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Intensive Archaeological Resources Survey of a Proposed Hein Road Sewer Outfall Project in Bexar County, Texas

WBS Element: 40-00025-04-02

Env. Project Code: 02-618C7-051CIPI

Prepared for

City of San Antonio

Prepared by

Mary Jo Galindo

Texas Antiquities Permit 5148

SWCA Cultural Resources Report No. 2009-43

February 2009



**INTENSIVE ARCHAEOLOGICAL RESOURCES SURVEY OF A PROPOSED
HEIN ROAD SEWER OUTFALL PROJECT IN BEXAR COUNTY, TEXAS**

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Prepared for

CITY OF SAN ANTONIO
1901 South Alamo Street, 2nd Floor
San Antonio, Texas 78204

Prepared by

Mary Jo Galindo

SWCA ENVIRONMENTAL CONSULTANTS

4407 Monterey Oaks Boulevard
Building 1, Suite 110
Austin, Texas 78749
www.swca.com

Principal Investigator

Mary Jo Galindo

Texas Antiquities Permit 5148

SWCA Project Number 15194-293-AUS
SWCA Cultural Resources Report No. 2009-43

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ABSTRACT

On behalf of Adams Environmental and the City of San Antonio, SWCA Environmental Consultants (SWCA) conducted an intensive archaeological survey of a proposed storm sewer system outfall at Salado Creek in east San Antonio, Bexar County, Texas. The project area is southwest of the intersection of southeast Loop 410 and Interstate (IH) 10. Approximately 0.32 acres of new ROW would be required. Proposed subsurface impacts are not known at this time, but are not expected to exceed 6 feet. Overall the area of potential effects (APE) is 250 feet long, 55 feet wide, and maximally 6 feet deep.

As the City of San Antonio is a political subdivision of the state, the client is fulfilling project regulatory requirements in compliance with the Texas Antiquities Code. The Texas Historical Commission (THC) issued Texas Antiquities Permit 5148 to SWCA to conduct the cultural resource investigations. All cultural resources located within the project area were identified and evaluated for their eligibility for designation as a State Archeological Landmark (SAL).

SWCA conducted a background review and an intensive archaeological survey of the 0.32-acre project area. The background review revealed that there are no previously recorded sites within the project area. Additionally, no previous archeological investigations have taken place within or directly adjacent to the project area. One previously recorded archaeological site, eight archeological surveys, and an historical marker are recorded within a one-mile radius of the project area.

SWCA archaeologists conducted field investigations within the proposed 0.32-acre site on February 4, 2009. The intensive surface inspection and shovel testing regimen failed to produce any evidence of cultural materials within the 0.32-acre tract. The APE consists of a heavily wooded tract with extremely eroded and rocky soils and debris piles throughout. Overall, the APE possesses no potential for buried cultural deposits due to the near-surface nature of the underlying bedrock, which is blanketed only by a thin lens of topsoil.

Based on the survey-level investigations, it is SWCA's opinion that construction of the proposed storm sewer system outfall at Salado Creek will have no adverse impacts on significant cultural resources. SWCA recommends no further archeological investigations.

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MANAGEMENT SUMMARY

PROJECT TITLE: Intensive Archaeological Survey of a Proposed 0.32-Acre Storm Sewer System Outfall at Salado Creek, east San Antonio, Bexar County, Texas.

SWCA PROJECT NUMBER: 15194-293-AUS.

PROJECT DESCRIPTION: SWCA conducted archaeological investigations of a 0.32-acre project area in east San Antonio, Bexar County, Texas, on behalf of the City of San Antonio. Work involved a background review and an intensive pedestrian survey.

LOCATION: The project area is in Bexar County, Texas and is depicted on the San Antonio East (2998-133) USGS 7.5-minute topographic quadrangle map. The project area is southwest of the intersection of southeast Loop 410 and IH-10.

NUMBER OF ACRES SURVEYED: Approximately 0.32 acres.

PRINCIPAL INVESTIGATOR: Mary Jo Galindo.

DATES OF WORK: February 4, 2009.

PURPOSE OF WORK: The client is fulfilling project regulatory requirements in compliance with the Texas Antiquities Code.

TEXAS ANTIQUITIES PERMIT NUMBER: 5148

NUMBER OF SITES: None

ELIGIBILITY OF SITES: N/A

CURATION: No artifacts were collected; as a result, no curation was necessary.

INTRODUCTION

On behalf of Adam Environmental and the City of San Antonio, SWCA Environmental Consultants (SWCA) conducted an intensive archaeological survey of a proposed 0.32-acre storm sewer system outfall in east San Antonio, Bexar County, Texas (Figures 1 and 2). The project area is southwest of the intersection of southeast Loop 410 and IH-10.

