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An Intensive Phase I Cultural Resources Investigation Of The Proposed Southwest Independent School District Natatorium Project, Bexar County, Texas

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THE PROPOSED SOUTHWEST INDEPENDENT SCHOOL DISTRICT NATATORIUM PROJECT

AN INTENSIVE PHASE I CULTURAL RESOURCES INVESTIGATION

August 2020

PAPE-DAWSON ENGINEERS

Transportation | Water Resources | Land Development | Surveying | Environmental

AN INTENSIVE PHASE I CULTURAL RESOURCES INVESTIGATION OF THE PROPOSED SOUTHWEST INDEPENDENT SCHOOL DISTRICT NATATORIUM PROJECT, BEXAR COUNTY, TEXAS

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Texas Antiquities Permit No. 9217

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NOT FOR PUBLIC DISCLOSURE

Abstract

On behalf of Southwest Independent School District (SWISD), Pape-Dawson Engineers, Inc. (Pape-Dawson) conducted an archaeological survey for the proposed SWISD Natatorium Project (Project) in southwestern San Antonio, Bexar County, Texas. SWISD proposes to develop one of three plans for the natatorium complex on an approximately 2-hectare (5-acre) tract of land (Project Area).

The Project Area is located within the City of San Antonio's (COSA) jurisdictional boundary, necessitating compliance with the Historic Preservation and Urban Design Section of the COSA Unified Development Code (Article 6 35-630 to 35-634). As SWISD is a political subdivision of the State of Texas, compliance with the Antiquities Code of Texas (ACT) is also required. However, as no federal funding or permitting is anticipated for the Project, compliance with Section 106 of the National Historic Preservation Act is not required.

Fieldwork for the Project was conducted on January 16, 2020. Pape-Dawson archaeologist Adam Leroy served as the Principal Investigator for the Project and was assisted by archaeologist Mikayla Mathews. Pape-Dawson archaeologists performed a pedestrian survey supplemented by shovel testing investigation of the Project Area. Site 41BX2332 was identified and recorded as a result of the investigation. 41BX2332 is a surficial to subsurface twentieth century historic artifact scatter and burned trash pit. The site spans approximately 78.5 square meters (845 square feet) based on the horizontal and vertical extent of the surficial artifact scatter. Artifacts observed on the surface throughout the site included whiteware, stoneware, porcelain, colorless flat and bottle glass of varying thicknesses (some burned, some embossed with decorations), can fragments, wire nails, and unidentified ferrous metal (some burned). One shovel test (SST01) placed in the middle of the artifact scatter was positive for cultural materials. Two diagnostic artifacts, a Colt model 1908 handgun with loaded ammunition and a colorless bottle base with makers mark, were among the artifacts recovered from SST01.

Site 41BX2332 contained no cultural features and yielded common artifacts that are well documented within the region. Soils within the site and surrounding Project Area were shallow and were typically terminated at gravel impasse prior to 30 centimeters (12 inches) below surface. Additional work at the site would likely only recover similar material unlikely to contribute additional information to the archaeological record. Furthermore, the site lacks an association with people significant to the local or regional development of the area. Due to these factors, site 41BX2332 is recommended Not Eligible for listing in the National Register of Historic Places under Criteria A, B, C, or D, and is recommended ineligible for designation as a State Antiquities Landmark under the ACT.

Based on the results of the investigation, Pape-Dawson archaeologists recommend no further work for site 41BX2332. Should additional cultural materials be inadvertently encountered outside the current parameters of the Project Area during construction, it is recommended that all work in the vicinity should cease and that the COSA and Texas Historical Commission archaeologists should be contacted immediately. Following completion of the investigation, all recovered artifacts will be discarded, and the final report will be submitted to and permanently stored at the University of Texas San Antonio-Center for Archaeological Research.

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CHAPTER 1: INTRODUCTION

On behalf of Southwest Independent School District (SWISD), Pape-Dawson Engineers, Inc. (Pape-Dawson) conducted an archaeological survey for the SWISD Natatorium Project (Project) in southwestern San Antonio, Bexar County, Texas (**Figures 1** and **2**). SWISD proposes to develop one of three plans for the natatorium complex on an approximately 2-hectare (ha; 5-acre [ac]) tract of land constituting the Project Area (**Figures 3** to **5**).

The proposed Project Area is located within the City of San Antonio (COSA) jurisdictional boundary, mandating compliance with the Historic Preservation and Urban Design Section of the COSA's Unified Development Code (UDC) (Article 6 35-630 to 35-634). As SWISD is a political subdivision of the State of Texas, the Project also requires compliance with the Antiquities Code of Texas (ACT). The investigation was therefore conducted under Texas Antiquities Permit No. 9217. As no federal funding or permitting is anticipated for the Project, compliance with Section 106 of the National Historic Preservation Act is not required.

Consistent with municipal and state regulatory review, the purpose of the investigation was to identify archaeological sites (if present) within the Project Area and assess whether these resources are eligible for listing as State Antiquities Landmark (SALs) or National Register of Historic Places (NRHP) properties.

Fieldwork for the Project was conducted on January 16, 2020. Pape-Dawson archaeologist Adam Leroy served as the Principal Investigator for the Project and was assisted by archaeologist Mikayla Mathews. Pape-Dawson archaeologists performed a pedestrian survey supplemented by shovel testing investigation of the Project Area. Site 41BX2332 was identified and recorded as a result of the investigation. 41BX2332 is a surficial to subsurface twentieth century historic artifact scatter and burned trash pit. All records associated with the Project will be permanently curated at the University of Texas at San Antonio Center for Archaeological Research (UTSA-CAR). All Project-related data is presently housed at the Pape-Dawson office in San Antonio, Texas.

Image removed to protect sensitive cultural information.

Figure 1. Project location map.

Image removed to protect sensitive cultural information.

Figure 2. Project aerial overview map.

