

Archaeological Monitoring for Frio Street Utility Improvements from Houston Street to César Chávez Boulevard, San Antonio, Bexar County, Texas

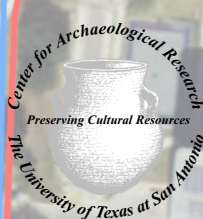
by
Andrea Thomas and Clinton M. M. McKenzie

Texas Antiquities Permit No. 7913

REDACTED

Principal Investigator
Paul Shawn Marceaux

Prepared for:
Poznecki-Camarillo, Inc.
5835 Callaghan Road
Suite 200
San Antonio, Texas 78228



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Prepared by:
Center for Archaeological Research
The University of Texas at San Antonio
One UTSA Circle
San Antonio, Texas 78249
Archaeological Report, No. 460

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Abstract:

The Center for Archaeological Research (CAR) at The University of Texas at San Antonio (UTSA), in response to a request from Poznecki-Camarillo, Inc. (PCI), on behalf of the City of San Antonio (COSA), conducted archival research and archaeological monitoring for the Frio Street Utilities Improvement Project in San Antonio, Bexar County, Texas. The project falls under COSA's Unified Development Code (Article 6 35-630 to 35-634) and the Antiquities Code of Texas. The project was conducted under Texas Antiquities Permit No. 7913 issued by the Archeology Division of the Texas Historical Commission (THC). Dr. Paul Shawn Marceaux served as the Principal Investigator for the project, and Andrea Thomas was the Project Archaeologist (PA). All archaeological work for this project followed the standards and guidelines of the THC and the Council of Texas Archaeologists.

Archaeological work conducted for this project consisted of archival research, monitoring below-ground excavations during utility improvements, and the subsequent analysis of the historic structures recorded and cultural material collected during the project. From February to June 2017, the CAR monitored extensive below-ground utilities work along North and South Frio Street from César Chávez Boulevard to Houston Street. The Area of Potential Effect (APE) is located on the west side of downtown San Antonio in a highly urbanized and developed area. CAR archaeologists monitored excavations for more than 700 meters (m; 2,296.6 feet [ft.]) of gas, electrical, water, and sewer utility lines.

Archaeological monitoring during this project did not locate any prehistoric deposits; however, it did identify 16 distinct historic archaeological features, four of which were stone-lined wall segments of the nineteenth-century Alazán Ditch (41BX620). Of the remaining 12 features, CAR archaeologists recorded five new historic sites. All were foundations, walls, and/or archaeological deposits associated with no longer extant historic buildings. CAR staff recorded part of a late nineteenth-century stone foundation and a trash pit associated with the Schoenert Bakery (41BX2194) on the west side of the Alazán Ditch, as well as a trash pit (41BX2196) associated with commercial activity of the A. Androlli's Residence and Saloon. Other features recorded as sites included wall segments of two stores attached to the Pettus Commercial Building (41BX2195), a late nineteenth-century wood frame structure with an early twentieth-century brick veneer, parts of the north and south walls of the early twentieth-century Hotel Rex (41BX2198), and a small wall segment of the late nineteenth-century Gebhardt Chili Powder Company warehouse (41BX2197).

The extent of archaeological work on all sites was limited, most often to the width of a utility trench. Therefore, it was difficult to determine if any of the newly recorded sites would meet the criteria for inclusion on the National Register of Historic Places (NRHP) or as a State Antiquities Landmark (SAL). From this narrow investigation, the portions of Schoenert's Bakery (41BX2194), the early twentieth-century Pettus Commercial Building (41BX2195), A. Androlli's Residence and Saloon (41BX2196), and the Hotel Rex (41BX2198) within the APE do not appear to meet any of the criteria.

The Gebhardt warehouse (41BX2197) is potentially eligible for the NRHP based on Criteria B, as the site is associated with the life of a person who was significant to San Antonio's history. Wilhelm "Willi" Gebhardt was significant in both San Antonio business and culture, particularly the popularizing of Mexican cuisine. Although the majority of the warehouse was destroyed from previous construction projects, including part of the wall segment located during this project (Feature 13), there may still be intact deposits related to the Gebhardt warehouse on the interior of the lot. Additional archival research and testing would be needed to definitively determine the NRHP and SAL eligibility of the Gebhardt warehouse.

The portion of the Alazán Ditch (41BX620) within the project area is recommended as eligible for listing in the NRHP or for designation as a SAL due to the site's integrity and significance. This supports the previous recommendation of Cox|McClain Environmental Consulting (Dayton 2014:i) that the Alazán Ditch is "eligible for the National Register of Historic Places (NRHP) and/or for designation as a State Antiquities Landmark (SAL) for its potential to illuminate the development of water management infrastructure in San Antonio." In addition to formal designation on the NRHP and as a SAL, CAR recommends avoiding impacts to the Alazán Ditch in the future, if possible. In the event of future construction or development in the project area, CAR recommends monitoring below-ground excavations or archaeological testing.

All project-related documentation and artifacts are permanently curated at the CAR facility.

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Chapter 1: Introduction

The Center for Archaeological Research (CAR) at The University of Texas at San Antonio (UTSA), in response to a request from Poznecki-Camarillo, Inc. (PCI), on behalf of the City of San Antonio (COSA), conducted archival research and archaeological monitoring for the Frio Street Utilities Improvements Project in San Antonio, Bexar County, Texas. From February to June 2017, the CAR monitored extensive utilities work along Frio Street from Houston Street to César Chávez Boulevard.

The project area consists of COSA-owned streets and public right-of-ways. As public municipal property, undertakings that might affect archaeological or historical sites are subject to regulatory review. At the municipal level, the property falls under COSA's Unified Development Code (Article 6 35-630 to 35-634). The project also required review by the Texas Historical Commission (THC) under the Antiquities Code of Texas. Texas Antiquities Permit No. 7913 was issued prior to the archaeological monitoring of below-ground construction. CAR's Director, Dr. Paul Shawn Marceaux, served as the project's Principal Investigator, and CAR staff archaeologist, Andrea Thomas, served as the Project Archaeologist (PA) with staff archaeologist Clinton McKenzie assisting in artifact analysis, archival research, and report production. All archaeological work for this project followed the standards and guidelines of the THC and the Council of Texas Archaeologists.

Area of Potential Effect and Project Description

The Area of Potential Effect (APE) was on the west side of downtown San Antonio in a highly urbanized and developed area. It was roughly 2.5 hectares (6.1 acres) and 505 m (1,656.82 ft.) long and 45-95 m (147.64-311.68 ft.) wide. The APE was focused along Frio Street between Houston Street on the north and César Chávez Boulevard on the south (Figures 1-1 and 1-2).

The APE was west of San Pedro Creek, less than one kilometer (km) east of Alazán Creek, and less than 1.5 km (0.93 miles) south of San Pedro Springs. Previously recorded sites in Bexar County provide evidence of over 10,000 years of prehistoric Native American habitation. For this reason, there was a distinct probability of buried prehistoric materials within the APE. The APE was also less than 1 kilometer (km; 0.6 miles) from the Main and Military Plazas National Register of Historic Places (NRHP) District. Significant archaeological sites are located both within the district and

in the immediate area. Previously documented sites reveal evidence of Spanish Colonial and prehistoric deposits that are potentially still present in the subsurface of this crowded urban setting.

Project design included improvements to curbs, sidewalks, traffic signals, streetlights, benches, and other infrastructure elements. These improvements required extensive below-ground disturbance, including activities related to the installation of new utilities.

The COSA worked with CAR, San Antonio Water System (SAWS), and CPS Energy (CPS) to coordinate construction activities and the utilities that required monitoring. These utility improvements consisted of gas line installation and replacement (CPS), electrical conduit line replacement (CPS), sewer line replacement (SAWS), and water line installation and replacement (SAWS).

Summary of Results

Work on this project included archival research, monitoring below-ground excavation for utility line improvements, and the documentation of numerous archaeological features. CAR staff focused much of the research on the features associated with known historic structures and associated cultural material. The majority of below-ground construction that required archaeological monitoring was located on Frio Street between Houston Street and Buena Vista Street. CAR archaeologists monitored 410 m (1,345.14 ft.) of gas line installation, 48.7 m (159.78 ft.) of electrical line replacement, 134 m (439.63 ft.) of water line installation, and 135 m (442.91 ft.) of sewer line replacement.

The below-ground excavations for this project did not locate any prehistoric deposits; however, they did unearth 16 distinct historic features, four of which were stone-lined wall segments of the late nineteenth-century Alazán Ditch (41BX620). Moreover, of the 16 features, CAR archaeologists designated five new historic sites including: 1) the north and south wall of the 1911 Hotel Rex (41BX2198); 2) a small extant wall segment of the 1912 Gebhardt Chili Powder warehouse (41BX2197); 3) wall segments of two 1904 stores that were part of the Pettus Commercial Building (41BX2195); 4) a late nineteenth-century site with a stone foundation and associated trash privy for Schoenert's Bakery (41BX2194) close to the Alazán Ditch; and 5) a trash pit associated with the early 1900s A. Androlli's Residence and Saloon (41BX2196).

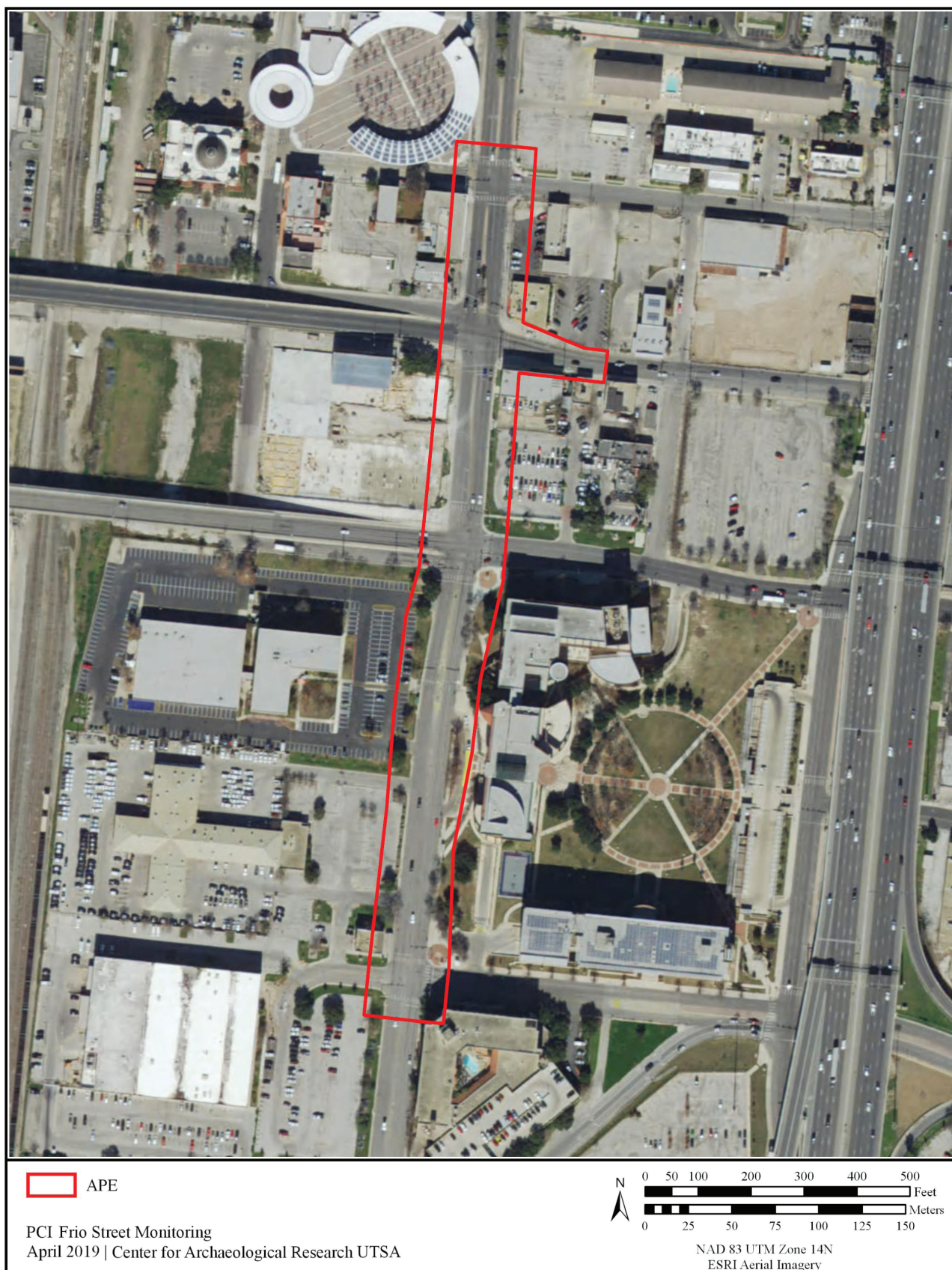


Figure 1-1. Location of APE in red on 2016 ESRI aerial image.

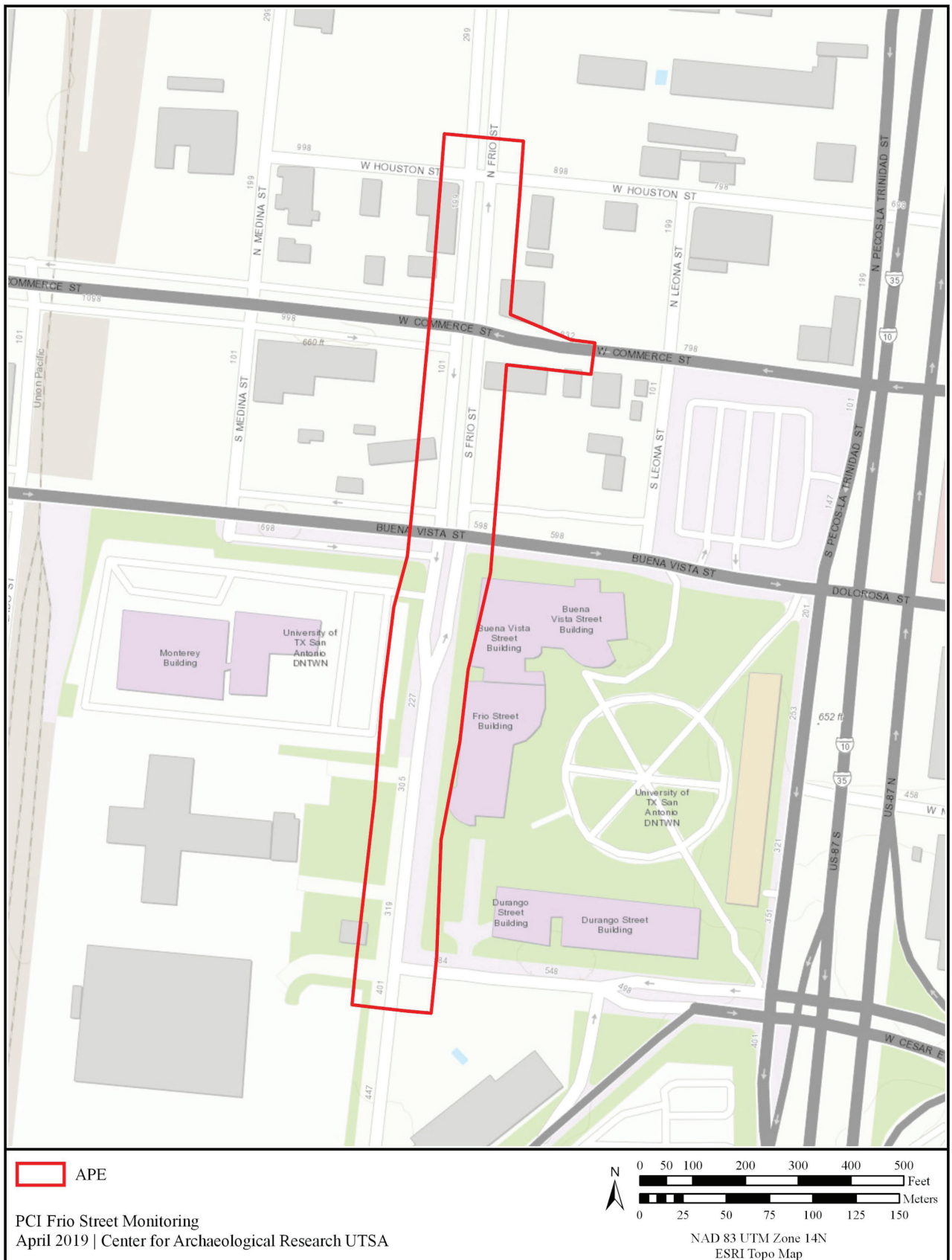


Figure 1-2. Location of APE in red on 2016 ESRI topographic map.

The extent of archaeological work on these sites was often limited to the width of a utility trench. Therefore, it is not clear if any of the newly recorded sites would meet the criteria for inclusion as a State Antiquities Landmark (SAL) or listing on the NRHP, as set forth by the National Park Service (NPS). From the current limited investigations, the portions of Schoenert's Bakery (41BX2194), the early twentieth-century Pettus Commercial Shops (41BX2195), A. Androlli's Residence and Saloon (41BX2196), and the Hotel Rex (41BX2198) sites do not appear to meet any of the criteria.

In contrast, the Gebhardt Chili Powder Company warehouse (41BX2197) is potentially eligible for the NRHP based on Criteria B, as the site is associated with the life of a person who was significant to San Antonio's history. Wilhelm "Willi" Gebhardt, founder of the Gebhardt Chili Powder Company, was an important individual with a business that shaped Mexican cuisine of this area as well as the entire country. Although the majority of the warehouse was destroyed from previous construction projects, including part of the wall segment located during this project (Feature 13), the potential exists for intact deposits related to the Gebhardt warehouse. Additional archival research and testing would be needed to determine the NRHP eligibility of the Gebhardt warehouse.

The site's integrity and significance makes the portion of the Alazán Ditch (41BX620) within the APE eligible for listing in the NRHP and for designation as a SAL. CAR recommends avoiding impacts to the Alazán Ditch in the future, if possible. In the event of future construction or development in the project area, CAR recommends additional archival research, monitoring below-ground excavation, and archaeological test excavations.

Report Organization

This report discusses the archaeological monitoring and documentation of historical buildings, structures, and artifacts uncovered during each phase of utility improvements. The report consists of six chapters. Following this introductory chapter, Chapter 2 presents a description of the environmental setting. Chapter 3 provides a general overview of the prehistory and a more detailed historical narrative of the area, and Chapter 4 presents the field and laboratory methods used during the project. Results from the monitored utility excavations and a review of the newly designated sites and revisit of the Alazán Ditch (41BX620) are presented in Chapter 5. Chapter 6 provides a summary and discussion of the CAR's recommendations for any future work in the project area.

Chapter 2: Environmental Setting

San Antonio falls within the geographic region known as South Central Texas and is surrounded by the Edwards Plateau to the north, the Gulf of Mexico to the southeast, and the Rio Grande Valley to the south. The project area has an elevation of 198.12 m (650 ft.) above mean sea level (Nichols et al. 2017:8; Norwine 1995:138). Moreover, three unique ecological zones, or ecosystems, meet in this location: the Edwards Plateau, the Oak Woods and Tallgrass Prairie, and the Tamaulipan Thornscrub (NPS 2015). Nearby ecological zones include the South Texas Plains and the Blackland Prairie.

More specifically, the project area is within the Nuecian District Tamaulipan Biotic Province (TBP), as defined by Blair (1950; Tunnel and Judd, eds. 2002:40, 43). This biotic province is an area of semi-arid brushland just south of the Balcones fault line (Blair 1950:Figure 1; Jahrsdoerfer and Leslie 1988:1). The flora of this province is mostly dominated by live oak (*Quercus* spp.), grasses, mesquite (*Prosopis* spp.), and a range of acacia species (*Acacia* spp.) that are typical of thorny brush communities (Blair 1950; Tunnel and Judd, eds. 2002:43). Nichols and colleagues (2017:10) list various cacti and agave plants (*Agave* spp.) native to this region, such as lechuguilla (*Agave lechuguilla*), prickly pear (*Opuntia* spp.), and sotol.

The fauna of the TBP is highly variable due to the confluence of different ecological and geological zones. The TBP includes desert and North American forest native terrestrial vertebrates, as well as Neotropical faunal, which are “those

that originated in South America and have since moved into North America” (Presley 2003:34). Nichols and colleagues (2017:10) state that at least “95 bird and 29 mammal species” inhabit this south Texas region, and Blair (1950) describes “57 species of reptiles and 21 species of amphibians” (Presley 2003:37). Small and large mammals native to the area include white-tailed deer (*Odocoileus virginianus*), cottontail rabbit (*Sylvilagus audubonii*), and a variety of rodents. The TBP is also the home to 13 species of reptiles that do not occur outside this province (Presley 2003:Table 6). Although small rodents are observed, the project area lies within a busy urban center of the city in which concrete and asphalt dominate the landscape with only a few trees predominately located near the UTSA downtown campus.

The soil of the project area is 100 percent Branyon Clay (HtA), which is “a calcareous clayey alluvium derived from mudstone of Pleistocene age” (Natural Resources Conservation Service [NRCS] 2017). The soil is buried approximately 1.52-1.83 m (5-6 ft.) below the modern construction fill and debris from continual urban development in the area. This South Central Texas region is humid subtropical with temperate winters and hot and humid summers. The summer takes up the majority of the year from the end of April until the end of September, with July usually being the hottest month, while mild winters last from the beginning of November until the beginning of March. Typically, San Antonio experiences 220 days of sunshine and an average of 83.57 cm (32.9 in.) of rain throughout an entire year (Bomar 1995; Nichols et al. 2017:10).

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Chapter 3: Culture History and Previous Archaeology

by Clinton M. M. McKenzie

This chapter addresses the cultural history of the project area, beginning with a brief discussion of the prehistoric components of San Antonio and ending with a short synopsis of previous archaeological work conducted in the project area. Four major periods define Central and South Texas: Paleo-Indian, Archaic, Late Prehistoric, and Historic. Following the prehistoric section, the chapter presents an overview of the Historic period in San Antonio. For purposes of this report, the Historic period is divided into the Proto-historic period (AD 1528-1700), the Colonial/Mission period (1700-1821), the Mexican period (1821-1836), and the Republic of Texas/Early Statehood Century period (1836-1900). The overview of these periods is from McKenzie and colleagues (2016) and Zapata and colleagues (2018). General information is presented before archival research of the project area, which is organized by New City Block (NCB) and is focused specifically on the west side of San Antonio and the Alazán Ditch.

Prehistory

The project area is in the heart of downtown San Antonio, which is in the environmental and archaeological zone of South Texas. However, the area lies close to Central Texas and shares similar environmental attributes and a basic chronology of prehistoric human occupation. No prehistoric materials were encountered during the project; therefore, the bulk of this chapter focuses on the historic chronology of San Antonio with a particular focus on the neighborhood history of the APE. The discussion of San Antonio's prehistory is based primarily on the chronologies developed by Collins (2004), Johnson and Goode (1994), and Black (1989) for Central Texas, with observations from Hester (2004) for South Texas.

Paleo-Indian Period (11,500-8800 BP)

The Paleo-Indian period is divided into early and late sub-periods. Each sub-period is characterized by particular projectile point styles and subsistence patterns (Collins 2004). The period begins at the close of the Pleistocene, with the earliest evidence of humans in the Central Texas region. The climate during this period was generally cooler and wetter than the present. Clovis and Folsom point types, bifacial Clear Fork tools, and finely flaked end scrapers characterize the early Paleo-Indian period (Black 1989). Clovis is the earliest defined cultural assemblage and is, for the most part, consistent across the North American

continent. Material assemblages dating earlier than Clovis are referred to as pre-Clovis.

Archaic Period (8800-1200 BP)

The Archaic period is identified as a period of intensification of hunting and gathering and a move toward greater exploitation of local resources. Food processing technologies appeared to have broadened as features, such as hearths, ovens, and middens, increased in frequency during this time (Black and McGraw 1985). Collins (2004) and Johnson and Goode (1994) divide the Archaic period into Early, Middle, and Late sub-periods. These sub-periods are distinguished by variances in climate conditions, resource availability, subsistence practices, and diagnostic projectile point styles (Collins 2004; Hester 2004). In Central Texas, the Early Archaic dates from 8800-6000 BP (Collins 2004). Changing climate and the extinction of megafauna appear to have initiated a behavioral change by hunter-gatherers. Because of the necessary economic shift away from big game hunting, local resources in Central Texas, such as deer, fish, and plant bulbs, were more intensively exploited. The Middle Archaic, 6000-4000 BP (Collins 2004), appears to have been a period of increasing population, based on the large number of sites documented from this time in Central Texas and adjacent regions (Story 1985; Weir 1976). The final interval, the Late Archaic, in Central Texas dates from 4000-1200 BP (Collins 2004). During this period, large cemeteries were formed, indicating an increasing population and the subsequent establishment of territories (Black and McGraw 1985).

Late Prehistoric Period (1200-350 BP)

The Late Prehistoric period in Central Texas marks a distinctive shift from the use of the atlatl and dart to the use of the bow and arrow (Black 1989; Collins 2004; Hester 2004). The Late Prehistoric is subdivided into early and late phases termed Austin and Toyah Phases, respectively (Prewitt 1981). The Austin Phase (1200-650 BP) marks the introduction of the bow and arrow, and the presence of the Scallorn and Edwards arrow points (see Collins 2004). The subsequent Toyah Phase spanned 650-350 BP and included the first occurrence of pottery in South Texas (Black 1989). Characteristic artifacts of this phase include Perdiz and Clifton arrow points (Black 1986). Cultural material associated with the Late Prehistoric period indicates increasing complexity in subsistence patterns and very large prehistoric populations (Black 1989; Collins 2004).

