



**Bulverde Ranch Middle School No. 14**  
**Systematic Surface Collection Project, Bexar County, Texas**

*by*

Justin Blomquist

Texas Antiquities Permit No. 6364

Principal Investigator  
Steve A. Tomka

**Restricted**



*Prepared for:*  
Northeast Independent School District  
8961 Tesoro Drive, Suite 300  
San Antonio, Texas 78217

*Prepared by:*  
Center for Archaeological Research  
The University of Texas at San Antonio  
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San Antonio, Texas 78249  
Archaeological Report, No. 426

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## **Abstract:**

In June 2012, the Northeast Independent School District (NEISD) contracted with the Center for Archaeological Research (CAR) of The University of Texas at San Antonio (UTSA) to carry out collections of surface-exposed artifacts from within the boundaries of sites located along the boundary fence easement of Bulverde Ranch Middle School No. 14. On October 15 and 16, 2012, and again on February 11, 2013, staff of the CAR visited the campus to inspect the fence-easement along the eastern and northern property boundaries and collect surface-exposed artifacts. The vegetation clearance along the easement resulted in increased visibility of the archaeological materials belonging to previously documented sites present along the fence-line. Such increased surface visibility could potentially encourage public collecting. The surface collections were carried out on behalf of the.

Because the NEISD is a political subdivision of the State of Texas, the project fell under the jurisdiction of the Antiquities Code of Texas. The survey was conducted under Texas Antiquities Permit No. 6364 issued to Dr. Steve Tomka, CAR Director, who served as the Principal Investigator. Justin Blomquist served as Project Archaeologist.

Surface collections were carried out within the boundaries of sites 41BX1864 and 41BX1865 to reduce the visibility of the sites along the cleared fence easement. No surface exposed cultural materials were noted within the fence easement in the boundaries of 41BX1866. The collection efforts yielded one untypeable projectile point fragment, early-, middle- and later-stage biface fragments, and unmodified lithic debitage. These artifacts support the original impression that the bulk of the activities carried out at the two sites may have been associated with short-term resource procurement and tool manufacture.

All artifacts collected by the CAR, along with documentation generated by the project, including notes, and photographs were prepared for curation according to Texas Historical Commission guidelines and are permanently housed at the CAR curation facility. Upon request, they are available for temporary loans to the NEISD.

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# **Chapter 1: Introduction**

In June of 2012, the Center for Archaeological Research (CAR) of The University of Texas at San Antonio (UTSA) was contracted by the Northeast Independent School District (NEISD) to provide archaeological services associated with planned improvements within the Bulverde Ranch Middle School No. 14 campus. The school campus is located approximately 340 m east of Bulverde Road and about 4,145 m north of Loop 1604 in northwest Bexar County. It covers approximately 80.75 acres.

Specifically, the archaeological services were to consist of selected surface collections from previously recorded sites, 41BX1864, 41BX1865, and 41BX1866. The goal of the surface collections was to reduce site visibility given the clearing of an easement that intersects them and the subsequent construction of a chain-link fence.

Because the NEISD is a political subdivision of the State of Texas, the proposed improvements and associated impacts to the two sites fall under the Antiquities Code of Texas. The agency tasked with compliance with the antiquities code is the Texas Historical Commission. As a result, the project was conducted under Antiquities Committee Permit No. 6364, issued to Dr. Steve Tomka, Center Director. Dr. Tomka served as Principal Investigator, and Justin Blomquist served as Project Archaeologist.

## **Project Background**

In May and June of 2010, the three above-mentioned archaeological sites were documented and recorded during the intensive pedestrian survey of the future campus of Bulverde Ranch Middle School No. 14 conducted by the Center for Archaeological Research (Munoz and Ulrich 2010). Figure 1-1 shows the Bulverde Ranch Middle School No. 14 campus, the Area of Effect (APE) on the Bulverde USGS 7.5-minute quadrangle map. Also shown are the three sites documented during the survey of the project area (Munoz and Ulrich 2010).

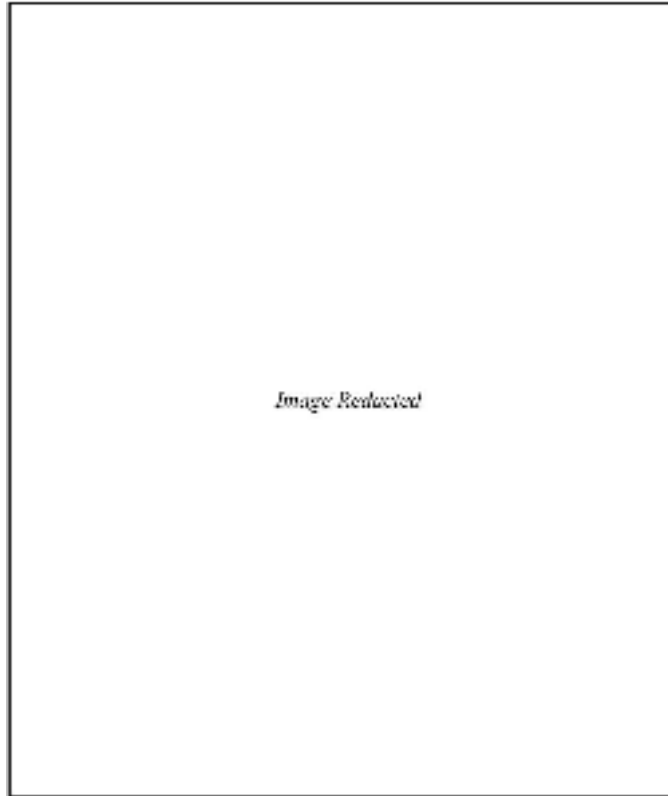


Figure 1-1. *Area of Potential Effect with recorded sites on the Bulverde USGS 7.5-minute quadrangle map.*