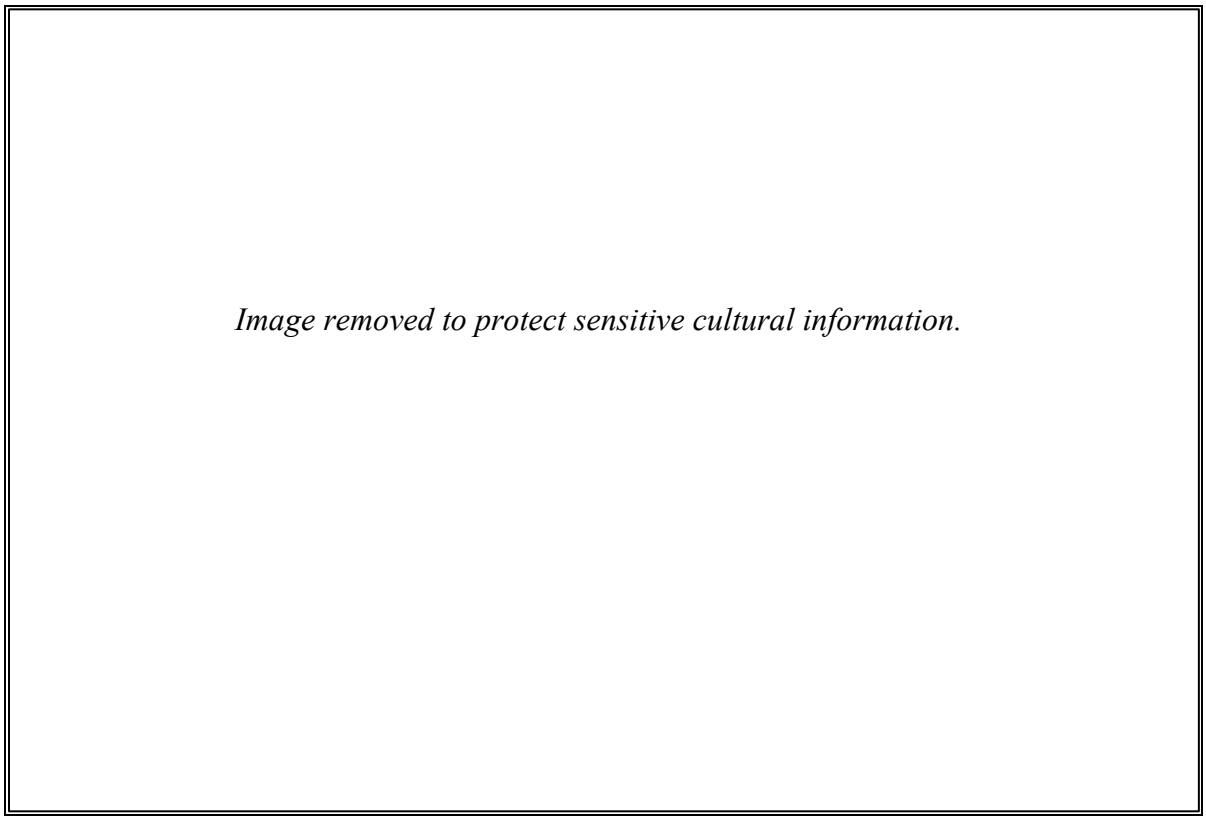

Figure 3. Natatorium site Option 1.

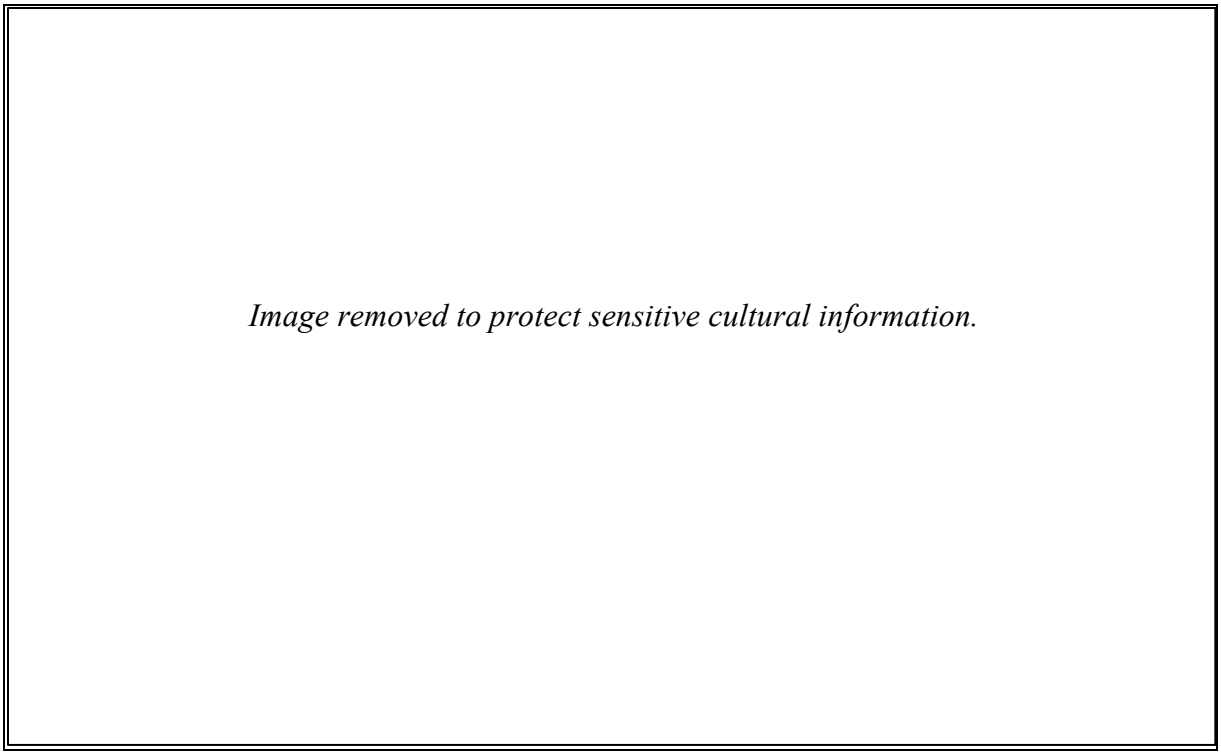

Figure 4. Natatorium site Option 2.

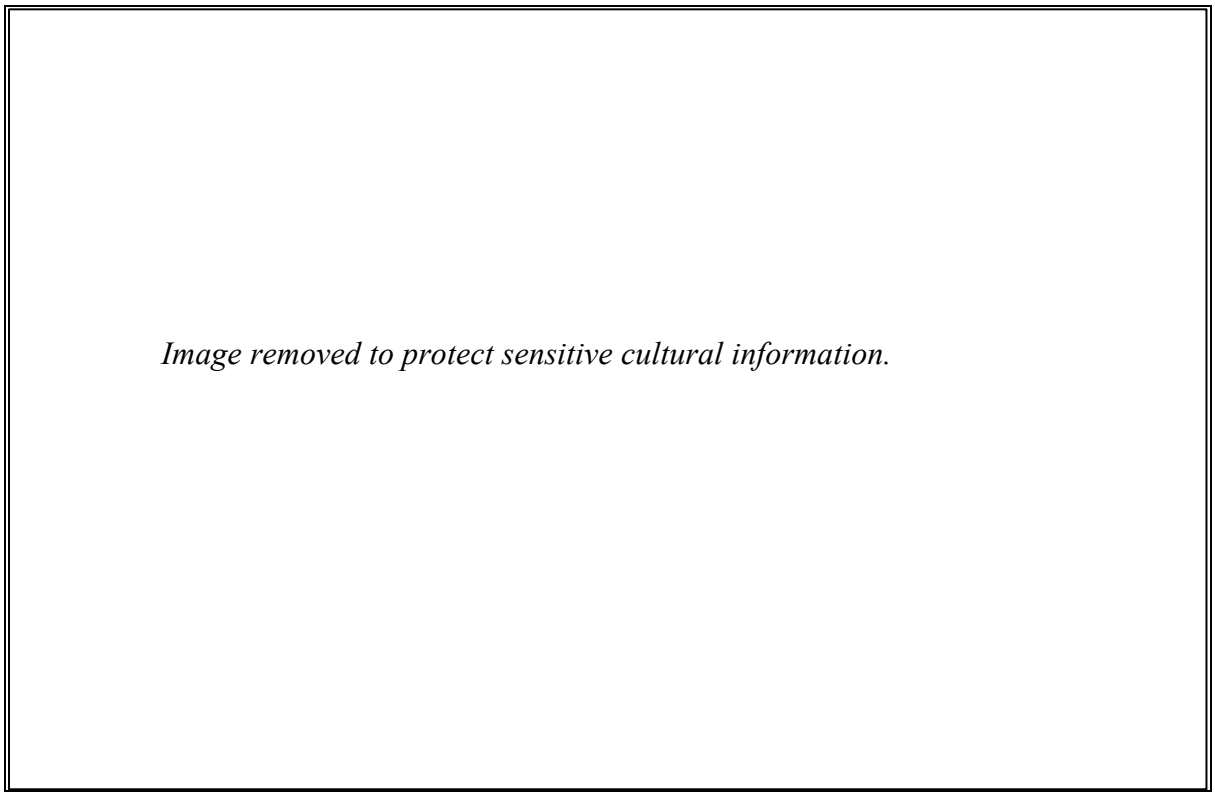

Figure 5. Natatorium site Option 3.