The proposed outfall location at Salado Creek is part of a project to reconstruct North Hein from W.W. White to West Hein, and to reconstruct West Hein from Rice to North Hein with curbs, sidewalks, driveway approaches and necessary drainage improvements. Proposed subsurface impacts are not known at this time, but are not expected to exceed 6 feet. Approximately 0.32 acres of new ROW would be required. Overall the area of potential effects (APE) is 250 feet long, 55 feet wide, and maximally 6 feet deep. The Texas Historical Commission (THC) issued Texas Antiquities Permit 5148 to SWCA to conduct the cultural resource investigations. The entire 0.32 acres of the project area is the Area of Potential Effects (APE).

The archaeological investigations for this project included a 100 percent intensive archaeological survey of the project area. The goal of the work was to locate all prehistoric and historic archaeological sites in the project area, establish vertical and horizontal site boundaries as appropriate, and provide sufficient information to significance recommendations. All work was done in accordance with the standards and guidelines of the THC and the Council of Texas Archaeologists (CTA).

PROJECT AREA DESCRIPTION

The project area consists of a heavily wooded tract of land that is bordered to the north by a commercial development and to the east by West Hein Road. Salado Creek is to the west of the project area, while undeveloped riparian woodlands are to the south. The project area stretches across a rocky hilltop that slopes primarily to the northwest towards Salado Creek.

The majority of the project area is dominated by thick stands of secondary-growth, deciduous trees supported by rocky clay loam soils. Numerous ravines traverse the project area and provide windows into the substrata. Surface visibility was moderate (ca. 30-55%) throughout the project area with a light to heavy leaf scatter obscuring the surface. Overall, the project area is moderately disturbed by erosion, from the deposition of debris, and the introduction of fill during the construction of the neighboring commercial development and West Hein Road. The debris consisted of downed trees as well as household and construction materials. Overview photographs of the project area are presented in Figures 3 to 5.

ENVIRONMENTAL SETTING

GEOLOGY

Geologically, the project area is mapped as Quaternary-age Fluvial Terrace Deposits. These deposits are made up of predominately gravel, limestone, dolomite, and chert (Fisher 1983). The deposits also consist of sand, silt, and clay. Most low terrace deposits along entrenched streams are above flood level (Fisher 1983).