Sites 41BX1864, 41BX1865, and 41BX1866 are located in the north and northeastern portion of the school campus (Figure 1-2). These sites were outside of the footprint of the buildings that were to be erected during the construction of the campus facilities. However, there was a slight concern on the part of the CAR staff and the NEISD that given the artifacts noted on their surfaces, these sites may be subject to surface collecting. Therefore, following the completion of the 2010 survey, the CAR recommended that the sites' deposits should be systematically collected if the construction of any new facilities or access roads would increase access to the area or result in greater surface visibility of the archaeological deposits. The collections would reduce the visibility of the sites and may also be available for future exhibits on the Bulverde Ranch Middle School No. 14 campus.

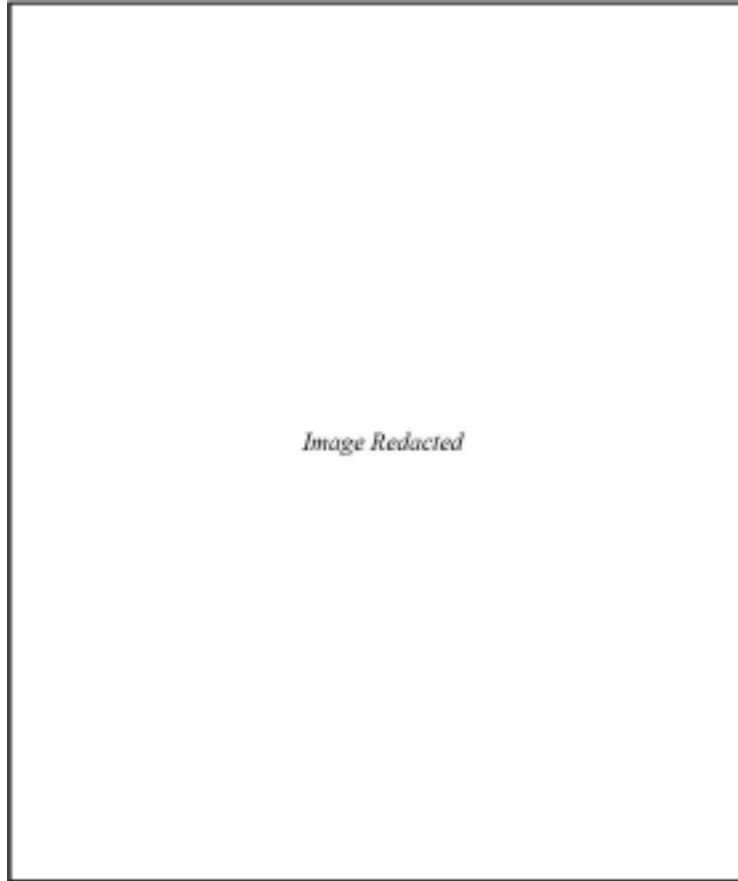


Figure 1-2. *Location of 41BX1864 (largest site), 41BX1865 (westernmost site), and 41BX1866 (middle site).*

Original design plans called for the construction of a chain-link fence along the eastern and northern property boundaries of Middle School No. 14. The northern fence alignment and associated easement would have crossed all three site boundaries.

Original plans also called for CAR staff to conduct the surface collections prior to vegetation clearance within the proposed easement. However, prior to the inception of the clearance and following discussions with the fence contractor regarding the procedures to be employed in clearance, it became clear that the surface visibility of the sites would be better assessed following the clearance rather than before. Therefore, the surface collection was postponed until after the easement was cleared to allow for the erection of the fence. In addition, the original scope of work also called for the staff of the CAR to excavate the planned locations of the fence posts to be placed within the site boundaries. The Principal Investigator visited the project area once the locations of the posts were determined and examined the proposed post spots. The site visit showed that the chosen spots consisted of surface-exposed bedrock with very thin soil accumulation. Therefore, Dr. Tomka recommended that the holes for the posts could

be auger bored rather than hand-excavated by CAR staff. A subsequent site visit showed that the clearance for the fencing has opened the area and increased surface visibility of the surface artifacts in the area near the three sites targeted for collection. It was clear that the visibility of two of these sites was greatly increased.

## Chapter 2: Project Overview

This chapter characterizes the environs and cultural history of the NEISD project area. The chapter concludes with a summary of previous archaeological work conducted in the vicinity of the properties.

### Project Environs

The project area, consisting of a total of 80.75 acres in northern Bexar County, is on the southeastern margins of the Edwards Plateau. Bexar County lies in the transition zone between the northern border of the South Texas Plains portion of the Gulf Coastal Plain and the southern edge of the Edwards Plateau Escarpment. The escarpment edge is characterized by large eroding limestone uplifts and light, calcareous soil. The Edwards Plateau is made up of Cretaceous-age sandstone, shale, dolomite, and limestone deposits. During the Cretaceous Period (66-144 million years ago), shallow seas covered the plateau. As calcareous animals died and sank to the sea floor, thick layers of limestone formed that gradually built immense sedimentary rock formations (Spearing 1991). Elevations on the Edwards Plateau range from roughly 183 m (600 ft.) above mean sea level (amsl) on the eastern side to roughly 610 m amsl (2,000 ft.) on the western side. Elevations on the Bulverde Ranch project area range from 296-310 m amsl (971-1017 ft.).

