Archaeological Monitoring for the San Pedro Avenue, Main Avenue, and Navarro Street Roundabout Project, San Antonio, Bexar County, Texas

by
Antonia L. Figueroa

Texas Antiquities Permit No. 7906

[redacted] **REDACTED**

Principal Investigator
Paul Shawn Marceaux

Prepared for:
Adams Environmental, Inc.
12018 Las Nubes Street
San Antonio, Texas 78233

Prepared by:
Center for Archaeological Research
The University of Texas at San Antonio
One UTSA Circle
San Antonio, Texas 78249
Technical Report, No. 74

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Abstract:

From March 2017 to February 2018, the Center for Archaeological Research (CAR) at The University of Texas at San Antonio (UTSA) conducted archaeological monitoring for the San Pedro Avenue, Main Avenue, and Navarro Street Roundabout Project in downtown San Antonio, Bexar County, Texas. Adams Environmental, Inc., on behalf of the City of San Antonio (COSA), contracted CAR to conduct the archaeological monitoring in association with road and utilities improvements. The project fell under COSA's Unified Development Code (UDC) (Article 6 35-630 to 35-634) and required review by the Texas Historical Commission (THC) under the Antiquities Code of Texas. The archaeological work was performed under Texas Antiquities Permit No. 7906. Dr. Paul Shawn Marceaux served as Principal Investigator, and Antonia L. Figueroa served as the Project Archaeologist.

The fieldwork consisted of archaeological monitoring of excavations associated with San Antonio Water System (SAWS) utilities installation and COSA roadwork. Much of the project area has been subjected to vehicular traffic and has been impacted by previous utilities. No new archaeological sites were documented during the archaeological monitoring, and only modern material was observed. CAR recommends no further archaeological work and that improvements proceed as planned. Records generated during this project were prepared for curation according to THC guidelines and are permanently curated at the CAR.

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The project would not have been completed without the efforts of the diligent CAR staff who aided with the project, Lindy Martinez. Special thanks to Sable Kitchen of Adams Environmental, Inc. and Céline Finney of COSA Transportation and Capital Improvements Department for project details and the opportunity to work on the project. Heart-felt thanks to both Mathew Burges and Raymond Hernandez with Jordan Foster Construction for constant communication about daily scheduling and use of their indoor restroom. Thanks to Kay Hindes, the City Archaeologist, for her input on project logistics. The project would not be possible without the permit for archaeological investigations provided by Mark Denton with the Texas Historical Commission (THC). Thanks to Dr. Paul Shawn Marceaux the Principal Investigator. The project records were processed at the CAR under the direction of Cindy Munoz. Jessica Nowlin provided maps for the report, and Kelly Harris edited the final report.

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Chapter 1: Introduction

Starting in March 2017 and extending through February 2018, the Center for Archaeological Research (CAR) at The University of Texas at San Antonio (UTSA) in response to a request from Adams Environmental, Inc. (AEI), on behalf of the City of San Antonio (COSA), conducted archaeological monitoring for the San Pedro Avenue, Main Avenue, and Navarro Street Roundabout Project in San Antonio, Bexar County, Texas. The work included changes to parking and traffic flow, creation of bike lanes, planting of trees, and replacement of some curbs, sidewalks, traffic signals, streetlights, benches, and other infrastructure elements. These improvements required extensive below-ground disturbance primarily related to the installation of new utilities (e.g., water lines and sewer lines). The archaeological work consisted of monitoring below-ground construction that had the potential to impact possible archaeological resources present within the project area.

The project fell under COSA's Unified Development Code (UDC) (Article 6 35-630 to 35-634) as well as the Texas Antiquities Code, and the archaeological work was performed under Texas Antiquities Permit No. 7906. Dr. Paul Shawn Marceaux served as Principal Investigator, and Antonia L. Figueroa served as the Project Archaeologist. The COSA along with San Antonio Water Systems (SAWS) and in conjunction with Jordan Foster Construction coordinated with CAR on all excavations requiring archaeological monitoring. No intact cultural materials or sites were observed or recovered during this project, and no further work was recommended.

