

**INTENSIVE CULTURAL RESOURCES SURVEY OF THE  
BULVERDE MARKETPLACE DEVELOPMENT  
BEXAR COUNTY, TEXAS**

Prepared for

**HPI**

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## ABSTRACT

On behalf of HPI, SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the 117-acre Bulverde Marketplace project area in Bexar County, Texas. Work was done to satisfy requirements of the San Antonio Historic Preservation Office (HPO) per the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code (Article 6 35-360 to 35-634). The project area is in northern San Antonio, near the intersection of Bulverde Road and Loop 1604.

The investigations included a background literature and records review and an intensive pedestrian survey with subsurface investigations in the form of shovel tests and backhoe trenches. Overall, the survey revealed the project area to be roughly equally divided between a rocky upland setting with prevalent limestone bedrock outcroppings and upland terraces with deeper soil. The survey included 31 shovel tests and six backhoe trenches placed in areas that had the highest potential for containing buried cultural materials with good integrity. Sparse lithic debitage was identified within 12 shovel test excavations and scattered across the surface of two locations within the project area.

Two archaeological sites (41BX1786 and 41BX1787) and several isolated finds were identified. Sites 41BX1786 and 41BX1787 are sparse surficial lithic scatters. No features were observed and buried artifacts are contained within the upper 35 cm, which had been previously disturbed by vegetation clearing and plowing. Neither 41BX1786 nor 41BX1787 are considered significant or eligible for listing in the National Register of Historic Places or for designation as a State Archaeological Landmark.

A dry-laid rock alignment was recorded about 45 meters from and paralleling a portion of the southern project area boundary. Near the northeast corner of the property is a twentieth-century cement water tank associated with a grove of pecan trees. No other associated structures were apparent within the project area, although modern residential developments are adjacent to it (beyond the limits of the current survey). No residential structures are depicted within the project area on either the 1940 or 1961 General Highway Map of Bexar County, Texas. As such, the rock alignment, water tank, and pecan grove are modern resources.

No other significant cultural resources were observed on the surface of the project area. Based on these results, no significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archaeological investigations within the project area.

No artifacts were collected; therefore, nothing was curated.

## MANAGEMENT SUMMARY

**PROJECT TITLE:** Intensive Cultural Resources Survey of the Bulverde Marketplace 117-Acre Tract, Bexar County, Texas

**SWCA PROJECT NUMBER:** 14714-293

**PROJECT DESCRIPTION:** On behalf of HPI, SWCA conducted an intensive cultural resource investigation of the 117-acre Bulverde Marketplace project area, which is scheduled for commercial development. The SWCA investigations included a background review and a pedestrian survey with subsurface investigations.

**LOCATION:** The project area is in northern San Antonio, near the intersection of Bulverde Road and Loop 1604. The irregular-shaped property is oriented northeast-southwest at its longest axis and is bisected by Elm Waterhole Creek, an ephemeral tributary of Elm Creek. Bulverde Road forms the project area's western and northern borders, while Classen Road is its eastern boundary. The southern boundary follows a newly constructed fence line. The project area is on the Longhorn, Texas USGS topographic quadrangle map.

**NUMBER OF ACRES SURVEYED:** 117

**DATES OF WORK:** August 11 and 12, 2008

**PURPOSE OF WORK:** Work was done to satisfy requirements of the San Antonio Historic Preservation Office (HPO) per the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code (Article 6 35-360 to 35-634).

**NUMBER OF SITES:** Two sites newly recorded: 41BX1786 and 41BX1787.

**CURATION:** No artifacts were collected during the fieldwork investigations; thus, nothing was curated.

**COMMENTS:** Two archaeological sites consisting of sparse surficial lithic scatters were identified. No features were observed and buried artifacts were contained within the upper 35 cm, which had been previously disturbed by vegetation clearing and plowing. Neither 41BX1786 nor 41BX1787 are considered significant or eligible for listing in the National Register of Historic Places or for designation as a State Archeological Landmark. No other significant cultural resources were observed on the surface of the project area. Accordingly, no significant cultural resources will be affected by any construction activities within the project area. No additional archaeological investigations are recommended for the project area.

## INTRODUCTION

On behalf of HPI, SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the 117-acre Bulverde Marketplace project area in northern Bexar County, Texas (Figure 1). Work was done to satisfy requirements of the San Antonio Historic Preservation Office (HPO) per the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code (Article 6 35-360 to 35-634). These investigations included a background review and a pedestrian survey with subsurface investigations. Three SWCA archaeologists conducted the fieldwork on August 11 and 12, 2008.

## DEFINITION OF STUDY AREA

The project area is located adjacent to Bulverde Road, near its intersection with Loop 1604 in northern San Antonio, Texas. The irregular-shaped project area is 117-acres in size and oriented northeast-southwest at its longest axis. The project area is traversed from west to east by Elm Waterhole Creek, an ephemeral tributary of Elm Creek. Bulverde Road forms the project area's western and northern borders, while Classen Road is its eastern boundary. The southern boundary follows a newly constructed fence line.

The project area is mainly situated on gently sloping upland terraces, bisected by the ephemeral tributary. The property along the creek is heavily vegetated with minimal disturbances from erosion and two-track dirt road construction. The tributary traversing the project area has a relatively small channel that was mostly dry at the time of survey. In places, it cuts into the local bedrock with little water or alluvium present, although two wetland areas were evident. Its shallow banks are composed of gravels and colluvium.

About half of the project area occupies rocky limestone upland terrain with soils of little vertical depth and broad areas of exposed bedrock (Figure 2). In places the project area contains thick vegetation with an overstory of oaks and cedar, and a dominant understory of juniper and various shrubs (Figure 3). The deepest soils are located near the northwest and southwest corners of the project area, where fallow agricultural fields are located. At the time of the survey, ground visibility within the project area ranged from a low of 35 percent to a high of 100 percent, but the visibility was typically about 50 percent.

## ENVIRONMENTAL SETTING

Broadly defined, the project area is within the Edwards Plateau region, which is described as rough, rocky areas with a tall to mid-grass understory and a mixed overstory of oaks, juniper, and mesquite that blends into other vegetative regions along its boundaries. Additionally, the project area lies along the margins of three intermingled floral communities of the Edwards Plateau region to the north and west, the Blackland Prairies region to the north, and Post Oak Savannah to the east (Correll and Johnston 1979:3-10). The Blackland Prairies region is composed of grasses with scattered timber particularly along drainages. The Post Oak Savannah region is characterized as primarily containing grassy plains with confined stands or groves of trees (Kutac and Caran 1994:13). The intermingled floral communities of the South Texas Plains, Edwards Plateau, Blackland Prairie, and Post Oak Savannah vegetation regions that surround the project area corresponds to the convergence of the broader Tamaulipan, Balconian, and Texan biotic provinces of Texas defined by Blair (1950).

The geology of the project area is mapped as Quaternary-age Fluvial terrace deposits and Buda Limestone (Barnes 1983). Most of the

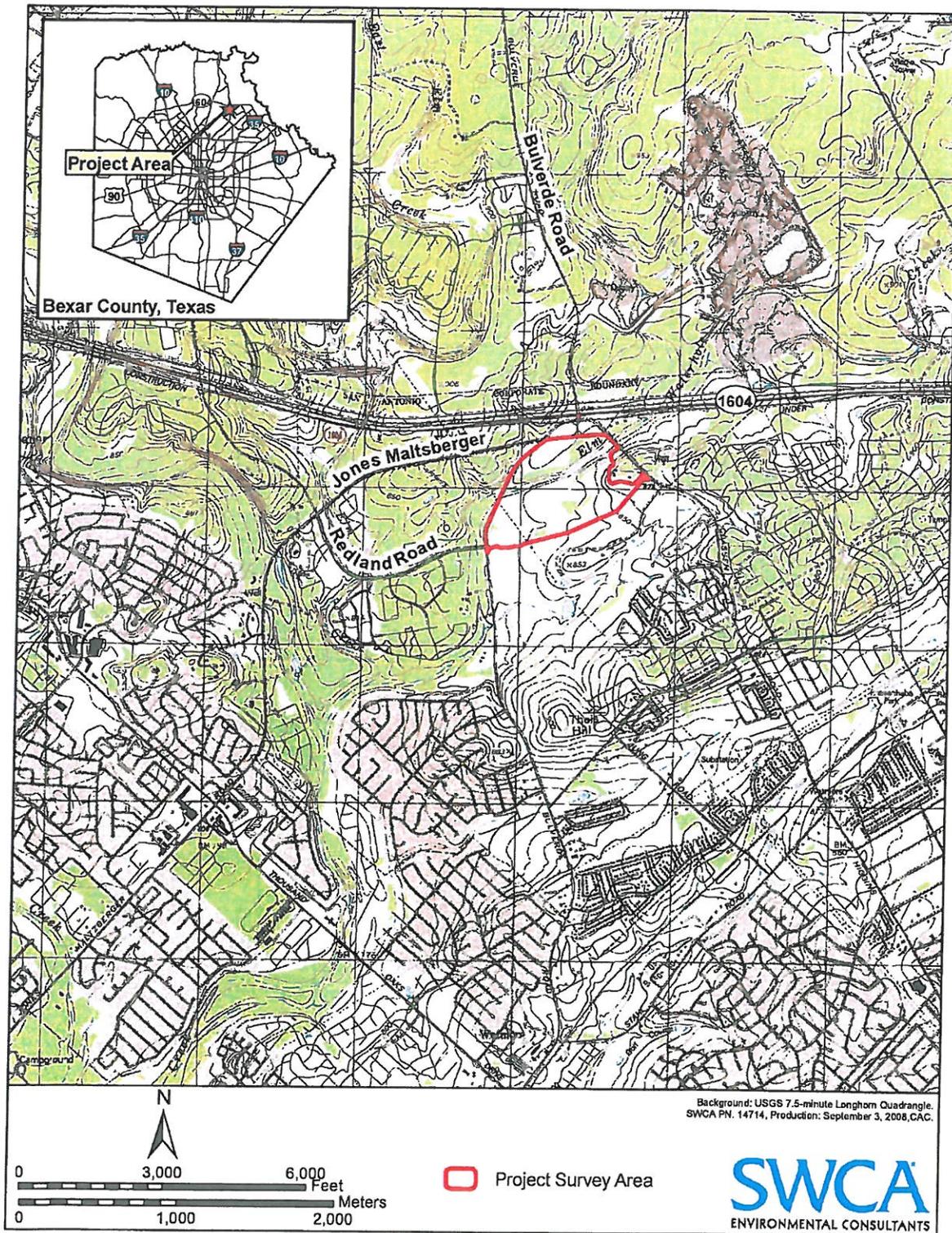


Figure 1. Project location map.



