

***A Cultural Resources Survey for the
Indian Creek Channel Improvement
City of San Antonio, Bexar County, Texas***

Document No. 090154
PBS&J Job No. 0710046.08

**A CULTURAL RESOURCES SURVEY FOR THE
INDIAN CREEK CHANNEL IMPROVEMENT
CITY OF SAN ANTONIO, BEXAR COUNTY, TEXAS**

TEXAS ANTIQUITIES PERMIT No. 5348

Prepared for:

City of San Antonio

Prepared by:

PBS&J
6504 Bridge Point Parkway
Suite 200
Austin, Texas 78730

Principal Investigator/Geoarcheologist:
Julie Shipp

Report Authors:
Julie Shipp
Meghan Egan

August 2009

Abstract

PBS&J was contracted by the City of San Antonio to perform cultural resource investigations of the land within the proposed Indian Creek Channel Improvement area in San Antonio, Bexar County, Texas. The project will alter Indian Creek from its northern intersection with Five Palms Drive downstream to its southern intersection with the same road, for a total distance of approximately 1,430 linear meters. It will also modify a roughly 548-meter-long segment of the Kim Valley drainage, which feeds Indian Creek north of Old Pearsall Road. A cultural resources survey was conducted in this area on July 20, 21, and 22, 2009. The survey consisted of a pedestrian survey augmented by 23 shovel tests and 7 backhoe trenches. No cultural material was recovered.

Contents

	Page
Abstract	ii
List of Figures	iii
Acknowledgments	v
I. INTRODUCTION	1
II. SETTING	3
III. METHODS	4
RECORDS REVIEW	4
FIELD INVESTIGATION	4
IV. RESULTS	6
FIVE PALMS ROAD TO OLD PEARSALL ROAD	6
OLD PEARSALL ROAD TO WAR CLOUD DRIVE	6
WAR CLOUD DRIVE TO FIVE PALMS ROAD	10
KIM VALLEY DRAINAGE	10
SUMMARY	13
V. RECOMMENDATIONS	14
VI. REFERENCES	15
Appendix: Trench Descriptions	

Figures

	Page
1	Location Map 2
2	Shovel Test and Trench Locations 7
3	Five Palms to Old Pearsall 8
4	Old Pearsall to War Cloud 9
5	North from Five Palms to War Cloud 11
6	Kim Valley 12

Acknowledgments

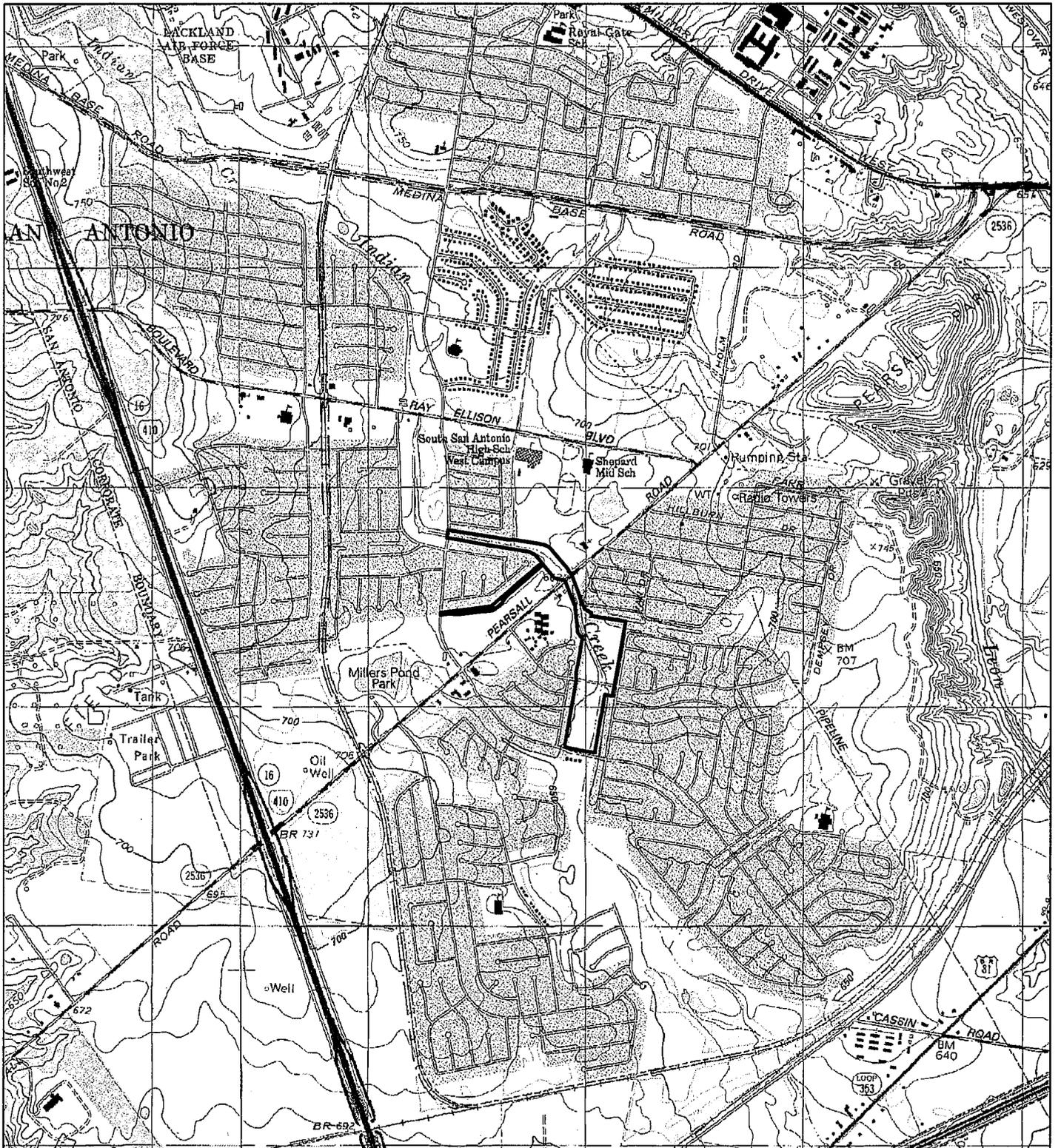
This work was conducted by a team of PBS&J personnel. Ryan Bayer coordinated with the City of San Antonio to communicate project details and field questions. Eugene Foster and Nesta Anderson also provided such assistance. In addition, Eugene Foster coordinated backhoe services with Randall Lozano of Jerdon Enterprises, LP, and Nesta Anderson provided comments on the report. Michael Smith conducted background research and prepared the research design. Julie Shipp served as Principal Investigator, report author, and led the field crew. Meghan Egan assisted as field technician and report author. The report was formatted by Christine Vidrick and edited by Linda Nance. David Kimmerling drafted figures for the report. Kim Griffin served as reprographics technician. Robert Rogers provided quality control.