The surface geology for the property consists of undivided Lower Cretaceous Edwards Limestone. The Edwards Limestone formation contains abundant medium gray to grayish brown chert (Barnes 1983). The plateau contains a diverse system of aquifers, springs, and rivers. Water percolates through the Lower Cretaceous limestone into the Edwards Aquifer, which is located under 67,200 km<sup>2</sup> of West Central Texas. The outcomes of this process are springs, creeks, and rivers (Barker et al. 1994).

The project area is located in what McGraw (1985) and Potter et al. (1995) term the Upper Salado watershed. The Upper Salado is defined as the portion of the Salado system that consists of first- and second-order streams (Potter et al. 1995). First-order streams are those supplied completely by runoff from surrounding land, whereas second-order streams drain local runoff but also include increasing inputs of water from upstream (Hulke 1978). The Upper Salado consists of approximately 22 linear km from the start of five first-order streams (Mud, Long, Elm, Panther Springs Creeks and the portion of the Salado Creek above the Panther Spring confluence) to the confluence of Mud and Salado Creeks. This portion of the Salado has a relatively steep gradient compared to the Middle and Lower systems resulting in a relatively straight stream course with narrow floodplains (Potter et al. 1995). The Upper Salado meanders through the Balconian Biotic Province (Blair 1950). The Balconian Province covers

most of the Edwards Plateau and is characterized by a general vegetation region known as the Juniper-Oak-Mesquite Savanna (Arbingast 1976).

The project area supports a diverse assemblage of flora including three vegetation types, Live Oak-Ashe Juniper Parks, Live Oak-Ashe Juniper Woods, and Live Oak-Mesquite-Ashe Juniper Parks, as defined by the Texas Parks and Wildlife Department (TPWD 2012; Figure 2-1). These are found on gently rolling uplands and ridge tops, on shallow limestone soils on hills and escarpments, and on level to gently rolling uplands and ridge tops, respectively (TPWD 2012). Plants found on the project area from all three vegetation types include Texas oak (*Quercus texana*), shin oak (*Quercus sinuate* var. *breviloba*), cedar elm (*Ulmus crassifolia*), saw greenbriar (*Smilax bonanox*), Texas wintergrass (*Stipa leucotricha*), little bluestem (*Schizachyrium scoparium* var. *frequens*), curly mesquite (*Hilaria belangeri*), Texas grama (*Bouteloua rigidisetata*), cedar sedge (*Carex planostachys*), and mat euphorbia (*Euphorbia Serpens*). Plants commonly associated with both Live Oak-Ashe Juniper Parks and Live Oak-Mesquite-Ashe Juniper Parks include netleaf hackberry (*Celtis reticulata*), flameleaf sumac (*Rhus lanceolata*), agarito (*Berberis trifoliolata*), Mexican persimmon (*Diospyros texana*), Texas prickly pear (*Opuntia lindheimeri*), kidneywood (*Eysenhardtia texana*), Halls panicum (*Panicum hallii*), purple three-awn (*Aristida purpurea*), hairy tridens (*Tridens hirsuta*), two-leaved senna (*Cassia roemeriana*), and rabbit tobacco (*Evax prolifera*). Types associated with Live Oak-Ashe Juniper Woods include evergreen sumac (*Rhus virens*), escarpment cherry (*Prunus serotina* var. *eximia*), mescal bean (*Sophora secundiflora*), poison oak (*Rhus toxicodendron*), twistleaf yucca (*Yucca rupicola*), elbowbush (*Forestiera pubescens*), Neally grama (*Bouteloua uniflora*), meadow dropseed (*Sporobolus asper* var. *hookeri*), pellitory nosebum (*Tragia ramosa*), spreading sida (*Sida filicaulis*), and woodsorrel (*Oxalis* spp.; TPWD 2012).





Figure 2-1. Map showing vegetation types within the project area.

Fifty-seven species of mammals, one species of turtle, sixteen species of lizard, thirty-six species of snakes, and fifteen frog and toad species have been documented on the Balconian Province (Blair 1950). Extant mammals commonly found in the area include white-tailed deer (*Odocoileus virginianus*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), opossum (*Didelphis virginiana*), nine-banded armadillo (*Dasypus novemcinctus*), black-tailed jackrabbit (*Lepus californicus*), raccoon (*Procyon lotor*), and deer mouse (*Peromyscus maniculatis*). Bison (*Bison bison*), mountain lion (*Felis concolor*), and black bear (*Ursus americanus*) were in the area prehistorically (Davis and Schmidly 1994). The Balconian Province is the main breeding area for the golden-cheeked warbler (*Dendroica chrysoparia*) and the black-capped vireo (*Vireo atricapillus*; Kutac 1994).

Climate in this general area is classified as subtropical-subhumid with hot summers and mild winters. Rainfall averages approximately 78.7 cm (31 in.) per year. The average minimum and maximum temperature for the region is 39°F in January and 96°F in July, respectively. The growing season averages 265 days annually (Long 2012).

The project areas contain three soil units: Crawford and Bexar stony soils (Cb) and Eckrant cobbly clays (TaB and TaC; Figure 2-2). Crawford and Bexar Stony soils consist of soils that are stony clay (limestone and chert) in texture and are shallow to moderately deep over hard limestone. These soils exist as relatively flat, large areas forming an almost continuous band from the northeastern part of Bexar County to slightly south of the city of Helotes. Crawford soils consist of stony clay from the surface to bedrock (86-127 cm below the surface [cmbs]; 33.8-50 in.). Bexar soils contain cobbly clay loam to 46 cmbs (18 in.) underlain by 23 cm (9 in.) of cobbly clay. Crawford and Bexar stony soils cover approximately 94 percent of the Bulverde Ranch project areas (Soil Survey Staff 2012; Taylor et al. 1962).

