

# Archaeological Monitoring of Geotechnical Boring Associated with the Alamo Museum in Alamo Plaza, San Antonio, Bexar County, Texas



by  
José E. Zapata

**NON-REDACTED**

Texas Antiquities Permit No. 9125

Principal Investigator  
Cynthia M. Munoz

*Prepared for:*  
City of San Antonio  
Transportation and Capital Improvements  
114 West Commerce Street  
San Antonio, Texas 78205



*Prepared by:*  
Center for Archaeological Research  
The University of Texas at San Antonio  
One UTSA Circle  
San Antonio, Texas 78249  
Technical Report, No. 88

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## **Abstract:**

In November 2019, in response to a request from the City of San Antonio (COSA) Transportation and Capital Improvements (TCI) Department, The University of Texas at San Antonio (UTSA) Center for Archaeological Research (CAR) conducted archaeological monitoring of geotechnical boring associated with the Alamo Museum project adjacent to the Alamo Plaza complex in San Antonio, Bexar County, Texas. The boring samples will be used by Terracon Consultants, Inc. (Terracon) to evaluate the soil bearing pressure, the active soil load, the location of the groundwater table, and the soil characteristics. The archaeological work consisted of monitoring four geotechnical bores that formed the Area of Potential Effect (APE), which covered less than 0.004 hectare (0.01 acre).

The project area is located on COSA-owned property. As a public municipal property, undertakings that might affect archaeological or historical sites are subject to regulatory review. At the municipal level, the property falls under COSA's Unified Development Code (Article 6 35-630 to 35-634). The project is also located within the Alamo Plaza Historic District. The project requires review by the Texas Historical Commission (THC), under the Antiquities Code of Texas, and was assigned Texas Antiquities Permit No. 9125. José Zapata was the Project Archaeologist, and Cynthia Munoz served as Principal Investigator.

CAR monitoring activities did not locate any cultural material or features. However, the 7.6 cm (3 in.) diameter bores greatly restricted this assessment. Consequently, CAR recommends that any future ground disturbance plans adjacent to the Alamo Plaza include archaeological monitoring and/or testing. The THC concurs with CAR's recommendation that any additional ground disturbances in this area should undergo archeological investigation. All project related material, including the final report, are permanently stored at the CAR facilities in accession file number 2236. Terracon submitted a separate geotechnical report to TCI.

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This project was completed with the support of several individuals and agencies. Special thanks to Andrew Anderson of Terracon Consultants, Inc. and the Ramco Drillers crew. Thanks are due to Matthew Elverson with the City of San Antonio Office of Historic Preservation and Dr. Emily Dylla of the Texas Historical Commission for their input and review of the final report. CAR staff members, Leonard Kemp and Jason Perez, completed the fieldwork, while Dr. Jessica Nowlin and Peggy Wall provided mapping and imaging support. Cynthia Munoz aided with the organization of the report, and Dr. Kelly Harris edited the final draft of the report.

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# Chapter 1: Introduction

In November 2019, at the request of the City of San Antonio (COSA) Transportation and Capital Improvements (TCI), The University of Texas at San Antonio (UTSA) Center for Archaeological Research (CAR) conducted archaeological monitoring of geotechnical bores associated with the Alamo Museum project, adjacent to the Alamo Plaza, San Antonio, Bexar County, Texas. The boring samples will be used by Terracon Consultants, Inc. (Terracon) to evaluate the soil bearing pressure, the active soil load, the location of the groundwater table, and the soil characteristics. The work consisted of monitoring four geotechnical bores that formed the Area of Potential Effect (APE), which covered less than 0.004 hectare (0.01 acre).

The bore holes are located within the Alamo Plaza Historic District (Figure 1-1). The district includes Alamo Plaza, located immediately to the west of the Alamo (41BX6), and commercial enterprises that developed in and around the Plaza (COSA 2020). The Alamo originally functioned as the third and final location of Mission San Antonio de Valero. The site is a State Antiquities Landmark (SAL), listed on the National Register of Historic Places, and designated a UNESCO World Heritage Site. Recently, a notice of existence of an abandoned or previously unknown cemetery at the Alamo was filed pursuant to Section 711.011 of the Texas Health and Safety Code. Therefore, any improvements to the facilities and surrounding complex that result in ground disturbing impacts need to be evaluated to ensure that they do not negatively impact significant cultural deposits and/or human remains.

