Cultural Resources Monitoring for Brackenridge Park River Wall Replacement Project, San Antonio, Bexar County, Texas

by
Stephen Smith

Principal Investigator
Paul Shawn Marceaux

Texas Antiquities Permit No. 7276

Prepared for:
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San Antonio, Texas 78233

Prepared by:
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The University of Texas at San Antonio
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Technical Report, No. 66

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Abstract:

From January through May 2016, The University of Texas at San Antonio (UTSA) Center for Archaeological Research (CAR) conducted archaeological monitoring of removal and repair of 30.5 m (100 ft.) of the historic river wall along a section of the San Antonio River within Brackenridge Park. The wall is a contributing resource to Brackenridge Park's listing on the National Register of Historic Places (NRHP) and its designation as a State Antiquities Landmark (SAL). The CAR's archaeological monitoring was done under contract with Adams Environmental, Inc. Project Archaeologist Stephen Smith monitored contractor's excavations at the site. Paul Shawn Marceaux served as Principal Investigator.

The CAR did not identify any archaeological material during the course of the construction monitoring, and no more ground-disturbances are planned. Based on the findings, CAR recommends to the project sponsor and Archeology Division of the Texas Historical Commission (THC) no further archaeological monitoring or investigation of the project area is necessary at this time. Though no further work is recommended at this time, it is known that Brackenridge Park contains important archaeological resources; therefore, archaeological monitoring and/or investigation should precede any future ground-disturbing activities in the area.

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Acknowledgements:

Project Archaeologist Stephen Smith of the Center for Archaeological Research at The University of Texas at San Antonio conducted the archaeological monitoring discussed in this report. Dr. Paul Shawn Marceaux served as Principal Investigator. Katherine Smyth prepared the figures, and Kelly Harris edited the manuscript. A special thanks to City of San Antonio City Archaeologist Kay Hindes, Mark Denton of the Texas Historical Commission, and Adams Environmental, Inc.

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Chapter 1: Introduction and Project Summary

From January through May 2016, The University of Texas at San Antonio (UTSA) Center for Archaeological Research (CAR), in response to a request from Adams Environmental, Inc. (AEI) on behalf of the City of San Antonio monitored the removal and repair of a 30.5-m (100-ft.) section of a historic river wall along the San Antonio River in Brackenridge Park. Because of the park's listing on the National Register of Historic Places (NRHP), its status as a State Antiquities Landmark (SAL), and its public ownership, CAR performed the work under the Antiquities Code of Texas (Title 9, Chapter 191 Texas Natural Resource Code) and the regulations and requirements of the Archeology Division of the Texas Historical Commission (THC). CAR performed archaeological work under Texas Antiquities Permit No. 7276. Raymond Mauldin was the initial Principal Investigator, Dr. Paul Shawn Marceaux took over as Principal Investigator in May 2015, and Stephen Smith served as Project Archaeologist.

Area of Potential Effect (APE) and Report Overview

The wall along the San Antonio River in Brackenridge Park is a contributing element to the park's listing on the NRHP and its designation as a SAL. Figure 1-1 shows the project area on the combined San Antonio East and San Antonio West USGS 7.5-minute quadrangle map. [redacted]

This technical report comprises six chapters. The next chapter introduces the natural setting and cultural history of the region, and Chapter 3 introduces the history of the region and previous archaeology in and around the APE. Chapter 4 describes field and laboratory methods. Chapter 5 presents the results of archaeological monitoring, and Chapter 6 provides a summary and recommendations.

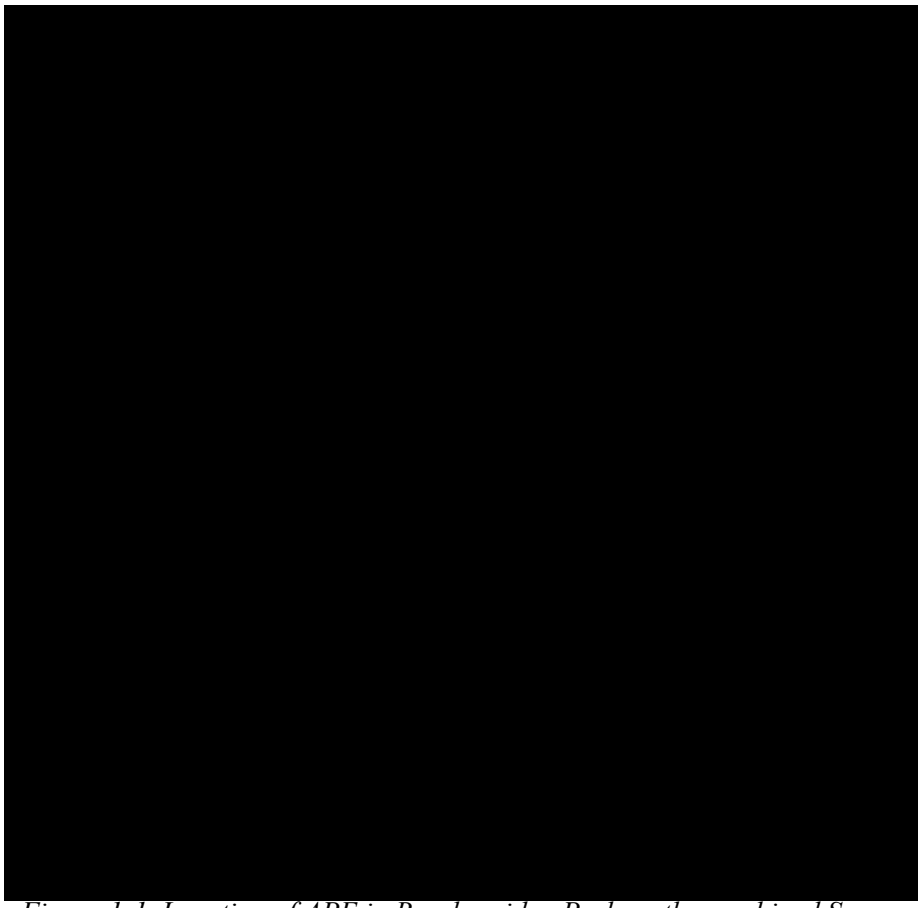

Figure 1-1. Location of APE in Brackenridge Park on the combined San Antonio East and San Antonio West USGS 7.5-minute quadrangle map.

Figure 1-2. Aerial photograph depicting the APE and historic wall.