CHAPTER 2: ENVIRONMENTAL SETTING

The Project Area is located within southwestern San Antonio, near the junction of Loop 410 and Interstate 35, directly west of Trader's Village outdoor flea market. The Project Area is situated directly north of Christa McAuliffe Middle School within an undeveloped field. Vegetation consists primarily of maintained native grasses, with a scattering of mesquite and oak trees present towards the central and northern portions of the Project Area. A wire fence runs north to south along the property boundary in the western portion of the Project Area paralleling the Loop 410 access road. A chain-link fence also runs east to west along the southern border of the Project Area between the property and the middle school. Six utility poles are present within the boundaries of the Project Area. Two were installed just south of the chain-link fence, while three were installed in the western portion of the Project Area adjacent to the highway. One utility pole was installed in the southeastern portion of the Project Area. The southern portion of the Project Area also contains a raised driveway access covered with gravel road base, possibly related to the construction of the nearby school buildings to the south.

ENVIRONMENT

The Project Area is located within the Northern Blackland Prairie ecoregion of Texas. The topography of the ecoregion is characterized by low rolling terrain with a surface elevation ranging from 330 to 380 meters (m; 1083 to 1247 feet [ft]) (Wermund 1996). The Northern Blackland Prairie contains thermic soils and has an annual precipitation ranging from 71 centimeters (cm; 28 inches [in]) in the south to 107 cm (42 in) in the north. Historically, the Northern Blackland Prairie was predominantly vegetated with tall prairie grasses consisting of little (*Schizachyrium scoparium*) and big bluestem (*Andropogon gerardii*), tall dropseed (*Sporobolus asper*), and yellow indiangrass (*Sorghastrum nutans*) (Griffith et al. 2007; Natural Resources Conservation Service [NRCS] 2006). Additional common vegetation on the prairie consisted of silver bluestem (*Bothriochloa laguroides*), switchgrass (*Panicum virgatum*), sideoats grama (*Bouteloua curtipendula*), eastern gamagrass (*Tripsacum dactyloides*), and vine mesquite (*Hopia obtusa*) (NRCS 2006). Some bottomland forests occupied riparian areas in the northern portion of the ecoregion, which were vegetated with Shumard oak (*Quercus shumardii*) bur oak (*Q. macrocarpa*), sugar hackberry (*Celtis laevigata*), ash (*Fraxinus* spp.), elm (*Ulmus* spp.), pecan (*Carya illinoinensis*), and eastern cottonwood (*Populus deltoides*).

This historic vegetation supported diverse wildlife, including bison (*Bovidae* spp.), wolves (*Canis lupus*), greater prairie chickens (*Tympanuchus cupido*), and pronghorns (*Antilocapra americana*). However, in the late nineteenth and early twentieth centuries, farming replaced ranching as the predominant commercial activity in the ecoregion, which led to the clearing of tall prairie grass lands and bottomland forests. During this period, non-native grasses, such as Bermuda grass (*Cyndon dactylon*), Johnson grass (*Sorghum halepense*), and King Ranch bluestem (*Bothriochloa ischaemum*), were introduced. Today, the majority of the Northern Blackland Prairie has been converted to cropland to grow cotton, wheat, grain sorghum, and corn (Griffith et al. 2004).

GEOLOGY AND SOILS

The underlying geology of the Project Area is mapped as the Paleocene-aged (66 to 55 million years ago) Midway Group (Emi), which consists of clay and sand (Bureau of Economic Geology 1983).

One soil unit is mapped within the Project Area (**Table 1**; **Figure 6**), consisting of Houston Black gravelly clay (NRCS 2020). Houston Black gravelly clay (HuB) is characterized as a very deep, moderately well drained, very slow permeable soil. This soil is typically found on interfluves, side slopes of upland ridges, and on plains on dissected plains. The A-Horizon is typically 20 cm (8 in) deep, and very dark gray to black in color. As such, Pape-Dawson archaeologists anticipated that cultural materials, if present, could be reached by means of shovel testing.

Table 1. Soils within the Project Area

Soil Name	Slope	Parent Material	Landform	Percent of Project Area
Houston Black gravelly clay	0 to 1%	Clayey residuum weathered from calcareous mudstone of Upper Cretaceous age	Stream Terraces	100%

Image removed to protect sensitive cultural information.

Figure 6. Project soils map.

CHAPTER 3: CULTURAL BACKGROUND

Bexar County is located within Central and Southern Planning Region of Texas as delineated by the THC (Mercado-Allinger et al. 1996). Cultural developments in this region are typically classified by archaeologists according to four primary chronological time periods: Paleoindian, Archaic, Late Prehistoric, and Historic. These classifications are primarily defined by changes in material culture and subsistence strategies over time, as evidenced by data recovered from archaeological sites. This cultural chronology provides a brief summary of each major cultural period with reference to significant archaeological work conducted within the region.

PREHISTORIC PERIOD

PALEOINDIAN PERIOD (11,500 B.P. – 8800 B.P.)

Although there is some debate about whether pre-Clovis Paleoindian peoples lived in Texas, there is evidence of Paleoindian occupations within the state by 11,500 B.P. Collins (1995) proposed dividing this period into early and late phases, with Dalton, San Patrice, and Plainview projectile points possibly providing the transition between the subperiods. Research indicates that Paleoindians gathered wild plants and hunted large mammals (mammoth, bison, etc.) as well as smaller terrestrial and aquatic animals (Bousman et al. 2004; Collins 1995). Projectile points characteristic of the Paleoindian period in Central Texas are lanceolate-shaped and include Clovis, Plainview, and Folsom types (Turner and Hester 1993). In Texas, most Paleoindian sites are classified as procurement or consumption sites (Bousman et al. 2004), but a few, such as the Wilson-Leonard site in Williamson County (Collins 1995) and the Pavo Real site in Bexar County (Henderson 1980), contain *in situ* human burials (Collins 1995). Other Paleoindian sites discovered within Bexar County include site 41BX47 on Leon Creek (Tennis 1996), the Richard Beene site (41BX831) (Thoms and Mandel 2007), and the St. Mary's Hall site (41BX229), the latter of which provides insight into the diverse diet of Paleoindian groups (Hester 1978).

As the climate warmed and megafauna became extinct, Paleoindian peoples shifted from hunting large animals to smaller game, including deer and rabbit, as well as gathering edible roots, nuts, and fruits (Black 1989). This change in food supply, as well as the production of a different set of stone tools, mark the transition to the Archaic period.

ARCHAIC PERIOD (8800 B.P. – 1200 B.P.)

Usually divided into early, middle, late, and sometimes transitional sub-periods, the Archaic marks a gradual shift to a focus on hunting medium and small animals and gathering wild plants, with an eventual transition to agriculture. Beginning with Clear Fork gouges and Guadalupe bifaces in the Early Archaic (8500 B.P. – 6000 B.P.), Early Archaic people produced a variety of point types (Collins 1995; Turner and Hester 1993). This array of points types and their scattered distributions may indicate smaller groups of people moved over larger territories in the Early Archaic (Prewitt 1981). In Bexar County, sites with Early Archaic components include the Housman Road site (41BX47), the Richard Beene site (41BX831) (Thoms and Mandel 2007), the Higgins site (41BX184) (Black et al. 1998), and the Panther Springs site (41BX228) (Black and McGraw 1985). Point types transitioned to Bell-Andice-Calf Creek, Taylor, and Nolan-Travis forms in the Middle Archaic (6000 B.P. – 4000 B.P.) and burned rock middens became more prevalent (Collins 1995; Turner and Hester 1993). Burned rock ovens were constructed to

cook a diverse array of plant foods, suggesting a slightly more sedentary subsistence strategy (Black 1989). The Elm Waterhole site (41BX300) is representative of a Middle Archaic site within Bexar County (McNatt et al. 2000). Bulverde, Pedernales, Ensor, Frio, and Marcos points produced during the Late Archaic (4000 B.P. – 1300 B.P.) mirror the diversity of point types found in the Early Archaic (Collins 1995; Turner and Hester 1993). During the Late Archaic, cemeteries (especially associated with rock shelters) become common in Central Texas (Dockall et al. 2006). The Granberg site (41BX17/41BX271) in San Antonio is a multi-component site with occupations from both the Middle and Late Archaic sub-periods.

