ARCHEOLOGICAL SURVEY OF PROPOSED PANTHER SPRINGS PARK,
CITY OF SAN ANTONIO, BEXAR COUNTY, TEXAS

by

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ABSTRACT AND MANAGEMENT SUMMARY

In October 2012, Prewitt and Associates, Inc., conducted an intensive archeological survey of 300 acres within the City of San Antonio’s proposed Panther Springs Park in Bexar County under Texas Antiquities Permit No. 6350. The survey determined that two previously recorded sites (41BX447 and 41BX448) have been destroyed by dam construction and erosion and identified 14 previously unknown sites (41BX1938–41BX1951). Thirteen of the new sites are prehistoric lithic scatters and lithic procurement areas. One new site is a historic-age stock tank dam and concrete water trough. None of the sites is considered eligible for listing in the National Register of Historic Places or designation as a State Archeological Landmark. Hence, development of the park will not impact any significant archeological sites, and it is recommended that the project be allowed to proceed without additional archeological work.

No artifacts requiring curation were collected during this project; the records generated are curated at the Texas Archeological Research Laboratory of The University of Texas at Austin.
ACKNOWLEDGMENTS

Special thanks are given to Brian Gottschalk at Adams Environmental, Inc., for the speedy assistance he provided the field crew. Ross C. Fields served as the principal investigator, Aaron Norment was the project archeologist, and Rob Thrift and Jennifer McWilliams served as field technicians. The archeological background section of the report was written by Karl W. Kibler. Sandy Hannum produced the figures for this report, and Mr. Fields edited it.
INTRODUCTION

Between October 8 and 12, 2012, personnel from Prewitt and Associates, Inc., conducted an intensive archeological survey of 300 acres within the City of San Antonio’s proposed Panther Springs Park in Bexar County, Texas (Figure 1). The proposed park is in the northern part of San Antonio, just east of Blanco Road and Camp Bullis and north of Loop 1604. This survey was done to comply with the requirements of the State of Texas Antiquities Code (Texas Natural Resource Code of 1977, Title 9, Chapter 191, VTCS 6145-9) and was conducted under Texas Antiquities Permit No. 6350.

Panther Springs Park is being developed as a result of a 2012 bond election. The proposed park consists of the following tracts: (1) 240 acres of mostly undeveloped land containing Panther Springs Creek and two tributaries; (2) 42 acres west of the larger main tract containing existing athletic fields and other recreational facilities; (3) 68 acres south of the larger main tract containing San Antonio River Authority (SARA) Dam 5; and (4) 7 acres of mostly undeveloped land at the north end of the larger main tract, bordering Wilderness Oak Drive and existing neighborhoods. The proposed improvements include the following: (1) at least three entrances with easy access between the park, Parman Library, Mays Family YMCA, and Wilderness Oak Elementary School; (2) 2.5–3.0 miles of perimeter trails approximately 8 ft wide; (3) a multiuse trail on natural surfaces running throughout the park; (4) directional signage and identifying markers/maps throughout the park and at the entrances and park signage along Blanco Road and Wilderness Oak Drive; (5) a dog park; and (6) fencing to secure SARA Dam 5. It is anticipated that most of these improvements will result in only shallow impacts, and thus the vertical Area of Potential Effects generally will be 1 ft or less.

The project area is covered with a mix of juniper and live oak trees and very short thin grasses that provide fair to good ground surface visibility in open areas. Among the trees, ground surface visibility is poor due to dense growth (Figure 2). Several major disturbances are known to exist within the project area, including construction of SARA Dam 5, construction of soccer fields and baseball and softball diamonds, and construction of several sewer lines across the park. Several two-track roads meander throughout the project area and appear to be in regular use, most likely to service the sewer lines.

ENVIRONMENTAL BACKGROUND

The project area is dissected by two branches of Panther Springs Creek, a tributary of Salado Creek, which is a tributary of the San Antonio River. According to the Geologic Atlas of Texas (Bureau of Economic Geology 1983), the entire project area is mapped as Lower Cretaceous Edwards Limestone; Holocene alluvium is not mapped anywhere in or near the project area. Mapped soils include mostly Crawford and Bexar soils with narrow sections of Tarrant soils along the margins of the project area; these are mostly shallow stony soils. This geologic and soils setting has little potential for naturally buried archeological sites.
Figure 1. Map of the project area.
North San Antonio is on the Edwards Plateau, a region described as subtropical steppe with low summer humidity (Natural Fibers Information Center 1987). The average minimum January temperature for Bexar County is 39°F, and the average daily maximum temperature for July is 95°F (Texas Almanac 2012). The average annual precipitation, coming almost entirely as rainfall, is 33 inches.