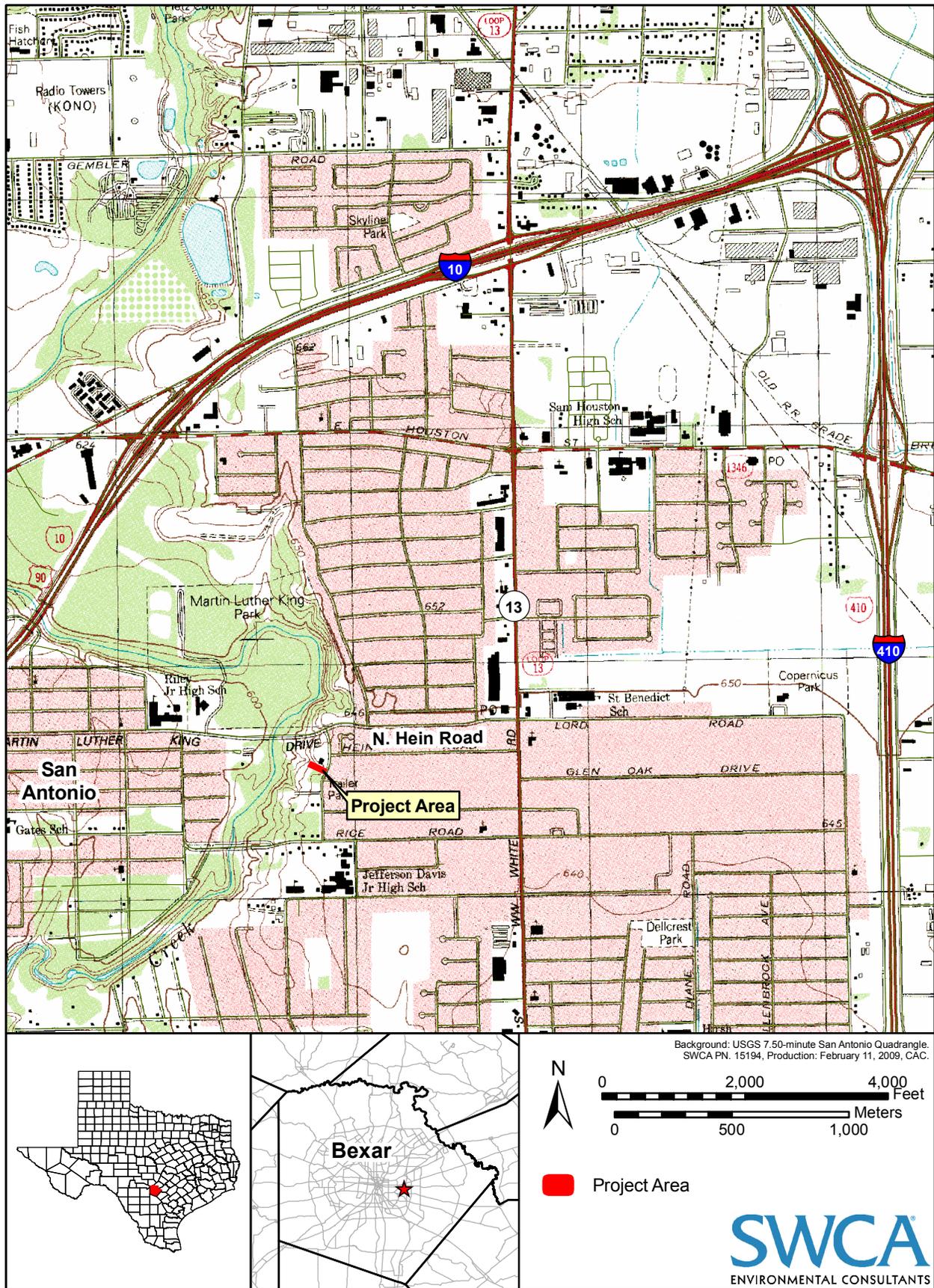


Figure 1. Project Location Map.



Figure 2. Project area map.



Figure 3. Overview of typical vegetation and ground visibility within the project area.



Figure 4. Example of eroded ravines that traverse the project area.



Figure 5. View of debris in the project area.

SOILS

Two types of soil are mapped in the project area: Hilly Gravelly Land and Lewisville silty clay (Taylor et al. 1991:Map Sheets 54 and 55). Approximately 75 percent of the project area is mapped as Hilly Gravelly Land. This type of land occurs on knolls and narrow ridges that are erosion-resistant remnants of old waterways. These deposits consist of beds of caliche or gravelly, very strongly calcareous loamy alluvium 10 to 20 feet in depth. The upper caliche layer is generally hard and platy, 3 to 12 inches thick. On nearly level areas, a 4-to-8-inch mantle of limy, dark grayish-brown loam or clay loam has formed. Slopes have very little soil, and some places of this land type have a bed of weak conglomerate consisting of sediments cemented with calcium carbonates 2 to 4 inches thick (Taylor et al. 1991:17).

Lewisville soils cover the remaining 25 percent of the project area. Lewisville silty clay, with 0 to 1 percent slopes, occurs on nearly level, broad terraces along rivers and creeks. The surface layer is a silty clay or light clay, 24 inches thick. The underlying layer consists of brown silty clay, 20 inches thick (Taylor et al. 1991:25). Based on aerial photography, this portion of the sewer outfall APE is currently a wooded riparian zone and has been since at least 1938 (Kitchen and Gottschalk 2008:Appendix A).

VEGETATION

The project area is situated along the southern margin of the Balconian biotic province (Blair 1950). This province has highly variable vegetation of the Edwards Plateau and Hill country (Spearing 1991:24). Typical vegetation of the Edwards Plateau region consists of Texas oak (*Quercus texana*), live oak (*Quercus virginiana*), Ashe Juniper (*Juniperus ashei*), mesquite (*Prosopis*

glandulosa), some bald cypress (*Taxodium distichum*), and grass prairies (Blair 1950; Simpson 1988; Spearing 1991). As noted above, the general vegetation of the 0.32 acres is mostly comprised of secondary growth, deciduous trees.

METHODS

ARCHIVAL RESEARCH AND BACKGROUND REVIEW

SWCA conducted a thorough archaeological background review of the project area. An SWCA archaeologist searched site files and maps at the Texas Archeological Research Laboratory (TARL) and the THC's Texas Archeological Sites Atlas (Atlas), an online database, for any previously recorded surveys and historic or prehistoric archaeological sites located in or adjacent to the project area. In addition to identifying previously recorded archaeological sites, the Atlas review included the following types of information: NRHP properties, SALs, Official Texas Historical Markers, Registered Texas Historic Land Marks, cemeteries, and local neighborhood surveys.

ARCHAEOLOGICAL 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 caliche, 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. Shovel test locations are presented in Figure 6 and shovel test data are provided in Table 1.

ARTIFACT COLLECTION

SWCA proposed a non-collection survey. Artifacts were to be tabulated, analyzed, and documented in the field, but not collected. Temporally diagnostic artifacts were to be described in detail and photographed in the field. Only especially rare artifacts or discoveries were to be collected. In this case, no artifacts were encountered within the project area and as such the non-collection policy did not come into play.