LATE PREHISTORIC PERIOD (1200 B.P. – 250 B.P.)

As the Archaic transitions into the Late Prehistoric period, several technological changes become apparent in the archaeological record. The most notable change is the use of the bow and arrow rather than the spear and atlatl, as evidenced by the production of smaller points for fastening to arrow shafts. Another significant innovation is the creation and use of ceramic vessels. There is some evidence that peoples in Central Texas may have incorporated agriculture into their lives at this time; however, they primarily remained hunter-gatherers (Collins 1995). Also, during this period, there are indications of potentially major population movements, changes in settlement patterns, and perhaps lower population densities (Black 1989). Archaeologists divide the Late Prehistoric into two phases: the Austin phase, followed by the Toyah phase.

HISTORIC PERIOD (1600S -1950)

San Antonio was the site of many occupations by prehistoric peoples, but Europeans did not explore the area until the seventeenth century. Alonso de León's (1689 and 1690) and Domingo Terán de los Ríos' (1691) expeditions were likely some of the first interactions between Europeans and Native groups in the region (de la Teja 1995). These explorations helped the Spanish choose locations to establish five missions in and around what would later become San Antonio. Don Martín de Alarcón established the first mission, San Antonio de Valero (1718), on the west bank of San Pedro Creek, followed by the Presidio San Antonio de Béxar and the Villa de Béxar (de la Teja 1995). However, by 1722, the Marqués de San Miguel de Aguayo moved the *presidio* and villa downstream to a second location along San Pedro Creek (Clark et al. 1975). Other missions, including Mission San José y San Miguel de Aguayo, Nuestra Señora de la Purísma Concepción, San Juan Capistrano, and San Francisco de la Espada, were established in the area from 1720 to 1731 (Clark et al. 1975). The Native American people recruited to live at these missions comprised many different groups (Campbell 1977), but it is difficult to know all the groups that were present due to the variations in spelling and phonetic complexity of documented names. The missions used this native labor force to construct *acequias*, or irrigation ditches, which helped the missionaries develop self-sustaining communities bordered by farmland (Long 2010).

In 1731, Spain sent 16 families from the Canary Islands to the Villa de Béxar to establish a secular village. With the arrival of these families, surveyors set out the city's main plaza, or Plaza de las Islas, next to the church, designated a spot for the Casas Reales, and began to establish residential lots (Spell 1962). In 1773, San Antonio de Béxar Presidio was named the capital of Spanish Texas, and the settlement (including mission Indians) had a population of about 2,000 by 1778 (Fehrenbach 2010). During this period of early settlement, water was an essential component for successful settlement and survival. The *acequia* system continued to expand to serve irrigation

and drinking water needs. The *acequia* system influenced the street layout in the city (Cox 2005) and played an integral part in contact between the Spanish, who brought the engineering concepts for the system, and the indigenous groups forced to provide the construction labor.

During the 1820s and early 1830s, American settlers began moving to San Antonio in increasing numbers, though the population remained predominately Mexican. In 1824, Texas and Coahuila were united into a single state with its capital at Saltillo. San Antonio fought for Mexican Independence in 1813, then for its own sovereignty during the Texas Revolution (1836). The Siege of Bexar (1835) and the Battle of the Alamo (1836) were both located within San Antonio, demonstrating its importance in the region. After Texas gained its independence from Mexico in 1836, Bexar County was created, and San Antonio was chartered as its county seat (Long 2010). However, this was not the end of conflict in the city; a dispute with the Comanche resulted in the Council House Fight in 1840, and Woll's invasion in 1842 precipitated Texas' entrance into the United States as the 28th state.

On March 2, 1861, Texas seceded from the Union about a month before the Civil War (1861 to 1865) began. San Antonio became a Confederate storage area, as well as a location where military units could be organized; however, the city kept its distance from most of the actual fighting (Fehrenbach 2010). After the Civil War, San Antonio continued to grow, spurred on by the arrival of the railroad in 1877 (Fehrenbach 2010). Industries, such as cattle, distribution, ranching, mercantile, gas, oil, and military centers, prospered in San Antonio. The city served as the distribution point for the Mexico-United States border, as well as the rest of the southwest. At the turn of the twentieth century, San Antonio was the largest city in Texas with a population of more than 53,000. Much of the city's growth after the Civil War was a result of an influx of southerners fleeing the decimated Reconstruction-era (1863 to 1877) south. An additional population increase came after 1910, when large numbers of Mexicans began moving into Texas to escape the Mexican Revolution (1910 to 1920) (Fehrenbach 2010).

Modernization in Bexar County increased dramatically between the 1880s and 1890s compared to the rest of the United States. Civic government, utilities, electric lights, street railways, paving and maintenance; water supply, telephones, hospitals, and a city power plant were all built or planned around this time (Fehrenbach 2010). The First United States Volunteer Cavalry was organized in San Antonio and led by Theodore Roosevelt during the Spanish-American War (1898). San Antonio continued to be an important military center for the U.S. Army and Air Force during both world wars (1914 to 1918; 1939 to 1945). Its five military bases provided an important economic base and contributed to the evolution of the city's military and private medical research industry.

CHAPTER 4: METHODOLOGY

CULTURAL BACKGROUND STUDY

Pape-Dawson archaeologists conducted a cultural resources background review to determine if the Project Area was previously investigated for cultural resources and if any previously identified cultural resources are located within a 1.0-kilometer (km; 0.6-mile [mi]) radius (Study Area) of the Project. The review included an examination of the THC's Texas Archeological Sites Atlas (Atlas) and the OHP Explorer Map (Explorer Map) online databases. Cultural resources recorded in these databases include archaeological sites, National Register of Historic Places (NRHP) properties and districts, SALs, National Historic Trails (NHTs), Official Texas Historical Markers (OTHMs), Registered Texas Historic Landmarks (RTHLs), cemeteries, COSA Local Historic Landmarks, and COSA Local Historic Districts.

In addition to the Atlas, Pape-Dawson examined recent and historic-age maps (2016, 2013, 1992, 1975, 1969, and 1959) (United States Geological Survey [USGS] 2020) and aerial photographs (2016, 2014, 2012, 2010, 2008, 2004, 1995, 1986, 1973, 1966, 1963 and 1955) of the Study Area available online (Google Earth Pro; Nationwide Environmental Title Research [NETR] Online 2020) to identify historic high probability areas (HHPAs) where historic-age structures (50 years of age or older) or historic archaeological sites may exist. Archaeologists also sought to identify previous impacts visible in aerial imagery that may have occurred within the Project Area. This included a review of relevant, historic maps of San Antonio, including circa 1930 Stoner System aerial photography and maps.

FIELD METHODS

Following the receipt of Texas Antiquities Permit No. 9217, Pape-Dawson archaeologists conducted a 100 percent pedestrian survey of the Project Area. The pedestrian survey was supplemented by shovel testing in areas where soils were conducive to shovel testing and had the potential to contain buried cultural deposits. Archaeologists examined the ground surface of the Project Area along transects spaced at 30-m (98.4-ft) intervals. Any erosional exposures were examined at closer spaced intervals for cultural resources. Shovel tests were approximately 30 cm (1 ft) in diameter and were excavated to a maximum depth of 80 cm (2.6 ft), when possible, below the ground surface. Soils from all shovel tests were screened through a ¼-in hardware mesh, unless they were dominated by a composition of clay. Clay soils were finely divided and hand sorted. Shovel tests were visually described, mapped using a handheld Trimble global positioning system (GPS) receiver with sub-meter accuracy, and backfilled upon completion.