The Edwards Plateau sits within the Balconian biotic province (Blair 1950). Much of the area is dominated by dense stands of juniper, red oak, and live oak trees (Blair 1950:113). Mesquites and prickly pears also grow abundantly throughout the region. Mesic forests of live oaks, hackberries, elms, and pecans often dominate stream banks and floodplains. The Balconian province is home to 57 mammal species, 16 lizards, 36 snakes, 7 urodeles, and 13 anurans (Blair 1950:113–115). Some of the more-significant species of animals during prehistoric times included white-tailed deer, bison, bear, rabbits, and various fish and mussels that inhabited the San Antonio River and its tributaries.

**Figure 2.** Typical view of the project environment.

**ARCHEOLOGICAL BACKGROUND**

The project area straddles the boundary between the central Texas and south Texas archeological areas. A cultural chronology of these areas has been developed by Story (1985) and Johnson and Goode (1994) with refinements by Black (1989a, 1989b), Collins (1995, 2004), Hester (2004), and Kibler and Scott (2000). Numerous archeological investigations
at Camp Bullis just west of the project area have contributed to an understanding of Native American and historic use of the region (e.g., Boyd et al. 1990; Cestaro et al. 2000, 2001; Gerstle et al. 1978; Kibler and Gardner 1997; Kibler and Scott 2000; Masyk and Kibler 1998; Scott 1999).

The Paleoindian period (ca. 11,500–8,800 years B.P.) is divided into early and late subperiods in central Texas and the southern portions of the state (Collins 1995, 2004). Each subperiod is characterized by distinct styles of lanceolate projectile points and other stone tool technologies. Early Paleoindian sites are characterized by Clovis or Folsom projectile points, with each associated with a subsistence pattern related to hunting large mammals, primarily mammoth for the earlier Clovis hunters and bison for later Folsom hunters. Each group also used a wide variety of other animal and plant resources. Late Paleoindian sites are associated with a series of distinctive projectile point forms: Plainview, Golondrina, Scottsbluff, and Angostura. Evidence from central and south Texas indicates that these later Paleoindian groups used a more-generalized hunting and gathering subsistence pattern similar to that of later Archaic groups in the region. Early and Late Paleoindian site types are similar and include open campsites, special-purpose sites for procuring specific resources, and kill sites for mammoth and bison.

The Archaic period is subdivided into Early (ca. 8800–6000 B.P.), Middle (ca. 6000–4000 B.P.), and Late subperiods (ca. 4000–1300 B.P.) (Collins 1995, 2004; Hester 2004). The Archaic period represents a continuation of the generalized hunting and gathering lifeway that characterized the Late Paleoindian subperiod. Each subperiod is characterized by distinctive changes in lithic technology, projectile dart point styles, and ground stone technology, some of which are regionally specific for central and south Texas. Changes in technology and broad changes in subsistence and site types are correlated with regional changes in climate and resource distribution through time.

Some indication of increasing social complexity during the Middle and Late Archaic is evident by the appearance of regional cemeteries, distinctive burial practices, and the presence of various artifacts manufactured of nonlocal raw materials such as marine shell ornaments, banner stones, and boat stones. Such artifacts imply participation in larger regional exchange networks, some of which have been traced to the greater southeastern United States. The presence of established mortuary areas during the period is indicative of specific group territories and the existence of maintained, and in some cases defended, social boundaries.

Many site types have been recorded for the Archaic period. Although site types are comparable through the period, frequencies of different kinds of sites fluctuated over time, relating in large part to changes in environmental conditions and available resources. Site types include rockshelters, open campsites, special-purpose resource extraction locations (burned rock middens, ring middens, lithic procurement areas), and mortuary sites.