**Figure 2.** Typical vegetation and disturbances within Bulverde Marketplace project area.



**Figure 3.** Riparian vegetation along Elm Waterhole Creek.

northern portion of the property is mapped as Fluvial terrace deposits consisting of gravel, sand, silt, and clay. Buda Limestone deposits are 60 to 100 feet thick and are located at the southernmost portion of the project area (Barnes 1983).

In order of predominance, the soils of the project area are mapped as Lewisville silty clay (47 percent), Tarrant clay loam (28 percent), Patrick clay loam (21 percent), and Crawford and Bexar stony soils (4 percent). The Lewisville silty clay, with 0–1 percent slopes (11 percent), occur as nearly level, broad terraces along creeks and represent prime agricultural land and are about four feet thick (Taylor et al. 1991:25). Lewisville silty clay, with 1–3 percent slopes (36 percent), are characterized as occupying long, narrow, sloping areas that separate nearly level terraces from soils of the uplands and are about three feet thick (Taylor et al. 1991:25). These soils are adjacent to either bank of Elm Waterhole Creek (a tributary of Elm Creek) in the western half of the project area where they are separated from the creek bed by Patrick soils. Lewisville soils are also mapped along much of the southern boundary of the project area and correspond to previously cleared areas used for farming or pasture.

The Tarrant association stony clay loams (0–5 percent slopes) are characterized as very shallow to shallow, well drained soils on convex to plane slopes in undulating to very steep uplands. They formed in residuum over interbedded limestone, marls and chalk (Taylor et al. 1991:30). These soils occupy areas that have mostly been previously cleared of vegetation, although trees and underbrush cover some areas. Tarrant soils are adjacent to the southern bank of Elm Waterhole Creek in the eastern half of the project area, separated from the channel by Patrick soils.

Patrick silty clays (0–3 percent slopes) are characterized as shallow, dark-colored, nearly level, and gently sloping soils (Taylor et al. 1991:26). Patrick soils form the banks of the entire length of Elm Waterhole Creek through the project area.

Finally, Crawford and Bexar stony soils are found in two small areas: near the northeast and southeast corners of the project area. These soils are characterized as shallow to moderately deep cherty clay to gravelly loam over hard limestone (Taylor et al. 1991:13).

### **CULTURAL HISTORY OF CENTRAL TEXAS AND THE SAN ANTONIO REGION**

The project area lies at the intersection of two archeological regions, the Central Texas Region and South Texas. These regions are recent analytical constructs but they do contain a measure of distinct, spatial, cultural information (see Prewitt 1981; Collins 2004). In this study, the project area is included with the Central Texas Archeological Region.

Following Collins (2004), the archeological periods in Central and South Texas are, Paleoindian, Archaic, Prehistoric and Historic. Subperiods of the Paleoindian period are Early and Late. The Archaic subperiods are Early, Middle, and Late Archaic. The date ranges for archaeological periods uses radiocarbon years B.P., following the convention of Collins (1995).

Within the San Antonio area are significant archeological deposits representing all archeological periods. Significant archeological sites include Richard Beene (41BX831) which contained discrete Early Archaic deposits of Angostura and split-stemmed points (Thoms et al. 1996) and Pavo Real (41BX52), which contains Early Paleoindian Clovis and Folsom deposits (Collins et al. 2003).

The Historic period begins with the first European documentation from the exploits of Cabeza de Vaca in the 1530's. Further exploration and conquest of Texas by the Spanish occurred, in part, because of accounts of fabled riches suggested by de Vaca, and the expectations of riches fueled by earlier conquests of Mexico and Peru. The Historic period is divided into eras corresponding to political and social change.

### ***PALEOINDIAN PERIOD***

Paleoindian sites occur in a variety of topographic settings and include both surface and deeply buried sites, rockshelter sites, and isolated artifacts spanning over 2500 years of occupations (ca. 11,500–8800 B.P.) in the Central Texas region (Collins 2004:116). The period is often described as having been characterized by small but highly mobile bands of foragers who were specialized hunters of Pleistocene megafauna. But Paleoindians probably used a much wider array of resources (Meltzer and Bever 1995:59), including small fauna and plant foods. Faunal remains from Kincaid Rockshelter and the Wilson-Leonard site (41WM235) support this view (Bousman 1998; Collins 1998; Collins et al. 1989).

Collins (1995, 2004) divides the Paleoindian period into early and late subperiods. Two main projectile point styles, Clovis and Folsom, are included in the early subperiod. A third type, Plainview may be contemporary with Folsom. Clovis chipped stone artifact assemblages, including the diagnostic fluted lanceolate Clovis point, were produced by bifacial, flake, and prismatic-blade techniques on high-quality and oftentimes exotic lithic materials (Collins 1990). Along with chipped stone artifacts, Clovis assemblages include engraved stones, bone and ivory points, stone bolas, and ochre (Collins 2004:116; Collins et al. 1992). Clovis points are found evenly distributed along the eastern edge of the Edwards

Plateau, where the presence of springs and outcrops of chert-bearing limestone are common (Meltzer and Bever 1995:58). Analyses of Clovis artifacts and site types suggest that Clovis peoples were well-adapted, generalized hunter-gatherers with the technology to hunt larger game but not solely rely on it.

In contrast, Folsom tool kits—consisting of fluted Folsom points, thin unfluted (Midland) points, large thin bifaces, and end scrapers—are more indicative of specialized hunting, particularly of bison (Collins 2004:117). Folsom points have been recovered from Kincaid Rockshelter (Collins et al. 1989) and Pavo Real (Collins et al. 2003). Folsom point distributions, both the frequency and spatial patterning, differ from the Clovis patterns, suggesting a shift in adaptation patterns (Bever and Meltzer 2007; Meltzer and Bever 1995:60 and 74).

Postdating Clovis and Folsom points in the archaeological record are a series of dart point styles (primarily unfluted lanceolate darts) for which the temporal, technological, or cultural significance is unclear. Often, the Plainview type name is assigned these dart points, but Collins (2004:117) has noted that many of these points typed as Plainview do not parallel Plainview type-site points in thinness and flaking technology. At Wilson-Leonard, the Paleoindian projectile point sequence includes an expanding-stem dart point termed Wilson, which dates to ca. 10,000–9500 B.P. Postdating the Wilson component is a series of unfluted lanceolate points referred to as Golondrina-Barber, St. Mary's Hall, and Angostura, but their chronological sequence is poorly understood.

By the Late Paleoindian subperiod, aspects of Archaic lifeways became increasingly entrenched, and in many ways, the Late Paleoindian subperiod is a transition between the early Paleoindian and succeeding Archaic pe-

riods (Collins 2004:118). During this period there is evidence of a diverse subsistence practice, a variety of lithic tools and ritualized burial practices (Bousman 1998, 2004).

### **ARCHAIC PERIOD**

The longest period is the Archaic, beginning between 8800 B.P. and 8000 B.P. and extending until approximately 1200 B.P. when the widespread use of the bow and arrow occurs. Collins (1995, 2004) and Collins et al. (1998) use 8800 B.P. as the approximate starting date for the Early Archaic where there is a shift toward hunting and gathering of a wider array of animal and plant resources and a decrease in group mobility (Willey and Phillips 1958:107–108).

In the eastern and southwestern United States and on the Great Plains, development of horticultural-based, semi-sedentary to sedentary societies succeeds the Archaic period. In these areas, the Archaic truly represents a developmental stage of adaptation as Willey and Phillips (1958) define it. For central Texas, this manifestation of the Archaic is somewhat problematic. An increasing amount of evidence suggests that Archaic-like adaptations were in place before the Archaic (see Collins 2004:118, 1998; Collins et al. 1989) and these practices continued into the succeeding Late Prehistoric period (Collins 1995:385; Prewitt 1981:74).

### **EARLY ARCHAIC**

The use of 8800 B.P. as a beginning date for the Early Archaic appears to be at the extreme older date range. It is just as probable that the date is closer to 8000 B.P., which is closer to the beginning date of the Early Archaic for South Texas, according to Hester (2004).