I. INTRODUCTION

The City of San Antonio (COSA) has developed plans for the improvement of the Indian Creek Channel Improvement. The project will modify Indian Creek from its northern intersection with Five Palms Drive downstream to its southern intersection, also with Five Palms Drive (Figure 1). The total distance of this area is approximately 1,430 linear meters (m) (4,700 feet [ft]). An additional 548-m (1,800-ft) segment of the Kim Valley drainage, which feeds Indian Creek north of Old Pearsall Road, will also be modified. Due to the fact that the proposed project is located on lands owned by COSA, compliance with the Antiquities Code of Texas (ACT) and the acquisition of an Antiquities Permit was required. Further, compliance with Section 106 of the National Historic Preservation Act is necessary because the project has received a Clean Water Act Section 404 individual permit due to the proposed drainage modifications and U.S. Department of Housing and Urban Development (HUD) 108 funding. Therefore, COSA has contracted PBS&J to conduct cultural resource investigations of the project area affected by the Indian Creek Channel Improvement project. The survey reported here was conducted under Texas Antiquities Permit No. 5348.

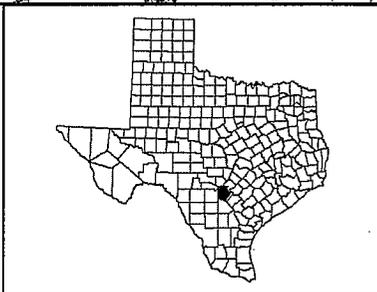
The improvements within the project area will consist primarily of excavation to widen and deepen existing channels. Compacted fill, covered by a soil retention blanket, will be placed within the excavations to form new channels. Ground disturbances will occur to depths of 1.5 m (5 ft), and may extend in places to widths of approximately 122 m (400 ft). North of Old Pearsall Road, construction will affect previously channeled sections of Indian Creek and the Kim Valley drainage. To the south, Indian Creek will be modified along its natural channel to War Cloud Drive, and within the previously channeled stretch to Five Palms Drive. Operations will also include the creation of staging areas for the removal of soils. The exact locations of the latter have yet to be determined but are anticipated to remain within the drainage easement. The project will also require modification of the Old Pearsall Road crossing over Indian Creek, an existing bridge-class culvert that lies entirely within existing Texas Department of Transportation (TxDOT) right of way (ROW). PBS&J and COSA will request concurrence that the TxDOT portion of the project requires no further cultural resource assessment in accordance with Stipulation V of TxDOT's First Amended Programmatic Agreement for Transportation Undertakings (PA-TU) and their Memorandum of Agreement with the Texas Historical Commission (THC). A review of the 1931 Stoner System aerial photographs and property maps of Bexar County identified no structures within at least 230 m (700 ft) of the bridge at Indian Creek; the nearest buildings depicted are no longer extant on recent maps and aeriels, having been replaced by modern residential development.

The following investigations were designed to (1) locate and record all archeological resources present within the project area, (2) preliminarily assess their eligibility status for listing in the National Register of Historic Places (NRHP) and as State Archeological Landmarks (SAL); and (3) provide site-specific recommendations for all NRHP- or SAL-eligible sites or sites with an unknown eligibility status.



