Cultural Resources Investigation
of the Sienna Tract Project,
Bexar County, Texas

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Abstract

On behalf of Meritage Homes, Pape-Dawson conducted a cultural resources survey of the proposed Sienna Tract development project located in northern Bexar County, Texas, about 1.1 miles (1.8 kilometers [km]) northeast of the intersection of U.S. Highway 281 and Loop 1604. The project will entail the construction of a single-family residential subdivision. The irregularly-shaped project area is bounded by large-acreage homesteads and Redland Road to the southwest, residential developments to the northwest, north, east, and southeast. The project area is maximally 3,518 feet (ft) (1,072.3 meters [m]) north to south and 2,839 ft (865.3 m) east to west, for a total area of 173 acres (70 hectares [ha]). Roughly 29 acres (12 ha) of the project area will not be developed; instead, this acreage will remain undeveloped greenspace. Thus, the archaeological survey area is defined as the approximately 144 acres (58 ha) of land within the confines of the property boundary (referred to from here on as the development area). Based on historic maps, a previously unrecorded cemetery may fall within areas planned for greenspace outside of the development area. The depth of all impacts has not yet been determined, but typically road construction impacts are 4 to 5 ft (1.22 to 1.52 m) deep, while underground utility line installations may impact up to 20 ft (6.1 m) deep.

As the project is situated within the City of San Antonio (COSA) city limits, compliance with the Historic Preservation and Design Section of the City’s Unified Development Code (UDC) was required. Since no federal funding or permitting is anticipated for this project, and it is situated on private property, compliance with Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas will not be necessary. All work was done in accordance with the archaeological survey standards and guidelines as developed by the Council of Texas Archeologists (CTA) and adopted by the Texas Historical Commission (THC).

Prior to fieldwork, Pape-Dawson archaeologists conducted a background study that reviewed the cultural resources literature and assessed the potential for cultural resources to exist within the 144-acre (58.3-ha) development area. The study identified two areas with a high probability of containing extant historic-age resources and where historic archaeological deposits may exist. The review also determined that the development area had not previously been surveyed and that no archaeological sites were recorded within or adjacent to the development area. Pape-Dawson archaeologists Mary Jo Galindo, Virginia Moore, Jacob I. Sullivan, and Megan Veltri conducted the field work on July 31, and August 1, 2017. Archaeologists were accompanied in the field by a representative of Meritage Homes.
for the duration of the project. The entirety of the development area was subjected to visual inspection augmented by shovel tests in order to evaluate the impact of the proposed project on cultural resources. A total of 55 shovel tests was excavated within the development area, of which 5 were positive for cultural material. Pape-Dawson archaeologists recorded one new archaeological site (41BX2193) as a result of the current survey.

Site 41BX2193 consists of historic-age structures and a prehistoric lithic scatter of unknown age that spans nearly the entire development area. The historic component consists of structures associated with an airport dating to the early twentieth century. Most of these structures were located within a fenced portion of the development area, which was inaccessible to archaeologists at the time of the survey. The historic component also consists of a concrete slab located southwest of the airport complex. No historic artifacts were documented at the site. The prehistoric component consists of an extensive lithic scatter with multiple concentration areas situated at the periphery of the property. Lithic artifacts were observed on the surface and within shovel tests. Archival research suggests the historic component of the site is associated with the Yates family, specifically John Yates’ development of an air strip beginning in 1939. Site 41BX2193 was evaluated according to the criteria in Title 36 Code of Federal Regulations Part 60.4 (36 CFR 60.4) and in 13 Texas Administrative Code 26.10 (13 TAC 26.10). Pape-Dawson recommends that site 41BX2193 is not eligible for State Antiquities Landmark (SAL) designation or for listing in the National Register of Historic Places (NRHP) under any criteria, in compliance with the UDC. As such, Pape-Dawson recommends no further cultural resources work is necessary at site 41BX2193.

The archival evidence indicates that the majority of the development area was an 1862 land grant to Domingo Losoya, who never resided here and whose descendants sold the property, perhaps to Joseph P. Devine before 1900. The development area was adjacent to Devine Ranch, an eighteenth-century precursor of Redland Ranch, before it was sold to a pair of Classen brothers (1900) and then the Yates (1929).

The cemetery that is mapped within or adjacent to the southern portion of the development area appears on topographic maps between 1928 and 1938; no evidence of the cemetery was encountered during the survey of the development area. Meritage Homes proposes to preserve a portion of the wooded area by fencing it, thereby protecting a 100-ft (30-m) buffer on the georeferenced locations of the cemetery on historic maps (Appendix A). In addition, Pape-Dawson will record the cemetery, per Section 711 of the Health and Safety Code.
Pape Dawson recommends that no further cultural resources work is necessary for the proposed project and that construction be allowed to proceed within the development area. However, if undiscovered cultural material is encountered during construction, it is recommended that all work in the vicinity should cease and the COSA archaeologist be contacted to ensure compliance with the UDC. Project records and photographs will be curated at the Center for Archaeological Studies at Texas State University in San Marcos. Any collected artifacts will be returned to the landowner or discarded with landowner permission.
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Management Summary

Pape-Dawson conducted a cultural resources survey of the proposed Sienna Tract development project located in northern Bexar County, Texas. The project will entail the construction of a single-family residential subdivision on a 173 acres (70 ha) undeveloped tract of land situated about 1.1 mile (1.8 km) northeast of the intersection of U.S. Highway 281 and Loop 1604. However, only 144 acres (58 ha) are proposed for development while the rest will remain undeveloped greenspace. The project is located within the COSA city limits, therefore; compliance with the Historic Preservation and Design Section of the city’s UDC was required. However, as the project is located on privately-owned land, compliance with the Antiquities Code of Texas was not necessary. No federal permitting or funding is attached to this project, so compliance with Section 106 of the National Historic Preservation Act was also not required.

Prior to fieldwork, Pape-Dawson conducted a background study of the 144-acre development area and identified two areas with the potential to contain extant historic-age standing structures and archaeological deposits. Mary Jo Galindo, Virginia Moore, Jacob I. Sullivan, and Megan Veltri conducted the field work on July 31, and August 1, 2017. As a result of the field effort, archaeologists recorded one new archaeological site (41BX2193).

Site 41BX2193 is a multicomponent site consisting of historic-age structures and foundations, and a prehistoric lithic scatter. The archival evidence indicates that the majority of the development area was an 1862 land grant to Domingo Losoya, who never resided here and whose descendants sold the property, perhaps to Joseph P. Devine before 1900. The development area was adjacent to Devine Ranch, a precursor of Redland Ranch, before it was sold to a pair of Classen brothers (1900) and then the Yates (1929). Site 41BX2193 was evaluated according to the criteria in 36 CFR 60.4 and in 13 TAC 26.10. Based on the primarily surficial nature of the cultural deposits, lack of intact features, and the sites’ lack of definitive association with people significant to local or regional development, site 41BX2193 is not recommended for NRHP inclusion or SAL designation, in compliance with the UDC.

Pape Dawson recommends that no further cultural resources work is necessary for the proposed project and that construction be allowed to proceed within the development area. However, if undiscovered cultural material is encountered during construction, it is recommended that all work in the vicinity should cease and the COSA archaeologist be contacted to ensure compliance with the UDC.
Introduction

On behalf of Meritage Homes, Pape-Dawson conducted a cultural resources investigation of the proposed Sienna Tract development project located in northern Bexar County, Texas (Figures 1 and 2). The project will entail the construction of a single-family residential subdivision on a 144-acre (58.3-ha) undeveloped tract of land (project area). The irregularly-shaped project area is about 1.1 mile (1.8 kilometer [km]) northeast of the intersection of U.S. Highway 281 (U.S. 281) and Loop 1604, and is bounded by large-acreage homesteads and Redland Road to the southwest, residential developments to the northwest, north, east, and southeast. The project area is maximally 3,518 feet (ft) (1,072.3 meters [m]) north to south and 2,839 ft (865.3 m) east to west, for a total area of 173 acres (70 hectares [ha]). Roughly 29 acres (12 ha) of the project area will not be developed, but rather, will remain undeveloped greenspace. Thus, the archaeological survey area is defined as the approximately 144 acres (58 ha) of land within the confines of the property boundary (referred to from here on as the development area). The depth of all impacts has not yet been determined, but typically road construction impacts are 4 to 5 feet (ft) (1.22 to 1.52 meters [m]) deep, while underground utility line installations may impact up to 20 ft (6.1 m) deep.

The project is situated within the city limits of the City of San Antonio (COSA), therefore; compliance with the Historic Preservation and Design Section of the City’s Unified Development Code (UDC) was required. As no federal funding or permitting is anticipated for this project, and it is situated on private property, compliance with Section 106 of the National Historic Preservation Act (NHPA) and the Antiquities Code of Texas (ACT) was not necessary.

Pape Dawson’s investigations included an extensive background records and literature review, followed by an intensive pedestrian survey with shovel testing. Pape-Dawson archaeologists Mary Jo Galindo, Virginia Moore, Jacob I. Sullivan and Megan Veltri conducted the field work between July 31 and August 2, 2017. The goals of the investigation were to: (1) locate all prehistoric and historic cultural resources, if present, within the development area; (2) establish vertical and horizontal site boundaries, as appropriate with respect to the development area; (3) evaluate the significance of recorded cultural resources with regard to eligibility for inclusion in the National Register of Historic Places (NRHP) and for designation as a State Antiquities Landmark (SAL), in compliance with the UDC.
Figure 1. Project Location

Sienna Tract PN: 11330-05
Bexar County, Texas
Cultural Resources Report
August 2017
Figure 2. Project Area

Sienna Tract PN: 11330-05
Bexar County, Texas
Cultural Resources Report
August 2017
Project Setting

Located in northern Bexar County, the development area is in an urban setting situated on an upland terrace between the Mud Creek flood plain to the west and West Elm Creek to the east. Residential and commercial developments surround the tract, except for a wooded area near the southern margin of the development area (near Redland Road) and a sparsely wooded pasture adjacent to the tract’s northwestern corner (National Environmental Title Research [NETR] Online 2017). Mud Creek is about 0.4 mile (0.7 km) southwest of the development area, while West Elm Creek is 790 ft (241 m) east of the tract. An airstrip has been constructed traversing the development area from the southeast to the northwest, and a formal driveway providing access from U.S. 281 is parallel to and southwest of the airstrip, leading to a group of structures (NETR Online 2017). On two historic topographic maps (1938 and 1953 [Foster et al. 2006]), the driveway continues past these structures as a two-track road, crossing the airstrip in a northeasterly direction, and leading to points beyond the northeastern corner of the development area. Another possible structure is visible to the south of the group of structures (NETR Online 2017). Surface elevation of the development area is relatively flat, ranging from 940 to 971 ft (286.5 to 296 m) above mean sea level, with the terrain that abuts to the east dropping steeply to West Elm Creek.