Early Archaic (8800–6000 B.P.) lithic assemblages can be diverse, with a greater variety of

stone tool types than during the previous Paleoindian period (Weir 1976:115–122), suggesting that populations were highly mobile and population densities were probably low (Houk et al 2008). It has been noted that there is a concentration Early Archaic sites are concentrated along the eastern and southern margins of the Edwards Plateau (Johnson and Goode 1994; McKinney 1981, Story 1985). This distribution may indicate drier and/or more extreme climatic conditions at the time, given that these environments have more reliable water sources and a more diverse resource base than other parts of the region. Early Archaic projectile point styles include Hoxie, Gower, Wells, Martindale, and Uvalde. Clear Fork and Guadalupe bifaces and a variety of other bifacial and unifacial tools are common to Early Archaic assemblages. The increasing regional variation in tool styles also suggests increasing territorialism that reduced exchanges of technology and interaction between distant and possibly local groups (Oksanen and Bousman 2007).

Construction and use of rock hearths and ovens, which had been limited during late Paleoindian times, became commonplace. Such a practice probably was related to cooking plant foods, particularly roots and bulbs, many of which must be subjected to prolonged periods of cooking to render them consumable and digestible (Black et al. 1997:257; Wandsnider 1997; Wilson 1930).

Significant Early Archaic sites include the Richard Beene site in Bexar County (Thoms 2005; Thoms and Mandel 1992), the Gatlin site in Kerr County (Houk et al. 2008), Wilson-Leonard (Collins et al. 1998), the Icehouse site (41HY161) in San Marcos (Oksanen and Bousman 2007) and the Youngsport site in Bell County (Shafer 1963). The end of the Early Archaic is a poorly documented transition. The convention of 6000 B.P. intends to mark the appearance of both a chang-

ing environment and the appearance of specialized technology associated with bison hunting.

#### MIDDLE ARCHAIC

During the Middle Archaic period (6000–4000 B.P.), the number and distribution of sites, as well as their size, probably increased as population densities grew (Prewitt 1981:73; Weir 1976:124, 135). Macrobands may have formed at least seasonally, or more small groups may have used the same sites for longer periods (Weir 1976:130–131). Development of burned rock middens toward the end of the Middle Archaic suggest a greater reliance on plant foods, although tool kits still imply a considerable dependence on hunting (Prewitt 1985:222–226). Middle Archaic projectile point styles include Bell, Andice, Taylor, Baird, Nolan, and Travis. Bell and Andice points reflect a shift in lithic technology from the preceding Early Archaic Martindale and Uvalde point styles (Collins 2004:119). Johnson and Goode (1994:25) suggest that the Bell and Andice darts are parts of a specialized bison-hunting tool kit. They also believe that an influx of bison and bison-hunting groups from the Eastern Woodland margins during a slightly more mesic period marked the beginning of the Middle Archaic.

Although no bison remains were detected, Bell and Andice points were recovered from the Cibolo Crossing (Kibler and Scott 2000), Panther Springs Creek, and Granberg II (Black and McGraw 1985) sites in Bexar County. Bison were either absent or decreased drastically in number as more-xeric conditions returned during the late part of the Middle Archaic. Later Middle Archaic projectile point styles represent another shift in lithic technology (Collins 2004:120; Johnson and Goode 1994:27). At the same time, a shift to more-xeric conditions saw the burned rock middens develop, probably because intensified use of a specific resource (geophytic or xerophytic

plants) or resource patches meant the debris of multiple rock ovens and hearths accumulated as middens on stable to slowly aggrading surfaces, as Kelley and Campbell (1942) suggested many years ago. Johnson and Goode (1994:26) believe that the dry conditions promoted the spread of yuccas and sotols, and that it was these plants that Middle Archaic peoples collected and cooked in large rock ovens.

#### LATE ARCHAIC

During the succeeding Late Archaic period (4000 to 1300–1200 B.P.), populations continued to increase (Prewitt 1985:217). Within stratified Archaic sites such as Loeve-Fox, Cibolo Crossing, and Panther Springs Creek, the Late Archaic components contain the densest concentrations of cultural materials. Establishment of large cemeteries along drainages suggests certain groups had strong territorial ties (Story 1985:40). A variety of projectile point styles appeared throughout the Late Archaic period. Middle Archaic subsistence technology, including the use of rock and earth ovens, continued into the Late Archaic period. Collins (2004:121) states that, at the beginning of the Late Archaic period, the use of rock ovens and the resultant formation of burned rock middens reached its zenith and that the use of rock and earth ovens declined during the latter half of the Late Archaic. There is, however, mounting chronological data that midden formation culminated much later and that this high level of rock and earth oven use continued into the early Late Prehistoric period (Black et al. 1997:270–284; Kleinbach et al. 1995:795).

The use of rock and earth ovens (and the formation of burned rock middens) for processing and cooking plant foods suggests that this technology was part of a generalized foraging strategy. However, at times during the Late Archaic, this generalized foraging strategy appears to have been marked by shifts to a

specialized economy focused on bison hunting (Kibler and Scott 2000:125–137). Castroville, Montell, and Marcos dart points are elements of tool kits often associated with bison hunting (Collins 1968). Archaeological evidence of this association is seen at Bonfire Shelter in Val Verde County (Dibble and Lorrain 1968), Jonas Terrace (Johnson 1995), Oblate Rockshelter (Johnson et al. 1962:116), John Ischy (Sorrow 1969), and Panther Springs Creek (Black and McGraw 1985).

The Archaic period represents a hunting and gathering way of life that was successful and that remained virtually unchanged for more than 7,500 years. This notion is based in part on fairly consistent artifact and tool assemblages through time and place and on resource patches that were used continually for several millennia, as the formation of burned rock middens shows. This pattern of generalized foraging, though marked by brief shifts to a heavy reliance on bison, continued almost unchanged into the succeeding Late Prehistoric period.

#### LATE PREHISTORIC PERIOD

Introduction of the bow and arrow and, later, ceramics into Central Texas marked the Late Prehistoric period. Population densities dropped considerably from their Late Archaic peak (Prewitt 1985:217). Subsistence strategies did not differ greatly from the preceding period, although bison again became an important economic resource during the late part of the Late Prehistoric period (Prewitt 1981:74). Use of rock and earth ovens for plant food processing and the subsequent development of burned rock middens continued throughout the Late Prehistoric period (Black et al. 1997; Kleinbach et al. 1995:795). Horticulture came into play very late in the region but was of minor importance to overall subsistence strategies (Collins 2004:122).

In central Texas, the Late Prehistoric period generally is associated with the Austin and Toyah phases (Jelks 1962; Prewitt 1981:82–84). Austin and Toyah phase horizon markers, Scallorn-Edwards and Perdiz arrow points, respectively, are distributed across most of the state. Violence and conflict often marked introduction of Scallorn and Edwards arrow points into central Texas—many excavated burials contain these point tips in contexts indicating they were the cause of death (Prewitt 1981:83). Subsistence strategies and technologies (other than arrow points) did not change much from the preceding Late Archaic period. Prewitt's (1981) use of the term "Neoarchaic" recognizes this continuity. In fact, Johnson and Goode (1994:39–40) and Collins (2004:122) state that the break between the Austin and Toyah phases could easily and appropriately represent the break between the Late Archaic and the Late Prehistoric.

Around 1000–750 B.P., slightly more-xeric or drought-prone climatic conditions returned to the region, and bison came back in large numbers (Huebner 1991; Toomey et al. 1993). Using this vast resource, Toyah peoples were equipped with Perdiz point-tipped arrows, end scrapers, four-beveled-edge knives, and plain bone-tempered ceramics. Toyah technology and subsistence strategies represent a completely different tradition from the preceding Austin phase. Collins (1995:388) states that formation of burned rock middens ceased as bison hunting and group mobility obtained a level of importance not witnessed since Folsom times. Although the importance of bison hunting and high group mobility hardly can be disputed, the argument that burned rock midden development ceased during the Toyah phase is tenuous. Black et al. (1997) claim that burned rock midden formation, although not as prevalent as in earlier periods, was part of the adaptive strategies of Toyah peoples.

## ***HISTORIC PERIOD***

The historic period in Texas begins in 1528 near Galveston Island with the encounter between the Pánfilo de Narváez expedition and a Karankawa group. After disaster befell the expedition, one of the members, Cabeza de Vaca, spent six years of wandering through Texas in the 1530's. Cabeza de Vaca traversed coastal Texas and parts of the interior and recounted in great ethnographic detail the peoples he encountered (Chapman 1992). Based in part from his exploits and suggestions of a kingdom of gold, the Coronado expedition was formed to search for a "northern" Cuzco or Teotihuacan, and by 1540 it crossed into New Mexico, and into Texas (Fehrenbach 1985).

The following historic discussion focuses on the San Antonio region and the significance of this region during the historic period and the creation of Texas independence, sovereignty and statehood.

### **EARLY HISTORIC TO 1718**

The Native Americans living in the missions along the San Antonio River were referred to by the Spanish as "Coahuiltecan". The name comes from a southern tribe named after the Spanish province of "Coahuila", which later became a Mexican state. The term "Coahuiltecan" is a generalized term and makes no distinction between language and cultural differences of the tribes living in the area. The abundant berries, nuts and fish made San Pedro Springs an attractive place to camp and/or live (Johnston 1947; Ramsdell 1968).

The San Antonio area was first explored in 1691 by the Governor of the Spanish Province of Texas, Domingo Terán de los Ríos, and Father Damián Massenet. The pair traveled to San Pedro Springs where they encountered a hunter-gather tribe named Payaya. In their vil-

lage named Yanaguana, the Payaya lived in simple huts made of brushwood and grass. The river and village were renamed after San Antonio de Padua by Terán and Massenet (Johnston 1947).