Legend

 Project Area Limits*





0 1,000 2,000
Feet

Source(s):
TNRIS

PBSJ 10100 Reunion Place, Suite 850
San Antonio, Texas 78216
Phone: (210) 828-9494

Figure 1
Project Location Map

Prepared for: City of San Antonio, Texas

Prepared By: PBSJ CW/DR	Scale: 1 in = 2000 ft
Job No.: 071004608	Date: March 27, 2009

*Note: Project area limits are estimates based on project information provided by the City of San Antonio.

II. SETTING

The project area is located in southwestern San Antonio approximately 1.8 kilometers (km) (1.1 miles) northeast of Loop 410, on Old Pearsall Road. The Area of Potential Effect (APE) is considered to be within the limits of construction (see Figure 1 and Figure 2), including depths of up to 1.5 m (5 ft). The APE is primarily within the existing drainages of Indian Creek and the Kim Valley drainage. Indian Creek rises in southwestern Bexar County and runs for approximately 13 km (8 miles) before terminating at Leon Creek. The terrain is gently rolling, with vegetation consisting primarily of mesquite and grasses.

San Antonio is situated within the Blackland Prairie Ecological Region, at the interface of the Balcones Escarpment and the Gulf Coastal Plains. The southwestern corner of San Antonio is mapped geologically as an outcrop of the Eocene-aged Midway Group. This geologic formation consists primarily of clay and sand, with silt and sand grading to mudstone upward, toward the Wilcox Group. The lower parts are glauconitic with phosphatic nodules. Typically, the Midway Group is gray in color and weathers yellow (Brown et al. 1992).

The majority of the soils within the APE are mapped as belonging to the Tinn and Frio association. These are Holocene-aged soils that were formed in calcareous clayey alluvium within floodplains of the Blackland Prairie. Tinn soils are taxonomically classified as Vertisols, while Frio soils are classified as Mollisols. Soils of the Houston Black series are mapped in the remaining portions of the APE. Houston clays are upland soils that formed in Cretaceous-aged calcareous clay and marl (Taylor et al. 1966). They are taxonomically classified as Vertisols and are particularly susceptible to shrinking and swelling, which can be detrimental to the context of archeological assemblages (Collins and Bousman 1990). Furthermore, Houston Black soils are considered to have low geoarcheological potential (Abbott 2001).

III. METHODS

RECORDS REVIEW

A records search was conducted at the Texas Archeological Research Laboratory (TARL) and on the THC's Texas Archeological Sites Atlas Online (Atlas) for the purpose of determining whether any previously recorded archeological sites, properties listed on the NRHP, SALs, cemeteries, or historical markers are present within, or close to, the proposed project. According to the records search, no previously recorded sites, NRHP properties, SALs, cemeteries, or historical markers have been plotted within 2.5 km (1.6 miles) of the proposed project area. A review of the 1931 Stoner System aerial photographs and property maps of Bexar County identified no structures within at least 230 m (700 ft) of the bridge at Indian Creek; the nearest buildings depicted are no longer extant on recent maps and aerials, having been replaced by modern residential development. The bridge-class culvert that crosses Indian Creek was installed in 1965, according to the National Bridge Inventory (NBI 150150244001001). In 2000, the bridge and related section of road were reconstructed and improved by the extension of the culvert bridge and the widening of the road; according to an examination of the THC's Archeological Sites Atlas, no archeological investigations were required for those improvements.

Only one previous investigation is listed within 600 m (2,000 ft) of the proposed project area, a 1977 survey between Miller's Pond and Old Pearsall Road, southwest of the current project center. No sites were recorded during this survey. The nearest recorded archeological site, located approximately 2.5 km (1.6 miles) to the northeast, is 41BX598, a thin 8-x-10-m lithic scatter on Leon Creek (Snively et al. 1983). Additionally, Lackland Air Force Base, over 1.5 km (0.9 mile) to the north, has received numerous cultural resource surveys; the nearest sites located during the various investigations are over 3 km (1.9 miles) from the proposed Indian Creek Drainage Improvement project area.

FIELD INVESTIGATION

Based on the mapped alluvium within the APE and the possibility of encountering buried cultural resources, PBS&J, in consultation with the COSA Archeologist and the Regulatory Archeologist of the U.S. Army Corps of Engineers (USACE), recommended an intensive pedestrian survey combined with a program of mechanical excavation. The pedestrian survey included judgmentally placed shovel tests to identify any shallowly buried sites as well as to identify potential areas for the location of backhoe trenches.

Shovel tests were approximately 30 cm (12 inches) in diameter and were excavated in arbitrary levels not exceeding 10 centimeters (cm) (4 inches). Where possible, shovel tests were to be excavated to subsoil (the Bt horizon) or to bedrock. The excavated soil from each shovel test was screened through 0.64-cm (0.25-inch) mesh hardware with the exception of clay-dominated matrices. Clays were hand sorted and visually inspected. Information relating to each shovel test was recorded in a shovel test log, including a description of the sediments present, the general environmental setting of the shovel test, its position as

marked by a Global Position System (GPS) unit, any artifacts that were present, and any additional comments. All shovel tests were backfilled upon completion.