As a public municipal property and COSA funded project, undertakings that might affect archaeological or historical sites are subject to regulatory review. As such, the project fell under the purview of the COSA, Office of Historic Preservation (OHP), and the COSA's Unified Development Code UDC) (Article 6 35-630 to 35-634). The project also required review by the Texas Historical Commission (THC) and was conducted under Texas Antiquities Permit No. 9125. José Zapata was the Project Archaeologist, and Cynthia Munoz served as Principal Investigator.

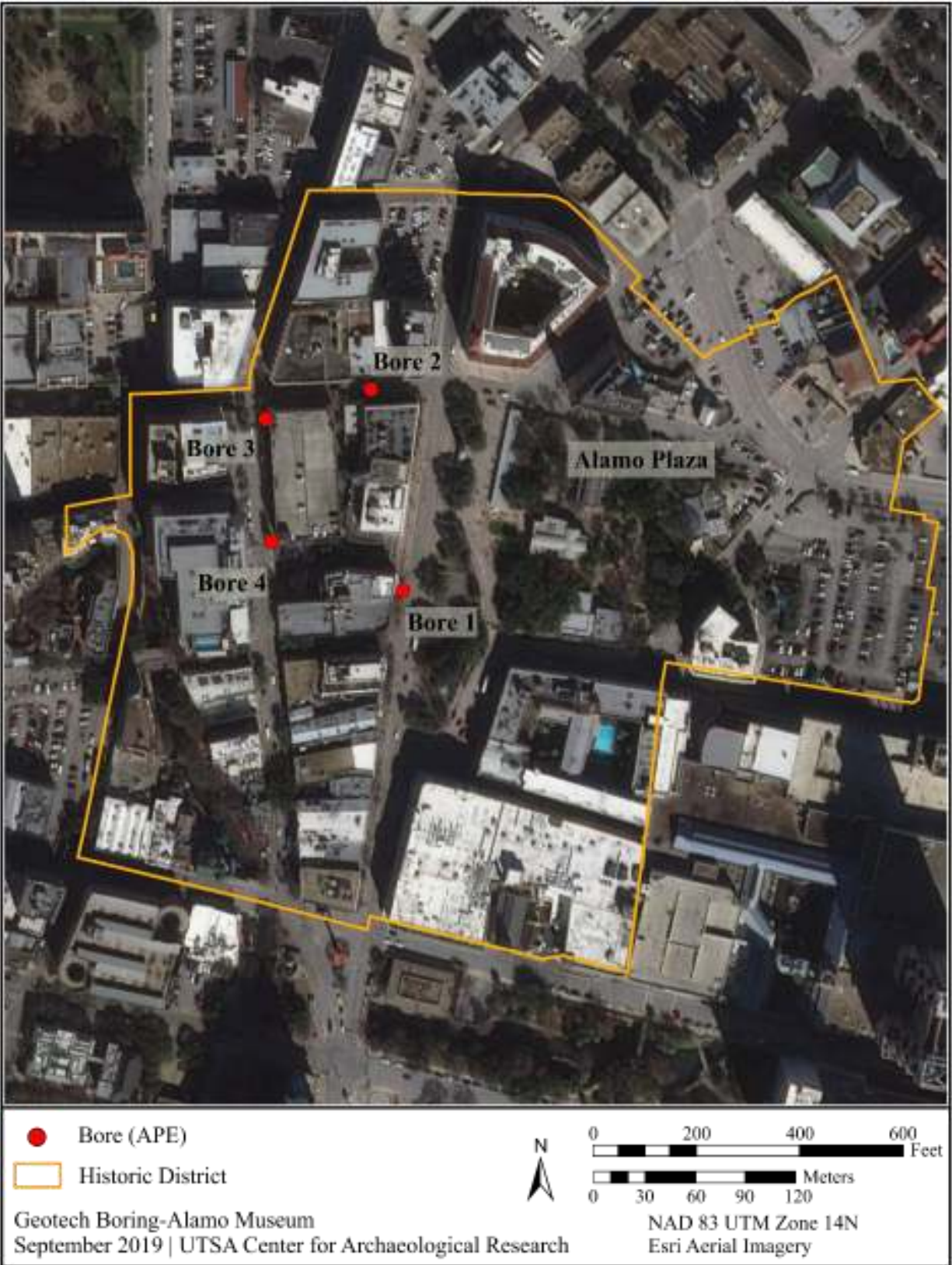


Figure 1-1. Alamo Plaza Historic District (COSA-OHP 2020), with location of the bores shown in red on satellite imagery.

