

An Intensive Cultural Resources Survey of the 51.5-Acre South Park Industrial Property near San Antonio in Bexar County, Texas

By:

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HJN 140196 AR

Prepared for:



**The Innovative Group
San Antonio, Texas**

Prepared by:



**Horizon Environmental Services, Inc.
Austin, Texas**

September 2014

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MANAGEMENT SUMMARY

On 4 September 2014, Horizon Environmental Services, Inc. (Horizon) conducted an intensive cultural resources survey of the 51.5-acre South Park Industrial Property located near San Antonio in southwestern Bexar County, Texas (Project Area). Since the Project Area is located on private property, and its development will be funded by private sources, regulations under the Antiquities Code of Texas (ACT) or Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, do not apply to the Project Area. However, the City of San Antonio's (COSA) Office of Historic Preservation (OHP) has requested a cultural resources survey of the Project Area in accordance with the COSA Unified Development Code (Article 6 35-630 to 35-634). At the request of The Innovative Group (TIG), Horizon conducted the cultural resources survey of the 51.5-acre Project Area in compliance with survey standards developed by the Texas Historical Commission (THC) and the Council of Texas Archeologists (CTA). The purpose of the survey was to determine if the development of the Project Area would have the potential to adversely affect any significant cultural resources listed on or considered eligible for listing on the National Register of Historic Places (NRHP) or eligible for formal designation as State Antiquities Landmarks (SAL).

The survey of the Project Area resulted in entirely negative findings. No cultural materials were observed on the surface of the Project Area or within any of the 17 excavated shovel tests. In the undisturbed portions of the Project Area, shovel testing revealed dense, gravelly clay sediments in surface contexts. In the disturbed portions of the Project Area, heavily disturbed soils and impenetrable artificial fill sediments were observed in shovel tests excavated in these locations, therefore decreasing the potential to contain intact cultural deposits.

Based on the negative results of the cultural resources survey documented in this report, it is Horizon's opinion that the development of the Project Area will have no adverse effect on significant cultural resources listed on or considered eligible for listing on the NRHP or eligible for formal designation as SALs and that no further investigations are warranted. Horizon therefore recommends that TIG be allowed to proceed with the undertaking, relative to the jurisdiction to the COSA OHP.

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1.0 INTRODUCTION

This document reports the results of an intensive cultural resources survey of the proposed 51.5-acre South Park Industrial Property located near San Antonio in southwestern Bexar County, Texas (Project Area) (Figures 1-1 and 1-2). Since the Project Area is located on private property, and its development will be funded by private sources, regulations under the Antiquities Code of Texas (ACT) or Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, do not apply to the Project Area. However, the City of San Antonio's (COSA) Office of Historic Preservation (OHP) has requested a cultural resources survey of the Project Area in accordance with the COSA Unified Development Code (Article 6 35-630 to 35-634). At the request of The Innovative Group (TIG), Horizon conducted the cultural resources survey of the entire 51.5-acre Project Area in compliance with survey standards developed by the Texas Historical Commission (THC) and the Council of Texas Archeologists (CTA). The purpose of the survey was to determine if the development of the Project Area would have the potential to adversely affect any significant cultural resources listed on or considered eligible for listing on the National Register of Historic Places (NRHP) or eligible for formal designation as State Antiquities Landmarks (SAL).

The cultural resources investigations consisted of an archival review, an intensive cultural resources survey of the Project Area, and the production of a report suitable for review by the State Historic Preservation Officer (SHPO) in accordance with the THC's Rules of Practice and Procedure, Chapter 26, Section 27, and the CTA Guidelines for Cultural Resources Management Reports. Jennifer Cochran (Horizon staff archeologist) served as the project's principal investigator, while Briana Smith and Jared Wiersema conducted the field investigations.

Horizon conducted the survey of the Project Area on 4 September 2014. This entailed intensive surface inspection and subsurface shovel testing efforts within the Project Area. The Texas State Minimum Archeological Survey Standards (TSMASS) require a minimum of 1 shovel test per 2 acres for projects between 11.0 to 100.0 acres in size. As such, a total of 26 shovel tests were necessary within the 51.5-acre Project Area in order to comply with the TSMASS. Horizon failed to meet the minimum survey standards by excavating only 17 shovel tests within the Project Area. Approximately 36.3 acres of the Project Area consist of disturbed soils and artificial fill material, and Horizon archeologists were not able to excavate into these fill deposits. As such, the 17 shovel tests were mostly excavated within the undisturbed portions of the Project Area.

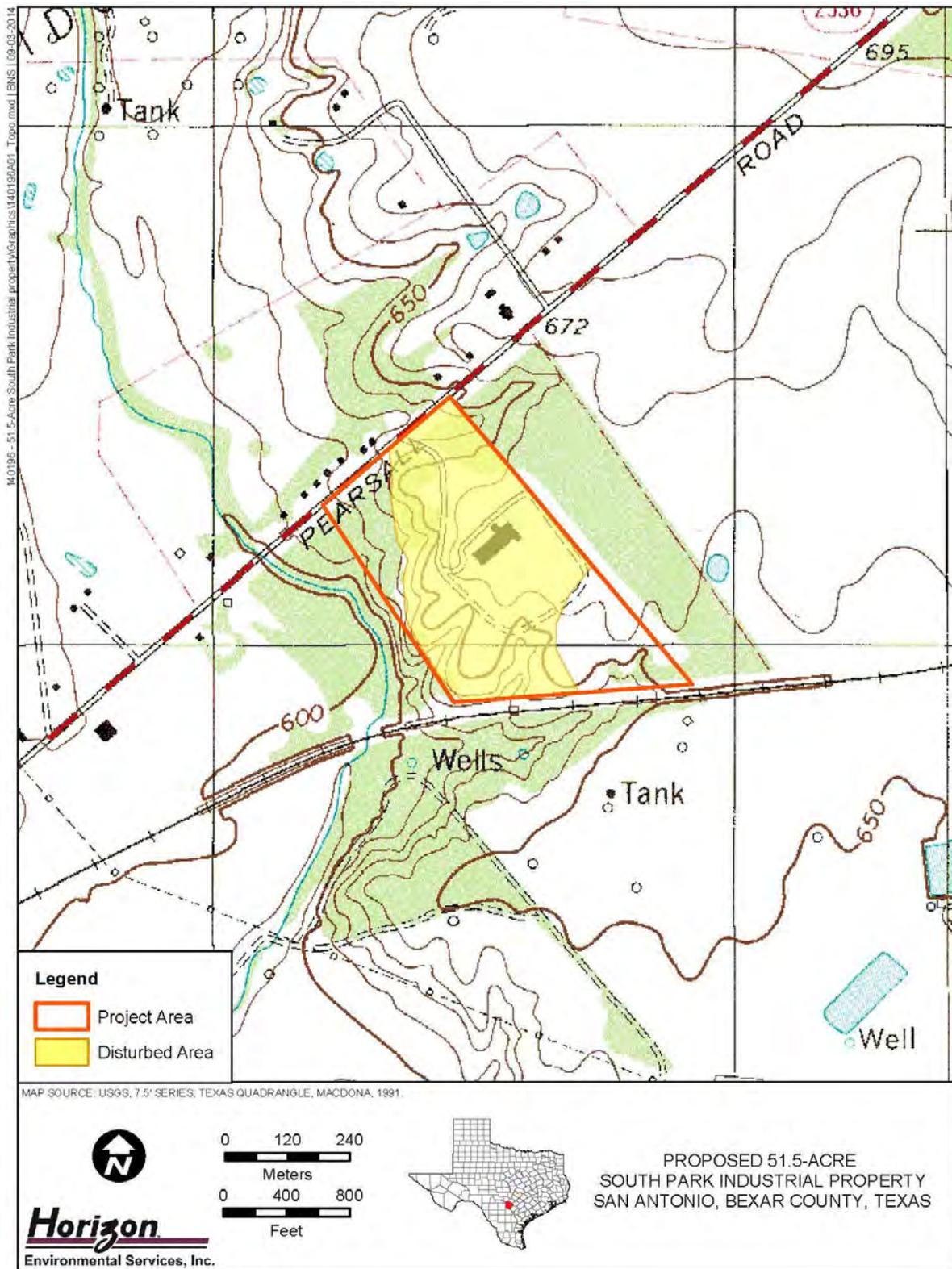


Figure 1-1. Topographic map with the location of the Project Area



Figure 1-2. Aerial photograph with the location of the Project Area

The survey of the Project Area resulted in entirely negative findings. No cultural materials were observed on the surface of the Project Area or within any of the 17 excavated shovel tests. In the undisturbed portions of the Project Area, shovel testing revealed dense, gravelly clay sediments in surface contexts. In the disturbed portions of the Project Area, heavily disturbed soils and impenetrable artificial fill sediments were observed in shovel tests excavated in these locations, therefore decreasing the potential to contain intact cultural deposits.

