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## Archaeological Monitoring Associated with Geotechnical Boring for the Cenotaph Relocation in Alamo Plaza, San Antonio, Bexar County, Texas

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## Archaeological Monitoring Associated with Geotechnical Boring for the Cenotaph Relocation in Alamo Plaza, San Antonio, Bexar County, Texas

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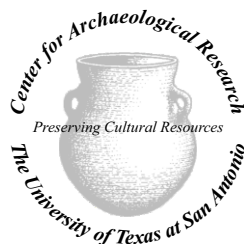
by  
José E. Zapata

**REDACTED**

Texas Antiquities Permit No. 9098

Principal Investigator  
Cynthia M. Munoz

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City of San Antonio  
Transportation and Capital Improvements  
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*Prepared by:*  
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Technical Report, No. 87

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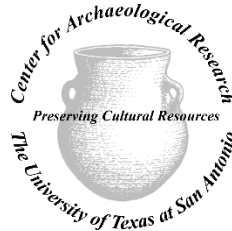
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## **Abstract:**

On October 21, 2019, in response to a request from 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 boring associated with the Cenotaph Relocation project in 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 two geotechnical bores that formed the Area of Potential Effect (APE), which covered less than 0.004 hectare (0.01 acre).

The APE is located within the Alamo Plaza Historic District. The district includes Alamo Plaza, located immediately west of the Alamo (41BX6), a site that originally functioned as the third and final location of Mission San Antonio de Valero. Site 41BX6 is a State Antiquities Landmark (SAL), listed on the National Register of Historic Places, and designated a UNESCO World Heritage Site. 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 also requires review by the Texas Historical Commission (THC), under the Antiquities Code of Texas, and it was assigned Texas Antiquities Permit No. 9098. Cynthia Munoz served as Principal Investigator, and José E. Zapata served as the Project Archaeologist.

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 in 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 2235. Terracon submitted a separate geotechnical report to TCI.

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# Chapter 1: Introduction

On October 21, 2019, at the request of 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 for the Cenotaph Relocation project in Alamo Plaza, San Antonio, Bexar County, Texas. The work consisted of monitoring two geotechnical bores that formed the Area of Potential Effect (APE). The bore samples will be used to evaluate the soil bearing pressure, the active soil load, the location of the groundwater table, and the soil characteristics. The APE is on the 200 block of Alamo Plaza, in front of the Menger Hotel.

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.