The development area is geologically mapped as Lower Cretaceous-age Edwards Limestone, which is fine- to coarse-grained with abundant chert and fossil inclusions, and 300 to 500 ft (91.4 to 152.4 m) thick (Bureau of Economic Geology [BEG] 1983). The soils that formed within the development area are mapped entirely as Crawford and Bexar stony soils (Cb) (U.S. Department of Agriculture-Natural Resources Conservation Service [USDA-NRCS] 2017). The Crawford series consists of moderately deep, well-drained, and very slowly permeable soils that formed in clayey sediments, which are underlain by indurated limestone bedrock, typically at about 28 inches (71 cm). The Crawford A-horizons consist of brown silty clay that is typically up to 12 inches (30.5 cm) thick, overlying about a 16-inch (40.6-cm) Bss-horizon. These soils are found on broad, nearly level or gently sloping uplands with slopes ranging from 0 to 5 percent (USDA-NRCS 2017). The Bexar series consists of moderately deep, well-drained, and slowly permeable soils on upland plains. These slightly acid soils have a dark reddish brown cobbly clay loam A-horizon (typically up to 18 inches [46 cm] thick), a dark reddish brown cobbly clay Bt-horizon (typically 9 inches [23 cm] thick), and are underlain by hard limestone at depths of 20 to 40 inches (51 to 102 cm) (USDA-NRCS 2017).
Cultural Chronology

Bexar County falls within the Central Texas archaeological region of the Central and Southern Planning Region 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 have been defined primarily by changes in material culture and subsistence strategies over time as evidenced through information and artifacts recovered from archaeological sites. This cultural chronology provides a brief summary of each major cultural period with reference to significant archaeological work that has occurred within the region.

**PALEOINDIAN (11,500 B.P. – 8,800 B.P.)**

Although there is some debate about whether pre-Clovis Paleoindian peoples lived in Texas, there is evidence of Paleoindian occupation within Texas by 11,500 B.P. Collins (1995:376, 381) has proposed dividing this period into early and late phases, with Dalton, San Patrice, and Plainview possibly providing the transition between them. Research has shown Paleoindians were gathering wild plants and hunting large mammals (mammoth, bison, etc.) as well as smaller terrestrial and aquatic animals (Collins 1995: 381; Bousman et al. 2004: 75). Projectile points characteristic of the Paleoindian period in Central Texas are lanceolate-shaped and include Clovis, Plainview, and Folsom (Turner and Hester 1993). In Texas, most Paleoindian sites are classified as procurement or consumption sites (Bousman et al. 2004: 76-78), but a few, such as the Wilson-Leonard site in Williamson County (Collins 1995) and the Pavo Real site in Bexar County (Henderson 1980; Collins et al. 2003; Figueroa and Frederick 2008), have produced burials in context (Collins 1995: 383). Other Paleoindian sites discovered within Bexar County include site 41BX47 on Leon Creek (Tennis 1996), the Richard Beene site (41BX831) (Thoms et al. 2005; Thoms and Mandel 2007), and the St. Mary’s Hall site (41BX229), which has provided insight into a more diverse diet for Paleoindian groups (Hester 1978).

As the climate warmed, the Paleoindian people began to shift away from hunting large animals. The changing environment, which led to extinction of the megafauna, likely influenced their decision to focus more on hunting small game animals, including deer and rabbit, as well as gathering edible roots, nuts, and fruits (Black 1989). This change in food supply, as well as a different set of stone tools, marks the transition into the Archaic Period.
**Archaic (8,800 B.P. – 1,200 B.P.)**

Usually divided into early, middle, late, and sometimes transitional sub-periods, the Archaic marks a gradual shift from hunting Megafauna and some smaller animals supplemented with wild plants to a focus on hunting and gathering medium and small animals and wild plants, and an eventual transition to agriculture. Beginning with Clear Fork gouges and Guadalupe biface in the Early Archaic (8500 B.P. – 6000 B.P.) (Turner and Hester 1993; Collins 1995), Early Archaic people produced a variety of point types. The variety of points and their scattered distribution over a large area in the Early Archaic may indicate smaller groups of people moving over larger territories (Prewitt 1981). Point types transition to Bell-Andice-Calf Creek, Taylor, and Nolan-Travis points in the Middle Archaic (6000 B.P. – 4000 B.P.) (Turner and Hester 1993; Collins 1995), and burned rock middens become an important characteristic. The Middle Archaic focus on constructing burned rock ovens to cook a diverse array of plant food (Black 1989) suggests a slightly more sedentary focus. The Bulverde, Pedernales, Ensor, Frio, and Marcos points in the Late Archaic (4000 B.P. – 1300 B.P.) (Turner and Hester 1993; Collins 1995) mirror the diversity of point types found in the Early Archaic. During the Late Archaic, cemeteries, especially associated with rock shelters, become common in central Texas (Dockall et al. 2006). In Bexar County, sites with Early Archaic components include the Housman Road site (41BX47), the Richard Beene site (41BX831) (Thoms et al. 2005; Thoms and Mandel 2007), the Higgins site (41BX184), and the Panther Springs site (41BX228) (Black and McGraw 1985). While the Elm Waterhole site (41BX300) is representative of a Middle Archaic site within Bexar County (McNatt et al. 2000), 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 (1,200 B.P. – 250 B.P.)**

As the Archaic transitioned into the Late Prehistoric period, several technological changes become apparent. The most notable change is the use of the bow and arrow rather than the spear and atlatl, evidenced by smaller dart points. Another significant innovation is the creation and use of ceramic vessels. Some groups began to practice consistent agriculture during this time as well; there is some evidence that peoples in Central Texas may have incorporated agriculture into their lives, but primarily remained hunter gatherers (Collins 1995). Also during this period, there are possible indications of 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.
**HISTORIC (1600s – 1960)**

While there is an overlap between the prehistoric and historic periods (sometimes called the protohistoric), Europeans did not begin exploration in the area until the 17th century. Alonso de Leon’s 1689 and 1690 expeditions and de los Rios’ 1691 expedition were likely some of the first interactions between Europeans and Native groups (de la Teja 1995: 6). According to historical accounts of the expeditions, these early Spanish explorers encountered numerous indigenous groups residing in and near Central Texas (Mercado-Allinger et al, 1996). These indigenous groups likely included the Payaya and the Pamaya who resided in the southern plains of Texas as well as the Tonkawa, Karankawa, Lipan Apache, and Comanche, who entered the area from the northern plains in pursuit of food and stopped at the areas springs (Long 2017). In 1691, Spanish explorers traveling through Bexar County began creating what would become the El Camino Real de los Tejas (The King’s Highway, also known as the Old San Antonio Road in portions) (United States Department of the Interior [DOI] 2011). This network of roadways at least in part likely followed existing trails already well established by the numerous highly mobile indigenous groups within the area.

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, in 1718, on the west bank of the San Pedro Creek, followed by the Presidio San Antonio de Béxar and the Villa Béxar (de la Teja 1995). However, by 1722 the Marqués de San Miguel de Aguayo had moved the presidio and villa to the west side of the San Antonio River (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 1718 to 1731 (Wright 2016). Most of the Native American groups 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. The missions used this Native labor force to construct acequias, or irrigation ditches, which helped them to develop self-sustaining communities bordered by farmland (Long 2017).

In 1731, Spain sent 16 families from the Canary Islands to the villa de Bexar to establish the 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). This began San Antonio’s gradual secularization. In 1773, San Antonio de Bexar Presidio was
named the capital of Spanish Texas, and the settlement including mission Indians had a population of about 2,000 by 1778 (Fehrenbach 2017).

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 the capital at Saltillo. San Antonio fought for Mexican Independence in 1813, then for its own sovereignty during the Texas Revolution. The Siege of Bexar and the Battle of the Alamo, in 1835 and 1836, were both located within San Antonio, showing 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 seat (Long 2017). However, this was not the end of conflict in the city; a dispute with Comanche Indians 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. By 1846, San Antonio’s population had decreased to approximately 800 people (Fehrenbach 2017).

After the Civil War, Bexar County continued to grow larger, spurred on by the arrival of the railroad in 1877 (Fehrenbach 2017). Industries such as cattle, distribution, ranching, mercantile, gas, oil, and military centers in San Antonio prospered. 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 south. An additional population increase came after 1910, when large numbers of Mexicans began moving into Texas to escape the Mexican Revolution (Fehrenbach 2017).

Modernization in San Antonio increased dramatically between the 1880s and the 1890s, compared to the rest of the United States. Civic government, utilities, electric lights and street railways, street paving and maintenance, water supply, telephones, hospitals, and a city power plant were all built or planned around this time (Fehrenbach 2017). The First United States Volunteer Cavalry was organized in San Antonio during the Spanish-American War, and San Antonio was an important military center for the army and air forces during both world wars. Its five military bases provided an important economic base and contributed to the evolution of the city’s medical research industry.
Methods

Records Review
Prior to fieldwork, Pape-Dawson archaeologists conducted a thorough background literature and records search of the proposed development area. This research included reviewing the Bulverde (2998-423) and Longhorn (2998-422) U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps at the Texas Archeological Research Laboratory (TARL) and searching the Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located within a 0.62-mile (1-km) radius of the development area. The review also included information on the following types of cultural resources: NRHP-listed properties and districts, SALs, Official Texas Historical Markers (OTHM), Recorded Texas Historic Landmarks (RTHL), and cemeteries. In addition, archaeologists consulted the City of San Antonio (COSA) Historic Landmark Sites and Historic Geodatabases to locate any local historic landmarks and districts. The archaeologists also examined the U.S. Department of Agriculture Soil Survey of Bexar County (Taylor et al. 1991), Natural Resources Conservation Service Web Soil Survey, the Geologic Atlas of Texas-San Antonio Sheet (BEG 1983), and historic maps and aerials that depict the development area (NETR Online 2017).