Based on the negative results of the cultural resources survey documented in this report, it is Horizon's opinion that the development of the Project Area will have no adverse effect on significant cultural resources listed on or considered eligible for listing on the NRHP or eligible for formal designation as SALs and that no further investigations are warranted. Horizon therefore recommends that TIG be allowed to proceed with the undertaking, relative to the jurisdiction to the COSA OHP. However, in the unlikely event that any cultural materials (including human remains or burial features) are inadvertently discovered at any point during construction, use, or ongoing maintenance of the Project Area, even in previously surveyed areas, all work at the location of the discovery should cease immediately, and the OHP and the THC should be notified of the discovery.

2.0 ENVIRONMENTAL SETTING

2.1 GENERAL PROJECT AREA DESCRIPTION

The cultural resources survey reported herein assessed the proposed South Park Industrial Property located near San Antonio in Bexar County, Texas (see Figures 1-1 and 1-2). The Project Area is located near San Antonio and can be found on the US Geological Survey (USGS) 7.5-minute MacDona, Texas, topographic quadrangle map (see Figure 1-1). Overall, the Project Area consists of 51.5 acres. However, approximately 36.3 acres of the Project Area consist of heavily disturbed soils and artificial fill sediments (see Figures 1-1 and 1-2). At the time of the survey, evidence of extensive bulldozing activities was observed along the eastern portions of the Project Area. At least 1 modern, standing structure was observed within the Project Area. Within the undisturbed portions of the Project Area, the vegetation consists of cedar and mesquite trees along with short-to-medium-height grasses. Photographs representative of the Project Area are provided in Figures 2-1 through 2-6

2.2 PHYSIOGRAPHY AND HYDROLOGY

The Project Area is located near San Antonio in southwestern Bexar County in South-Central Texas near the common junction of 3 significant physiographic provinces—the Edwards Plateau, the Balcones Canyonlands, and the Gulf Coastal Plain. The Edwards Plateau and Balcones Escarpment are associated with a great fault system that arcs across Texas to form a distinct boundary between uplands composed primarily of limestone bedrock and lower plains composed mostly of softer rocks. In places, this boundary is marked by an abrupt scarp (the Balcones Escarpment) and in others by a more gradational ramp, but the entire length of this transition zone is a major ecotone in terms of topography, bedrock, hydrology, soil, vegetation, and animal life.

The Gulf Coastal Plain, which extends as far north as the Ouachita uplift in southern Oklahoma and westward to the Balcones Escarpment, consists of seaward-dipping bodies of sedimentary rock, most of which are of terrigenous clastic origin, that reflect the gradual infilling of the basin from its margins (Abbott 2001). The fluviodeltaic sedimentary rocks are arranged in



Figure 2-1. Typical view of disturbed portions of the Project Area (facing southwest)



Figure 2-2. Another view of disturbed portions of the Project Area (facing southeast)



Figure 2-3. Artificial fill along the western portion of the Project Area (facing east)



Figure 2-4. View of undisturbed portions of the Project Area (facing west)



Figure 2-5. View of undisturbed portions of the Project Area (facing south)



Figure 2-6. Modern structure along the eastern portion of the Project Area (facing east)

an offlapped sequence, with interdigitated and capping eolian, littoral, and estuarine facies making up a relatively minor component of the lithology. Major bounding disconformities between these formations are usually interpreted to represent depositional hiatuses that occurred during periods of low sea level. The oldest rocks in this sequence are of Late Cretaceous age.

Hydrologically, the Project Area is situated within the San Antonio River basin. The Project Area is adjacent to the east of Medio Creek. Medio Creek flows in a southerly direction before converging with the Medina River approximately 4.8 km (3.0 mi) to the south of the Project Area. The Medina River flows in a southeasterly direction before discharging into the San Antonio River approximately 24.2 km (15.0mi) southeast of the Project Area. The San Antonio River flows southeastwards across the Gulf Coastal Plain, ultimately discharging into the Gulf of Mexico southeast of Victoria, Texas. Elevations across the Project Area range from approximately 190.0 to 204.0 meters (m) (625.0 to 670.0 feet [ft]) above mean sea level (amsl).

2.3 GEOLOGY AND GEOMORPHOLOGY

The Project Area, underlain by the Eocene-age Midway Group, is composed of primarily gravelly clay and sand sediments (Barnes 1974). The Project Area is situated on 3 specific soil units—Houston black gravelly clay, 1 to 3% slopes (HuB); Houston black gravelly clay, 5 to 8% slopes (HuD); and Lewisville silty clay, 1 to 3% slopes (LvA). These 3 soil types are described in Table 2-1 (NRCS 2014), and their distribution is mapped in Figure 2-7.

While aboriginal cultural resources are commonly encountered in deep alluvial sediments adjacent to major streams in Texas, the relative antiquity of the fluviodeltaic clayey sediments that constitute the soils of the coastal plain, such as those that comprise the current Project Area, suggests that any cultural resources would be constrained to the modern ground surface, rather than in buried contexts, in erosional settings lacking integrity. Intact, buried archeological deposits may occur within alluvial sediments near major streams; however, no Holocene-age sediments are mapped within the current Project Area. Historic-era cultural resources may occur in any physiographic setting.

2.4 CLIMATE

Evidence for climatic change from the Pleistocene to the present is most often obtained through studies of pollen and faunal sequences (Bryant and Holloway 1985; Collins 1995). Bryant and Holloway (1985) present a sequence of climatic change for nearby East-Central Texas from the Wisconsin Full Glacial period (22,500 to 14,000 B.P.) through the Late Glacial period (14,000 to 10,000 B.P.) to the Post-Glacial period (10,000 B.P. to present). Evidence from the Wisconsin Full Glacial period suggests that the climate in East-Central Texas was considerably cooler and more humid than at present. Pollen data indicate that the region was more heavily forested in deciduous woodlands than during later periods (Bryant and Holloway 1985). The Late Glacial period was characterized by slow climatic deterioration and a slow warming and/or drying trend (Collins 1995). In East-Central Texas, the deciduous woodlands were gradually replaced by grasslands and post oak savannas (Bryant and Holloway 1985). During the Post-Glacial period, the East-Central Texas environment appears to have been more

