

**CULTURAL RESOURCES SURVEY OF THE GOLIAD/IH-37 OUTFALL CHANNEL
PROJECT IN BEXAR COUNTY, TEXAS**

Env. Project Code: 03-684B2-006CIPII
WBS: 40-00054

Prepared for

ADAMS ENVIRONMENTAL, INC.
13483 Wetmore Road
San Antonio, Texas 78247

Prepared by

John D. Lowe

SWCA ENVIRONMENTAL CONSULTANTS
4407 Monterey Oaks Blvd.
Building 1, Suite 110
Austin, Texas 78749
www.swca.com

Principal Investigator

Kevin A. Miller

Texas Antiquities Permit No. 5251

SWCA Project Number 15186-026-AUS
SWCA Cultural Resources Report No. 2009-220

July 13, 2009

ABSTRACT

On behalf of the City of San Antonio (COSA), in coordination with Adams Environmental, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the Goliad/IH-37 Outfall Channel Project area in southern Bexar County, Texas. The area of potential effects (APE) is located along an existing channelized drainage from Brooks Park to the eastern edge of the Interstate Highway (IH) 37 right-of-way (ROW), north of the intersection of IH-37 and Loop 410 in southern San Antonio, Texas. The APE totals 2.8 acres, approximately 0.37 miles in length, and is shown on the Southton, Texas, USGS topographic quadrangle. Cultural resource investigations were conducted to satisfy the requirements of the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634) and the Antiquities Code of Texas (Permit No. 5251). These investigations included a background and archival review and a pedestrian survey with subsurface investigations.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the project area, establish vertical and horizontal site boundaries as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded within the property for inclusion to the National Register of Historic Places (NRHP) or for designation as a State Archaeological Landmark (SAL). SWCA archaeologists Mary Jo Galindo and John D. Lowe conducted the fieldwork on June 30, 2009.

Much of the project area is within a developed area and contains various buried utilities. The impacts within APE include vegetation clearing, previous drainage channelization, highway construction, and utilities. Buried utilities include electric, cable, gas, and sewer lines in the construction easement in the northern part of the project area. These disturbances have eliminated the potential for encountering cultural resources across most of the APE, as impacts have altered subsurface setting and landscape. A small area east of IH-37 appeared to be intact. A total of four shovel tests were excavated in the APE, in areas believed to contain intact deposits. No cultural materials were encountered in these shovel tests, or elsewhere in the APE. Accordingly, no intact significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archeological investigations within the project area.

INTRODUCTION

On behalf of the City of San Antonio (CO SA), in coordination with Adams Environmental, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the Goliad/IH-37 Outfall Channel Project area in southern Bexar County, Texas (Figure 1). Cultural resource investigations were conducted to satisfy the requirements of the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634) and the Antiquities Code of Texas (Permit No. 5251). These investigations included a background review and a pedestrian survey with subsurface investigations.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the area of potential effects (APE), establish vertical and horizontal site boundaries as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded within the property for eligibility for inclusion to the National Register of Historic Places (NRHP) or for designation as a State Archaeological Landmark (SAL). The APE is defined as the entire Goliad/IH-37 Outfall Channel project area, which totals approximately 2.8 acres. SWCA archaeologists Mary Jo Galindo and John D. Lowe conducted the fieldwork on June 30, 2009.

DEFINITION OF STUDY AREA

The Goliad/IH-37 Outfall Channel Project is located between Brooks Park and Salado Creek north of the intersection of Interstate Highway (IH) 37 and Loop 410 in southern San Antonio, Bexar County, Texas. The APE is approximately 0.37 miles in length and 85 feet wide, oriented roughly east-west along an

existing modified drainage channel. The purpose of the project is to reconstruct and widen the outfall channel in order to assist with flood control near Brooks Park. The project area is located primarily in a developed area, near an old gravel pit. Additional disturbances within the project area include underground utilities within the APE, highway construction, vegetation clearing, and previous modification of the drainage channel.