The field crew recorded the Project Area, any archaeological sites encountered, and associated feature locations (if present). The crew was equipped with topographic maps, aerial photographs, and historic map overlays of the Project Area, as well as a digital camera. Each archaeologist was also equipped with a compass, appropriate excavation forms, photographic logs, daily journal forms, and appropriate state site forms. Laboratory staff completed the analysis and preparation of any collected artifacts. An office-based GIS Specialist supported the fieldwork, analysis, and preparation of maps and illustrations for the report.

Archaeologists completed daily written documentation of all observed activities in the form of a daily log supplemented by digital photography, as appropriate. Archaeologists also maintained a

photographic log and subsequently downloaded and archived photographic data. Archaeologists documented locations of excavations, sites, and finds with a handheld GPS unit.

The objectives of the archaeological investigations were four-fold: (1) identify archaeological sites within the Project Area, (2) document the vertical and horizontal extents of any newly identified sites; (3) provide a preliminary evaluation of each site's eligibility for designation as a SAL or NRHP property; and (4) assess any potential for the Project to impact significant archaeological sites.

One previously undocumented archaeological site was identified within the Project Area (41BX2332). Pape-Dawson staff collected all diagnostic artifacts observed during the field investigation. A sample of non-diagnostic artifacts was also documented and photographed in the field. All collected material, recorded with associated provenience information, was transported to the Pape-Dawson laboratory for processing, analysis, and possible curation or discard pursuant to requirements in the permit.

LABORATORY METHODS

Upon completion of fieldwork, collected artifacts were brought back to Pape-Dawson's office for cleaning and analysis. Archaeologists analyzed the artifacts according to class and material type and included the results in this report. Throughout the Project, the analysis and organization of records, artifacts, and daily logs was ongoing. All records generated during the Project were prepared in accordance with THC requirements for State Held-in-Trust collections.

Field forms were printed on acid-free paper and completed with pencil. Any artifacts collected during the investigation were washed, air-dried, and stored in 4-milimeter zip-lock, archival-quality bags. Each label contained provenience information and a corresponding lot number. These artifacts were stored in acid-free boxes labeled with standard tags; however, an artifact discard strategy will be established in consultation with the COSA OHP City Archaeologist and the THC.

All field notes, forms, photographs, and drawings were placed in labeled archival folders. Digital photographs were printed on acid-free paper. Finally, following completion of the investigation, the final report will be submitted to and permanently stored at UTSA-CAR.

CHAPTER 5: RESULTS

CULTURAL BACKGROUND STUDY

The background review revealed that no NRHP-listed properties or districts, SALs, OTHMs, RTHLs, COSA Historic Districts, COSA Historic Landmarks, previously recorded archaeological sites, or cemeteries are located within a 1-km (0.6-mi) radius of the Project Area (**Figure 7**). However, one previously recorded archaeological survey, conducted in 2005, extended into the western portion of the Project Area, but yielded no cultural materials or features (THC 2020).

The 2005 survey was conducted as part of a Loop 410 improvement project and included three phases. During phase one, UTSA-CAR conducted a pedestrian survey that included the western portion of the current Project Area. Additionally, shovel tests and trenches that targeted medium to high probability areas were completed during the investigation. Although no cultural features or artifacts were found, none of the shovel tests or trenches were excavated within the current Project Area (Figueroa et al. 2008).

Pape-Dawson also examined both recent and historic-age topographic maps (2016, 2013, 1992, 1975, 1969, and 1959) and aerial photographs (2016, 2014, 2012, 2010, 2008, 2004, 1995, 1986, 1973, 1966, 1963 and 1955) to identify any HHPAs or previous major impacts that may have occurred within the Project Area. One HHPA (HHPA-1) was identified from a 1959 topographic map, located northeast of the Project Area (**Figure 8**). The HHPA appears to be a homestead located at the end of an unpaved road traversing northwest-southeast through the northeast corner of the Project Area. According to the Book 1, 1104 Section 4301 Stoner System map produced circa 1930, the property was owned by John Sweeney. Sweeney passed away in 1940, and his wife Ophia maintained the property until 1949, when she also passed away (Ancestry 2020). Ophia was the daughter of Colonel Dillard Rucker Fant, a Civil War veteran and pioneer Texas cattle trail driver (Roell 2010). At the time of the 1940 census, no occupation was listed for John Sweeney and neither he nor Ophia were not living on the property. The couple actually resided on Highway 16 in Bandera, Texas (Ancestry 2020). No additional information regarding John or Ophia could be found during the background review, but the couple most likely did not reside at the structure located northeast of the Project Area. Neither individual appears to be a historical figure of local, regional, or national significance.

Aerial imagery depicts the Project Area as primarily undeveloped rangeland from as early as 1955, except for a strip of cleared land in the south. The map also illustrates an unpaved road that transverses the Project Area northwest to southeast. Two other unpaved roads branch off the first and exit the Project Area to the northeast and south (NETR 2020). Between 1955 and 1963, more land in the southern portion of the Project Area was cleared. Between 1963 and 1986, the Project Area does not appear to have undergone any major changes. The southern portion was utilized for agriculture, while the northern half remained undeveloped rangeland. Sometime between 1986 and 1995, the Christa McAuliffe Middle School was built on farmland directly to the south of the Project Area, and a chain-link fence was built to separate the school from the rangeland. After this improvement, the cleared southern portion of the Project Area became a fallow field (NETR 2020). In addition, 1995 aerial photographs document the appearance of an unpaved road, beginning at the highway and running along the southern boundary of the Project Area. From

1995 to 2012, relatively little change occurred within the Project Area, apart from the installation of three utility poles between July and December of 2012 (Google Earth Pro 2020; NETR 2020). The southern portion of the Project Area, previously used for agriculture, appears to have been maintained with landscaping during this time. In the 2015, a paved, irregularly shaped gravel and dirt parking lot was constructed in the southern portion of the Project Area, with an access road connecting it to a paved road adjacent to the school. This parking area may be related to the construction of additional outbuildings for the school that occurred between 2012 and 2014. Additionally, a metal wire fence was constructed running north-south along the west side of the Project Area. Construction on the school appears to have been completed by 2016 and all equipment was removed from the gravel and dirt driveway, which was left to be reclaimed by vegetation or was partially destroyed (Google Earth Pro 2020; NETR 2020).