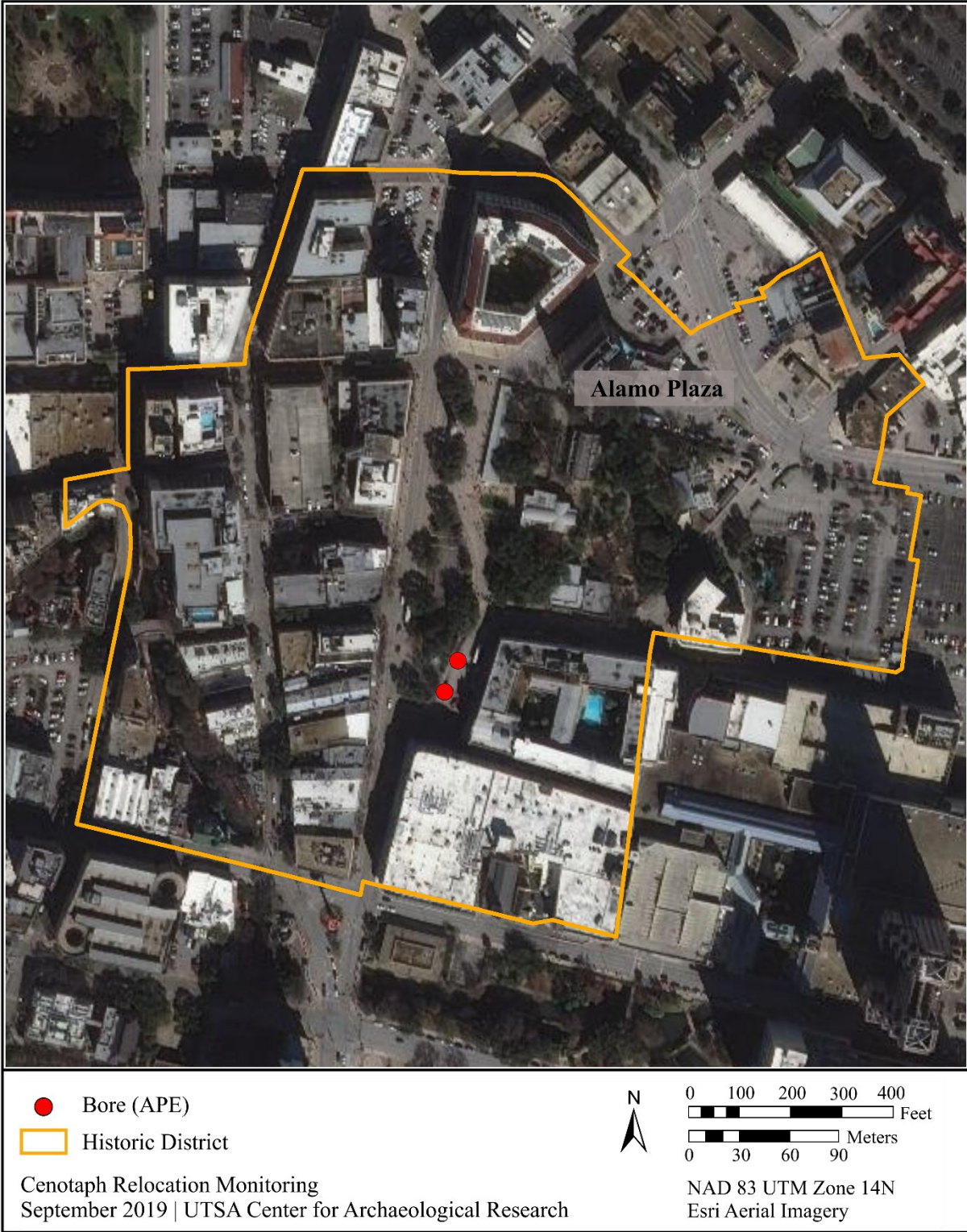


Figure 1-1. Alamo Plaza Historic District (COSA 2020), with location of the bores shown in red on satellite imagery.



The project is funded by the COSA and is located on public municipal property; therefore, 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 Unified Development Code UDC) (Article 6 35-630 to 35-634). The project also required review by the Texas Historical Commission (THC), and it was conducted under Texas Antiquities Permit No. 9098. Cynthia Munoz served as Principal Investigator, and José E. Zapata was the project archaeologist.

### **Area of Potential Effect and Project Description**

The Area of Potential Effect (APE) covers less than 0.004 hectare (0.01 acre) and consists of the two bores that are located in the 200 block of Alamo Plaza. The geotechnical bores were located east of the south end of the plaza, on the street and 2 m (6.6 ft.) off the sidewalk (Figure 1-2). 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.



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

## Report Organization

As there was no cultural material recovered from the either bore, this report follows the reporting format suggested by the Short Report Content Guidelines of the Council of Texas Archeologists (2020) and consists of five chapters. Following this introduction, Chapter 2 provides 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 of the project and recommendations made by CAR.