Historic Period (AD 1528-1900)

Proto-historic Period (1528-1700)

Generally, the Proto-historic period in Texas corresponds with the advent of the shipwrecked survivors of the Pánfilo de Narváez Spanish expedition in 1528 along the Texas shoreline near Galveston, Texas. Álvar Núñez Cabeza de Vaca and three other survivors lived among the Native Americans of the Texas Coast and Central Texas for nearly seven years (Bandelier 1972:157-158). Additional early Spanish accounts of Texas come from the survivors of the Hernando de Soto expedition under Luis de Moscoso, who entered Texas in 1541-1542 from the northeast and made it as far as the Brazos River in the vicinity of Waco, Texas, before returning to Arkansas and Louisiana. During this period, Vazquez de Coronado entered Texas from the northwest in his search for the Seven Cities of Cibola (Bolton 1949:355-356; Chipman 1992:40). Neither expedition entered into South Central Texas. The Proto-historic period ends with the European settlements established at the close of the seventeenth century along the Lower Rio Grande and the Spanish colonizing efforts in northeast Texas beginning in 1685 (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 written European accounts.

Spanish Colonial Period (1700-1821)

The Spanish Colonial period began with the founding of military presidios and missions in East and Central Texas. In San Antonio, the Spanish established the Villa de Bexar, the Presidio San Antonio de Bexar and Mission San Antonio de Valero in 1718 (de la Teja 1995:8; Habig 1968:38). Two years later Mission San José y San Miguel de Aguayo de Buenavista was founded some 4 km (2.5 miles) south of San Antonio de Valero (Habig 1968:84-85). Three additional missions were relocated to San Antonio from East Texas in 1731, bringing the total number of mission pueblos to five. In addition to the three missions re-settled in 1731, a civilian settlement was established. The settlement consisted of Canary Islanders and was named San Fernando (de la Teja 1995:10-11).

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). Secularization of the missions began in 1794 and was effectively complete by 1824 when they ceased operation as separate political entities (Carlson 1994; Cox 1997, 2005). Contemporaneous with the decline of the mission system, civilian settlements in Texas began to increase, along with the demands on the crown for support and defense. By the close

of the eighteenth century, the numerous tensions between Royalist Spain and its colonies in the New World increased with a number of rebellions against the Spanish Crown and cries for independence. In Texas, initial rebellions began in 1810, leading to the Royalist victory at the Battle of Medina in 1812. Rebellion at the national level was ultimately successful when Mexico became independent in 1821, essentially ending Spanish Colonial rule (Henderson 2009; McKenzie et al. 2016).

Mexican Period (1821-1835)

Texas, as a whole, and San Antonio, in particular, were underpopulated at the time of the Mexican Revolution. Low population was directly associated with the rebellion of 1813 and its aftermath when General Arredondo took reprisals on rebels and their families across the state. San Antonio lost nearly 40 percent of its population at that time. Mexico attempted to address the problem of low population by enacting laws and constitutional provisions in the early 1820s that encouraged new settlement, particularly from the United States (Cox 1997). Following Antonio Lopez de Santa Anna's April 1835 usurpation and dismantling of the liberal constitution of 1824, the revolt in Texas began in earnest in October of 1835 (Castañeda 1950:258-259). In response, Santa Anna dispatched troops under Martín Perfecto de Cos to deal with the insurrection in San Antonio, which he and his troops occupied in October of 1835. Texas insurrectionists besieged Cos in San Antonio beginning in November of 1835, and Cos was defeated and forced to surrender on December 11, 1835. He subsequently withdrew his forces south towards Laredo (Castañeda 1950:281; Corner 1890:119-120, 164; Cox 1997; McKenzie et al. 2016).

Santa Anna recaptured San Antonio on March 6, 1836, after an 18-day siege of the Alamo (formerly Mission San Antonio de Valero). Following the victory, Santa Anna dispatched forces to crush the remaining resistance but was defeated at the battle of San Jacinto on April 21, 1836, ending Mexican rule of Texas (Cox 1997; Davis 2004).

Republic of Texas/Early Statehood (1836-1900)

The Republic of Texas was declared on March 1, 1836, though true independence was not effectuated until the aftermath of the Battle of San Jacinto on April 21, 1836 (Jones 1859:14-15). Boundary disputes continued with Mexico until June 1843, when an armistice was reached (Cox 1997). 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, formally lowering the flag of

the Republic and convening the new State Legislature on February 19, 1846 (Brown 1970:305-306). Texas statehood led to war between the United States and Mexico in May 1846. The Treaty of Guadalupe-Hidalgo, signed in February 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 had been recorded as 142,000 (Campbell 2003). Much of this growth was tied to the availability of farmland. Cotton, often supported by slave labor, was the dominant crop in East Texas. Roughly 30,000 black slaves were present in the state in 1847 (Campbell 1989; Cox 1997), and this number increased to over 180,000 by 1860 (Campbell 1989, 2003).

During the Civil War in the United States, Texas sided with the Confederacy and 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, Texas was readmitted to the United States in 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, the state was crisscrossed by an extensive network of rail lines connecting Texas with the rest of the country (Meinig 1969; Reed 1941). As a result, commercial development increased throughout the twentieth century.

Archival Research for the Project Area

The initial core of the Spanish Colonial enterprise lies in what is currently downtown San Antonio, between the San Antonio River and San Pedro Creek. The first settlement was moved from its initial 1718 location in what is now San Pedro Springs Park to the second and final site of the Presidio San Antonio de Bexar in 1722-1724. With the advent of the Canary Islanders in 1731, the development of a true villa commenced. However, the period between their initial settlement and the first lots developing on the near west side

was nearly 15 years. The delay in development was predicated on the slow organic growth of the settlement from its nucleus on Plaza de Armas and Plaza de las Islas, and also because of Apache raids (Dunn 1911). It was not until the 1740s that the lands immediately west of the Presidio San Antonio de Bexar were granted and settled (de la Teja 1995:38). This small settled area west of San Pedro Creek was called the Barrio de Laredo, or Laredito (the Little Laredo Neighborhood), and is shown on the 1912 Rullman Map of San Antonio in 1837 (Figure 3-1; Rullman 1912).

This initial settlement west of San Pedro Creek was limited in its agricultural potential until an *acequia*, or irrigation canal, was constructed. The construction of the *acequia* is not disputed, but it is only referentially known from deeds and similar types of official documentation in the 1770s and later documents that mention this canal as a boundary on various properties or for properties having water rights on the *acequia* (de la Teja 1995:39). For purposes of discussion, and because of its association with the Barrio de Laredo, this little-known and poorly documented system will be referred to as the Acequia de Laredo. Like all the San Antonio *acequia* systems, the system was open ended, with a mouth on San Pedro Creek and the canal running along contour lines until depositing its excess flow back into the creek below the plots of the west side settlers.

The area encompassing the project APE is approximately 600 m (2,000 ft.) west from the Barrio de Laredo. During the Spanish Colonial period, a property adjacent-west of Barrio de Laredo was used as the Catholic Cemetery, or Campo Santo, of the parish of San Fernando de Bexar. In Figure 3-2, the original extent of the Campo Santo is shown in green, and this represents only the period from November 1, 1808, until March 1848 when the Catholic Cemetery was expanded and the City Cemetery added (City Council Minute Books [CCMB] A:135-137; Giraud 1848).

The area west of the Barrio de Laredo essentially remained fallow during the Spanish Colonial period because the lands were not irrigated and their distance from the Presidio de Bexar left them more exposed to raids by the Apache. These raids were numerous in the period between 1718 and the 1740s and then again from the 1750s to the end of the eighteenth century (Dunn 1911:198-279). These lands west of the Barrio de Laredo were considered *proprios*, or common lands, and were used as pasturage or for the collection of firewood and other raw materials (de la Teja 1995:39).

The lands within the APE boundary were considered part of the *ejidos* (communal agricultural lots) that had previously been set aside by the King of Spain and that the City of San

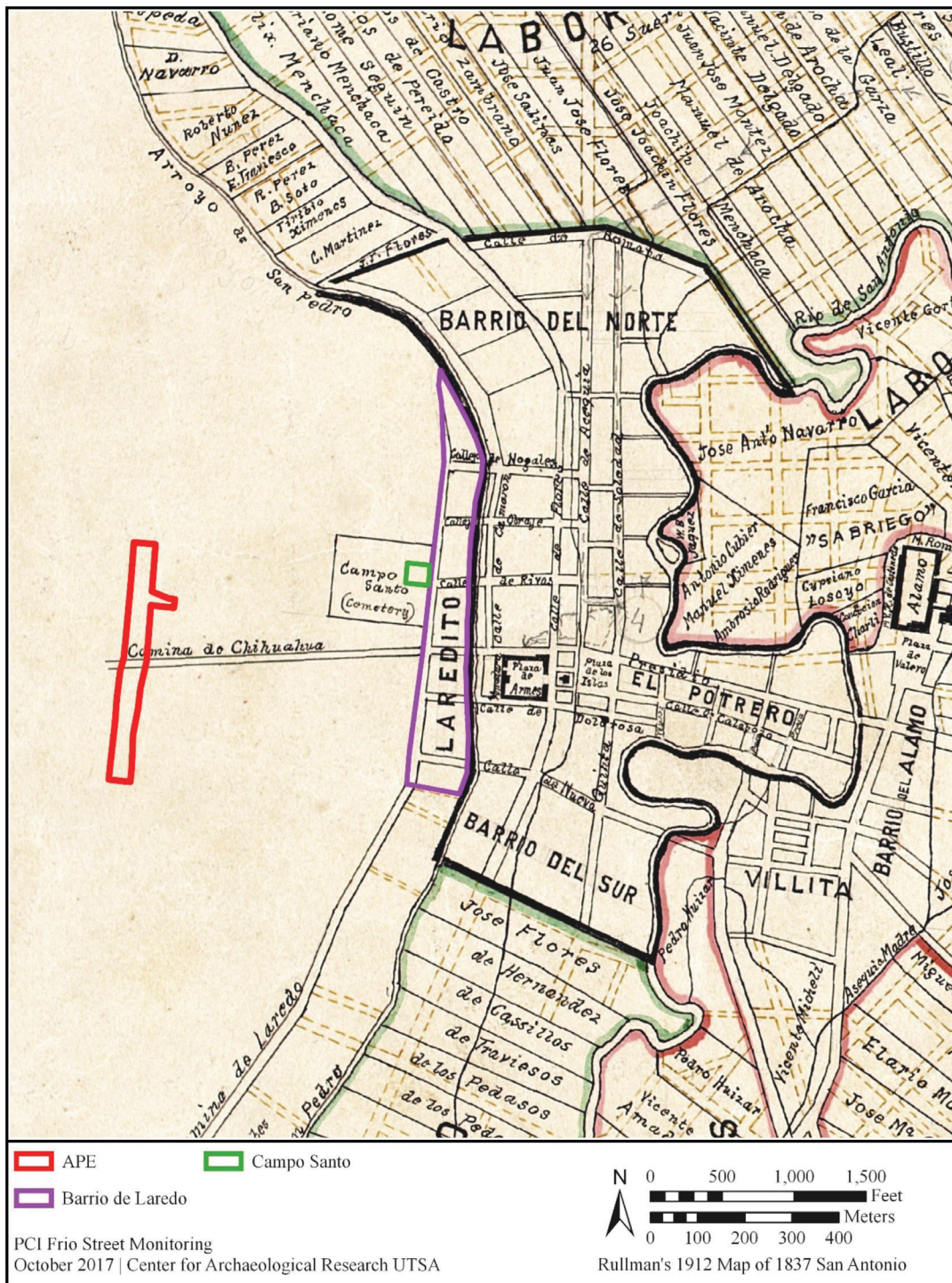


Figure 3-1. Barrio de Laredo, or Laredito, depicted on the 1912 Rullman Map of San Antonio in 1837 (Rullman 1912).

Antonio claimed as municipal property (Corner 1890:37-38). The City began to pursue legal title to all former public lands beginning in the mid-1840s in an attempt to gain control of the burgeoning land speculation of the Republic period. The City sued one of the more notable speculators, Nat Lewis, and in 1851, the Supreme Court of Texas (Texas Supreme Court 1851) affirmed the City in its rights to these lands.

The City platted the lots that became the eight NCBs of the current APE between 1847 and 1849 and had sold all of the lots by 1851 (Figure 3-3). The land assembly history for these eight blocks originated with the *ejidos* of the Villa de San Fernando from around 1731 until claimed by the City of San Antonio as public lands and sold to land speculators between 1847 and 1851 (Corner 1890:37-38; de la Teja 1995). These

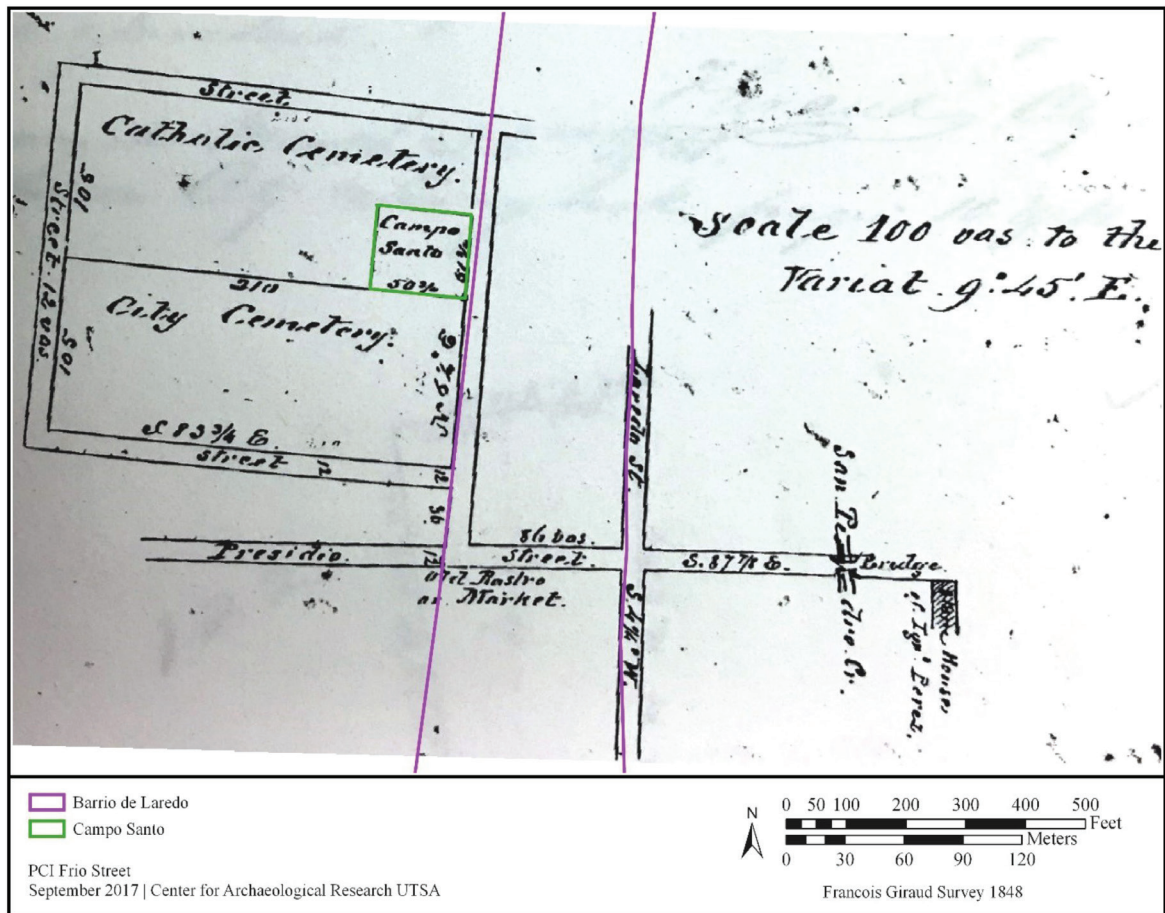


Figure 3-2. François Giraud Survey of the Catholic and City Cemeteries, March 11, 1848 (Giraud 1848).

lands remained predominantly vacant until the advent of the second railroad to reach San Antonio, the International and Great Northern Railroad, which arrived in 1881 (the Galveston, Harrisburg, and San Antonio having arrived first in February of 1877). The International and Great Northern Railroad Company purchased all adjacent blocks west of the current APE (NCBs 234, 244, 245, and 246).

The anticipated commercial boom resulting from the increased economic activity brought by the railroads dramatically changed land use within the APE. The blocks on the west side of South Frio Street were in large measure given over to transportation, mercantile, and industrial uses, while those on the east side became a mixture of small businesses, bordellos, and residences. The 1896 Sanborn map shows the developmental differences between the two sides (Figure 3-3). The figure clearly displays the rail yards and spurs serving the major lumberyards of the city, two of which, F. J. Beitel Lumber and Ed Steves and Sons Lumber, are within the boundary of the APE that is shown in red. Note that pink is the color utilized by Sanborn maps to indicate brick construction and yellow indicates wood frame construction.

New City Block Archival History for the APE

This section provides more detail of the property histories encountered within the APE and, specifically, those in which archaeological features were recorded during the project. Historical and archival research allows for the potential attribution of specific features and temporal associations. Of the eight NCBs within the APE, only NCBs 264, 265, 284, and 285 had designated features. The following discussion provides a land assembly history for NCBs 265, 284, and 285. Although the Alazán Ditch does cut through NCB 264, no features were uncovered in this city block, and therefore, it requires no additional discussion.

NCB 265

New City Block 265 is bounded by West Commerce Street on the north, Buena Vista Street on the south, South Medina Street on the west, and South Frio Street on the east. Features 4 and 5 (41BX2194) were encountered in this block on Lot 18 in the northeast corner of the block (Figure 3-4) and are discussed in detail in Chapter 5. New City Block 265 was originally designated as a District and Range Parcel and referred to as Fifth South Range Block 1.

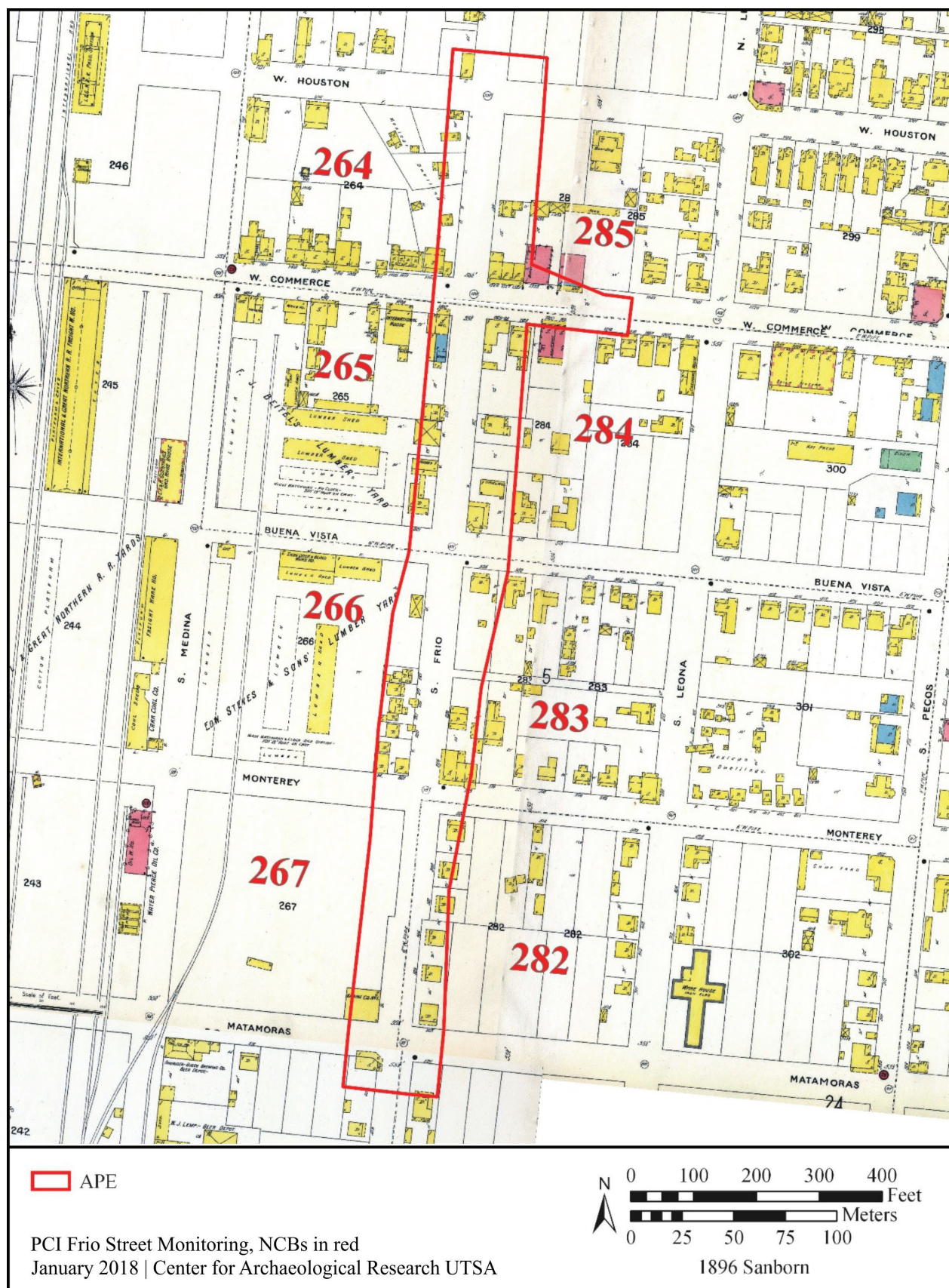


Figure 3-3. Series of 1896 Sanborn map Sheets 3, 4, 5, and 6 (Sanborn 1896).

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Figure 3-4. Locations of Features 4 and 5 within NCB 265 on 1896 Sanborn map (Sanborn 1896).

Lots 84, 85, 86, and 87 were sold together in October 1851 to Emily W. Brackett (Figure 3-5; Bexar County Deed Records [BCDR] K1:231). The lands were unimproved at that time and West Commerce Street retained its original name of Presidio de Rio Grande as that was the ultimate destination of the road during the Spanish Colonial era. In the mid-1800s, Lot 84 was bordered on the north by South Street (present-day Commerce Street) and to the east by West 3rd Street (present-day South Frio Street).

Lot 84 remained in Brackett's control until she was forced by bankruptcy to sell the property to the land speculation firm of Adams and Wickes in September of 1869 (BCDR V2:167-168). Adams and Wickes retained the property until they re-platted it into smaller lots in 1880 (Figure 3-6). Adams and Wickes then sold Lots 15 and 16 to F.H. Bilhartz in February 1882 and Lots 17 and 18 to Gustave and Margaretha Schoenert on April 20, 1881 (BCDR 20:588-589, 12:203-204). The remaining lots, 1 to 16, were sold in toto to Frank J. Beitel of Beitel Lumber Company in February 1881 (BCDR 12:150).

Bilhartz constructed a residence, saloon, and grocery store on Lots 15 and 16, while the Schoenerts contracted with Beitel through a Mechanics Lien to erect the Pacific Hotel, Schoenert's Bakery, and a small residence on Lots 17 and 18, respectively (BCDR A1:202-203). The Pacific Hotel

and the bakery fronted West Commerce Street, while the small residence fronted South Frio Street. Beitel began the development of his lots in NCB 265 and in NCB 266 (the next block to the south) into the Beitel Lumber Company yard. This development took advantage of a spur of the International and Great Northern rail line that serviced his business. These structures, including the rail spur, are shown on the 1885 Sanborn map (Sanborn 1885; Figure 3-7).

NCB 284

New City Block 284 is directly east of NCB 265 and bounded by West Commerce Street on the north, Buena Vista Street on the south, South Frio Street on the west, and South Leona Street on the east. Features 6, 10, 11, and 13 were encountered within NCB 284 (Figure 3-8). The former City Blocks 22 and 23 were sold together in December of 1853 to William Lytle (BCDR L2:98-99). Blocks 22 and 23 (later NCB 300 and NCB 284, respectively), like other lots purchased at that time, were unimproved vacant land. Much like other blocks in the area, Lytle's purchase was purely on speculation, and during his ownership, no plats or improvements were made to NCB 284. Lytle sold the entire property to the firm of Graebner and Strohmeyer in November 1871 (BCDR W1:404). Graebner and Strohmeyer held the property for some time, using the land as collateral for loans against deeds of trust (Hummel to Graebner BCDR

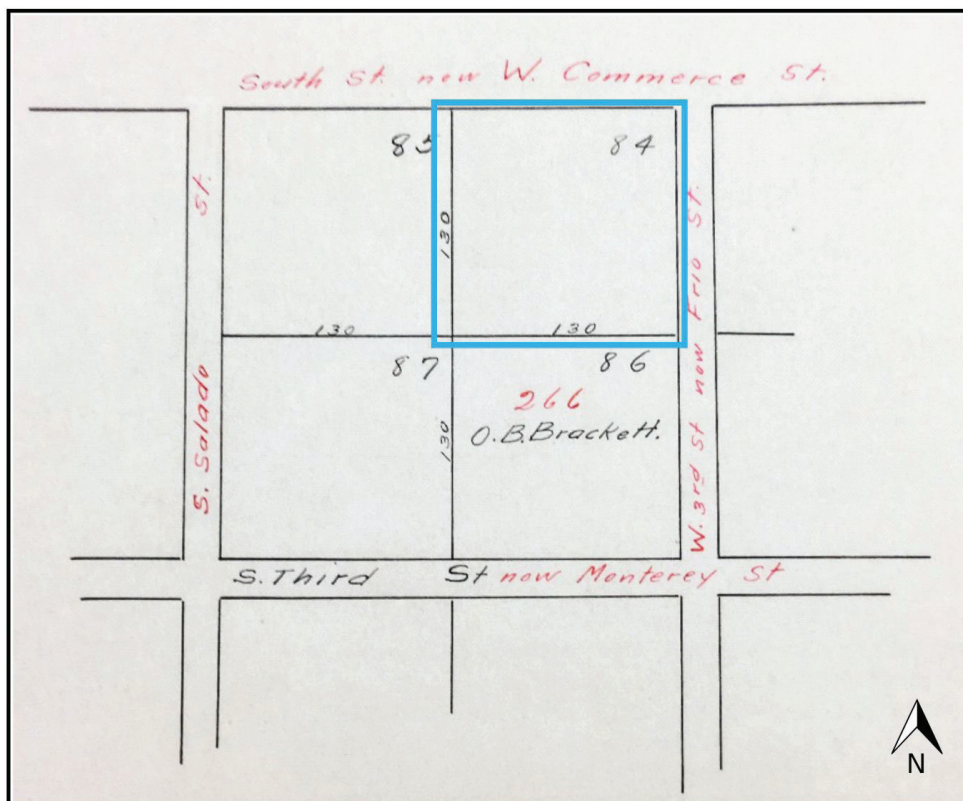


Figure 3-5. Plat of Lands on the West Side of San Pedro Creek, 1849 and 1855 (Giraud 1885). Lot 84 (outlined in blue) becomes NCB 265.