The Late Prehistoric period (ca. 1300/1200–350 B.P.) in central and south Texas was marked by increased apparent social boundary differentiation and a continuation of the basic hunting and gathering subsistence strategy (Collins 1995, 2004; Hester 2004). Three significant traits—pottery, bow and arrow, and to a minor extent agriculture—also made their appearance during the Late Prehistoric.
Collins (2004) divides the period into Austin and Toyah intervals. The Austin interval is associated with a technological shift from Late Archaic-style dart points to smaller arrow points associated with initial use of the bow and arrow technology; there was little change in terms of subsistence patterns from the preceding Late Archaic period, however. The Toyah interval is distinguished by one primary arrow point style, Perdiz. Other technological aspects of Toyah assemblages include end scrapers, prismatic chert blades, and large thin bifacial knives—all of which are interpreted as signatures of a bison, deer, or antelope hunting tool kit. The traits of Toyah assemblages appeared at about the same time across central and south Texas and beyond into east Texas. This distribution has led some researchers to question whether it represents the spread of an adopted technological system by multiple ethnic groups or the widespread presence of a single ethnic group (Black 1989a, 1989b; Johnson 1994; Ricklis 1994).

Late Prehistoric cemeteries indicate a continuation of territorial boundaries developed during the Middle and Late Archaic periods, but perhaps for different social objectives. Site types reflect a continuation of those identified during previous periods: open occupation or camp sites, burned rock midden sites and hearth features, shell middens, lithic procurement sites and rockshelters, caves, and sinkholes. Isolated burials, cemeteries, rock art sites, and artifact caches reflect special-purpose sites. Some sites have also had small ephemeral structures associated with them.

The Historic period (beginning ca. 350 B.P.) covers the time of initial contact between Europeans and Native Americans and the subsequent demise of native populations following the establishment of European and later Anglo settlements. Collins (2004) has assigned early, middle, and late subperiods. Archeological research and accounts by Spanish, French, and Anglo writers provide the basis for virtually all of our knowledge of this period. Written records provide a much more-detailed glimpse into the lifeways and social aspects of native populations than exists for previous periods.

The Historic period subsumes initial Spanish and French exploration; military and religious expeditions into central and south Texas; and the subsequent establishment of the Spanish mission system in the 1700s. During this period, Native American populations were subjected to a dramatic influx of new ideas, new technologies, and diseases. Subsistence patterns continued to emphasize mixed hunting and gathering, primarily of bison, deer, and antelope, with movement of native groups directed in response to game routes. Site types are similar to those documented for the Late Prehistoric period, but with the occasional use of European artifacts and materials as part of the technological system. Following the demise of the last mobile groups in the region, mainly the Comanche in central Texas, Anglo-European and Hispanic settlers established farms and ranches and developed urbanized areas.

RESULTS OF THE FILE SEARCH

Prior to fieldwork, a file search was conducted using the Texas Historical Commission’s Archeological Sites Atlas to identify any previously recorded archeological sites and investigations within or near the project area. The file search revealed 2 sites recorded within the project area and 17 sites within 1 km of it. Sites 41BX447 and 41BX448
are near the southeast end of SARA Dam 5; they are light lithic scatters recorded in 1974, probably in connection with construction of the dam.

All but 2 of the 17 sites within 1 km of the project area are upland Native American lithic scatters or lithic procurement sites (41BX409–41BX412, 41BX415–41BX417, 41BX504, 41BX752, 41BX753, 41BX754, 41BX757, and 41BX1225–41BX1227). One (41BX1664) is a small Native American burned rock midden, also in an upland setting. The final site (41BX1309) is a historic trash dump in a karst feature. Eleven of these sites were recorded during various surveys on Camp Bullis and are 0.1–1.0 km southwest, west, and northwest of the project area. Five were recorded during surveys of proposed residential developments; they are 0.2–0.9 km east and southeast and 0.7 km north of the project area. A single site, 0.5 km north of the project area, was recorded during a survey along Blanco Road.

The potential for historic archeological sites was assessed using eight nineteenth- and twentieth-century maps obtained from the Texas Department of Transportation’s Texas Historic Overlay. The three most useful ones are the 1953 and 1965 USGS quadrangles and a 1922 U.S. Army Corps of Engineers topographic map. All three maps show no historic improvements in the proposed park, except for Blanco Road along the west side; several buildings, wells, and radio towers are shown near the project area but outside it. Based on these maps and the setting, the proposed park area was considered to have a low potential for historic archeological sites, buildings, or structures.