Chapter 2: Environment Setting and Cultural History

Environmental Setting

The project area is in a region of subtropical humid climate with cool winters and hot summers (Norwine 1995). Average annual rainfall measures 73.93 cm (29.11 in.; National Oceanic and Atmospheric Administration 2013) and temperatures range from 37.9°F in January to 95°F in July (Bomar 1995). Three major geographic regions meet in Bexar County. These are the Edwards Plateau, the Blackland Prairie, and the South Texas Brush Country (Nickels et al. 1997). Bexar County is at the southeastern edge of the Edward's Plateau on the Balcones Escarpment. This escarpment marks the break between two major physiographic divisions in North America: the Great Plains Province on the west and the Coastal Plains to the east (Abbott and Woodruff 1986). It is a geological fault zone several miles wide extending from Del Rio to the Red River and dividing the Edwards Plateau from the southern Coastal Plains (Collins and Laubach 1990:2).

The Balcones Escarpment plays a major role in weather production in Central Texas (Abbott and Woodruff 1986). Although a relief of only a few hundred feet, the escarpment is the first topographic break inland from the Gulf of Mexico, making its orographic influence on the unstable, moisture saturated Gulf air more pronounced. In fact, high magnitude flooding occurs along the Balcones Escarpment more than any other place in the United States, and precipitation and discharge rates are close to the maximum in the world (Caran and Baker 1986). One of the most productive carbonate aquifers in the United States (Stein and Ozuna 1995), the Edwards Aquifer is a cavernous zone of water-bearing permeable limestone 91-213 m (298.56-698.82 ft.) thick (Menard 1995). Composed of Cretaceous-era limestone, the Edwards Aquifer dips coastward, and its southern and eastern edge mark the transition line from freshwater to saline.

Cultural History

The following section of the report offers a cursory account of the prehistoric and historic cultural history of South and Central Texas. Researchers discuss the prehistory of South and Central Texas in terms of three broad periods, the Paleoindian, Archaic, and Late Prehistoric. Projectile point classifications have driven distinctions between these prehistoric periods, which have both temporal (Bousman et al. 2004) and cultural (Collins 2004) features. The prehistoric period ends and the historic period begins with the first arrival of Europeans into the area. Below, this report summarizes several important post-contact periods.

Prehistoric History

Paleoindian Period (11,500-9000 BP)

This period dates to the end of the last Ice Age during the Pleistocene and beginnings of the Holocene. A period of great climate change, in which humans altered subsistence practices. In the early part of the period, focus was on large "megafauna," but as these resources became extinct, diet shifted to bison, deer, and plants (Collins 2004).

Archaic Period (9000-1200 BP)

Compared to the Paleoindian Period, the 7,800-year Archaic period reflected increased population, an intensification of hunting and gathering, lower mobility, and an associated focus on the use of local resources. In Central Texas, a variety of technological changes, some of which were related to subsistence and a shifting resource structure, appeared during this period.

In the Early Archaic, spanning from 9000 through 6800 BP, there was a shift in subsistence from large game hunting to plant foods and medium and small species of game (Collins 2004). New projectile point types include Early Split Stem/Early Triangular, Gower, Martindale, and Uvalde. Specialized, task-specific tools, including Clear Fork gouges and Guadalupe bifaces, also appear during this time.

The Middle Archaic spans from 6800 to 4200 BP. Diagnostic projectile points from this period include Andice, Bell, Calf Creek, Nolan, Taylor, and Travis. Some disagreement exists over the presence and/or absence of bison during this time sub-period (Collins 2004; Dillehay 1974; Munoz and Mauldin 2011). Many researchers agree that human populations in the region increased during the Middle Archaic (Story 1985; Weir 1976)

This last sub-period spans 4200 to 1200 BP. Dart point diagnostics of the Late Archaic are triangular points with corner notches that include Ensor and Ellis (Turner and Hester 1993:114-122). Other Late Archaic dart point types are Bulverde, Castroville, Marcos, Marshall, and Pedernales (Collins 2004).

Late Prehistoric Period (1200-350 BP)

Archaeologist divide this period into two phases: Austin (ca. 1200 to ca. 700 BP) and Toyah (ca. 700 to 350 BP). Technological change distinguishes the phases. In the Austin phase, bow and arrows replaced a dart and spear technology. During the Toyah phase, bone tempered ceramics appeared.

Historic Period

The Historic period is divided into the Proto-historic (AD 1528-1700), the Colonial/Mission period (1700-1821), the Mexican period (1821-1836), and the Republic of Texas/Early State period (1836-1900). Readers interested in a more thorough review of this period should refer to McKenzie et al. (2016).

Proto-historic (1528-1700)

The Proto-historic period begins with the Spanish arrival in 1528 and ends when they established European settlements around the AD 1700 (Chipman and Joseph 2010; Weddle 1968). Archaeological evidence of Native American and European contact is scant (Thoms and Ahr 1995). Therefore, most of what is known about the period comes from European accounts.

The Colonial/Mission Period (1700-1821)

This period began when the Spanish founded permanent missions in south and central Texas. In San Antonio they founded the *Villa de Bexar* and Mission Valero in 1718, and moved three additional missions to San Antonio from east Texas in 1731. The Spanish solidified their presence in Central Texas during the next few years as they responded to the perceived threat of French encroachment. However, missions in San Antonio were on the decline by the close of the 1700s. Falling population totals and several epidemics, including small pox and measles, hastened this decline (Ewers 1973). A decree issued in 1793 called for secularization of the San Antonio missions, and the Spanish abandoned several of their missions (Cox 1997, 2005), leading to secularization of missions by 1824 (Carlson 1994; Cox 1997). Tensions at the close of the eighteenth century between Spain and its colonies in Texas and Mexico increased, and in 1810, several groups rebelled against Spanish control. In time, the rebels succeeded, and in 1821, Mexico gained its independence bringing an end to Spanish Colonial rule (Henderson 2009).

The Mexican Period (1821-1835)

In 1821, Texas was underpopulated and in economic chaos. To remedy this situation, Mexico adopted laws and constitutional changes that allowed heads of households to claim land in Mexico. A significant number of settlers moved to Mexico from the United States (Cox 1997), but tensions between settlers and the nation of Mexico soon erupted. When Santa Anna took control of the Mexican government in 1834, he dissolved the legislature and rescinded the laws and constitution and dispatched troops under Martin Perfecto de Cos to quell the unrest. Insurrection brought Cos to San Antonio, and he occupied the town in October of 1835. The insurrectionists defeated Cos and forced his surrender and withdrawal of his forces to the south (Cox 1997; Marley 2014).

Santa Anna recaptured San Antonio in the winter of 1836 after a short siege at Mission Valero. Following the victory, Santa Anna dispatched forces to crush the remaining resistance. The rebels defeated Santa Anna in late April at the battle of San Jacinto ending Mexican rule of Texas (Cox 1997; Davis 2004).