## Area of Potential Effect and Project Description

The APE was less than 0.004 hectare (0.01 acre) and consisted of the four geotechnical bore located along the 300 block of Alamo Plaza, on the 500 block of E. Houston Street, and on the 100 block of Losoya Street. The bores were on the street approximately 50 cm (19.7 in.) from the sidewalk (Figure 1-2).

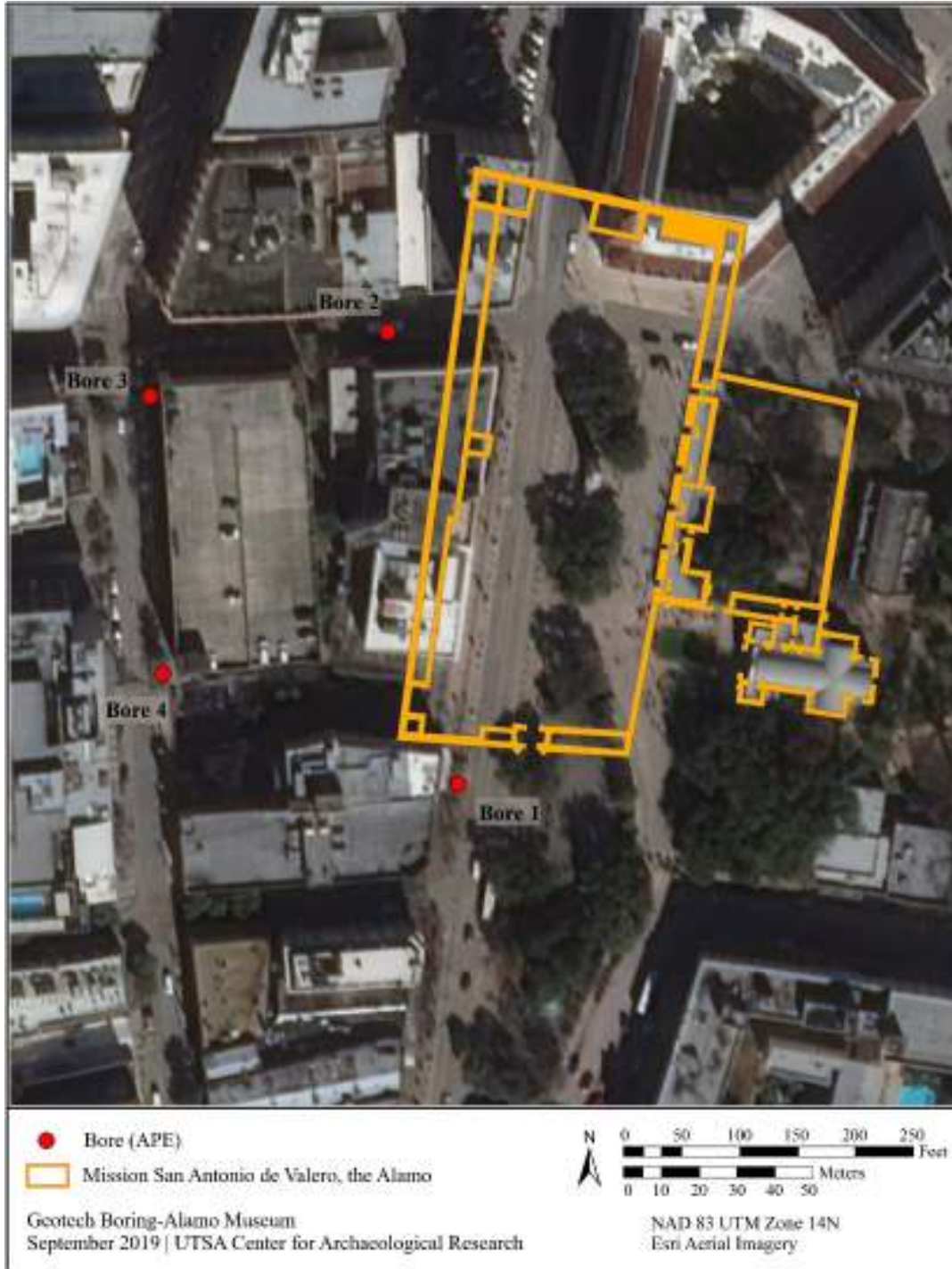


Figure 1-2. Location of the APE on satellite imagery.