Fieldwork
Pape-Dawson archaeologists conducted an intensive cultural resources survey of the proposed 144-acre (58.3-ha) development area that included a 100-percent pedestrian survey augmented with shovel testing. Survey methods followed the Council of Texas Archeologists’ Archeological Survey Standards for Texas. Archaeologists examined the entire ground surface along transects spaced 98 ft (30 m) apart and any erosional exposures for cultural resources. Subsurface investigations were placed in settings with the potential to contain buried cultural materials. A total of 55 shovel tests were excavated to investigate the 144-acre (58.3-ha) development area, exceeding the state’s minimum standard of 1 shovel test every 3 acres for development areas from 101 to 200 acres in size. Shovel tests were approximately 12 inches (30 cm) in diameter and were excavated to sterile substrate, bedrock, or to a maximum of 31.5 inches (80 cm) below the ground surface when intact soils were encountered. Soils were screened through 0.25 inch (0.64 cm) hardware mesh unless they were dominated by clay. Clay soils were finely divided and hand sorted. Shovel tests were visually described, mapped using a handheld Trimble GPS unit, and backfilled upon completion.
Archaeological site boundaries located on the property were defined within the development area. Sites were then recorded on TexSite forms in the field, and the forms were submitted to TARL in order to obtain trinomials for newly recorded sites. Any collected diagnostic artifacts will be returned to the landowner or discarded with landowner permission once the project is completed. A representative sample of non-diagnostic artifacts observed during the survey was photographed and documented in the field, but not collected. Project records and photographs will be curated at the Center for Archaeological Studies at Texas State University in San Marcos following their specific standards of preparation.

In addition, Pape-Dawson archaeologists recorded historic-age structures present within the 144-acre (58.3-ha) development area. Each historic-age structure was photographed, and the location of each recorded structure was mapped using a Trimble GPS unit, where access was permitted.

ARCHIVAL

Pape-Dawson historians conducted archival research to assist in learning about the potential occupants associated with the historic-age structures documented within the development area. Historians consulted deed and probate records online at the Bexar County Clerk’s website to develop a chain of title for the parcel of land containing the structures. In addition, Pape-Dawson used the Texas General Land Office Land Grant Database to identify the land grant and patent. Once parcel owners had been identified, historians conducted census research on HeritageQuest online for additional insight into which of these owners could have occupied the site. This information was used to present the NRHP-eligibility assessments included in the results section, in compliance with the COSA’s UDC.

Results

RECORDS REVIEW

The background review determined that the development area had not been previously surveyed, and that no previously recorded archaeological sites are within or adjacent to the development area. The study identified two areas with a high probability of containing extant historic-age resources and where historic archaeological deposits may exist. These include the air strip and related structures along with a foundation further south. Within 0.62 mile (1 km) of the development area, 14 archaeological sites (41BX90, 41BX91, 41BX92, 41BX93, 41BX94, 41BX95, 41BX96, 41BX97, 41BX111, 41BX455, 41BX1673, 41BX1675, 41BX1992, and 41BX2006) have been recorded (Figure 3; Table 1). No NRHP properties or
This page has been redacted as it contains restricted information.
Table 1. Previously recorded sites within 1 km of the development area.

<table>
<thead>
<tr>
<th>Trinomial</th>
<th>Site Type</th>
<th>Landform</th>
<th>Dimensions</th>
<th>Depth of Deposits</th>
<th>Distance from development Area</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>41BX90</td>
<td>Open Campsite/Quarry</td>
<td>Ridge above flood plain</td>
<td>400 m N/S, 225 m E/W</td>
<td>Unknown</td>
<td>2,329.4 ft (710 m) northwest</td>
<td>Scatter of flakes, utilized flakes, unifacial and bifacial scrapers, bifaces, quarry blanks, and cores</td>
</tr>
<tr>
<td>41BX91</td>
<td>Open Campsite/Quarry</td>
<td>Terrace above flood plain</td>
<td>400 m N/S, 375 m E/W</td>
<td>Unknown</td>
<td>3,199 ft (975 m) northwest</td>
<td>Scatter of heat-treated chert, flakes, utilized flakes, quarry blanks, anddebitage</td>
</tr>
<tr>
<td>41BX92</td>
<td>Open Campsite/Quarry/Lithic Scatter</td>
<td>Flood plain</td>
<td>700 m N/S, 500 m E/W</td>
<td>Unknown</td>
<td>820.2 ft (250 m) northwest</td>
<td>Scatter of flakes, utilized flakes, scrapers, bifaces, quarry blanks, and cores</td>
</tr>
<tr>
<td>41BX93</td>
<td>Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>125 m in diameter</td>
<td>Unknown</td>
<td>344.5 ft (105 m) northwest</td>
<td>Scatter of flakes, utilized flakes, unifaces and quarry blanks</td>
</tr>
<tr>
<td>41BX94</td>
<td>Quarry/Workshop</td>
<td>Terrace above flood plain</td>
<td>300 m N/S, 140 m E/W</td>
<td>Unknown</td>
<td>443 ft (135 m) north</td>
<td>Scatter of flakes (primary and secondary), unifacial and bifacial scrapers, quarry blanks, and cores</td>
</tr>
<tr>
<td>41BX95</td>
<td>Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>40 m N/S, 30 m E/W</td>
<td>Unknown</td>
<td>935 ft (285 m) north</td>
<td>Scatter of burned rock, utilized flakes and cores</td>
</tr>
<tr>
<td>41BX96</td>
<td>Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>60 m N/S, 30 m E/W</td>
<td>Unknown</td>
<td>869.4 ft (265 m) north</td>
<td>Scatter of flakes and utilized flakes</td>
</tr>
<tr>
<td>41BX97</td>
<td>Open Campsite/Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>100 m N/S, 75 m E/W</td>
<td>Unknown</td>
<td>1,148.3 ft (350 m) north</td>
<td>Scatter of burned rock, flakes, utilized flakes, bifaces, quarry blanks, and cores</td>
</tr>
<tr>
<td>41BX111</td>
<td>Open Campsite</td>
<td>Terrace above flood plain</td>
<td>150 m N/S, 75 m E/W</td>
<td>Unknown</td>
<td>2,067 ft (630 m) northeast</td>
<td>Scatter of burned chert, flakes and cores</td>
</tr>
<tr>
<td>41BX455</td>
<td>Open Campsite</td>
<td>Terrace above flood plain</td>
<td>137 m N/S, 46 m E/W</td>
<td>Unknown</td>
<td>2,789 ft (850 m) southeast</td>
<td>Scatter of burned rock and flakes</td>
</tr>
<tr>
<td>41BX1673</td>
<td>Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>10 m N/S, 10 m E/W</td>
<td>Surface only</td>
<td>0.62 mile (1 km) southwest</td>
<td>Scatter of biface, tested cobbles, cores, and debitage</td>
</tr>
<tr>
<td>41BX1675</td>
<td>Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>20 m N/S, 20 m E/W</td>
<td>Surface only</td>
<td>2,395 ft (730 m) southwest</td>
<td>Scatter of tested cobbles, cores, and debitage</td>
</tr>
<tr>
<td>Trinomial</td>
<td>Site Type</td>
<td>Landform</td>
<td>Dimensions</td>
<td>Depth of Deposits</td>
<td>Distance from development Area</td>
<td>Additional Information</td>
</tr>
<tr>
<td>-----------</td>
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<td>-------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>41BX1992</td>
<td>Open Campsite/Quarry/Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>140 m N/S, 245 m E/W</td>
<td>0-11.8 inches below surface (0-30 cmbs)</td>
<td>1,394 ft (425 m) west-southwest</td>
<td>Scatter of burned rock, flakes (primary, secondary, and tertiary), charcoal, and cores</td>
</tr>
<tr>
<td>41BX2006</td>
<td>Quarry/Lithic Scatter</td>
<td>Terrace above flood plain</td>
<td>185 m N/S, 235 m E/W</td>
<td>0-19.7 inches below surface (0-50 cmbs)</td>
<td>1,854 ft (565 m) southeast</td>
<td>Scatter of burned rock, bifaces, cores, and debitage</td>
</tr>
</tbody>
</table>
districts, RTHLs, OTHMs, SALs, or local historic landmarks or districts are within the study area. One unnamed cemetery, possibly associated with Redland Ranch or an earlier Devine Ranch, was noted adjacent to the development area’s southeastern-most corner on a circa 1930 Stoner System Map (Sheet 1046), the 1928 Bracken U.S. Army Corps of Engineers (USACE) topographic quadrangle map, and the 1938 Bracken USACE topographic quadrangle map (Figure 4 and Figure 5).

Nine of 14 previously recorded sites (41BX90, 41BX91, 41BX92, 41BX93, 41BX94, 41BX95, 41BX96, 41BX97 and 41BX111) were documented in 1977 during a survey of the Encino Park Development Project that was conducted by the Center for Archaeological Research at The University of Texas at San Antonio (CAR-UTSA) (McGraw et al. 1977). They are recorded as prehistoric campsites and quarries of varying size situated within or above the Mud Creek or the West Elm Creek flood plains. No shovel testing was conducted; thus, no information about the vertical distribution of cultural material is available. Artifacts observed ranged from debitage and cores to modified flake tools, bifaces, and projectile points (McGraw et al. 1977).

Site 41BX455 was recorded in 1974 as an open campsite on a terrace above the West Elm Creek flood plain, which is about 2,789 ft (850 m) southwest of the development area. Artifacts included a surficial scatter of burned rock and flakes (THC 2017). Sites 41BX1673 and 41BX1675 were recorded in 2006 as surficial lithic scatters on terraces above the Mud Creek flood plain. The sites are between 2,395 ft (730 m) and 0.62 mile (1 km) southwest of the development area. The assemblage from the sites included a biface, tested cobbles, cores, and debitage (THC 2017).