The Republic of Texas and Early Texas State (1836-1900)

The rebels established the Republic of Texas March 1836. Boundary disputes continued with Mexico until June 1843 when the parties reached an armistice (Cox 1997). The Republic offered cheap land to encourage immigration from the United States and Europe. In 1845, the United States Congress and the Texas Republic agreed to annexation terms, and Texas was admitted as the 28th state on December 29, 1845 (Neu 2013; Texas State Library and Archives Commission 2016). Texas statehood led to war between the United States and Mexico in May 1846. The Treaty of Guadalupe-Hidalgo, signed in February of 1848, ended the dispute and established the Rio Grande as the southern boundary between the United States and Mexico.

Following the war, Texas experienced rapid population growth. People came from the southern states and from Europe with German, Czech, and Polish immigrants arriving in large numbers. By 1860, population totals exceeded 600,000, which was a significant increase from 1847 when the population was 142,000 (Campbell 2003). Copious farmland spurred much of this population growth with cotton, often supported by slave labor, being the dominant crop in East Texas. A reported 30,000 black slaves were present in the state by 1847 (Campbell 1989; Cox 1997), and this number increased to over 180,000 by 1860 (Campbell 1989, 2003; Meinig 1969). Siding with the Confederacy, Texas seceded from the United States in February 1861. The following month, Texas joined the Confederate States of America. Few major battles occurred within the state (Campbell 2003). Following the defeat of the Confederacy, the United States readmitted Texas to the Union 1870.

Throughout the late 1800s, the state's population increased. In the early 1870s, the population surpassed one million, and by the turn of the century, the number had grown to over three million (Meinig 1969). Relative to southern states, Texas had suffered little damage during the Civil War, and it possessed cheap land. Farming in eastern Texas and cattle ranching in the south, west, and the plains/panhandle areas were the major economic activities during this period (Campbell 2003; Meinig 1969; Sonnichsen 1950). Railroads expanded into Texas, and by 1900, an extensive network of rail lines crisscrossed the state linking it to the rest of the United States, resulting in increased commercial development throughout the twentieth century (Meinig 1969; Reed 1941).

Chapter 3: History and Previous Archaeology

Historical Background

A detailed history of Brackenridge Park is available in Maria Watson Pfeiffer's *History of Brackenridge Park* (2011) and the National Register Nomination for the park (Watson Pfeiffer et al. 2011). These sources are available online at the Brackenridge Park Conservancy website (http://www.brackenridgepark.org).

In the eighteenth century, the San Antonio River and San Pedro Creek headwaters attracted passing Spanish *entradas* (Chipman 1992; Hoffman 1935; Tous 1930a, 1930b). The Espinosa-Olivares-Aguirre *entrada* discovered and named the San Antonio Springs and San Pedro Creek in 1709 (Tous 1930a). The Ramon *entrada* passed through the San Antonio River Valley in 1716 headed to East Texas (Tous 1930b). A third *entrada* reached the San Pedro Springs and established Mission San Antonio de Valero, the Presidio San Antonio de Bexar, and Villa de Bexar, and this entrada started constructing infrastructure including Spanish *acequias* (irrigation ditches) to supply water to these settlements.

The headwater's remained rural until after the United States annexed Texas in 1845. City land sales resulted in most of today's Brackenridge Park having private owners by 1852 (Watson Pfeiffer 2011). However, the City retained land, for example, the limestone bluffs west of the river, which the City used for a rock quarry, stayed under city-ownership.

San Antonio gained the Confederate States of America (CSA) tannery complex from the Federal government after the Civil War. They subdivided the tannery lots and sold them to private investors. The City sold several lots to George W. Brackenridge (Watson Pfeiffer 2011). Brackenridge had moved to San Antonio in 1865 and purchased a residence at the headwaters of the San Antonio River (Sibley 1973). Over the next 20 years, Brackenridge acquired more than 1,600 acres of land along the San Antonio River and Olmos Creek.

On April 3, 1877, the City Council approved construction of a municipal water system (Watson Pfeiffer 2011). A raceway and pump house were constructed near the tannery and Upper Labor *Acequia*. On July 5, 1878, the water works plant came into operation. Brackenridge got controlling interest of the San Antonio Water Works by 1883 (Sibley 1973).

Brackenridge's purchases of large blocks of riverfront land allowed for the rapid expansion of his water works, and in 1885, he added a second pump house (Watson Pfeiffer 2011:16). Numerous other businesses operated in today's Brackenridge Park from 1875-1899, including the Alamo and Roman Cement Works, the Ilka Nursery, and the San Antonio Jockey Club (Watson Pfeiffer 2011:17-19).

Brackenridge sold the headwater property to the Sisters of Charity of the Incarnate Word in May 31, 1897, and two years later, he donated 199 acres of riverfront land to the City of San Antonio for use as a public park (Watson Pfeiffer 2011:19). A clause in Brackenridge's bequest had the property revert to the State of Texas to benefit The University of Texas if anyone sold or consumed alcohol on the premises (Watson Pfeiffer 2011:20). Ludwig Mahnke, the Chairman of the Parks and Plazas Committee, developed the park in 1900. In 1914, City Council approved creation of a zoological garden and natural history museum on 12 acres of the tannery property making use of the rock quarry for large animal exhibits. The outline of the present park took shape through the Depression-era, post-World War II renovations of the 1960s, and it continues through today's on-going park renovations ever acting as an "evolutionary landscape" preserving the "public needs and political will" of its time (Watson Pfeiffer 2011:1).

A Depression-era renovation, the Works Projects Administration (WPA) constructed the San Antonio River retention walls. Representative Maury Maverick acquired significant local funding for the project during his tenure in Congress from 1935 to 1938. An estimated $90,000 was spent for improvements to Brackenridge Park, Koehler Parks, and the zoo (Watson Pfeiffer 2011:43). The river retention walls were to prevent river erosion that threatened trees along the San Antonio River.

Previous Archaeology

This following is from McKenzie and Smith's (2016) discussion of previous archaeological work performed in the areas around Brackenridge Park. This review of previous excavations focuses only on historic archaeological resources in the area. Table 3-1 lists the resources recorded within Brackenridge Park, the lower Olmos Basin, or within a kilometer of the APE (Figure 3-1).