METHODS OF INVESTIGATION

The October 2012 investigations consisted of intensive pedestrian survey of all parts of the 357-acre park that have not been extensively disturbed. Excluding SARA Dam 5 and the developed recreational facilities at the west edge, the survey covered about 300 acres. This was done by a three-person crew walking transects 20–30 m apart. Because ground surface visibility was good to excellent, with 100 percent visibility in many locations, only five shovel tests were excavated. Each encountered sterile clay within 10–15 cm of the surface. The entire area is an erosional setting lacking accumulated sediments, and large segments of bedrock benches are exposed along the ridges and hill slopes. When small pockets of sediment were encountered, they often consisted of a mix of varying sizes of degraded limestone nodules and boulders at the surface. The north-central portion of the project area had the lowest surface visibility due to thick grasses in some open areas. The five shovel tests were in this area. Shovel tests were excavated in 20-cm levels. All dirt was screened through 1/4-inch-mesh hardware cloth. Limestone nodules were common in each test; none contained archeological materials.

When concentrations of artifacts were observed on the ground surface, the survey crew left their transects and moved to the location of the artifacts to help determine the extent of the site. Concentrations of artifacts were considered sites when the number of artifacts exceeded five per 100 m². Once a location was determined to be a site, the surveyors searched the immediate area for additional cultural materials and defined the site boundary based on artifacts observed on the surface. Naturally occurring lithic resources are ubiquitous in this setting, and many individual isolated artifacts, such as flakes, tested cobbles, and cores, were observed. They were not treated as sites, however.
RESULTS OF SURVEY

The archeological survey resulted in documentation of the current condition of previously recorded sites 41BX447 and 41BX448 and recordation of 14 previously unknown sites (41BX1938–41BX1951; Figure 3), 13 of which are prehistoric and 1 of which is historic (Table 1). Careful examination of the plotted locations of 41BX447 and 41BX448 failed to find any archeological remains. The location of 41BX447 is on a small eroding bench that has a two-track road running through the middle of it. The area appears to be impacted by runoff during rainy periods. The location of 41BX448 has been heavily impacted by standing water and runoff due to the construction of SARA Dam 5; it is within the floodpool at the base of the dam. The site may have been completely eroded away. Both locations appear to have been heavily impacted by construction of the dam based on the lack of sediments and natural vegetation.

The 13 prehistoric archeological sites (41BX1938–41BX1950) are either lithic scatters or lithic procurement areas, or in 2 cases both. Three are lithic procurement sites. These served as sources for raw materials needed in the manufacture of stone tools, and the majority of the artifacts observed are tested cobbles, cores, and debitage from the early stages of lithic reduction. Site 41BX1943 is a good example of an eroded bedrock bench with chert nodules exposed on the surface, surrounded by various early-stage lithic artifacts (Figure 4). No formal tools and no concentrations of burned rocks were observed at any of these sites, indicating that these locations were not campsites or inhabited for extended periods of time.

Eight sites are lithic scatters. These consist of chert flakes from various stages of lithic reduction, as well as exhausted and partially reduced cores. No diagnostic artifacts were discovered, and there was no evidence of burned rocks or other indications of long-term habitation at these locations. Two sites just south of SARA Dam 5 exhibit characteristics of both lithic procurement sites and lithic scatters. The majority of artifacts observed are tested cobbles and partially reduced cores, but they also have debitage from multiple stages of lithic reduction scattered among abundant pieces of naturally occurring chert. Neither appears to have been occupied for an extended period of time, as there are no accumulations of burned rocks and no formal tools.

The 13 prehistoric sites are generally small, ranging in size from 20x20 to 60x90 m (see Table 1). No subsurface testing was performed due to the lack of sediments at all of them and good to excellent ground surface visibility (50–100 percent). In most cases, the sites are directly on eroded surfaces or exposed bedrock benches, and none has any subsurface deposits.

The single historic site (41BX1951) is an old stock tank dam and associated concrete water trough (Figure 5). The dam itself is mostly an earthen construction that hugs the contours of a natural low spot where the eastern segment of Panther Springs Creek pools. The dam runs for approximately 100 m north to south and is ca. 4 m wide at the base. Along its western portion is a dry-laid stack of limestone blocks that once served as the dam's spillway. The spillway measures 7.3 m across and is stepped down on the outside portion of the dam. Water ran over this portion into a small stream channel below. The limestone
Figure 3. Map of project area showing recorded sites and shovel tests.
### Table 1. Summary of archaeological sites recorded