RESULTS

PREVIOUS INVESTIGATIONS

The background review revealed that there are no previously recorded sites within the project area nor have any surveys been conducted within or immediately adjacent to the project area. One previously recorded archaeological site (41BX64), eight archeological surveys, and an historical marker are recorded within a one-mile radius of the project area (Atlas).

Site 41BX64 is a prehistoric campsite located approximately 0.93 miles southwest of the project area (Atlas). The site consists of a lithic artifact and burned rock scatter with few historic materials. The eligibility status of the site is undetermined and recommendations for further work were not given.

Archaeologists with the Center of Archaeological Research (CAR) at The University of Texas at San Antonio conducted a cultural resources survey in 1983 for the Environmental Protection Agency southwest

of the project area. The linear survey runs north and south beyond the project area boundaries. Another early survey occurred in 1986 when the Federal Highway Administration (FHWA) sponsored a linear survey along the proposed route of Loop 410 to the east of the project area.

SWCA conducted a pipeline survey for the San Antonio Water System (SAWS) Major Sewer Outfall Improvement Program in 1999 (Miller and Meadows 2000). The survey targeted two crossings of Salado Creek. Subsurface investigations did not encounter any significant cultural resources within the pipeline route (Miller and Meadows 2000).

Approximately 0.5 miles west of the project area are two cultural resource surveys performed by archaeologists from CAR. The first survey was conducted in 1973 within the J Street Park, or New City Park, and resulted in the discovery of site 41BX64 (Atlas). The second is a hike and bike trail survey along Salado Creek conducted for the Texas Department of Transportation in 2003, which included trenching. No cultural materials were encountered (Weston et al. 2004).

Within 0.4 miles northwest of the project area, Raba-Kistner archaeologists surveyed locations for sewer outfall siphons along Salado Creek (Held and Darnell 2008). Two other surveys were conducted along Salado Creek, one in 2007 under permit 4603, the other in 2008 under permit 4879; however, further information was not available (Atlas).

The historical marker, Camp of Stephen F. Austin, is located approximately 0.84 miles southwest of the project area (Atlas). The marker commemorates a campsite established by Stephen F. Austin in October 20–26, 1835, for the preparation of attacking the Mexican garrison in San Antonio. The marker was erected in 1936.

RESULTS OF INVESTIGATION

On February 4, 2009, an intensive pedestrian and subsurface archaeological survey was conducted by SWCA archaeologists at the proposed 0.32-acre storm sewer system outfall site. The project area stretches across a rocky hilltop with little to no soils present. The APE slopes primarily to the northwest and towards Salado Creek. Overall, the project area is disturbed by erosion, likely accelerated by the introduction of fill during the construction of the neighboring commercial development and West Hein Road. Additionally, the illegal disposal of debris, vegetation, and refuse has disturbed the surface integrity of the APE.

Two shovel tests were excavated within the 0.32-acre tract, thus exceeding the THC's survey standards for projects of this size (Figure 6, Table 1). The shovel tests were terminated at depths of 6 and 10 centimeters below surface (cmbs) due to the presence of ubiquitous caliche and near-surface bedrock. Soils, where present, consisted of a thin lens of extremely rocky clay loam. Surface visibility was typically moderate (ca. 30-55%) with a light to heavy leaf scatter obscuring the surface.

The investigation of the 0.32-acre property resulted in entirely negative findings. No cultural materials, aside from high amounts of modern refuse, were identified either on the surface or within either excavated shovel test.

SUMMARY AND RECOMMENDATIONS

On behalf of Adam Environmental and the City of San Antonio, SWCA conducted a cultural resources investigation of a 0.32-acre storm sewer system outfall site located in east San Antonio, Bexar County, Texas. Work was done to satisfy requirements of the Texas Antiquities Code under permit number 5148.

The background review revealed that no previously recorded archaeological sites are present in the project area. Additionally, the project area has not been previously surveyed for cultural resources.

Overall, the APE possesses no potential for buried cultural deposits due to the near-surface nature of the underlying bedrock, which is blanketed only by a thin lens of topsoil. The survey included the excavation of two shovel tests. No cultural materials were identified on the surface or within either of the shovel test excavations.

Based upon the results of current investigations, it is SWCA's opinion that the development of the project area will have no adverse impacts on significant cultural resources. SWCA recommends no further archaeological investigations within the project area.



Figure 6. Shovel test location map.

Table 1. Shovel Test Data

Shovel Test #	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Comments
1	-	0-6	10YR3/2	Very dark grayish-brown	clay	gravel	west edge of tributary to Salado Creek
2	-	0-10	10YR3/2	Very dark grayish-brown	clay	gravel	CaCO ₂ increases with depth; extremely compact

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