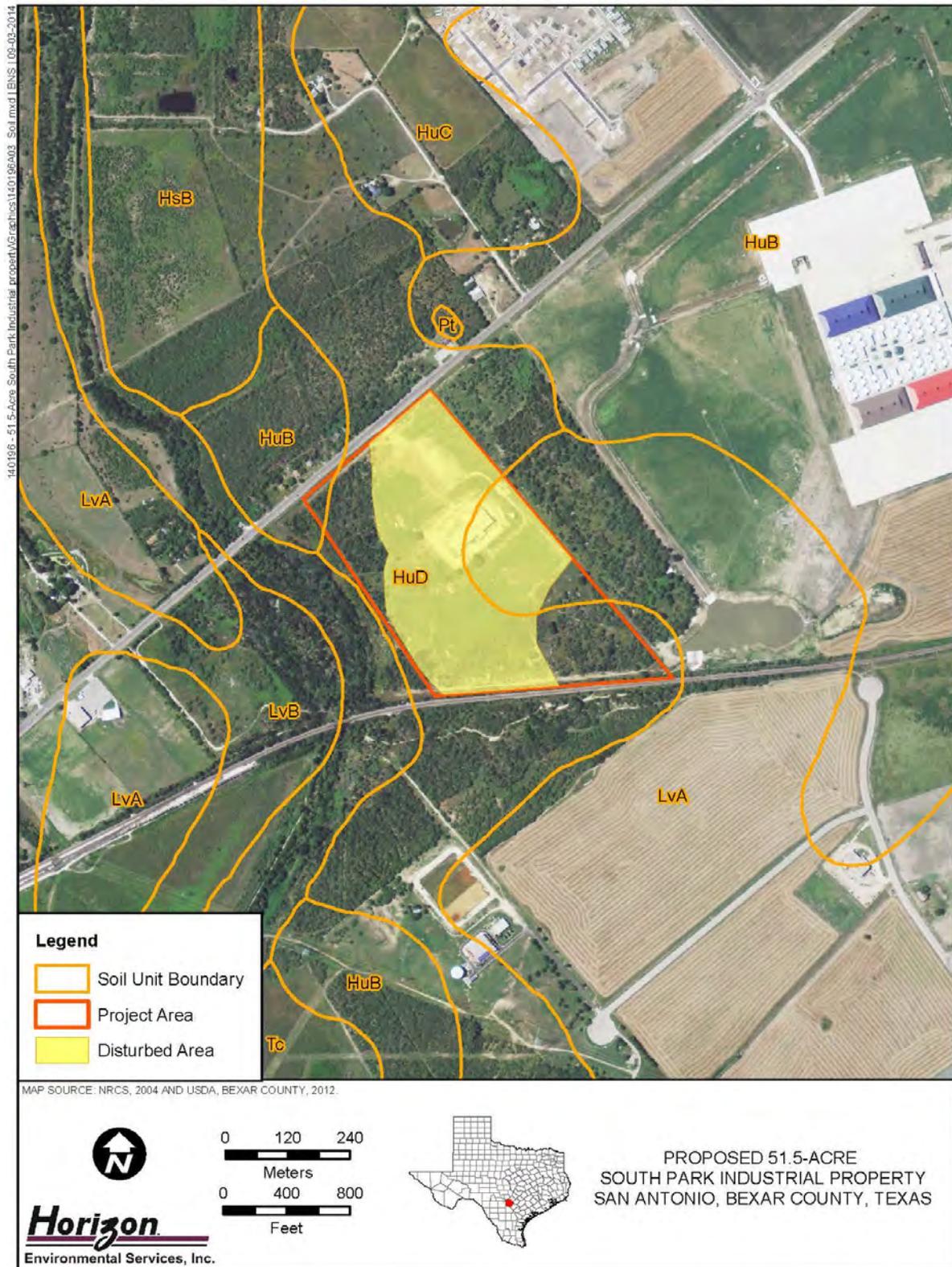


Figure 2-7. Distribution of mapped soils in the Project Area

Table 2-1. Soils mapped within the Project Area

Soil Name	Soil Type	Soil Depth (Inches)	Setting
Houston black gravelly clay, 1 to 3% slopes (HuB)	Gravelly clay	0-8: Gravelly clay 8-62+: Clay	Shoulder, summits
Houston black gravelly clay, 5 to 8% slopes (HuD)	Gravelly clay	0-8: Gravelly clay 8-62+: Clay	Shoulder, summits
Lewisville silty clay, 0 to 1% slopes (LvA)	Silty clay	0-62: Silty clay	Stream terraces

stable. The deciduous forests had long since been replaced by prairies and post oak savannas. The drying and/or warming trend that began in the Late Glacial period continued into the mid-Holocene, at which point there appears to have been a brief amelioration to more mesic conditions lasting from roughly 6000 to 5000 B.P. Recent studies by Bryant and Holloway (1985) indicate that modern environmental conditions in East-Central Texas were probably achieved by 1500 years ago.

Bexar County is located within the south-central climatic division. The modern climate is typically dry to subhumid with long, hot summers and short, mild winters. The climate is influenced primarily by tropical Maritime air masses from the Gulf of Mexico, but it is modified by polar air masses. Tropical Maritime air masses predominate throughout spring, summer, and fall. Modified polar air masses are dominant in winter and provide a continental climate characterized by considerable variations in temperature.

On average throughout the past century, precipitation and temperature in Texas manifest regional clines with mean annual precipitation totals declining fairly regularly from east to west and mean annual temperature declining equally evenly from northwest to southeast (Larkin and Bomar 1983). In Central Texas, climate has fluctuated from subtropical humid to subtropical subhumid. Average annual precipitation totals 81.0 centimeters (cm) (32.0 inches [in]) and temperature averages 19°Celsius (C) (67°Fahrenheit [F]) annually, ranging from 36°C (96°F) in August (the warmest month) to 15°C (59°F) in January (the coldest month). During this time, however, drier periods lasting from 3 to 7 years, when total annual rainfall ranged from 30.0 to 64.0 cm (12.0 to 25.0 in), were followed by abnormally wet years with 114.0 to 127.0 cm (45 to 50 in) of rainfall.

Two annual precipitation peaks, which typically occur in May and September, are associated with frontal storms that form when southward-moving cool air masses collide with warm, moist air masses moving inland from the Gulf of Mexico (Bomar 1983; Carr 1967). The topographic discontinuity along the Balcones Escarpment lies directly in the path of the Gulf storm trace and increases the lift in convective storms to produce extreme amounts of rainfall. Two extreme examples are the excess of 91.0 cm (36.0 in) of rain that fell within an 18-hour period in the vicinity of Thrall, Texas, in September 1921, and the 56.0-cm (22.0-in) deluge that fell in less than 3 hours near O'Harris, Texas, in May 1935. Lower rainfall amounts are characteristic of winter and late summer. In winter, frontal storms pass so frequently that there

is little time for moisture to increase, and prevailing upper-level winds from west to east often dominate over meridional flow, meaning that much of the available moisture is derived from the Pacific rather than from the Gulf of Mexico. In summer, cool fronts rarely penetrate into the region, and rainfall occurs primarily as localized, thermal convective storms.

2.5 FLORA AND FAUNA

The Project Area is located in the Balconian Biotic Province on the southern fringes of the Edwards Plateau (Blair 1950). The Edwards Plateau and associated Balcones Escarpment is characterized by a mixture of species from the Austroriparian, Tamaulipan, Chihuahuan, and Kansan, Balconian provinces. While 3 vegetational regions are recognized by Tharp (1939) within the limits of the Balconian Province, the Project Area is situated in the oak-cedar region that corresponds to the dissected southern and eastern part of the Edwards Plateau.

Fifty-seven species of mammals are known from the Balconian Province, though none of these species are restricted to this province. Common mammalian species include white-tailed deer, opossum, eastern cottontail rabbit, raccoon, striped skunk, hispid cotton rat, white-footed mouse, nine-banded armadillo, and fox squirrel. Common bird species include northern bobwhite, eastern meadowlark, mourning dove, killdeer, field sparrow, red-tailed hawk, turkey vulture, belted kingfisher, and mockingbird. Reptile and amphibian species common to this biotic zone include six-lined racerunner, rat snake, eastern hognose snake, Gulf Coast toad, Texas spiny lizard, rough green snake, copperhead, western diamondback rattlesnake, green tree frog, Blanchard's cricket frog, diamondback water snake, Houston toad, and green anole. Although small herds of bison and antelope were common during the late prehistoric and early historic periods, these species are no longer native to this region (Journey et al. 1989:13-14).

3.0 CULTURAL BACKGROUND

The Project Area is located near the southern boundary of Prewitt's (1981, 1985) Central Texas Archeological Region. The indigenous human inhabitants of Central Texas practiced a generally nomadic hunting and gathering lifestyle throughout all of prehistory, and, in contrast to much of the rest of North America, mobility and settlement patterns do not appear to have changed markedly through time in this region.

