High-quality color photographs of the project area and buildings proposed for demolition (Figures 4-8).

For the purposes of evaluating historic resources of Texas State, Volz and Associates conducted a survey of 50 buildings located within the central campus of the University that were constructed in or prior to 1965.These buildings were assigned a high, medium or low priority for preservation based upon criteria including historical designation, existing architectural features, significant notes about the building's history, and information provided by the University. Preliminary data was

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provided by Lila Knight and the students of the Fall 2004 Historic Preservation class, and Nancy Nusbaum, Assistant Vice President for Finance and Support Services with Texas State.
Building upon the university-supplied survey, additional information was collected by the Volz team regarding site conditions and building materials. This collective information is intended to serve as an inventory of historic resource assets for the University. According to the survey, the oldest and most important buildings were constructed in the early stages of the school's development. They are ranked as the highest priority for preservation. These buildings are typically sited within the historic campus and have the ornamentation typical of buildings of their period. Architect Harvey P. Smith had a profoundly positive impact on the architectural character of the University during a post-war growth period of 1946-1956. Therefore, the high priority designation also includes intact buildings that Smith designed or remodeled.
The high priority designation also includes buildings that have distinctive modern architectural character that is clearly associated with Texas State.

Please review the following descriptions and historic statuses generated from the Volz inventory, and consider CAS's recommendations for the buildings proposed for demolition:

Building Name: San Saba Hall **Building Number:** SSH 744
Address: 801 Moore
Construction Year: 1963
Stylistic Influence: International
Builder/Architect: Unknown

Character-Defining Features
Roof: Flat built-up roof.

Exterior Walls: Pre-cast concrete with exposed aggregate beams, brick spandrels.

Exterior Detailing: Metal railings, brise-soliel block on upper levels.

Windows: Aluminum.

Doors: Aluminum storefront.

Site Features: Exterior circulation, breezeway to Canyon Hall. Sloped site with large oak trees.

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Preservation Priority: Low

Preservation Recommendations: Although this building is over 50 years old, it lacks notable character-defining features and does not have a strong link to overarching architectural style symbolic of the Texas State University campus. CAS recommends the proposed demolition to proceed.

Building Name: Canyon Hall **Building Number:** CAN-743
Address: 803 Moore
Construction Year: 1952
Stylistic Influence: Modern
Builder/Architect: Unknown

Character-Defining Features
Roof: Flat built-up roof.

Exterior Walls: Shell limestone, tan brick.

Exterior Detailing: Pre-cast concrete breezeway in front, cast stone surround at entrance.

Windows: Metal casement two-over-two double-hung windows with continuous cast stone banding at headers and sills.

Doors: Original wood paneled doors.

Site Features: Handicapped ramp to entrance.

Preservation Priority: Medium

Preservation Recommendations: Due to a lack of notable character-defining features, and because this building does not have a strong link to the overarching architectural style symbolic of the Texas State University campus, CAS recommends the proposed demolition to proceed.

Building Name: West Maintenance Building **Building Number:** 742
Address: Blanco Road
Construction Year: 1965
Stylistic Influence: Industrial
Builder/Architect: Unknown

Character-Defining Features

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Roof: Flat, built-up.

Exterior Walls: C.M.U. frame with brick infill.

Exterior Detailing: Porch with steel columns.

Windows: Metal awning.

Doors: Original metal.

Preservation Priority: Low

Preservation Recommendations: This building was constructed less than 50 years ago. CAS recommends the proposed demolition to proceed.

In addition to the recommendations above, the proposed demolition of the San Saba Hall, Canyon Hall, and West Maintenance buildings is recommended to proceed based on the unmet Criteria for Evaluating Historic Structures (Section 26.7). However, based on the proximity of the project area to several known historic sites, as well as the Ivey-Moore House, CAS has determined that the project has a moderate potential to impact cultural resources. Additionally, no survey-level investigations have been conducted on the project area. Therefore, CAS proposes to 1) conduct archaeological investigations in advance of the proposed construction that will consist of backhoe trench excavations, and 2) conduct archaeological monitoring of the demolition activities. The maximum depth of impact required for the proposed construction is approximately 7.6 meters (25 ft) below surface grade. A fairly thick layer of fill material exists below the current paving that extends to depths of 2-4 meters below surface. Backhoe trenches will be excavated to target the sediments under the fill layer and will terminate at sterile soil, or limestone bedrock (approximately 7-15 meters below surface). A total of three (3) backhoe trenches will be excavated measuring 12-15 feet in length, and will be excavated in approximately 30 cm (12-inch) levels for vertical control. Sediments from each level will be placed separately, and will be sampled by passing five (5) five-gallon buckets of sediment through ¼-inch screen in order to recover artifacts that may be present. Sediments from each level will also be visually screened for artifact content.

All archaeological monitoring and backhoe trench investigations will be conducted by a professional archaeologist under CAS's 2014 Annual Permit No. 6775. Results of the investigations

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will be reported upon in the 2014 Annual Report to Texas State University. In the event that significant archaeological deposits are encountered, your office will be contacted immediately so that we may consult on appropriate courses of action.

Thank you for helping Texas State University in protecting its important cultural resources, and please do not hesitate to contact me if you have any questions concerning this correspondence.

Sincerely,

Amy E. Reid
Principal Investigator
Center for Archaeological Studies

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