Further Spanish exploration was conducted in 1709 by Father Antonio de San Buenaventura y Olivares. Father Olivares was the first to express interest in setting up a mission in the San Antonio area (Fehrenbach 2008; Johnston 1947).

### **SPANISH TEXAS: 1718 TO 1820**

San Antonio de Béxar Presidio, located on the east bank of the San Antonio River, was founded in 1718. In the same year, Mission San Antonio de Valero, later known as the Alamo, was transferred from the Rio Grande by Father Olivares. This mission was named after St. Anthony of Padua and the Marquis de Valero, the Viceroy of New Spain. The church was originally constructed of adobe and the huts of wood and thatch (Johnston 1947; Schoelwer 2008).

La Villita, an Indian village about 1,500 feet south of the Alamo, was built around 1722. The Indians from the Mission San Antonio de Valero lived in La Villita in crude huts called "jacales" (Johnston 1947:31). Jacales were typically constructed with an upright line of poles sunk into a footing ditch and then woven horizontally with smaller sticks. The walls were subsequently covered with adobe. Later, La Villita served as a home to the families of soldiers who protected the mission. (Johnston 1947; Magruder 2008).

The villa of San Fernando de Béxar was founded in 1731 by the Canary Islanders. The Canary Islanders were a small group, totaling 56 people, sent by Spain to colonize the province of Texas. Under the leadership of Juan Leal Goraz, the village of San Fernando de

Béxar was founded near the Presidio de Béxar and the first civil government in Texas was formed (Butterfield 1968; Ramsdell 1968).

In 1773, San Antonio de Béxar became the capital of Spanish Texas. By 1790, most of the Indians living in San Antonio had either already abandoned the missions or died from diseases like smallpox and the measles brought in by Europeans. Mission San Antonio de Valero was secularized in 1794 and mission land, excluding the church and convent, was divided amongst the few Indians that remained in the area (Johnston 1947).

Spain and Mexican revolutionists fought over San Antonio throughout the early 1800s. The Casas revolt of 1811 ended with the assertion of power by the Spanish regime. Captain Juan Bautista de las Casas went against the Spanish authority and was arrested and sent to Mexico. In Monclova, he was tried and found guilty of treason and shot to death. His head was sent back to San Antonio as a sign of defeat (Caldwell 2008; Ramsdell 1968).

San Antonio declared for Mexican independence in 1813 but was recaptured by Royalist forces in the battles of Alazán Creek and Medina. During this period of unrest, conditions in Texas were becoming worse. Inadequate provisions and neglected agricultural fields along with the fear of political and military upheavals forced many Texans to abandon their homes and move elsewhere. (Fehrenbach 2008; Heusinger 1951).

#### **TEXAS REVOLUTION, INDEPENDENCE AND STATEHOOD: 1820 TO 1848**

During the Texas Revolution, San Antonio was the site of several battles, including the siege of Bexar and the battle of the Alamo (Fehrenbach 2008).

General Martín Perfecto de Cós, along with 650 men, fortified the plaza of San Antonio de Béxar west of the San Antonio River and the Alamo to the east. Texan volunteers arrived in San Antonio on October 12, 1835 to set up camp. Upon hearing the Mexican army's morale and rations were low a council was held to decide whether to attack. Approximately 300 men joined Ben Milam and the battle finally began on December 5, 1835. General Cós focused his troops at the Alamo but was unsuccessful in holding San Antonio. By the morning of December 9, 1835, Cós surrendered (Barr 2008).

On February 23, 1836, nearly 150 American volunteers took refuge from the approaching Mexican Army in the Alamo Mission in San Antonio, Texas under orders from Colonel William B. Travis (Hatch 1999). A standoff between the Texian Revolutionary Army and the Mexican Army, lasting 13 days, ended in complete annihilation of the Alamo defenders and a victory for the Mexican General Antonio Lopez de Santa Anna (Huffines 1999).

The Alamo Garrison had been acquired following the defeat of Mexican General Martín Perfecto de Cós' army in the December 1835 Battle of San Antonio. The subsequent formation of the Matamoros Expedition cost the Alamo much needed supplies and men. This expedition was created with the intentions of invading Mexico through the city of Matamoros; however, the plan was never executed due to political turmoil in the Texas government. Some relief came over the next few months with the arrivals of Col. Jim Bowie, Col. William B. Travis and David Crockett; each bringing 12-30 additional men. Rumors of the approaching Mexican army of nearly 2,000 men soon followed (Hatch 1999).

General Santa Anna arrived in San Antonio with between 1,800 and 2,100 men on February 23, 1836. Upon their arrival Col. Travis

ordered his men to retreat into the Alamo (Hatch 1999). Gen. Santa Anna raised a red flag signifying “no quarter–no mercy” and received a cannon shot from the Texians in defiance (Hatch 1999:20). Another defiant cannon is rumored to have been shot in response to a request for an unconditional surrender. In a letter sent February 24, 1836 addressed to the “People of Texas and all Americans in the World,” Col. Travis pleads for assistance and states “if this call is neglected, I am determined to sustain myself as long as possible & die like a soldier who never forgets what is due his own honor & that of his country. Victory or Death” (Groneman 2001:6).

Over the next few days the Alamo defenders suffered shortages of provisions and water, constant bombardment on the Alamo and psychological warfare through the nights ordered by Gen. Santa Anna. On the third day of the siege, Mexican troops created a diversion at the Alamo’s main gate in an attempt to cross the San Antonio River and reach the south wall of the Alamo through La Villita. The Texians repelled both attacks and subsequently burned buildings in close proximity to the Alamo to deny shelter for Santa Anna’s men in La Villita (Hatch 1999). Gen. Santa Anna ordered many small attacks in an attempt to breach the Alamo’s walls. Many Mexicans lost their lives in the process; however, no Texians were killed in the 12-day siege before the final battle (Hatch 1999; Huffines 1999).

On March 4, Gen. Santa Anna held a Council of War to decide plans of attack and the fate of prisoners. The final decision to attack the Alamo with full force was made the following day, March 5, 1836 (Hatch 1999). The Mexican army moved into position just after midnight on March 6 and waited for the signal to attack. This call came around 5 o’clock in the morning when a soldier cried out “Viva Santa

Anna!” (Huffines 1999:134). With the element of surprise lost, Santa Anna ordered his troops to begin the attack on the Alamo garrison (Huffines 1999).

The vicious battle, lasting only 90 minutes, left every Texian combatant dead. The number of Mexican dead is a matter of debate, with numbers ranging from 100 to 1,600; uncounted more were wounded. The Texian’s bodies were burned on funeral pyres on either side of the Alameda. Santa Anna won the battle at the Alamo but victory and independence was won by the Texans two weeks later in the Battle of San Jacinto (Hatch 1999; Huffines 1999).

After Mexican forces were removed from San Antonio in December of 1836, the Republic of Texas began organizing Bexar County. The next month, San Antonio was chartered as the county seat. Despite these progressions, many conflicts continued to occur in San Antonio including the Council House Fight of 1840 and two Mexican invasions in 1842 (Fehrenbach 2008).

#### **1848 TO 1900**

After Texas entered the Union in 1845, San Antonio’s already diverse population grew dramatically. The Irish came to Texas in the late 1830s to early 1840s and established “Irish Flat.” Germans settled in San Antonio in the 1850’s introducing the “Bier Halle” (Butterfield 1968: 21) to the area. French immigrants added artists and artisans to the culture of the city. Later immigrants to the area included Polish, Italians, Greeks, Syrians and in 1910 Chinese, all of which formed small communities within the city of San Antonio.

Culture and architecture from each immigrant community have seeped into San Antonio and merged together, forming a rich cultural community. This diverse culture is evident as

you observe historic missions and Victorian mansions built next to modern offices and homes (Butterfield 1968; Fehrenbach 2008).

On March 2, 1861 Texas seceded from the Union and soon after the Civil War began. San Antonio was a Confederate storage area as well as a location to form military units; however, the city kept its distance from most of the fighting (Fehrenbach 2008).

After the Civil War, industries such as cattle, distribution, ranching, mercantile, gas and oil, and military centers in San Antonio prospered. The arrival of a railway transportation system in San Antonio in 1877 inspired economic growth throughout the city (Fehrenbach 2008). Modernization 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 power plant were all established or planned around this time (Butterfield 1968; Fehrenbach 2008).

## 1900 TO 1950

In 1921, a disastrous flood engulfed Houston and St. Mary's Street with approximately 9 feet of water. The Olmos Dam was built in response to this event to prevent further flooding, as well as the straightening and widening of sections of the San Antonio River. Another recommendation was to construct an underground channel in downtown San Antonio and covering portions of the river with concrete. This last idea upset many people, but eventually the compromise was reached in creating a Riverwalk with shops and restaurants. Construction of this Riverwalk was completed in 1941 (Long 2008).

As the US entered into WWII, San Antonio became an important military center and other city activities and construction ceased for

nearly five years. Fort Sam Houston, Kelly, Randolph, Brooks and Lackland Air Force bases are all active military training centers today (Heusinger 1951).

Tourism is one of the San Antonio's most important industries drawing tens of thousands of visitors every year. More recent features include theme parks, zoos, museums, gardens, parks and sporting attractions. The Riverwalk, also known as the Paseo del Rio, consists of over 2½ miles of shops and restaurants as well as a boat ride along the channel. This is probably one of San Antonio's most visited attractions.