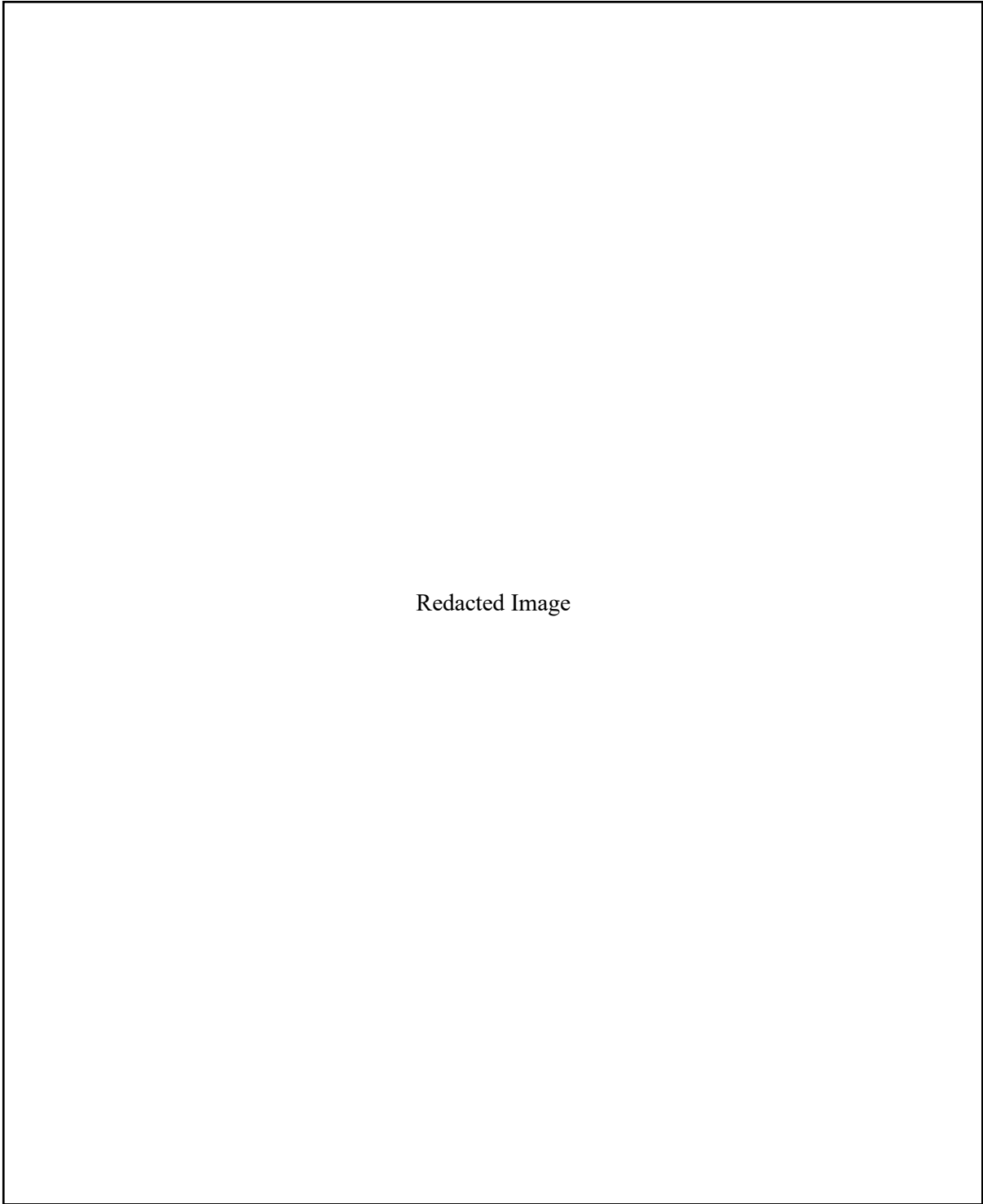
## Chapter 2: Project Setting

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; Zapata and McKenzie 2017).

### Previous Research

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

Site 41BX438 was excavated by staff from the CAR in 1979 (Ivey 2005), and it is alternately referred to as Radio Shack and Alamo West Wall. 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 1720 and 1870 (Ivey 2005). The site was revisited in 2016 by a team of archaeologists from Pape-Dawson, Raba-Kistner, and CAR. Much of this site remains intact and has been recommended for SAL status (Anderson et al. 2018:ii).



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

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

The CAR conducted archaeological monitoring for the Cenotaph Relocation project in Alamo Plaza. The work consisted of monitoring two geotechnical bores. Located within the 200 block of Alamo Plaza, the bores were in the street pavement, just off the sidewalk.

### **Field Methods**

The geotechnical borings were completed by Ramco Drillers, using a truck-mounted rotary drill rig. The geotechnical bores were 7.6 cm (3 in.) in diameter and extended to a depth of 9.1 m (30 ft.); however, CAR monitoring ceased at 6.1 m (20 ft.), a depth well below culturally sterile soils. CAR staff completed a standard form to record details about each boring and photo documented the process. The core samples were examined for cultural material. 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. However, 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, was 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 2235.

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## Chapter 4: Results of the Field Investigations

On October 21, 2019, CAR staff monitored two geotechnical bores on Alamo Plaza (Figure 4-1). The core samples from the bores, designated B-1 and B-2, were extracted using a truck-mounted rotary drill rig.



Figure 4-1. Location of bores in red (view south); location of B-1 and B-2 (view east).

All boring samples 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. This mechanical process involved a sequence of drilling and then hydraulically driving a split-barrel sampling spoon in 1.5 m (5 ft.) segments. Nine samples were collected from each of the borings.