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Site Type</th>
<th>Artifacts Observed</th>
<th>Site Size (m)</th>
<th>National Register/SAL Eligible (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41BX1938</td>
<td>quarry/procurement; lithic scatter</td>
<td>10 cores, 5 flakes, several tested cobbles</td>
<td>40x50</td>
<td>No</td>
</tr>
<tr>
<td>41BX1939</td>
<td>quarry/procurement; lithic scatter</td>
<td>10 cores, 5 flakes, 1 crude biface</td>
<td>75x20</td>
<td>No</td>
</tr>
<tr>
<td>41BX1940</td>
<td>lithic scatter</td>
<td>7 flakes</td>
<td>25x20</td>
<td>No</td>
</tr>
<tr>
<td>41BX1941</td>
<td>lithic scatter</td>
<td>6 flakes, 8 cores</td>
<td>25x50</td>
<td>No</td>
</tr>
<tr>
<td>41BX1942</td>
<td>lithic scatter</td>
<td>4 flakes, 3 cores, 1 crude biface fragment</td>
<td>40x60</td>
<td>No</td>
</tr>
<tr>
<td>41BX1943</td>
<td>quarry/procurement</td>
<td>10 tested cobbles, 5 cores, 10 flakes</td>
<td>60x90</td>
<td>NO</td>
</tr>
<tr>
<td>41BX1944</td>
<td>quarry/procurement</td>
<td>numerous tested cobbles, several exhausted cores, and several flakes</td>
<td>50x50</td>
<td>No</td>
</tr>
<tr>
<td>41BX1945</td>
<td>lithic scatter</td>
<td>4 cores, 4 flakes, 2 tested cobbles</td>
<td>20x20</td>
<td>No</td>
</tr>
<tr>
<td>41BX1946</td>
<td>quarry/procurement</td>
<td>4 cores, 4 flakes, 2 tested cobbles</td>
<td>20x20</td>
<td>No</td>
</tr>
<tr>
<td>41BX1947</td>
<td>lithic scatter</td>
<td>7 flakes</td>
<td>20x20</td>
<td>No</td>
</tr>
<tr>
<td>41BX1948</td>
<td>lithic scatter</td>
<td>10 cores, 12 flakes, few tested cobbles</td>
<td>40x75</td>
<td>No</td>
</tr>
<tr>
<td>41BX1949</td>
<td>lithic scatter</td>
<td>10 flakes, 4 cores</td>
<td>35x40</td>
<td>No</td>
</tr>
<tr>
<td>41BX1950</td>
<td>lithic scatter</td>
<td>13 flakes, 3 cores</td>
<td>35x40</td>
<td>No</td>
</tr>
<tr>
<td>41BX1951</td>
<td>historic tank dam and trough</td>
<td>NA</td>
<td>100x50</td>
<td>No</td>
</tr>
</tbody>
</table>

Block walls on either side of the block steps measure 4.6 m long, 0.8 m wide, and 0.9 m high at the tallest point. At some point, the dam was cut along its southern edge so the tank would drain and no longer hold water, and a concrete trough was constructed directly on top of bedrock within the old stock tank. The trough measures 3.7 m long by 1.8 m wide by 0.9 m high. The walls are 15 cm thick, and the concrete was made with large gravel aggregate. The southern end of the trough has a series of bolts protruding from the walls, and it appears something was constructed on this end, perhaps to connect to a windmill that fed the trough. A segment of probable sucker rod pushed against the inner wall of the dam supports the conclusion that a well was once at this location. Both the dam and the trough were likely associated with ranching activities dating perhaps as early as the late nineteenth century and more certainly the early to mid twentieth century.

**CONCLUSIONS AND RECOMMENDATIONS**

None of the 14 sites recorded during archeological survey of the proposed Panther Springs Park contains important information, and thus all are considered ineligible for listing in the National Register of Historic Places and designation as State Archeological Landmarks. All 13 of the prehistoric sites (41BX1938–41BX1950) are on ancient eroded landforms where there are no subsurface deposits; hence, they lack integrity. Further, none has any evidence that they contain cultural features, and temporally diagnostic artifacts
were not observed at any of them. Given these characteristics, they do not contain any significant information on prehistoric occupation of the area. The single historic site, 41BX1951, is an isolated stock-watering facility without any associated occupational debris. With limited physical integrity and no integrity of association, it does not contain significant information.

Construction and development of the proposed Panther Springs Park will not impact any significant archeological remains. Hence, it is recommended that the project be allowed to proceed without additional archeological work.

Figure 4. Chert outcrop at 41BX1943.
Figure 5. Photographs of 41BX1951. (a) Dry-laid limestone spillway wall; (b) concrete trough.
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