San Antonio Missions National Historical Park includes The Alamo (1718), Mission Concepción (1731), Mission San José (1720), Mission San Juan Capistrano (1731), and Mission San Francisco de la Espada (1741). San Fernando Cathedral (1758), the Spanish Governor's Palace (1749), the Quadrangle at Fort Sam Houston (1878), and the Bexar County Courthouse (1891) are visited due to their interesting architecture.

## METHODS

### *BACKGROUND REVIEW*

SWCA conducted a thorough background cultural resources and environmental literature search of the project area. An SWCA archaeologist reviewed the Bulverde, Texas, USGS 7.5-minute topographic quadrangle map at the Texas Archeological Research Laboratory (TARL) and searched the Texas Historical Commission's (THC) Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located in or near the project area. In addition to identifying recorded archaeological sites, the review included information on the following types of cultural resources: National Register of His-

toric Places (NRHP) properties, State Archaeological Landmarks (SALs), Official Texas Historical Markers, Registered Texas Historic Landmarks (RTHLs), cemeteries, and local neighborhood surveys. The archaeologist also examined the *Soil Survey of Bexar County, Texas* (Taylor et al. 1991) and the *Geologic Atlas of Texas, San Antonio Sheet* (Barnes 1983). Aerial photographs were reviewed to assist in identifying any disturbances.

### ***FIELD METHODS***

SWCA's investigations consisted of an intensive pedestrian survey with subsurface investigations within the project area. Archaeologists examined the ground surface and extensive erosional profiles and exposures for cultural resources. Subsurface investigations involved shovel testing and backhoe trenching in settings with the potential to contain buried cultural materials.

#### **SHOVEL TESTING**

The shovel tests were approximately 30 cm in diameter and excavated to culturally sterile deposits or impassible limestone, whichever came first. The matrix from each shovel test was screened through ¼-inch mesh, and the location of each excavation was plotted using a hand-held GPS receiver. Each shovel test was recorded on a standardized form to document the excavations.

#### **BACKHOE TRENCHING**

Portions of the project included topographic settings that have the potential for deeply buried archaeological sites. These areas are mainly alluvial terraces along Elm Waterhole Creek that are crossed by the project. The primary method for quickly and efficiently exploring these areas was backhoe trenching. In the areas deemed necessary for backhoe trenches, the trenches were placed approximately 100–300 m apart.

Backhoe trenches were excavated to a depth sufficient to determine the presence/absence of buried cultural materials and allow the complete recording of all features and geomorphic information to depths of project's impacts. Generally, trenches were 1.6 m deep, 6 m in length, and 1.5 m wide. An experienced archaeologist monitored all trenching while excavations were underway. Stratigraphic soils descriptions were recorded for each trench by an experienced archaeologist.

All work was performed in accordance with OSHA (29 CFR Part 1926) and the Texas Trench Safety Act (H. B. 1569). The entire process was thoroughly photographed and all trenches were backfilled and leveled upon completion of excavation and recording.

### **RESULTS**

#### ***BACKGROUND REVIEW***

The results of the background review determined that the project area has not been previously surveyed and no previously recorded sites are within the project area location. However, there are 20 previously recorded sites (Table 1) and numerous previously conducted surveys within 1 mile.

Two surveys have been performed on Loop 1604 by the State Department of Highways and Public Transportation (SDHPT), now the Texas Department of Transportation. The surveys were performed in 1971 and 1984 and two sites were identified within 1 mile north of the project area. Site 41BX66 is prehistoric campsite that was later tested in 1988 and 1989. The site was reported to be ineligible for NRHP listing and since been impacted by further expansion of Loop 1604 (McGraw et al. 1991). Site 41BX68 is a prehistoric quarry and chipping site that was later revisited in 1974 for the Salado Creek Watershed survey. The

Table 1. Previously recorded sites within 1 mile of the project area.

Site Trinomial	Distance from property in miles	Site Type	Time Period	Eligibility Status	Recommendations	Current Status
41BX66	0.3 mi north	Campsite	Prehistoric	Ineligible	No further work	Destroyed by Loop 1604
41BX68	0.1 mi north	Quarry	Prehistoric	Ineligible	No further work	Mostly destroyed by residential development and Loop 1604
41BX301	1 mi northeast	Quarry and knapping site	Prehistoric	Undetermined	Further work recommended	Intensively surveyed in 1977, possibly destroyed by modern quarry
41BX427	0.9 mi northwest	Lithic scatter	Prehistoric	Ineligible	No further work	Undisturbed
41BX452	0.8 mi west	Rockshelter	Prehistoric	Ineligible	No further work	Destroyed by floodwater retarding structure
41BX454	0.8 mi northwest	Lithic scatter	Prehistoric	Ineligible	No further work	Possibly impacted by floodwater retarding structure
41BX570	1 mi west	Rockshelter	Prehistoric	Ineligible	No further work	Destroyed by floodwater retarding structure
41BX623	1 mi southeast	Homestead	Historic-19th century	Ineligible	No further work	Unknown
41BX624	1 mi southeast	Utility Building	Historic-Late 19th to Early 20th century	Ineligible	No further work	Unknown
41BX901	0.4 mi west	Stone quarry	Prehistoric	Ineligible	No further work	Destroyed by school
41BX903	0.1 mi west	Burned rock midden	Prehistoric	Eligible	Further work recommended	Unknown
41BX904	0.2 mi west	Chipping station	Prehistoric	Not reported	Not reported	Unknown
41BX905	0.1 mi west	Quarry	Prehistoric	Eligible	Further work recommended	Unknown
41BX906	0.1 mi west	Quarry and lithic scatter	Prehistoric	Not reported	Not reported	Unknown
41BX907	0.2 mi west	Quarry	Prehistoric	Not reported	Not reported	Destroyed by residential development
41BX909	0.1 mi west	Lithic scatter	Prehistoric	Not reported	Not reported	Destroyed by residential development
41BX913	0.5 mi east	Caliche stone house	Historic- ca. 1893	Not reported	Not reported	Possibly destroyed or impacted by residential development
41BX914	0.4 mi south	Log house	Historic	Not reported	Not reported	Unknown
41BX1459	0.45 mi west	Unknown	Unknown	Not reported	Not reported	Unknown, site data not located
41BX1625	0.5 mi west	Lithic scatter	Prehistoric	Ineligible	No further work	Likely destroyed by development

site was reported to be ineligible for NRHP listing and no further work was recommended.

Most of the surveys within 1 mile of the project area were performed on behalf of the Soil Conservation Service for the Salado Creek Watershed and Drainage surveys. These surveys were conducted north of Loop 1604 and west of the project area. The surveys were performed in 1974, 1977, 1978, 1979, and 1982 (Brown et al. 1977; Cole 1982; Hester et al. 1974, 1977; Patterson 1982). Numerous sites were identified during the investigations and five are within 1 mile of the project area. Sites 41BX452 and 41BX570 are rockshelters located west of the property that were later destroyed during the construction for a floodwater retarding structure. Sites 41BX427 and 41BX454 consist of a prehistoric lithic scatter and stone chipping site, respectively. The sites were determined to be ineligible for NRHP listing and no further work was recommended. Site 41BX301 is a prehistoric quarry and knapping site. The site was intensively surveyed in 1977 and further work was recommended to determine NRHP eligibility status (Hester et al. 1977).

West of the project area, nine previously recorded sites are within 1 mile of the property. Seven sites were initially recorded by the THC steward, C. K. Chandler in 1990. The sites consist of prehistoric lithic scatters, quarries, and a chipping station. Three sites were later revisited during a survey performed for the Northeast Independent School District of San Antonio near Jones Maltsberger Road (Potter et al. 1992). Site 41BX901 is a prehistoric stone quarry that has been intensively disturbed. The surface and subsurface investigations of the site produced an abundant amount of lithic material but no diagnostic artifacts. The site was reported to be ineligible for NRHP listing and no further work was recommended. However, sites 41BX903 and 41BX905 located adjacent to 41BX901 were

determined to be eligible for listing on the NRHP and avoidance was recommended (Potter et al. 1992). Site 41BX905 is large prehistoric quarry site that was reported to be an extension of site 41BX901 and well preserved. 41BX903 is a large burned rock midden with an associated lithic scatter of debitage, cores, and projectile points.

North of Jones Maltsberger Road and west of the property, two previously conducted surveys were performed resulting in the identification of two sites within 1 mile of the project area. Site 41BX1459 was recorded during an unnamed survey. The survey and site information was not available at TARL or the Atlas. Site 41BX1625 is a large prehistoric lithic scatter recorded by SWCA in 2005 (Houk and Acuña 2005). The site was determined to be ineligible for NRHP listing and no further work was recommended.

Two previously conducted surveys and three previously recorded sites are located south of the project area. One survey was performed in 1977 for the San Antonio 201 Wastewater Treatment project (Fox 1977). No sites were recorded within 1 mile of the current project area. The Knollcreek Subdivision survey project was performed in 1984 and resulted in the recording of sites 41BX623 and 41BX624 (Cox 1984). Both sites are late nineteenth century structures that were determined to be ineligible for NRHP listing.

### *FIELD SURVEY*

On August 11 and 12, 2008, three SWCA archaeologists conducted an intensive pedestrian survey of the 117-acre Bulverde Marketplace project area. Overall, the project was found to contain rocky uplands and upland terraces with deeper soils with some significant modifications. Some of these disturbances include vegetation clearing, two-track roads, buried utilities, and an overhead transmission line

(Figures 2 and 4). The project area is a mix of thick vegetation with an overstory of scattered oaks and cedar and extensively cleared areas with only shrubs and short grasses (Figure 3).