Site 41BX1992 was recorded in 2013 as an open campsite with a quarry and lithic scatter on a terrace above the Mud Creek flood plain, and about 1,394 ft (425 m) west-southwest of the development area. Artifacts included burned rock, flakes (primary, secondary, and tertiary), charcoal, and cores (THC 2017). Finally, site 41BX2006, a quarry and lithic scatter, was recorded in 2014 on a terrace above the West Elm Creek flood plain that is 1,854 ft (565 m) southeast of the development area. Artifacts included burned rock, bifaces, cores, and debitage (THC 2017).

Besides the circa 1930 Stoner System Map Sheet 1046 and the 1928 and 1938 Bracken USACE topographic quadrangle maps (PCL 2017; Foster et al. 2006), no other documentation was encountered regarding a cemetery in proximity to the development area. The archival search involved deed records, but no mention of a cemetery was encountered. For the preservation plan, the cemetery’s mapped locations from the 1928 and 1938 topographic maps, and the Stoner System map, were overlaid on
Figure 4. Potential cemetery locations georeferenced from historic maps overlaid on a Stoner System Map (Sheet 1046) with original land grant boundaries.
Figure 5. Project Area on 1938 Bracken USGS Topographic Quadrangle (Foster et al. 2006)
historic aerials from 1953, 1963, and 1973. No cemetery is evident on these aerials, either within or in the vicinity of these mapped locations (Appendix A).

**Historic Map and Aerial Photograph Review**

Ten historic maps from 1845, 1846, 1867, 1871, 1887, 1907, 1911, 1927, 1928, 1938, and 1953 (Foster et al. 2006; Perry-Castañeda Library [PCL] 2017) were examined for information about the current development area. Of these, only four (dated to 1871, 1887, 1938 and 1953) contained information specific to the development area. Additionally, a circa 1930 Stoner System map (Sheet 1046) was found to contain relevant cultural information. Historic and current aerial photographs (1955, 1963, 1966, 1973, 1986, 1995, 2004, and 2012) and USGS topographic maps (1959, 1969, 1975, 1981, and 1993) depicting the development area were also reviewed (NETR Online 2017).

The 1871 Texas General Land Office (GLO) map of Bexar County (Foster et al. 2006) depicts the development area mostly within Survey No. 396 that was patented to Domingo Losoya and extending westward into state-owned land; however, this map appears to be incorrectly georeferenced as the 1887 map of Bexar County by J. D. Rullmann (Foster et al. 2006) appears more accurate and depicts the development area as encompassed by Survey No. 354-1/2, which was also awarded to Domingo Losoya in 1862 (GLO 2017). The 1887 map depicts the development area as situated between Mud Creek to the west and Pieper Settlement Road (present-day Bulverde Road) to the east (Foster et al. 2006).

The 1928 and 1938 Bracken USACE topographic quadrangle maps illustrate the development area with a pair of two-track roads traversing it (PCL 2017; Foster et al. 2006). A two-track road connects the property to U.S. 281 west of the development area, while the other exits the northeastern corner of the proposed development area, leading off-site to a hunting lodge with an associated water hole. West Elm Creek is to the north and east of the development area, and Mud Creek is southwest of it. Redland Ranch is south of the development area, and a cemetery is noted abutting the development area at its southwestern corner (see Figure 5) (Foster et al. 2006). Finally, the 1953 Longhorn USGS topographic quadrangle illustrates the development area with an airstrip traversing it from the northwest to the southeast (Foster et al. 2006). A formal driveway providing access from U.S. 281 is parallel to and southwest of the airstrip, leading to a group of structures. The driveway continues past these structures as a two-track road, crossing the airstrip in a northeasterly direction, and leading to points beyond the northeastern corner of the development area. Another structure is depicted to the south of the group of structures (Foster et al. 2006).
FIELDWORK

Pape-Dawson archaeologists conducted an intensive archaeological survey of the 144-acre (58.3-ha) development area on July 31, and August 1, 2017. The archaeological survey consisted of a pedestrian survey with shovel testing across the landform (Figure 6). The survey effort resulted in the recordation of one new archaeological site (41BX2193) which contains historic structures and prehistoric material that spans the majority of the development area. During the background review prior to field work, it was observed that an unrecorded historic cemetery is potentially adjacent to the southern end of the development area within the larger project area. The location is based off of three georeferenced maps dating to the 1920s and 1930s (see the Historic Map and Aerial Photography section and Appendix A for further discussion). Four shovel tests (VM09, MJ09, JS08, and MV08) were placed near the potential cemetery locations within the development area, and none were positive for cultural materials, although prehistoric cores were noted on the surface in this area. Likewise, no evidence of the cemetery was encountered during the pedestrian survey. The southern portion of the project area outside of the development area was not surveyed for cultural resources. Meritage Homes proposes to preserve a portion of the wooded area by fencing it, thereby protecting a 100-ft (30-m) buffer on the georeferenced location of the cemetery on historic maps (Appendix A). Additional deed research was accomplished, but no reference to a cemetery was encountered. Per discussion with the COSA city archaeologist, it was determined that for the Master Development Plan (MDP) stage, fencing a 100-ft (30-m) buffer on the cemetery locations from historic maps would be appropriate preservation. If any types of ground-disturbing construction activities or mechanical vegetation removal are identified within the Cemetery Preservation Area by the platting stage, then further work to identify the potential location of the cemetery will be required. In addition, Pape-Dawson will record the cemetery, per Section 711 of the Health and Safely Code.

The landscape of the development area consisted of level to gently sloping uplands south and west of West Elm Creek. In addition, a small unnamed drainage begins in the southwest end of the development area draining south toward the adjacent subdivision. Dense concentrations of limestone and chert gravels and cobbles were observed across the surface of the landform as were pockets of exposed limestone bedrock (Figure 7). Vegetation primarily consisted of short grasses, cacti and young mesquite with a grove of oak and mesquite trees in the southern end of the development area (Figure 8). Ground surface visibility throughout the development area was generally good with areas of dense short grasses being the main deterrent to surface visibility (Figure 9).
Figure 6. Results

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Figure 7. Example of bedrock at the surface along the edges of the landform within the development area, camera facing north.

Figure 8. General view of southern wooded portion of the development area, camera facing southeast.
Disturbances within the development area have resulted from both natural and artificial impacts. Artificial impacts include two-track roads along the edges and traversing the development area, an overgrown asphalt runway and an asphalt driveway both running in a northwesterly direction, a fenced area with an airport/house complex in the center of the development area, new fencing off set roughly 100 ft (30 m) from the original fence along the southwestern end (to allow access to a construction easement), and a cleared strip along the southern edge that appears to be a construction easement associated with the installation of utilities along Redland Road (Figure 10 to Figure 14). The area used for historic runways has likely been graded over the years, which has potentially removed or displaced evidence of newly recorded site 41BX2193. Aerials from 1955, 1963, 1966, and 1973 all show evidence to varying degrees of clearing along the runways and around the structures (NETR Online 2017). Natural impacts include erosion along the edges of the landform, bioturbation caused primarily by animal burrows such as harvester ant mounds (Figure 15), and numerous cattle and game trails crisscrossing the development area.
Figure 10. Example of the two-tracks running through the development area, camera facing northwest.

Figure 11. Remnants of the asphalt runway in the northern portion of the development area, camera facing southeast.
Figure 12. View of enclosed airport complex, camera facing north.

Figure 13. New fence in southwestern portion of the development area, camera facing southeast.
Figure 14. View of cleared area (construction easement) along the southern end of the development area, camera facing northeast.

Figure 15. One of many Harvester ant mounds across the development area.
Shovel Tests

Archaeologists walked the entire development area using transects oriented east to west and spaced 98 ft (30 m) apart while visually inspecting the ground surface for artifacts and features. Shovel tests were placed in areas with the perceived potential to contain intact soils to evaluate the impact of the proposed project on cultural resources such as around the fenced airport complex, and near the georeferenced location of an unrecorded cemetery. During the survey effort, a total of 55 shovel tests were excavated (see Figure 6). Of those, five shovel tests were positive for cultural material to a max depth of 12 inches (in) (30 cm) below surface.

Shovel test excavations revealed fairly homogeneous soils across the landform (Appendix B). A typical shovel test profile exposed brown to reddish brown very compact silty clay with an average depth of 6.3 inches (16 cm) terminating at impenetrable cobbles or very compact soils (Figure 16). This generally corresponded to the Crawford and Bexar stony soils mapped in the development area (USDA-NRCS 2017).

Figure 16. Example of shovel test profiles documented in the development area.
RECORDED CULTURAL RESOURCES

The current pedestrian survey and shovel testing resulted in the recordation of one new archaeological site (41BX2193) (see Figure 6), a multicomponent site spanning the majority of the development area. The following sections discuss the site and results of the archival research. The archival research section incorporates the historic map information with census data, property records, and genealogy.

Site 41BX2193

Setting and Description

Site 41BX2193 is situated on an upland terrace between the Mud Creek flood plain to the west and West Elm Creek to the east (Figure 17). In addition, the headwaters of a small unnamed drainage begin in the southern end of the development area heading into the adjacent subdivision to the south. The site spans this landform potentially extending beyond the boundaries of the current survey area. Vegetation consists of short grasses, cactus, and young mesquite trees with vegetation changing to a grove of oak, and mesquite trees in the southern end. Ground surface visibility ranged between 20 and 90 percent at the time of site recordation.

Site 41BX2193 contains an early-twentieth century airport and prehistoric materials of an unknown temporal period. The historic component of the site consists of structures associated with an airport dating to the 1930s. Standing structures at the site include a large house or main office (Resource 01), a hangar or garage (Resource 02), a small brick outbuilding (Resource 03), a water tower (Resource 04), and a runway (Resource 05). The historic aspect of the site was initially discovered during the background review when archaeologists observed a group of structures, a road, and runway on the 1955 aerial map and 1959 topographic map (NETR Online 2017). Both the structures and runway are still visible on modern aerials and their presence was verified in the field, including a foundation south of the fenced complex (Google Earth 2017).

The prehistoric component consists of non-diagnostic lithic debitage and tools. Chert covers the landscape as it erodes from rock outcrops frequently exposed across the development area. Large chunks of non-cultural lithic material litter the surface, much of it resulting from livestock trampling given that the area is currently a cattle pasture. However, during the pedestrian survey, archaeologists identified a sprawling but sparse scatter of lithic debitage and a few tools amongst the non-cultural
This page has been redacted as it contains restricted information
material. Based on the structures and artifact distribution the site was determined to extend from the northern end of the development area all the way to its southern edge, excepting a portion along the western half of the development area were no artifacts were observed either on the surface or within shovel tests.