The bores were 7.6 cm (3 in.) in diameter and extended to a depth of 9.1 m (30 ft.). CAR monitoring ceased at 6.1 m (20 ft.), a depth well below culturally sterile soils. No cultural material was encountered in the extracted soil samples.

### **Report Organization**

As no cultural material was recovered from any of the bores, this report follows the reporting format suggested by the Short Report Content Guidelines for the Council of Texas Archeologists (2020) and consists of five chapters. Following this introduction, Chapter 2 provides a review of the project setting. The field, laboratory, and curation methods for the project are presented in Chapter 3. Chapter 4 discusses the results of the archaeological monitoring, and Chapter 5 provides a summary and recommendations made by CAR.



## Chapter 2: Project Setting

Given the limited scope of this project, this report does not include an environmental section or culture history. The local environment and culture history are well documented and can be explored in two of the more recent Alamo study reports (see Anderson et al. 2018:22-36; Zapata and McKenzie 2017:5-13).

### Previous Research

A search of the Texas Historic Sites Atlas (THC 2019) noted five sites within 100 m (328 ft.) of the APE (Figure 2-1). Site 41BX6, Mission San Antonio de Valero, is the more prominent. Over the past fifty years, Mission San Antonio de Valero, the Alamo, has been the subject of several archaeological studies, all of which were recently summarized in a report by Anderson and colleagues (2018:50-67).

Site 41BX436 is the Lopez-Losoya House that stood on the west side of the 200 block of Broadway Street. An archaeological investigation located remnants of the house foundation and related artifacts. The online site registration form does not include a description of the recovered artifacts (THC 2019). The same project located and recorded site 41BX437, a historic period ice plant, and recovered artifacts (THC 2019). The results from the 1979 investigation were not published.

Site 41BX438, referred to as Radio Shack and Alamo West Wall, was excavated by staff from CAR in 1979 (Ivey 2005). Among the features encountered and excavated were adobe walls, a stone-lined well, a privy, and a segment of *acequia* (irrigation ditch). Numerous artifacts were recovered, including animal bone, ceramics, and artifacts related to the Battle of the Alamo. Based on the features and artifacts, the site dates to between circa 1720 and 1870 (Ivey 2005). The site was revisited in 2016 by a team of archaeologists from Pape-Dawson, Raba-Kistner, and CAR. The mostly intact site has been recommended for SAL status (Anderson et al. 2018:ii).

Site 41BX829 is the San Antonio River Bend site that was excavated by Lone Star Archeological Services. It was recorded in June 1991 by Alton K. Briggs (THC 2019). The site extends along the river channel known as the River Bend or Paseo del Rio. Archaeological work was confined to the approximately 10 m (32.8 ft.) wide channel, with the recovery of cultural material dating back to at least 4000 years before the present (BP). A site report was never produced.

*Redacted Image*

*Figure 2-1. Archaeological sites within 100 m (328 ft.) of the APE.*

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

CAR conducted archaeological monitoring for the Alamo Museum project adjacent to Alamo Plaza. The work consisted of monitoring four geotechnical bores that comprised the APE. The bores were located on the street pavement, approximately 50 cm (19.7 in.) off the sidewalk.

### **Field Methods**

The geotechnical bores were 7.6 cm (3 in.) in diameter and extended to a depth of 9.1 m (30 ft.). CAR staff completed a standard form to record details about each boring and photo documented the process. Ramco Drillers, using a truck-mounted CME-75 rig, completed the geotechnical borings. The core samples were collected by Terracon staff using a split-barrel sampling spoon. The mechanical process of collecting the core samples, by drilling and then hydraulically impelling a hollow stem sampler, was intrusive in that underlying deposits were fractured and cultural material, if present, were likely unrecognizable.

### **Laboratory Methods**

All field notes, forms, and photographs were placed in labeled archival folders. Digital photographs were printed on acid-free paper and placed in archival-quality page protectors. All records generated during the project were prepared in accordance with federal regulations 36 CFR Part 79 and THC requirements for State Held-in-Trust collections. No artifacts were recovered during this project. All project related materials, including the final report, are permanently stored at the CAR curation facility in accession file number 2236.