The sampling was a three-step process of set up, boring, and collection. Figure 4-2 shows the Terracon and Ramco crew setting up at the B-1 location. The left image in Figure 4-3 shows boring of B-1, and the right image in the figure shows the first of nine samples collected from the split-barrel sample spoon.

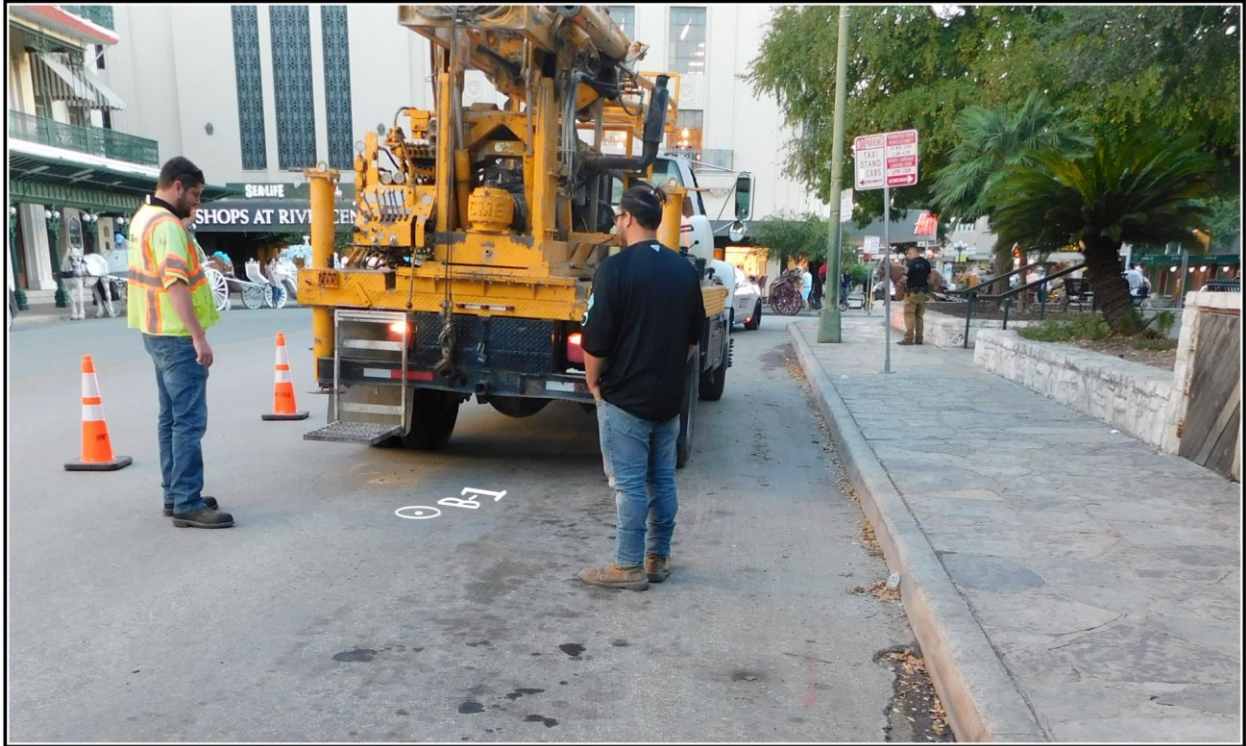


Figure 4-2. Terracon and Ramco crew setting up for B-1.



Figure 4-3. B-1: left) boring in progress, view southeast, and right) first core sample.

B-1 consisted of a white clay to 2.4 m (8 ft.), followed by a light brown clay to 3 m (10 ft.), then a white clay with calcium and chert to 4.5 m (15 ft.), and finally a brown clay to 6.1 m (20 ft.). B-2 consisted of light gray clay with gravels to 1.2 m (4 ft.), then a light gray clay to 4.5 m (15 ft.), and finally a light brown clay to 6.1 m (20 ft.).

CAR monitoring ceased at 6.1 m (20 ft.), a depth well below culturally sterile soils. No cultural material was observed during the drilling or during the examination of each of the soil samples. Terracon submitted the geotechnical boring results to TCI in a separate report.



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

On October 21, 2019, the CAR conducted archaeological monitoring for the COSA TCI Cenotaph Relocation project in Alamo Plaza. The work consisted of monitoring two geotechnical bores in Alamo Plaza. The bores were located on Alamo Plaza, 2 m (6.6 ft.) off the sidewalk. 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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