Backhoe trenches were excavated within the alluvial settings of the APE on either side of the drainage channel. These were placed at intervals of roughly 175 m, on alternating sides of the creek, for a total of seven trenches. The specific trench locations were judgmentally selected by the project geoarcheologist based on the likelihood of intact soils as well as backhoe accessibility.

The trenches were excavated to the depth of construction. The walls were cleaned and the trench then examined for cultural material. A representative profile was drawn of each trench. The portion of each trench wall drawn was also photographed and the soil was be described. The locations of the trenches were recorded using a Garmin GPS unit.

Residential development borders the project area. Previous development within the proposed project area includes the installation of fiber optic cable, sewage, and gas lines, and perhaps most detrimental to the location of cultural resources, the channelization of the creeks. Thus, the majority of the APE is considered to be a low probability area for archeological sites. However, undeveloped plots south of the Kim Valley drainage and on Indian Creek south of Old Pearsall Road were initially thought to harbor relatively undisturbed soils. The soils in these areas have been mapped as belonging to the Tinn and Frio series, which occupy the floodplain of Indian Creek and the Kim Valley drainage. These areas were the focus of the majority of the cultural resources investigation.

IV. RESULTS

Shovel tests and trenches were placed in the areas likely to be the least disturbed (Figure 2). The two primary locations that were suggested for subsurface investigation were the open terraces above the streams and the wooded area on the east bank of Indian Creek. The results of the investigation are discussed below as separate sections of APE: Five Palms Road to Old Pearsall Road to War Cloud Drive to Five Palms Road, and the Kim Valley drainage. As previously mentioned Five Palms Road curves and is both the northern and southern boundary of the APE along Indian Creek.

FIVE PALMS ROAD TO OLD PEARSALL ROAD

This portion of the APE is that which is located between Five Palms Road at the north end of the project area to Old Pearsall Road. The APE of the majority of this section is within the existing drainage ditch between residential developments (Figure 3). The project area widens north of Old Pearsall Road. The soils at that location are mapped as Tinn and Frio series. However, the drainage had been channelized and the stream gravels were pushed and leveled to create flat terraces. Thus, the soils in the area have been disturbed. Ground surface visibility is approximately 20 percent. Vegetation consisted of grasses and a few ornamental trees planted along the eastern bank of the creek, adjacent to a church parking lot.

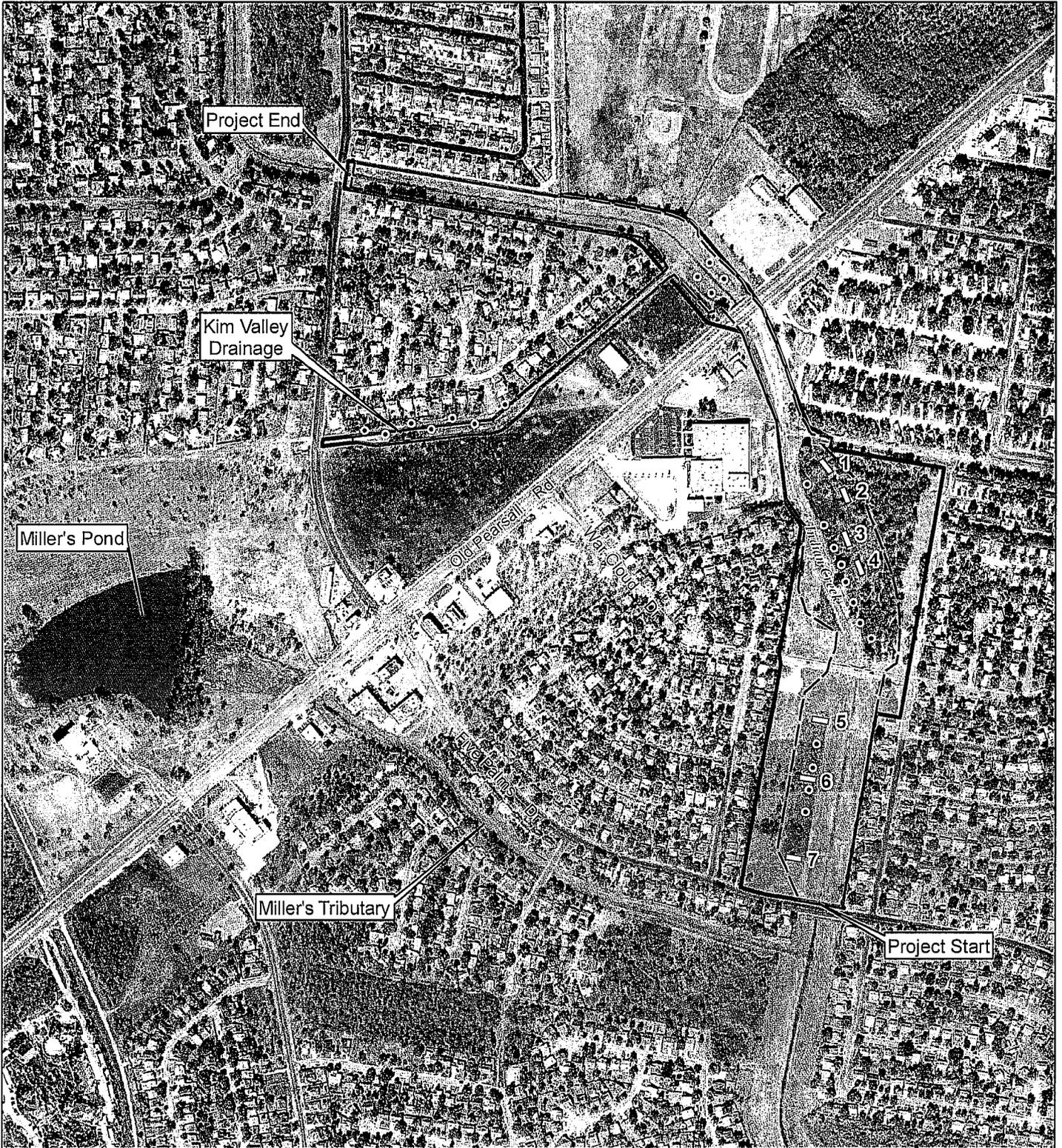
Four shovel test were placed 30 m apart, two on the east and two on the west side of Indian Creek, north of Old Pearsall Road (see Figure 2). The tests confirmed that the soils in this area were disturbed and that backhoe trenching was not necessary. Dense gravels encountered in the shovel tests further confirmed this assertion. No cultural material was recovered from the four shovel tests.