Work Performed and Recommendation

A total of 48 shovel tests was excavated within site 41BX2193. Of these, five were positive for cultural deposits to a max depth of 12 inches (30 cm) below surface. Shovel test depths ranged between 2 cmbs and 45 cmbs within the site before encountering either impassable cobbles or very compact clays. Soils were generally brown to reddish brown compact silty clay. Artifacts encountered within shovel tests were all prehistoric lithics consisting of tertiary and secondary flakes, and two cores.

Debitage and cores were scattered across the surface, but seemed to be concentrated along the periphery of the landform where chert cobbles were eroding out. While the site in general includes a low to moderate-density surficial lithic scatter, three discernable artifact concentration areas were defined. Concentration Area 1 (CA1) was identified in the northern end of the development area (within 984 ft [300 m] of the northern boundary) (Figure 18). This area contained the largest distribution of artifacts including a number of flakes, and two biface fragments documented near the top of the landform (Figure 19 and Figure 20). Two shovel tests excavated in this area were positive for cultural materials. Shovel Test VM01, located adjacent to the first biface, contained a tertiary flake between 0 and 4 inches (0 and 10 cm) below surface (Figure 21) Figure 26. The second shovel test (MV04) was excavated 653 ft (199 m) southeast of VM01 and contained a large core between 9.8 and 11.8 inches (25 and 30 cm) below surface (Figure 22).

Concentration Area 2 (CA2) is roughly 197 ft (60 m) in diameter on the western side of the development area (Figure 23). Artifacts were densely packed on the surface of the gently sloping landform. A core, multiple pieces of debitage, and one modified flake were noted within CA2 (Figure 24 Figure 25). No shovel tests excavated within CA2 were positive; however, a shovel test (VM05) placed 24 ft (60 m) north encountered two flakes between 0 and 4 inches (0 and 10 cm) below surface (Figure 26).
Figure 18. Overview of Concentration Area 1, camera facing northwest.

Figure 19. Example of debitage on the surface within Concentration Area 1 at 41BX2193.
Figure 20. Two formal tools documented on the surface at site 41BX2193.

Figure 21. Secondary flake from VM01 within the top 3.9 inches (10 cm) at 41BX2193.
Figure 22. Core encountered in shovel test MJ04 between 9.8 and 11.8 inches (25 and 30 cm).

Figure 23. Overview of Concentration Area 2, camera facing east.
Figure 24. Example of core observed on the surface in Concentration Area 2 within 41BX2193.

Figure 25. Flake tool documented on the surface at 41BX2193 in second concentration area.
The third concentration area was documented along the southeastern end of the development area. This section of the development area slopes down toward West Elm Creek, and chert and limestone cobbles and bedrock are eroding out along the edges of the slope (Figure 27). While no tools were observed within this area, a number of flakes and a few cores were documented both on the surface and within two positive shovel tests. Shovel test VM07 contained one core fragment roughly 3.9 inches (10 cm) below the surface (Figure 28). Located roughly 394 ft (120 m) southeast of VM07, VM12 encountered four tertiary and one secondary flake in the upper 3.9 inches (10 cm) (Figure 29).

In addition to the concentration areas, a few cores and tested cobbles were observed on the surface within the wooded portion of the development area to the south. This area is frequented by cattle and the surface is heavily churned by cattle wallows though the general surface visibility is good. It is also the location of an intermittent drainage.
Figure 27. Overview of third concentration area near its northern end, camera facing west.

Figure 28. Core fragment from VM07 between 0-10 cmbs.
An early-twentieth century airport comprises the historic component of the site (Figure 30). The historic age structures consist of a house (Resource 01), a hangar or garage (Resource 02), an outbuilding (Resource 03), a water tower (Resource 04), and a runway (Resource 05) (Figure 31 to Figure 33, Appendix C). In addition to the structures there is an asphalt driveway leading to Hwy 281, multiple concrete slabs, and two small round concrete slabs (interpreted as flag pole bases) in the site. The standing structures, and most of the concrete slabs are enclosed in a chain-link fence topped with barbed wire. Archaeologist were unable to gain access to the airport grounds during the survey, as the gates were locked. Thus, shovel tests were placed as close as possible to the fence, and photographs were taken of all the structures through the fence in order to document the complex. No historic artifacts were observed on the surface or within shovel tests placed near the fence. One concrete slab is situated roughly 381 ft (116 m) to the south and west of the airport complex. Closer inspection of the slab indicated that it was probably a garage as two edges of the concrete slab are ramped (Figure 34). One shovel test (JS17) was placed in front of the longer entrance. No artifacts were encountered within this shovel test, and no artifacts were observed on the surface around the foundation. Archaeologist inspected along the runway for any evidence of historic debris, but none were observed in or near the
Figure 30. Airport complex within site 41BX2193, camera facing southwest.

Figure 31. Main house (Resource 01) within the fenced area, camera facing south.
Figure 32. Hangar (Resource 02) within the fenced area, camera facing south.

Figure 33. Red brick outbuilding (Resource 03) within fenced area, camera facing south.
runway. Review of a 1953 aerial photograph shows the airport and outbuildings in their current locations minus the fence. Archival research found that the airport has been active since November 1939 and that the main structures were built by that time. According to the FAA, it was a private airport requiring permission prior to landing and containing three turf runways (AirNav 2017).

Archival Research

The 1887 map of Bexar County by J. D. Rullmann (Foster et al. 2006) depicts the development area as encompassed by Survey No. 354-1/2, which was awarded to Domingo Losoya in 1862 (GLO 2017). Domingo Losoya was granted 1,280 acres in two 640-acre tracts of land along Salado Creek as part of a Bounty Warrant. The tract containing most of the development area is known as Survey No. 354-1/2 in Section 4, which was patented on March 24, 1862 (GLO 2017; Bexar County Deed Records [BCDR] T1:125-126). Bounty warrants were gifts of land awarded to those (or their surviving relations) who took part in in the Siege of Bexar, the Goliad campaigns of 1835 and 1836, the battle of the Alamo, and later to disabled Confederate veterans (Lang and Long 2016).
Born in San Antonio in 1783, Domingo Losoya left Texas after the 1813 Battle of Medina, enlisting in the U.S. Army in Louisiana and participating in the Battle of New Orleans in 1815 (Walraven 1986). He returned to Texas and received a league of land from the Mexican government in 1834 along the south bank of the Medina River, just west of its confluence with the San Antonio River and southeast of downtown (BCDR J1:81-87). He then joined the original volunteer company of Juan N. Seguin and was accepted into the Texas Army in 1835, serving under James Fannin and James Bowie at the Battle of Concepción and at the Grass Fight during the Siege of Bexar (Walraven 1986).

Domingo Losoya was married twice; his first wife died before they had children. His second wife was Guadalupe Diaz, and they had one daughter, Maria Deonicia Losoya who was born about 1862 and married Juan Biagran (also spelled Viagran and Villagran) about 1881 (BCDR 418:198; 1910 U.S. Census). It is likely that the Domingo Losoya family lived in Losoya, Texas, which is on Farm Road 1937, about 18 miles southeast of downtown San Antonio in southeastern Bexar County (Long 2010). Domingo Losoya died in 1869 and is buried in Losoya at the Cemeterio del Carmen (Find a Grave 2017; Walraven 1986).

Domingo and Guadalupe Losoya appear in the 1860 U.S. Census of Bexar County, as farmers living in a rural area of Bexar County (page 290). The census reveals that Domingo was 80 years old, while Guadalupe was 30; thus, they were born about 1780 and 1830, respectively. Both were born in Texas, according to the census. Two apparently unrelated boarders (Antonia Nombraña age 27 and Antonio Arrolia age 40) resided with them. Domingo Losoya apparently died shortly after the census was taken (BCDR 418:198). Guadalupe Diaz de Losoya, acting as the executrix of her husband’s will, sold 36 and 325 acres along the south bank of the Medina River to Justa Villagran and Pedro Espinosa, respectively, in 1873 (BCDR 1:131). By 1910, their daughter Maria Deonicia Losoya de Viagran is living in the village of Losoya, Texas, along with her husband and four daughters ages 6 to 29, according to the U.S. Census of Bexar County (Precinct 50:6A). The Domingo Losoya family apparently never lived at the project area; instead, they settled south of San Antonio at a crossing of the Medina River that still bears his family name.

Deed researchers were not able to determine exactly how Losoya’s 640-acre tract containing the project area was divided and changed hands until 1900 when the property is sold by the Bexar County Sheriff in accordance with a judgment against Joseph P. Devine (BCDR 184:342-350) to brothers William and P.J. Classen along with a total of 7,190 acres. The following year, they sold all 7,190 acres to John G. Classen (BCDR 1289:380-383).
John G. and Alwine Classen were both born in Texas to German immigrants (1900 U.S. Census of Bexar County Precinct 8:13). An 8-year-old John (Johann) Classen appears in the 1880 U.S. Census of Bexar County as the son of Johann H. and Sophia Classen, who raised sheep (page 10). In the 1900 U.S. Census of Bexar County, John is a 28-year-old stock raiser married to Alwine (age 24), along with their two children, Linda (age 3) and Hugo (age 12 months) (Precinct 8:13). By 1910, the couple has three children, Hugo (10), Franklin (6), and Benjamin (1) (1910 U.S. Census of Bexar County Precinct 8:1). Their eldest daughter Linda died in 1905 at age 8, while two other daughters, Kora (1899-1899) and Alwyn (1907-1908) died in infancy (Find a Grave 2017). Also listed among the household in 1910 is Hermine Bauer, Alwine Classen’s sister. John’s occupation is listed as operating a general ranch and he is classified as a home owner, however no address is given, suggesting a rural setting. Of the children, only Hugo attended school and could read and write (1910 U.S. Census of Bexar County Precinct 8:1).