Both Eckrant cobbly clays with 1-5 percent slopes (TaB) and Eckrant cobbly clays with 5-15 percent slopes (TaC) are found in the project area. These soil types are identical with the exception of the slope degree. Type TaB loamy soils are found on roughly six percent of the Bulverde Ranch project area (Soil Survey Staff 2012; Taylor et al. 1962).



Figure 2-2. Map showing soil units on the Bulverde Ranch project area.

## **Cultural History**

In Central Texas, researchers have been able to document a long prehistoric sequence that can be broken down into four major time periods: Paleoindian, Archaic, Late Prehistoric, and Historic (Black 1989; Collins 1995; Johnson and Goode 1994; Prewitt 1981). These periods are further divided into sub-periods that are based on particular subsistence strategies and material culture. A brief description of each period follows to illustrate the archaeological potential of the region.

### **Paleoindian**

The Paleoindian Period (11,500-8800 BP) is divided into early and late sub-periods; each characterized by particular projectile point styles and subsistence patterns (Collins 1995). The period begins at the close of the Pleistocene with the earliest evidence of humans in the Central Texas region. Clovis and Folsom point types, bifacial Clear Fork tools, and finely flaked end scrapers characterize the early Paleoindian Period (Black 1989). The first stemmed points (i.e., Wilson), as opposed to lanceolate points (i.e., Angostura and Golondrina), begin to appear during the late Paleoindian Period. In the past, Paleoindian populations have generally been characterized as hunter-gatherers who ranged over wide areas in pursuit of now extinct megafauna, such as mammoth and *Bison antiquus*. However, research from the Wilson-Leonard site in Central Texas (Collins 1998) and other perspectives on Paleoindian adaptations (Tankersley and Isaac 1990) indicate that the diet of these early inhabitants may have been much broader. Although exploiting Late Pleistocene megafauna may have constituted a part of Paleoindian subsistence, these peoples are perhaps better characterized as more generalized hunter-gatherers who exploited a wide variety of plants and animals including large herbivores, like deer and bison, and small animals, such as turtles, alligators, rabbit, and raccoons (Collins 1995; Nickels 2000).

In Central Texas, many of the sites containing Paleoindian materials are found on high terraces, valley margins, and upland locations (Black 1989). This seems to fit with a broader pattern of Paleoindian site distributions where sites are located on landforms providing views of the surrounding landscape, are centered on critical resource zones, or are found in highly productive resource areas (Tankersley and Isaac 1990). Paleoindian artifacts are commonly recovered as isolated finds or from lithic scatters lacking good stratigraphic context, including kill, quarry, cache, camp, ritual and burial sites (Collins 1995).

### **Archaic**

The Archaic Period (8800-1200 BP) is identified as a period of intensification of hunting and gathering and a move toward greater exploitation of local resources. As a result, a broadening of the material

culture is evident, including the “extensive use of heated rock” in cooking (Collins 1995:383). Food processing technologies appeared to have broadened as features such as hearths, ovens, and middens increase in frequency during this time (Black and McGraw 1985). During this period, large cemeteries were formed indicating an increasing population and the subsequent establishment of territories (Black and McGraw 1985).

The Early, Middle, and Late Archaic sub-periods correspond with changes in climatic conditions and resource availability and are distinguished by differences in diagnostic projectile points (Collins 1995; Johnson and Goode 1994). During the Early Archaic (8800-5000 BP), a variety of Early Corner-Notched (Uvalde, Martindale, Baker) and Early Basal-Notched (Bell, Andice) points appeared across Central Texas. Early Archaic sites are often recorded on river terraces or on hills overlooking valleys (Hester 1995:439). A new set of temporally diagnostic artifacts are associated with the onset of the Middle Archaic (5000-2400 BP), including Pedernales, Langtry, Kinney, and Bulverde point types as well as triangular bifaces and tubular stone pipes (Black 1989; Hester 1995). In addition to the upland setting, Middle Archaic campsites are commonly located on floodplains, low terraces, and natural levees. The Late Archaic (2400-1200 BP) is characterized by the presence of Shumla, Montell, and Marcos point types and a diminution of projectile point sites near the end of the sub-period (i.e. Ensor, Ellis, Figueroa). Late Archaic sites are usually located near modern stream channels and occur in all topographic settings (Black 1989; Hester 1995). The Late Archaic sub-period is divided into the Initial and Terminal segments.

### **Late Prehistoric**

The Late Prehistoric Period (1200-350 BP) in Central Texas marks a distinctive shift from the use of the atlatl and dart to the use of the bow and arrow (Black 1989; Collins 1995; Hester 1995). The Late Prehistoric is subdivided into early and late sub-periods termed Austin and Toyah Phases, respectively. Temporal diagnostics including Scallorn and Edwards arrow points define the Austin Phase (1200-650 BP; Prewitt 1981). It appears that the use of burned rock middens may have reached its peak during this phase (Black and Creel 1997). The subsequent Toyah Phase spans 650-350 BP and includes the first occurrence of pottery in South Texas (Black 1989). Characteristic artifacts of this phase include Perdiz and Clifton arrow points (Black 1986). Material culture associated with the Late Prehistoric Period points to increasing complexity in subsistence patterns and to very large prehistoric populations (Black 1989; Collins 1995).