The geology of the project area is exclusively mapped as Pliocene or Pleistocene-age Uvalde Gravel (Barnes 1992). This formation consists of caliche-cemented gravel with well-rounded cobbles of chert, quartz, limestone, and igneous rock. Thickness ranges from several feet of gravel lag to approximately 20 feet.

The soils of the project area, from west to east, are mapped as Lewisville silty clay, 1 to 3 percent slopes (22 percent of APE), Karnes loam, 3 to 5 percent slopes (18 percent), Hilly Gravelly Land (17 percent), Venus clay loam, 0 to 1 percent slopes (26 percent), and Venus clay loam, 1 to 3 percent slopes (17 percent). These soils are generally formed on old creek and river terraces (Taylor et al. 1991).

METHODS

BACKGROUND REVIEW

SWCA conducted a thorough background cultural resources and environmental literature search of the project area. An SWCA archaeologist reviewed the Southton, 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 in-

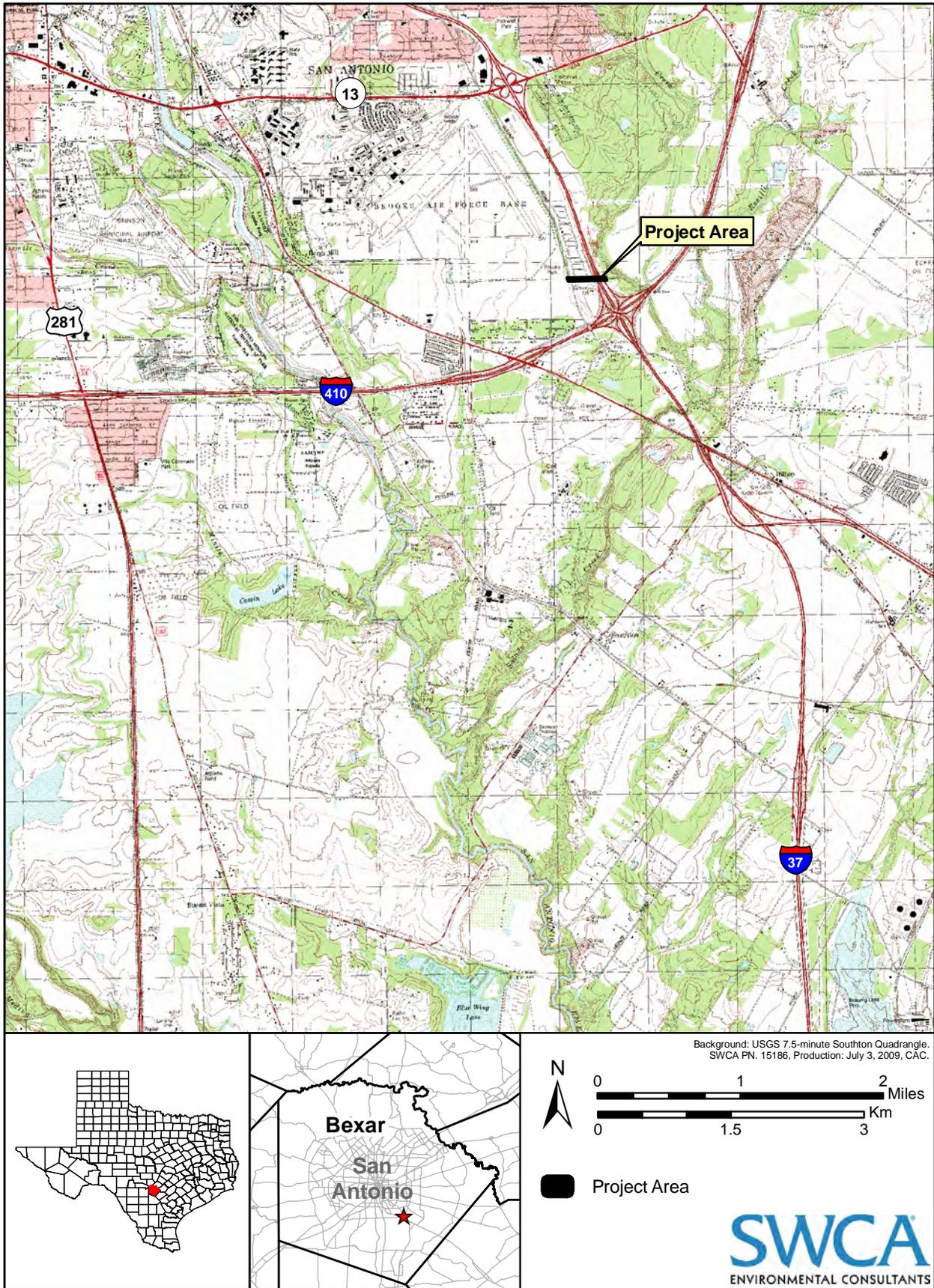


Figure 1. Project location map.

cluded information on the following types of cultural resources: NRHP properties, SALs, Official Texas Historical Markers (OTHM), 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 1992). 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 in settings with the potential to contain buried cultural materials. The shovel tests were approximately 30 cm in diameter and excavated to culturally sterile deposits or impassible basal clay, 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. The THC's survey standards for linear projects mandate 16 shovel tests per mile for a 100-foot wide ROW, meaning six shovel tests for the 0.37-mile-long project area.

RESULTS

BACKGROUND REVIEW

The background literature review determined that one previous area survey intersects the project area and no previously recorded sites are located within or adjacent to the project area location. THC records indicate that three linear surveys and three area surveys have

been conducted within one mile of the project area. The records also indicate that four previously recorded archeological sites exist within one mile of the project area.