Elm Waterhole Creek traverses the project area along the northeastern-southwestern axis and has a rocky-bottom channel lined by riparian vegetation that varies in width from 50–75 m. In places, it cuts into the local bedrock with little water or alluvium present, although two wetland areas were evident. While relatively intact, the slopes adjacent to this drainage were found to have shallow soils and exposed bedrock with no cultural resources.

The areas adjacent to Elm Waterhole Creek were intensively examined for cultural resources. Excavations were concentrated on the upland terraces adjacent to Elm Waterhole Creek in two areas with the deepest mapped soils. Backhoe trenches and shovel tests were excavated along the upland terrace north of the drainage, while shovel tests were excavated on the terrace south of the drainage. Although ground visibility was limited by grass cover and leaf litter, two lithic scatters were evident on the surface of these terraces.

The entire project area was subjected to a pedestrian survey conducted in 30 m transects. Ground visibility within the project area ranged from a low of 35 percent to a high of 100 percent, but the visibility was typically about 50 percent (Figure 5). The subsurface investigations of the project area consisted of 31 shovel tests and six backhoe trenches (Figures 6 and 7). The depths of the shovel tests ranged from 5–35 centimeters below surface (cmbs); however, most of them encountered limestone gravel or cobbles between 10–35 cmbs (Table 2). Overall, the shovel tests averaged 25.8 centimeters in depth and generally encountered a thin surface of humate material above a horizon of clay loam with abundant

limestone gravels and small cobbles overlying degrading limestone bedrock (Figure 8).

#### 41BX1786

A relatively sparse scatter of artifacts including lithic debitage, side and end scrapers, utilized flakes, cores, and burned rock were observed on the nearly-level surface of the upland terrace north of Elm Waterhole Creek. No buried artifacts were encountered in any of the five shovel tests or five backhoe trench excavated at the site. Measuring 500 m east-west and 250 m north-south, the site is evident on the surface of a cattle pasture that had previously been cleared of vegetation and likely plowed. A two-track road forms the site's eastern boundary.

Five shovel tests (L9, L10, J12, J13, and J14) and five trenches (BHT 2–BHT 6) were excavated within the boundary of 41BX1786 on the north bank of Elm Waterhole Creek (see Figures 6 and 7). The depths of the shovel tests ranged from 25–30 centimeters below surface (cmbs) before encountering compact clay and limestone gravel or cobbles (see Table 2). Overall, the shovel tests averaged 29 centimeters in depth and generally encountered a thin surface of humate material above a horizon of clay loam with abundant limestone gravels and small cobbles overlying degrading limestone bedrock

The depths of the trenches at 41BX1786 ranged from 50–110 centimeters below surface (cmbs); however, most of them encountered limestone gravel or cobbles between 20–80 cmbs (Table 3). Overall, the trenches averaged 92 centimeters in depth and generally encountered a thin surface of humate material above a horizon of clay loam and clay with abundant limestone gravels and cobbles overlying gravel, boulders, and degrading limestone bedrock (Figures 9 and 10).



**Figure 4.** A sanitary sewer line is buried along the project area's western boundary of Bulverde Road.



**Figure 5.** Typical ground visibility within Bulverde Marketplace project area.

IMAGE RESTRICTED

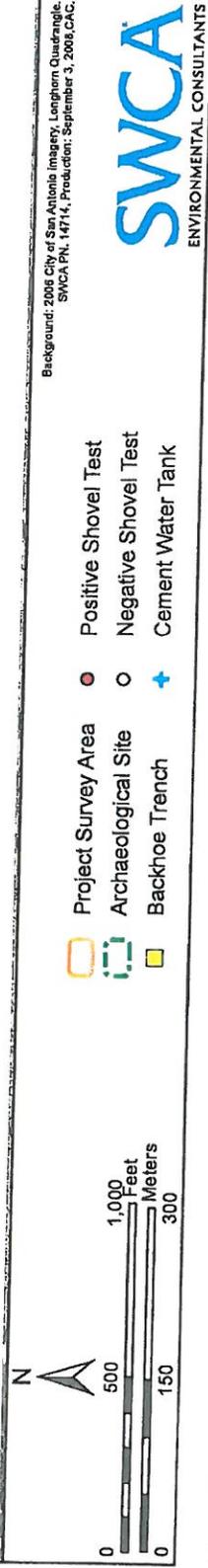


Figure 6. Project area map with shovel test and backhoe trench locations.

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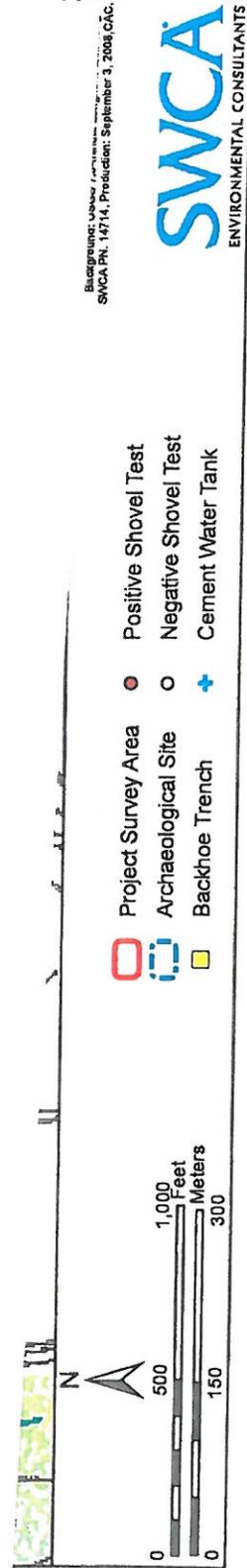


Figure 7. Project area map with shovel test and backhoe trench locations.

**Table 2. Shovel Test Data**

ST	Site	Depth (cmbs)	Soil Color (Munsell)	Sediment Texture	Artifacts Recovered	Comments
J1	41BX1787	0-10	10YR3/3	Clay loam	none	Large cobbles becoming impenetrable.
J2	41BX1787	0-10	10YR3/2	Clay loam	none	Impenetrable gravels.
J3	41BX1787	0-30	10YR3/2	Clay loam	5 flakes, 1 burned chert	Common gravels and cobbles.
		30-35	7.5YR3/4	Clay	none	Dense clay, no gravels.
J4	41BX1787	0-30	10YR3/2	Clay loam	none	Large cobbles.
		30-35	7.5YR3/4	Clay	none	Dense clay, no gravels.
J5	41BX1787	0-35	10YR2/1	Clay	3 flakes at 0-10 cmbs	Dense clay, no cobbles below 15 cmbs.
J6	-	0-35	7.5YR3/4	Clay loam	3 flakes at 0-10 cmbs	Large cobbles becoming impenetrable.
J7	41BX1787	0-7	10YR4/2	Clay loam	none	Impenetrable gravels.
J8	41BX1787	0-8	10YR3/2	Clay loam	none	Common gravels and cobbles.
		8-30	10YR3/2	Clay	none	Dense clay, no gravels.
J9	41BX1787	0-12	10YR3/2	Clay loam	none	Cobbles and gravels becoming impenetrable.
J10	41BX1787	0-15	10YR3/2	Clay loam	1 flake 0-5 cmbs	Dense clay, no cobbles below 25 cmbs.
J11	41BX1787	0-15	10YR3/2	Clay loam	1 flake 0-3 cmbs	Dense clay, no cobbles below 20 cmbs.
J12	41BX1786	0-30	10YR3/2	Clay	none	Very dry and compact clay.
J13	41BX1786	0-30	10YR3/2	Clay	none	Debitage on surface near shovel test. Very dry and compact clay.
J14	41BX1786	0-30	10YR3/2	Clay	none	Debitage on surface near shovel test. Very dry and compact clay.
L1	41BX1787	0-25	7.5YR3/3	Clay loam	none	Very dense clay and gravels.
L2	41BX1787	0-22	7.5YR3/3	Clay loam	20 flakes	Common gravels and cobbles.
		22-26	7.5YR4/4	Clay	none	Dense clay, no gravels.
L3	41BX1787	0-30	7.5YR3/3	Clay loam	none	Common gravels and cobbles.
		30-35	7.5YR4/4	Clay	none	Dense clay, no gravels.
L4	41BX1787	0-30	7.5YR3/3	Clay loam	Frio Point, 22 flakes	Common gravels and cobbles.
		30-35	7.5YR4/2	Clay	none	Dense clay, no gravels.
L5	-	0-10	10YR3/2	Clay loam	none	Bedrock, Many gravels on surface.
L6	41BX1787	0-32	10YR3/2	Clay loam	none	Clay becomes more dense with depth.
L7	41BX1787	0-28	10YR3/2	Clay loam	none	Clay becomes more dense with depth.
L8	41BX1787	0-30	10YR3/2	Clay	Core or burned rock	Clay becomes more dense with depth.
L9	41BX1786	0-25	7.5YR3/2	Clay	none	Dense, blocky clay with gravels.
L10	41BX1786	0-30	7.5YR3/2	Clay	none	Dense, blocky clay with gravels.
M1	41BX1787	0-30	7.5YR3/3	Clay loam	none	Impenetrable gravels.
M2	41BX1787	0-30	7.5YR3/4	Clay loam	none	Impenetrable gravels.
M3	41BX1787	0-35	7.5YR3/4	Clay loam	4 flakes	Gravels and cobbles becoming impenetrable.
M4	41BX1787	0-30	7.5YR3/4	Clay loam	3 flakes	Common gravels and cobbles.
		30-35	7.5YR3/4	Clay loam	none	Dense clay, no gravels.
M5	-	0-5	7.5YR3/4	Clay	none	Impenetrable gravels.
M6	41BX1787	0-20	7.5YR3/4	Clay	1 flake on surface	Common gravels and cobbles.
		20-30	7.5YR3/4	Clay	none	Dense clay, no gravels.
M7	-	0-30	7.5YR3/4	Clay loam	1 flake	Scraper on surface near shovel test. Common cobbles