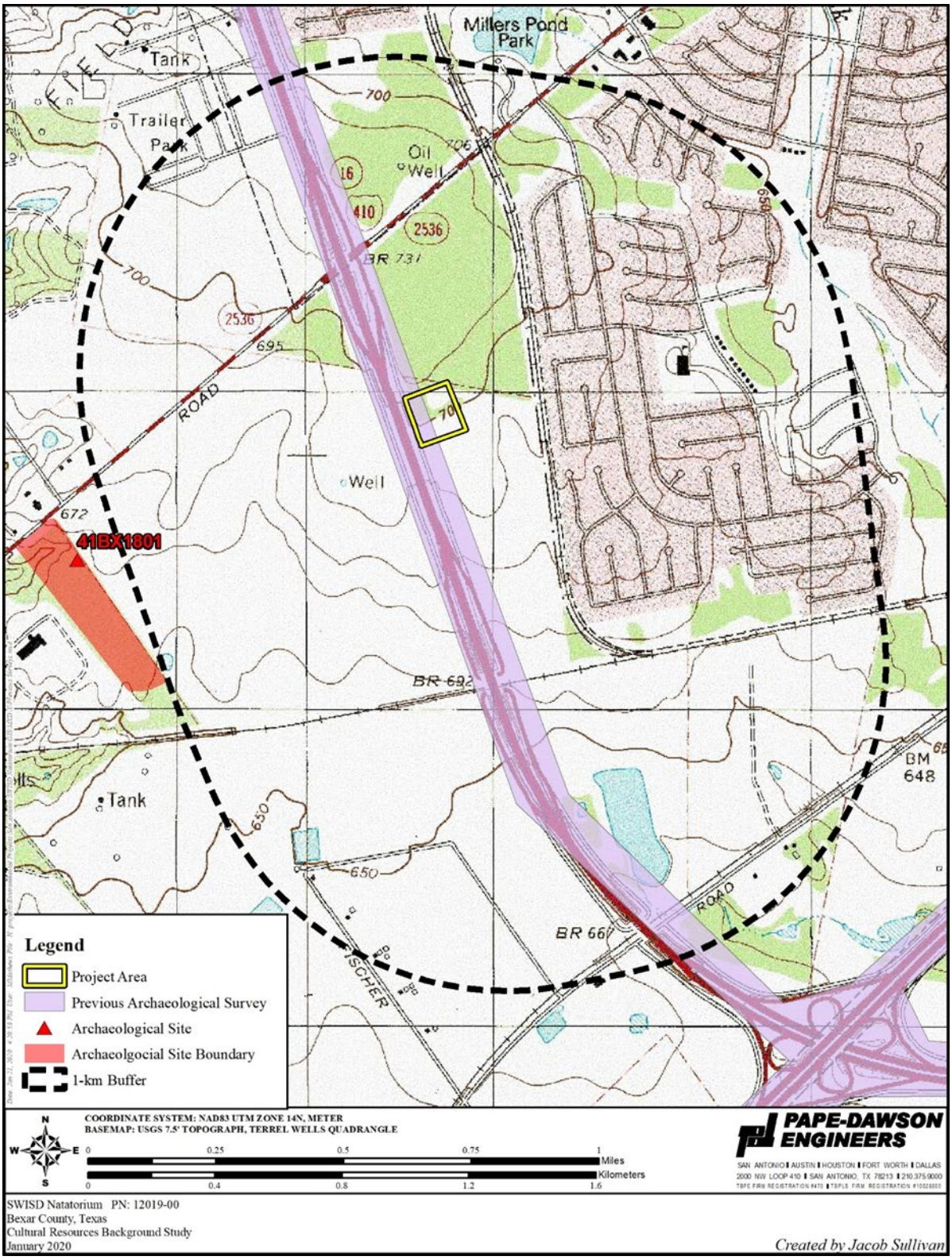

Figure 7. Atlas data within the Study Area.

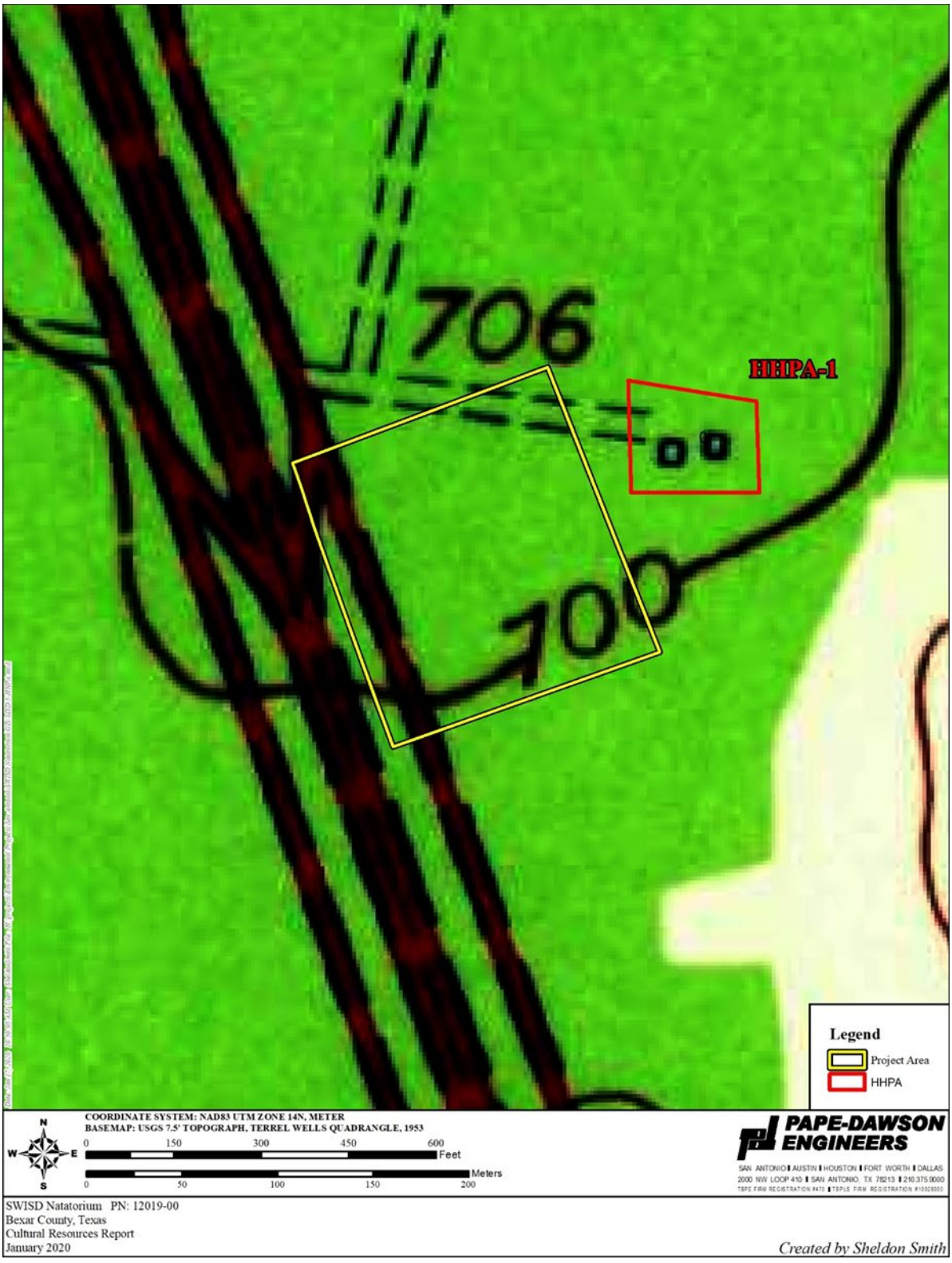

Figure 8. HHPA map.

FIELDWORK RESULTS

Pape-Dawson archaeologists conducted an intensive archaeological survey of the Project Area on January 16, 2020. The survey consisted of a 100 percent pedestrian survey supplemented by judgmental shovel testing. The survey effort resulted in the designation of one new site, 41BX2332.

The Project Area landscape consisted of a square tract of land adjacent to Loop 410 and Christa McAuliffe Middle School. A flat, undeveloped field characterized the landscape. Vegetation in the Project Area consisted primarily of maintained native grass, with a scattering of mesquite and oak trees present towards the center and northern portions (**Figure 9**). Ground surface visibility (GSV) typically ranged between 15 and 75 percent (**Figure 10**). A wire fence transected the western portion of the Project Area, running north to south (**Figure 11**). The southern portion of the Project Area also contained a raised driveway covered with gravel road base, which was laid during the construction of the nearby school buildings (**Figure 12**). This road base obscured GSV, and therefore was excluded from the pedestrian survey and shovel testing. Modern trash that appeared to have blown in from the highway access road to the west, was scattered throughout the western portion of the Project Area (**Figure 13**). A small scatter of concrete and limestone brick was present in the northeastern portion of the Project Area, and a historic rock feature, possibly used as a property boundary marker, was present in the east central portion of the Project Area (**Figure 14**). Disturbances could be seen throughout the Project Area from agricultural activities, vehicle traffic, soil core samples taken by Terracon (**Figure 15**), and the construction of a driveway, fences, and utility poles. Additional natural disturbances resulted from bioturbation from insects (ants) and tree roots.