The area survey that intersects the project area was conducted in January of 1977 by the Environmental Protection Agency (EPA) for the 201 Wastewater Sewer Project. The survey began along Southeast Military Road, just west of the intersection of Southeast Military Road and Spur 117, and extended south for approximately 5.5 miles. The survey ended just north of the intersection of Blue Wing Road and the San Antonio River, covering most of the watershed area of Salado and Rosillo Creeks.

Four previously recorded archaeological sites, 41BX358, 41BX359, 41BX360, and 41BX705, are located within one mile of the project area. Sites 41BX358, 41BX359 and 41BX360 were recorded by Liz Frkuska in February of 1977 during the 201 Wastewater Sewer Project. 41BX358, named the Valdez Site (Orchard), is located approximately 0.75 miles southeast of the intersection of the project area and IH 37. The site consists of a prehistoric lithic scatter of unknown age and four sherds of historic ceramics, and although no recommendations in regards to NRHP or SAL status were given, no further work was recommended at the site. Site 41BX359 (Lower Salado #2), is located approximately 0.87 miles southeast of the intersection of the project area and IH 37. The site consists of a prehistoric lithic and burned rock scatter of unknown age. No recommendations in regards to NRHP or SAL status were given and no further work was recommended at the site. Site 41BX360, named Lower Salado #3, is located approximately 0.88 miles northeast of the intersection of the project area and IH 37. The site type is not defined, and artifacts observed included cores; chert nodules; primary, secondary, and interior flakes; land snail and mussel

shells; and burned rock. No recommendations in regards to NRHP or SAL status are given. However, the site is described as heavily disturbed; thus, no further work would most likely be necessary.

Site 41BX705 is located approximately 0.36 miles east of the intersection of the project area and IH 37. The site is described as a pre-historic terrace campsite of unknown age. It was recorded by Al McGraw in June of 1986, and is not recommended for NRHP or SAL status. No further work is recommended for the site; however, if additional right-of-way (ROW) is obtained along IH 410, testing of the areas adjacent to the site would be appropriate.