By 1920, Hugo is listed as a 19-year-old laborer, while Franklin (age 15) and Benjamin (age 10) are now reading, writing, and attending school. Two more younger brothers, Edmund (age 8) and Monroe (age 7), have not yet learned to read and write, and are not yet attending school. John Classen is listed as a ranchman living on Wetmore Road (1920 U.S. Census of Bexar County Precinct 8:7A), which was an historic name for present-day Bulverde Road that is 1.3 mile (2.1 km) east of the project area. It was also referred to as the Piepper Settlement Road (Foster et al. 2006) and the Wetmore-Bulverde Road (Stoner System Map Sheet 1046).

Between 1912 and 1915, John Classen is listed in the city directories as owning 6,529 acres and residing in Wetmore, Texas, or about 4 miles southwest of the development area (Appler 1912:1173; 1913:1205; 1914:626; 1915:658). John G. Classen amassed 7,190 acres by 1929, including the project area and surrounding property. Of this is an 85.3-acre portion of Domingo Losoya’s Survey No. 354-1/2 listed among 4,168.7 acres that John G. and Alvine Classen sold to Ira Yates in 1929 (BCDR 1147:521-523). Most of the development area is contained within these 85.3 acres. Four years later the Classens sold the remaining 3,021.3 acres to Yates’ son Louis (BCDR 1358:343-350). The current project area lies along the dividing line between the Ira and Louis Yates lands, on both men’s property (see Figure 4). The exact dates of the Stoner System Map sheets (made by county tax appraiser J. Ben Stone [1876-1951]) are unknown, but they are thought to reflect a time period around the 1930’s and 40’s. The information about the area within and adjacent to the project area must have been collected by Stoner after the purchase of Classen land by Ira Yates (1929) and before its purchase by Louis Yates (1933), because the maps depict the tracts of land owned by Ira Yates and John Classen, but not by Louis Yates.
Ira Griffin Yates was born in 1859 and orphaned by 1872 (Find a Grave 2017). He went to work in Wilson County as a cowboy, and by age 19 he was buying cattle and horses and driving them to market in San Antonio. After marrying Anna Shockley Brooks in 1883, Yates moved the family to Tom Green County where he became a successful businessman. In 1913, while living on a Crockett County ranch, he traded 216 cattle for a dry-goods store in Rankin, Texas. Two years later, he traded the store for 16,640 acres in Pecos County. Yates struck oil on this property in 1926, making him an instant millionaire (Find a Grave 2017). It could not be determined when they moved to Bexar County, but the Yates resided in Alamo Heights by 1930, according to the U.S. Census of Bexar County. Ann Yates died in 1936 and Ira Yates died in 1939; both are buried at Fairmount Cemetery in San Angelo (Find a Grave 2017).

In 1933, Ira Yates issued a conditional deed for 2,539.54 acres to his son John O. Yates as an advancement out of his estate (BCDR 1359:231-233). Included in the property was 76.3 acres out of Survey No. 354-1/2. In 1934, his parents granted him an additional 773.01 acres out of a 940.71-acre tract (BCDR 1455:296-298), exempting the elder Yates’ residence, lawn, and two horse traps south of their house. John O. Yates married Evelyn Goode, but divorced in 1934 (BCDR 5241:708). He registered his cattle brand in 1945 (BCDR M:570), and “died on his ranch north of San Antonio” in 1964 (BCDR 5241:708). Given that the Yates owed thousands of acres of property in the area, it was not possible to determine whether any family members ever resided at the development area. Instead, it appears that the house and hanger was used as an airport as early as November 1939 when it was registered with the Federal Aviation Administration as a private airport with three turf runways (AirNav 2017). The structures are visible on a 1953 aerial photograph (NETR Online 2017) apparently in their current locations minus the compound’s fence.

The cemetery that is georeferenced from historic maps within or adjacent to the southern portion of the project area was not encountered during the archaeological survey within the development area. The historic maps date to 1928 and 1938, during which time the Yates family owned the property, although the project area was adjacent to the Classen’s Redland Ranch (known as Devine Ranch before 1900), which was to the southwest and may be associated with the cemetery.

Conclusions and Recommendations
The archival research suggests that it is doubtful that the development area was inhabited by Domingo Losoya or his family during the mid- to late-nineteenth century. Instead, he was likely residing in Losoya, Texas, about 18 miles southeast of downtown. Likewise, subsequent owners John G. and Alwine Classen
probably lived closer to Wetmore, Texas (about 4 miles southwest of the development area). Ira and Ann Yates lived in Alamo Heights (1930 U.S. Census of Bexar County City of Alamo Heights Sheet 4A), and while one 1933 deed mentions that their residence fronted Bulverde Road (BCDR 1455:296-298), no archival or archaeological evidence ties them specifically to Site 41BX2193. The artifact assemblage at site 41BX2193 dates exclusively to prehistoric times, although the extant foundation is visible in 1955 aerial photographs.

Archival research suggests the historic component of the site is associated with the Yates family, specifically John Yates’ development of an air strip beginning in 1939. Based on review of aerial maps and results of the archival research, the historic component of site 41BX2193 likely dates to the 1930s and was in use to the present. Site 41BX2193 was evaluated according to the criteria in Title 36 Code of Federal Regulations Part 60.4 (36 CFR 60.4) and in 13 Texas Administrative Code 26.10 (13 TAC 26.10). The prehistoric component lacks diagnostic materials and no historic artifacts were encountered. Thus, due to the absence of features and the minimal amount of subsurface deposits, the archaeological deposits at site 41BX2193 are not likely to yield additional information beneficial to the history of the region. Therefore, site 41BX2193 is recommended not eligible for listing in the NRHP or for designation as an SAL, and no further archaeological work is recommended. However, the site likely extends beyond the development area, as archaeologists observed that the surficial prehistoric material continued into the project area outside of the current survey area. Thus, the NRHP and SAL eligibility of the site beyond the current development area remains unknown.

Summary and Recommendations

Pape-Dawson conducted a cultural resources survey of the proposed Sienna Tract development project located in northern Bexar County, Texas. The project will entail the construction of a single-family residential subdivision. The irregularly shaped development area is bounded by large-acreage homesteads and Redland Road to the southwest, residential developments to the northwest, north, east, and southeast. The project area is maximally 3,518 ft (1,072.3 m) north to south and 2,839 ft (865.3 m) east to west, for a total area of 173-acres (70-ha). However, roughly 29-acres (12-ha) of the project area will not be developed, but rather, will remain undeveloped greenspace. Thus, the archaeological survey area is defined as the approximately 144-acres (58-ha) of land within the confines of the property boundary (referred to from here on as the development area). Based on historic maps, a previously unrecorded cemetery may fall within areas marked for greenspace outside of the
development area. The depth of all impacts has not yet been determined, but typically road construction impacts are 4 to 5 ft (1.22 to 1.52 m) deep, while underground utility line installations may impact up to 20 ft (6.1 m) deep.

As the project is situated within the COSA city limits, compliance with the Historic Preservation and Design Section of the City’s UDC was required. Since no federal funding or permitting is anticipated for this project, and it is situated on private property, compliance with Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas was not necessary. All work was done in accordance with the archaeological survey standards and guidelines as developed by the CTA and adopted by the THC.

Prior to fieldwork, Pape-Dawson archaeologists conducted a background study that reviewed the cultural resources literature and assessed the potential for cultural resources to exist within the 144-acre (58.3-ha) development area. The study identified two areas with a high probability of containing extant historic-age resources and where historic archaeological deposits may exist. The review also determined that the development area had not previously been surveyed and that no archaeological sites were recorded within or adjacent to the development area.

Pape-Dawson archaeologists Mary Jo Galindo, Virginia Moore, Jacob I. Sullivan, and Megan Veltri conducted the field work on July 31, and August 1, 2017. The entirety of the development area was subjected to visual inspection augmented by shovel tests in order to evaluate the impact of the proposed project on cultural resources. A total of 55 shovel tests was excavated within the development area, of which 5 were positive for cultural material. Pape-Dawson archaeologists recorded one new archaeological site (41BX2193) as a result of the current survey.

41BX2193 is a multicomponent site consisting of historic foundations and a prehistoric lithic landscape of unknown age that spans nearly the entire development area. The historic component consists of structures associated with an airport dating to the early twentieth century. Most of these structures were located within a fenced portion of the development area, which was inaccessible to archaeologists at the time of the survey. The historic component also consists of a concrete slab located southwest of the airport complex. No historic artifacts were documented at the site. The prehistoric component consists of an extensive lithic scatter with multiple concentration areas located at the periphery of the property. Lithic artifacts were observed on the surface and within shovel tests.
Archival research suggests the historic component of the site is associated with the Yates family, specifically John Yates’ development of an air strip beginning in 1939. Site 41BX2193 was evaluated according to the criteria in 36 CFR 60.4 and in 13 TAC 26.10. Pape-Dawson recommends that site 41BX2193 is not eligible for State Antiquities Landmark (SAL) designation or for listing in the National Register of Historic Places (NRHP) under any criteria, in compliance with the UDC. As such, Pape-Dawson recommends no further cultural resources work is necessary at site 41BX2193.

The archival evidence indicates that the majority of the project area was an 1862 land grant to Domingo Losoya, who never resided here and whose descendants sold the property, perhaps to Joseph P. Devine before 1900. The project area was adjacent to Devine Ranch, a precursor of Redland Ranch, before it was sold to a pair of Classen brothers (1900) and then the Yates (1929).

The cemetery that is within or adjacent to the southern portion of the development area appears on topographic maps between 1928 and 1938; however, no evidence of the cemetery was encountered during the survey of the development area. Meritage Homes proposes to preserve a portion of the wooded area by fencing it, thereby protecting a 100-ft (30-m) buffer on the georeferenced locations of the cemetery on historic maps (Appendix A). In addition, Pape-Dawson will record the cemetery, per Section 711 of the Health and Safety Code.

Pape Dawson recommends that no further cultural resources work is necessary for the proposed project and that construction be allowed to proceed within the development area. However, if undiscovered cultural material is encountered during construction, it is recommended that all work in the vicinity should cease and the COSA archaeologist be contacted to ensure compliance with the UDC. Project records and photographs will be curated at the Center for Archaeological Studies at Texas State University in San Marcos. Any collected artifacts will be returned to the landowner or discarded with landowner permission.
References Cited

AirNav

Appler, Jules A.

Bexar County Deed Records (BCDR)

Black, Stephen L.

