Archeological Survey
The Wissmann Ranch
129.448 Acres
San Antonio, Texas

July 27, 2005

FGS Control # FGS-05213

Prepared exclusively for

KB HOME
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OVERVIEW

Restricted Cultural Information

According to the Texas Administrative Code: TITLE 13: CULTURAL RESOURCES, PART 2, TEXAS HISTORICAL COMMISSION, CHAPTER 24, RESTRICTED CULTURAL RESOURCE INFORMATION, RULE §24.3 Scope: "The intent of these rules is to restrict access to specific cultural resource data to those individuals that have a legitimate scientific or legal interest in obtaining and using that information. The intent is not to limit the public's use of all information that the commission has within its libraries, files, documents, and the THSA database; however, as provided for in §442.007(f) of the Texas Government Code, and §191.004(a-c) of the Texas Natural Resources Code, the commission can determine what cultural resource information is sensitive and what information needs to be restricted due to potential dangers to those resources. The cultural resources that the commission considers to be at risk include archeological sites, shipwrecks, certain historic structures and engineering features. Public disclosure of any information relating to the location or character of these resources would increase their risk of harm, theft or destruction. Therefore, this information is defined as restricted and is not subject to public disclosure under state law. Restrictions on who can obtain data and how the data are used is within the legal authority of the commission, and can be defined through the rule-making authority of the commission."

As a result, it must be noted that the information contained within this report cannot be made available to the general public and additional copies of this report and the attached maps are not permissible without the written consent of Frost GeoSciences, Inc. and Abasolo Archeological Consultants.

Site Location

The area of investigation consists of 129.448 acres of land located along and south of F.M. 1957 at the intersection of Potranco Creek in San Antonio, Texas. An overall view of the area is shown on a copy of a local street map, a USGS Topographic Map, a geologic map, a 1938 aerial photograph, a 1962 aerial photograph from the U.S.D.A. Soil Survey of Bexar County, Texas, and a 2003 aerial photograph from the City of San Antonio. Copies of the above mentioned maps indicating the location of the project area are presented on Plates 1 through 6 in Appendix A.

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Geologic Map Review

Geologic formations capable of being a source bed for flint/chert will make favorable sites for prehistoric and historic cultures. These same formations will produce flint/chert gravels within streambeds that drain the areas covered by the formations. Caves and cliff overhangs would have the potential to provide shelter for prehistoric and historic nomadic hunting tribes. The caves will be primarily restricted to areas with carbonate formations such as limestones and chalk.

According to the Bureau of Economic Geology, Geologic Atlas of Texas, San Antonio Sheet, the project area is located on the Cretaceous Anacacho Limestone (Kac), and Pecan Gap Chalk (Kpg).

The Pecan Gap Chalk is a light yellow to yellowish brown chalk and chalky marl. The Pecan Gap Chalk weathers to form moderately deep soils. Fossils of Exogyra Ponderosa are common. Overall thickness ranges from 100 to 400 feet.

The Anacacho Limestone consists of limestone and marl. The limestone is light yellow to yellow brown and light gray. This limestone is thick bedded, fossiliferous, and crossbedded alternating with marl. The marl is light gray to yellow. Some volcanic rock fragments and rusty bentonite beds with sandy seams in some parts. Marine megafossils are abundant. Overall thickness is up to 500 feet.

A copy of the Bureau of Economic Geology, Geologic Atlas of Texas, San Antonio Sheet indicating the location of the project area and the outcrop pattern of the geologic formations is included in this report on Plate 3 in Appendix A.

Historic Aerial Photography

Historic aerial photography from 1938 indicates that both of the structures noted on the project site are visible as early as 1938. The 1930's Vintage Pier & Beam House is visible in the northwestern portion of the photograph and remains visible to the present day. The Barn/Hunting Cabin is visible along the southeastern property line and remains visible to the present day. Additional structures
are visible in the 1938 aerial photograph however, a detailed inspection of these areas showed no evidence of intact structures. Remnant scraps of tin were noted in some of the inspected areas indicating that the structures have long since collapsed. A copy of the 1938 aerial photograph from the Agricultural Stabilization & Conservation Service (ASCS) is included on Plate 4 in Appendix A. A copy of the 2003 aerial photograph from the City of San Antonio is included on Plate 6 in Appendix A.

U.S.D.A. Soil Survey Review

According to the U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Bexar County, Texas (1966), the project site is located within the Brackett Soils (BrD), the Brackett Clay Loam (BpC), the Lewisville Silty Clay (LVA), the Tarrant Association (TaC), and the Trinity & Frio Soils Frequently Flooded.