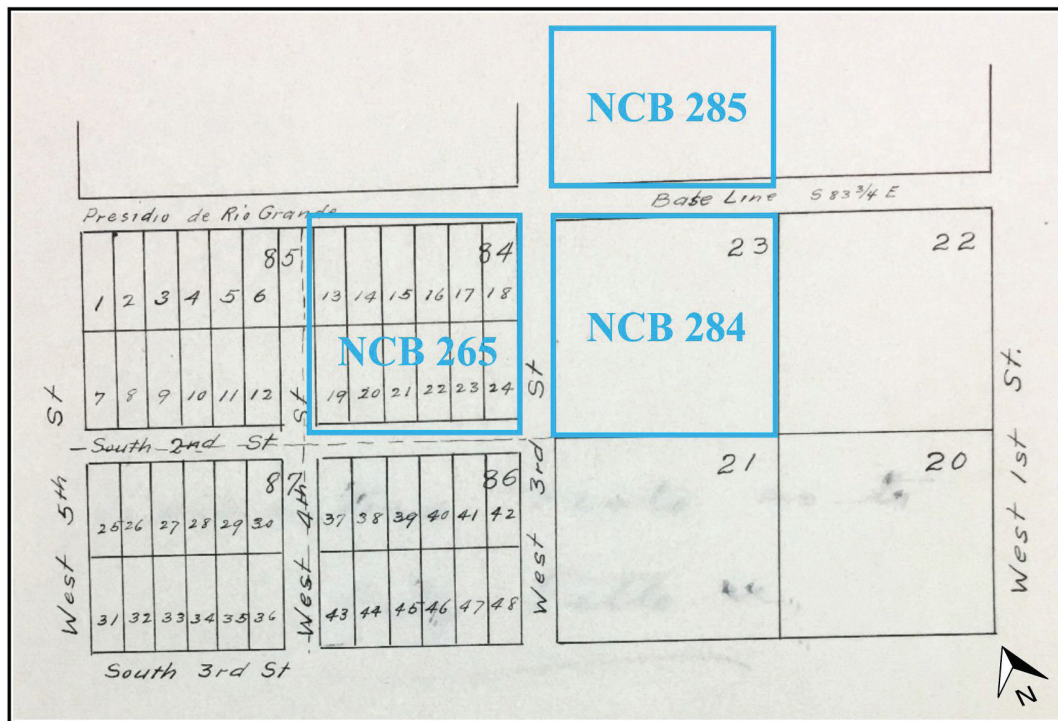


Figure 3-6. Copy of Adams and Wickes Plat of 1880 (BCDR 19:114-115). NCBs 265, 284, and 285 (outlined in blue) were the former Lots 84, 23, and 25, respectively, with 84 and 23 labeled as such on this plat.



Figure 3-7. Lot 84 (NCB 265) in 1885 (Sanborn 1885): 1) Beitel Lumber Yard, Lots 13-14, 19-24; 2) Bilhartz Lots 15 and 16; and 3) Schoenert Lots 17 and 18.

Image Redacted

Figure 3-8. Features 6, 10, 11, and 13 displayed on the 1912 Sanborn map of NCB 284 (Sanborn 1912).

3:309; Madaraz to Graebner BCDR X2:322). In the 1880s, Graebner and Strohmeier began to parcel the lots between themselves, effectively platting the property piecemeal (e.g., Graebner to Strohmeier BCDR 60:331-332).

The general platting pattern for NCB 284 was to reserve the West Commerce Street frontage and three of the four corners for businesses and to use the mid-portions of the block for residences. Graebner and Strohmeier both sold residential and commercial lots into the mid-to-late 1890s. The two most consequential sales involved the Gebhardt Chili Powder Company, acting through William Gebhardt's wife's, Rose Mary Kronkosky, family. Albert Kronkosky, Sr. was married to Augusta Graebner, the daughter of Charles Graebner, who together with Emil Strohmeier first purchased all of NCB 284 (BCDR 60:331-332). The Gebhardt/Graebner/Kronkosky connection saw major land assembly by their interests as the commercial business spread from its beginnings in 1896 at 1320 West Commerce (see Chapter 5). By the end of the first quarter of the twentieth century, the Kronkoskys owned the majority of the block. The Kronkoskys were directly involved with both William Gebhardt and Gebhardt's Chili Powder Company.

NCB 285

New City Block 285 is immediately north, across West Commerce Street, from NCB 284 and bounded on the west by North Frio Street, on the north by West Houston Street, and on the east by North Leona Street. Like its counterpart, this block was platted and sold by the City of San Antonio, but it was sold in lots rather than in its entirety. The initial sale of NCB 285 was to Emily W. Brackett in October 1851. However, as a result of a judgment against her husband, Oscar Brackett, these lots and many others were conveyed at a Sheriff's Sale to Samuel Maverick in October 1853 (BCDR L1:471-473). Maverick then returned all of the land sold for judgment via transfer to Emily W. Brackett "...in consideration of the regard and esteem I have for Emily W. Brackett..." on December 8, 1854 (BCDR M2:370-371).

M. A. Dalton purchased the eastern third of NCB 285, and J. B. Sweeney, a local land speculator, subsequently platted it together with NCB 299 in 1875 (BCDR K2:563-564, 3:480). Sweeney's plat shows NCB 285 on the left bounded by West Third Street on the west and Presidio Street on the south. The remaining lots on the eastern two thirds of NCB 285 at the time of the Sweeney plat (December 2, 1875) belonged to Dalton who had acquired the lots from Emily W. Brackett in 1860 (BCDR S1:233-234).

The western lots of NCB 285 were sold piecemeal by Dalton to several individuals beginning in 1879 and continuing until the last property was conveyed in 1890. The middle third of NCB 285, consisting of Lots 6, 7, and 10 along with Lot 9 at the corner of North Frio Street and West Houston Street, was sold by Dalton to J. B. Patterson on April 22, 1890 (BCDR 68:81-84). Patterson, in turn, sold three of the lots piecemeal beginning with Lot 7 in February 1892 to Mrs. A. C. Pettus, Lot 6 in October 1896 to W. P. Hudgins, and Lot 9 in June 1901 to J. F. Bilhartz (BCDR 95:111-112, 149:488-489, 194:556-557).

Lot 8, at the corner of North Frio Street and West Commerce Street, was sold by Dalton in December 1879 to Joseph Rose (BCDR 11:537-538). Rose held the property until July 1889 when it was conveyed to Mrs. A.C. Pettus, who subsequently purchased the adjoining Lot 7 from Patterson in 1892 (BCDR 73:279, 95:111-112).

The development of NCB 285 is similar to other neighboring NCBS in that it was sold to a single investor and held for a decade or more before being conveyed to multiple investors. Further, NCB 285 was initially almost entirely residential. Figure 3-9 is a series of Sanborn maps (1892, 1896, and 1911) illustrating changes to NCB 285. The first panel (Sanborn 1892) indicates that only a single lot, Lot 8 at the corner of North Frio Street and West Commerce Street, has a saloon and dance hall. The remaining lots are either vacant or contain modest residential structures or a single large boarding house, all of which were of wood frame construction.

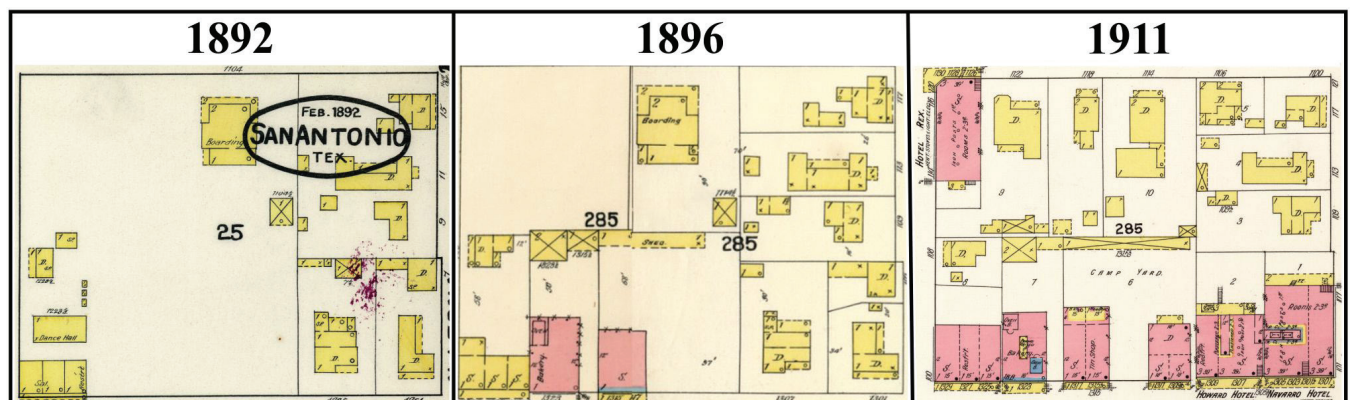


Figure 3-9. Development shown on 1892, 1896, and 1911 Sanborn maps of NCB 285 (Sanborn 1892, 1896, 1911).

By 1896, the character of NCB 285 shifted towards commercial development along West Commerce Street. This shift is amplified in the 1911 panel with the entirety of the West Commerce Street frontage being commercial brick structures of varying size and a single, brick hotel on the corner of West Houston Street and North Frio Street (Figure 3-10; Sanborn 1911).

Project excavation within NCB 285 encountered Features 7, 8, 12, and 14 along the western edge of the block on original Lots 8 and 9 (Figure 3-10). Features 7 and 8 on Lot 8 (newly designated site 41BX2195) and Features 12 and 14 on Lot 9 (newly designated site 41BX2198) are associated with commercial structures erected on those lots.

Brief History of Alazán Ditch

Before documenting the history of the Alazán Ditch, a matter of nomenclature must be discussed. It is a matter of historical accuracy and temporal clarity that the Alazán system be referred to in the same terms by which it was called when constructed. The Alazán is commonly referred to as the Alazán Acequia in cultural resource management literature. The first use of Alazán Acequia is attributable to Fox (1978) in her initial investigations of the Alazán system in San Pedro Springs Park. Since that time, the term has been repeated so often in succeeding reports and literature as to have gained popular acceptance. The common historical name of this drainage and irrigation feature is the Alazán Ditch, and for purposes of this report, it will only be referred to as such. At no time during the period of its proposal or subsequent construction and abandonment was it ever referred to as anything other than the Alazán Ditch. Referring to it as an *acequia* creates a temporal and cultural dissonance for the Alazán, which was neither Spanish Colonial in age nor in origin. Adding to the confusion is the fact that in the post-Spanish Colonial period, the old Spanish *acequias* generally kept their specific name, but the term *acequia* itself fell into disuse. Hence, names such as the Alamo or Valero Ditch, Concepción Ditch, and San Pedro Ditch appear in the historical record. Furthermore, the Valley Ditch, which was built at the same time as the Alazán Ditch, has never been referred to as the Valley Acequia.

Two major factors promoted the construction of a new irrigation canal system serving the west side of San Antonio. First, increased population west of San Pedro Creek brought growing demand for farmlands during the last quarter of the nineteenth century. Second, historical concerns for water management strategies necessitated the construction of flood control features (Fox 1978). The single greatest factor for supporting flood control was the disastrous flood of March 26, 1865, in which San Antonio suffered significant and costly damage caused by overflow in the San Antonio River basin (CCMB C:475, 481, 491, 496).

In an effort to prevent future flood damage, the City Council established a committee headed by local engineer and Bexar County Land Surveyor Gustav Schleicher. Together with then Council Secretary and former City Engineer François Giraud and the French democratic socialist founder of the failed La Reunion Colony Victor Considerant, the committee developed a plan for managing “the massive amounts of water flowing from that collected within the Olmos Creek basin, some five miles north of the city” (CCMB C:475). In 1865, the Schleicher Commission made three major recommendations to reduce flooding: 1) the removal of the Concepción Dam; 2) the removal of solid obstructions within the waterway; and 3) the commissioning of a flood elevation map. The Schleicher Commission also made the first mention of expanding irrigable lands, albeit on the east side of the city:

It is believed that a sufficient quantity of water can be taken out of the river at the upper dam [the Upper Labor Dam], to supply three ditches with water as well as two. If then, instead of following the Alamo Ditch, another Ditch were made from where the Alamo Ditch opens into the flat above Alamo City, taking in a large portion of the ground between Alamo City and the foot of the Powder House Hills; a large scope of property, now comparatively worthless, could be supplied with water facilities and increased in value to a very great extent, and in this new Ditch could receive sufficient capacity to supply the Concepcion Ditch [Schleicher Commission Report to City Council, CCMB C:475].

This proposed East Side ditch was not built, and no action was taken in 1865 by the City Council to implement the three primary recommendations of the Schleicher Commission. The potential for expanding the Alamo system on the east also engendered the potential for expanding the Upper Labor system on the west. To that end, Giraud presented a plan in January 1867 to divert waters between Alazán Creek and Olmos Creek by constructing a stone-lined channel extending from the terminus of the Upper Labor Acequia in San Pedro Springs to carry off the excess flood waters of Olmos Creek (CCMB C:577, 583; Nickels and Cox 1996:1). Initially, logistical and financial constraints held back construction. However, in 1872, the City Council directed the City Engineer, C. Hartnett, to draft plans for the both the Alazán Ditch as proposed by Giraud in 1867 and the plans for the Valley Ditch proposed by the Schleicher Commission in 1865 on the east side of the river. It was hoped that each of these new ditches would be extensions of the former Spanish Colonial *acequias* (the Upper Labor and Alamo, respectively) and that these ditches would act as flood control structures and provide irrigation for expanded agriculture on both the east and west sides.

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Figure 3-10. Features 7, 8, 12, and 14 plotted on the 1912 Sanborn map (Sanborn 1912).

Hartnett's 1872 Alazán Ditch plans proposed a 9.66-km (6-mile) long ditch with a large dam and new bridges. The Hartnett proposal revised the project from strictly a flood control measure to an irrigation scheme for watering land on the west side of the city that would bring 2,428.11 hectares (6,000 acres) under irrigation at a proposed cost of \$24,000 (*San Antonio Herald* 1 February 1872; *San Antonio Express* 2 February 1872). The project, like the proposals of 1865 and 1867, did not come to fruition as it was met with opposition over costs. In 1874, City Engineer Gustave Freisleben called for revisions to Hartnett's original ditch route citing design flaws. A new route was surveyed and construction bids were awarded the same year (Nickels and Cox 1996:2). The route of this ditch "carried the Upper Labor [Acequia] water...around the San Pedro Springs to the west, then taking a southerly course irrigated all those lands west of the San Pedro creek...[and] finally joins the Alazán Creek some distance before joining the San Pedro Creek" (Corner 1890:49-50; Fox 1978:3).

Construction began on the Alazán Ditch in August 1874 and was completed on June 9, 1875 (Corner 1890:49-50). This project and the contemporaneous work on the Valley Ditch on the east side of the city ultimately cost \$33,000 (Corner 1890:50). The Alazán Ditch was initially an earthen ditch with cut limestone blocks lining the walls; however, the construction of this ditch constantly faced obstacles related to poor water flow as a result of sub-par engineering and craftsmanship (Cox 2005:57-59). Necessary repairs to the ditch took place in 1876. To fix the water flow, portions of the ditch needed to be lowered considerably below their 1874-1875 grades. This required deeply burying portions of the Alazán Ditch and encasing the channel in stone on all sides in an underground conduit. Nickels and Cox (1996:5) state this type of "limestone-lined pipeline of this magnitude...represents a unique portion of San Antonio's acequia system." Poor construction and lack of maintenance caused constant problems throughout subsequent years. In addition to the poor flow of water, the ditch regularly operated at a loss to the City's budget. The west side Ditch Commissioner's report for March 1883 provides a list of maintenance costs:

B. Wilkens, ditch commissioner west side, per resolution of Alderman Lockwood, submits his reply, giving a full list of the water buyers and an accurate description of the ditches on the west side. He reports all the bridges and private

ditches well taken care of by private parties; also the bridge of the San Pedro ditch is in reasonable good repair.

San Pedro ditch, number of hours of water sold 95 at \$1 per hour. The number of hours of water sold on the Granjean Branch of the Alazán ditch is three hours at \$2.50 per hour; the number hours water sold from the Ripp branch of Alazán ditch, 15 hours at \$2.50 per hour; Convent branch, upper Labor ditch, 15 hours at \$2; branch of the Convent, running to the residence of W. R. Story, 11 hours at \$2; total number of hours from the upper Labor ditch this year, 138 hours at \$2,276.

Number of hours of water from the Alazán ditch branches for 1883, 41 hours at \$2.50 per hour, \$102.50. Total number of hours from the San Pedro ditch and branches for 1883, 330 hours at \$1,330. Cost of clearing and keeping in repair the said named ditch [San Pedro], with a new stone wall and water gate at the San Pedro springs, to guard against freshet, was \$249.75. Amount expended on upper Labor ditch and branches, \$232.95. Amount expended on Alazán ditch, \$256 [*San Antonio Light*, 9 April 1883:1].

According to the report, the maintenance costs of the Alazán Ditch exceeded collected water rents by 150 percent (\$102.50 income versus \$256 in expenses), while the Upper Labor maintenance costs were \$232.95 with water rental income of \$2,276. Of the four ditches, the Alazán Ditch had the least number of hours rent paid at only 18 hours versus 330 hours for the San Pedro and 138 hours for the Upper Labor. Table 3-1 enumerates and illustrates the stark differences in use, income, and maintenance for the three west side ditches.

A second aspect of Ditch Commissioner Wilken's March 1883 report that is worthy of future study is his clear statement that there were at least two branch ditches on both the Alazán and Upper Labor ditches, listing a Granjean and Ripp branch for the Alazán system and a Convent and W. R. Story branch on the Upper Labor. It may be the case that variation in ditch location, alignment, and construction noted in other archaeological reports on the Alazán system reflects subsurface encounters with these branch ditches rather than with the Alazán Ditch proper.

Table 3-1. 1883 Water Rents by Ditch, Rent Rate, Hours, Income, and Maintenance

Ditch	Rent Rate	Total Hours	Income	Maintenance	Net Gain/Loss
Alazán	\$2.50	41	\$102.50	\$256.00	(\$153.50)
Upper Labor	\$2.00	138	\$2,276.00	\$232.95	\$2,043.05
San Pedro	\$1.00	330	\$1,330.00	\$249.75	\$1,080.25

William Corner noted in his 1890 *San Antonio de Bexar: A Guide and History* that “the Alazán was a bold and practical conception, but the work seems to have been inadequately done” (Corner 1890:50). The Valley Ditch on the east side fared little better, also suffering from poor design and shoddy craftsmanship. Decades prior to the closure and abandonment of the Alazán and Valley ditches, the *San Antonio Herald* made the following prescient observation:

It is difficult to decide which ditch is destined to have the strongest claims on the indignation of the future San Antonio taxpayer. When it comes to furnish cattle and hogs with bathing facilities, the Valley Ditch gives the most satisfaction, but then it is to the Alazán Ditch that the citizens are indebted for the partial ruin, at least, of San Pedro Springs [*San Antonio Herald*, 4 March 1878].

The historical route of the Alazán Ditch transits the majority of South Frio Street within the project APE, coming in at a 45-degree diagonal from the northwest just off the northwest corner of the intersection of South Frio Street with West Commerce Street. Two historic plats clearly show the alignment of the ditch within the APE. The first of these plats is from December 2, 1875, and is referred to as the J. B. Sweeney Plat (Figure 3-11).

The Sweeney Plat only captures the former City Blocks 24 and 25 (NCBs 299 and 285, respectively) and the intersections of what are now South Frio and West Commerce streets, as well as South Pecos and West Commerce streets. In the Sweeney Plat, the earlier names of West 3rd Street, Presidio Street, and West 1st Street were retained. The plat shows the Alazán Ditch running from the northwest before turning south down the western right-of-way of South Frio Street with a bridge marked at the Presidio Street crossing.

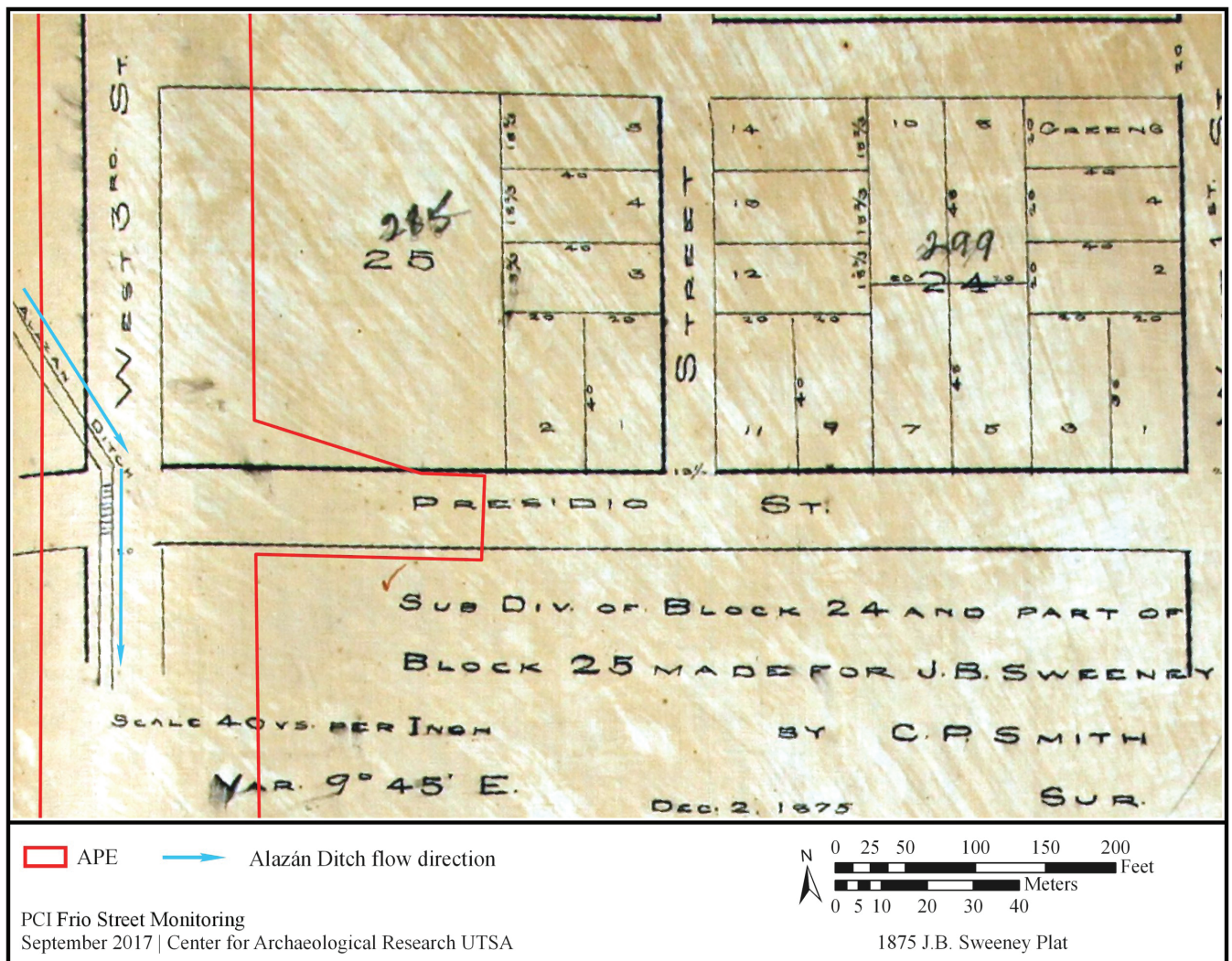


Figure 3-11. J. B. Sweeney Plat of a subdivision of Block 24 and part of Block 25, December 2, 1875 (BCDR 3:480). Note that the APE extends to the north and south.

The second plat is the Ed Steves Plat of Lots 86, 87, 88, and 89 from February 1881 (BCDR 19:114) that captures the remainder of the ditch's route through the APE as it transits southerly along the same western right-of-way of modern South Frio Street and current NCBs 265, 266, and 267 (Figure 3-12).

By 1890, the route of the Alazán fell in the city's expanding metropolitan area and use of the ditch decreased substantially. The lack of water flow left standing and stagnant water in the ditch, which led to unsanitary conditions and health concerns, and by 1903, the majority of the ditch was filled in and closed down (Labadie 1986:9; Nickels and Cox 1996:2).