Black, Stephen L., and A. McGraw
1985  The Panther Springs Creek Site: Cultural Change and Continuity Within the Upper Salado Creek Watershed, South-Central Texas. Archaeological Survey Report No. 100. Texas Archaeological Research, The University of Texas, San Antonio.

Bousman, C. Britt, B.W. Baker, and A.C. Kerr

Bureau of Economic Geology (BEG)

Campbell, Thomas N.
Clark, John, Adan Benavides, Dan Scurlock, and Dana Isham  

Collins, Michael B.  

Collins, Michael B., Dale B. Hudler, and Stephen L. Black  
2003 Pavo Real: A Paleoindian and Archaic Camp and Workshop on the Balcones Escarpment, South-Central Texas. Antiquities Permit No. 249. TxDOT Archeological Studies Program, Texas Archeological Research Laboratory, The University of Texas, Austin.

Dockall, J.E., D.K. Boyd, and L.E. Kittrell  

de la Teja, J.F.  

Fehrenbach, T.R.  

Figueroa, Antonia L., and Charles D. Frederick  

Find A Grave  

Foster, E. R., T. Summerville, and T. Brown  

Google Earth  
Henderson, J.

Hester, T.R.
1978 *Early Human Occupation in South Central and Southwestern Texas: Preliminary Papers on the Baker Cave and St. Mary’s Hall sites*. Center for Archeological Research, San Antonio.

Lang, Aldon S. and Christopher Long

McGraw, Al J., Fred Valdez, Jr., and I. Waynne Cox

McNatt, L., C. Beceiro, M.D. Freeman, S.A. Tomka, P. Schuchert, and C.G. Ward


Nationwide Environmental Title Research Online (NETR Online)

Nickels, David L., Mason D. Miller, and W. Nicholas Trierweiler
2010 *Archaeological Excavation of a Deeply Buried Paleoindian Component at the Vara Daniel Site (41TV1364), Travis County, Texas*. Texas Antiquities Permit 5177. Ecological Communications Corporation, Austin.
Perry-Casteñeda Library (PCL) Map Collection

Prewitt, E.R.

Spell, Lota M. (translation)

Taylor, F. B., R. B. Hailey, and D. L. Richmond

Tennis, C.L.

Texas General Land Office [GLO]

Texas Historical Commission (THC)

Thoms, A.V., and R. D. Mandel (editors)
2007 Archaeological and Paleoecological Investigations at the Richard Beene Site, South-Central Texas. Technical Report Series No. 8. 2 Vols. Center for Ecological Archaeology, Texas A&M University, College Station.

Thoms, A.V., P.A. Claybaugh, S. Thomas, and M. Kamiya

Turner, E. S. and T. R. Hester

United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS)
U.S. Department of the Interior (DOI)


Walraven, Bill


Wright, Robert E., O.M.I.

2016 Handbook of Texas Online, "Spanish Missions," accessed May 10, 2017,
Appendix A

CEMETERY PRESERVATION PLAN
NOTICE OF EXISTENCE OF CEMETERY

THE STATE OF TEXAS

COUNTY OF BEXAR

KNOW ALL MEN BY THESE PRESENTS:

THAT the undersigned, acting pursuant to the provisions of Section 711.011 of the Texas Health and Safety Code, files this notice of the discovery of an unknown or abandoned cemetery.

The Cemetery is located: From the intersection of Redland Road and the U.S. Highway 281 north-bound frontage road, proceed east on Redland Road for 1.3 miles to a utility easement on the northside of Redland Road. The southwestern corner (UTM 14R 553663.625 E 3276197.444 N) of the cemetery is 343 feet ENE along the utility easement; its southeastern corner (553771.6 E 3276223.1 N) is another 364 feet ENE along the easement. The irregularly shaped cemetery's northeastern corner is at 553762.447 E 3276313.08 N and northwestern corner is at 553628.648 E 3276252.846 N, with two more points along the northern boundary (553673.825 E 3276305.71 N and 553641.052 E 3276274.235 N).

A location map (Exhibit A) is attached (may be hand drawn).

The Cemetery is evidenced by: Fenced Cemetery Preservation Area determined by placing 100-ft buffer on georeferenced 1928 and 1938 USACE Bracken topographic maps, and on the circa 1930 Stoner System Map Sheet 1046.

The legal description for the land occupied by the Cemetery is (provide survey and abstract numbers and a description, attach as an Exhibit to Notice if necessary):

This Notice signed and executed on the __________ day of ____________________, 20_____.

______________________________________________
(signature)

______________________________________________
(printed name)

______________________________________________
(address)

THE STATE OF TEXAS

COUNTY OF ________________

This instrument was acknowledged before me on the ______ day of ________________, 20____, by _________________________________.

Notary Public, State of Texas
EXHIBIT A
Location map

Please provide a map showing the location of the cemetery in relation to the nearest community and any other permanent landmark such as roads. See attached maps A-1 and A-2.
Figure A-1. General Cemetery Location

Sienna Tract PN: 11330-05
Bexar County, Texas
Cultural Resources Report
August 2017
Figure A-2. Cemetery Preservation Area

Legend
- Development Area
- Cemetery Preservation Area
- Project Area
Figure A-3. Proposed Fenced Cemetery Preservation Area

Legend
- Cemetery per 1928 Bracken Topo (PCL 2017)
- Cemetery per Stoner Map (Sheet 1046)
- Cemetery per 1938 Bracken Topo (Foster et al. 2006)
- Proposed Fenced Cemetery Preservation Area
- Development Area
- Project Area
- No Archaeological Survey
Figure A-4. Georeferenced Cemetery Locations Overlaying a 1953 Aerial.
Figure A-5. Georeferenced Cemetery Locations Overlaying a 1963 Aerial.

Legend
- Cemetery per 1928 Bracken Topo (PCL 2017)
- Cemetery per Stoner Map (Sheet 1046)
- Cemetery per 1938 Bracken Topo (Foster et al. 2006)
- Development Area
- Project Area

Sienna Tract PN: 11330-05
Bexar County, Texas
Cultural Resources Report
August 2017
Figure A-6. Georeferenced Cemetery Locations Overlaying a 1973 Aerial.
Appendix B

SHOVEL TEST TABLES
<table>
<thead>
<tr>
<th>ST #</th>
<th>Site</th>
<th>Level</th>
<th>Depth</th>
<th>Positive/Negative</th>
<th>Munsell</th>
<th>Soil Color</th>
<th>Soil Texture</th>
<th>Cultural Material</th>
<th>Comments/Reason for Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS01</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>N</td>
<td>10YR4/3</td>
<td>brown</td>
<td>silty</td>
<td>none</td>
<td>Clear grassy area with mesquite scrub just east of runway. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS02</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-20</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>Clear grassy area along north fence line. ASV 90%. Large tertiary flake on surface. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS03</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-30</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>Grassy with mesquite scrub. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS04</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0–20</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>Grassy with mesquite scrub. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS05</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-25</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>Grassy with mesquite scrub. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS06</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>Grassy with mesquite scrub. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS07</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>Grassy with mesquite scrub. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
</tbody>
</table>
Table B-1. Shovel Test Data

<table>
<thead>
<tr>
<th>ST #</th>
<th>Site</th>
<th>Level</th>
<th>Depth</th>
<th>Positive/Negative</th>
<th>Munsell</th>
<th>Soil Color</th>
<th>Soil Texture</th>
<th>Cultural Material</th>
<th>Comments/Reason for Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS08</td>
<td>41BX2193</td>
<td>1-4</td>
<td>0-40</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>wooded area with mesquite and hackberry. ASV 20%. Tested cobbles and cores on surface nearby (several). Terminated at limestone boulder.</td>
</tr>
<tr>
<td>JS09</td>
<td></td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>grassy area with mesquite shrubs. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS10</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>grassy area with mesquite shrubs just west of fence surrounding buildings. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS11</td>
<td>41BX2193</td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>grassy area with mesquite shrubs. ASV 90%. Terminated at degraded limestone bedrock.</td>
</tr>
<tr>
<td>JS12</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>grassy area with mesquite shrubs. ASV 90%. Terminated at degraded limestone bedrock.</td>
</tr>
<tr>
<td>JS13</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>grassy area with mesquite shrubs. ASV 90%. Terminated at limestone bedrock.</td>
</tr>
<tr>
<td>JS14</td>
<td>41BX2193</td>
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<td>0-10</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>grassy area with mesquite shrubs. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
<tr>
<td>JS15</td>
<td></td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>grassy area with mesquite shrubs. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
</tr>
</tbody>
</table>
### Table B-1. Shovel Test Data

<table>
<thead>
<tr>
<th>ST #</th>
<th>Site</th>
<th>Level</th>
<th>Depth</th>
<th>Positive/Negative</th>
<th>Munsell</th>
<th>Soil Color</th>
<th>Soil Texture</th>
<th>Cultural Material</th>
<th>Comments/Reason for Termination</th>
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<tbody>
<tr>
<td>JS16</td>
<td>1-2</td>
<td>0–20</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>none</td>
<td>Grassy area with mesquite shrubs. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
<td></td>
</tr>
<tr>
<td>JS17</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-25</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>Grassy area with mesquite shrubs. ASV 90%. Just north of foundation. Terminated at impenetrable limestone cobbles.</td>
<td></td>
</tr>
<tr>
<td>JS18</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-30</td>
<td>N</td>
<td>10YR3/3</td>
<td>dark brown</td>
<td>silt loam</td>
<td>Grassy area with mesquite shrubs. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
<td></td>
</tr>
<tr>
<td>JS19</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>silt loam</td>
<td>Grassy area with mesquite shrubs. ASV 90%. Terminated at impenetrable limestone cobbles.</td>
<td></td>
</tr>
<tr>
<td>VM01</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>P</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td><strong>1 tertiary flakes 0-10 cmbs</strong></td>
<td>In cattle pasture ~50 m east of runway. ~100 m south of fence line. Good ground visibility. Lithics/tools on surface. Terminated at impassable gravels/cobbles.</td>
</tr>
<tr>
<td>VM02</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-25</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>~400 m east of fence line in pasture. Flakes all over surface. Lithics on surrounding surface. Terminated at impassable gravels.</td>
</tr>
</tbody>
</table>
### Table B-1. Shovel Test Data