## **Historic**

The Historic Period in Texas begins with the arrival of Europeans. Although the Historic Period theoretically begins in Texas with the shipwreck of the Narvaez expedition along the Texas coast in 1528, the majority of the inhabitants of Texas were Native Americans until the late eighteenth century. From AD 1550 to the late 1600s, European forays into South and Central Texas were infrequent. René Robert Cavelier, Sieur de La Salle, established a French settlement, Fort St. Louis, along Matagorda Bay on the Texas coast in 1685. Hunger, disease, and escalating hostilities between the French and the Karankawas, subsequently destroyed the colony (Foster 1998). The first Europeans settled in the region in early AD 1700 (Taylor 1996). The southward incursion of the Comanche and Apache and the northward expansion of Spanish influence led to the displacement of many of the area's indigenous groups. Decimated by disease brought by Europeans, many of the remaining groups sought refuge in the numerous Spanish missions established early in the eighteenth century. The move to the missions significantly impacted the hunter-gatherer way of life and the material culture. Artifacts from the Historic Period reflect European influences and include metal, glass, and ceramics along with pre-Hispanic Goliad wares and lithic arrow points, tools, and gunflints (Taylor 1996).

## **Previous Archaeological Investigations**

### **Bulverde Ranch Middle School No. 14 Campus**

Eleven archaeological sites have been documented within a 2.4 km radius of the Bulverde Ranch project area, prior to the survey performed in 2010 by the CAR (Texas Historical Commission 2012). Of the eleven sites, nine were recorded during the Encino Park Survey conducted by the CAR in 1977. These nine are 41BX110-41BX112 and 41BX115-41BX120. The remaining seven sites were described as lithic scatters that included bifaces, cores, scrapers, and debitage. Only 41BX110 and 41BX118 were recommended for further testing or additional survey (McGraw et al. 1977). Site 41BX1821 was recorded by SWCA in 2009 as part of the Bulverde Road Improvement project.

The cultural materials derived from one site, 41BX1551, spanned the time period from the Middle to the Late Archaic. The site is located to the east of the Bulverde Ranch property. It was documented by the Archaeological and Cultural Sciences Group (ACSG) in 2003 as part of the Cibolo Canyon Development Project. The project, which consisted of a pedestrian survey accompanied by shovel testing, revealed intact deposits between 20 and 36 cmbs. Cultural material documented on the site included debitage, bifaces, point performs, and a Pedernales and a Tortuga projectile point. The site contained a highly disturbed burned rock midden. No further work was recommended.

Three sites, 41BX1864-41BX1866, were recorded in 2010 by the CAR. All three sites were recorded during an intensive pedestrian survey of several proposed NEISD campuses (Munoz and Ulrich 2010).

Site 41BX1864 was recorded as a high density surface lithic scatter. Much of the site consists of sloping ground with large outcroppings of exposed bedrock. A total of 39 shovel tests were excavated within the boundary of the site. Eight of the 39 shovel tests were positive, with artifacts recovered from the first level of excavation (0-10 cmbs). Three artifact clusters were noted during the dogleash survey when determining the site boundary. The site appears to be relatively undisturbed with the majority of the cultural material located on the surface. Analysis of the lithic material recovered indicates that there are at least two, and possibly three, occupation sequences represented within the site boundaries. The CAR recommended further archaeological investigations prior to the initiation of construction on the school campus. In addition, archaeologists recommended that the site was potentially eligible for listing to the National Register of Historic Places (NRHP).

Site 41BX1865 is a smaller lithic scatter located to the west of 41BX1864. The site is situated on level ground and is covered by a significant amount of leaf litter. Ground visibility was at 50 percent at the time of the survey. Nine shovel tests were excavated to determine the extent of the site. Two of the nine were positive. The boundary of the site was delineated by the surface finds. Although there is a lack of depth to the cultural material, the density of the surface material and its proximity to 41BX1864 suggested that the site may be part of a large number of lithic procurement sites found throughout the region. CAR recommended further archaeological investigations at this site. The site was recommended as potentially eligible for listing on the NRHP.

Site 41BX1866 was the final site recorded during the CAR survey. This site is located along the northern boundary of the project area and east of 41BX1865. The site is recorded as a small surface scatter of lithics, primarily debitage and cores. The terrain at the site is covered with a fairly even layer of heavy leaf litter. Eight shovel tests were excavated, and all were negative, indicating that all materials are exposed on surface and buried materials are lacking. The surface scatter is of low density and lacks diagnostic artifacts. 41BX1866 was also recommended as potentially eligible for nomination to the NRHP.

## **Chapter 3: Field and Laboratory Methods**

Systematic surface collection of artifacts within the fence-easement occurred once the easement was cleared of vegetation. It was surmised that this approach would allow archaeologists higher surface visibility and therefore would result in a more comprehensive collection of surface-exposed artifacts.

### **Field Methods**

Prior to the inception of the surface collections, the easement was walked along transects to define the beginning and end points of the surface-exposed artifact distributions. This reconnaissance of the fence easement identified no surface materials within the boundaries of 41BX1866 along the fence line. Low numbers of artifacts are present within the tree line south of the fence easement but their visibility is reduced by the ground cover found in the area.

Portions of the easement that traversed the boundaries of the other two sites, 41BX1864 and 41BX1865, were divided into multiple adjoining 10 or 20 m long collection units. Due to the size of 41BX1864, a total of 26 collection units, each measuring 20 m, were laid out in two segments. The first segment begins at the northeast corner of the property and travels west 360 m. Eighteen units were positioned along this portion of the easement (Figure 3-1). The second segment begins at the northeast corner and continues south 160 m along the easement. Eight units were positioned along this portion of the easement. Site 41BX1865 is oriented east to west along the northern easement and is approximately 180 m in length. Unit 1 was set up at the eastern edge of the site while Unit 18 was the last unit on the western flank of the site.