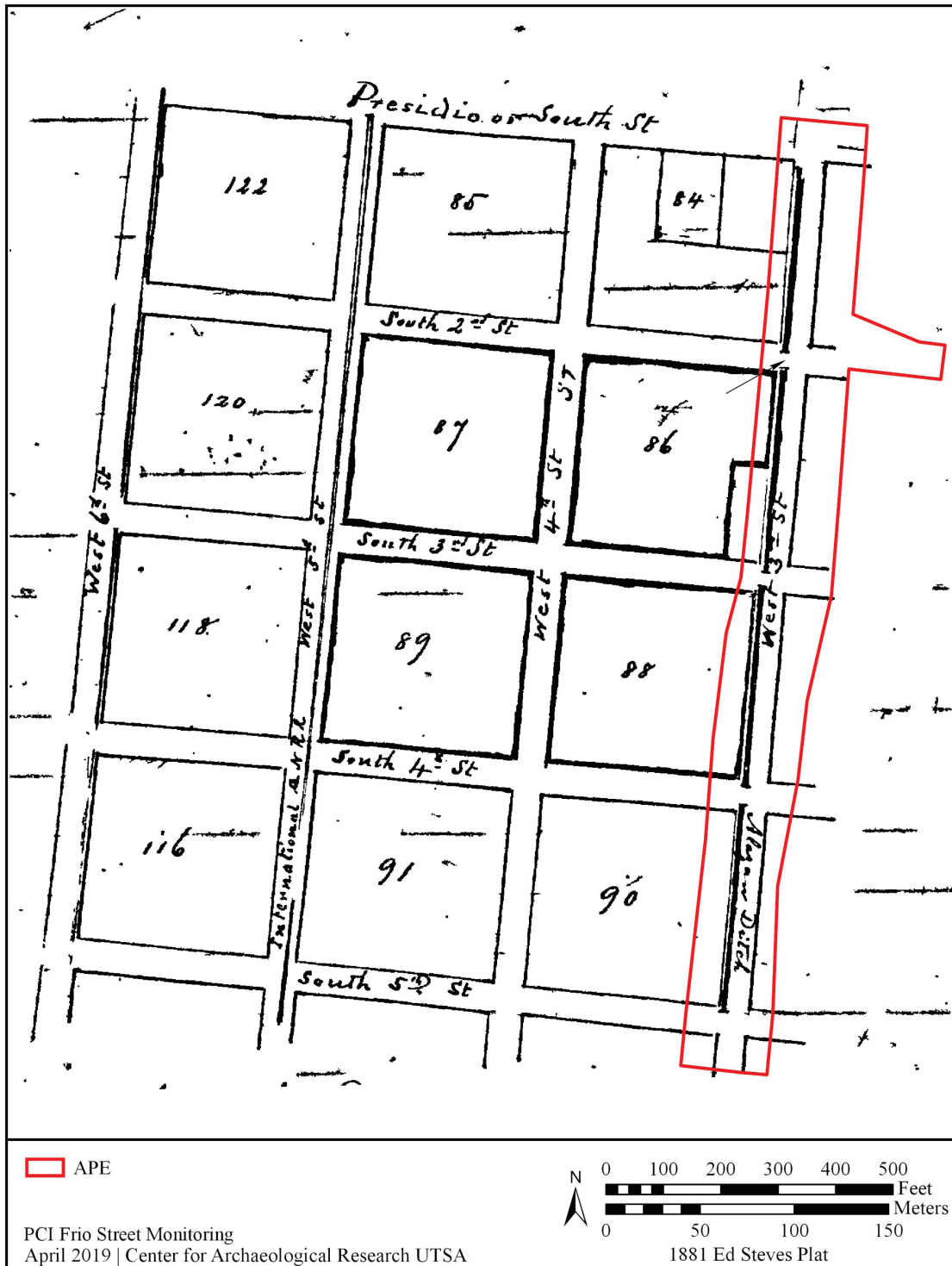


Figure 3-12. Ed Steves Plat of a Subdivision of Blocks No. 86, 87, 88, and 89, February 1881 (BCDR 16:114). Steves Lots 86 and 88 form the western line of the APE.

Previous Archaeology

Prior to the start of monitoring, CAR staff assessed the previously recorded sites within 500 m (1,640 ft.) of the APE using the Texas Archeological Sites Atlas (Figure 3-13, Table 3-2). The majority (41BX600-41BX606, and 41BX608-41BX618) of the previously recorded sites are structural remains of historic

buildings documented during the CAR 1983 Vista Verde South Project (Labadie 1986:24). The remaining sites near the APE include the Alazán Ditch (41BX620), three historic privies/trash pits (41BX1967, 41BX2074, and 41BX2092) with two sites (41BX610 and 41BX1967) listed as NRHP eligible, and a single site a registered cemetery (the 1848-1860 City Cemetery in what is now Milam Park (41BX992).

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Figure 3-13. Previously recorded sites within 500 m (1,640 ft.) of the APE shown on ESRI topographic map.

Table 3-2. Previously Recorded Sites within 500 m (1,640 ft.) of the Project Area

Trinomial	Time Period	Site Type	Site Name/Project Name
41BX600	Historic	Residential	Ed Steves and Son
41BX601	Historic	Commercial	Steves' Lumber Yard
41BX602	Historic	Commercial	Merchant's Ice House
41BX603	Historic	Residential	Jacob Richardson House
41BX604	Historic	Residential	Ernest Steves House
41BX605	Historic	Commercial/Residential	McNue House
41BX606	Historic	Residential	Jimenez Store
41BX608	Historic	Commercial	Martinez Mill
41BX609	Historic	Residential	Bartolo Martinez House
41BX610	Historic	Residential	Lischke/Duerier House
41BX611	Historic	Residential	Marx House
41BX612	Historic	Residential	Callaghan Navarro House
41BX613	Historic	Residential	Navarro/Leal House
41BX614	Historic	Commercial/Residential	Morales House
41BX615	Historic	Commercial	Anton Reicher Shop
41BX616	Historic	Residential	Anton Reicher House
41BX617	Historic	Residential	Juan R. Lozano House
41BX618	Historic	Residential	Guilbeau-Saldaña House
41BX620	Historic	Water Management	Alazán Ditch
41BX992	Historic	Cemetery	Milam Square
41BX1967	Historic	Privy	Santa Rosa Privy
41BX2074	Historic	Privy/Trash Midden	VIA MTA - Centro Plaza
41BX2092	Historic	Privy/Trash Midden	Cattleman's Square

The 1983 Vista Verde South Project was a redevelopment project that required intensive survey and testing of 60.70 hectares (150 acres) of downtown San Antonio. The APE was described as “west of downtown central business district and is bounded on the north by Buena Vista Street, on the south by Tampico Street, on the east by South Pecos Street and I.H. 35, and on the west by Alazán Creek and San Marcos Street” (Labadie 1986:1). The CAR performed the survey and testing to assess the NRHP eligibility of the standing structures and to obtain a better understanding of the archaeological context of the area as a whole.

From previous architectural surveys of the approximate 300 standing structures in the project area, approximately 50 structures were eligible for inclusion on the NRHP. The project's research design treated each NCB as a separate entity. Historical structures 41BX600-41BX606 and 41BX608-41BX618 were deemed NRHP-eligible by CAR archaeologists in the 1987 report (Labadie 1986:24). However, the Ed Steves and Son Home (41BX600), the Steve's Lumber Yard (41BX601), the Jacob Richardson House (41BX603), the Ernest Steves House (41BX604), and

the McNue House (41BX605) were deemed eligible ex post facto as they were demolished prior to the 1983 CAR survey (Labadie 1986:Figures 14 and 15). The types of structures from the Vista Verde project ranged from residential homes to commercial enterprises and a mill. Two structures, the previously demolished McNue House (41BX605) and the Morales House (41BX614), operated as brothels located at the western edge of San Antonio's Red Light District prior to the district's closing in 1941 (Bowser 1992; Labadie 1986). A synopsis of six of the 23 sites noted above follows. Each of these sites was chosen because it was deemed analogous to similar sites within the current APE, allowing for comparison.

41BX605 (McNue House) and 41BX614 (Morales House)

Site 41BX605 was a brothel, the McNue House, run by Dorothy McNue on Matamoras Street from 1904 to approximately 1911-1913 (Bowser 1992:10; Fox 1983a; Labadie 1986:18). This brothel was placed on the NRHP in 1983. Just north of this site on Matamoras Street was another brothel, the Morales House (Fox 1983b). There

is a discrepancy in the documentation of these brothels with respect to their addresses. In the Vista Verde project report (Labadie 1986:18), Labadie states the McNue House (41BX605) was at 420 Matamoras Street and was built to operate as a brothel (Bowser 1992; Fox 1983a). However, the State of Texas Archaeological Site Form for 41BX605 states this site is an “L” shaped Victorian house at 416 Matamoras Street that was a notorious brothel in 1913 (THC 2018). Furthermore the site form for 41BX614, the Morales House, states it is a two-story brothel on 420 Matamoras Street built in 1913 (Fox 1983b), and this site is listed at 420 Matamoras in Labadie (1986:Figure 14). The close proximity of these sites most likely led to this discrepancy. Furthermore, the site form for the Morales House states it was built in 1913, possibly for the sole reason of being a commercial (brothel/residential) building and was actually an extension of the McNue House business (THC 2018).

41BX2074 (Historic Trash Deposit)

Site 41BX2074 was a late 1800s trash deposit recorded in 2014 by Blanton and Associates, Inc. (Sanchez et al. 2014) at the northwest corner of the intersection of North Frio Street and Houston Street at the VIA Metropolitan Transit Centro Plaza. The recording archaeologists described the site as a single component compilation of four features consisting of a basin-shaped refuse deposit and heavily disturbed brick support alignments. Cultural material associated with these features were machine-made glass bottles, cut faunal bone, whiteware ceramics, and flat glass. The site was previously destroyed by years of urbanization and was ineligible for inclusion on the NRHP (Sanchez et al. 2014). It is possible that 41BX2074 was a remnant of the Alazán Ditch but not recognized as such in the 2014 work. The site aligns closely with the path of the Alazán as it traverses northwest to southeast through this area (see Figure 3-13).

41BX2092 (Historic Trash Deposit)

Site 41BX2092 was recorded in 2015 by Terracon Consultants Inc. (Yelacic 2015) and was a historic scatter of domestic-type cultural material in the historic area of Cattleman’s Square. The site consisted of a lens of cultural material from the late 1800s to the early 1900s, which most likely represented the remnants of domestic structures that were destroyed for commercial interests during the mid-1900s. The site was ineligible for inclusion of the NRHP (Yelacic 2015).

41BX1967 (Santa Rosa Privy)

The Santa Rosa privy, 41BX1967, on the other hand, was eligible for the NRHP and was included in 2013 (Tomka et al. 2014). Located in NCB 337, the site was a rectangular privy lined with yellow brick and was excavated in 2011

by CAR archaeologists. This yellow-brick feature was first encountered when excavating for a truck ramp expansion, which prompted CAR archaeologists to excavate a 22-x-44 cm (8.66-x-17.32 in.) test probe section to a depth of 52 cm below the surface (cmbs; 20.47 in.) At that depth, the feature was designated a privy and was fully excavated in arbitrary 10-cm (3.94-in.) levels, with the north and south section of the privy being unique excavation sequences (Tomka et al. 2014:30-34; Ulrich 2013). The privy was fully exposed to a width of 120-140 cm (47.24-55.12 in.), a length of 222 cm (87.40 in.), and a depth of 135 cmbs (53.15 in.), with large cast iron piping at this depth in the northern half. The cultural material collected from this privy included: ceramic fragments, faunal bone, glass containers ranging from beer/wine to inkwells, medicinal bottles, glass syringes, and personal items such as a ceramic doll leg and marbles. All the cultural material from this site dated from the 1850s to approximately 1930 (Tomka et al. 2014:35). According to Tomka and colleagues (2014:45-46), this privy “reflects multiple ethnicities, domestic households, and businesses of the neighborhood” and was possibly used by private households and public businesses alike at the turn of the century.

41BX992 (Milam Park - City Cemetery)

Site 41BX992, the City Cemetery site at Milam Park, was a 3.24-hectare (8-acre) plot of land designated as a cemetery (Nichols 2013). In 1992, COSA contracted CAR to explore the center of the park to uncover the cemetery boundaries. The project reports produced by CAR (Lyle et al. 1999; Tennis 1993) present a detailed description of the history of this City Cemetery, and Nichols (2013) provided a discussion of the City Cemetery history.

In 1993, the remains of Colonel Ben Milam, the posthumous hero of the Siege of Bexar in 1835 wherein he was killed, were exhumed and, in 1994, reinterred at the base of the Ben Milam statue in the park (Nichols 2013; Tennis 1995). The City designated two cemeteries in 1848. The first of which was denoted as the City Cemetery, and the second, adjacent to the north, was designated as the Catholic Cemetery (CCMB A:135-137). Although the official creation of the City Cemetery occurred in 1848, this plot of land was most likely used as a burial ground prior to its formal dedication. The site was in use for only five years before available land began to run out, and by 1853, it was no longer in use and many of the burials were reinterred elsewhere (Nichols 2013:13; Tennis 1993, 1995). The Catholic Cemetery was an extension of the pre-existing Campo Santo (Cemetery) of the parish church of San Fernando, which had opened on what became the northwest corner of the intersection of West Houston and Santa Rosa streets in November 1808. The 1853 end date for City Cemetery burials coincides with the opening of the new City Cemeteries on the east side. The Catholic Cemetery

continued in use until December 26, 1860, with Evarista Valenzuela recorded as the final burial (Leal 1976). The San Fernando Burial register shows that all interments after 1860 were made at San Fernando Cemetery No.1 on the west side of the city. Previous reporting on the topic of the period of use for these cemeteries by CAR was incorrect and conflated the East Side City Cemetery dates of operation and use with those of San Fernando and the City Cemetery in Milam Park (see Lyle et al. 1999:4; Nichols 2013:13-14; Tennis 1993, 1995).

41BX620 (Alazán Ditch)

As previously discussed, the design and poor construction of the Alazán Ditch led to its abandonment after only 20 years of use. The abandonment of the ditch was followed by its deconstruction in many places. For the most part, the Alazán Ditch was haphazardly filled in and buried under new construction throughout the years. The Alazán Ditch was first documented in 1977 during an archaeological investigation of old *acequias* within City parks by CAR at the request of the San Antonio Parks and Recreation Department (Fox 1978:11-12). However, a State of Texas Archaeological Site Form was not submitted until 1983 when a segment of the ditch was uncovered by CAR during the Vista Verde South Project, and at that time, the Alazán Ditch was given the trinomial 41BX620 (CAR Letter Report 1983).

In the summer of 1977, CAR archaeologists excavated a small section of this ditch in San Pedro Park near the head of San Pedro Springs. Fox (1978:11) described the construction of the Alazán Ditch as reminiscent of the original ditch's design, with cut limestone blocks and sandy lime mortar making up the north and south wall. On the south wall, two limestone blocks were added at a later date than the original construction, and three additional courses of limestone were added to the north wall. Both additions were mortared together with cement, rather than the sandy lime mortar indicative of late 1800s construction techniques. These were possibly City Engineer Giraud's attempt at fixing construction issues

in 1876 (Fox 1978:11). The Alazán Ditch's west wall was encountered under South Frio Street in a backhoe trench on the southern edge of NCB 266 in 1983 (Labadie 1986:12, 30), with a modern utility line running down the center of the ditch.

In 1996, CAR (Nickels and Cox 1996) conducted an archaeological assessment of the Alazán Ditch for the San Antonio River Authority (SARA) at the intersection of Cornell Street and Fredericksburg Road. The limestone-cased ditch was encountered during a sewer tunnel construction. CAR archaeologists examined the ditch by entering 18.29 m (60 ft.) of newly joined concrete sewer pipes. The SARA construction crews hit the ditch at a transverse angle, creating a 40-in. high and 44-in. wide opening in its south wall (Nickels and Cox 1996:4-5, Figure 3). From this opening, CAR archaeologists observed the full picture of this ditch's construction:

The [Ditch] was a near perfectly round casing measuring 48 inches in diameter on the interior and constructed of hand-hewn limestone bonded together with a sandy paste mortar. The hand-quarried stones were all keystone shaped, with 10-inch faces to the tunnel's interior. Each stone was 36 inches long by 18 inches thick. A smooth coating of roman cement...was applied to the interior of the tunnel up to within 8 inches of the keystone ceiling [Nickels and Cox 1996:4].

The limestone blocks were lined with cement to smooth the edges of the stones in order to ease water flow. The Alazán Ditch is the only one its kind documented in San Antonio with a "buried tunnel conduit" (Nickels and Cox 1996:7), which was the final product after the 1876 repairs (Figure 3-14). This 1996 examination provided a "unique opportunity to document historic construction of the 1870s tunnel" (Nickels and Cox 1996:7). Figure 3-15 shows the approximate path of the Alazán Ditch based on current knowledge and in relation to the APE.

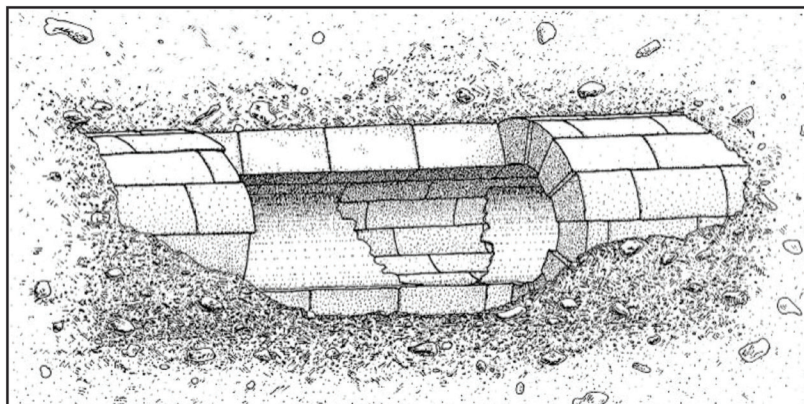


Figure 3-14. A depiction of the Alazán Ditch tunnel architecture (Nickels and Cox 1996:Figure 5).

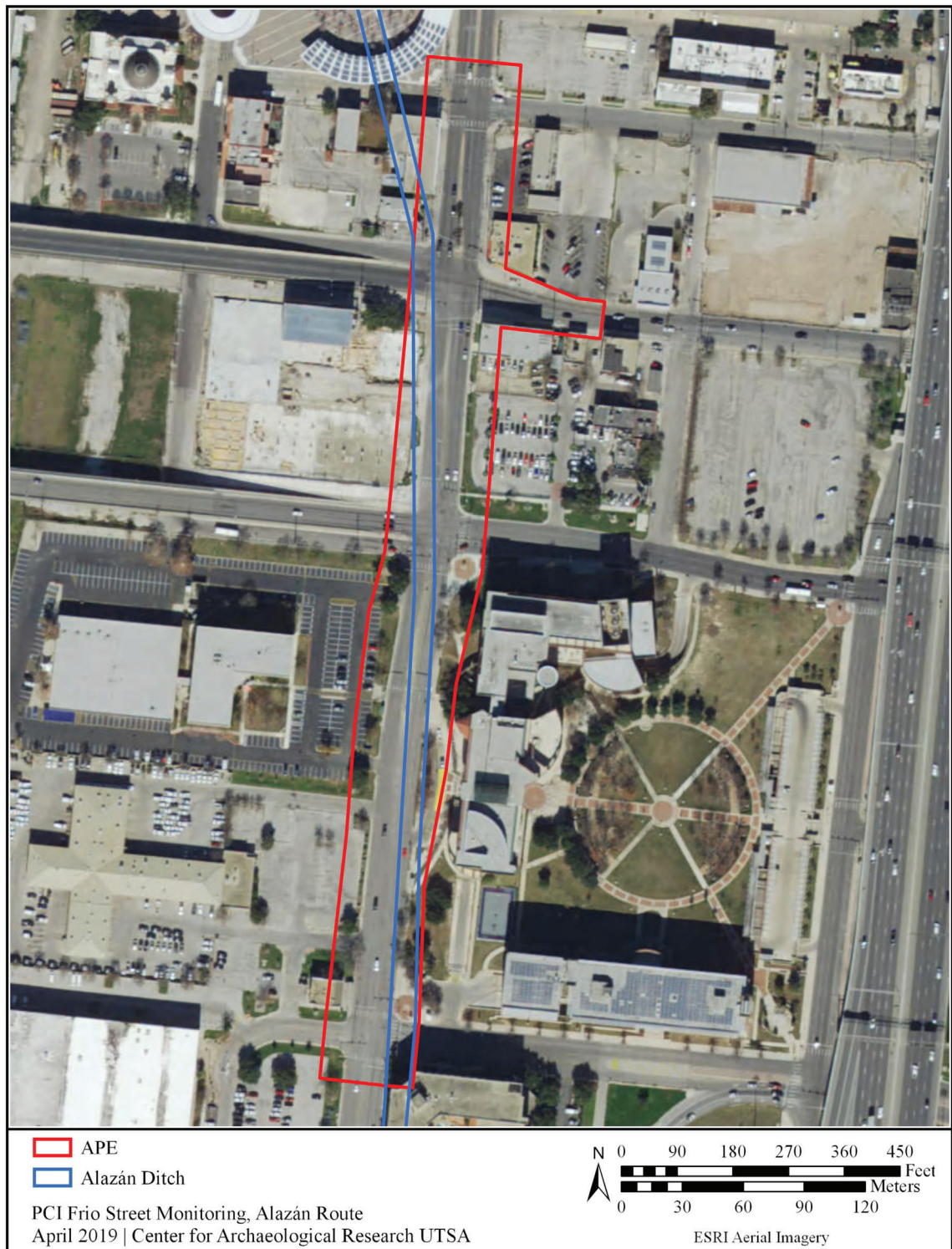


Figure 3-15. Approximate path of the Alazán Ditch in relation to the APE shown on an ESRI aerial image.

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Chapter 4: Field and Laboratory Methods

Monitoring Field Methods

To accommodate the requested monitoring activities, the Project Archaeologist (PA) corresponded with the COSA Office of Historic Preservation, PCI, and contractors to coordinate when an archaeologist needed to be present for below-ground construction activities. The PA attended weekly progress meetings, and weekly progress reports and future week schedules were submitted and discussed among all relevant parties using email.

When on site, the CAR archaeologist documented the day's activities (i.e. type of utility work, locale, trench dimensions and depth, and any unearthed historic features) on a standard daily monitoring form. The forms were scanned, and the hard copy was placed into the project folder and filed for future curation. A field notebook was used to record personal notes and daily sketch maps. These entries were copied and curated along with all project paperwork. To document daily activities, the monitor utilized digital data in the form of Trimble GPS and photographic documentation where appropriate. A lab-based Illustrator (GIS) supported the monitor by downloading and managing GPS data in an ArcGIS project file, which served as the database for all maps.

When intact archaeological features were uncovered, the monitor notified the CAR Director and the COSA City Archaeologist immediately. The CAR used the following guidelines for the designation of historic features and new sites. A feature was defined as any intact engineered structure that clearly did not belong to modern construction projects (i.e. concrete duct bank) or an in situ deposit of historic cultural material in an area larger than 0.5-x-0.5 m (1.64-x-1.64 ft.). *Sanborn Fire Insurance Maps* and other archival documentation were used to determine if a feature was associated with any nearby Historic buildings. Features associated with Historic buildings were recorded as sites.

The monitor recorded features using standard archaeological procedures, including completion of feature forms that

noted feature dimensions, descriptions of feature attributes, measured plan and profile view drawings, GPS point(s), and photographs. After consultation with the COSA City Archaeologist and the THC, the monitor directed construction crews on the appropriate and required level of preservation of the feature. Where appropriate, the monitor collected diagnostic artifacts and transported them to the CAR laboratory for processing, analysis, and curation pursuant to requirements in the permit. CAR provided updates and summaries of the field and lab activities to PCI and the COSA OHP each month.

Laboratory and Curation Methods

The analysis and organization of records, artifacts, and daily logs was ongoing during the course of the project. All records generated during the project were prepared in accordance with Federal Regulations 36 CFR Part 79 and THC requirements for State Held-in-Trust collections. Field forms were printed on acid-free paper and completed with pencil. Forms not completed in pencil or marked with pen were placed in plastic page protectors. A CAR laboratory technician washed, air-dried, and stored all collected project artifacts in 4-mil, zip-lock, archival-quality bags. All materials that required extra support were double-bagged, and acid-free labels were placed in all artifact bags. Artifacts requiring a label, in accordance to the curation labeling standards, received a laser printer generated label that contained provenience information and a corresponding lot number generated from CAR cataloging system. For final curation, these artifacts were separated by class and stored in acid-free boxes that were labeled with standard tags.

All field notes, forms, photographs, and drawings were placed in labeled archival folders. Digital photographs were printed on acid-free paper and inserted in archival-quality plastic page protectors to prevent accidental smearing due to moisture. All recovered artifacts and project-related materials, including the final report, were permanently stored at the CAR's repository facility.

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Chapter 5: Results

The objective of the project was to monitor infrastructure improvements along Frio Street. The major component of these improvements was the installation of new utility lines: gas, electric, sewer, and water. From February to June 2017, utility line backhoe trenching uncovered 16 historical

features recorded by CAR archaeologists (Figure 5-1, Table 5-1). This monitoring project included a total of 410 m (1,345 ft.) of trenching and new gas line installations, 135 m (443 ft.) of newly installed sewer lines, and approximately 134 m (439 ft.) of new water lines.



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Figure 5-1. Location of all features uncovered during the project on an ESRI aerial image.

Table 5-1. List of Features and Associated Sites for Project

Feature	Depth (cmbs)	Feature Description	Site Trinomial	Site Name
1	43-111 (16.93-43.70 in.)	earthen ditch	N/A	N/A
2	69-155 (27.17-61.02 in.)	north-south wall segment	41BX620	Alazán Ditch
3	55-160 (21.65-63 in.)	east-west wall segment	41BX620	Alazán Ditch
4	90-145 (35.43-57.09 in.)	stone foundation of late nineteenth-century house	41BX2194	Schoenert's Bakery
5	41-92 (16.14-36.22 in.)	1896 limestone capped privy	41BX2194	Schoenert's Bakery
6	50-65 (19.69-25.59 in.)	pavement stones	N/A	N/A
7	45-82 (17.72-32.28 in.)	1904/1911 shop brick wall	41BX2195	Pettus Commercial Shops
8	34-82 (13.39-32.28 in.)	1904/1911 shop brick wall	41BX2195	Pettus Commercial Shops
9	50-80 (19.69-31.50 in.)	north-south wall segment	41BX620	Alazán Ditch
10	45-76 (17.72-29.92 in.)	late nineteenth-century trash pit	41BX2196	Androlli Residence and Saloon
11	40-100 (15.75-39.37 in.)	concrete fence foundation	N/A	N/A
12	50-160 (19.69-63 in.)	1911 D'Hanis Brick south wall	41BX2198	Hotel Rex
13	50-180 (19.69-70.87 in.)	1912 Gebhardt Chili Powder Co. warehouse brick wall	41BX2197	Gebhardt Chili Powder Co.
14	60-160 (23.62-63 in.)	1911 D'Hanis Brick north wall	41BX2198	Hotel Rex
15	70-160 (27.56-63 in.)	yellow brick wall	N/A	N/A
16	70-160 (27.56-63 in.)	N/S wall segment	41BX620	Alazán Ditch

Since the project area falls within a heavily urbanized area that has seen continuous construction events throughout the neighborhood's history, CAR archaeologists anticipated high levels of below-ground disturbance and construction fill to dominate the trench stratigraphy. The majority of the features (Features 4, 7, 8, and 12-15) encountered were brick walls or remnants of stone foundation. Trench excavation for gas and water pipe installations unearthed north-south oriented walls of the Alazán Ditch (41BX620) at three locations on the west side of Frio Street (Features 2, 9, and 16). Gas line excavation also unearthed an east-west segment of the Alazán Ditch at one of these locations (Feature 3).