The Brackett Soils & Brackett Clay Loam consist of very shallow and shallow, light colored soils that developed over soft limestone interbedded with hard limestone. These soils occur as moderately sloping to steep, convex, cone shaped hills. They are mainly in the northern and northwestern parts of the county but occur in a few places in the northeastern part. The alternate layers of hard and soft limestone give the slopes a "stair step" appearance. The surface layer is grayish brown gravelly clay loam and is about 4 inches thick. This layer has weak, granular structure and is friable when moist. It is very strongly calcareous and consists of limestone fragments that range from about a quarter of an inch to as much as 6 inches in diameter. The subsurface layer is light brownish gray clay loam to silty clay and is about 8 inches thick. Soft limestone and lenses of chalky marl make up an estimated 30 percent of this layer, by volume. The structure is weak to moderate, fine, and granular. This layer is hard when dry but friable when moist. The underlying material is a thick bed of soft limestone that is interbedded with hard limestone and contains lenses of chalky marl or calcareous clay. The Brackett Soils are well drained. Internal drainage is medium or slow. Erosion is active in most areas, even where there is a natural cover of vegetation.
The Lewisville Silty Clay consists of moderately deep, dark colored, nearly level alluvial soils. These soils occur mainly on terraces bordering the San Antonio and Medina Rivers and their main tributaries. The surface layer is very dark grayish brown to brown silty clay and is about 24 inches thick. It has fine subangular blocky or blocky structure, and is firm and crumbly when moist. This layer contains a few fine concretions of lime carbonate. The subsurface layer is brown silty clay and is about 20 inches thick. It has fine, subangular blocky or blocky structure and is very firm but crumbly when moist. This layer is limy. The underlying material is reddish yellow silty clay. It has weak, blocky structure, is very firm when moist, and contains large amounts of lime. Beneath this layer there may be deep beds of water rounded limestone gravel. Lewisville soils have slow or medium surface drainage and medium internal drainage. Permeability is slow to moderate. The capacity to hold water is good. Natural fertility is high. The hazard of water erosion is serious on the more sloping parts but is very slight on the nearly level areas.

The Tarrant Association consists of stony soils that are very shallow, dark colored, and gently undulating to steep. The Tarrant Association occurs on the limestone prairies in the northern third of the county. The surface layer is very dark grayish brown, calcareous clay loam and is about 10 inches thick. It has moderate, fine, subangular blocky structure. This layer is crumbly and friable when moist. Limestone fragments that range from a quarter of an inch to 24 inches in diameter cover about 35 percent of the surface. The subsurface layer, about 8 inches thick, is hard fractured limestone. The cracks and spaces are filled with dark grayish brown clay loam. The bedrock is hard limestone. Tarrant soils have rapid surface drainage and good internal drainage. The capacity to hold water is low. Natural fertility is high. Water erosion is a hazard.

The Trinity and Frio Soils, Frequently Flooded occur as narrow, long and irregularly shaped areas on the flood plains of small streams and the larger field drainage ways. They are mostly in the northern and central parts of the county. These soils are flooded at least once a year, generally after a heavy rain. Some areas are subject to a thin deposition of sediments, and others to scouring or shifting. Channels in these areas are poorly defined and of small capacity. The surface layer ranges from clay loam to gravelly clay in texture. The subsurface layer is clay, but
in places it contains thin loamy strata. These soils support a heavy cover of vegetation, which
generally consists of elm, hackberry, oak, huisache, mesquite, and other thorny shrubs.

A copy of the 1962 Aerial Photograph from the U.S.D.A. Soil Survey of Bexar County, Texas (1966) indicating the location of the project site and the soil types is included in this report on Plate 4 in Appendix B.

Abstract

Abasolo Archaeological Consultants conducted an archeological survey of the 129 acres in the Wissman Tract Development for Frost Geosciences and the City of San Antonio. The survey thoroughly inspected all landforms within the survey tract. The remains of two structures, an old barn and a recently abandoned residence were noted and photographed. No archaeological sites were recorded although an isolated artifact, three hearths, and two hearth areas with widely scattered burned rock, were observed. Proposed development will not impact significant archaeological or historical resources.

Introduction

Abasolo Archaeological Consultants conducted an archeological survey of the 129 acres in the Wissman Tract Development for Frost Geosciences and the City of San Antonio. The survey team inspected all landforms within the property.