Table 3-1. Previously Recorded Historic Archaeological Sites in the Area

Trinomial	Site Name or Description	Date Recorded	Area	Designation, Eligibility Status, Notes*
41BX8	Acequia Madre de Valero (Alamo Madre, Alamo Ditch)	1966	[redacted]	RTHL
41BX170	Lime Kiln Site	1971	[redacted]	Unknown
41BX171	Historic late nineteenth to early twentieth century dump	1971	[redacted]	Unknown
41BX283	Historic quarry site	1975	[redacted]	NRHP (site no longer extant)

Trinomial	Site Name or Description	Date Recorded	Area	Designation, Eligibility Status, Notes*
41BX284	Historic "Mill" site	1975	[redacted]	NRHP
41BX285	Historic foundations and dump site	1975	[redacted]	NRHP (site no longer extant)
41BX287	Historic dump	1975	[redacted]	SAL, NRHP
41BX289	Fernridge aka G. W. Brackenridge Villa	1975	[redacted]	NRHP
41BX1273	Presa de Labor de Arriba (Upper Labor Dam)	1999	[redacted]	Potentially SAL
n/a	Historic Site (Upper Labor Acequia)	1996	[redacted]	Potentially SAL
41BX1425	Multicomponent prehistoric and historic site	2000	[redacted]	Unknown
41BX1754	Miraflores multicomponent prehistoric and historic site	2008	[redacted]	SAL
41BX1798	Multicomponent prehistoric and historic waterworks site	2009	[redacted]	Unknown
41BX1892	Multi-component historic quarry site	2013	[redacted]	Potentially SAL
41BX2007	Multicomponent prehistoric and historic site	2014	[redacted]	Unknown
41BX2056	Presa de Valero (Alamo Madre Dam)	2014	[redacted]	Potentially SAL

*State Antiquities Landmark (SAL); National Register of Historic Places (NRHP); Registered Texas Historic Landmark (RTHL)

Brackenridge Park

A search of the THC Archeological Sites Atlas identified eight recorded sites within a half mile of the APE and inside the boundary of Brackenridge Park. Six sites are multi-component with both historic and prehistoric materials, and two sites are solely historic. No one performed archaeological work within the park prior to the 1976 CAR survey (Katz and Fox 1979). CAR conducted this initial survey work for the City of San Antonio prefatory to their developing a Brackenridge Park Master Plan. The 1976 survey identified 27 historic buildings or features within the park (Katz and Fox 1979:12-22). Information regarding these extant historic structures and resources can be found in *Brackenridge Park: A History* and the Brackenridge Park National Register Nomination (Watson Pfieffer 2011; Watson Pfieffer et al. 2011). Nineteen years elapsed between Katz and Fox's archaeological and historical assessment of Brackenridge Park and any archaeological investigations within the park boundaries proper. However, since 1995 investigators have documented important Spanish Colonial sites, including the dams for the *Acequia Madre de Valero* (Alamo Madre or Alamo Ditch) and *Acequia de Labores de Arriba* (Upper Labor).

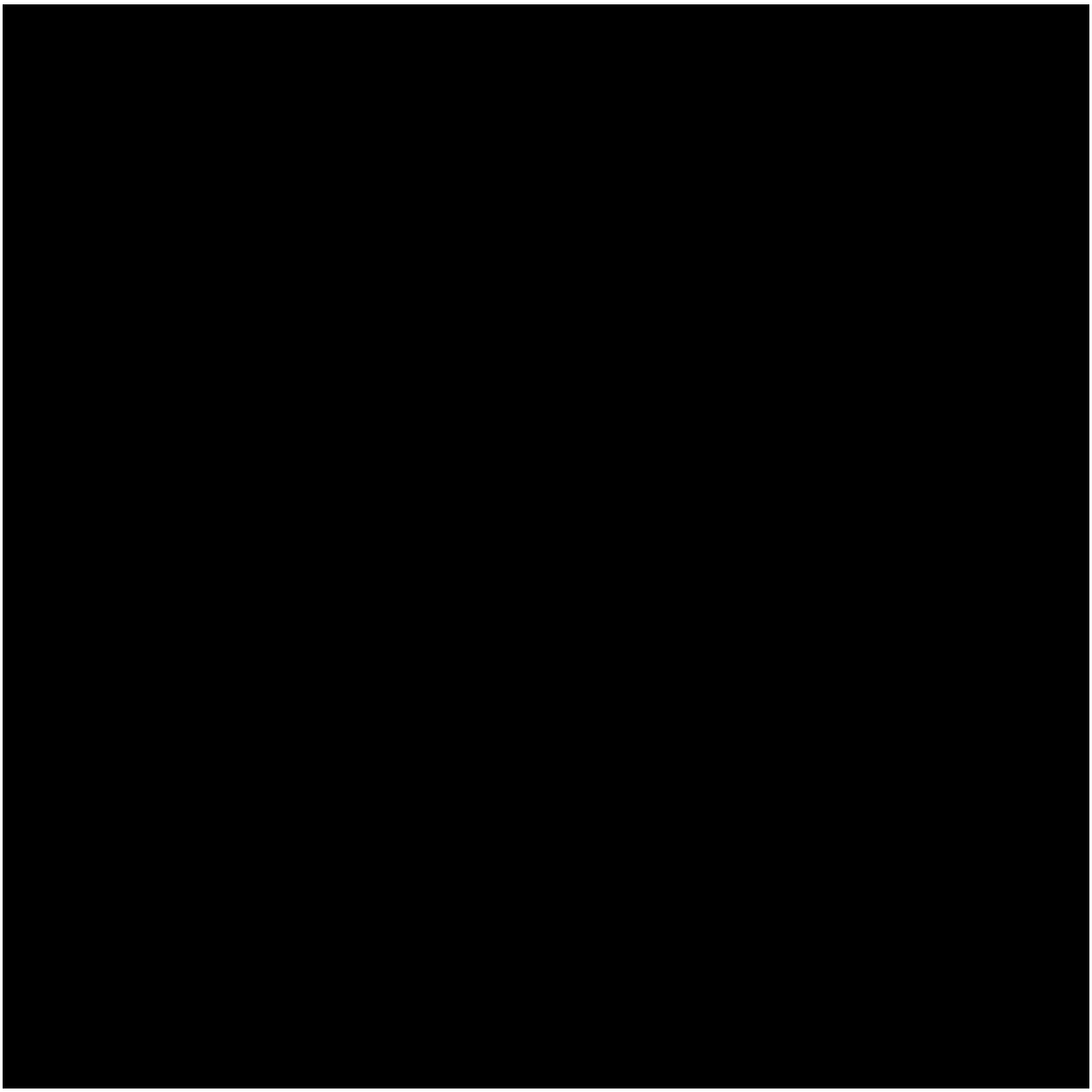

Figure 3-1. Historic archaeological sites within 1 km (0.6 mi.) of the APE.

Acequia Madre de Valero or Alamo Madre (41BX8)

Site 41BX8 is the historic Spanish Colonial *Acequia Madre de Valero*, also referred to as the Alamo *Madre* or Alamo Ditch. This irrigation structure began at the *Presa de Valero* and then continued south to the east of the San Antonio River. Numerous excavations have occurred along the route of the *acequia*, which returned to the San Antonio River in the King William Neighborhood. Several excavations focused on the *Acequia Madre* within Brackenridge Park. Miller-Ulrich (2011) documented two instances of the *acequia* near the presumed site of the head gate. These excavations showed the *acequia* to be earthen-lined rather

than stone-lined. The CAR documented the Alamo Ditch at the 10th Street Substation site in downtown San Antonio for the City Public Service Company in 1984. The *acequia* CAR uncovered was 4.6 m (15 ft.) in cross section and 1.5 m (5 ft.) in depth. The channel was unlined in this section (Cox 1985:3).