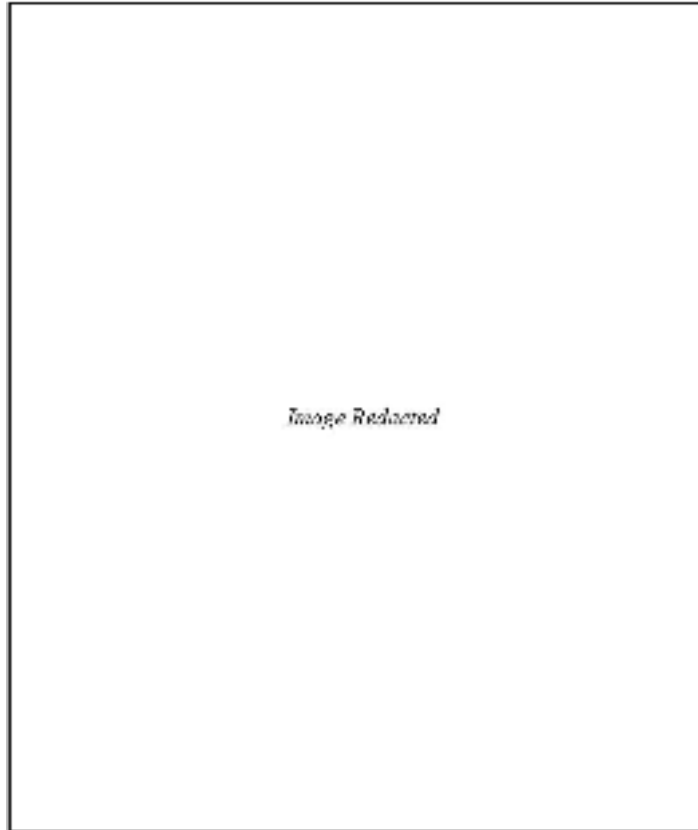


Figure 3-1. *Aerial map of units from 41BX1864 and 41BX1865 shown on boundary of campus property.*

### **Artifact Identification and Collection**

Following the layout of the segments, a systematic surface collection of the units was performed within the two previously recorded site boundaries. All chipped and potentially groundstone artifacts were collected and bagged. Bags were labeled with the appropriate provenience information. While isolated pieces of burned rock were also observed on surface, they were not collected or mapped because they did not appear to form undisturbed clusters. A large number of fire-altered chert was noted during the survey. If these pieces of chert were fire-cracked chipped lithic artifacts, they were collected for further examination. When the chert appeared to be fire-cracked but not otherwise a fragment of a chipped stone artifact, the material was not collected.

### **Laboratory Methods**

In the CAR laboratory, the materials collected were first checked in and washed to ensure that no characteristics were blurred, which would make accurate identification difficult. Once cleaned and dried, the project lithic analyst inspected the artifacts to define their stages of reduction and functional



classification (i.e. tools or not tools, bifaces, unifaces, etc). The goal of these analyses was to determine what lithic manufacture activities had occurred on these sites. All materials that turned out not to be cultural in origin were discarded at this time without inclusion into the project database.

Temporally and technologically diagnostic cultural materials and the records obtained and generated during the project were prepared in accordance with federal regulation 36 CFR part 79 and THC requirements for State Held-in-Trust collections. Additionally, the materials have been curated in accordance with current guidelines of the CAR. The materials collected and processed in the CAR laboratory were washed, air-dried, and stored in 4-mil zip-locking archival-quality bags. Acid-free labels were placed in all artifact bags. Each laser-printed label contains provenience information and a corresponding lot number.

Artifacts were separated by class and stored in acid-free boxes identified with standard tags. Field notes and forms were placed in labeled archival folders. Digital photographs were printed on acid-free paper, labeled with archival-appropriate materials, and placed in archival-quality sleeves. All field forms were completed with pencil. Soiled forms were placed in archival-quality page protectors. Ink-jet-produced maps and illustrations also were placed in archival-quality page protectors. All collected materials and project related documentation are permanently housed at the CAR.



## Chapter 4: Survey Results

The survey of the Bulverde Ranch Middle School No. 14 campus was completed in October 2012 and on February 11, 2013. The fieldwork consisted of the surface collection of artifacts along the property easement cleared for the construction of a boundary fence. The fence easement was cleared along the north and east boundaries of the campus property. The vegetation clearing increased the surface visibility of two sites recorded by the CAR in 2010. Cultural materials were present within the fence easement only within the boundaries of 41BX1864 and 41BX1865.

### 41BX1864

At site 41BX1864 a total of 26 collection units were laid out (Figure 4-1). Units 1-18 were laid out along the north property line beginning at the northeast corner of the Bulverde Ranch Middle School No. 14 campus property (Figure 4-2). The remaining 8 collection units, 19-26, were positioned parallel to the east property line beginning in the northeast corner of the property. A total of eighty artifacts were collected from these segments of 41BX1864 (Table 4-1). Sixteen of 26 collection units (61.5 percent) contained artifacts visible on the surface.



Figure 4-1. Unit 26, looking north and uphill toward Unit 19 at 41BX1864.