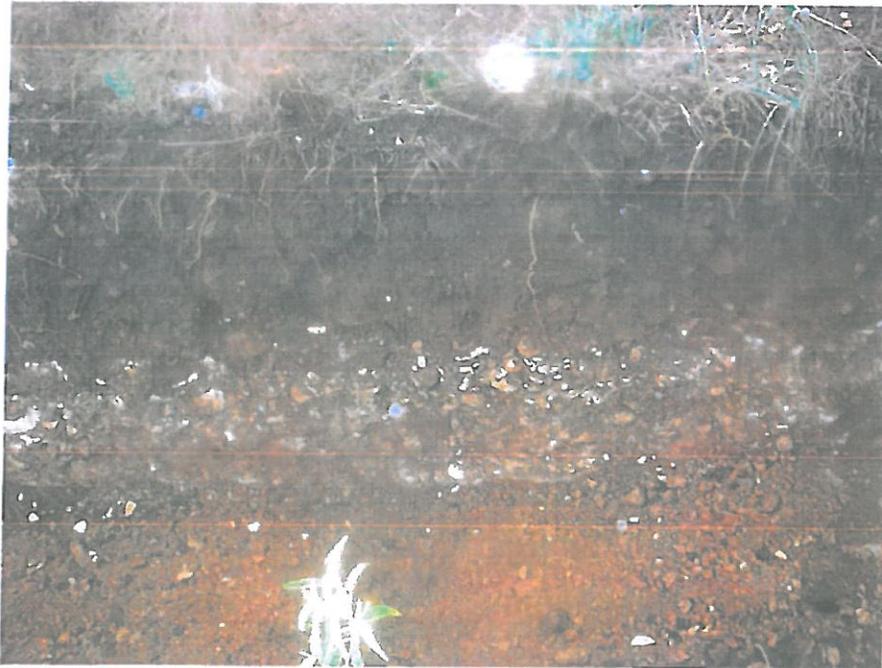
**Figure 8.** Shovel tests were excavated near the southeast corner of the project area where isolated lithic debitage was observed in a two-track road.

Table 3. Backhoe Trench Data

Trench	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Lower Boundary	Comments
1	n/a	0-20	10YR3/3	dark brown	clay loam	medium-sized limestone and chert gravel with some boulders	gradual	opposite the Bulverde and Jones-Maltsberger intersection; near terrace edge and close to Long Creek; no cultural materials
		20-50	5YR4/3	reddish brown	sand	gravel		no cultural materials
2	41BX1786	0-35	10YR3/3	dark brown	clay loam	medium-sized limestone and chert gravel	clear	open pasture on terrace above Long Creek; flakes visible on surface
		35-60	10YR3/3 mottled with 5YR4/3	dark brown and reddish brown	sand	medium- to large-sized limestone and chert gravel; boulder frequency increases with depth	clear	no cultural materials
		60-100	5YR6/3	light reddish brown	sand	large-sized limestone and chert gravel and boulders		no cultural materials
3	41BX1786	0-15	10YR3/3	dark brown	clay loam	medium-sized limestone and chert gravel	diffuse	100 m from BHT 2; open pasture on terrace above Long Creek; flakes visible on surface
		15-50	10YR5/2	grayish brown	clay	medium- to large-sized limestone and chert gravel	abrupt	no cultural materials
		50-100	5YR4/3	reddish brown	clay	no rocks	abrupt	no cultural materials
		100-110	5YR4/3	reddish brown	clay	abundant gravel		no cultural materials
4	41BX1786	0-25	10YR3/3	dark brown	sandy loam	few rocks	clear	100 m from BHT 3; open pasture on terrace above Long Creek; flakes visible on surface
		25-35	5YR4/3	reddish brown	clay	medium- to large-sized limestone and chert gravel	clear	no cultural materials
		35-65	5YR4/3	reddish brown	clay	few rocks	abrupt	no cultural materials
		65-70	5YR6/3	light reddish brown	clay	all rock		no cultural materials
5	41BX1786	0-25	10YR3/3	dark brown	clay loam	roots	diffuse	100 m from BHT 4; open pasture on terrace above Long Creek; flakes visible on surface
		25-90	10YR3/3	dark brown	clay	none	clear	no cultural materials
		90-110	5YR4/3	reddish brown	clay	none		no cultural materials
6	41BX1786	0-75	10YR3/3	dark brown	clay loam	a few medium-sized cobbles	diffuse	100 m from BHT 5; open pasture on terrace above Long Creek; flakes visible on surface
		75-100	5YR4/3	reddish brown	clay	no rocks	clear	no cultural materials
		100-110	5YR6/3	light reddish brown	clay	medium-sized gravel		no cultural materials



**Figure 9.** Typical backhoe trench profile at 41BX1786.



**Figure 10.** BHT1 south wall profile near Elm Waterhole Creek.

No features were observed and artifacts are restricted to the surface, which has been previously disturbed by vegetation clearing and plowing. Based on the results of this survey, site 41BX1786 is not considered significant and is not eligible for designation as an SAL. No further work is recommended at this location.

#### 41BX1787

Another relatively sparse scatter of artifacts including a biface fragment, lithic debitage, side and end scrapers, utilized flakes, cores, and burned rock were observed on the nearly-level surface of the upland terrace south of Elm Waterhole Creek. Buried artifacts were encountered in 10 of the 22 shovel tests excavated at the site, including a diagnostic projectile point (Frio) in shovel test L4 (Figure 11). A biface fragment was observed on the surface of a two-track road about 75 m east of this shovel test. No other diagnostic artifacts or features were observed at the Bulverde Marketplace project area.

Measuring 700 m east-west and 250 m north-south, the site is evident on the surface of a cattle pasture that had previously been cleared of vegetation and likely plowed. Several two-track roads traverse the site's eastern half and a transmission line crosses the site near its western boundary.

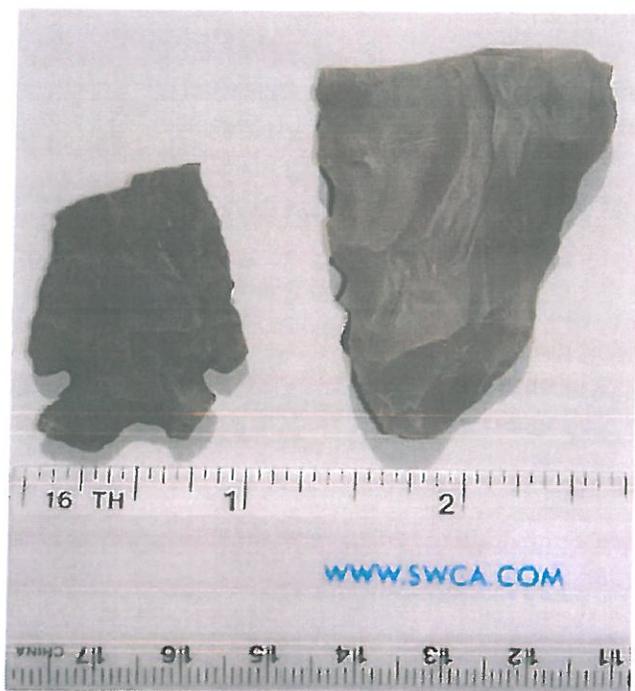
Twenty-two shovel tests were excavated within the boundary of 41BX1787 on the south bank of Elm Waterhole Creek (see Figures 6 and 7). The depths of the shovel tests ranged from 7–35 cmbs before encountering compact clay and limestone gravel or cobbles (see Table 2). Overall, the shovel tests averaged 26 centimeters in depth and generally encountered a thin surface of humate material above a horizon of clay loam with abundant limestone gravels and small cobbles overlying degrading limestone bedrock

No features were observed and the occasional buried artifacts are contained within the upper 35 cm, which has been previously disturbed by vegetation clearing and plowing. Based on the results of this survey, site 41BX1787 is not considered significant and is not eligible for designation as an SAL. No further work is recommended at this location.

#### REMAINDER OF PROJECT AREA

Several isolated artifacts were observed on the surface of the project area near the southeast corner in a two-track road (Figure 12). Three shovel tests were excavated in this area, but only three buried flakes were encountered in one of them (J6). Based on the disturbance and sparse nature of the artifacts, SWCA does not consider these isolated finds eligible for a trinomial or for designation as a State Archaeological Landmark and recommends no further work at this location.