OLD PEARSALL ROAD TO WAR CLOUD DRIVE

This part of the project area lies within the existing drainage south from Old Pearsall Road to a tributary of Indian Creek (Figure 4). South of this is a triangular, wooded parcel on the east side of Indian Creek that appeared to have potential to contain buried cultural deposits. Although channelization of the creek has occurred in this area, as it has along the entirety of the project area, portions of the wooded parcel were not in the immediate drainage, and it seemed possible that the soils were less disturbed in this area. The soils are mapped as belonging to the Tinn and Frio series. Ground surface visibility was less than 10 percent, and vegetation consisted primarily of various hardwoods.

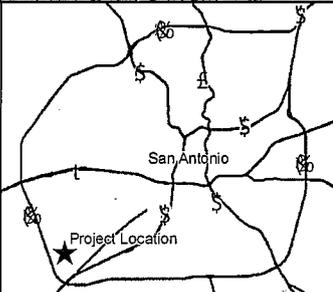
Eight shovel tests were placed along the east side of the two-track road that runs along the east side of Indian Creek (see Figure 2). Shovel tests were dug at 30-m intervals. Although most of the shovels tests revealed dense gravels with little remaining soil, three of the shovel tests indicated that soils remained in portions of the wooded tract. No cultural material was recovered from the eight shovel tests along the road.

Four locations in the wooded area were selected for mechanical excavation (see Figure 2). The backhoe trenches were excavated in areas that appeared as possible natural landforms, avoiding wetland areas.



Legend

- Project Area Limits*
- Limits of Construction
- Negative Shovel Test
- Negative Trench Location



0 280 560
 Feet

Source(s):
 COSA, TxDOT, TNRRS

10100 Reunion Place, Suite 850
 San Antonio, Texas 78216
 Phone: (210) 828-9494

Figure 2
Shovel Test
and Trench Locations

Prepared for: City of San Antonio, Texas	
Prepared By: PBSJ CW/DR	Scale: 1 in = 600 ft
Job No.: 071004608	Date: March 25, 2009

*Note: Project area limits are estimates based on project information provided by the City of San Antonio.



PBS&J

- Engineering
- Environmental Consulting
- Surveying

Figure 3

FIVE PALMS TO OLD PEARSALL



PBS

- Engineering
- Environmental Consulting
- Surveying

Figure 4

OLD PEARSALL TO WAR CLOUD

Only Trench 3 exhibited an undisturbed soil profile. Trenches 1, 2, and 4 were deposited as a result of earth-moving construction, and showed multiple fill deposits and/or mixing of deposits (Appendix). No cultural material was recovered from the four trenches excavated in this area.

WAR CLOUD DRIVE TO FIVE PALMS ROAD

The southernmost portion of the project area transects from War Cloud Drive to Five Palm Road (Figure 5). The east side of the creek is within the existing drainage. The project area is wider on the west side of the creek and extends onto one of the flat terraces that were created during creek channelization. The soils on the western bank are mapped as Tinn and Frio. Ground surface visibility is approximately 20 percent. Vegetation is sparse scrub and mesquite.

Four shovel tests were placed along the vegetation line on the west bank at 30-m intervals to assess the nature of the deposits (see Figure 2). The shovel tests were shallow because of dense gravels. The maximum depth of shovel testing was 30 cm below ground surface. No cultural material was recovered from the shovel tests.