Portranco Creek divides the property in almost equal portions. The survey tract included an abandoned field area east of Portranco Creek which is now mostly grass covered and a densely wooded section west of the creek. Soils in rocky and wooded western and extreme eastern areas of the tract are composed of Brackett clay loam on the five to twelve percent slopes. The abandoned field area bordering Portranco Creek floodplain on the east consists mostly of Lewisville silty clay on the one to three percent slopes (Taylor et al: 1991). The Brackett soils are underlain by Austin chalk which is exposed at places in the southern and western portions of the survey. The Brackett soils are only about 20 cm deep. The Lewisville soils form
the narrow terrace east of the creek and are deeper, consisting of both alluvial and colluvial material. The possible hearth field observed in the survey occurred in this soils association.

Archaeological Background

Over 1600 archaeological sites have been recorded in Bexar County, including many in northwest San Antonio. These include long-term campsites, locales used for specialized cooking techniques, areas of stone procurement for making stone tools, and temporary utilization of upland areas for hunting and gathering. As a group, the sites date from the Paleoindian (ca. 13,000-8,500 years ago), the Archaic (ca. 8,500-1,500 years ago), the Late Prehistoric (1,500-500 years ago) and Historic (after A.D. 1700). One of the most significant prehistoric sites recorded thus far is Pavo Real (41BX52) located at FM 1604 and Leon Creek. This site uncovered prehistoric occupation dating back to the Late Pleistocene Clovis period about 13,000 years ago (Collins et al., 2003). Another significant prehistoric site was located where Culebra Creek crosses FM 1604 (Nickels et al. 1998). This site yielded information that dates back to 6000 years ago and dominated by a burned rock midden (earth-oven cooking) from the Archaic. 41BX708 on Culebra Creek east of FM 471 is a long term occupation, from at least 10,000 years ago up to the Historic period, in the early 1700s (Shafer and Hester 2005). Nearby, on the edge of the uplands is a massive cut-stone house built in the 1840s, representing one of the types of early Historic Anglo-European homes found on farms and ranches in the region.

Near the Wissman Tract, Nickels et al. (2003) have published the test excavation of site 41BX1428 (the Young site). This site is a burned rock midden on a low bluff on the south side of Potranco Creek. At sites of this type, the bulbs of sotol, along with other plants, were baked in earth ovens lined with limestone rock. Artifacts found at the Young site include a number of spear points whose shapes indicate that they date to Middle and Late Archaic times (ca. 2000-600 B.C.).

Also in the Potranco Creek drainage are several sites recorded during archaeological surveys of the proposed northern extension of Highway 211. Sites 41BX1397-1403 were documented by SWCA field crews (Texas Archeological Site Atlas, Texas Historical Commission).
Most are “lithic scatters” of flint chips, broken artifacts, and pieces of fire-cracked rock. They represent short-term visits to the uplands along Potranco Creek for hunting and food-collecting tasks. SWCA also reports site 41BX1401, consisting of two wooden structures and cattle-watering tanks related to fairly recent stock-raising activities that are guessed to be no more than 40 years old.

Survey Methods

The survey was conducted by the authors and Steve Frost of Frost GeoSciences on June 21, 2005. Our objective was to inspect the entire property to locate and record any archaeological or historical sites that might be present. The open field area was traversed by spacing each person approximately 50 meters apart and walking the area. This worked well for the open field and adjacent thin upland wooded area but had to be modified for the area west of Portranco Creek. Fortunately, north-south and east-west survey transects had recently been clear-cut allowing excellent visibility over the entire area. These transects were inspected to insure that no archaeological sites were overlooked. Standing structures were noted and photographed.

Portranco Creek is an intermittent drainage that contains no permanent springs in this part of the valley. Natural seep areas may have provided pools for a short duration, and it is possible that Native Americans camped near these locations on occasion. Given the data provided in the Archaeological Background (above), no intensive occupation areas were expected within the survey tract. But, there was a possibility that a burned rock midden would be encountered. Additionally, natural outcrops of Uvalde Gravels chert occurs along the higher landforms overlooking the Portranco Creek valley, and these localities may have been utilized quarried by Native Americans searching for raw material for artifact manufacture.

Survey Findings

While no prehistoric archaeological sites were found, the information provided by the survey is pertinent to mapping prehistoric Native American landscape use. The survey findings, not unexpectedly, include three possible hearths consisting of concentrations of burned limestone.
rocks, a thin scatter of burned rocks in the former field area probably indicated a lightly used hearth area disturbed by plowing, and one chipped stone artifact. The three hearths are isolated features while the burned rock scatter was not dense and amounted to about one burned rock per ever 5 to 10 meters square. The relative location of the burned rock is shown in Figure 1 in Appendix B. A single hearth was recorded on the fringes of a modern limestone quarry (Fig. 2 in Appendix B). It is possible that the quarry may have removed other hearths since it removed most of a low bluff overlooking the creek and a natural wet weather seep.