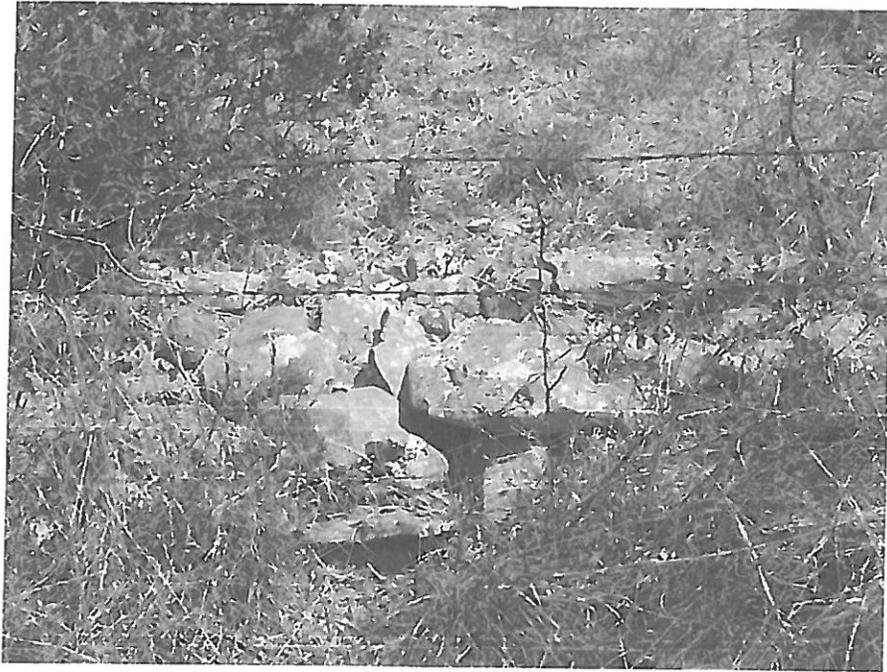
In addition to the prehistoric resources identified at the project area, several twentieth-century features were also encountered. A nearly contiguous dry-laid rock alignment, varying in formality and from one to several courses, is about 45 meters from and paralleling a portion of the southern project area boundary (Figure 13). The individual stones vary in size, but most are un-cut boulders that have been loosely stacked. Rock alignments such as this are common in this area and represent attempts at flood control as well as the clearing of rock from adjacent agricultural fields. Such features are common sights in the area, with many examples exhibiting better quality construction that evident within the Bulverde Marketplace project area. As such, the design is typical of expedient vernacular construction that is commonly associated with farming and ranching in the central Texas area.



**Figure 11.** A Frio point from a shovel test and a biface fragment from the surface of 41BX1787.



**Figure 12.** Isolated finds included a side scrapper and tertiary flakes found on the surface near the southeast corner of the project area.



**Figure 13.** Large un-cut boulders partially line an old fence line about 45 m from and paralleling the southern boundary of the project area.

Near the northeast corner of the property is a twentieth-century cement water tank associated with several pecan trees (Figure 14). The water tank is no longer operational; however, the remnants of iron pipes and a flotation valve device attest to its operation. Each of the pecan trees in the adjacent grove has a brick-lined base (Figure 15). Northeast of this grove is an area of fill that has been deposited in the modern era. This area of fill is perhaps associated with the adjacent modern residential development. Several homes and adjacent lands were not part of the current survey.

No residential structures are depicted within the project area on either the 1940 or 1961 General Highway Map of Bexar County, Texas (Figures 16 and 17). As such, the rock alignment, water tank, and pecan grove are considered modern resources. Based on these determinations, the rock alignment, water tank, and pecan grove are not eligible for a trinomial or for designation as a State Archaeological Landmark and no further work is recommended at these locations.

Overall, no significant cultural resources were observed across the 117-acre property and no further archaeological work is recommended for the project area.

## **SUMMARY AND RECOMMENDATIONS**

SWCA conducted a cultural resources investigation of the 117-acre Bulverde Marketplace project area in western Bexar County, Texas. Work was done to satisfy requirements of the HPO per the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code (Article 6 35-360 to 35-634).

The results of the background review determined that the project area has not been previously surveyed and no previously recorded sites are within the project area location. How-

ever, there are 20 previously recorded sites and numerous previously conducted surveys within one mile.

The intensive survey included a 100 percent walkover with 31 shovel tests and 6 backhoe trenches placed in areas that had the highest potential for containing buried cultural materials with good integrity. Overall, the survey revealed the project area to be roughly equally divided between a rocky upland setting with prevalent limestone bedrock outcroppings and upland terraces with deeper soil. Sparse lithic debitage was identified within 12 shovel test excavations and scattered across the surface of three locations within the project area.

Site 41BX1786 is a sparse surficial lithic scatter. No features were observed on the upland terrace and artifacts are restricted to the surface, which has been previously disturbed by vegetation clearing, plowing, and two-track road construction. Site 41BX1786 is not considered significant and is not eligible for designation as an SAL. No further work is recommended at this location.

Site 41BX1787 is a sparse surficial lithic scatter, from which a Frio projectile point was recovered. However, no features were observed on the upland terrace and buried artifacts are restricted to 0-30 cmbs, a zone that has been previously disturbed by vegetation clearing, plowing, and two-track road construction. Site 41BX1787 is not considered significant and is not eligible for designation as an SAL. No further work is recommended at this location.

Finally, isolated artifacts were observed on the surface of the project area near its southeast corner in a two-track road. SWCA does not consider these isolated finds eligible for a trinomial or for designation as an SAL and recommends no further work at this location.



**Figure 14.** A cement water tank with evidence of a float valve mechanism is near the pecan grove.



**Figure 15.** The bases of several pecan trees are lined with modern bricks.

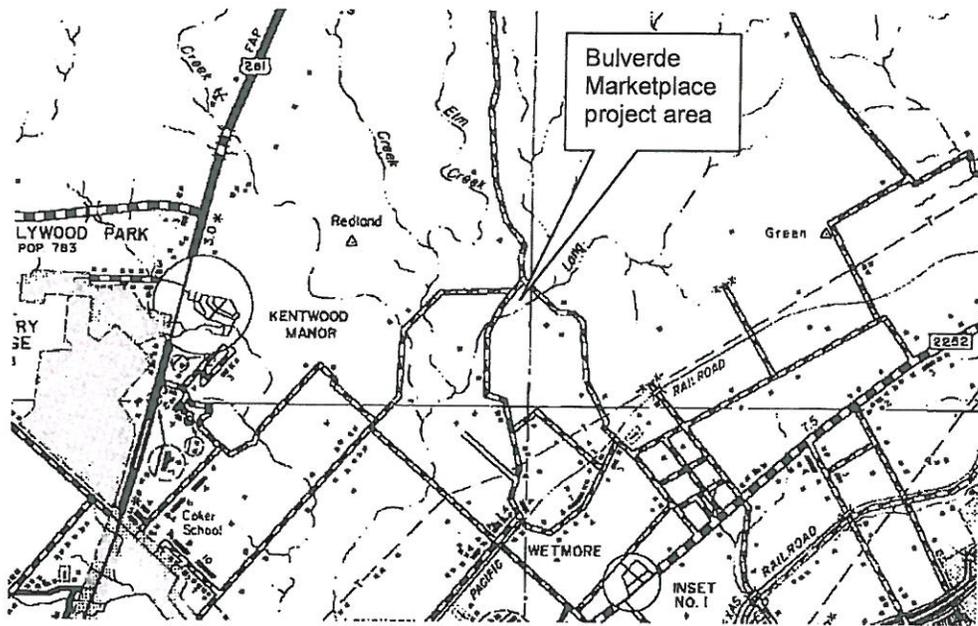


Figure 16. Project area on the 1940 General Highway Map, Bexar County, Texas.

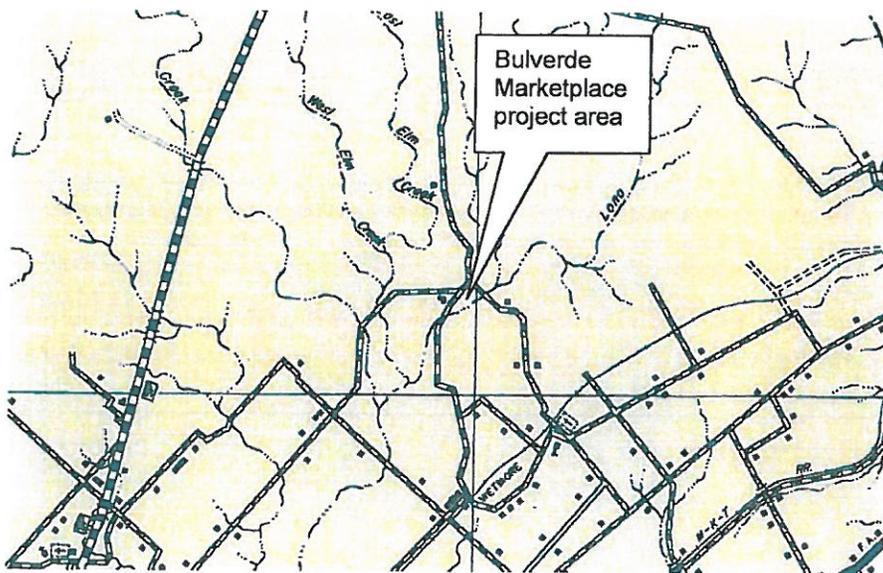


Figure 17. Project area on the 1961 General Highway Map, Bexar County, Texas.

In addition to the prehistoric resources identified at the project area, several historic features were also encountered. A dry-laid rock alignment was recorded about 45 meters from and paralleling a portion of the southern project area boundary. Near the northeast corner of the property is a twentieth-century cement water tank associated with a grove of pecan trees. No other associated structures were apparent within the project area, although modern residential developments are adjacent to it (beyond the limits of the current survey).

No residential structures are depicted within the project area on either the 1940 or 1961 General Highway Map of Bexar County, Texas. As such, the rock alignment, water tank, and pecan grove are modern resources. Based on these determinations, the rock alignment, water tank, and pecan grove are not eligible for a trinomial or for designation as an SAL.

No other significant cultural resources were observed on the surface of the project area. Accordingly, no intact significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archaeological investigations within the project area.

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