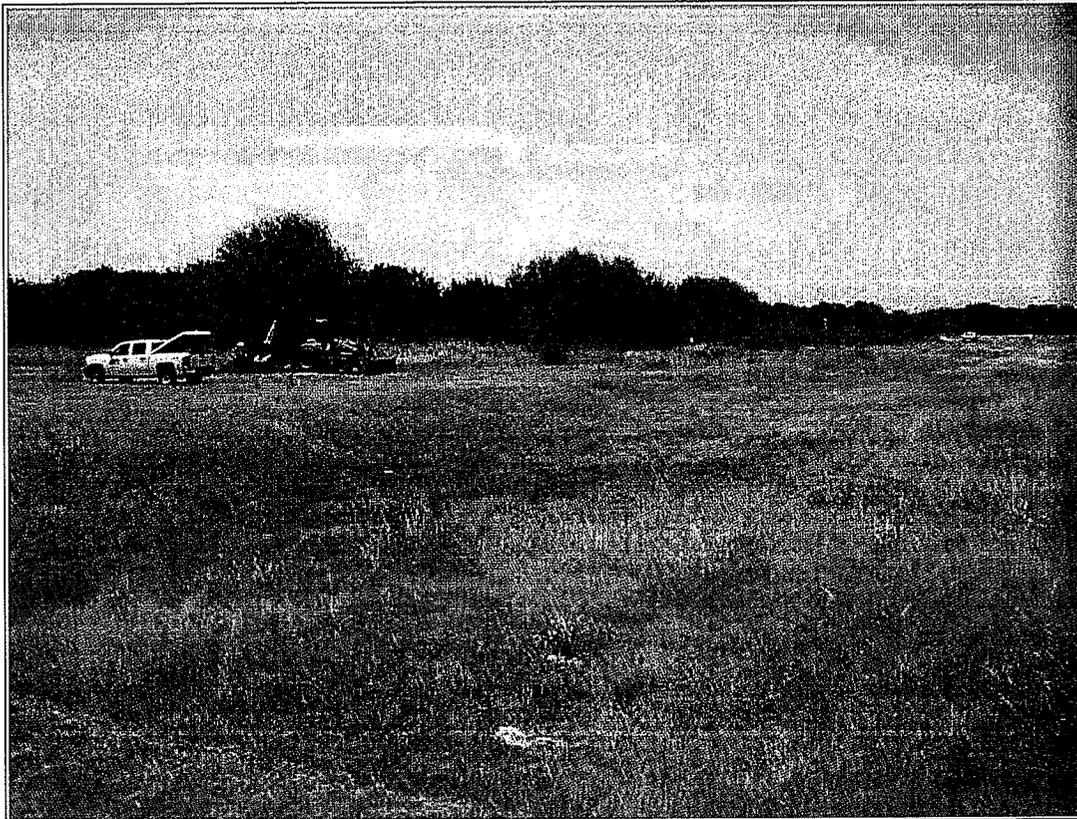
Despite the apparent lack of soils, three locations were selected along the west bank of the creek for mechanical excavation because of the possibility that intact soils may be buried under the fill (see Figure 2). Wetland areas were avoided. The three trenches confirmed disturbance to depth of construction (see Appendix). No cultural material was located in the three trenches dug in this area.

KIM VALLEY DRAINAGE

The Kim Valley portion of the project is an existing drainage that runs behind residential development (Figure 6) to Indian Creek at its eastern terminus (see Figure 1). South of the creek is a semi open terrace, although the potential for buried cultural resources in this area is low. Soils in this area are mapped as Tinn, Frio, and Houston Black series. These soils have little potential to contain buried cultural resources (Abbott 2001). The creek has been channelized and the fill pushed and leveled to create flat terraces. Ground surface visibility is minimal, less than 2 percent. Vegetation consisted of mixed grasses.

Seven shovel tests were placed along the western half of this portion of the APE (see Figure 2), on alternating sides of the creek at 50-m intervals to assess the nature of the deposits and the potential utilization of mechanical trenching in the area. Four shovel tests on the north side of the drainage confirmed soil disturbance and erosion. Three shovel test on the south terrace also confirmed disturbance, although on the south side the disturbance was primarily from earth movement during drainage channelization.

Once the drainage turns to the northeast, the entire APE is within the drainage. No shovel tests were placed in this area. No cultural material was located in the seven shovel tests along the Kim Valley drainage. Backhoe trenches were not excavated in this location, as the area has been heavily disturbed from residential development.



- Engineering
- Environmental Consulting
- Surveying

Figure 5

NORTH FROM FIVE PALMS
TO WAR CLOUD



PBS

- Engineering
- Environmental Consulting
- Surveying

Figure 6

KIM VALLEY

SUMMARY

The pedestrian survey of the APE, including 23 shovel tests and 7 backhoe trenches, did not result in the location of any cultural resources. This is due in large part to previous residential development, including the channelization of the Kim Valley drainage and Indian Creek. Subsurface investigations confirmed that the stream deposits were pushed into artificial terraces and leveled as part of drainage construction. Very little soil remains intact within the highly disturbed APE, which is dominated by stream gravels and fill.

V. RECOMMENDATIONS

The cultural resource survey team did not locate any prehistoric or historic cultural material during the cultural resources investigations. The soils within the APE were found to have been disturbed by urban development. Cultural deposits deeper than the proposed limits of construction would not likely be disturbed by the improvement of the Indian Creek channel. Therefore, further archeological investigation is not recommended. If cultural material is located during construction, work at that location should cease and the COSA archeologist should be notified immediately.

VI. REFERENCES

Abbott, James T.