Area of Potential Effect

The project area is roughly 0.93 acres (0.38 hectares) and 163-meters (m) (534.8-ft.) long by 21-m wide (68.9-ft.) with the Area of Potential Effect (APE) focused along the west side of San Pedro Avenue, between Quincy Street to the north and Buffalo Run to the south (Figures 1-1 and 1-2). The width of the APE varied from 10-12 m (32.8-39.4 ft.). CAR monitored below-surface construction activities associated with the installation of SAWS utilities, which included sewer manholes and water lines, and COSA roadwork, which included storm sewers and road grading.

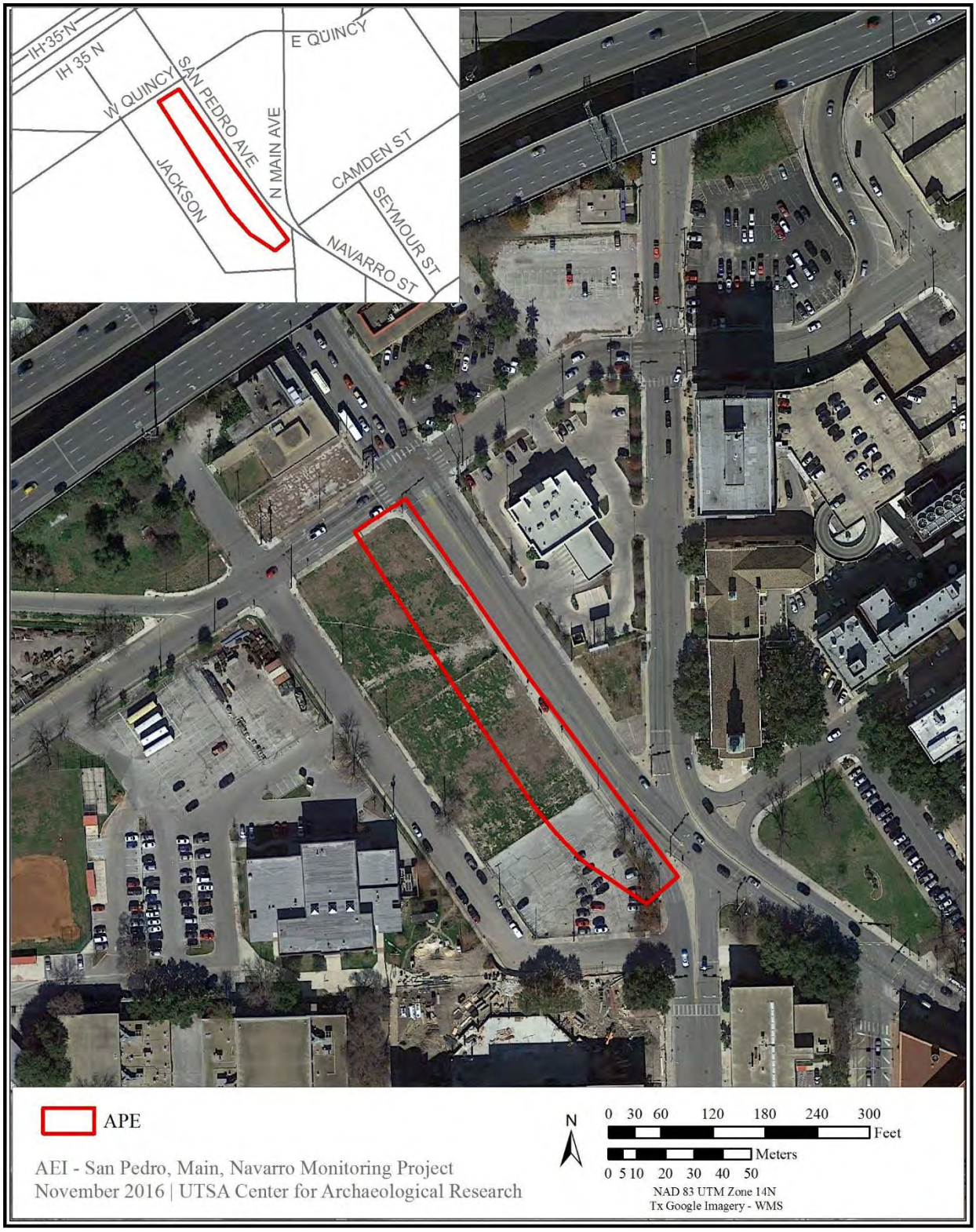

Figure 1-1. The APE illustrated on a Google Earth map.

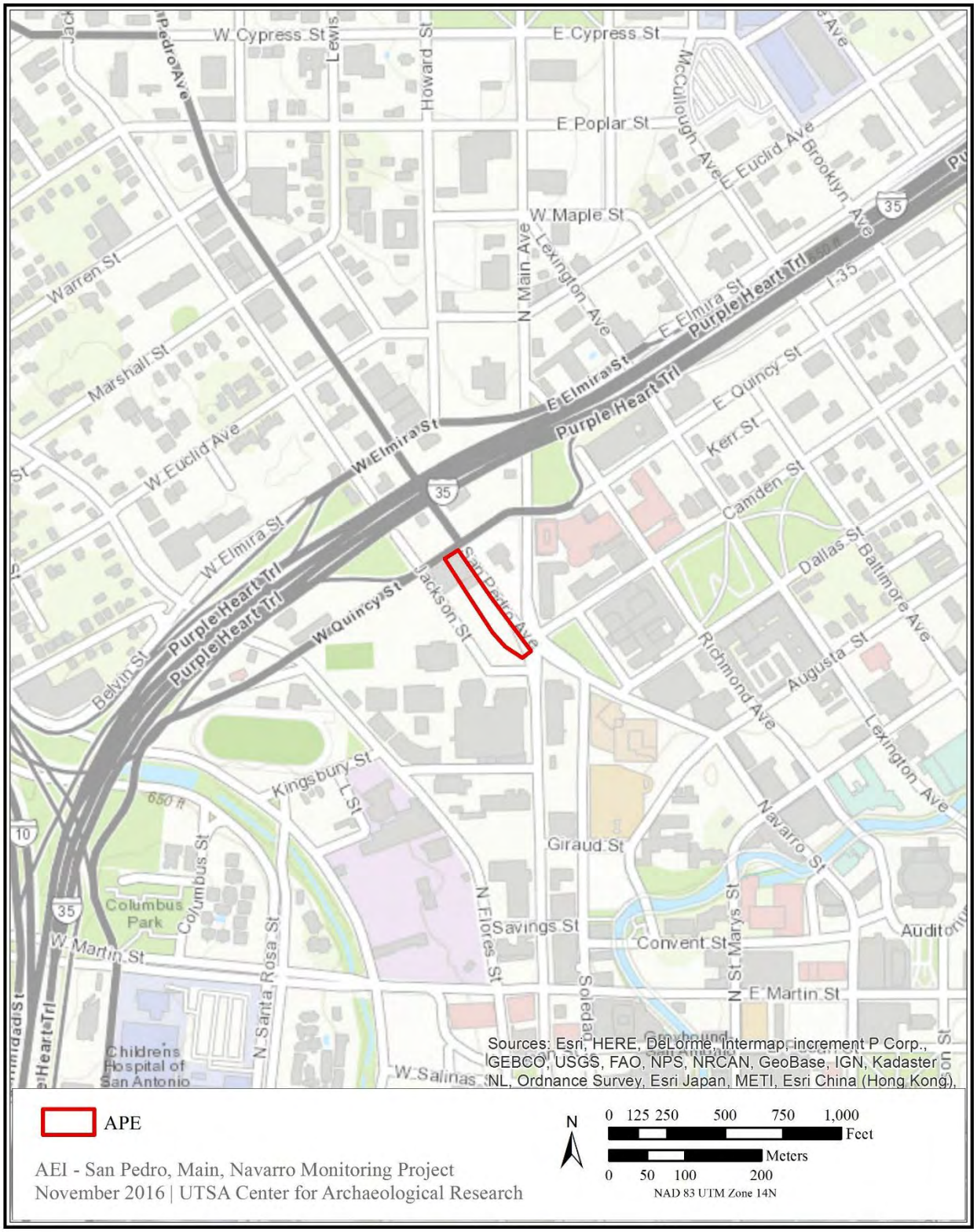

Figure 1-2. The APE illustrated on a USGS topographical map.