3.1 PALEOINDIAN PERIOD (CA. 12,000 TO 8500 YEARS B.P.)

The initial human occupations in the New World can now be confidently extended back before 12,000 years B.P. (Dincauze 1984; Haynes et al. 1984; Kelly and Todd 1988; Lynch 1990; Meltzer 1989). Evidence from Meadowcroft Rockshelter in Pennsylvania suggests that humans were present in eastern North America as early as 14,000 to 16,000 years ago (Adovasio et al. 1990), while more recent discoveries at Monte Verde in Chile provide unequivocal evidence for human occupation in South America by at least 12,500 years ago (Dillehay 1989, 1997; Meltzer et al. 1997). Most archeologists presently discount claims of much earlier human occupation during the Pleistocene glacial period (cf. Butzer 1988).

The earliest generalized evidence for human activities in Central Texas is represented by the PaleoIndian period (12,000 to 8500 years B.P.) (Collins 1995). This stage coincided with ameliorating climatic conditions following the close of the Pleistocene epoch that witnessed the extinction of herds of mammoth, horse, camel, and bison.

Cultures representing various periods within this stage are characterized by a series of distinctive, relatively large, often fluted, lanceolate projectile points. In Central Texas, the PaleoIndian stage is divided into 2 periods based on recognizable differences in projectile point styles. These include the Early PaleoIndian period, which is recognized based on large, fluted projectile points (i.e., Clovis, Folsom, Dalton, San Patrice, and Big Sandy), and the Late PaleoIndian period, which is characterized by unfluted lanceolate points (i.e., Plainview, Scottsbluff, Meserve, and Angostura). These points are frequently associated with spurred end scrapers, graters, and bone foreshafts.

PaleoIndian groups are often inferred to have been organized into egalitarian bands consisting of a few dozen individuals who practiced a fully nomadic subsistence and settlement pattern. Due to poor preservation of floral materials, subsistence patterns in Central Texas are

known primarily through the study of faunal remains, though floral remains have been recovered from sites in other regions. Based on this collective evidence, PaleoIndian subsistence focused on the exploitation of plants, small animals, fish, and shellfish. There is little evidence in this region for hunting of extinct megafauna, as has been documented elsewhere in North America. Rather, a broad-based subsistence pattern appears to have been practiced throughout all prehistoric time periods.

PaleoIndian sites in central Texas typically consist of isolated finds of artifacts (usually projectile points) and PaleoIndian cultural components on multiple-component sites that also contain later prehistoric components. Isolated finds of PaleoIndian projectile points are the most common type of PaleoIndian site in Central Texas and may occur in virtually any physiographic setting, whereas PaleoIndian campsites and/or stratified PaleoIndian cultural components in Central Texas are typically restricted to major stream systems that contain deep, intact, alluvial flood deposits.

3.2 ARCHAIC PERIOD (CA. 8500 TO 1200 YEARS B.P.)

The onset of the Hypsithermal drying trend marks the beginning of the Archaic period (8500 to 1200 years B.P.) (Collins 1995). This climatic trend marked the beginning of a significant reorientation of lifestyle throughout most of North America, but this change was far less pronounced in Central Texas. Elsewhere, the changing climatic conditions and corresponding decrease in the big game populations forced people to rely more heavily upon a diversified resource base composed of smaller game and wild plants. In Central Texas, however, this hunting and gathering pattern is characteristic of most of prehistory. The appearance of a more diversified tool kit, the development of an expanded groundstone assemblage, and a general decrease in the size of projectile points are hallmarks of this cultural stage. Material culture shows greater diversity during this broad cultural period, especially in the application of groundstone technology.

Traditionally, the Archaic period is subdivided into Early, Middle, and Late subperiods. Changes in projectile point morphology are often used as markers differentiating these 3 subperiods, though other changes in material culture occurred as well. Perhaps most markedly, burned rock middens appear during the Middle Archaic subperiod, continuing into the Late Archaic subperiod, and large cemeteries appear during the Late Archaic subperiod. In addition, the increasing density of prehistoric sites through time is often considered to constitute evidence of population growth, though differential preservation probably at least partially accounts for the lower numbers of older sites.

Isolated finds of Archaic period projectile points are common in Central Texas, and Archaic campsites are typically found adjacent to reliable water sources. Burned rock features such as hearths, ovens, middens, and scatters become increasingly common on Archaic period campsites over time. Other cultural features found on Archaic sites include chipped and ground stone tool caches; isolated burials, midden burials, and cemeteries, though the latter are relatively rare; and occasional remnants of house structures, such as wall trenches and/or post molds.

3.3 LATE PREHISTORIC PERIOD (CA. 1200 TO 350 YEARS B.P.)

The onset of the Late Prehistoric period (1200 to 350 years B.P.) (Collins 1995) is defined by the appearance of the bow and arrow. In Central Texas, pottery also appears during the Late Prehistoric period (though ceramics appear earlier in Southeast Texas). Use of the atlatl (i.e., spearthrower) and spear was generally discontinued during the Late Prehistoric period, though they continued to be used in the inland subregion of Southeast Texas along with the bow and arrow through the Late Prehistoric period (Patterson 1980, 1995; Wheat 1953). In Texas, unifacial arrow points appear to be associated with a small prismatic blade technology. The Late Prehistoric period is generally divided into 2 phases, the Austin and Toyah phases. Austin phase sites occur earliest to the north, which has led some researchers (e.g., Prewitt 1985) to suggest that the Austin-phase populations of Central Texas were migrants from the north, and lack the ceramic industry of the later Toyah phase.

Late Prehistoric sites in Central Texas are broadly similar to earlier Archaic period sites, with the exception of the replacement of the larger dart point styles of the Archaic period with smaller arrow points and the introduction of pottery in some areas. Isolated finds of Late Prehistoric artifacts (usually projectile points) and campsites found adjacent to reliable water sources are common, and Late Prehistoric cultural components are often found in stratified stream-side contexts overlying older cultural components. Cemeteries dating to the Late Prehistoric period have been found in Southeast Texas, but human burials in Central Texas are typically isolated features or associated with midden contexts.

3.4 HISTORIC PERIOD (CA. 350 YEARS B.P. TO PRESENT)

The first European incursion into what is now known as Texas was in 1519, when Álvarez de Pineda explored the northern shores of the Gulf of Mexico. In 1528, Cabeza de Vaca crossed South Texas after being shipwrecked along the Texas Coast near Galveston Bay. However, European settlement did not seriously disrupt native ways of life until after 1700. The first half of the 18th century was the period in which the fur trade and mission system, as well as the first effects of epidemic diseases, began to seriously disrupt the native cultures and social systems. This process is clearly discernible at the Mitchell Ridge site on Galveston Island in Galveston County, Texas, where burial data suggest population declines and group mergers (Ricklis 1994), as well as increased participation on the part of the Native American population in the fur trade. By the time that heavy settlement of Texas began in the early 1800s by Anglo-Americans, the indigenous Indian population was greatly diminished.

The first Europeans to explore the Bexar County region came with an expedition in 1691 led by Domingo Terán de los Ríos and Fray Damián Massanet, who evidently reached the San Antonio River near where the San Juan Capistrano Mission was later founded.¹ Nearby, they found a group of Payaya Indians living on the riverbank. The Indians, as Massanet recorded in

¹ The following discussion of Bexar County history is excerpted from TSHA (2014).

his diary, called the place Yanaguana; he, however, renamed the site San Antonio de Padua to celebrate the memorial day of St. Anthony—June 13.