Figure 4-2. *Vegetation-cleared easement, looking west, with post holes for new fence showing disturbed rock piles at 41BX1864 at Unit 10.*

Table 4-1. Artifacts Surface Collected from 41BX1864

Collection Unit	Artifact Counts	Artifact Types Collected
1	32	1 Core, 1 Biface Fragment, 1 Expedient Tool, Debitage (P= 3 , S= 13 , T= 13)
2	3	Debitage (S= 1 , T= 2)
3	2	1 Biface, Debitage (S= 1)
5	1	Debitage (S= 1)
7	2	1 Uniface Fragment, Debitage (T= 1)
8	8	1 Biface, 1 Core, Debitage (P= 1 , S= 2 , T= 3)
9	19	1 Core, 1 Uniface Fragment, Debitage (P= 1 , S= 8 , T= 8)
10	3	1 Biface, 1 Core, 1 Flaked Core
11	3	Debitage (S= 2 , T= 1)
12	2	Debitage (S= 2)
13	1	Debitage (S= 1)
14	4	1 Point- Midsection, Debitage (S= 1 , T= 1)
17	2	Debitage (S= 1 , T= 1)
18	1	Debitage (S= 1)
21	1	Untypable Point
24	2	1 Biface, Debitage (T= 1)

\*collections units 4, 6, 15, 16, 19, 20, 22, 23, 25, and 26 were negative for cultural materials

\*\* P= Primary Flake S= Secondary Flake T= Tertiary Flake

In Segment 1, Units 1-18, the surface collected artifacts consisted of complete and incomplete bifaces (n=7; Figure 4-5), unmodified debitage (n=65), cores (n=4), a point midsection, one uniface fragment, and an expedient tool. No features or diagnostic artifacts were recorded within this segment.

In Segment 2, Units 19-26, a lower density of artifacts was encountered and surface collected. The artifacts included a biface (n=1; Figure 4-3), unmodified debitage (n=1), and an untypeable projectile point (n=1; Figure 4-4). No features were noted within this segment.



Figure 4-3. *Surface collected biface from Unit 10 at 41BX1864.*

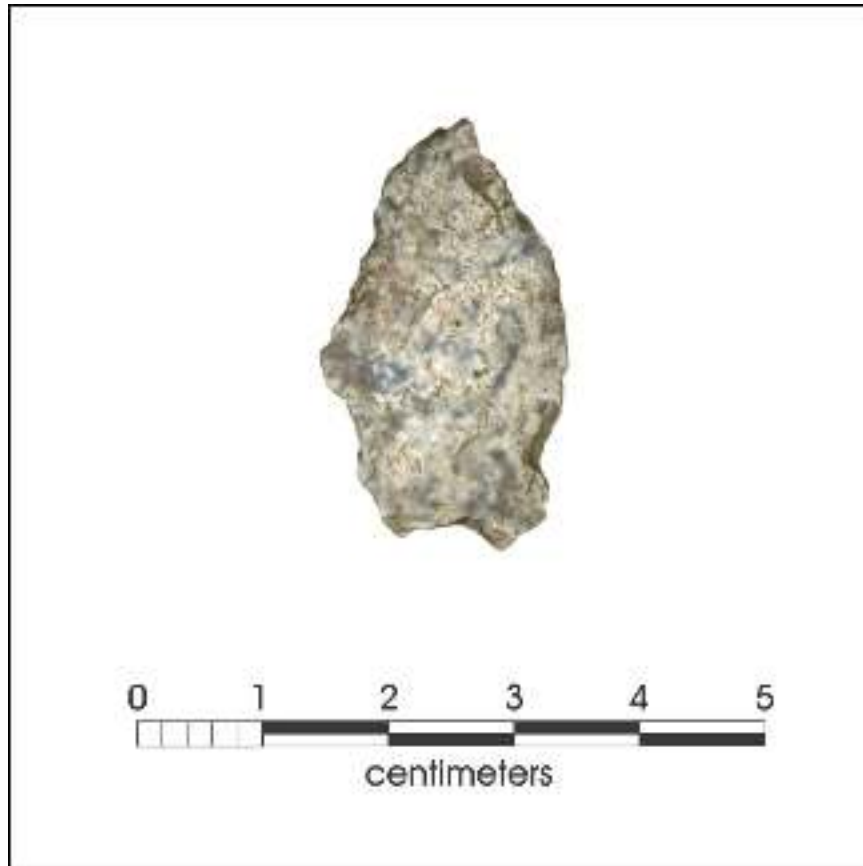


Figure 4-4. *Untypeable point, possible Gower, surface collected from Unit 21 at 41BX1864.*

### **41BX1865**

At site 41BX1865, a total of 18 collection units were laid out. These units were oriented east-west following the property line. Unit 1, the easternmost unit, was set up during the preliminary reconnaissance to determine the furthest extent of this site along the northern fence boundary. Units were then added until the artifact count dropped to zero outside of the site boundary (Figures 4-5 and 4-6). A total of ninety-seven artifacts were collected from 41BX1865 (Table 4-2). These artifacts included a biface (n=1), a core (n=1), and unmodified debitage (n=95). There were no features or temporally diagnostic artifacts present or collected from this site. Only 12 out of 18 collection units (66.6 percent) contained artifacts visible on the surface.