Three linear and three area surveys have been previously conducted within one mile of the project area. The first of these linear surveys was conducted in September of 1983 by the EPA and the Texas Doppler Weather Radar (TDWR). The survey began approximately 0.86 miles northeast of the project area on IH 410, and paralleled the west side of IH 410 roughly 0.15 miles to the west for approximately 0.88 miles, where it diverged to the west and ran north-northwest for approximately 3.82 miles. No further information was available for this survey.

The next linear survey was conducted in 1981 by the National Park Service (NPS). It began 0.72 miles west of the intersection of the project area and IH 37 and extended west-southwest for approximately 1.62 miles. The linear project was noted as being a testing survey. No further information was available.

The final linear survey within one mile of the project area was conducted in July of 1986 by the State Department of Highways and Public Transportation (SDHPT) on behalf of the Federal Highway Works Administration (FHWA) and the Texas Department of Transportation

(TxDOT). At its closest point, the survey passes 0.27 miles from the project area. The survey extended for approximately 23 miles along the area that is currently IH 410, and was related to the construction of IH 410. It encountered no archeological sites within one mile of the project area.

The first area survey was conducted in December of 1984 by T. Schwarz and R. Thonhoff of the Handbook of Texas Online. The survey began approximately 0.64 miles east of the intersection of the project area and IH 37, and extended south for approximately 0.8 miles. The survey was related to the search for the Medina battlefield of 1813. A book titled *The Forgotten Battlefield of the First Texas Revolution: The Battle of Medina, August 18, 1813* was later written by Schwarz and edited by Thonhoff, and may have used the information obtained during this survey. No further information about this survey was available.

The second area survey was conducted in January of 1977 by the EPA, and is associated with the 201 Wastewater Sewer Project mentioned above that intersects the project area. This survey covered most of the area of the Rosillo Creek watershed to its confluence with Salado Creek. It began approximately 0.93 miles east of the project area, and extended approximately 2.48 miles to the south.

The final area survey was conducted in 1995 under the direction of Frank Weir of TxDOT in Austin, Texas, on behalf of the FHWA and TxDOT. The survey began approximately 0.75 miles southwest of the intersection of the project area and IH 37 at the corner of South Presa Street and IH 410. The survey then extended east for approximately 0.37 miles. This survey covered approximately 13.8 acres on the southwest corner of South Presa Street and IH 410, and encountered no archeological sites within one mile of the project area.

FIELD SURVEY

On June 30, 2009 two SWCA archaeologists conducted an intensive pedestrian survey of the Goliad/IH-37 Outfall Channel Project. The majority of the project area is in an urban setting bordered by extensive residential development as well as various utilities and a large interstate highway. Much of the IH-37 ROW is built on a large fill section (Figure 2), which has completely eliminated the potential for encountering cultural resources by altering the subsurface setting and landscape. The existing outfall channel, presumably utilizing a tributary drainage of Salado Creek, has been straightened, contoured, and lined with concrete (Figure 3). Finally, project schematics indicate a number of subsurface utilities in the proposed construction easement north of the channel to the west of IH-37. These utilities include electric, gas, cable, and sewer lines. No shovel tests were excavated in these clearly disturbed areas, as the likelihood of intact cultural deposits is nonexistent.

A small section of IH-37 ROW along the eastern edge of the APE was beyond the fill section. Vegetation in this area included hackberry, elm and yaupon trees along with a sparse understory of greenbriar and saplings (Figure 4). Surface visibility in this area was near zero, although some limestone and chert cobbles were observed through the leaf litter. Two shovel tests were excavated in this area, one on either side of the drainage (Figure 5). Both shovel tests were negative for cultural materials, and the shovel test south of the drainage encountered likely disturbed matrix (Table 1).