The next group of Spanish explorers, an expedition led by 2 Franciscans, fathers Antonio de San Buenaventura y Olivares and Isidro Félix de Espinosa, and a military officer, Pedro de Aguirre, did not reach the area until April 1709. Much impressed by the setting and the availability of water, they noted that the area might make a promising site for future settlement. In 1714, Louis Juchereau de St. Denis crossed the region on his way to San Juan Bautista. Espinosa again visited the site in 1716 on his way to East Texas with the expedition of Domingo Ramón and this time recommended San Pedro Springs as a mission site. Near that spot, in May 1718, Martín de Alarcón led the expedition that founded San Antonio de Valero Mission and San Antonio de Béxar (or Béjar) Presidio, named for Viceroy Balthasar Manuel de Zúñiga y Guzmán Sotomayor y Sarmiento, second son of the duke of Bexar. By the end of the winter of 1718, numerous Indians of the Jamrame, Payaya, and Pamaya groups had joined the mission. In 1720, Fray Antonio Margil de Jesús founded the San José y San Miguel de Aguayo Mission a short distance to the south. Another mission, San Francisco Xavier de Naxara, was established in 1722 but proved unsuccessful and was merged with San Antonio de Valero in 1726. In 1724, the San Antonio de Valero mission compound, which had originally been located at the site of the present-day Chapel of Miracles south of San Pedro Springs, was moved to Alamo Plaza. In 1731, after the removal of the missions from East Texas, 3 additional missions—Nuestra Señora de la Purísima Concepción de Acuña, San Francisco de la Espada, and San Juan Capistrano—were founded along the San Antonio River.

During the 1720s, the Spanish population of the area was about 200, including 53 soldiers and their families and 4 civilians with their families. On 9 March 1731, 55 Canary Islanders arrived at Bexar, and the villa of San Fernando de Béxar became the first municipality in the Spanish province of Texas. The 5 missions, together with the presidio and the villa of San Fernando, constituted the most important Spanish concentration in Texas. By the mid-1730s, the total population of the area was some 900, including 300 Spanish and 600 Indian converts. An epidemic in 1738 and 1739 devastated the missions, killing perhaps 3/4 of the Indian population. At Mission San Antonio de Valero alone, only 182 of 837 Indians who had been baptized survived. By 1740, however, the missions' populations began to recover. The number of converts at the 5 missions reached more than 500, as many of the indigenous Coahuiltecan peoples living in the region fled to them as a refuge from the Apaches and Comanches.

The missions developed as self-supporting communities, each ringed with farmland irrigated by a comprehensive system of acequias, or irrigation ditches. Crops included grain, cotton, flax, beans, sugarcane, and vegetables. Each of the missions also maintained sizable herds of cattle, sheep, and goats on extensive ranchlands located around Bexar. Governor Manuel M. de Salcedo described Mission Concepción's ranch in 1809 as comprising some 38 square miles and extending east and northeast from the mission to Cibolo Creek. An inventory in 1756 recorded that the Concepción ranch had 700 cattle, 1800 sheep, and large herds of goats and horses.

Both the missions and the villa of Bexar were subject to sporadic attacks of Apaches and Comanches; nearly a quarter of the Spanish who died between 1718 and 1731 were reportedly victims of Apache attacks. A truce was signed with the Apaches in August 1749, but occasional attacks by Comanches and Apaches continued well into the 19th century.

In 1772, the government offices of Spanish Texas were moved from Los Adaes to Bexar, and some of the East Texas settlers also moved. Nonetheless, Bexar remained a small frontier outpost, as Father Juan A. Morfi described in a report of the late 1770s, with “fifty-nine houses of stone and mud, seventy-nine of wood, all poorly built without a preconceived plan. The whole town,” he continued, “resembles a poor village rather than the capital of a province.”

After the secularization of the missions in 1793 and 1794, they gradually became satellite civilian communities under the authority of the town of Bexar. The mission lands were distributed to the few remaining Indians and the increasing number of Spanish settlers; most of the better land nearest the settled areas was controlled by the town's elite, which was made up of the descendants of the original Canary Islanders and presidial soldiers. The complex network of irrigation systems that had been operated by the missions was partially abandoned, and, by 1815, the amount of irrigated farmland had declined markedly.

Despite the downturn brought on by the secularization of the Spanish missions, San Antonio de Béxar continued to be an overwhelmingly agricultural community. Subsistence farming was the rule. The largest number of cultivators worked small family plots, though many farms were also worked by tenant farmers or day laborers. The elite landowners increased the size of their holdings after the secularization of the missions, and some of the largest ranchers exported horses and cattle to Coahuila or Louisiana.

During the late colonial period, Bexar continued to serve as the capital of the province of Texas as well as the main shipping point for supplies headed for Nacogdoches and La Bahía. Between 1811 and 1813, the city was also the center of revolutionary activity against Spanish rule. In 1811, a former militia captain, Juan Bautista de Las Casas, following the lead of Miguel Hidalgo y Costilla in Mexico, mounted an insurrection in Bexar that quickly spread throughout the province of Texas. Las Casas's band of followers, which included the poorer soldiers and civilians of the lower social stratum who resented the rule of the Spanish elite, scored early successes, arresting the governor and his military staff and seizing the property of the most ardent royalists. On 1 March 1811, however, some of the conservative military officers and clergy supported by the *isleños* (aristocratic descendants of the original Canary Island settlers) staged a counterrevolution. Las Casas was captured in Chihuahua and executed, and his head was salted and shipped in a box to Bexar for display on Military Plaza in an attempt to dissuade others from taking up his cause.

After Las Casas's death, the leadership of the insurrectionists fell to Bernardo Gutiérrez de Lara, who led an army of Mexican revolutionaries and sympathetic Americans from Louisiana who seized San Antonio in the spring of 1813 and proclaimed Texas an independent state. In August, however, royalist forces commanded by José Joaquín Arredondo succeeded in routing the insurrectionists and restoring order. Arredondo's victory was followed by a period

of reprisals that included confiscation, detentions, and executions; in San Antonio alone, loyalists shot 327 supporters of the rebellion.

In the wake of the rebellion, the population of Bexar and the surrounding region fell markedly and did not begin to grow again until the end of the decade. By 1820, however, Bexar had some 2,000 inhabitants, with slightly more females (1021) than males (973); several hundred more lived on ranches in the outlying countryside. During the 1830s, the population again increased slightly, although the number of inhabitants in Bexar declined as more town dwellers moved out to adjoining farms and ranches.

Soon after the first Anglo-American colonists came to Texas in 1821, San Antonio became the western outpost of settlement. In 1824, Texas and Coahuila were united into one state with the capital at Saltillo; a Department of Bexar was created with a political chief to have authority over the Texas portion of the state. During the late 1820s and early 1830s, increasing numbers of American settlers began moving to San Antonio, though the city remained predominantly Mexican at the beginning of the Texas Revolution.

In late October 1835, Texas volunteers laid siege to the city, which was garrisoned by the Mexican army under Martín Perfecto de Cos. On 10 December, after fierce hand-to-hand fighting, it was occupied by Texan forces. San Antonio was retaken by government forces commanded by Antonio López de Santa Anna during the battle of the Alamo on March 6 of the following year. After the subsequent defeat of Santa Anna's army in the battle of San Jacinto, the city was reoccupied by Texan forces, but the area, claimed by both sides, continued to be fought over. In March 1842, six years after Texas independence, Mexican general Rafael Vásquez briefly occupied San Antonio, and, in September of the same year, Adrián Woll led another Mexican invasion force that seized the city.

Because of the uncertainty posed by the frequent invasions, San Antonio and the surrounding area were largely depopulated. Many settlers fled during the Runaway Scrape of 1836 or during subsequent attacks and did not return in large numbers until after Texas joined the Union. As late as 1844, San Antonio had only some 1000 residents, 90% of whom were of Mexican descent.

The newly formed Bexar County covered much of the western edge of settlement in Texas. During the late Mexican period, Texas had been divided into 4 departments, with the department of Bexar stretching from the Rio Grande to the Panhandle and as far west as El Paso. With the winning of Texas independence, the departments became counties, and on 20 December 1836, Bexar County was established, with San Antonio as county seat. Since 1860, when the partitioning of Bexar County began, 128 counties have been carved from the original county.

Despite the steady growth of the population in the late 1840s, fueled by large numbers of immigrants from the Old South and from Germany, Bexar County was still a sparsely populated region during the early years of statehood. In 1850, the county had a total population of 5633, 3488 of whom lived in San Antonio. The economy, as during the Spanish and Mexican periods, was still based on ranching and subsistence agriculture. Most of the farms were small; on the

eve of the Civil War only 1 farm in the county was larger than 405 hectares (ha) (1000 acres [ac]), and most were smaller than 20 ha (50 ac). The main source of revenue for the county was trade carried on by team trains between San Antonio and Mexico and New Orleans. A number of German and Anglo immigrants opened mercantile establishments in the city, but there was little in the way of industry. In 1860, the county had only 28 manufacturing establishments with 135 employees.