Presa de Valero or Alamo Madre Dam (41BX2056)

CAR investigated a layer of stones 100 cm (39.4 in.) below the surface on the east bank of the San Antonio River [redacted] in 2011. The trench refilled with water before CAR could document it. Therefore, documentation of the stones was limited to hand probing. Based on the size of feature (7 m; 23 ft.) and apparent alignment with historic maps, it was concluded that the stones were remnants of the *Madre* Dam (Miller-Ulrich 2011:56). The dam has not been given a trinomial.

Presa de Labores de Arriba or Upper Labor Dam (41BX1273)

Torrential rains washed out a culvert [redacted] in 1995 [redacted]. The City contracted with CAR to investigate and document the structure in September of 1996. CAR's excavations confirmed the storm had exposed the remains of the *Presa de Labores de Arriba* (41BX1273), which comprised a rough limestone block Spanish Colonial component topped by a later dressed-stone portion that was set at a different angle from the earlier Spanish Colonial stonework (Cox et al. 1999:12). Cox only documented the northern terminus and the first 6.5 m (21.3 ft.) of the northern portion of the dam. No one conducted further work at the site until CAR's 2013 investigations.

Cox traced courses of the many Spanish *acequias* in San Antonio (Cox 2005). The *Acequia de Labores de Arriba* route is well documented. During the 1930s, WPA workers exposed sections of the *acequia* lined with stone near the dam and head gate. [redacted]. Investigators have documented portions of the *Acequia de Labores de Arriba* [redacted] In the past 25 years, numerous investigations of the *acequia* and related structures have taken place (Cox et al. 1999; Fox and Cox 1988; Shafer and Hester 2010, 2012).

In 1988, CAR encountered part of the *acequia* during monitoring for drainage construction [redacted] Cox observed a trace of the *acequia* [redacted] described as "a broad sloping ditch (seen in profile)…dropped to a depth of approximately five feet [1.5 m] and a width of about 20 feet [6.1 m]" (Fox and Cox 1988:5).

Abasolo Archaeological Consultants documented additional portions of the *Acequia de Labores de Arriba* in 2010 and 2012. In 2010, Abasolo monitored sediment and fill removed from a 131.1-m (430-ft.) section of the *acequia* [redacted]. They concluded that the stone lining dates to the WPA era and the ditch was last cleaned-out in the late 1960s or early 1970s (Shafer and Hester 2010:11). Abasolo recovered no Spanish Colonial artifacts and discovered no definable trace of the original channel, which they believed was obliterated during construction of the stone walls and the periodic clean-out of the channel. In 2012, Abasolo monitored and documented a *desague* of the main *acequia* channel on the west side of Allison Park. Cox (2005:5-6) defines *desagues* as "…discharge channels…required to control flooding and excess flow." Abasolo monitored fill removal from within the *desague* and from the stone-lined walls and brick-lined floors of the channel prior to being stabilized (Shafer and Hester 2012). They located no Spanish Colonial period artifacts.

41BX1425

SWCA recorded 41BX1425 as a multi-component historic and prehistoric site 2001. The site includes part of Katz and Fox's Collecting Locality 10. [redacted] SWCA tested the site in 2002 and described it ashttps://tshaonline.org/handbook/online/articles/fwo28 "generally low-density and dispersed prehistoric materials [that] have a Transitional Archaic component…draped by scattered historic and modern artifacts" (Houk and Miller 2002:53). They concluded that most deposits were inverted fill or spoils from adjacent drainages/canals (Houk and Miller 2002:60).

41BX170

While Katz and Fox's Figure 1 (1979:4) illustrates the 41BX170 at the time, recordation of the site did not finish until 1994. Katz and Fox identified the site as historic foundations, evidence of a lime kiln, and assorted nineteenth-century artifacts. [redacted] No one has performed any other work at the site.

41BX1754 - [redacted] Site

Site 41BX1754 is a multicomponent (historic and prehistoric) site. When CAR recorded the site in 2008, they recommended avoidance or investigation of prehistoric materials in the northwest portion of the project area and subsurface work impacting historic features be monitored (Ulrich 2008). Subsequent investigations by CAR in 2009 documented that runoff had transported prehistoric materials from their primary context up-stream and redeposited them downstream as alluvial fill. CAR recommended no further work for the site.

41BX1798

CAR recorded site 41BX1798, a multicomponent (historic and prehistoric) site with a large prehistoric component, in 2008 (Tomka and Dowling 2009). The historic component of the site consists of a water control feature or relief dam [redacted] (THC Site Atlas 2016). CAR completed data recovery at the site, including seven 1-x-1 m units and six backhoe trenches.

41BX1892

STARS, LLC recorded 41BX1892 in an unpublished report on work at the old City Animal Control Facility [redacted] (personal communication with Herbert G. Uecker July 2014). The site is the quarry face with tool marks found [redacted]. The site dates from Spanish Colonial times through the late nineteenth century.

Olmos Basin

Five previously recorded historic archaeological sites were identified within the lower Olmos Basin and outside the boundary of Brackenridge Park during the THC Archeological Sites Atlas search. These sites contribute to the "Source of the River Archaeological District" and its enrollment on the National Register of Historic Places in 1978. Sites are discussed in the order of their recordation.

41BX283

In 1975, CAR conducted the first survey of the Olmos Basin. The property belonged to the Sisters of Charity of the Incarnate Word (Fox 1975). [redacted]. Property of the Sisters of Charity of the Incarnate Word included 62.3 ha (154 acres) of the University of the Incarnate Word campus. Fox's initial survey work on the Incarnate Word property identified five historic sites within the Olmos Basin. Fox recorded this historic quarry site in 1975 and noted that old maps and aerials suggest it was the last quarry worked in the vicinity. Early maps of the area display no quarry in 1890, but a 1938 aerial view makes the quarry look to have ceased operation only a short time before (Fox 1975:4). Besides recording the site, no further archaeological work occurred there. The University of the Incarnate Word erected apartment-style housing removing all trace of the former quarry.

41BX284

An Incarnate Word Field School investigated the ruins that comprised broken walls and a foundation built over [redacted] in 1978 (Stothert 1989:64). The foundation's

position led to its being interpreted as a mill, but other sources identified the structure as a guardhouse or part of the Confederate Tannery (Fox 1975:4-5; Kemp 2008:1; Stothert 1989:64). Present archival research identified the site as Alsbury's Mill constructed by Hanson Alsbury and Francois Marchant in 1853 (Bexar County Deed Records M1:191). Corroborative evidence comes from an advertisement found in the 1858 edition of the *San Antonio Herald*. This advertisement labels the structure as a corn and grist mill in the Olmos Basin (Fox 1979:5; Stothert 1989:64). Excavation in 1978 failed to establish the site's function, but it did produced drawings of the foundations and mid-to-late nineteenth artifacts. The Headwaters Sanctuary area protects the site from encroachment or disturbance (Kemp 2008).