From the 16 features, CAR designated five new historic sites (Figure 5-2). Table 5-2 lists the newly designated sites,

the associated features, and the location of the new sites. The two new sites with a privy/trash pit feature unearthed a range of artifact classes (i.e. glass, ceramics, metal, faunal bone) dating from the late nineteenth century through the early twentieth century. With the aid of archival research and historic maps, such as the *Sanborn Fire Insurance Maps*, CAR archaeologists were able to attribute most of the recorded building/structural features to the turn-of-the-twentieth-century businesses in the west side of town.

To explicate the results of the project, this chapter is organized by the type of utility improvements monitored: 1) CPS gas line monitoring, 2) CPS electrical conduit monitoring, 3) SAWS sewer line monitoring, and 4) SAWS water line monitoring. In each utility improvement section,

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Figure 5-2. Location of all newly designated sites (outlined in blue) within the APE on an ESRI topographic map.

Table 5-2. Newly Designated Sites

Site Trinomial	Site Name	Associated Features	NCB (Lot)	Address
41BX2194	Schoenert's Bakery	Feature 4 (stone foundation) and Feature 5 (trash pit/privy)	265 (18)	1402 W. Commerce St.
41BX2195	Pettus Commercial Shops	Feature 7 (brick wall segment) and Feature 8 (brick wall segment)	285 (8)	1325 and 1329 W. Commerce St.
41BX2196	Androlli Residence and Saloon	Feature 10 (trash pit)	284 (7)	525-527 Buena Vista St.
41BX2197	Gebhardt Chili Powder Co.	Feature 13 (brick wall segment)	284 (parts of 1, 2, 3, 4, 7, 8, and 9)	110 S. Frio St.
41BX2198	Hotel Rex	Features 12 (south brick wall segment) and 14 (north brick wall segment)	285 (parts of 9)	116 S. Frio St.

the description of work performed is further broken down by the trench location along Frio Street and by the features encountered at that location. Any features that are associated with a new site are discussed as such.

CPS Gas Line Monitoring

The largest portion of the project requiring archaeological monitoring was gas line installation conducted for CPS. New gas lines were installed along both sides of Frio Street, across the street at the north and south intersection of West Commerce Street, and across the street at the south intersection of Houston Street. In the southern extent of the APE, contractors installed new gas lines to tie into an existing line approximately 33 m (108.26 ft.) south of the South Frio Street and Buena Vista Street intersection. New gas lines (approximately 24 m; 78.74 ft.) were also installed just in front of the UTSA Buena Vista Building and westward across Frio Street from the Buena Vista Building sidewalk to the beginning of the Monterey Building parking lot.

The northern extent of gas line trenching was the northeast corner of the North Frio Street and Houston Street intersection. At this corner, the crew excavated a 1.5-x-1.8 m (4.92-x-5.91 ft.) box for the new 15.24-cm (6-in.) gas line to tie into the existing 20.32-cm (8-in.) gas line. Contractors installed new gas lines across Frio Street at the intersection with West Commerce Street. The crew trenched westward 24 m (78.74 ft.) from the eastern to the western corner across Frio Street on both the northern and southern side of West Commerce Street. At the south end of the Houston Street and North Frio Street intersection, the crew trenched westward from the southeast corner to the southwest corner of the intersection.

Although exceptions were made to remove unknown modern construction features (e.g. concrete duct banks, plastic ITSD

lines, etc.), the average trench sizes for the installation of the 15.24-cm (6-in.) pipes were as follows: 40-60 cm (15.75-23.62 in.) in width and 1.5-1.8 m (4.92-5.91 ft.) in depth. The soil stratigraphy was relatively uniform throughout the project trenching. Generally, the below-ground strata were as follows: 10-15 cm (3.94-5.91 in.) of asphalt/concrete, 20-35 cm (7.87-13.78 in.) of caliche fill/base, and a dark gray/brown clay soil to the terminating depth.

On the east side of Frio Street, approximately 185 m (606.96 ft.) of new 15.24-cm (6-in.) gas line pipes were installed within the boundaries described above. The lateral trenching across Frio Street at West Commerce, Houston, and Buena Vista streets totaled approximately 98 m (321.52 ft.). Additionally, contractors installed a new line at the southeast corner of South Frio Street and West Commerce Street, in front of the historic Estrada Hardware Building. The line ended at a tie-in point approximately 43 m (141.08 ft.) east from the corner.

On the west side of Frio Street, the gas line installation was 34 m (111.55 ft.) from the abandoned brick building at 948 West Commerce Street to the southwest corner intersection of South Frio Street and West Commerce Street. Then, the line extended southward approximately 50 m (164.04 ft.) to an existing tie-in point near the intersection of South Frio Street and Buena Vista Street. In total, trench excavations for gas line construction uncovered 11 historic features including an earthen ditch (Feature 1), a privy and a late nineteenth-century stone foundation (Features 5 and 4, respectively), late nineteenth-century pavement stones (Feature 6), brick wall segments from early twentieth-century shops (Features 7 and 8), the brick walls of a 1911 building (Features 14 and 12), and three segments of the Alazán Ditch (Features 2, 3, and 9). From these features, three new sites were recorded: 41BX2194 (Features 4 and 5), 41BX2195 (Features 7 and 8), and 41BX2198 (Features 12 and 14).

Trenching on West Side of South Frio Street

The gas line installation for this project began at the southwest corner of the intersection of South Frio Street and West Commerce Street. The backhoe trenching started at the abandoned building at 948 West Commerce Street heading east approximately 34 m (111.55 ft.). The preliminary construction work took place to the west outside of the APE. The monitoring archaeologist did not observe any cultural material in this trench. However, a possible earthen ditch was uncovered in the south trench wall (Feature 1). CAR staff documented the feature, and trenching progressed southward from that southwest corner intersection approximately 50 m (164.04 ft.) to an existing tie-in point. Excavation at this corner uncovered two wall segments of the Alazán Ditch, one a north-south oriented wall segment (Feature 2) and the other an east-west oriented wall segment (Feature 3). After the monitoring archaeologist documented both features, Feature 2 was left in place and not impacted by utility work. The City Archaeologist approved the removal of the first two stone blocks from the top of Feature 3 to place the gas line. A second north-south oriented Alazán Ditch wall segment that consisted of a single limestone block was discovered at the northwest corner of the North Frio Street and West Commerce Street intersection. CAR staff designated this segment as Feature 9, and it was left in place.

Approximately 20 m (65.62 ft.) south of the intersection of Frio Street and West Commerce Street, trenching uncovered two more historic features, a possible stone house foundation (Feature 4) and a limestone capped privy or trash pit (Feature 5). With the approval from the City Archaeologist, contractors removed both features after documentation. The following descriptions provide further detail on each feature uncovered during the gas line trenching on the west side of South Frio Street.

Feature 1: Earthen Ditch

Gas line improvements began on the south side of a side street off Medina Street, approximately 15 m (50 16.40 ft.) west of the intersection of South Frio Street and West Commerce Street on February 22, 2017. Feature 1 was an earthen ditch with fist-size limestone cobbles stacked on top of one another in the south profile wall of the trench (Figure 5-3). The top of the feature began at 43 cmbs (16.93 in.), and it terminated at 111 cmbs (43.70 in.). It was 43 cm (16.93 in.) wide, east-west. The archaeologist did not observe any cultural material in association and noted this area was previously disturbed by modern above-ground (landscaping) and below-ground (tree planting, nearby pipelines, and gravel road fill) construction projects. There was not enough of the original design remaining to determine if the limestone cobbles represent a wall lining a historical earthen ditch. The feature did not impact the progression of the gas line installation and was left in place.



Figure 5-3. Feature 1, limestone blocks lining the earthen ditch (outlined in white), facing south. Scale is metric.

Feature 2: Alazán Ditch (41BX620), North-South Oriented Wall Segment 1

A major concern for this project was the potential for below-ground construction to negatively impact remaining segments of the nineteenth-century Alazán Ditch. As a part of background research, CAR archaeologists assessed the trajectory of the Alazán Ditch prior to fieldwork to predict the areas in which excavation could reveal portions of its path. The southwest corner of the South Frio Street and West Commerce Street intersection was the area with the highest potential for finding the Alazán Ditch. On February 24, 2017, trenching at this intersection unearthed a stone block feature. Feature 2 consisted of approximately four courses of shaped limestone blocks, oriented north-south. The feature began at 69 cmbs (27.17 in.) and extended to a terminating depth of 155 cmbs (61.02 in.; Figures 5-4 and 5-5). The north-south trench was 50 cm (19.69 in.) wide, which meant little of the Alazán Ditch's stone-lined walls was exposed. The wall segment, however, did appear to continue into the trench profile. The feature was 35 cm (13.78 in.) wide. The stones were relatively uniform in size and height, with the exception of the top stone that was not as formally shaped as the lower stones.

Once exposed, the CAR archaeologist halted work in the area and informed the City Archaeologist. Since the Alazán Ditch

has been determined eligible for listing on the NRHP and as a SAL, it was important to avoid and/or preserve as much of its wall as possible and limit the amount of impact necessary for this utility installment. Fortunately, contractors were able to tunnel underneath the wall for placement of the 15.24-cm (6-in.) pipe, preserving this segment of the Alazán Ditch. After standard feature documentation, no additional work was recommended in this area.

Gas line trenching across South Frio Street at the intersection of West Commerce Street was completed in early March 2017, providing archaeologists another view of Feature 2. In that area, a cast iron pipe ran parallel to the Feature 2 wall segment with a lens of river cobbles between the two. In all likelihood, the Alazán Ditch's east wall was destroyed when the cast iron pipe was installed. The layer of river cobbles was unique, as these rocks were not observed in any other strata in the gas line trenches. The stones may be evidence of water flow through this stone-lined ditch.

Feature 3: Alazán Ditch (41BX620), East-West Oriented Wall Segment 2

Feature 3 was an east-west oriented wall segment of the Alazán Ditch (Figure 5-6). It consisted of four courses of shaped limestone blocks, creating an appearance of stairs on



Figure 5-4. Feature 2, Alazán Ditch north-south wall segment (between white lines), facing north. Scale is metric.



Figure 5-5. Feature 2, Alazán Ditch north to south wall segment, facing west. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c. Scale is metric.



Figure 5-6. Feature 3, east-west wall segment (between white lines), facing west. Scale is metric.

the north facing side (Figure 5-7). The south facing side of the feature was completely straight. Each stone was uniformly cut to create a flat side of the wall. The feature was 48 cm (18.90 in.) long, north-south, and it was 40 cm (15.75 in) wide, east-west. The feature was exposed to a depth of 160 cmbs (63 in.).

CAR's GIS analyst experienced issues georeferencing the 1896 Sanborn map because the historic map is off by approximately 5 m (16.4 ft.). This presented the contents of the map more westward than they should be, which led to Feature 3 not matching up with the stone foundation shown on the 1896 Sanborn map. CAR archaeologists later identified Feature 4 as this stone foundation. Upon further archival research completed after the fieldwork, it was determined that Feature 3 actually represented an east-west bend in the Alazán Ditch that can be seen on the 1875 Subdivision Plat by J.B. Sweeney (see Figure 3-12). Unfortunately, this was unknown in the field, resulting in the removal of the first two levels of stone from this east-west segment of the ditch in order to place the gas line, with the remainder of the stone wall left in place. CAR staff extensively photographed and created a plan and profile map of Feature 3 prior to the stone's

removal. The step-like appearance of Feature 3 presented evidence of the Alazán Ditch's enclosed nature that resulted from the 1876 improvements. These recent finds provided confirmation of the tunnel-like construction described and depicted in Nickels and Cox (1996:8; see Figure 3-15).

Feature 9: Alazán Ditch (41BX620), North-South Wall Segment 3

A second north-south oriented wall segment of the Alazán Ditch was unearthed during gas line trenching at the northwest corner of the North Frio Street and West Commerce Street intersection. CAR staff designated this segment as Feature 9, and it consisted of only one limestone block that was 25 cm (9.84 in.) in height (Figure 5-8). The crew first encountered the feature at 50 cmbs (19.69 in.), and it terminated at approximately 80 cmbs (31.50 in.). The CAR archaeologist used a Trimble GPS to verify that the feature was a segment of the Alazán Ditch. Feature 9 measured 60 cm (23.62 in.), north-south, and 40 cm (15.75 in.), east-west (width of the trench). The stone was almost identical in size, shape, and color to the stones from the first two identified Alazán Ditch segments (Features 2 and 3). The construction crew uncovered Feature 9 immediately underneath the gravel/caliche base strata, and



Figure 5-7. Feature 3, east-west wall segment, facing south. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c. Scale is metric.



Figure 5-8. Feature 9, ditch wall segment, facing west. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c.

approximately 70 cm (27.56 in.) west of the feature was a large gas line. Previous utility placement and construction heavily disturbed subsurface deposits in this area; therefore, it is understandable only one limestone block associated with the Alazán Ditch was still in place. CAR staff recorded Feature 9, and contractors were able to prevent any impact by placing the gas line underneath the feature. The location of the Alazán Ditch segments are shown on Figures 5-9 and 5-10, and the ditch in Figure 5-9 is georeferenced. Feature 16, the fourth wall segment of the Alazán Ditch, was located during a new water line installation, and it will be discussed in the SAWS sewer line monitoring section of the report.

Features 4 and 5: Schoenert's Bakery (41BX2194)

Site 41BX2194 consisted of a stone structure fronting Frio Street that served as Schoenert's Bakery and a wooden structure fronting West Commerce Street that served as the mercantile portion of the structure. As discussed in the archival section, these structures were erected around 1882. The building remained in place until the turn of the twentieth century, when it no longer appeared on the *Sanborn Fire Insurance Maps*. Figure 5-11 is a series of Sanborn maps showing the evolution of the stone foundation structure at the southwest corner of Frio Street and West Commerce Street. The series shows that by 1904 the stone structure to the rear has been removed, leaving the wooden structure at 1402 West Commerce Street.

Feature 4 dates from the 1880s to the turn of the twentieth century. In the 1905-1906 City Directory, 1400-1402 West

Commerce Street is listed as the "French Meat Market" operated by L. Picard (Appler 1906:380). This site included the wood frame dwelling/store with the stone foundation along the east end of the lot (Feature 4) and the smaller wood dwelling where a trash pit of late nineteenth-century to early twentieth-century cultural material was uncovered (Feature 5). Together Features 4 and 5 are approximately 30-x-12 m (98.43-x-39.37 ft.; Figure 5-12).

Feature 4: Stone Foundation

Contractors began excavating a gas line trench southward from the southwest corner of the intersection of South Frio Street and West Commerce Street and uncovered a stone foundation approximately 15 m (49.21 ft.) south of Feature 3. The feature began at 90 cmbs (35.43 in.) and terminated at 145 cmbs (57 in.). The feature was 1 m (3.28 ft.) long, north-south, and was at least 50 cm (19.69 in.) wide, east-west (Figure 5-13). The feature consisted of three layers of flat limestone slabs. The top stone was rounded, and the bottom two were rectangular. None were as evenly shaped as the stones from Feature 3. The only observed cultural material was a small piece of an amber beer bottle glass and a small area of charcoal on the top limestone (Figure 5-14). The feature was recorded with digital photographs, GPS location, and a standard feature form.

After documentation, contractors removed the top two limestone blocks for the pipeline installation. In the field, the monitoring archaeologist did not interpret this feature as correlating with the stone and wood frame dwelling/

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Figure 5-9. Alazán Ditch route (blue lines indicate site boundaries as defined by Texas Archeological Sites Atlas) and uncovered segments (Features 2, 3, 9, and 16) found during trenching shown on an ESRI topographic map.



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Figure 5-10. Alazán Ditch route and Features 2, 3, 9, and 16 overlaid on the 1881 Ed Steves Plat map (BCDR 16:114). Note that Features 2, 3, and 16 appear as a cluster due to map scale).

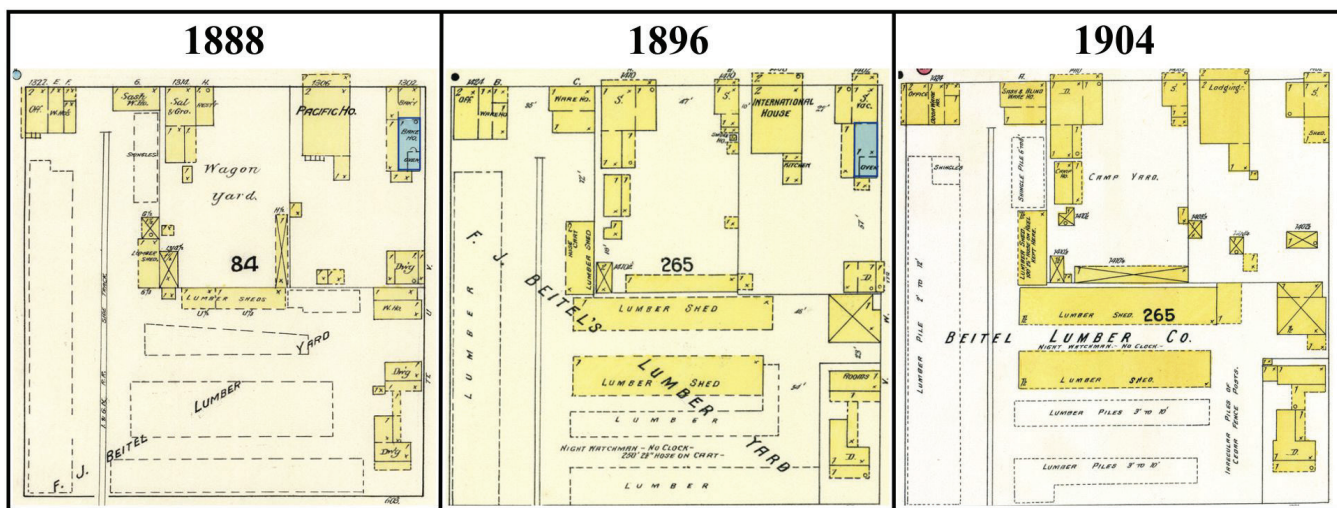


Figure 5-11. Series of Sanborn maps from 1888, 1896, and 1904 showing the evolution of the foundation structure (blue on maps) of these buildings (Sanborn 1888, 1896, 1904).

store on the 1896 Sanborn map. Once plotted in ArcGIS, it became clear this feature was indeed a part of a stone and wood frame dwelling at the southwest corner of South Frio Street and West Commerce Street. There was some difficulty georeferencing this older map due to the lack of referencing data associated with the map; therefore, the map is slightly skewed to the left. This minor difference is the reason why Feature 4 does not match up exactly with the dwelling; however, its close proximity and charcoal stained, slightly shaped stones provide a sufficient amount of evidence to call this the southeastern corner of the oven room of the dwelling/store on the 1896 Sanborn (Figure 5-12).

Animal bone fragments were found at approximately 25 cmbs (9.84 in.) during trench excavation at the southwest corner of South Frio Street and West Commerce Street. The bone fragments were a proximal femoral head and shaft that fit together at the femoral head epiphysis; however, the epiphysis was not fused, indicating the bones were that of a juvenile mammal, most likely domesticated cattle, with distinctive saw cut butchering marks. The GPS point for this bone placed it within the store of the 1896 building, and the machine-made cut marks on the distal end indicate an end of the nineteenth-century temporal range.

Feature 5: Limestone Capped Privy/Trash Pit

Feature 5 is a limestone-capped privy or trash pit that was uncovered in the east trench wall excavated at the rear of NCB 265 Lot 18. The feature is the remnants of a privy that was repurposed as a trash pit. Feature 5 is directly associated with the small wood frame residence built by the Schoenert family at 113 South Frio Street. The limestone cap may represent stone remainders from the construction of the bakery adjacent to the north and part of the same lot owned by the Schoenert

family (Figure 5-15; see also Figure 5-12). Feature 5 was on the west side of South Frio Street, approximately 6-9 m (19.69-29.53 ft.) south of the Feature 4 stone foundation in the same gas line trench.

The feature was previously disturbed by modern construction and the installation of an asbestos pipe that runs parallel to the feature. The feature began at 41 cmbs (16.14 in.), terminated at 92 cmbs (36.22 in.), and extended 40 cm (15.75 in.) across, north-south, in a U-shape indicative of privies. Two limestones capped the feature, and a lighter color soil layer was beneath these stones. The feature's location aligns with the southeastern edge of an 1896 wood frame dwelling and the northeastern edge of a wood frame stable. The monitoring archaeologist collected nine diagnostic artifacts as a representative sample for analysis and a small sample of charcoal from this feature (Table 5-3). This feature appears to represent a typical turn-of-the-twentieth-century privy, but it was impossible to verify given the limited investigations.

The artifact assemblage of this feature is indicative of household trash and wall fall in a mid-to-late nineteenth-century temporal range. The ceramic fragments, listed in Table 5-3, are indicative of everyday wares (Figure 5-16). Additionally, the monitor documented an ironstone plate base with a Morley and Co. maker's mark recovered from the back dirt excavated immediately prior to the discovery of Feature 5. This was an American pottery company in Wellsville, Ohio, with production dates ranging from 1879-1884 ('KAD No. A285; Kowalsky and Kowalsky 1999:51).

Apart from household plate sherds, a porcelain Hertwig Company German style doll face (Figure 5-16), and a large metal boring beam drill were collected. Hertwig porcelain

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Figure 5-12. Schoenert's Bakery (41BX2194) and Features 4 and 5 on 1896 Sanborn map (Sanborn 1896).



Figure 5-13. Feature 4, stone foundation, facing south. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c. Scale is metric.



Figure 5-14. Feature 4 (between white lines), facing west. Note charcoal stains on the top stone (bottom, center).



Figure 5-15. Feature 5, limestone capped privy (outlined in white), facing east.

Table 5-3. 41BX2194 (Feature 5) Artifact Assemblage

Superclass	Class	Type/Description	Temporal Range
Ceramics	European Earthenware	Yellowware Plate Base	1830-1900
Ceramics	European Earthenware	Pearlware-Annularware Banded	1840-1900
Ceramics	European Earthenware	Pearlware-Purple Spongeware	1829-1860
Glass	Container/Vessel	Clear Soda/Mineral Water Bottle	1900s (machine made)
Glass	Container/Vessel	Aqua Battery Cell Jar Base	1860-1920
Glass	Container/Vessel	Olive Wine/Champagne Bottleneck	1900s
Glass	Container/Vessel	Clear Stopper Shank Fragment	late 1800s to early 1900s
Metal	Tools	Cast Iron Hand Drill	1870-1940
Personal	Toys	Porcelain German Doll face-Hertwig Co.	1890-1900

dolls were produced in the German town of Katzütte from 1864 until 1950 and were very popular throughout the world during the late nineteenth century to the turn of the twentieth century, particularly right around 1900. The most common porcelain style was the lowbrow china dolls, which is the type recovered from this feature (Krombholz 2009). The drill is most likely a Millers Falls Beam Drill (Stewart 2014). The glass artifacts include a wine/champagne bottle, a soda/mineral water bottle, a battery jar, and a bottle stopper. All of these glass artifacts date from the late 1800s to the early 1900s (Lindsey 2017a).

CAR archaeologists collected a two-piece body mold clear soda or mineral water bottle base with no embossing that dated most likely to the turn of the nineteenth century, and an

olive colored turn mold wine or champagne bottle neck from the same time frame. Along with two bottles, a unique 13-cm (5.12 in.) in diameter aqua/light sapphire blue glass base was collected (Table 5-3). The glass base was a battery jar from the beginning of the 1900s. Glass open circuit battery jars became popular around 1890 and then went out of style near 1920 (Lindsey 2017c). The first battery jars were created for the Planté lead-acid cell of 1859; however, the glass base uncovered from Feature 5 is most likely an 1860s Gravity cell or “crow’s foot jar” style. These clear, light green, or aqua glass, wide mouth jars came in cylindrical or rectangular shapes designed to hold a conductive solution (Lindsey 2017c; Woods 2017). Although the jar base collected from Feature 5 does not have any embossing or seam lines to aid in dating and typology, its size, shape, and color indicate it

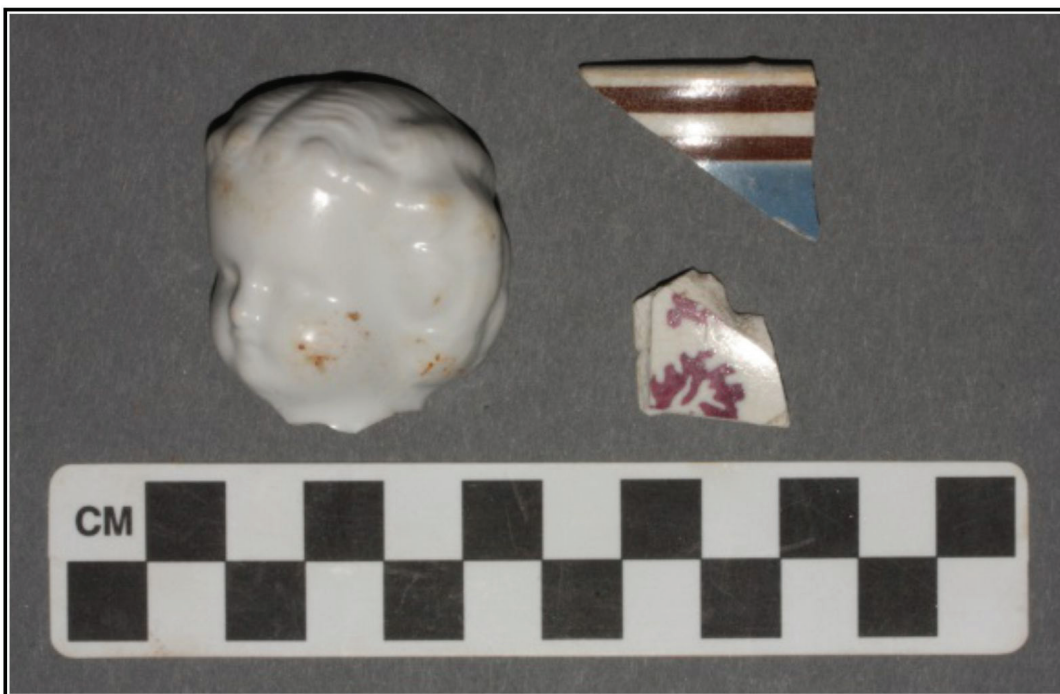


Figure 5-16. Feature 5 Hertwig Co. Porcelain Lowbrow China Doll Head (left), Annularware sherd (top right), and a Purple Sponge Decorated Pearlware sherd (bottom right).

was a battery jar from the late 1800s or early 1900s. The last glass item uncovered in this feature was a glass stopper that was usually used for perfume bottles around the late 1800s or early 1900s (Lindsey 2017b). The temporal range of these artifacts indicates that the date of the trash pit feature was approximately 1880-1910. This range coincides with archival evidence of the property's use.