- 2001 *Houston Area Geoarcheology: A Framework for Archeological Investigation, Interpretation, and Cultural Resource Management in the Houston Highway District.* Archeological Studies Program Report 27. Texas Department of Transportation, Environmental Affairs Division, Austin.

Brown, T.E, N.B. Waechter, and V.E. Barnes

- 1992 *Geologic Atlas of Texas, San Antonio Sheet.* Robert Hamilton Cuyler Memorial Addition. Bureau of Economic Geology, The University of Texas at Austin.

Collins, M.B., and C.B. Bousman

- 1990 *Cultural Implications of Late Quaternary Environmental Change in Northeastern Texas.* Texas Archeological Research Laboratory, The University of Texas at Austin.

Snavely, R., M. Greco, and A. Fox

- 1983 *An Archeological Survey of Three Pipeline Routes in South Bexar County for the San Antonio 201 Wastewater Treatment Facilities Project: An Interim Report.* Center for Archaeological Research, The University of Texas at San Antonio.

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

- 1966 *Soil Survey of Bexar County, Texas.* U.S. Department of Agriculture, Soil Conservation Service, in Cooperation with the Texas Agricultural Experiment Station.

Appendix

Trench Descriptions

Appendix: Trench Descriptions

Trench descriptions are listed below, with photographs. Each trench was limited to 15 feet (5 meters) in length because dense gravels made excavation difficult. Trenches 1-4 were parallel with Indian Creek and trenches 5-7 were perpendicular (east-west), in the hopes of cutting across a portion of the natural terrace.

Trench 1

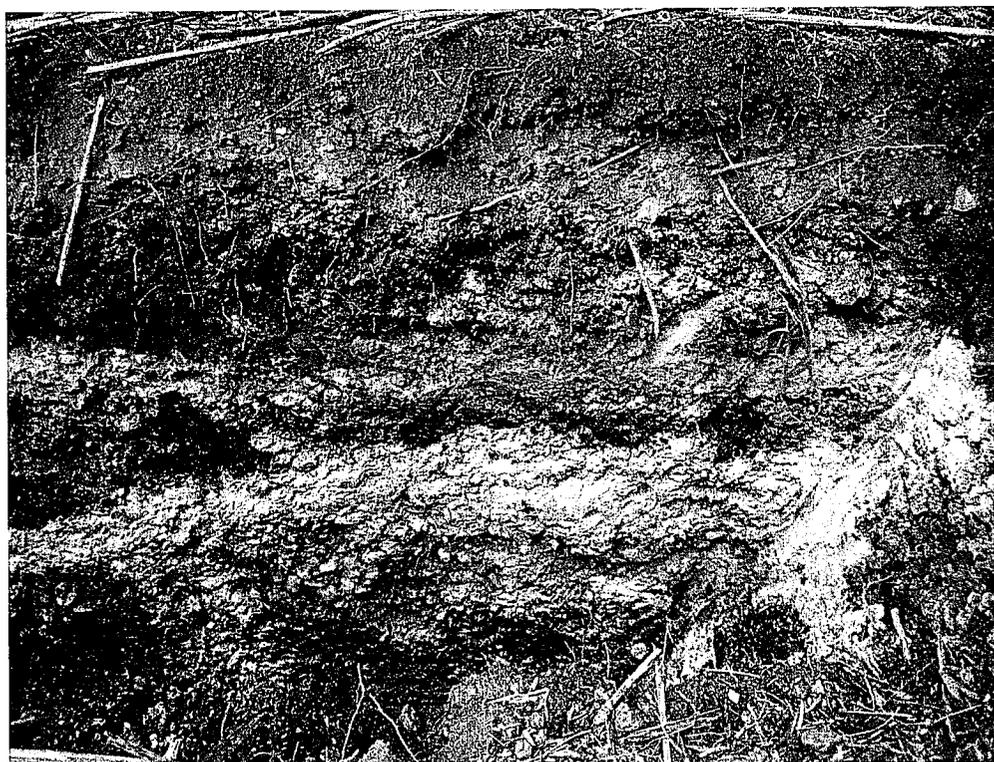
Zone	Depth (cmbs)	Description
I	0-20	10YR4/2 dark grayish brown clay loam; medium bed; smooth, gradual boundary; weak, fine, subangular, blocky structure; 20% gravels; many fine to coarse roots
II	20-85	10YR6/1 gray clayey sand; thick bed; smooth, gradual boundary; loose, granular structure; 60 % gravels; few fine roots
III	85-150+	10YR2/1 black loamy clay; thick bed; boundary unknown; weak, fine, subangular, blocky structure; friable; calcareous; 15% gravels



Appendix B (Cont'd)

Trench 2

Zone	Depth (cmbs)	Description
I	0-10	10YR 3/2 very dark gray brown clay loam, 30% gravels; thin bed; smooth, gradual boundary; weak, fine subangular, blocky structure; many fine roots
II	10-20	10YR 6/4 light yellowish brown clay loam, 50 % gravels; thin bed; smooth, gradual boundary; weak, fine subangular, blocky structure; few fine roots
III	20-50	10YR 2/1 black clay loam, 40 % gravels; thick bed; smooth, clear boundary; weak, fine, subangular, blocky structure;
IV	50-60	10YR 8/2 pale brown clay, 40% gravels; thin bed; smooth, clear boundary; prismatic structure; common, fine, distinct 10YR6/4 light yellowish brown mottles
V	60-70	10YR 2/1 black clay loam, 40% gravels; thin bed; smooth, clear boundary; weak, fine subangular, blocky structure;
VI	65-100	10YR 8/2 very pale brown clay loam; thick bed; smooth, gradual boundary; weak, fine, subangular, blocky structure; calcareous;
VII	100-150+	10YR 2/1 black clay loam; thick bed; boundary unknown; weak, fine, subangular, blocky structure.