41BX285

Fox (1975:5) identified this as limestone foundation walls projecting from a trash dump. CAR surveyed for a proposed dormitory in 2007 and found the site no longer exists (Kemp 2008:1).

41BX287

This site comprised mid-to-late nineteenth century ceramics, glass, and brick [redacted] (Fox 1975:7). Once part of a cluster of prehistoric sites (41BX24), Fox noted only a historic component to 41BX287. Nothing structural remains and below surface testing would be required to determine whether a prehistoric component exists.

41BX289

This site is the George W. Brackenridge Villa referred to as Fernridge. J.R. Sweet owned the property before Brackenridge, and he constructed the first residence there in 1852 (Fox 1975:4). Brackenridge purchased the property and home in 1869 and gave the place its name (Sibley 1973:91; Watson Pfeiffer 2011:13). Fernridge is two houses—the original single-story Sweet home of 1852 and the subsequent three-story Brackenridge home built in 1886—joined by a Tudor-styled breezeway (Stothert 1989:69). Brackenridge deeded the building and grounds to the Sisters of Charity of the Incarnate Word in 1897. The Sisters maintain the structure as a convent and continue to hold title while using the site as a museum. No one has performed formal archaeological work at 41BX289.

Additional Sites within 1 Kilometer of the APE

41BX171

Two additional previously recorded historic archaeological sites were identified during CAR's background review. Site 41BX171 was recorded in 1971 as part of the U.S. Highway 281 (North Expressway) survey. This site is a late nineteenth- to early twentieth-century municipal dump that had used the abandoned

historic limestone quarries as a landfill. Clark (1984) tested the site using heavy equipment without screening, and with only gross collection of artifacts. Although a late historic site (1893-1922), the site offers insight into regional and national trade networks, diet and food, and trash disposal patterns (Clark 1984:117).

41BX2007

In 2009, SWCA recorded this site [redacted] this multi-component site, which has historic materials in the upper deposits, and a buried lithic scatter beneath (Ward 2007).

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Chapter 4: Field and Laboratory Methods

Field Methods

The CAR's fieldwork consisted of construction monitoring during the removal and reconstruction of historic wall. The field crew consisted of a single Project Archaeologist (PA) as the intensity of excavation work never required the services of more than one monitor. A lab-based GIS Specialist supported the field crew. The CAR archaeologist was available for all below ground disturbances and photographed excavations. Field notes and a monitoring report were prepared daily, and the monitoring reports were forwarded to AEI.

Site Recording and Collection Policy

According to the THC, a site comprises cultural materials or features at least 50 years old within a defined area. Furthermore a site is: (1) five or more surface artifacts within a 15-m (49.21-ft.) radius (ca. 706.9 m²; 7,609 sq. ft., or (2) a single cultural feature, such as a hearth, observed on surface or exposed in shovel testing, or (3) a positive shovel test containing at least three artifacts within a given 10-cm (3.94-in.) level, or (4) a positive shovel test containing at least five total artifacts, or (5) two positive shovel tests within 30 m (98.43 ft.) of each other. The CAR encountered no cultural materials meeting the criteria for an archaeological site during this project.

Laboratory Methods

All records generated during the project were under federal regulation 36 CFR Part 79 and THC requirements for State Held-in-Trust collections. Records were made within the current guidelines of CAR. Lab staff separated field notes, forms, and photographs into labeled, archival-appropriate folders. Staff printed digital photographs on acid-free paper and placed them into archival-quality sleeves. Field forms were completed in pencil, and maps and illustrations were produced using an ink-jet printer. All field forms, maps, and illustrations were placed in archival-quality page protectors to prevent smearing due to moisture. All collected materials and project related documentation are housed at the CAR.

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Chapter 5: Project Results

The Project Archaeologist (PA) photographed the project area in 2013 (Figure 5-1). On January 13, 2016, AEI informed CAR that the contractor had begun removal of the historic wall without giving prior notification. The contractor had demolished part of the historic wall the previous day, and AEI halted work upon learning the contractor had failed to notify CAR prior to beginning construction. It was determined that 14 m (46 ft.) of the historic wall had been removed (Figure 5-2). The contractor excavated 1.5-1.8 m (5-6 ft.) of matrix from the riverbank behind the historic wall. The PA inspected the spoils and discovered no archaeological material. Monitoring of excavations continued on January 14 and 15 with no significant findings.

Figure 5-1. Photograph of historic river wall in 2013.

Figure 5-2. Excavations as documented by CAR on January 13, 2016.

To continue excavations, the contractor installed a dam and excavated a ramp to admit equipment to the base of the wall (Figure 5-3). On February 11-12 and April 14-15, 2016, the PA monitored the positioning and excavation of this ramp. The contractor planned to install a French drain at the base of the riverbank parallel the riverbank that would require impacting to a depth of approximately 0.3 m (1 ft.).

Figure 5-3. Dam installed to permit access to the riverbank.

On April 27, 2016, the contractor excavated a drain pipe and junction box for a manhole. This drain pipe will direct water flow into the river and is 4.9 m (16 ft.) from the junction box to its exit point, 1.2-m (4-ft.) deep and 0.6-m (2-ft.) wide (Figures 5-4 and 5-5). The matrix was imported fill atop a natural caliche base. Next, an area 0.5 m^2 (5 $ft.^2$) and 1.5-m (5-ft.) deep was excavated for the junction box. This matrix appeared intact, and caliche undergirded the soil matrix. This excavation contained no cultural material except a modern bottle glass fragment.

Figure 5-4. Drain pipe trench junction box excavation.

Figure 5-5. West wall of the junction box excavation.

On May 10-12, 2016, the contractor excavated a French drain. On May 10, 2016, the PA called the Senior Project Manager to inquire about job progress and was informed that contractors began excavating the French drain two hours earlier. The archaeologist was at the jobsite within an hour and examined the unmonitored excavation (Figure 5-6). This unmonitored excavation was about 6.1 m (20 ft.) in length and extended 25.4-30.5 cm (10-12 in.) into the river embankment. Vertically, the excavation was 30.5-38.1 cm (12 –15 in.; Figure 5-7). No further excavation occurred on May 10.

The French drain sits atop a horizontal concrete apron and lies 1.2 m (4 ft.) below the top of the embankment (Figure 5-8). Contractors used sledge and jackhammers to break up a concrete skirt that extends to the crest of the riverbank. Once the concrete was cleared, contractors hand excavated the trench for the French drain. The drain extends the length of the wall construction, and contractors encountered no intact soils while excavating the French drain.