Two areas of structures were noted on the property at the time of the site inspection. A barn, later used as a hunting cabin was located near the southeastern property line, east of Portranco Creek. A recently abandoned dwelling and associated barn and other outbuildings was located immediately south of Portranco Road near the northwestern corner of the property. Photographs of these structures are included in this report. None of the structures are considered to have historical significance.

The barn/hunting cabin, shown in Figure 3 in Appendix B, is a wooden structure that once contained a small kitchen, wood stoves, and sleeping quarters. Abandoned stove, bed frames and springs, attest to its function as a hunting cabin. Given the associated animal feed and water troughs and a nearby windmill, the structure was almost surely used as a barn when built perhaps in the 1930s. It may have also served to house a farm hand at that time.

The recently abandoned house is a 1930's vintage pier and beam wooden structure (Fig. 4 in Appendix B). It measures approximately 30 feet wide and 54 feet long with an estimated 1620 square feet floor space, not counting a back porch. It may have had as many as four bedrooms. The floor plan is consistent for kit homes commonly sold from ca. 1910-1940 by Sears and Roebuck, Montgomery Ward, and other retailers. These inexpensive homes are common in early 20th century rural communities throughout the eastern half of the state and many continue to be occupied to this day. This type of structure is not uncommon on small farms and ranches that are presently being absorbed through urban expansion (Shafer and Hester 2005).
The only artifact observed throughout the survey was a sequent flake uniface tool (Fig. 5 in Appendix B; Turner and Hester 1993:285) found in the Brackett Clay loam in the eastern portion of the survey tract. Sequent flake unifaces were specialized formal tools that were used as side-hafted knife blades used, among other things, for harvesting succulent plants such as sotol and yucca and butchering small animals (Shafer, ms). This tool type is common throughout the Canyonlands of the Edwards Plateau and lower Pecos River area in Early Archaic components but may also be found in Middle Archaic sites. These interesting tools were unifacially retouched and are most often classified as “side scrapers.” They provide evidence for the location of plant resource exploitation when found in upland areas away from occupation sites (Saunders 1992).

Assessment and Recommendations

No prehistoric archaeological sites were found during the course of the survey of the Wissman Tract development. Signs of prehistoric landscape use were noted, however, in the form of three hearths, an area of scattered burned rock, and an isolated artifact. Historic land use is apparent by a cleared field area, an abandoned barn/hunting cabin, and a recently abandoned frame house. None of the structures are considered historically significant. Therefore, it is our assessment based on field survey that no significant archaeological or historical resources will be impacted by the Wissman Tract development.

References Cited

Collins, M. B., D. B. Hudler, and S.L. Black

2003  
Pavo Real (41BX52): A Paleoindian and Archaic Camp and Workshop on the Balcones Escarpment, South-Central Texas. Studies in Archeology 41. Texas Archeological Research Laboratory, The University of Texas at Austin.

Nickels, D. L., C. B. Bousman, J. D. Leach, and D. A. Cargill

1998  
Test Excavations at the Culebra Creek Site, 41BX126, Bexar County, Texas. Archaeological Survey Report, No. 265. Center for
Archaeological Research, The University of Texas at San Antonio.

Nickels, D.L., R. Young and R. Young

2003  The Young Site (41BX1428): A Burned Rock Midden and Archaic/Late
      Prehistoric Occupation Along the Southeastern Edge of the Edwards

Shafer, H. J.

2005  Dirty Tools and Ulu-Style Knives. Accepted for publication, La Tierra. Southern
      Texas Archaeological Association, San Antonio.

Shafer, H. J. and T. R. Hester

2005a  An Archaeological Survey of the Southton Road Development,
      Bexar County, Texas. Report No. 7 Abasolo Archaeological
      Consultants, San Antonio.


Saunders, J.

1992  Plant and Animal Procurement Sites in the Lower Pecos Region, Texas.

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

      States Department of Agriculture, Soil Conservation Service, Washington, D.C.

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

      Gulf Publishing, Houston.
Figure 1. Soils map showing the location of the soil associations and features described in text. "H" marks the location of possible burned limestone hearths, white triangle denotes the find spot for the sequent flake uniface, and white squares identify the location of scattered burned rocks. The locations of the recently abandoned house and hunting cabin also are shown.
Figure 2. Possible hearth remnant at the edge of a modern quarry near the south end of the Wissman Tract property boundary.
Figure 3. Two views of the barn/hunting cabin; A as seen from the east; B, as seen from the south.
Figure 4. Two views of the 1930s vintage pier and beam house on the Wissman property.
Figure 5. Two views of the sequent flake uniface tool. The artifact measures 38.5 mm long, 58.5 mm wide, and is 8.5 mm thick.