Trenching on East Side of South Frio Street

Gas line work on the east side of South Frio Street encompassed 122 m (400.62 ft.) of backhoe trenching from the southeast corner intersection of South Frio Street and West Commerce Street to the northeast corner intersection of North Frio Street and Houston Street. Additionally, from the corner intersection of South Frio Street and West Commerce Street, the crew trenched in the sidewalk eastward 43 m (141.08 ft.) to an existing tie-in point in the alley behind the historic Estrada Hardware Building. Trenching to install new gas lines took place across West Commerce Street from the southeast corner intersection of South Frio Street and West Commerce Street to the northeast corner intersection of North Frio Street and West Commerce Street in front of the Golden Star Café (21 m; 68.90 ft.). In addition, trenching occurred across South Frio Street westward from the northeast corner intersection of North Frio Street and West Commerce Street to the southwest corner intersection of North Frio Street and West Commerce Street in front of the PikNik Convenient Store (32 m; 105 ft.).

Similar to the backhoe trenching on the west side of South Frio Street, new plastic 15.24-cm (6-in.) pipes were installed. The trench width was 40-60 cm (15.75-23.62 in.), and the terminating depth was 1.5-1.8 m (4.92-5.91 ft.).

The soil stratigraphy of the trenching (43 m; 141.08 ft.) eastward down West Commerce Street resembled that seen on the west side of South Frio Street. Approximately 10-15 cm (3.94-5.91 in.) of concrete sidewalk was followed by a layer of caliche and gravel fill that extended from about 20-40 cmbs (7.87-15.75 in.) and transitioned to fill/base then a dark gray/brown clay soil to the desired depth of 1.6 m below the surface (mbs; 5.25 ft.). In both the fill and dark clay, historic and modern trash was encountered in the form of plastic wrappers and small brick fragments, showing signs of modern construction disturbance. Approximately four north-south metal pipelines of various size and depth were uncovered in the trench, near the northeast corner of the Estrada Hardware Building.

The 122 m (400.62 ft.) of gas line trenching northward from the southeast corner intersection of South Frio Street and West Commerce Street to the northeast corner intersection of North Frio Street and Houston Street. The soil stratigraphy of the backhoe trench was again similar to previously trenched gas lines; however, the existing pipelines and historic trash were more prevalent than the eastward trenching in front of the Estrada Hardware Building.

Feature 6: Paved Stone Alignment

Feature 6 was uncovered in the eastward trench of the sidewalk in front of the Estrada Hardware Building (Figure 5-17). Limestone was noted at approximately 50 cmbs (19.69 in.) in the east profile of the trench. The stones terminated at 65 cmbs (25.60 in.) and were aligned east-west, directly below the store's awning drip line. The stone alignment was 3 m (9.84 ft.) long. It was determined that the alignment was most likely a walking path of pavement stones rather than foundational stones of a historic home. These stones most likely originated during the late 1800s, yet very little information could be gleaned from this feature. A GPS point was not obtained prior to the feature's removal; therefore, the CAR staff estimated the feature's point from the form documentation and photographs taken prior to its removal.

Features 7 and 8: Pettus Commercial Shops (41BX2195)

Site 41BX2195 consisted of two exposures of the Valero Laredo-style yellow-brick foundations of the Pettus Commercial Building, which originally occupied the corner

of the intersection of North Frio Street with West Commerce Street. The structure is shown in pink on the 1904 and 1911 Sanborn maps (Figure 5-18; Sanborn 1904, 1911). This single-story, three-bayed, commercial structure replaced the earlier three-bayed, wooden commercial building that occupied the same corner, shown in the 1896 Sanborn map (Figure 5-18). These three commercial spaces within the same building were addressed as 1325, 1327, and 1329 West Commerce Street, respectively. Feature 7 is the rear, east-west wall foundation of 1325 West Commerce Street, while Feature 8 is a portion of the foundation at the rear of 1329 West Commerce Street as seen on the site map (Figure 5-19).

The earliest Sanborn map that shows NCB 285 is the 1896 map (Sanborn 1896), but it is probable that the wooden commercial structure predates that time. Both the wooden commercial and subsequent brick commercial buildings were the property of Mrs. A. C. Pettus, who had obtained the property from Jason Rose in July 1889 (BCDR 73:279). As discussed in Chapter 3, Rose acquired the vacant and unimproved property from Dalton in December 1879 (BCDR 11:537-538). Dalton had acquired the property from Emily Brackett in August of 1860,



Figure 5-17. Feature 6, paving stones (between white lines), facing east. Scale is metric.

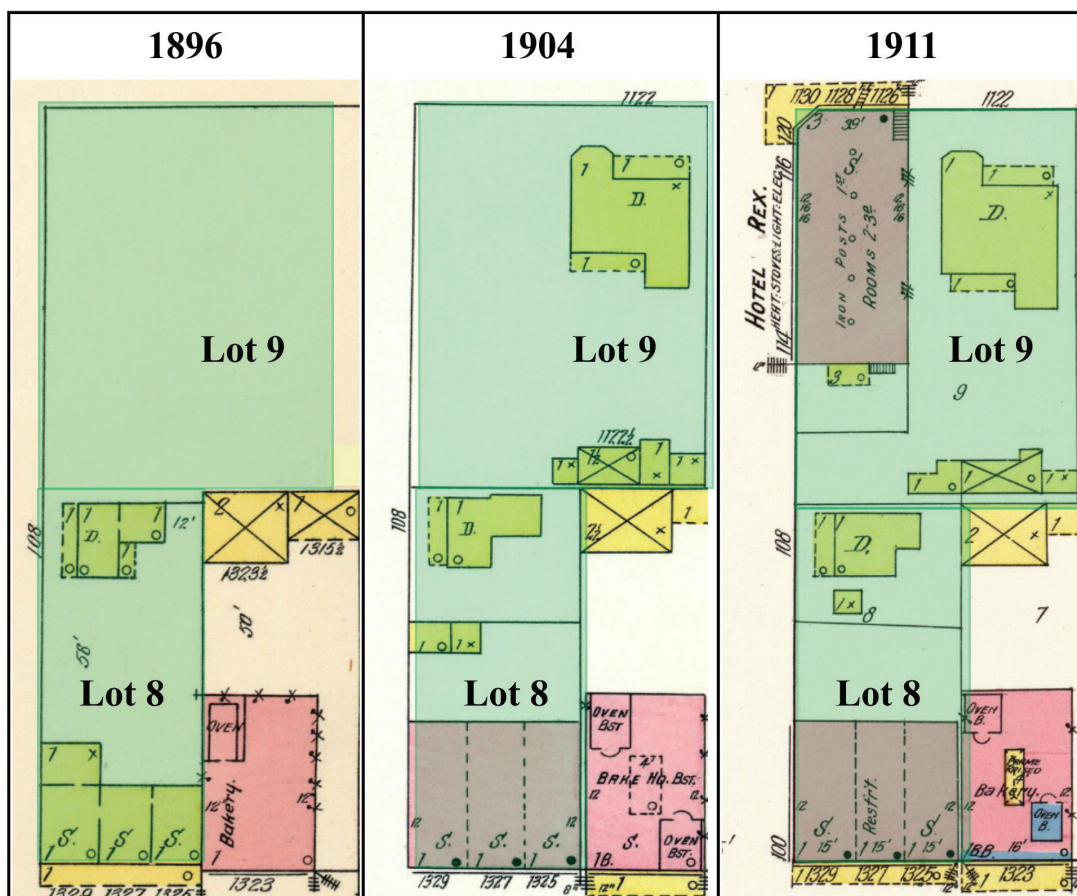


Figure 5-18. Comparison of 1896, 1904, and 1911 Sanborn maps of NCB 285, Lots 8 and 9 (Sanborn 1896, 1904, 1911). Areas shaded in green indicate Lots 8 and 9.

and this was one of the parcels given to Brackett in 1853 by Samuel Maverick who purchased the original lot from the City of San Antonio the prior year in 1852 (BCDR S1:233-234, M2:370-371, K2:563-564). In addition to the commercial structure fronting West Commerce Street, Pettus had a small rental residence at 108 North Frio Street at the rear of Lot 8. This small residence is shown on both the 1896 and 1911 Sanborn maps.

A cursory review of both Sanborn maps and city directories indicated that a number of different companies and uses occupied the space during the early twentieth century. For example, the 1905-1906 City Directory lists the San Antonio Artificial Fuel Company at 1325 West Commerce Street, F. H. Savant Groceries at 1327 West Commerce Street, and 1329 West Commerce Street is listed as vacant (Appler 1906:537). By 1911, Savant was no longer at 1327 West Commerce Street, and the space was shown as occupied by a restaurant (Sanborn 1911:V4:404). Mrs. A. C. Pettus sold all of Lot 8 to W. A. Spencer in 1924, and the lot passed through multiple owners, including the Urban Renewal Agency, until it was sold to the current owners, The Golden Star Restaurant, in 1977 (BCDR 722:554-558, 8281:452).

Feature 7: Brick Alignment

During excavation of a 2-x-8 m (6.56-x-26.25 ft.) tie-in box to connect the new pipes to the old cast iron lines, one complete, medicinal, clear, “sun-purpled” glass bottle was uncovered at 30 cmbs (11.81 in.). CAR staff took a GPS point (Figure 5-19) of the location and collected the bottle for analysis. The bottle is a 4 fl. oz., machine-made, label-only, pharmaceutical bottle with a cork stopper closure (Lindsey 2017d). It does not have any identifying embossed maker’s mark other than a “3 IV” (signifying it holds 4 fl. oz.) at the base of the neck on the flattened front face, and sides of the bottle are embossed with gradation marks for measuring fluid ounces on the left side and milliliters on the right side (Figure 5-20). This type of machine-made, medicinal bottle has a broad date range from circa 1900 to as late as 1929 (Lindsey 2017d).

While continuing the trench across Frio Street, excavations exposed a yellow sandstone brick alignment at 45 cmbs (17.72 in.) that terminated at 82 cmbs (32.28 in.). The alignment, Feature 7, was approximately 1 m (3.28 ft.) west of the glass medicinal bottle, and a small cast iron pipe ran parallel to the alignment on the west side of the feature at 40 cmbs

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Figure 5-19. Pettus Commercial Shops (41BX2195) and Features 7 and 8 on the 1911 Sanborn map (Sanborn 1911).



Figure 5-20. Clear medicinal/extract rectangular glass bottle (ca. 1900-1929).

(15.75 in.). The bricks were uniform in size (10-x-22-x-5 cm; 3.94-x-8.66-x-1.97 in.) and had the manufacture stamp “Valdez Laredo” imprinted on one side. Two bricks were collected to further analyze the imprinted manufacture logo (Figure 5-21). This wall segment is oriented diagonally, southeast to northwest, and includes approximately six levels of bricks. Each level had two to four bricks, east-west, and four to seven bricks, north-south. Brief consultation of a printed version of the 1904 *Sanborn Fire Insurance Map* indicated a brick building was at this corner, and this brick alignment and georeferencing of the 1904 Sanborn map confirmed Feature 7, as well as the adjoining Feature 8, to be a remnant of the 1904 store. The glass medicine bottle and a small unidentifiable faunal bone fragment were the only observed cultural material associated with this feature. The feature was left in place and was unaffected by the installation of the gas line (Figure 5-22).

Feature 8: Brick Alignment

In the trench crossing Frio Street, approximately 3.5 m (11.4 ft.) west of Feature 7, an alignment of yellow bricks was uncovered beneath the gravel fill at 34 cmbs (13.39 in.), and it terminated at 82 cmbs (32.28 in.). The feature was oriented

northwest-southeast and was similar in construction to Feature 7. The alignment consisted of six to seven courses of yellow sandstone brick with a white sandy mortar mixture. The second and third level of bricks jugged out to the east, and each level consisted of two to three bricks (Figure 5-23). The bricks were the type of Valdez Laredo brick found in Feature 7, and the same type of mortar remnants were present on the bricks. It was determined that Feature 8 was a remaining wall or foundation of a 1904 brick building. As with Feature 7, any further disturbance of Feature 8 was avoided, and the placement of the gas pipeline was able to continue without alteration.

Features 7 and 8 represent two brick buildings of the same commercial space. These were designated as a new site (41BX2195). Buildings made using this type of brick were constructed from 1903 to 1905 (Hanson 2016:71). The temporal range of the brick places Features 7 and 8 as remnants of the 1904 remodeling that transitioned these wood-frame stores into sturdier brick buildings shown on the Sanborn maps (Sanborn 1896 and 1904). Apart from the Valdez Laredo brick, the medicinal bottle, and a small fragment of unidentifiable faunal bone, no other cultural material was associated with this site.



Figure 5-21. Valdez Laredo bricks from Feature 7.



Figure 5-22. Feature 7 (between white lines), facing south.



Figure 5-23. Feature 8, facing west. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c.

Features 12 and 14: Hotel Rex Site (41BX2198)

Site 41BX2198 consisted of the remnants of the north (Feature 14) and south (Feature 12) foundational D'Hanis red brick walls of the 1910 Hotel Rex (Figure 5-24). Both features represent portions of the Rex Hotel foundations, although much of the building's foundations were removed by the widening of North Frio Street and West Houston Street. Unlike most of the other NCB corner lots that were first built upon for commercial access at an intersection, this corner property remained vacant until sold to J. F. Bilhartz in 1901 (BCDR 194:5656-557). There was a single-story, wood-frame residence on Lot 9, but this lot fronted West Houston Street and was not situated at the corner (Figure 5-18, middle and right). This wood-frame residence was most likely the home built by Bilhartz between June 1901 and the collection of data in 1903 for the 1904 Sanborn map (Sanborn 1904:V1:48).

In 1909-1910, Bilhartz erected Hotel Rex on the western half of Lot 9, fronting the corner on both North Frio Street and West Houston Street. This construction date is inferred from an advertisement in the *San Antonio Daily Express* that noted the Rex Hotel was a new building with all outside

rooms with hot and cold water and that the proprietress was a Ms. Hyacinth Bunton (*San Antonio Daily Express* 5 May 1910:13). Lot 9 remained the property of the Bilhartz family, who used the property to secure a Deed of Trust from The Grand Lodge of the Order of the Sons of Hermann in 1935 (BCDR 1488:285-290). The Bilhartz family continued to control the property until after World War II, and the lot ultimately became the property, along with the rest of the block, of the Urban Renewal Agency. The Urban Renewal Agency sold the lots in NCB 285 to private business interests, with Lot 9 sold to Whitt Properties in October 1977 (BCDR 4891:1267).

Feature 12: Brick Alignment

Feature 12, a red brick alignment, was uncovered in the trench along the sidewalk to the south of the North Frio Street and Houston Street intersection (Figures 5-25 and 5-26). The feature was first exposed at 50 cmbs (19.69 in.) when the excavator hit the alignment, and the feature continued past 1.6 mbs (5.25 ft.), which was the terminating depth of the trench. The alignment continued the width of the trench (40 cm; 15.75 in.), east-west, and measured 50 cm (19.69 in.) in length, north-south. The only cultural material observed

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Figure 5-24. Hotel Rex Site (41BX2198) and Features 12 and 14 on the 1911 Sanborn map (Sanborn 1911).



Figure 5-25. Feature 12 (between white lines), facing east. Scale is metric.



Figure 5-26. Feature 12, wall profile, facing north. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c. Scale is metric.

were the brick fragments associated with this feature. The wall consisted of approximately 10 courses of D' Hanis red bricks with a white sandy mortar, and there were five or six bricks to a row. The bricks were uniform in size, measuring 10 cm (3.941 in.) wide, 18 cm (7.09 in.) long, and 5.5 cm (2.17 in.) high. The first row of bricks had been destroyed by a pipeline installation on the west side of the trench. ArcGIS was used to confirm the feature was a section of the southern wall of Hotel Rex. The gas line could not deviate further to avoid the feature, and the construction crew could not trench underneath the wall since it continued past the maximum trench depth for the gas line. After documentation, the construction crew removed the feature to continue trenching.

Feature 14: Brick Alignment

Trenching uncovered another D' Hanis red brick wall segment at the southeast corner intersection of North Frio Street and Houston Street (Figure 5-27) beside a large modern concrete duct bank excavation. The alignment, Feature 14, appeared at 60 cmbs (23.62 in.) with some disarticulated bricks jutting out of the west wall. At 100 cmbs (39.37 in.), the wall was intact and continued past 1.6 mbs (5.25 ft.). Fragments of clear window glass and wooden beam, as well as brick debris from previous utility work in the area, were observed near the feature. Additionally, a large piece of concrete floor with a hexagonal tile on top was pulled from the trench on the north face of the feature. Feature 14 shared the same attributes as

Feature 12, and ArcGIS was used to confirm the feature was a segment of the north wall of the 1911 Hotel Rex. After documentation, the construction crew removed the feature to place the gas line.

CPS Electrical Conduit Monitoring

The electrical conduit replacement occurred on the east and west sides of South Frio Street. The north boundary of this work was West Commerce Street, and the southern boundary was Buena Vista Street. Electrical conduit trenching occurred in the same footprint of the gas line trench in front of the UTSA campus; therefore, it did not require monitoring. The trench size for the electrical line replacement was approximately 60-80 cm (23.62-31.50 in.) in width, with a terminating depth of 76-90 cmbs (29.92-35.43 in.; Figure 5-28).

Trenching on the West Side of South Frio Street

The trenching extended southward from the intersection of South Frio Street and West Commerce Street towards Buena Vista Street. The trench was 48.7 m (159.78 ft.) long, 60 cm (23.62 in.) wide, and 76 cm (29.92 in.) deep. The stratigraphy resembled the gas line trench stratigraphy; however, the clay strata was more disturbed and mottled. A few fragments of glass were observed, but these were isolated fragments that



Figure 5-27. Feature 14 (between white lines), facing east. Scale is metric.

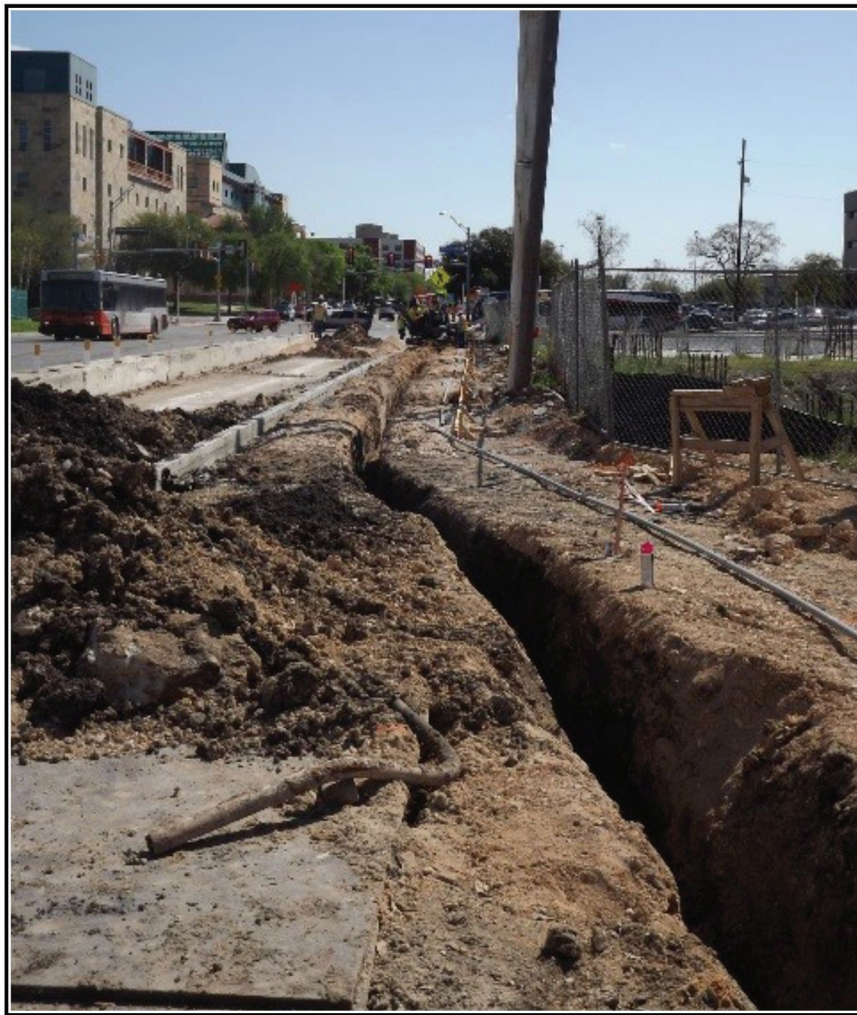


Figure 5-28. Electrical conduit trench, west side of South Frio Street, facing south.

were not associated with any structure, nor grouped together, suggesting a possible historic trash pit. No archaeological features were encountered in this trench.

Trenching on the East Side of South Frio Street

The electrical conduit trenching on the east side of South Frio Street extended approximately 60 m (196.85 ft.) from the intersection of South Frio Street and West Commerce Street toward the intersection of South Frio Street and Buena Vista Street. The trench was 83 cm (32.68 in.) wide and 90 cm (35.43 in.) deep. Excavation approximately 6 m (19.69 ft.) north of the intersection of South Frio Street and Buena Vista Street uncovered two historic features. Feature 10 was a trash pit at the southwestern corner of a late nineteenth-century through early twentieth-century outhouse that accompanied a residence/saloon owned by A. Androlli around 1912. This saloon and accompanying outhouse were designated as a new site (41BX2196). Feature 11 was a concrete foundation with a twisted steel rebar attached.

Feature 10: A. Androlli's Residence and Saloon (41BX2196)

A historic trash pit of predominately glass bottles (Feature 10) was uncovered at 45 cmbs (17.71 in.) in a trench near the intersection of South Frio Street and Buena Vista Street. The assemblage of artifacts ended at approximately 92 cmbs (36.22 in.), which was the terminating depth needed for the trench; however, it is possible the assemblage continued past this depth. This assemblage or trash pit spanned approximately 1.2 m (4 ft.) in length, north-south, and approximately 80 cm (31.5 in.) in width, east-west. The feature had been heavily disturbed by previous utility line installation, particularly the preexisting electrical conduit pipe, and did not show any privy signatures in the trench profile compared to the trash pit located earlier on the west side of Frio Street (Feature 5).

According to the GPS point, this trash pit was located at the southwest corner of a wood frame stable associated with a saloon on this corner seen on the 1896 and 1912 Sanborn maps (Sanborn 1896, 1912). It was designated a site in lieu

of its connection to an existing historic structure and due to its proximity to a known brothel or “female boarding” house located in the northwestern borders of San Antonio’s Red Light District at the address 222 South Frio Street (Bowser 2003:113, 115).

The saloon property was designated as a new site (41BX2196), and Feature 10 was a trash pit feature associated with the site (Figure 5-29). The wooden structure first appears on the 1892 Sanborn map (Sanborn 1892), but clear reference is made to a structure on the lot in a Deed of Trust between Graebner and Mary Menger in 1886 (BCDR 47:628). As Graebner owned the lot in 1886, it appears that a commercial structure was erected prior to that time. Graebner obtained rental income from this property and further supplemented that income via a Deed of Trust, with the subject property as collateral, to Mary Menger. The 1892 and 1896 Sanborn maps (Sanborn 1892, 1896) and early twentieth-century city directories indicate the location was a residence and saloon operated by A. Androlli (Appler 1906:93). The presence of alcohol bottles with date ranges spanning the late nineteenth century clearly associate Feature 10 with the historical use and occupation of the lot.

A total of 58 individual pieces of cultural material were collected from this pit (Table 5-4), with 47 pieces being glass container fragments. The pieces of glass represent six dark amber or brown beer bottles, one dark amber possible liquor bottle, and four olive wine/champagne bottles. Additionally, handsaw- and machine-cut faunal bones (Figure 5-30), a horseshoe and wire fragment, and construction fragments were recovered from the feature.

Glass containers (81 percent) dominated the artifact assemblage for this pit and provided the majority of the temporal knowledge for the site (Table 5-4). The first step of analysis involved categorizing the glass artifacts based on specified parameters, going from general to more unique characteristics. The glass fragments were separated by color, then by form (separating out the bases, body shards, bottle tops, and rims), and lastly by other distinguishing design features, such as embossing and/or maker’s mark. The complete bases and vessels were used to estimate a minimum number of vessels (MNV). This number represents the fewest number of vessels possibly present in the pit based on these elements. Although it is possible the total number of body shards (both dark amber and olive, $n=30$) could include more bottles than the MNV, these fragments most likely belong to one of the complete bases.

Typically, dark amber/brown and olive glass vessels were used as bottles for alcohol (i.e. beer, wine, spirits, champagne), and with 91 percent of the glass representing

alcohol bottles, the majority of this analysis focused on the dark amber/brown and olive pieces. The feature held seven dark amber/brown bottles, four olive bottles, one clear mug/stein, one clear cup, and one medicinal bottle (MNV=14). The majority (11 of 14) of these vessels are dark amber/brown or olive, which is to be expected since the majority of the entire glass assemblage are either dark amber/brown beer bottle fragments or olive bottle fragments. The clear glass fragments included a cup rim with a banded design and a square base that is indicative of a medicinal bottle and one “sun purpled” beer mug/stein. CAR archaeologists hypothesize this trash pit was predominately a dumping ground for finished beverages at the southwestern corner of this 1912 wood-frame outhouse of Androlli’s Saloon.