Figure 5-6. Excavations of French drain as documented May 10, 2016.

Figure 5-7. Vertical extent of excavation of French drain.

Figure 5-8. Installation of French drain.

Chapter 6: Summary and Recommendations

From January through May 2016, the CAR monitored the removal and repair of a 30.5-m (100-ft.) section of a historic river wall along the San Antonio River in Brackenridge Park. The wall is publicly owned and a contributing element to Brackenridge Park's listing on the National Register of Historic Places (NRHP) and its designation as a State Antiquities Landmark (SAL). Therefore, the work fell under the Antiquities Code of Texas and the regulations and requirements of the Archeology Division of the Texas Historical Commission (THC). The CAR performed archaeological work under Texas Antiquities Permit No. 7276. Dr. Paul Shawn Marceaux served as Principal Investigator, and Stephen Smith as Project Archaeologist.

CAR did not identify any archaeological material during the course of the construction monitoring, and no more ground-disturbances are planned. Based on the findings, the CAR recommends to the project sponsor and Archeology Division of the THC that no further archaeological monitoring or investigation of the project area is necessary at this time. Though no further work is recommended at this time, it is known that Brackenridge Park contains important archaeological resources. Therefore, archaeological monitoring and/or investigation should precede any future ground-disturbing activities in the area.

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References Cited:

Abbott, P.L. and C.M. Woodruff, Jr. (editors)
1986 *The Balcones Escarpment Geology, Hydrology, Ecology, and Social Development in Central Texas.* San Antonio Geological Society of America.

Bexar County Deed Records (BCDR)
2015 On file at Bexar County Courthouse, San Antonio, Texas. Electronic documents, http://gov.propertyinfo.com/TX-Bexar/Default.aspx, accessed 2015.

Bomar, G.W.
1995 *Texas Weather.* University of Texas Press, Austin.

Bousman, C.B., B.W. Baker, and A.C. Kerr
2004 Paleoindian Archeology in Texas. In *The Prehistory of Texas*, edited by T.K. Perttula, pp. 15-97. Texas A&M University Press, College Station, Texas.

Campbell, R.
1989 *An Empire for Slavery: The Peculiar Institution in Texas, 1821–1865*. Louisiana State University Press, Baton Rouge.

2003 *Gone to Texas: A History of the Lone Star State.* Oxford University Press, New York.

Caran, C.S., and V.R. Baker
1986 Flooding Along the Balcones Escarpment, Central Texas. In *The Balcones Escarpment Geology, Hydrology, Ecology, and Social Development in Central Texas,* edited by P.L. Abbott and C.M. Woodruff, pp. 1-14. San Antonio Geological Society of America.

Carlson, S.B.
1994 *Texas beyond the Periphery: An Archaeological Study of the Spanish Missions during the Eighteenth Century*. Ph.D. dissertation, Department of Anthropology, Texas A&M University, College Station.

Chipman, D.E.
1992 *Spanish Texas, 1519-1821*. University of Texas Press, Austin.

Chipman, D.E., and H.D. Joseph
2010 *Spanish Texas, 1519-1821*. Revised ed. University of Texas Press, Austin.

Clark, J.W.
1984 *Archaeological Test Excavations at an Early Twentieth Century Dump in North San Antonio, Bexar County, Texas.* Texas State Department of Highways and Public Transportation, Highway Design Division, Publications in Archaeology Report No. 26, Austin, Texas.

Collins, E.W., and S.E. Laubach
1990 *Faults and Fractures in the Balcones Fault Zone*. Austin Geological Society.

Collins, M.B.
2004 Archeology in Central Texas. In *The Prehistory of Texas*, edited by T.K. Perttula, pp. 205-265. Texas A&M University Press, College Station.

Cox, I.W.
1985 *10th Street Substation Excavation of the Acequia Madre (41BX8) San Antonio, Bexar County, Texas*. Archaeological Survey Report, No. 153. Center for Archaeological Research, The University of Texas at San Antonio.

1997 The Growth of San Antonio. In *Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition. Volume 1, Historical, Architectural, and Oral History Research*, edited by A.A. Fox, M. Renner, and R.J. Hard, pp. 4-44. Archaeological Survey Report, No. 236. Center for Archaeological Research, The University of Texas at San Antonio.

2005 *The Spanish Acequias of San Antonio*. Maverick Publishing, San Antonio.

Cox, I.W., E.D. Johnson, and C.B. Bousman
1999 *Excavations for the Upper Labor Dam Site, Brackenridge Park, San Antonio, Bexar County, Texas*. Archaeological Survey Report, No. 268. Center for Archaeological Research, The University of Texas at San Antonio.

Davis, W.C.
2004 *Lone Star Rising*. Free Press, London.

Dillehay, T.
1974 Late Quaternary Bison Population Changes on the Southern Plains. *Plains Anthropologist* 19(64):180-196.

Fox, A.A.
1975 *An Archaeological Assessment of the Southern Portion of the Olmos Basin, Bexar County, Texas.* Archaeological Survey Report, No. 9. Center for Archaeological Research, The University of Texas at San Antonio.

Fox, A.A., and I.W. Cox
1988 *Archaeological Monitoring of the Ashby Street Drainage Project, San Antonio, Bexar County, Texas*. Archaeological Survey Report, No. 176. Center for Archaeological Research, The University of Texas at San Antonio.

Henderson, T.J.
2009 *The Mexican Wars for Independence*. Hill and Wang Publishing, New York.

Hoffman, F.L.
1935 *Diary of the Alarcón Expedition into Texas, 1718-1719 by Francisco Céliz.* Vol. 5. Quivira Society Publications. Los Angeles, California.

Houk, B.A., and K.A. Miller
2001 *The Brackenridge Park Rehabilitation Project Archaeological Survey, San Antonio, Bexar County, Texas*. SWCA Cultural Resource Report No. 00-331. SWCA Inc., Austin.

2002 Significance Testing at 41BX1425. In *The Brackenridge Park Rehabilitation Project Data Recovery at 41BX323 and Testing at 41BX1425, San Antonio, Bexar County, Texas*, by B. Houk, pp. 53-66. SWCA Cultural Resource Report No. 01-357. SWCA Inc., Austin.

Katz, S.R., and A.A. Fox
1979 *Archaeological and Historical Assessment of Brackenridge Park, City of San Antonio, Texas*. Archaeological Survey Report, No. 33. Center for Archaeological Research, The University of Texas at San Antonio.

Kemp, L.
2008 *Archaeological Survey Associated with the Proposed Stadium Field House and Bleachers at the University of the Incarnate Word, San Antonio, Bexar County, Texas.* Technical Report, No. 12. Center for Archaeological Research, The University of Texas at San Antonio.

Marley, D.
2014 *Mexico at War: From the Struggle for Independence to the 21st-Century Drug Wars*. ABC-CLIO, Santa Barbara, California.