Figure 9. Project Area overview, facing north-northwest.

Figure 10. Ground surface visibility in the Project Area, facing south.

Figure 11. Close up of fence that runs through the Project Area, facing southeast.

Figure 12. Project Area overview showing raised gravel driveway, facing northeast.

Figure 13. Modern trash near MM02, facing north.

Figure 14. Possible rock feature, facing north.

Figure 15. Soil cores near MM01, facing north.

SHOVEL TESTING

During the investigation, archaeologists examined the ground surface of the proposed Project Area along transects spaced no more than 30 m (98.4 ft) apart. Any erosional exposures were examined at closer spaced intervals. Shovel tests were placed at an interval of two per acre (0.4 ha) of land intermittently in areas where soils were conducive to shovel testing and had potential to contain buried cultural deposits. Shovel tests were approximately 30 cm (1 ft) in diameter and were excavated to a maximum depth of 80 cm (2.6 ft) below surface, where possible. During the survey, a total of 11 shovel tests were excavated, one of which (SST01/AL07) was positive for cultural materials (**Figure 16; Table 2**).

Soils throughout the Project Area typically consisted of a very dark brown/black silty clay loam (**Figure 17**). Shovel tests were typically terminated at depths of 10 to 30 cm (4 to 12 in) below the ground surface due to the presence of an impenetrable limestone and chert cobble layer (**Figure 18**). One shovel test (AL06) contained a thicker A-Horizon deposit and was terminated at a depth of 42 cm (17 in) below surface due to gravel impasse.

Table 2. Shovel Test Descriptions.

SST#	ST #	Reason for Termination	Soil Zone	Munsell Color	Soil Texture	Arbitrary Level	Depth (cmbs)	Result	Comments
–	AL01	Gravel Impasse	I	10YR 2/2	Silt Loam	1	0–3	Negative	Decomposing limestone bedrock/chert cobbles
			II	10YR 7/4	Silt Loam	1–2	3–12		
–	AL02	Gravel Impasse	I	10YR 7/4	Silt Loam	1	0–10	Negative	Decomposing limestone bedrock/chert cobbles; Layer extends for 3 m (10ft); Soil core by Terracon
–	AL03	Gravel Impasse	I	10YR 2/2	Silt Loam	1	0–5	Negative	Decomposing limestone bedrock/chert cobbles
			II	10YR 7/4	Silt Loam	1–2	3–12		
–	AL04	Gravel Impasse	I	10YR 2/2	Silt Loam	1–3	0–21	Negative	Decomposing limestone bedrock/chert cobbles; Thicker topsoil in tree area
			II	10YR 7/4	Silt Loam	3	21–27		
–	AL05	Gravel Impasse	I	10YR 2/2	Silt Loam	1–2	0–11	Negative	Decomposing limestone bedrock/chert cobbles; Thicker topsoil in tree area
			II	10YR 3/2	Silt Loam	2	11–16		
–	AL06	Gravel Impasse	I	10YR 2/2	Silt Loam	1–4	0–40	Negative	Decomposing limestone bedrock/chert cobbles; Thickest topsoil of all shovel tests
			II	10YR 3/2	Silt Loam	5	40–42		
01	SST01 (AL07)	Gravel Impasse	I	10YR 2/2	Silt Loam	1–2	0–15	Positive	Rock layer; Positive: whiteware, glass (flat and bottle), stoneware, cans, nails, handgun .380 ACP, Hazel Atlas Bottle Co. 1920, some glass melted; scatter on and near surface
			II	10YR 3/2	Silt Loam	2	15–25		

SST#	ST #	Reason for Termination	Soil Zone	Munsell Color	Soil Texture	Arbitrary Level	Depth (cmbs)	Result	Comments
–	MM01	Gravel Impasse	I	10YR 3/1 with 10YR 7/4	Silty Clay	1	0–10	Negative	Piece of modern crushed can (0-5 cm [0 to 2 in]), many small-large round-sub-round limestone, cobble; Impenetrable limestone cobble
			II	10YR 2/1	Clay	2	10–14		
–	MM02	Gravel Impasse	I	10YR 2/1	Silty Clay	1–2	0–18	Negative	Impenetrable limestone cobble
–	MM03	Gravel Impasse	I	10YR 2/1	Silty Clay	1–3	0–24	Negative	Impenetrable limestone cobble
–	MM04	Gravel Impasse	I	10YR 3/1	Silty Clay	1–3	0–30	Negative	Impenetrable limestone cobble

Figure 16. Results map.

Figure 17. AL04 overview showing typical soil composition.

Figure 18. AL01 overview, showing limestone bedrock typically encountered.

SITE 41BX2332

The current pedestrian survey and shovel testing effort resulted in the recordation of one new site, 41BX2332. Site 41BX2332 is a historic site consisting of the remnants of a burned refuse pit. A detailed description of the site is presented below.

SETTING AND DESCRIPTION

Site 41BX2332 is a twentieth century historic artifact scatter and burned trash pit with surficial and subsurface expressions. The site, situated in a flat field towards the center of the Project Area, measures approximately 10 m (32.8 ft) north-south by 10 m (32.8 ft.) east-west, with a total area of 78.5 m^2 (845 ft^2). Due to the good overall GSV across the site area, the shallow nature of the cultural material deposit and soil layer above the decomposing bedrock, the relatively small size of the artifact scatter, and nearby negative shovel tests, radial shovel tests were not excavated from SST01 (AL07) and the site boundary was determined by the horizontal expression of the surface artifacts.

The site is situated within a well-maintained field consisting of short native grass. A scattering of mesquite and oak trees are present directly to the northwest and southeast. A large bush is also present in the center of the site, which has pushed up historic artifacts around its base. GSV within site 41BX2332 was good and varied between 50 and 100 percent at the time of the survey. As such, the horizontal extent of the site boundary was determined by the distribution of visible surface artifacts. Artificial and natural impacts observed at the site included disturbance from agriculture, which has flattened the ground and somewhat dispersed artifacts across the site, and bioturbation caused by tree and bush roots, as well as insect burrows.

WORK PERFORMED

Archaeological investigations at site 41BX2332 included a pedestrian survey augmented by judgmental shovel testing (**Figure 27**). Artifacts observed on the surface throughout the site included ceramics (whiteware, stoneware, and porcelain), glass (colorless, aqua, and amber bottle glass [some burned, some embossed with decorations], colorless flat window glass of varying thicknesses), and metal (can fragments, wire nails, and unidentified ferrous metal [some burned]) (see **Figure 19**). As site 41BX2332 is only 10 m (32.8 ft) in diameter, one shovel test, SST01 (AL07), was placed at the site centroid, which also contained the highest concentration of surface artifacts, to determine the site's vertical extent. The shovel test was positive for cultural material. The soil within the shovel test consisted of 10YR 2/2, very dark brown, yielding to 10YR 3/2, very dark grayish brown, silty loam. SST01 terminated at 25 cm (10 in) below surface due to a gravel impasse consisting of decomposed limestone and chert cobbles (**Figure 20**). Artifacts were recovered from all levels of SST01 and were identical to the types found on the surface. Two diagnostic artifacts, a .380 caliber Automatic Colt Pistol (ACP) handgun and loaded magazine and a colorless bottle base with a maker's mark of the Hazel-Atlas company, were recovered from between 15 and 25 cm (6 and 10 in) below surface.