Figure 4-5. *Chert flake scatter in Unit 12 at 41BX1865.*



Figure 4-6. *Exposed and eroding debitage from Unit 16 on surface from vegetation clearing at 41BX1865, facing west.*

Table 4-2. Artifacts Surface Collected from 41BX1865

Test Unit	Artifact Counts	Artifact Types Collected
1	1	Debitage (S=1)
2	3	Debitage (S=2 , T=1)
6	1	Debitage (T=1)
8	4	Debitage (S=3 , T=1)
10	5	Debitage (S=5)
11	4	Debitage (S=3 , T=1)
12	10	1 Tool - Biface, Debitage (S=5 , T=4)
13	16	2 Edge Modified Flakes, Debitage (P=1 , S=8 , T=5)
14	29	2 Core, 1 Edge Modified Flake, 1 Biface, Debitage (S=20 , T=5)
15	15	2 Biface, 1 Core, Debitage (P=3 , S=6 , T=3)
16	4	1 Biface, Debitage (S=2 , T=1)
17	2	Debitage (T=2)

\*collections units 3, 4, 5, 7, 9, and 18 were negative for cultural materials

\*\* P= Primary Flake S= Secondary Flake T= Tertiary Flake

## 41BX1866

During the initial pedestrian reconnaissance of the fence easement, there was no evidence of the site in the area between the other two sites. To ensure that this was not an oversight on the part of the crews, the survey crews returned to the project area on February 11, 2013 to examine the fence-easement in the vicinity of the site. Again no artifacts were noted within the fence-easement. However, examination of the area just within the tree-line and south of the fence-easement revealed a low density scatter of cultural materials. These materials were within an area of low visibility in part derived from leaf litter. Given their lower visibility and the fact that the materials consisted of large flakes and angular chert cores, it was decided that these material would be left in situ since they would be difficult to recognize as cultural debris by untrained individuals.



## **Chapter 5: Summary and Recommendations**

### **Summary**

On October 15 and 16, 2012, and again on February 11, 2013, staff of the CAR at UTSA collected chipped lithic artifacts from the surface of two previously documented sites, 41BX1864 and 41BX1865, within the boundary of the Bulverde Ranch Middle School No. 14 campus (80.75 acres). The school campus is located approximately 340 m east of Bulverde Road and about 4,145 m north of Loop 1604 in northeast Bexar County. It covers approximately 80.75 acres. The surface collections were carried out on behalf of the Northeast Independent School District (NEISD). The archaeological services were conducted under Texas Antiquities Committee Permit No. 6364 with Dr. Steve A. Tomka serving as Principal Investigator and Justin Blomquist as the Project Archaeologist.

The sites that were the targets of surface collection were documented during a previous pedestrian survey of the property conducted by the staff of the CAR (Munoz and Ulrich 2010). Site 41BX1864 was recorded as a high density surface lithic scatter. The site appeared to be relatively undisturbed although the majority of the cultural material was located on the surface. The analysis of the lithic material recovered during the pedestrian survey indicated that there were possibly two, or possibly even three, components represented within the site boundaries. Sites 41BX1865 and 41BX1866 were located along the northern boundary of the project area. The sites were recorded as small surface scatters of lithics consisting primarily of debitage and cores. The surface scatters were low density and lacked diagnostic material. During the original survey, all three sites were assessed as potentially eligible for nomination to the NRHP. As a result, the CAR recommended that if any future impacts were planned in the vicinity of the sites, additional research may be needed to determine the eligibility status of the deposits. CAR suggested that controlled collections of the surface concentrations of artifacts may help discern the eligibility status of the sites' deposits and would minimally reduce the visibility of the sites if vegetation clearance was to take place along the property boundary.

Because the NEISD did eventually decide that a perimeter chain linked fence was necessary, they contracted the Center for Archaeological Research to carry out the surface collections proposed in the pedestrian survey report. Following the vegetation clearance carried out by the fence contractor, CAR staff carried out an initial reconnaissance of the easement that crossed the site boundaries. During the reconnaissance, the crews flagged any surface-exposed artifacts to establish whether any concentrations existed within the project limits. Next, the crews laid out collection units along the easement

encompassing all artifacts exposed on surface. As the last step of the field work, all surface-exposed artifacts were collected and bagged by collection unit.

A combined total of forty-four collection units were laid out within 41BX1864 and 41BX1865. A total of 26 collection units were defined within the two segments at 41BX1864, and eighty prehistoric artifacts were identified and collected. A total of 18 collection units were laid out within a single segment at 41BX1865, and ninety-seven prehistoric artifacts were collected from all units. No historic artifacts were noted during the easement inspection. The artifacts recovered from the two sites consist of unmodified lithic debitage derived from the manufacture of stone tools, cores, and bifacially flaked pieces of flint that represent manufacture-failed items. Only one tool has been identified among the surface collected artifacts. It is an untypable dart point fragment that may represent an Early Archaic Gower projectile point (Figure 4-4). No other temporally diagnostic artifacts have been collected and the overall temporal assignment of the component or components identified within the easements of the two sites cannot be determined from the surface collected artifacts. No surface artifacts were noted within the boundaries of site 41BX1866.

## **Recommendations**

The surface collection of materials from within the boundaries of 41BX1864 and 41BX1865 produced a mix of artifacts suggestive of raw material procurement and tool manufacture. The encounter of additional lithic tool classes during the survey that resulted in the documentation of the two sites suggest that short term camping may have also been carried out at the two locations. Unfortunately, given that the artifacts are exposed on surface and may have been accumulating there for an unknown length of time, they have little research value. Therefore, we recommend that the portions of the sites that fall within the perimeter fence easement of the Bulverde Middle School No. 14 campus do not warrant listing to the National Register of Historic Places or formal designation as State Archeological Landmarks. Other portions of the three sites, 41BX1864-1866, remain within the boundaries of the campus, and their eligibility would have to be separately determined in case they too become the focus of future developments.

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