Out the dark amber/brown assemblage, four bases had embossed makers’ marks that provided a name and date range of the bottles’ origins (two nearly complete bottles and two bases). Figure 5-31 shows a quart mold beer bottle collected from the pit with the embossed maker’s mark “C.V. Co No 2 8 MILW” on the base. The “C.V. Co No 2” curves around the top with the number “8” in the middle and the “MILW” curving at the bottom. The “No” has a line underneath the “o” that is indicative of the quart mold insignia for the molds 4-8 (Lockhart and Olszewski 1994; Lockhart et al. 2014:218). This maker’s mark belongs to the Chase Valley Factory 2 of Milwaukee, Wisconsin, that produced household and alcohol bottles from 1880 to 1881 (Lockhart et al. 2014; Maas 2014). Two specimens with this mark were recovered from Feature 10.

The other nearly complete dark amber/brown beer bottle had a fading embossed maker’s mark “DSG Co 5” on the base. The “5” is in the middle of the base was turned backwards, while the lettering curved along the inner base rim. This is the mark of the De Steiger Glass Co. based out of Buffalo, Iowa. The De Steiger Glass Co. owners bought out a small glass bottling company in Buffalo, Iowa, in 1880, and focused almost exclusively on beer bottle production. The company was in business from around 1876 to 1896, but the Buffalo site was only operational from 1880 to around 1882 (Lockhart et al. 2007).

The maker’s mark on the second bottle base consisted of three lines of writing stacked on top of one another “A MGCo 3”. The mark was used by the Mississippi Glass Company in St. Louis, Missouri (operating from 1873-1971), which was a manufacturing plant that exclusively produced export beer bottles (Lockhart et al. 2009). Lockhart and colleagues (2009) state this company had a variety of maker’s mark emblems during the years of bottle production (1873-1884). The recovered bottle base represents the fifth style described by the authors, and the “A” most likely represents the mold maker’s signature, while the “3” represents the mold series used.

Image Redacted

Figure 5-29. A. Androlli's Residence and Saloon (41BX2196) and Feature 10 on the 1912 Sanborn map (Sanborn 1912).

Table 5-4. 41BX2196 (Feature 10) Artifact Assemblage

Superclass	Class	Count	Type	Description and Temporal Range
Ceramics	Other	1	Front Mounted Porcelain Cabinet Knob	Unattributed: likely ca. late nineteenth to early twentieth century
Construction	Other	1	Painted Concrete Tile	Unattributed
Construction	Other	1	Unpolished Granite Block	Unattributed
Glass	Container/Vessel	1	Amber, Shoulder/Body Shard	Unattributed: likely ca. late nineteenth to early twentieth century
Glass	Container/Vessel	1	Clear, Mug/Stein	Two-part mold through handle: ca. 1870s to 1900s
Glass	Container/Vessel	1	Clear, Cup Rim with Banded Design	Unattributed: likely ca. late nineteenth to early twentieth century
Glass	Container/Vessel	1	Clear, Medicinal Bottle Base	Unattributed: likely ca. late nineteenth to early twentieth century
Glass	Container/Vessel	2	Dark Amber, In Sweep Bottle Base	Unattributed: ca. late nineteenth century to mid-twentieth century
Glass	Container/Vessel	26	Dark Amber/Brown, Beer Bottle Fragments	Unattributed: most likely ca. late nineteenth to early twentieth century
Glass	Container/Vessel	1	Dark Amber/Brown, Complete Beer Bottle	Base embossed with “C.V. Co No 2 8 MILW” Chase Valley Factory 2, quart mold 8: ca. Sept. 1880 to May 1881
Glass	Container/Vessel	1	Dark Amber/Brown, Complete Beer Bottle	Base embossed with “DSGCo” De Steiger Glass Co., Buffalo, Iowa: ca. 1878-1896
Glass	Container/Vessel	2	Dark Amber/Brown, Export Style Beer Bottle Bases	Two beer bottle bases with no maker’s mark: ca. 1870s to 1920s
Glass	Container/Vessel	1	Dark Amber/Brown, Oil Finish Closure	Oil finish beer bottle top: ca. 1830s to 1920s
Glass	Container/Vessel	1	Dark Amber, Beer Bottle Base	Base embossed with “C.V. Co No 2 8 MILW” Chase Valley Factory 2, quart mold 8: ca. Sept. 1880 to May 1881
Glass	Container/Vessel	1	Dark Amber, Beer Bottle Base	Base embossed with “A M G Co 3” Mississippi Glass Co. MGCo: ca. 1873-1884
Glass	Container/Vessel	4	Olive Bottle Fragments	Most likely wine bottle fragments: ca. late nineteenth to early twentieth century
Glass	Container/Vessel	1	Olive Wine Bottle Base	Turn mold bottle with no maker’s mark: ca. late 1800s to mid-1900s
Glass	Container/Vessel	2	Olive Wine Bottle Base	Turn mold bottle (refit pieces) with no maker’s mark: ca. late 1800s to mid-1900s
Glass	Container/Vessel	1	Olive Wine Bottle Neck	Unattributed: ca. late 1800s to mid-1900s
Glass	Container/Vessel	1	Olive-Bordeaux Style Wine Bottle Kick Up Base	Kick-up indentation present: ca. late nineteenth century to mid-twentieth century
Metal	Farm/Ranch/ Tack	1	Horseshoe	Unattributed: ca. late nineteenth to early twentieth century
Metal	Wire	1	Wire	Unattributed
Organics	Faunal Bone	1	Large Mammal (Order: Artiodactyla) Handsaw Tibia	Most likely from a domestic sheep (<i>Ovis aries</i>): ca. late nineteenth to early twentieth century
Organics	Faunal Bone	3	Very Large Mammal Fragments	Unattributed
Organics	Faunal Bone	1	Very Large Mammal-Machine Cut Rib	Unattributed: most likely ca. late nineteenth to early twentieth century



Figure 5-30. Very large mammal machine-cut rib recovered from Feature 10. Scale is metric.

The results of this glass container analysis indicates that the trash pit was in use from around the late 1880s to the 1890s, which aligns with the founding of A. Androlli's Saloon circa 1892.

Feature 11: Concrete Foundation

Approximately 3.7 m (12.14 ft.) north of Feature 10, a large concrete foundation block with a twisted steel rebar protruding from its northern face, Feature 11, was uncovered at 40 cmbs (15.75 in.). The feature was 50 cm (19.69 in.) long, north-south (Figure 5-32), and 80 cm (31.50 in.) wide, east-west (Figure 5-33). It terminated at 1 mbs (3.28 ft.). No additional cultural material was observed near the feature. Feature 11 most likely is a remnant of a mid-1900s ornamental fence or gate. The feature does not align with any structures on the available Sanborn maps, and the presence of twisted rebar indicates its construction dates to 1920-1950. Twisted rebar is officially referred to as cold-twisted square bar and was the pre-cursor to modern cast rebar (Hool 1929:958).

SAWS Sewer Line Monitoring

Trench excavation was conducted to replace 135 m (442.91 ft.) of existing SAWS sewer lines with 20.32-cm (8-in.)

pipes and to replace an existing manhole at the intersection of South Frio Street and West Commerce Street. Sewer line replacement took place in three locations within the APE: 1) along the east side of South Frio Street between West Commerce Street and Buena Vista Street (84 m; 275.60 ft.); 2) across South Frio Street from the southeast to southwest corners of the intersection of South Frio Street and West Commerce Street (24 m; 78.74 ft.); and 3) and northward across West Commerce Street from the southwest to the northwest corners of the intersection of South Frio Street and Commerce Street (27 m; 88.58 ft.).

The installation of the new sewer line required a trench depth of approximately 3.5 mbs (11.48 ft.), and the trench was 1.5 m (4.92 ft.) wide to accommodate the shoring equipment. The stratigraphy was the same as that seen in the gas line trenches, and the sterile dark brown/gray clay continued to the terminating depth of 3.5 mbs (11.48 ft.).

Trenching on the East Side of South Frio Street

Excavation began with a trench from an existing manhole at the southeast corner intersection of South Frio Street and West Commerce Street to the sidewalk in front of the

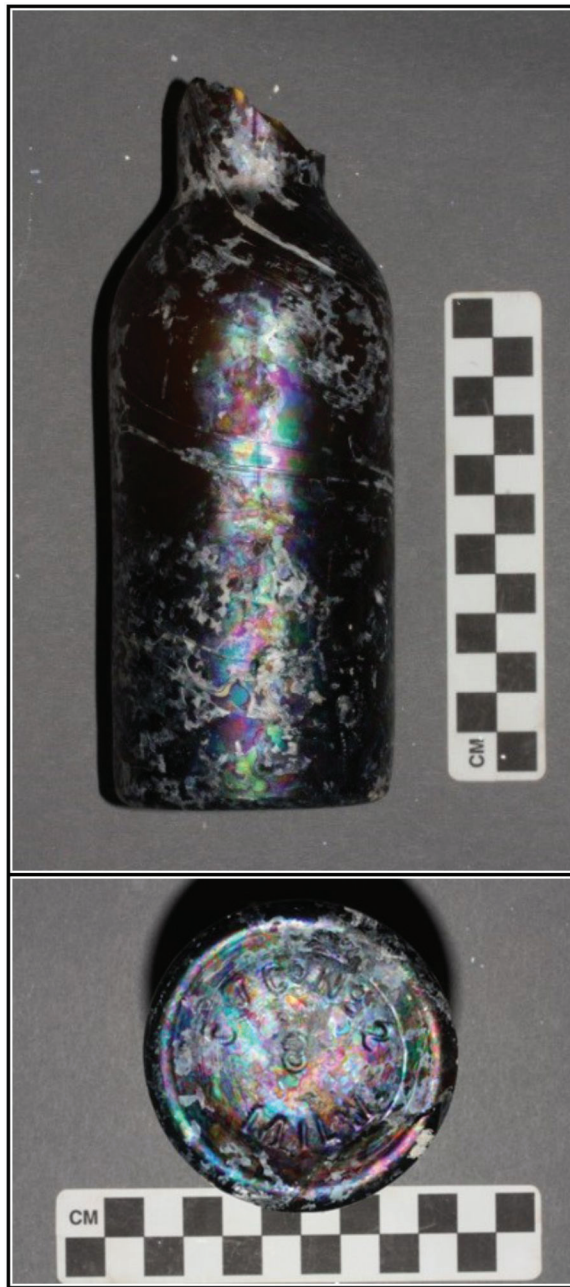


Figure 5-31. Quart mold beer bottle, Chase Valley Factory 2 (ca. Sept. 1880 to May 1881).

Estrada Hardware Building. This trench was 82 m (269.05 ft.) long when completed. The crew installed a new concrete manhole box, replaced the abandoned manhole, and installed the new lines in place of the existing plastic pipes. Modern construction trash/fill was observed in the trench, and much of this fill was attributed to the installation of the preexisting sewer line. Excavations revealed modern concrete bases that were unaffected by pipe installations and a partial yellow brick wall feature, Feature 13, on top of a concrete base. This wall protruded 60 cm (23.62 in.) from the west trench wall and had been damaged by the preexisting sewer line installation.

Feature 13: Gebhardt Chili Powder Company Warehouse (41BX2197)

Excavations uncovered a yellow brick wall alignment jutting out of the west trench wall at 50 cmbs (19.69 in.), beneath the gravel caliche base, and the feature terminated at 1.8 mbs (5.91 ft.). This wall segment measured 60 cm (23.62 in.) east-west and 45 cm (17.72 in.) north-south. This feature was disturbed and partially destroyed by the previous sewer line installation. The wall segment rested on top of a concrete base with modern rebar jutting outward. On the south side of the



Figure 5-32. Feature 11 (between white lines), facing west. Scale is metric.



Figure 5-33. Feature 11, facing north. Horizontal extent of the feature shown between lines a and b. Vertical extent of the feature shown between lines b and c. Scale is metric.

feature was a layer of construction fill, loose brick, and rocks, which appeared to be remnants of the wall. It was necessary to remove the feature because the sewer line could not deviate from its course, and to ensure the safety of the crew, the wall needed to be removed for the metal shoring implements to fit into place. The construction crew began removing the wall while the archaeologist was at Houston Street to watch gas line excavations. A GPS point and digital photographs of this wall segment were taken prior to its removal; however, the wall segment was removed before any scaled photographs could be taken. Once removed, the archaeologist documented the wall profile with photographs (Figure 5-34) and a sketch profile map. The wall segment consisted of approximately 13 courses of uniform-sized yellow bricks. ArcGIS showed that the feature correlated with a northwestern wall segment of the Gebhardt Chili Powder Company warehouse on the 1912 *Sanborn Fire Insurance Map* (Sanborn 1912).

*Gebhardt Chili Powder Company. Warehouse
(41BX2197)*

The partial yellow brick wall, Feature 13, was part of the brick foundations of the northern east-west wall of the former Gebhardt Chili Powder manufacturing building located at 110 South Frio Street. Gebhardt Chili Powder Company was founded by Wilhelm “Willi” Gebhardt in New Braunfels but was moved to San Antonio where the company opened offices in 1896. (Gebhardt Mexican Foods Company Records, MS 44, Box 2, Folder 1, UTSA Libraries Special Collections). The expansion of Gebhardt’s Chili Powder Company over time is documented in the Sanborn map series from 1896 through 1912 (Figure 5-35; Sanborn 1896, 1904, 1912). The first location at 1318 West Commerce Street was constructed between 1893 and 1895, and Gebhardt was essentially a tenant of the Graebners/Kronkoskys beginning



Figure 5-34. Feature 13 (between white lines), yellow brick wall segment, facing west.

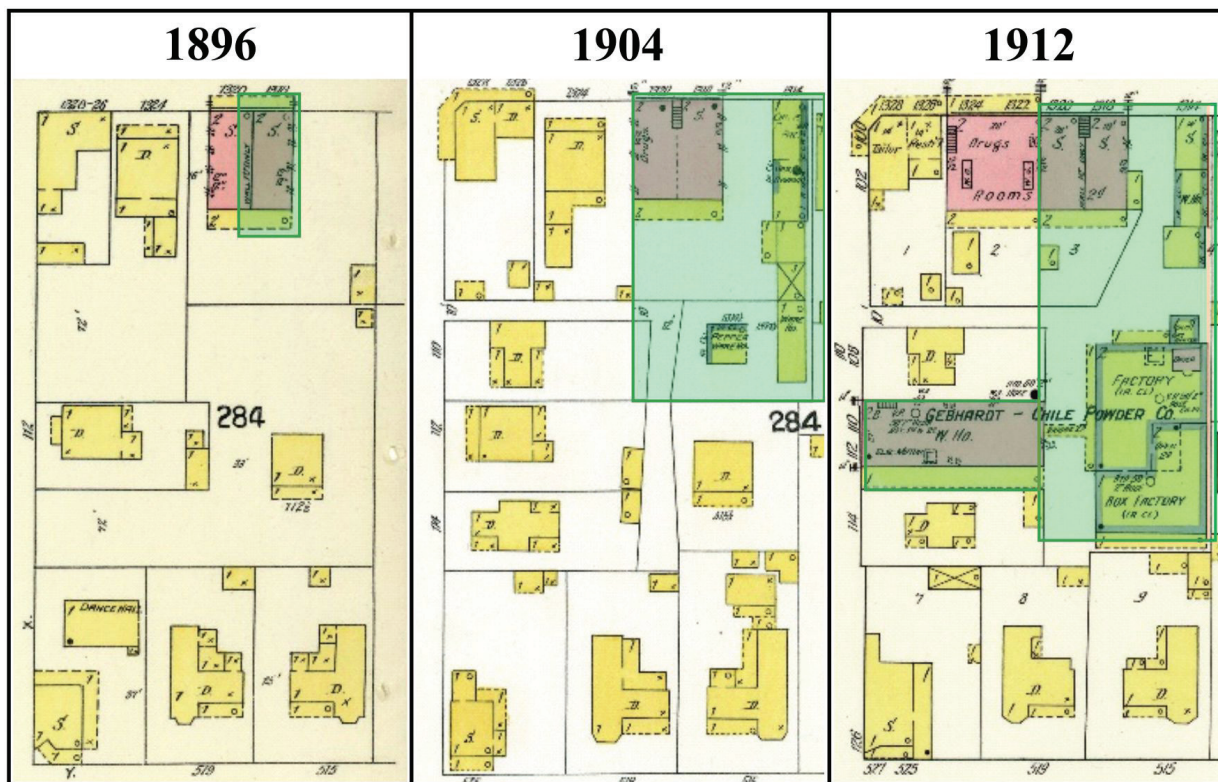


Figure 5-35. Evolution of Gebhardt's Chili Powder Company in NCB 284 from 1896, 1904, and 1912 (Sanborn 1896, 1904, 1912). Areas shaded in green indicate location of Gebhardt's facilities.

in 1896 (Sanborn 1892:2, 1896:5, 1904:39, 1912:V4:404). This structure is not present on the 1892 Sanborn map, but it is the eastern half of the two storefront brick structures shown on the 1896 map. Through his familial connections to the Graebners and the Kronkoskys, Gebhardt subsequently utilized portions of Lots 1-4 and 7-9 as Gebhardt Chili Powder expanded its operations (Appler 1906:2011; Sanborn 1904:V1:39, 1912 V:4:404).

The 1904 Sanborn map (Sanborn 1904) shows that by that date Gebhardt's had expanded into the rear of Lot 4 with the construction of a Pepper Warehouse, and the building of storage and warehousing structures along the north-south lot line between Lot 4 and Lot 5 (Sanborn 1904:V1:39). This first expansion added both sections of the commercial building at 1318-1320 West Commerce Street for use as a manufacturing plant and offices (Gebhardt Mexican Foods Company Records, MS 44, Box 2, Folder 1, UTSA Libraries Special Collections). These changes are visible in 1904 Sanborn map shown in Figure 5-35. Figure 5-36 is a photograph of the interior of the 1318-1320 West Commerce Street location, circa 1900.

By 1911 and 1912, Gebhardt's has expanded to the middle lot at 112 South Frio Street and the residence to the rear of 515 Buena Vista Street (Figure 5-37). The residences at 112 South Frio and 515 ½ Buena Vista Street were demolished for

the construction of a manufacturing, office, and warehouse building. The adjoining residences at 110 and 114 South Frio Street remained. This collection of parcels was contiguous, giving Gebhardt's frontage on both West Commerce Street and South Frio Street. Figure 5-38 is an undated photograph of the outside of the Gebhardt store.

Trenching Across South Frio Street and West Commerce Street

The final segment of sewer line replacement took place across South Frio Street at the southern intersection of West Commerce and across West Commerce from the southern to the northern intersection of South Frio Street. The trench dimensions and stratigraphy were the same as that of the first two segments. Excavations revealed that the preexisting line was plastic, instead of the expected clay piping, and the north wall of the trench began to collapse. No historical features were discovered during trenching across South Frio Street and West Commerce Street.

SAWS Water Line Monitoring

The water line installation of 20.32 cm (8 in.) of plastic piping took place along the west side of Frio Street from Houston Street to West Commerce Street for approximately 100 m (328.08 ft.). Approximately 34 m (111.55 ft.) of new



Figure 5-36. Employees at the Gebhardt plant, undated, Gebhardt Mexican Foods Company Records (MS 44, UTSA Libraries Special Collections).

water line was installed between the southeast and southwest corners of the South Frio Street and West Commerce Street intersection. New water lines were connected to existing water lines at the southeast corner intersection of South Frio Street and West Commerce Street, the southwest corner intersection of South Frio Street and West Commerce Street, and the northwest corner intersection of North Frio Street and Houston Street. The average trench size was 90 cm (35.43 in.) wide and 167 cm (65.75 in.) deep, and trenches exhibited the same stratigraphy observed throughout the project.

Feature 15: Yellow Brick Wall Segment

A yellow brick wall segment, Feature 15, was encountered in the middle of West Commerce Street during southward trenching along South Frio Street. The wall segment began at approximately 70 cmbs (27.56 in.) and terminated at 1.6 mbs (5.25 ft.; Figure 5-39). The wall was approximately 110 cm (43.31 in.), north-south, and 60 cm (23.62 in.), east-west. It was located in mottled dark black/gray clay, and no other cultural material was observed in association. The majority of the wall was destroyed with one pull of the backhoe bucket; however, a GPS point and digital photographs were taken. The Valdez Laredo brick construction indicates a post-1877 date of construction, and its placement in the street right-of-

way indicates that it may be related to either a manhole or other utility access.

Feature 16: Alazán Ditch (41BX620), North-South Wall Segment 4

A fourth segment of the north-south Alazán Ditch wall was uncovered while excavating for the new water line installation at the southwest corner of the South Frio Street and West Commerce Street intersection (see Figures 5-9 and 5-10 for its location to the other Alazán segments). The first three segments were encountered during the monitoring of CPS Energy utility installations and are reported in that section of this same chapter where they are labeled as Features 2, 3, and 9, respectively. Uncovering another segment of the Alazán Ditch was possible in this location because the water line trench was approximately 0.5 m (1.64 ft.) south of the completed gas line trench (Figure 5-40). This wall segment, Feature 16, first appeared 70 cmbs (27.56 in.) and terminated at 160 cmbs (63 in.), similar to the first segment uncovered (Feature 2). Feature 16 was oriented north-south and consisted of approximately five to seven courses of cut, rectangular, limestone blocks. The top levels of stone were more irregular in shape and size, possibly from previous construction, while the lower level stones were larger and

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Figure 5-37. Gebhardt Chili Powder Company warehouse (41BX2197) and Feature 13 on the 1912 Sanborn map (Sanborn 1912).



Figure 5-38. Gebhardt Chili Powder Company Office on South Frio Street, undated, Gebhardt Mexican Foods Company Records (MS 44, UTSA Libraries Special Collections).

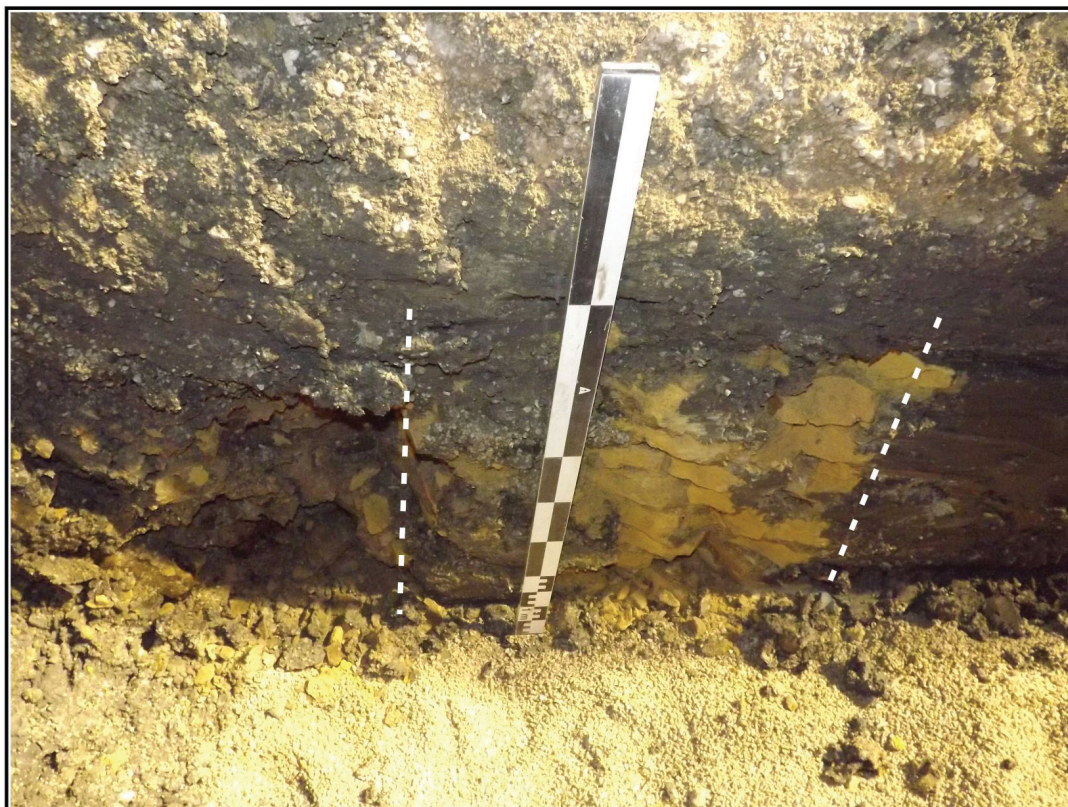


Figure 5-39. Feature 15, remnants of unknown yellow brick wall (between white lines), facing west. Scale is metric.



Figure 5-40. Feature 16, north-south wall segment of Alazán Ditch, facing northwest. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c.

cut to a uniform rectangular size. It appeared this segment of the wall had been more heavily disturbed by previous construction projects than Feature 2. Furthermore, the trench width for the water line was almost twice that of the gas line trench, and it is probable that exposing the wall for a width of approximately 1.5 m (4.92 ft.) displaced too much of the dirt that supported the wall.

To place the new water pipe line, the contractors followed the same protocol as with Feature 2. The feature was left intact, and the trench ran beneath the wall to place the pipe. The wall began to fall apart when excavating underneath it (Figures 5-41 and 5-42) due to its lack of preservation. Two stones fell from the bottom of the wall once the construction crew began removing the dirt below the feature. The monitoring archaeologist photographed and recorded the dimensions of the stones (average size was 50-x-41-x-22 cm; 19.69-x-16.14-x-8.66 in.).

During work on this section of water line installation, a rainstorm flooded the trench, softening the clay and significantly affecting the structural integrity still present for this segment of the Alazán Ditch. Once the crew began to remove the shoring and top layers of soil, it was apparent the wall would collapse, causing a potentially dangerous situation for the crew once they started installing the water pipe. The monitoring archaeologist contacted the Principal Investigator and the City Archaeologist to discuss how to move forward. The City Archaeologist approved the removal of the stones to continue the new water line installation and stated the stones needed to be placed back into the trench at that location. Each stone was photographed and measured. The average size of these stones was 58-x-42-x-20 cm (22.83-x-16.54-x-7.87 in.). In addition to the two lower level stones that fell while trenching beneath the feature, another ten stones made up this segment of the Alazán Ditch.