<table>
<thead>
<tr>
<th>ST #</th>
<th>Site</th>
<th>Level</th>
<th>Depth</th>
<th>Positive/Negative</th>
<th>Munsell</th>
<th>Soil Color</th>
<th>Soil Texture</th>
<th>Cultural Material</th>
<th>Comments/Reason for Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>VM03</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-30</td>
<td>N</td>
<td>10YR4/3</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>~20 m west of fence line on slight slope in pasture. Lithics on surrounding surface. Terminated at impassable gravels.</td>
</tr>
<tr>
<td>VM04</td>
<td>41BX2193</td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>~200 m east of runway in pasture. Few lithics on surrounding surface. Dense short grasses. Terminated at impassable gravels.</td>
</tr>
<tr>
<td>VM05</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>P</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>2 flakes (1 is broken)</td>
<td>In pasture at edge of project area (west). Lithics on surface. 4 flakes 0-10 cmbs. Terminated at impassable gravels.</td>
</tr>
<tr>
<td>VM06</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-30</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>~15 m west of runway and north of house in pasture. Small pockets of lithics on surface. Terminated at very compact cobbly clay.</td>
</tr>
<tr>
<td>VM07</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>P</td>
<td>10YR4/3</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>1 core</td>
<td>On east edge of project area. Cobbles eroding from land form. Lots of flakes on surface. 1 core 0-10 cmbs. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM08</td>
<td>41BX2193</td>
<td>1-5</td>
<td>0-45</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>East of runway in high area/pasture. Flake on surrounding surface. Terminated at very compact soil increasing with depth and impassable cobbles.</td>
</tr>
</tbody>
</table>
### Table B-1. Shovel Test Data

<table>
<thead>
<tr>
<th>ST #</th>
<th>Site</th>
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<th>Comments/Reason for Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>VM09</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>Just outside of southern tree line. ~15 m east of fence line in pasture. Flakes on surrounding surface. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM10</td>
<td></td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>In pasture between two track and western fence line. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM11</td>
<td></td>
<td>1</td>
<td>0-2</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>In pasture between two track and western fence line. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM12</td>
<td>41BX2193</td>
<td>1</td>
<td>0–5</td>
<td>P</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>4 tertiary and 1 secondary flakes</td>
<td>Northeast of house and fence line in pasture. Lithics on surface. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM13</td>
<td>41BX2193</td>
<td>1</td>
<td>0–5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>~10 m east of fence around house in pasture. Lithics on surface. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM14</td>
<td>41BX2193</td>
<td>1</td>
<td>0–10</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>On east end of project area in pasture. Southeast of house. Lithics on surface. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM15</td>
<td>41BX2193</td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>~20 m north of tree line on east side of project area. Lithics on surface. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM16</td>
<td></td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>South of house. ~5 m east of two track. 5% ground visibility. Terminated at impassable cobbles.</td>
</tr>
</tbody>
</table>
# Table B-1. Shovel Test Data

<table>
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<tbody>
<tr>
<td>VM17</td>
<td>41BX2193</td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>Off south fence around house near southwest corner of fence. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>VM18</td>
<td>1</td>
<td>0-8</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>~50 m east of fence line and ~5 m north of two track. Terminated at impassable cobbles.</td>
<td></td>
</tr>
<tr>
<td>VM19</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>compact friable silty clay</td>
<td>none</td>
<td>On 3rd transect from the north. Lithics on surrounding surface. Terminated at impassable cobbles.</td>
</tr>
<tr>
<td>MJ01</td>
<td>41BX2193</td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>2.5YR4/4</td>
<td>reddish brown</td>
<td>silty clay</td>
<td>none</td>
<td>Cacti, sprouting mesquite, grassy pasture. 5% sandstone cobbles. Terminated at bedrock.</td>
</tr>
<tr>
<td>MJ02</td>
<td>41BX2193</td>
<td>1-4</td>
<td>0-35</td>
<td>N</td>
<td>2.5YR4/4</td>
<td>reddish brown</td>
<td>silty clay</td>
<td>none</td>
<td>Cacti, sprouting mesquite, grassy pasture. 20% gravels and cobbles. Terminated at dense clay and cobbles.</td>
</tr>
<tr>
<td>MJ03</td>
<td>41BX2193</td>
<td>1-4</td>
<td>0-35</td>
<td>N</td>
<td>2.5YR4/4</td>
<td>reddish brown</td>
<td>silty clay</td>
<td>none</td>
<td>Cacti, sprouting mesquite, grassy pasture. 25% gravels and cobbles. Terminated at compact clay and cobbles.</td>
</tr>
<tr>
<td>MJ04</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-30</td>
<td>P</td>
<td>2.5YR4/4</td>
<td>reddish brown</td>
<td>silty clay</td>
<td>1 core</td>
<td>Cacti, sprouting mesquite, grassy pasture. 1 possible core 25-30 cmbs. 25% gravels. Terminated at dense clay and cobbles.</td>
</tr>
<tr>
<td>MJ05</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-25</td>
<td>N</td>
<td>2.5YR4/4</td>
<td>dark reddish brown</td>
<td>silty clay</td>
<td>none</td>
<td>Cacti, sprouting mesquite, grassy pasture. ~20% gravels and cobbles. Terminated at dense clay and cobbles.</td>
</tr>
<tr>
<td>ST #</td>
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</tr>
<tr>
<td>MJ06</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-30</td>
<td>N</td>
<td>2.5YR4/6</td>
<td>red</td>
<td>silty clay</td>
<td>none</td>
<td>Cacti, sprouting mesquite, grassy pasture. Few cobbles. Terminated at dense clay and cobbles.</td>
</tr>
<tr>
<td>MJ07</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-25</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>silty clay</td>
<td>none</td>
<td>Grassy pasture with mesquite saplings. Terminated at common cobbles and dense clay.</td>
</tr>
<tr>
<td>MJ08</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-20</td>
<td>N</td>
<td>2.5 YR3/3</td>
<td>dark reddish brown</td>
<td>silty clay</td>
<td>none</td>
<td>Grassy pasture with mesquite saplings. 50% cobbles. Terminated at impenetrable cobbles.</td>
</tr>
<tr>
<td>MJ09</td>
<td>41BX2193</td>
<td>1-3</td>
<td>0-25</td>
<td>N</td>
<td>7.5YR5/2</td>
<td>brown</td>
<td>silty clay</td>
<td>none</td>
<td>Oak and mesquite woods. Terminated at compact clay.</td>
</tr>
<tr>
<td>MV01</td>
<td>41BX2193</td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>clay loam</td>
<td>none</td>
<td>ASV=90%. Grassy pasture, no trees, thorny bushes. Terminated at impenetrable cobbles.</td>
</tr>
<tr>
<td>MV02</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>clay loam</td>
<td>none</td>
<td>ASV=90%. Grassy pasture, no trees, thorny bushes. Terminated at impenetrable cobbles.</td>
</tr>
<tr>
<td>MV03</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>clay loam</td>
<td>none</td>
<td>ASV=90%. Grassy pasture, no trees, thorny bushes. Terminated at impenetrable cobbles.</td>
</tr>
<tr>
<td>MV04</td>
<td>41BX2193</td>
<td>1</td>
<td>0-7</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>clay loam</td>
<td>none</td>
<td>ASV=90%. Grassy pasture, no trees, thorny bushes. Terminated at many impenetrable cobbles.</td>
</tr>
<tr>
<td>ST #</td>
<td>Site</td>
<td>Level</td>
<td>Depth</td>
<td>Positive/Negative</td>
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<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MV05</td>
<td>41BX2193</td>
<td>1</td>
<td>0-5</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>dry clay</td>
<td>none</td>
<td>ASV=90%. Grassy pasture, no trees, thorny bushes. Many cobbles. Very dry clay. Terminated at many impenetrable cobbles and boulders (medium size).</td>
</tr>
<tr>
<td>MV06</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>dry clay loam</td>
<td>none</td>
<td>ASV=90%. Grassy pasture, no trees, thorny bushes. Many cobbles. Very dry clay. Terminated at many impenetrable cobbles.</td>
</tr>
<tr>
<td>MV07</td>
<td>41BX2193</td>
<td>1</td>
<td>0-10</td>
<td>N</td>
<td>2.5YR3/3</td>
<td>dark reddish brown</td>
<td>dry clay loam</td>
<td>none</td>
<td>ASV=90%. Grassy pasture, no trees, thorny bushes. Many cobbles. Very dry clay. Terminated at many impenetrable cobbles.</td>
</tr>
<tr>
<td>MV08</td>
<td>41BX2193</td>
<td>1-2</td>
<td>0-15</td>
<td>N</td>
<td>7.5YR4/4</td>
<td>brown</td>
<td>dry clay loam</td>
<td>none</td>
<td>ASV=80%. Many trees and shrubs. Leaf litter and many cobbles. Terminated at impenetrable cobbles.</td>
</tr>
</tbody>
</table>
Appendix C

Historic-age Resources Maps and Photographs
Resource ID: 01  
Location: UTM NAD83 14R 553514 Easting 3276604 Northing  
Style/Form: N/A  
Description/Notes: Single-story, wood-frame residence with hipped roof and exposed rafter ends; single brick-stacked chimney; shed roof porch with metal porch supports on façade, hipped-roof porch addition with wood porch supports on rear elevation, attached shed roof carport, rear gable additions with board and batten in the gable ends, single-entry on each elevation, casement windows, pier-and-beam foundation.
Resource ID: 02
Location: UTM NAD83 14R 553467 Easting 3276601 Northing
Style/Form: N/A
Description/Notes: One-story, garage with side-facing gable and metal roof associated with Resource 01
Resource ID: 03
Location: UTM NAD83 14R 553451 Easting 3276614 Northing
Style/Form: N/A
Description/Notes: Brick and mortar outbuilding associated with Resource 01

Oblique of Resource 03, camera facing southwest

Oblique of Resource 03, camera facing northeast

C-3
View of Resource 04, camera facing northwest

Resource ID: 04
Location: UTM NAD83 14R 553502 Easting 3276564 Northing
Style/Form: N/A
Description/Notes: Water tower and well associated with Resource 01
Resource ID: 05
Location: UTM NAD83 14R 553265 Easting 3276935 Northing
Style/Form: N/A
Description/Notes: Asphalt runway associated with Resource 01