In contrast to many other areas of Texas, slaves played only a minor role in the Bexar County economy. In 1850, there were only 419 African Americans living in the county, 30 of whom were free. By 1860, the number of slaves had grown to 1395, or slightly less than 10% of the county's total population. Most of the county's 294 slaveholders owned 5 or fewer slaves, and only 2 owned more than 40.

Bexar County, with its large German population, was a center for antislavery sentiment. Nevertheless, county residents voted for secession 827 to 709 (54% for, 46% against). On 16 February 1861, General David E. Twiggs, commander of the federal Department of Texas, which was headquartered in San Antonio, surrendered all United States forces, arms, and equipment to a committee of local secessionists backed by a large force of Texas Rangers under Major Benjamin McCulloch. Although Bexar County escaped the destruction that devastated other parts of the South, the war years were difficult for the county's citizens, who were forced to deal with the lack of markets and wild fluctuations in Confederate currency, as well as with concern for those on the battlefield. With many of the men away fighting, the county and the surrounding region experienced an upsurge of cattle rustling and other crimes, and a committee of vigilantes organized "necktie parties" for bandits, cattle thieves, and Union sympathizers.

After the war, San Antonio was occupied by Union soldiers, but the county was spared much of the political violence that consumed other parts of Texas. The war and its aftermath, however, had a serious effect on the county's economy. Land prices fell significantly—by as much as half—and most of the county's businesses suffered. Many of the county's farms also fell idle. The amount of improved farmland declined by more than 60% between 1860 and 1870, from 5543 to 2244 ha (13,697 to 5546 ac). With little tax money coming in, San Antonio and county officials were unable to fund many services. Public sanitation suffered, and as a result the county had a serious cholera outbreak in 1866.

Except for San Antonio, which continued to be a commercial and military center, the county remained scantily settled and undeveloped. Most of the population continued to be concentrated in the San Antonio River valley, with only a few small settlements in the northern, eastern, and western parts of the county. Economic recovery did not begin until the late 1860s and early 1870s with the start of the great cattle drives. Because Bexar County was located at the northern apex of the diamond-shaped area that was the original Texas cattle kingdom, it became an increasingly important center for the ranching industry. By 1870, the number of beef cattle in the county reached 55,325, nearly double the figure for 1860. A sharp increase in the price of wool and the large amount of free range west and south of the city also spurred the development of sheep ranching, particularly in the decade between 1870 and 1880.

The economic recovery, however, found its most important stimulus with the arrival of the first railroad, the Galveston, Harrisburg and San Antonio Railway, which reached San Antonio in February 1877. The completion of the rail link with the coast made the shipment of local products far easier and helped to fuel a rapid growth in population. The number of inhabitants in the county, which had grown by less than 2000 between 1860 and 1870, nearly doubled over the next decade, increasing from 16,043 in 1870 to 30,470 in 1880. Many of the new residents were recent immigrants from Europe and Mexico. Of the total population in 1880, 7912 were foreign-born, with the largest numbers coming from Mexico (3498), Germany (2621), Ireland (471), England (334), and France (293). After the Civil War, the county's black population also grew dramatically as many freed slaves settled in and around San Antonio. By 1880, the number of African-American inhabitants had reached 3,867, nearly 3 times what it had been in 1860.

In 1881, a second railroad, the International-Great Northern, reached the city from the northeast. The completion of the 2 railroads not only brought new prosperity, but helped to change the physical face of the county. Before the 1870s, most visitors had been struck by the fact that San Antonio and environs, despite relatively large numbers of English, Irish, and Germans, still resembled a Mexican community more than an American one. The influx of new settlers and manufactured building products gradually transformed the city and county, altering its appearance to more closely resemble that of other communities in Texas. The changing character of Bexar was perhaps most tellingly revealed in 1890, when for the first time the number of the county's inhabitants born in Germany (4039) actually outnumbered those who had been born in Mexico (3561).

The construction of the railroads also stimulated the establishment or greatly spurred the growth of numerous new communities, including Macdona, Von Ormy, Cassin, Atascosa, Thelma, Beckman, Luxello, Converse, and Kirby, though the overwhelming majority of the county's inhabitants still lived in San Antonio.

The 1880s also saw many new industries. By 1887, San Antonio listed among its businesses 3 bookbinderies, 4 breweries, 3 carriage factories, 4 ice factories, 3 tanneries, 1 wool-scouring plant, and 1 iron foundry. Between 1880 and 1890, employees in manufactures in the county grew from 362 to 2518. After the turn of the century, the manufacturing sector continued to show impressive growth. By 1920, the county had 328 factories employing 6860 persons.

Despite the area's relatively diversified economy, the depression hit Bexar County hard. By the mid-1930s, many people were out of work and very glad of the New Deal programs that gave them work paving streets and building bridges, sewers, and parks. Among the largest projects of the period were the renovation of La Villita and the San Antonio missions, and the construction of the Paseo del Rio along the San Antonio River in the center of the city.

Beginning in the second half of the 19th century, San Antonio also developed as an important military center. The San Antonio Arsenal was opened in 1858, and, in 1878, the city deeded 36 ha (90 ac) to the federal government for what eventually became Fort Sam Houston. During World War I, Kelly and Brooks fields (which later became Kelly Air Force Base and

Brooks Air Force Base) were established to train pilots, and Camp Bullis and Camp Travis were opened. At the end of the war, a part of Kelly Field became Duncan Field, and, in 1931, Randolph Field was established as a primary flight training base. During World War II, Duncan Field was reintegrated with Kelly, and Camp Normoyle, a motor base, was added.

During World War II, Bexar County's already large military presence grew even more as the area's bases became an important center for the training of army air corps cadets under the auspices of the San Antonio Aviation Cadet Center. At the height of the war, more than 21,000 civilian war workers were employed at Kelly Field alone. After the war, the presence of so many military personnel continued to bring changes to the county. Thousands of returning veterans enrolled in local colleges and universities, and many others, attracted to the area during their service years, moved to the city. San Antonio also developed into a major retirement center for military families, drawn by the relatively low cost of living and the access to the 2 large area military medical centers, Wilford Hall and Brooke Army Medical Center. Since the end of the Second World War, the economy of the area has continued to depend heavily on a large federal payroll from the various military bases and research facilities, and from the large number of retired military residents.

4.0 ARCHIVAL RESEARCH

4.1 DATABASE REVIEW

Archival research conducted via the Internet at the THC's *Texas Archeological Sites Atlas* (Atlas) website indicated the presence of 7 previously recorded archeological sites within a 1.6-km (1.0-mi) radius of the Project Area (THC 2014), while a review of the National Park Service's (NPS) NRHP Google Earth map layer indicated the presence of no historic properties listed on the NRHP within the review radius (NPS 2014). These documented cultural resources are summarized in Table 4-1, while their locations relative to the Project Area are presented in Figure 4-1. Site 41BX1801 was recorded as a prehistoric surficial lithic scatter that was determined to be ineligible for inclusion in the NRHP. No additional previously recorded archeological sites, including any listed on the NRHP or listed as formal SAL designation, are located within or immediately adjacent to the Project Area. According to the Atlas, a small, linear survey was conducted for the San Antonio Water System (SAWS) in 2011 across the northern and western edge of the Project Area. This survey produced negative results within the Project Area.

4.2 PROBABILITY ASSESSMENT

Prehistoric archeological sites are commonly found in upland areas and on alluvial terraces near stream/river channels or drainages. Based on the location of the Project Area on an upland formation in close proximity to Medio Creek, as well as the presence of 1 previously documented prehistoric site adjacent to the Project Area, it was Horizon's original opinion that there existed a moderate to high potential for undocumented prehistoric cultural deposits within the Project Area.

In regard to historic-era resources, 1 structure is visible within the boundaries of the Project Area on the relevant topographic quadrangle map and on Google Earth. However, according to the client, the structure (seen on the relevant topographic map) has been razed and the surrounding area has been bulldozed. This suggests a low potential for the presence of intact historic-era cultural material within the boundaries of the Project Area.