Figure 5-41. Feature 16, Alazán Ditch (41BX620) wall segment and fallen stone from bottom of the wall (outlined in white), facing northwest. Horizontal extent of feature shown between lines a and b. Vertical extent of feature shown between lines b and c.



Figure 5-42. Stone from Alazán Ditch wall (53-x-45-x-24 cm; 20.87-x-17.72-x-9.45 in.). Scale is metric.

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Chapter 6: Summary and Recommendations

CAR staff conducted archival research and archaeological monitoring for the Frio Street Utilities Improvements Project. The project fell under COSA's Unified Development Code (Article 6 35-630 to 35-634) and the Antiquities Code of Texas, and was conducted under Texas Antiquities Permit No. 7913. Archaeological monitoring of below-ground construction for this project took place from February to June 2017 on both sides of Frio Street, primarily between Houston Street and Buena Vista Street. The utility improvements focused on the installation and/or replacement of gas, electrical, water, and sewer lines within the APE. CAR archaeologists monitored installation of approximately 410 m (1,345.14 ft.) of gas line installation, 48.7 m (159.78 ft.) of electrical line replacement, 134 m (439.63 ft.) of water line installation, and 135 m (442.91 ft.) of sewer line replacement.

The principal goal of CAR's monitoring was to identify and document the presence of any archaeological deposits. The path of the previously recorded Alazán Ditch (41BX620) was known to run through the APE, and previous work indicated a high potential for other significant archaeological resources in the area. During the course of the project, CAR archaeologists recorded 16 historic features. Four of the features were stone-lined wall segments of the late nineteenth-century Alazán Ditch (41BX620). CAR archaeologists also designated five new historic sites, all of which were foundations, walls, and/or archaeological deposits associated with no longer extant historic buildings. CAR staff recorded the north and south wall of the 1911 Hotel Rex (41BX2198), a small extant wall segment of the 1912 Gebhardt Chili Powder warehouse (41BX2197), and wall segments of two 1904 stores that were part of the Pettus Commercial Building (41BX2195). Additionally, archaeologists recorded a late nineteenth-century site close to the Alazán Ditch with a stone foundation and associated trash privy for Schoenert's Bakery (41BX2194), and a trash pit associated with the early 1900s A. Androlli's Residence and Saloon (41BX2196).

The extent of archaeological work on these sites was limited. Often investigations did not exceed the width of a utility trench; therefore, it was difficult to determine whether any of the newly recorded sites met the criteria for inclusion on the NRHP or as a SAL. From the current limited investigations, the Hotel Rex (41BX2198), the early twentieth-century Pettus Commercial Shops (41BX2195), the portions of Schoenert's Bakery (41BX2194), and A. Androlli's Residence and Saloon (41BX2196) do not appear to meet any of the criteria.

In contrast, the Gebhardt Chili Powder warehouse (41BX2197) is potentially eligible for the NRHP based on Criteria B, as the site is associated with the life of a person who was significant to San Antonio's history. Wilhelm "Willi" Gebhardt was the founder of the Gebhardt Chili Company and was an important individual from both a business and cultural perspective. Much of the warehouse was likely destroyed from previous construction projects, as was part of the wall segment located during this project (Feature 13), but there may still be intact deposits related to the site. Additional archival research and testing would be needed to determine the NRHP and SAL eligibility of the Gebhardt warehouse.

CAR recommends the integrity and significance of the portion of the Alazán Ditch (41BX620) make it eligible for listing in the NRHP and for designation as a SAL. This position supports the previous recommendation of Cox-McClain (2014) that the Alazán Ditch is eligible for its potential to illuminate the development of water management infrastructure in San Antonio. CAR recommends avoiding impacts to this section of the Alazán Ditch in the future. In the event of future construction or development in the project area, CAR recommends monitoring below-ground excavations or archaeological testing.

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References Cited:

Appler, J.

1906 *Jules A. Appler's General Directory and Blue Book of the City of San Antonio 1905-1906*. Jules A. Appler compiler and publisher, San Antonio.

Bandelier, F.

1972 *The Narrative of Alvar Nunez Cabeza de Vaca*. Translated by F. Bandelier with an Introduction by John Francis Bannon. The Imprint Society, Barre, Massachusetts.

Bannon, J.F.

1974 *The Spanish Borderlands Frontier, 1513-1821*. University of New Mexico Press, Albuquerque.

Bexar County Deed Records (BCDR)

Year	Volume:Page	Instrument	Date	Parties
1850	K1:231	Deed	27 October	City of San Antonio to Brackett
1852	K2:563-564	Deed	26 November	City of San Antonio to Maverick
1853	L1:471-473	Judgement Sale	6 October	Bexar District Court to Maverick
1853	L2:98-99	Deed	31 December	City of San Antonio to Lytle
1854	M2:370-371	Transfer	8 December	Maverick to Brackett
1860	S1:233-234	Deed	18 August	Brackett to Dalton
1869	V2:167-168	Deed	8 September	Brackett to Adams and Wickes
1871	W1:404-405	Deed	16 November	Lytle to Graebner and Stroehmeyer
1874	X2:322-324	Deed of Trust	7 October	Graebner to Madarasz
1875	3:309-310	Deed of Trust	26 May	Graebner to Hummel
1875	3:480	Deed of Trust	10 December	Sweeney to Uhlrich
1879	11:537-538	Deed	18 December	Dalton to Rose
1881	12:150	Deed	9 February	Adams and Wickes to Beitel
1881	12:203-204	Deed	19 April	Adams and Wickes to Schoenert
1881	16:114	Plat	February	Ed. Steves Plat – Blks 86-89
1881	19:114-115	Plat	14 May	City San Antonio to Adams and Wickes
1881	A1:202-203	Mechanics Lien	3 April	Beitel to Schoenert
1882	20:588-589	Deed	4 February	Adams and Wickes to Bilhartz
1886	47:628	Deed of Trust	7 October	Graebner to Menger
1889	60:331-332	Deed	11 April	Graebner to Stroehmeyer
1889	73:279	Deed	2 July	Rose to Pettus
1890	68:81-84	Deed	22 April	Dalton to Patterson
1892	95:111-112	Deed	10 February	Patterson to Pettus
1895	143:212-213	Release	6 April	Traynham to Patterson
1896	149:488-489	Deed	29 October	Patterson to Hudgins
1901	194:556-557	Deed	6 June	Patterson to Bilhartz
1913	BOS2:219	Bill of Sale	16 April	Koon to Bilhartz
1924	722:554-558	Deed	21 July	Pettus to Spencer
1935	1488:285-290	Deed of Trust	2 May	Bilhartz to G.L. of OSH
1977	8281:452	Deed	31 October	Urban Renewal Agency to Golden Star
1990	4891:1267	Deed	24 August	Urban Renewal Agency to Whitt Prop.

Black, S.L.

1986 *The Clemente and Herminia Hinojosa Site, 41JW8: A Toyah Horizon Campsite in Southern Texas*. Special Report No. 18. Center for Archaeological Research, The University of Texas at San Antonio, San Antonio.

1989 South Texas Plains. In *From the Gulf to the Rio Grande: Human Adaptation in Central, South and Lower Pecos Texas*, by T.R. Hester, S.L. Black, D.G. Steele, B.W. Olive, A.A. Fox, K. Reinhard, and L.C. Bement, pp. 39-62. Research Series No. 33. Arkansas Archaeological Survey, Fayetteville.

Black, S.L., and A.J. McGraw

1985 *The Panther Springs Creek Site: Cultural Change and Continuity within the Upper Salado Creek Watershed, South-Central Texas*. Archaeological Survey Report, No. 100. Center for Archaeological Research, The University of Texas at San Antonio.

Blair, W.F.

1950 The Biotic Provinces of Texas. *Texas Journal of Science* 2(1):93-117.

Bolton, H.E.

1949 *Coronado, Knight of Pueblos and Plains*. University of New Mexico Press, Albuquerque.

Bomar, G.W.

1995 *Texas Weather*. University of Texas Press, Austin.

Bowser, D.

1992 *San Antonio's Old Red-light District: A History, 1890-1941*. Lone Star Printing Co. Arlington, Texas.

2003 *West of the Creek: Murder, Mayhem, and Vice in Old San Antonio*. Maverick Publishing Company, San Antonio.

Brown, J.H.

1970 *History of Texas From 1685 To 1892: Volume 2*. Jenkins Publishing Company, The Pemberton Press, Austin and New York.

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.

Carlson, S.B.

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

Castañeda, C.E.

1950 *Our Catholic Heritage in Texas, 1519-1936; Volume VI, The Transition Period: The Fight for Freedom 1810-1836*. Von-Boeckman-Jones, Austin.

Chabot, F.

1931 *San Antonio and its Beginnings, 1691-1731*. Naylor Printing Co., San Antonio.

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.

City Council Minute Books (CCMB)

City of San Antonio, Texas. On file, City of San Antonio Municipal Archives.

Year	Volume:Page	Date
1848	A:135-137	March
1865	C:475, 481	9 April
1865	C:491	30 April
1865	C:496	30 April
1867	C:557, 583	22 January

City Council Ordinance Books (CCOB)

1889 City Ordinance Number 168. City of San Antonio Municipal Archives.

Collins, M.B.

2004 Archeology in Central Texas. In *The Prehistory Of Texas*, edited by T.K. Perttula, pp. 101-126. Texas A&M Press, College Station.

Corner, W.

1890 *San Antonio de Bexar: A Guide and History*. 1st ed. Bainbridge and Corner, San Antonio. Cameron Memorial Library and John Peace Collection.

Cox, I.W.

1997 The Growth of San Antonio. In *Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition. Volume I, Historical, Architectural, and Oral History Research*, edited by A.A. Fox, M. Renner, and R.J. Hard, pp. 8-44. 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 Company, San Antonio.

Davis, W.C.

2004 *Lone Star Rising*. Free Press, London.

Dayton, C., M. Green, and H. Rush

2014 *Martin/Medina Maintenance Facility Archeological Survey, San Antonio, Bexar County, Texas*. Cox McLain Environmental Consulting, Austin.

de la Teja, J.F.

1995 *San Antonio de Bexar: A Community on New Spain's Northern Frontier*. University of New Mexico Press, Albuquerque.

Dunn, W.E.

1911 Apache Relations in Texas, 1718-1750. *Quarterly of the Texas State Historical Association*. 14(3):198-275.

Ewers, J.C.

1973 The Influence of Epidemics on the Indian Populations and Cultures of Texas. *Plains Anthropologist* 18:104-115.

Fox, A.A.

1978 *Archaeological Investigations of Portions of the San Pedro and Alazán Acequias in San Antonio, Texas*. Archaeological Survey Report, No. 49. Center for Archaeological Research, The University of Texas at San Antonio.

1983a State of Texas Archaeological Site Form for site 41BX605. Recorded by Center for Archaeological Research, The University of Texas at San Antonio. On file, Center for Archaeological Research, The University of Texas at San Antonio.

1983b State of Texas Archaeological Site Form for site 41BX614. Recorded by Center for Archaeological Research, The University of Texas at San Antonio. On file, Center for Archaeological Research, The University of Texas at San Antonio.

- 1983c State of Texas Archaeological Site Form for site 41BX620. Recorded by Center for Archaeological Research, The University of Texas at San Antonio. On file, Center for Archaeological Research, The University of Texas at San Antonio.
- Giraud, F.
1848 11 March. Survey of the Catholic and City Cemeteries. City Engineer's Survey Book, Vol. 1, p. 3. City of San Antonio Municipal Records.

1855 Plat of Lands on the West Side of San Pedro Creek 1849 and 1855. City Engineer's Survey Book, Vol. 2, p. 6. City of San Antonio Municipal Records.
- Habig, M.A.
1968 *The Alamo Chain of Missions: A History of San Antonio's Five Old Missions*. Franciscan Herald Press, Chicago.
- Hanson, C.
2016 *Archaeological Investigations for the Main Plaza Redevelopment Project, San Antonio, Bexar County, Texas*. Archaeological Survey Report. Atkins, Austin.
- Hartley, O.C.
1853 *Lewis v. San Antonio*. In *Reports of Cases Argued and Decided in the Supreme Court of the State of Texas during Austin Term, 1851, and Part of Galveston Term, 1852*, Volume VII, pp. 288-322. Civilian Book Office, Galveston.
- Henderson, T.J.
2009 *The Mexican Wars for Independence*. Hill and Wang Publishing, New York.
- Hester, T.R.
2004 The Prehistory of South Texas. In *The Prehistory of Texas*, edited by T.K. Perttula, pp. 127-151. Texas A&M Press, College Station.
- Hool, G.A.
1929 *Handbook of Building Construction: Data for Architects, Designing And Constructing Engineers, and Contractors*. Edited by G.A. Hool and N.C. Johnson. 2d ed. McGraw-Hill Book Company, New York.
- Jahrsdoerfer, S.E., and D.M. Leslie, Jr.
1988 *Tamaulipan Brushland of the Lower Rio Grande Valley of South Texas: Description, Human Impacts, and Management Options*. U.S. Department of Interior Fish and Wildlife Service Biological Report 88(36). Oklahoma Cooperative Fish and Wildlife Research Unit, Stillwater.
- Johnson, L., and G.T. Goode
1994 A New Try at Dating and Characterizing Holocene Climates, as well as Archaeological Periods, on the Eastern Edwards Plateau. *Bulletin of the Texas Archaeological Society* 65:1-51.
- Jones, A.
1859 *Memoranda and Official Correspondence Relating to the Republic of Texas – Its History and Annexation 1836 to 1846. Including a Brief Autobiography of the Author; Anson Jones, Late President of the Republic of Texas*. D. Appleton and Company, New York. The Portal to Texas History. University of North Texas Libraries. Electronic document, <https://texashistory.unt.edu>, accessed August 2017.
- Kowalsky, A.A., and D.E. Kowalsky
1999 *Encyclopedia of Marks on American, English and European Earthenware, Ironstone and Stoneware (1780-1980): Makers, Marks, and Patterns in Blue and White, Historic Blue, Flow Blue, Mulberry, Romantic Transferware, Tea Leaf and White Ironstone*. Schiffer Publishing, Atglen, Pennsylvania.
- Krombholz, M.G.
2009 *A Pictorial Reference Guide for German Chinas*. Reverie Publishing, Cumberland, Maryland.

Labadie, J.H.

1986 *An Archaeological and Historical Assessment of the Vista Verde South Project, San Antonio, Texas*. Archaeological Survey Report, No. 156. Center for Archaeological Research, The University of Texas at San Antonio.

Leal, J.O.

1976 Index of the San Fernando Archives: San Fernando Church Burials, 1744-1760, San Fernando Church Marriages, 1742-1760, San Fernando Church Notations, 1731-1760. Archives of the Archdiocese of San Antonio in the San Fernando Cathedral, compiled by J.O. Leal.

Lindsey, B.

2017a Society for Historical Archaeology Historic Glass Bottle Identification and Information Website, Electronic document, <https://sha.org/bottle/>, accessed July 2017.

2017b Society for Historical Archaeology Historic Glass Bottle Identification and Information Website, Electronic document, <https://sha.org/bottle/closures.htm#Glass>, accessed August 1, 2017.

2017c Society for Historical Archaeology Historic Glass Bottle Identification and Information Website, Electronic document, <https://sha.org/bottle/miscellaneous.htm#Batteryjars>, accessed August 1, 2017.

2017d Society for Historical Archaeology Historic Glass Bottle Identification and Information Website, Electronic document, [https://sha.org/bottle/medicinal.htm#Oval Druggists](https://sha.org/bottle/medicinal.htm#OvalDruggists); accessed July 2017.

Lockhart, B., and W. Olszewski

1994 Excavation and Analysis of a Nineteenth Century Bottle Pit in San Elizario, Texas. *The Artifact* 32(1):29-49.

Lockhart, B., B. Schriever, C. Serr, and B. Lindsey

2014 Chase Valley Glass Co. Electronic document, <https://sha.org/bottle/pdf/ChaseValleyGlass.pdf>, accessed July 2017.

Lockhart, B., P. Schulz, C. Serr, and B. Lindsey

2009 The Dating Game: Marks Used by the Mississippi and Lindell Glass Companies. *Bottles and Extras* 20(1):34-43, 56-58.

Lockhart, B., C. Serr, and B. Lindsey

2007 The Dating Game: De Steiger Glass Co. *Bottles and Extras* 18(5):31-37.

Lyle, A., D.G. Steele, and J.R. Francis

1999 *Exhumation and Analysis of Two Historic Burials from the Camposanto at Santa Rosa Hospital, San Antonio, Texas*. Archaeological Survey Report, No. 276. Center for Archaeological Research, The University of Texas at San Antonio.

Maas, P.

2014 Antique 'Wisconsin Glass' Bottle Gallery. Mr. Bottles.com. Electronic document, <http://www.mrbottles.com/Category/ChaseValleyFactory1>, accessed July 14, 2017.

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.M., L. Martinez, and R.P. Mauldin.

2016 *Archaeological Monitoring and Test Excavations at the 1722 Presidio San Antonio de Bexar (Plaza de Armas Buildings), San Antonio, Bexar County, Texas*. Archaeological Report, No. 445. 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.

References Cited

National Park Service (NPS)

- 2015 Environmental Factors. San Antonio Missions National Park. Nation Park Service. Electronic document, <https://www.nps.gov/saan/learn/nature/environmentalfactors.htm>, accessed July 2017.

National Resources Conservation Service (NRCS)

- 2017 Web Soil Survey. Electronic document, <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed July 2017.

Neu, C.T.

- 2010 Annexation. Handbook of Texas Online. Texas State Historical Association. Electronic document, <http://www.tshaonline.org/handbook/online/article/mga02>, accessed September 2017.

Nickels, D.L., and I.W. Cox

- 1996 *An Archaeological Assessment of the Alazán Ditch (41BX620) in the Five Points Area of San Antonio, Bexar County, Texas*. Archaeological Survey Report, No. 253. Center for Archaeological Research, The University of Texas at San Antonio.

Nichols, K., M. Luzmoor, and A. Jones

- 2017 *Uncovering and Documenting the Acequia de Valero on the Grounds of the Planned Civic Park at the Henry B. Gonzalez Convention Center Expansion Project, San Antonio, Bexar County, Texas*. Volume I. Raba Kistner Environmental Inc. San Antonio.

Nichols, M.

- 2013 *Archeological Monitoring of the Milam Park (41BX992) Playground Redevelopment Project San Antonio, Texas, Bexar County, Texas*. TAC Permit# 6613. Atkins North America, Inc., San Antonio.

Norwine, J.

- 1995 The Regional Climate of South Texas: Patterns and Trends. In *The Changing Climate of Texas: Predictability and Implications of the Future*, edited by J. Norwine, J. Giardino, G. North, and J. Valdes, pp. 138-155. Texas A&M University Press, College Station.

Presley, A.L.

- 2003 Antiquity and Paleoenvironment of The Tamaulipan Biotic Province of Southern Texas: The Zooarchaeological Perspective. Master's thesis, Department of Anthropology, Texas A&M University, College Station.
- 1981 Cultural Chronology in the Central Texas. *Bulletin of the Texas Archaeological Society* 52:65-90.

Reed, S.G.

- 1941 *A History of the Texas Railroads*. Ayer Company Publishers, North Stratford, New Hampshire.

Rullman, J.D.

- 1912 *Historic Map of Old San Antonio de Bexar in 1837*. Map on file, Center for Archaeological Research, The University of Texas at San Antonio.

San Antonio Daily Express

- 1910 [Advertisement for Rex Hotel]. 5 May:13.

San Antonio Express

- 1872 2 February.

San Antonio Herald

- 1872 1 February.

- 1878 The Alazán and Valley Ditches. 14 March.

San Antonio Light

1883 West Side Ditch Commissioner's Report to Council. 9 April:1.

Sanborn Map Company (Sanborn)

1885 *Sanborn Fire Insurance Map*. San Antonio, Texas, Insurance Map, Volume 1, Sheet 12, New York, New York. Perry-Castañeda Library, University of Texas, Austin. Electronic document, <http://www.lib.utexas.edu/maps/sanborn/texas.html>, accessed August 2017.

1888 *Sanborn Fire Insurance Map*. San Antonio, Texas, Insurance Map, Volume 1, Sheet 2, New York, New York. Perry-Castañeda Library, University of Texas, Austin. Electronic document, <http://www.lib.utexas.edu/maps/sanborn/texas.html>, accessed August 2017.

1892 *Sanborn Fire Insurance Map*. San Antonio, Texas, Insurance Map, Volume 1, Sheet 2, New York, New York. Perry-Castañeda Library, University of Texas, Austin. Electronic document, <http://www.lib.utexas.edu/maps/sanborn/texas.html>, accessed August 2017.

1896 *Sanborn Fire Insurance Map*. San Antonio, Texas, Insurance Map, Volume 1, Sheets "Key", 3, 4, 5, and 6, New York, New York. Perry-Castañeda Library, University of Texas, Austin. Electronic document, <http://www.lib.utexas.edu/maps/sanborn/texas.html>, accessed August 2017.

1904 *Sanborn Fire Insurance Map*. San Antonio, Texas, Insurance Map, Volume 1, Sheets 39 and 48, 12, New York, New York. Perry-Castañeda Library, University of Texas, Austin. Electronic document, <http://www.lib.utexas.edu/maps/sanborn/texas.html>, accessed August 2017.

1911 *Sanborn Fire Insurance Map*. San Antonio, Texas, Insurance Map, Volume 1, Sheet 16, New York, New York. Perry-Castañeda Library, University of Texas, Austin. Electronic document, <http://www.lib.utexas.edu/maps/sanborn/texas.html>, accessed August 2017.

1912 *Sanborn Fire Insurance Map*. San Antonio, Texas, Insurance Map, Volume 4, Sheet 404, New York, New York. Perry-Castañeda Library, University of Texas, Austin. Electronic document, <http://www.lib.utexas.edu/maps/sanborn/texas.html>, accessed August 2017.

Sanchez, J., T. Griffith, and J. Dowling

2014 State of Texas Archaeological Site Form for Site 41BX2074. Recorded by Blanton & Associates, Inc., San Antonio.

Sanchez, S., and J. McLoone

2017 Gebhardt Mexican Foods Company Collection. The University of Texas at San Antonio Special Collection Digital Collections. Electronic Documents, <http://web.lib.utsa.edu/gebhardt/>, accessed July 2017.

Smith, C.P.

1875 2 December. J.B. Sweeney Plat of a Subdivision of Block 24 and Part of Block No. 25. City Engineer's Plat Book 2, p. 58. City of San Antonio Municipal Records.

1881 3 May. Adams and Wickes Plat of 1880, May 3, 1881. Copy from Stewart Title Collection MS32, original filed as City Engineer's Office, Index No. 370, Drawer 5, Section 10.

Sonnichsen, C.L.

1950 *Cowboys and Cattle Kings: Life on the Range Today*. University of Oklahoma Press, Norman.

Stewart, J.

2014 Quintessential Antique Dolls: Heirloom Hertwigs. Electronic document, <https://quintessentialantiquedolls.wordpress.com/tag/hertwig/>, accessed August 2017.

Story, D.A.

1985 Adaptive Strategies of Archaic Cultures of the West Gulf Coastal Plains. 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.

References Cited

Tennis, C.A.

1993 State of Texas Archaeological Site Form for site 41BX992. Recorded by Center for Archaeological Research, The University of Texas at San Antonio. On file, Texas Archaeological Research Laboratory, Austin.

1995 *Exhumation of a Hero, Colonel Ben Milam: Milam Park Renovation, Phase I. San Antonio, Texas*. Archaeological Survey Report, No. 223. Center for Archaeological Research, The University of Texas at San Antonio.

Texas Historical Commission (THC)

2018 Texas Archaeological Sites Atlas. Electronic document, <http://nueces.thc.state.tx.us>, accessed August 2018.

Texas Supreme Court

1851 *Nat Lewis vs. City of San Antonio*. In *Reports of Cases Argued and Decided in the Supreme Court of Texas during Austin Term, 1851, and a Part of Galveston Term, 1852*, by O.C. Hartley, pp. 288-322. Civilian Book Office, Galveston.

Thoms, A.V., and S.W. Ahr

1995 The Pampopa-Talon Crossings and Heerman Ranch Sites: Preliminary Results of the 1994 Southern Texas Archaeological Association Field School. *La Tierra* 22(2):34-67.

Tomka, S.A., M.S. Tomka, K.M. Nichols, A. Jones, and M.W. Pfeiffer

2014 *Archaeological Construction Monitoring of the Police and Fire Administration Building and Department of Public Safety Fueling Station and Vehicle Wash Facility, San Antonio, Bexar County, Texas*. Archaeological Report, No. 433. Center for Archaeological Research, The University of Texas at San Antonio.

Tunnel, J.W., and F.W. Judd, editors

2002 *The Laguna Madre of Texas and Tamaulipas*. Vol. 2. Texas A&M University Press, College Station.

Ulrich, K.

2013 State of Texas Archaeological Site Form for site 41BX1967. Recorded by Center for Archaeological Research, The University of Texas at San Antonio. On file, Center for Archaeological Research, The University of Texas at San Antonio.

United States Climate Data (USCD)

2017 Climate San Antonio-Texas. Electronic document, <https://www.usclimatedata.com/climate/san-antonio/texas/united-states/ustx1200>, accessed October 18, 2017.

Ward, R.

2014 State of Texas Archaeological Site Form for site 41BX620. Recorded by SWCA Environmental Consultants. On file, SWCA Environmental Consultants-San Antonio, San Antonio.

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.

Woods, C.

2017 Antique Battery Jars. Electronic document. <http://www.antiquebottles-glass.com/battery-jars/>, accessed August 1, 2017.

Yelacic, D.

2015 State of Texas Archaeological Site Form for site 41BX2074. Recorded by Terracon Consultants, Inc., San Antonio.

Zapata, J.E., A.E. Figueroa, C.S. Smith, and C.M.M. McKenzie

2018 *Archaeological Monitoring and Investigations for Recent Redevelopment in Hemisfair Park, San Antonio, Bexar County, Texas*. Archaeological Report, No. 456. Center for Archaeological Research, The University of Texas at San Antonio.