The roughly 900-foot-long portion of the APE between Goliad Road and IH-37 appeared to have been recently cleared and possibly graded. Large piles of dirt, limestone, caliche and mulch covered much of the APE (Figure 6), with a strip ranging from 5–15 feet wide

between the piles and the existing channel. This strip is covered with huisache and mesquite saplings, Spanish dagger, and mixed grasses, allowing for less than 10 percent surface visibility. A north-south drainage channel, possibly artificial, leads into the outfall. Examination of the cutbank profile revealed a layer of dense limestone gravels roughly 25 cm below surface (cmbs) that appeared to be artificial. This may be the remnants of an old road or parking lot base, possible related to a large gravel pit indicated on topographic and aerial maps to the south of the APE. Despite the abundant evidence of disturbance within the APE, two shovel tests were excavated in areas that appeared to be intact. In one of these tests, an asphalt pavement layer was encountered at 15 cmbs, while the other contained asphalt chunks in addition to limestone gravels (see Table 1). No cultural materials were recovered from these shovel tests, which confirm that the APE between Goliad Road and IH-37 has been extensively disturbed.

The THC's survey standards for linear projects mandate 16 shovel tests per mile for a 100-foot wide ROW, meaning six shovel tests for the 0.37-mile-long project area. The four shovel tests excavated during the intensive survey do not meet this standard; however the large areas of disturbance precluded the need for shovel testing across much of the APE. SWCA has made a reasonable and good faith effort to identify archeological and historic properties within the APE.

SUMMARY AND RECOMMENDATIONS

SWCA conducted an intensive cultural resources survey of the Goliad/IH-37 Outfall Channel Project in Bexar County, Texas. Cultural resource investigations were conducted to satisfy the requirements of the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development



Figure 2. Overview of large fill section for IH-37, facing west from edge of fill. Note culvert for existing outfall channel in lower left.



Figure 3. Representative overview of modified drainage/outfall channel, facing north.



Figure 4. Overview of intact area east of IH-37, facing west from Shovel Test 1.