McKenzie, C.M., L. Martinez, and R.M. Mauldin
2016 *Archaeological Monitoring and Test Excavations of the Plaza de Armas Building (Vogel Belt Complex), San Antonio, Bexar County, Texas.* Archaeological Report, No. 445. Center for Archaeological Research, The University of Texas at San Antonio.

McKenzie, C.M.M., and S. Smith
2016 *Archaeological Investigations of the Alamo Dam and Upper Labor Dam, Brackenridge Park, San Antonio, Bexar County, Texas*. Archaeological Report, No. 444. Center for Archaeological Research, The University of Texas at San Antonio.

Meinig, D.W.
1969 *Imperial Texas: An Interpretive Essay in Cultural Geography*. University of Texas Press, Austin.

Menard, J.A. (compiler)
1995 Bibliography of the Edwards Aquifer, Texas, through 1993. U.S. Geological Survey Open-File Report 95-336. U.S. Geological Survey Earth Science Information Center, Denver.

Miller-Ulrich, K.M.
2011 *Intensive Survey and Testing Associated with the Rediscovery of the Acequia Madre and Alamo Dam, San Antonio, Bexar County, Texas*. Archaeological Report, No. 417. Center for Archaeological Research, The University of Texas at San Antonio.

Munoz, C.M., and R.P. Mauldin
2011 Subsistence Strategies. In *Archeological Significance Testing at 41BX17/271, the Granberg Site: A Multi-Component Site along the Salado Creek in Bexar County, Texas*, by C.M. Munoz, R.P. Mauldin, J.L. Thompson, and S.C. Caran, pp. 105-130. Archeological Studies Program, Report No. 140, Environmental Affairs, Texas Department of Transportation, Austin. Archeological Report, No. 393. Center for Archaeological Research, The University of Texas at San Antonio.

Neu, C.T.
2013 Annexation. Handbook of Texas Online. Texas State Historical Association. Electronic document, http://www.tshaonline.org/handbook/online/articles/mga02, accessed December 1, 2013.

Nickels, D.L., D.W. Pease, and C.B. Bousman
1997 *Archaeological Survey of Lackland Air Force Base, Bexar County, Texas*. Archaeological Survey Report, No. 248. Center for Archaeological Research, The University of Texas at San Antonio.

Norwine, J.
1995 The Regional Climate of South Texas: Patterns and Trends. In *The Changing Climate of Texas: Predictability and Implications for the Future*, edited by J. Norwine, J.R. Giardino, G.R. North, and J.B. Valdez, pp. 138–154. Cartographics, Texas A&M University, College Station.

Reed, S.G.
1941 *A History of the Texas Railroads*. St. Clair Publishing Company, Houston.

Shafer, H.J., and T.R. Hester
2010 *Archaeological Monitoring of the Upper Labor Acequia Clean-up Project, Brackenridge Park, San Antonio, Bexar County, Texas*. Report No. 92. Abasolo Archaeological Consultants, San Antonio.

2012 *Archaeological Monitoring at Allison Park Upper Labor Acequia Repair, San Antonio, Bexar County, Texas.* Report No. 113. Abasolo Archaeological Consultants.

Sibley, M.M.
1973 *George W. Brackenridge: Maverick Philanthropist*. University of Texas Press, Austin.

Sonnichsen, C.L.
1950 *Cowboys and Cattle Kings*. University of Oklahoma Press, Norman.

Stein, W.G., and G.B. Ozuna
1995 *Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas*. U.S. Geological Survey Water-Resources Investigations 95-4030.

Stothert,K.
1989 *The Archaeology & Early History of the Head of the San Antonio River.* Southern Texas Archaeological Society, Special Publication No. 5.

Story, D.A.
1985 Adaptive Strategies of Archaic Cultures of the West Gulf Coastal Plain. In *Prehistoric Food Production in North America*, edited by R.I. Ford, pp. 19-56. Anthropological Papers No. 75. Museum of Anthropology. University of Michigan, Ann Arbor.

Texas State Library and Archives Commission
2016 Annexation. Texas State Library and Archives Commission. Electronic document, https://www.tsl.texas.gov/treasures/earlystate/annex-01.html, accessed August 2016.

Thoms, A.V., and S.W. Ahr
1995 The Pompopa-Talon Crossings and Heermann Ranch Sites: Preliminary Results of the 1994 Southern Texas Archaeological Association Field School. *La Tierra* 22(2):34-67.

Thoms, A.V., D.D. Keuhn, B.W. Olive, J.E. Dockall, P.A. Clabaugh, and R.D. Mandel
1996 Early and Middle Holocene Occupations at the Richard Beene Site: The 1995 Southern Texas Archaeological Association Field School Project. *La Tierra* 23(4):8-36.

Tomka, S.A., C.B. Bousman, and J.M. Hunziker
1997 Modern and Paleoenvironmental Context. In Archaeology of the Rio Grande and Central Coastal Plains, Texas: A Planning Document, edited by S.A. Tomka, T.K. Perttula, and R.J. Hard. Manuscript on file, Center for Archaeological Research, The University of Texas at San Antonio.

Tous, G. (translator)
1930a The Espinosa-Olivares-Aguire Expedition of 1709. *Preliminary Studies of the Texas Catholic Historical Society* 1(3):3-14.

1930b Ramon's Expedition: Espinosa's diary of 1716. *Preliminary Studies of the Texas Catholic Historical Society* 1(4):4-24.

Turner, A.W.
2010 Worth, William Jenkins. Handbook of Texas Online. Electronic document, https://tshaonline.org/handbook/online/articles/fwo28, accessed July 8, 2014.

Turner, E.S., and T.R. Hester
1993 *A Field Guide to Stone Artifacts of Texas Indians*. Gulf Publishing Company, Houston.

Ulrich, K.M.
2008 *Archaeological Services Associated with Improvements to Miraflores at Brackenridge Park, San Antonio, Bexar County, Texas.* Archaeological Report, No. 387. Center for Archaeological Research, The University of Texas at San Antonio.

Ward, R.
2007 Site Recordation Form for 41BX2007, Recorded by R. Ward, SWCA. Obtained through, Texas Sites Atlas, July 2014.

Watson Pfieffer, M.
2011 *Brackenridge Park: A History*. Adapted from the National Register Nomination and temporarily published on-line with the Brackenridge Park Conservancy website. Electronic document downloaded July 11, 2014.

Watson Pfieffer, M., S.A. Tomka, and R. Liebowitz
2011 *Brackenridge Park National Register Nomination.*

Weddle, R.S.
1968 *San Juan Bautista Gateway to Spanish Texas*. University of Texas Press, Austin.

Weir, F.A.
1976 The Central Texas Archaic. Unpublished Ph.D. dissertation, Washington State University, Pullman.