Appendix B (Cont'd)

Trench 3

Zone	Depth (cmbs)	Description
I	0-20	10YR 2/1 black loamy clay, 30% gravels; thick bed; smooth, gradual boundary; weak, fine, subangular, blocky structure; many fine roots
II	20-65	10YR 4/1 dark grayish brown loamy clay, 60% gravels; thick bed; smooth, gradual boundary; weak, fine, subangular, blocky structure;
III	65-100+	10YR 8/1 white caliche/hard pan, 70 % gravels; thick bed, boundary unknown



Appendix B (Cont'd)

Trench 4

Zone	Depth (cmbs)	Description
I	0-150+	10YR 3/1 very dark gray, 10YR 2/1 black, 10YR 6/4 light yellowish brown, and 10YR 8/1 white clay loam, 60% gravels; thick bed; boundary unknown; weak, fine, subangular, blocky structure; few fine roots



Appendix B (Cont'd)

Trench 5

Zone	Depth (cmbs)	Description
I	0-30	10YR 5/1 gray loamy clay, 40% gravels; thick bed; smooth, gradual boundary; weak, fine, subangular, blocky structure; pockets of 10YR6/4 light yellowish brown sand; many fine and medium roots
II	30-100	10YR 2/1 black loamy clay, 30% gravels; thick bed, smooth, gradual boundary; weak, fine, subangular, blocky structure
III	100-120+	10YR 4/1 gray clay; boundary unknown; prismatic structure; calcareous



Appendix B (Cont'd)

Trench 6

Zone	Depth (cmbs)	Description
I	0-30	10YR 4/1 dark gray loamy clay, 30% gravels; thick bed, smooth, diffuse boundary; weak, fine, subangular, blocky structure; many fine roots
II	30-110	10YR 2/1 black loamy clay, 30% gravels; thick bed; smooth, gradual boundary; weak, fine, subangular structure;
III	110-120+	10YR 5/2 grayish brown clay, 50% gravels; boundary unknown; prismatic structure



Appendix B (Cont'd)

Trench 7

Zone	Depth (cmbs)	Description
I	0-20	10YR 4/1 dark gray loamy clay, 30% gravels; medium bed; smooth, clear boundary; weak, fine, subangular, blocky structure; many fine roots
II	20-30	10YR 6/3 pale brown sand; thin bed; smooth, clear boundary; granular, loose structure
III	30-35	10YR 8/3 very pale brown loamy clay, 30% gravels; thin bed, smooth, clear boundary; weak, fine, subangular, blocky structure
IV	35-40	10YR 2/1 black loamy clay, 30% gravels; thin bed; smooth, clear boundary; weak, fine, subangular, blocky structure
V	40-50	10YR 8/3 very pale brown loamy clay, 40% gravels; thin bed; smooth, clear boundary; weak, fine, subangular, blocky structure
VI	50-110	10YR 2/1 black loamy clay, 50% gravels; thick bed; smooth, gradual boundary; weak, fine, subangular, blocky structure
VII	110-130+	10YR 4/2 dark grayish brown clay; boundary unknown, prismatic structure



PBS & TRANSMITTAL

TO: Ms. Theresa Larson
 Senior Environmental Protection Officer
 City of San Antonio
 111 Soledad, Suite 675
 San Antonio, Texas 78205

DATE: August 21, 2009

JOB NO. 071004608 0701.X

From: Ryan Bayer

Phone: 210.321.2050

Address/Office: 10100 Reunion Place, Suite 850
 San Antonio, Texas 78216

RE: Indian Creek Channel Improvement Project
 Draft Archeological Report

WE ARE SENDING YOU Attached Under separate cover via _____
 the following items:

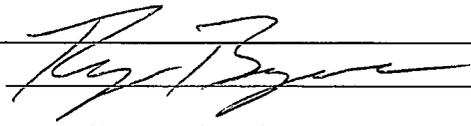
- Shop Drawings Prints Plans Samples
 Copy of Letter Change Order Specifications _____

COPIES	DATE	NO.	DESCRIPTION
1			Draft Archeological Report

THESE ARE TRANSMITTED As Checked Below:

- For approval Reviewed as submitted Resubmit _____ copies for approval
 For your use Reviewed as noted Submit _____ copies for distribution
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____ _____
 For bids due _____ 20____
 Prints returned after loan to us

REMARKS:

SIGNED 

DISTRIBUTION Kay Hindes (COSA)