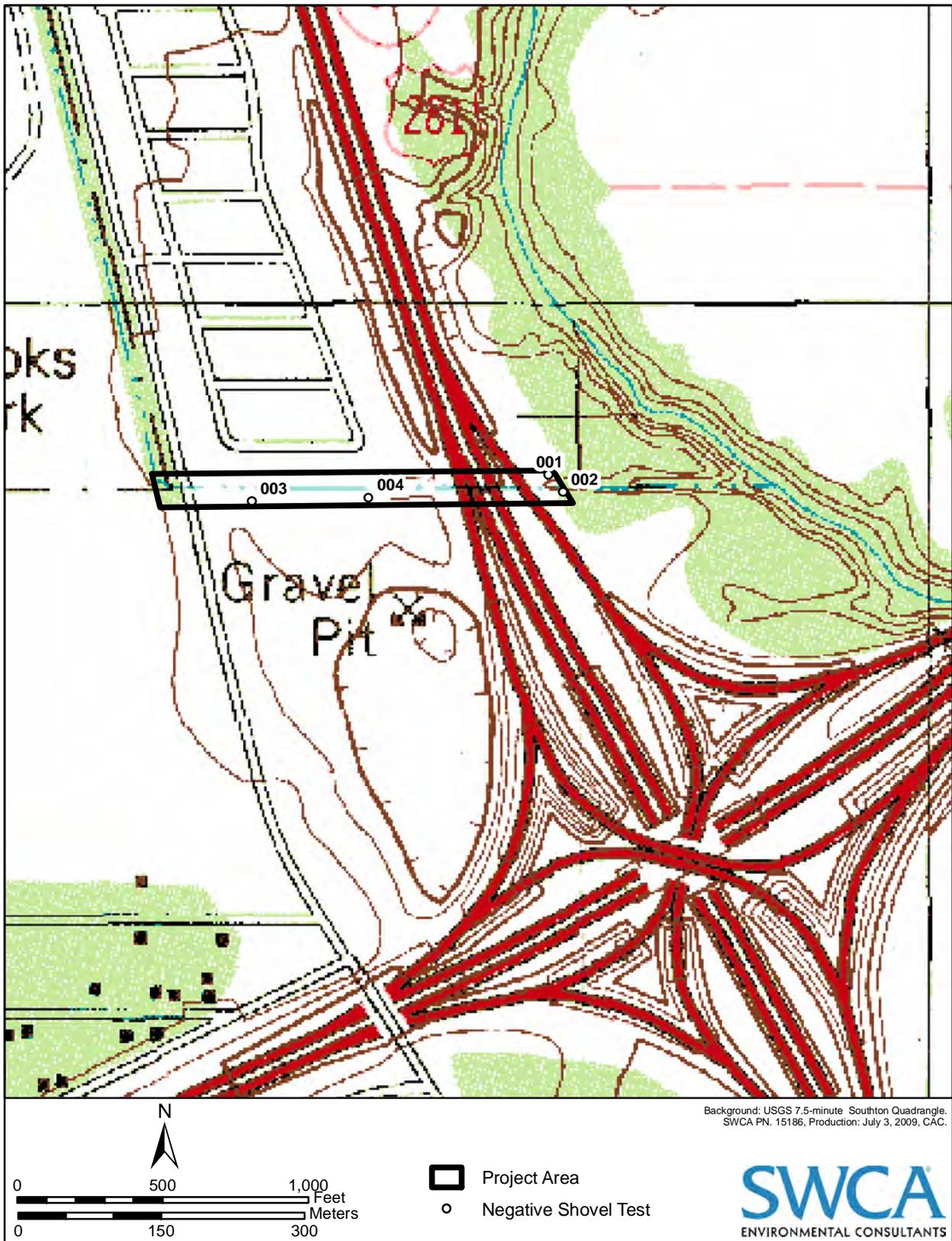


Figure 5. Shovel test location map.

Table 1. Shovel Test Data.

Shovel Test #	Level	Depth (cmb)	P=Pos N=Neg	Munsell	Soil Color	Soil Texture Description	Inclusions	Comments
1	1	0-10	N	10 YR 5/4	Yellowish Brown	Silty loam	n/a	East of IH-37, north of drainage. Hackberry, yaupon, elm
	2	10-40	N	10 YR 6/4	Light Yellowish Brown	Clay Loam	n/a	Terminated at basal clay.
2	1	0-10	N	10 YR 5/4	Yellowish Brown	Clay Loam	7-10% chert and limestone gravels	East of IH-37, south of drainage. Limestone rocks on surface
	2	10-25	N	10 YR 6/4	Light Yellowish Brown	Clay	n/a	Heavily mottled, calcareous. Seems badly disturbed. Terminated due to disturbance, compact soil
3	1	0-20	N	10 YR 5/4	Yellowish Brown	Clay	Asphalt chunks	West of IH-37. Cleared; large dirt and mulch piles nearby. Disturbed soil, terminated due to compact soil
4	1	0-15	N	10 YR 7/2	Light Gray	Unconsolidated caliche	n/a	West of IH-37. Cleared; large dirt and mulch piles nearby. Disturbed soil, terminated at asphalt.



Figure 6. Overview of dirt, gravel, and mulch piles between Goliad Road and IH-37, facing east. Note possible intact strip in center, trees along channel to left.



Figure 7. Profile of drainage channel, showing possible buried road base.

Code (Article 6 35-630 to 35-634) and the Antiquities Code of Texas (Permit No. 5251).

The background literature review determined that one previous area survey intersects the project area and no previously recorded sites are located within or adjacent to the project area location. THC records indicate that three linear surveys and three area surveys have been conducted within one mile of the project area. The records also indicate that four previously recorded archeological sites exist within one mile of the project area.

Overall, the project area is mainly within an urban setting bordered by extensive residential development as well as various utilities and a large interstate highway. The nature of the disturbances has eliminated the potential for encountering significant cultural resources across most of the project area. Shovel testing in areas believed to be intact did not encounter any cultural materials. 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.

REFERENCES

Barnes, V. E.

1992 *Geologic Atlas of Texas, San Antonio Sheet*. The University of Texas at Austin, Bureau of Economic Geology.

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

1991 *Soil Survey of Bexar County, Texas*. National Resources Conservation Service, United States Department of Agriculture.