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## Chapter 4: Results of the Field Investigations

In November 2019, CAR staff monitored four geotechnical bores adjacent to Alamo Plaza. Bore B-1 was on the 300 block of Alamo Plaza, B-2 on the 500 block of E. Houston Street, and B-3 and B-4 on the 100 block of Losoya Street (Figure 4-1).



*Figure 4-1. Locations of B-1, B-2, B-3, and B-4.*

All boring occurred on the street, so that the initial auguring went through a 15.2-22.8 cm (6-9 in.) layer of asphalt pavement and concrete underlayment. The core samples were extracted using a truck-mounted rotary drill rig. This mechanical process involved a sequence of drilling and then hydraulically impelling a split-barrel sampling spoon in 1.5 m (5 ft.) segments. Figures 4-2 and 4-3 show the samples as they are in the process of being collected from the split-barrel sample spoon. Figure 4-2 shows geotechnical boring sample B-1 in front of 301 Alamo Plaza. Figure 4-3 shows geotechnical boring sample B-3 in front of 102 Losoya Street.



*Figure 4-2. Boring of B-1 in progress; sample 1 (top right) and sample 7 (bottom right).*



*Figure 4-3. Boring of B-3 in progress; sample 1 (top right) and sample 7 (bottom right).*

With the exception of B-3, the other three core samples were composed of light tan to light gray clays to a depth of 3 m (10 ft.). A white marl was recovered from the B-3 samples to a depth of 3 m (10 ft.). Silty gravely clays were recovered from between 3-6 m (20 ft.) in all four bores.

CAR monitoring ceased at 6.1 m (20 ft.), a depth well below culturally sterile soils. No cultural material was observed during the drilling/sampling activities. Terracon submitted a separate geotechnical report to TCI.

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

In November 2019, CAR conducted archaeological monitoring for the Alamo Museum project adjacent to Alamo Plaza. The work consisted of monitoring four geotechnical bores that formed the APE on the project. They were located along Alamo Plaza, E. Houston Street, and Losoya Street, approximately 50 cm (19.7 in.) off the sidewalk and in the street. The 7.6 cm (3 in.) diameter bores were 9.1 m (30 ft.) deep.

The extracted soil samples were examined for cultural material. No cultural deposits were encountered during this project. However, given the restricted sample size and intrusive means of securing the samples, CAR recommends that any additional ground disturbances should be archaeologically monitored and/or tested. The THC concurs with CAR's recommendation that any additional ground disturbances in this area should undergo archeological investigation.

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## References Cited:

Anderson, N.J., K. Miller Nichols, S. Tomka, C. McKenzie, A.N. Young, M. Nichols, M.J. Galindo, P.S. Marceaux, J. Zapata, J. Perez, and S. Wigley

2018 *Archeological Testing of Site 41BX6, The Alamo, San Antonio, Bexar County, Texas*. Pape-Dawson Engineers, Austin, Texas.

City of San Antonio (COSA)

2020 Alamo Plaza Historic District Map. Electronic document. <https://www.sanantonio.gov/Mission-Trails/Mission-Trails-Historic-Sites/Historic-Districts-Neighborhoods/Alamo-Plaza-Historic-District/Alamo-Plaza-Historic-District-Expanded>, accessed May 2020.

Council of Texas Archeologists

2020 Guidelines for Cultural Resource Management Reports. Electronic document, <https://counciloftexasarcheologists.org/resources/Documents/Guidelines%20for%20CRM%20Reports.pdf>, accessed January 2020.

Ivey, J.E.

2005 Chapter 3: Excavations Beneath the Radio Shack and the Alamo Theatre. In *Excavations West of Alamo Plaza, San Antonio, Texas*. Draft manuscript on file in accession 500, Center for Archaeological Research, The University of Texas at San Antonio.

Texas Historical Commission (THC)

2019 Texas Archaeological Sites Atlas. Electronic document, <https://atlas.thc.state.tx.us/>, accessed November 18, 2019.

Zapata, J.E., and C.M.M. McKenzie

2017 *The 2006 UTSA Field School at Mission San Antonio de Valero (41BX6), the Alamo, San Antonio, Bexar County, Texas*. Archaeological Survey Report, No. 453. Center for Archaeological Research, The University of Texas at San Antonio.