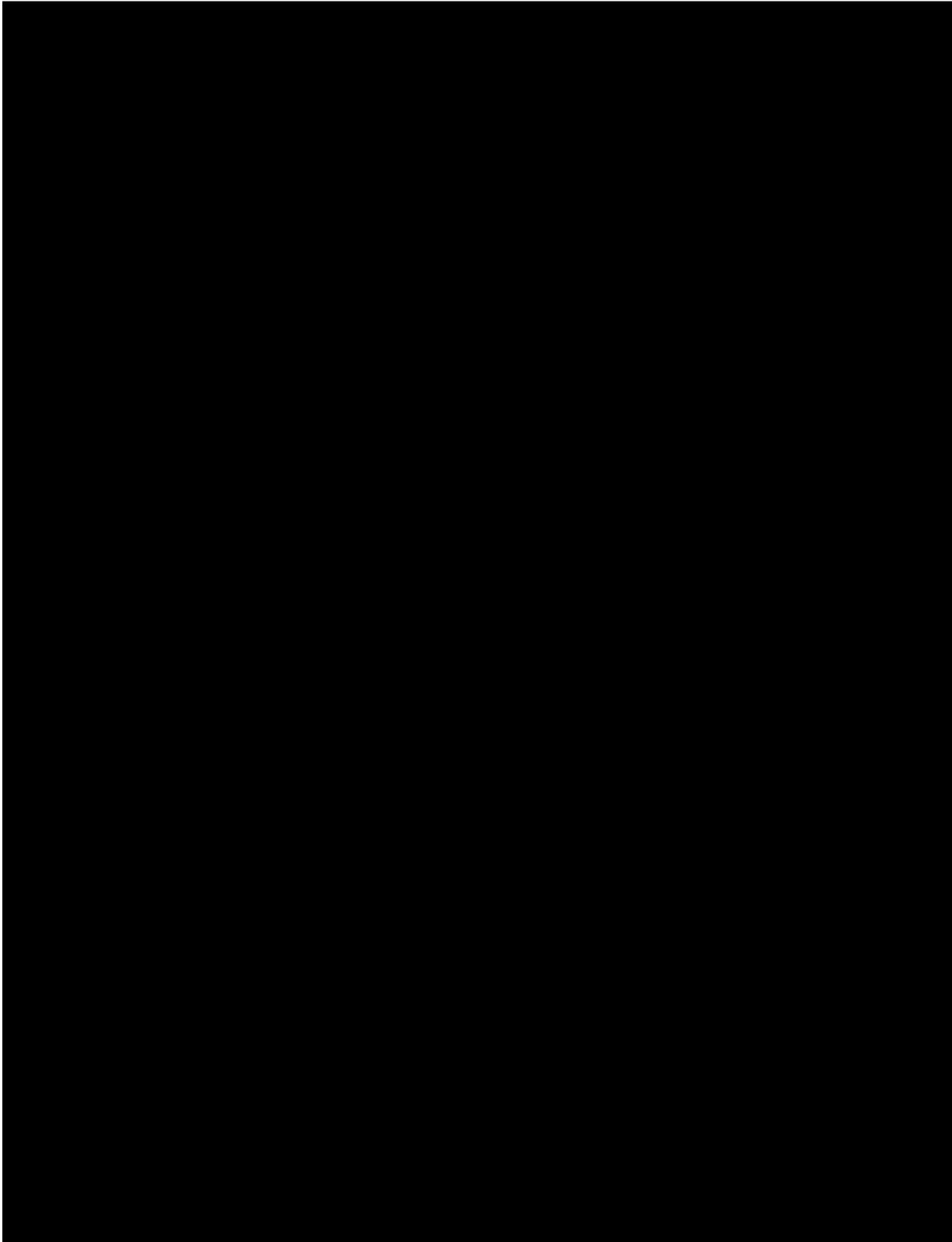


Figure 4-1. Documented cultural resources within 1.6 km (1.0 mi) of the Project Area

Table 4-1. Documented cultural resources within 1.6 km (1.0 mi) of the Project Area

Trinomial, Cemetery, Historic Property	Site Type	NRHP Eligibility	Distance/Direction from Project Area	Potential to be Impacted by Project?
41BX1149	No record on file	Undetermined	1.3 km (0.8 mi) northwest	No
41BX1259	Unknown prehistoric	Ineligible	0.3 km (0.2 mi) south	No
41BX1727	Prehistoric lithic scatter	Noncontributing	1.6 km (1.0 mi) southwest	No
41BX1728	Prehistoric lithic scatter	Ineligible	1.1 km (0.7 mi) southwest	No
41BX1729	Prehistoric lithic scatter	Undetermined	1.6 km (1.0 mi) southwest	No
41BX1801	Prehistoric lithic scatter	Ineligible	Adjacent to the east	Possible
41BX1819	Prehistoric lithic procurement site	Undetermined	1.6 km (1.0 mi) northwest	No

5.0 SURVEY METHODOLOGY

A 2-person Horizon archeological field crew completed the intensive pedestrian survey within the Project Area on 4 September 2014. This entailed intensive surface inspection and subsurface shovel testing efforts within the Project Area. The TSMASS require a minimum of 1 shovel test per 2 acres for projects between 11.0 to 100.0 acres in size. As such, a total of 26 shovel tests were necessary within the 51.5-acre Project Area in order to comply with the TSMASS. Horizon failed to meet the minimum survey standards by excavating only 17 shovel tests within the Project Area. Approximately 36.3 acres of the Project Area consist of disturbed soils and artificial fill material, and Horizon archeologists were not able to excavate into these fill deposits. As such, the 17 shovel tests were mostly excavated within the undisturbed portions of the Project Area. All excavated matrices were screened through 6.0-millimeter (mm) (0.25-inch [in]) hardware mesh or were trowel-sorted if the dense clay soils prohibited successful screening.

In general, shovel tests measured approximately 30.0 cm (12.0 in) in diameter and were excavated to a target depth of 1.0 m (3.3 ft) below ground surface, to the top of pre-Holocene deposits, or to the maximum depth practicable. In practice, shovel tests were terminated at depths of up to 30.0 cm (11.8 in) below surface due to the presence of pre-Holocene sediments generally composed of dark grayish-brown gravelly clays in surface contexts. The locations of all shovel tests were recorded via handheld global positioning system (GPS) units utilizing the Universal Transverse Mercator (UTM) coordinate system and the North American Datum of 1983 (NAD 83). Shovel test locations are presented in Figure 5-1, and shovel test data are presented in Appendix A.

The TSMASS also require backhoe trenching in stream terraces and other areas with the potential to contain buried archeological materials at depths below those that shovel tests are capable of reaching (approximately 1.0 m [3.3 ft] below surface). The Project Area is located on an Eocene-aged terrace adjacent to Medio Creek. In the undisturbed portions of the Project Area, shovel testing revealed dense, gravelly clay sediments in surface contexts. In the disturbed portions of the Project Area, heavily disturbed soils and impenetrable artificial fill sediments were observed in shovel tests excavated in these locations. These results demonstrate that shovel test efforts were capable of penetrating to the bottom of sediments that could contain archeological deposits or that the presence for intact deposits did not exist. As such, shovel testing is considered to constitute an adequate and effective survey technique for