Figure 19. Overview of 41BX2332 vicinity, facing northwest.

Figure 20. Surface scatter around SST01 (AL07), facing northwest.

Figure 21. Profile overview of SST01 (AL07), facing northwest.

ARTIFACTS OBSERVED

Artifacts observed on the surface of site 41BX2332 included common household goods, such as ceramics and bottle glass, typically found in early to mid-twentieth century assemblages (**Figures 21** and **22**). Additionally, several metal fragments, including wire nails and can fragments, were observed. A representative sample of these artifacts were collected and analyzed (**Table 3**).

Figure 22. Sample of surface and subsurface artifacts from 41BX2332.

Figure 23. Sample of surface artifacts from 41BX2332.

Table 3. Artifacts Collected from 41BX2332.

Provenience	Description	Approximate Quantity	Date Range
Surface/ SST01	Colorless window glass shards (varying thicknesses)	50+	–
Surface/SST01	Colorless glass bottle shards	50+	–
Surface	Colorless glass bottle lip and neck	1	–
Surface/SST01	Unidentified colorless melted glass	50+	–
SST01	Colorless glass bottle base (with maker's mark embossed on bottom)	1	Maker's mark is from Hazel-Atlas Glass Co. Dated ca.1923-1964
Surface	Amber glass vessel lip (melted)	1	
Surface	Unidentified amber melted glass	1	
Surface/SST01	Whiteware (decorated and undecorated)	20+	
Surface/SST01	Stoneware	30+	
Surface	Porcelain	10+	
Surface/SST01	Wire nails	50+	
Surface/SST01	Unidentified metal	20+	
Surface/SST01	Unidentified melted metal	10+	
Surface/SST01	Can fragments	10+	
SST01	Automatic Pistol (with exploded bullets)	1	1908 Colt Pocket Hammerless model "M" manufactured between 1908 and 1945 (model likely manufactured between 1908 and 1912 based on type); Loaded with Remington UMC ammo manufactured between 1913 and 1970

Two diagnostic artifacts, a Colt automatic handgun and a colorless glass bottle base with a maker's mark, were also recovered from SST01 from between 15 and 25 cm (6 and 10 in) below surface (**Figures 23** and **24**). The colorless glass bottle base is machine-made and embossed with the Hazel-Atlas Co. maker's mark. Based on the style of the logo and the production dates of the Hazel-Atlas Co., the bottle base was produced between 1923 and 1964 (Lindsey 2020).

Figure 24. Colorless glass bottle base with maker's mark from SST01 (AL07).

Figure 25. Side-view of Model 1908 .380 ACP caliber Colt Pocket Hammerless from SST01 (AL07).

The pistol was identified as a Model 1908 .380 ACP caliber, Colt Pocket Hammerless model "M", which was manufactured between 1908 and 1945 (**Figures 24** and **25**). The recovered pistol frame appears to be of the earlier type manufactured between 1908 and 1912, after which the frame was slightly modified (**Figure 26**). The pistol measures 17.1 cm (6.8 in) in length, 11.4 cm (4.5 in) tall, and 2.5 cm (1 in) wide. It originally weighed 680.4 grams (g; 24 ounces [oz]) and was loaded with a 7-shot, single-stack magazine (Miller 2009). Although the magazine was partially corroded and destroyed, the magazine spring, three exploded shell casings, and at least one unexploded round were still present in the middle and top of the magazine chamber, directly below the breach. The three ammunition cartridges were identified as Remington UMC rounds, manufactured between 1913 and 1970 (Bendici 2009). There is evidence that the handgun was burned prior to being buried as slugs were not recovered from the three exploded cartridges and likely fragmented when discharged in the magazine, blowing out the side grips and grip safety, and damaging the backstrap and grip. The three cartridge casings recovered from inside the grip were flowered outwards from the rims of the cartridge casings to the bases, and the primers had been partially or completely blown out of the cartridge rim, which indicated they exploded in the magazine from exposure to an extreme heat source, rather than from being fired normally or from a "chain-fire," (firing multiple cartridges at once) which occurred more often in black powder revolver pistols (**Figure 27**). This evidence suggests the pistol may have been deliberately discarded and destroyed.

Figure 26. Ca. 1910 advertisement for the 1908 Model Colt Automatic Pistol (Historicalfirearms.info 2020).

Figure 27. Side-view example of original .380 ACP caliber Colt Pocket Hammerless (Heritage Auctions 2020).

Figure 28. Exploded .380 ACP shell casings recovered inside handgun magazine from SST01 (AL07).

SUMMARY

Given the approximate relative date ranges of the artifacts recovered from site 41BX2332, the site is likely associated with the time of ownership of the property by John and Ophia Sweeney, (who owned the property until 1949) (Ancestry 2020). However, as firearms may be owned for many years after their manufacture, the fact that no serial number remains on the firearm, its distance from the structures associated with HHPA-1, and that no other temporally diagnostic artifacts were recovered from the site, the site cannot be definitively linked to John or Ophia Sweeney or to the nearby HHPA.

Site 41BX2332 contained no cultural features and yielded ubiquitous and well documented artifacts. Soils within the site and surrounding Project Area were shallow and terminated at a limestone and chert gravel impasse layer between 20 and 30 cm (12 in) below surface, indicating there is no deeply buried component associated with the site. Additional work at the site would likely only recover similar material that would be unlikely to contribute additional information to the archaeological record. Furthermore, the site lacks an association with people significant to the local or regional development of the area. Due to these factors, 41BX2332 is recommended Not Eligible for listing in the NRHP and is recommended ineligible as a SAL. Based on the results of the survey, Pape-Dawson archaeologists recommend no further work for site 41BX2332.

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CHAPTER 6: SUMMARY AND RECOMMENDATIONS

On behalf of SWISD, Pape-Dawson conducted an archaeological survey for the proposed SWISD Natatorium Project in southwestern San Antonio, Bexar County, Texas. SWISD proposes to develop a natatorium complex on an approximately 2-ha (5-ac) tract of land located within the COSA jurisdictional boundary. Therefore, compliance with the Historic Preservation and Urban Design Section of the COSA's UDC (Article 6 35-630 to 35-634) was necessary. Since SWISD is a political subdivision of the State of Texas, the Project also required review by the THC under the ACT.

Fieldwork was conducted on January 16, 2020. The Principal Investigator for the Project was Adam Leroy, who was assisted in the field by archaeologist Mikayla Mathews. Pape-Dawson archaeologists performed a 100 percent pedestrian survey augmented by shovel testing of the Project Area. A total of 11 shovel tests were excavated, one of which was positive for cultural material.

During the investigation, one new archaeological site, 41BX2332, was recorded. Site 41BX2332 is a twentieth century historic artifact scatter and burned trash pit with surficial and subsurface expressions. The site measures approximately 10 m (32.8 ft) north-south by 10 m (32.8 ft) east-west, with a total area of 78.5 m^2 (845 ft^2). The site boundary was determined by means of the horizontal and vertical extents of the surface artifact scatter.

Site 41BX2332 contained no cultural features and yielded non-diagnostic and diagnostic artifacts that are common and well documented within the area. Additional work at the site would likely only recover similar material that would be unlikely to contribute additional information to the archaeological record. Furthermore, the site lacks an association with people significant to local or regional development of the area. Due to these factors, site 41BX2332 is recommended Not Eligible for listing in the NRHP and is recommended ineligible as a SAL under the ACT. Based on the results of the survey, Pape-Dawson archaeologists recommend no further work for site 41BX2332.

Should cultural materials be encountered outside the current parameters of the Project Area during construction, it is recommended that all work in the vicinity should cease and COSA and THC archaeologists be immediately contacted about how to proceed.

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