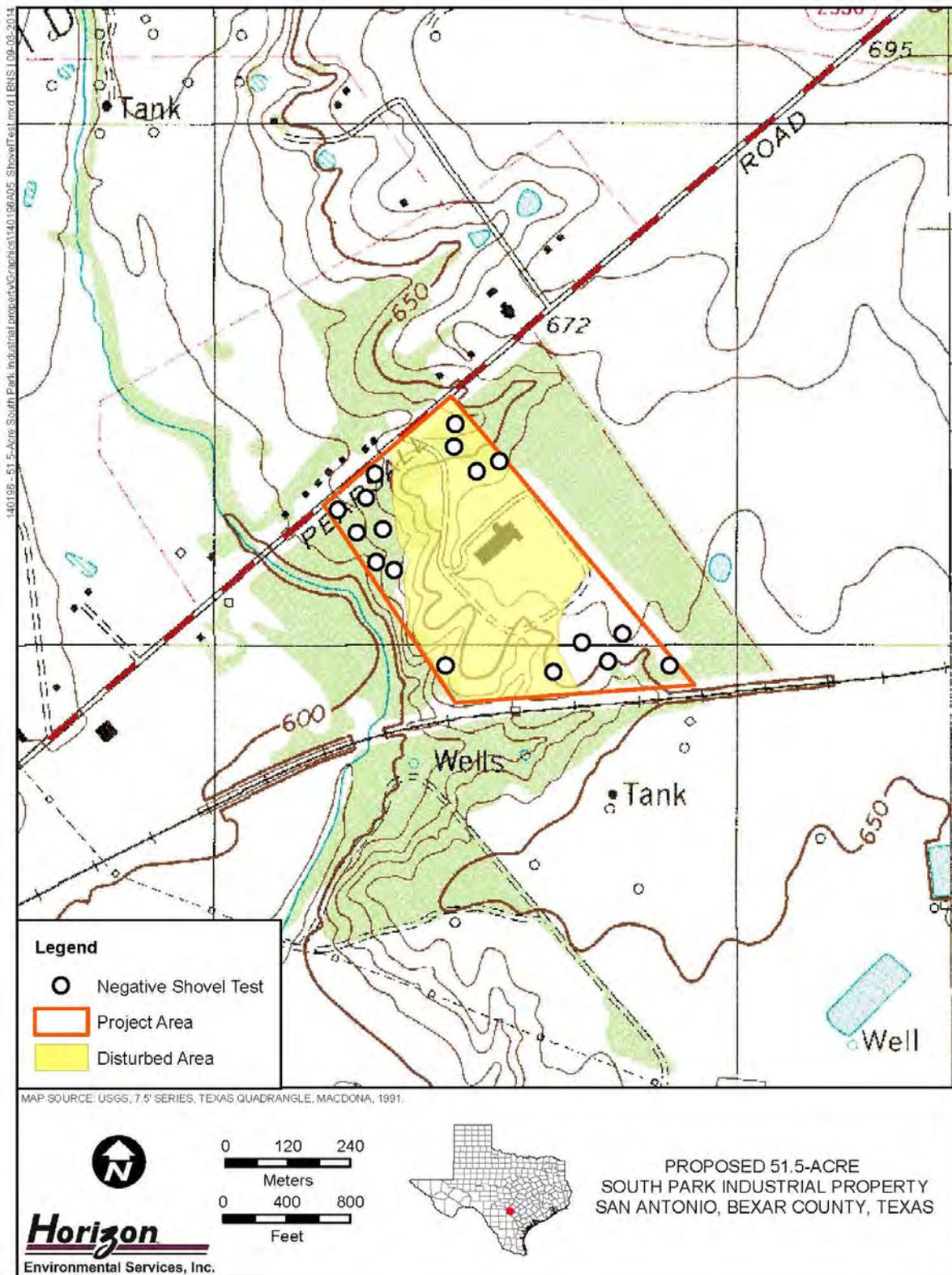


Figure 5-1. Shovel test locations within the Project Area

identifying archeological resources within the Project Area, and mechanical trenching was consequently not employed as a site-prospecting technique.

6.0 RESULTS AND RECOMMENDATIONS

6.1 RESULTS

On 4 September 2014, Horizon conducted an intensive cultural resources survey of the 51.5-acre South Park Industrial Property located near San Antonio in southwestern Bexar County, Texas. Since the Project Area is located on private property, and its development will be funded by private sources, regulations under the ACT or Section 106 of the NHPA of 1966, as amended, do not apply to the Project Area. However, the COSA's OHP has requested a cultural resources survey of the Project Area in accordance with the COSA Unified Development Code (Article 6 35-630 to 35-634). At the request of TIG, Horizon conducted the cultural resources survey of the 51.5-acre Project Area in compliance with survey standards developed by the THC and the CTA. The purpose of the survey was to determine if the development of the Project Area would have the potential to adversely affect any significant cultural resources listed on or considered eligible for listing on the NRHP or eligible for formal designation as an SAL.

The TSMASS require a minimum of 1 shovel test per 2 acres for projects between 11.0 to 100.0 acres in size. As such, a total of 26 shovel tests were necessary within the 51.5-acre Project Area in order to comply with the TSMASS. Horizon did not meet the minimum survey standards by excavating only 17 shovel tests within the Project Area. Approximately 36.3 acres of the Project Area consist of disturbed soils and artificial fill material, and Horizon archeologists were not able to excavate into these fill deposits. As such, the 17 shovel tests were mostly excavated within the undisturbed portions of the Project Area.

The survey of the Project Area resulted in entirely negative findings. No cultural materials were observed on the surface of the Project Area or within any of the 17 excavated shovel tests. In the undisturbed portions of the Project Area, shovel testing revealed dense, gravelly clay sediments in surface contexts. In the disturbed portions of the Project Area, heavily disturbed soils and impenetrable artificial fill sediments were observed in shovel tests excavated in these locations, therefore decreasing the potential to contain intact cultural deposits.

6.2 MANAGEMENT RECOMMENDATIONS

Based on the negative results of the cultural resources survey documented in this report, it is Horizon's opinion that the development of the Project Area will have no adverse effect on significant cultural resources listed on or considered eligible for listing on the NRHP or eligible for formal designation as SALs and that no further investigations are warranted. Horizon therefore recommends that TIG be allowed to proceed with the undertaking, relative to the jurisdiction to the COSA OHP. However, in the unlikely event that any cultural materials (including human remains or burial features) are inadvertently discovered at any point during construction, use, or ongoing maintenance of the Project Area, even in previously surveyed areas, all work at the location of the discovery should cease immediately, and the OHP and the THC should be notified of the discovery.

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APPENDIX A:

Shovel Test Data

Table A-1. Shovel Test Summary Data

ST No.	UTM Coordinates ¹		Depth (cmbs)	Soils	Artifacts
	Easting	Northing			
BS1	535846	3244161	0-25	Dark grayish-brown gravelly clay	None
			25+	Dense gravels	None
BS2	535756	3244222	0-30	Dark grayish-brown gravelly clay	None
			30+	Dense gravels	None
BS3	535728	3244168	0-5	Dark grayish-brown gravelly clay	None
			5+	Dense gravels	None
BS4	535209	3244459	0-10	Dark grayish-brown gravelly clay	None
			10+	Dense gravels	None
BS5	535249	3244500	0-30	Dark grayish-brown gravelly clay	None
			30+	Dense gravels	None
BS6	535281	3244529	0-5	Dark grayish-brown gravelly clay	None
			5+	Dense gravels	None
BS7	535519	3244553	0+	Dense gravels	None
BS8	535449	3244625	0-3+	Dense gravels	None
JW1	535695	3244157	0-15	Dark grayish-brown gravelly clay	None
			15+	Dense gravels	None
JW2	535678	3244205	0-20	Dark grayish-brown gravelly clay	None
			20+	Dense gravels	None
JW3	535398	3244148	0-10	Dark grayish-brown gravelly clay	None
			10+	Dense gravels	None
JW4	535300	3244323	0-5	Dark grayish-brown gravelly clay	None
			5+	Dense gravels	None
JW5	535284	3244360	0-20	Dark grayish-brown gravelly clay	None
			20+	Dense gravels	None
JW6	535258	3244389	0-25	Dark grayish-brown gravelly clay	None
			25+	Dense gravels	None
JW7	535278	3244404	0-10	Dark grayish-brown gravelly clay	None
			10+	Dense gravels	None
JW8	535476	3244533	0-5+	Dense gravels	None
JW9	535441	3244586	0-5+	Dense gravels	None

¹ All UTM coordinates are located in Zone 14 and utilize the North American Datum of 1983 (NAD 83)

cmbs = Centimeters below surface

ST = Shovel test

UTM = Universal Transverse Mercator