This report provides a description of the work that was monitored by the CAR. The first chapter has presented a general introduction to the project and defined the APE. Chapter 2 presents a brief background to the project that includes the environmental and archaeological setting. The field and laboratory methods used for the project are outlined in Chapter 3, and the results of monitoring activities are summarized in Chapter 4. Chapter 5 provides a summary of the work and recommendations.

Chapter 2: Project Area Environment and Previous Archaeology

This chapter presents a brief description of the project area's physical environment, including soils, climate, and vegetation. It also provides a brief description of previous archaeological investigations conducted within 0.75 km (0.47 miles) of the APE.

Environmental Setting

This section presents an overview of the San Antonio physical environment with a focus on the downtown area. Elevations in this part of downtown San Antonio range from 195 to 201 m (640 to 660 ft.) above mean sea level. The nearest body of water to the project area is the San Antonio River, which is approximately 396 m (1,300 ft.) to the west. This channelized portion of the river is part of the famous San Antonio River Walk. The riverbanks are surrounded by commercial structures; therefore, much of this area has been disturbed by utilities and large construction efforts. The natural soils are a Branyon Clay (HtB) with clay that varies from 50-203 cm (20-80 in.) in thickness (National Resources Conservation Service2016).

The San Antonio region is described as a moderate, subtropical, humid climate with generally cool winters and hot summers (Norwine 1995; Taylor 1991). The monthly average temperature in San Antonio between 1980 and 2010 varied between 51°F and 83°F. Average annual temperature in San Antonio for this period was 69.5°F (National Oceanic and Atmospheric Administration [NOAA] 2016). The warmest months are July and August, while the coolest are December and January. Annual rainfall peaks in May and June with smaller peaks occurring in the fall months of September and October. The driest period occurs from winter to early spring in the months of December, January, February, and March with an average of less than 6.35 cm (2.5 in.) of precipitation (NOAA 2016) each month.

Previous Archaeology

While no archaeological sites have been recorded on the subject property, there were seven recorded archaeological sites within 0.75 km (0.47 miles) of the APE according to a search of the Texas Site Atlas (THC 2017; Table 2-1 and Figure 2-1). The APE is just northeast of San Pedro Creek and 1.5 km (0.93 miles) south of San Pedro Springs. Previously recorded sites in this archaeologically rich area of San Antonio area provide evidence of Native Americans' intermittent use of these locations for over 10,000 years (Collins 2004). The APE is less than 1 km (0.62 miles) from the Main and Military Plazas Historic District. For this reason, there was a high probability of buried prehistoric and historic materials within the project area. The nearby sites revealed evidence of Spanish Colonial and prehistoric occupation that may still be present below the surface in this urban setting.

Table 2-1. Previously Recorded Sites within 0.75 km (0.47 miles) of the APE (THC 2017)

Trinomial	Time Period	Site Type	Site Name/Project Name
41BX235	Historic/Prehistoric	architecture/lithics	Ursuline Academy
41BX1818	Historic	architecture (dam)	Lexington Avenue Dam (Hugman)
41BX508	Historic	architecture	Menger Soap Works
41BX1476	Historic/Prehistoric	architecture/lithic scatter	Shropshire Rent Houses
41BX1369	Historic	architecture (dam)	Laux Mill
41BX1370	Historic	trash pit	Travis Street Bridge
41BX1968	Historic	Possible site of Mission San Antonio de Valero, 1718	Christopher Columbus Italian Society

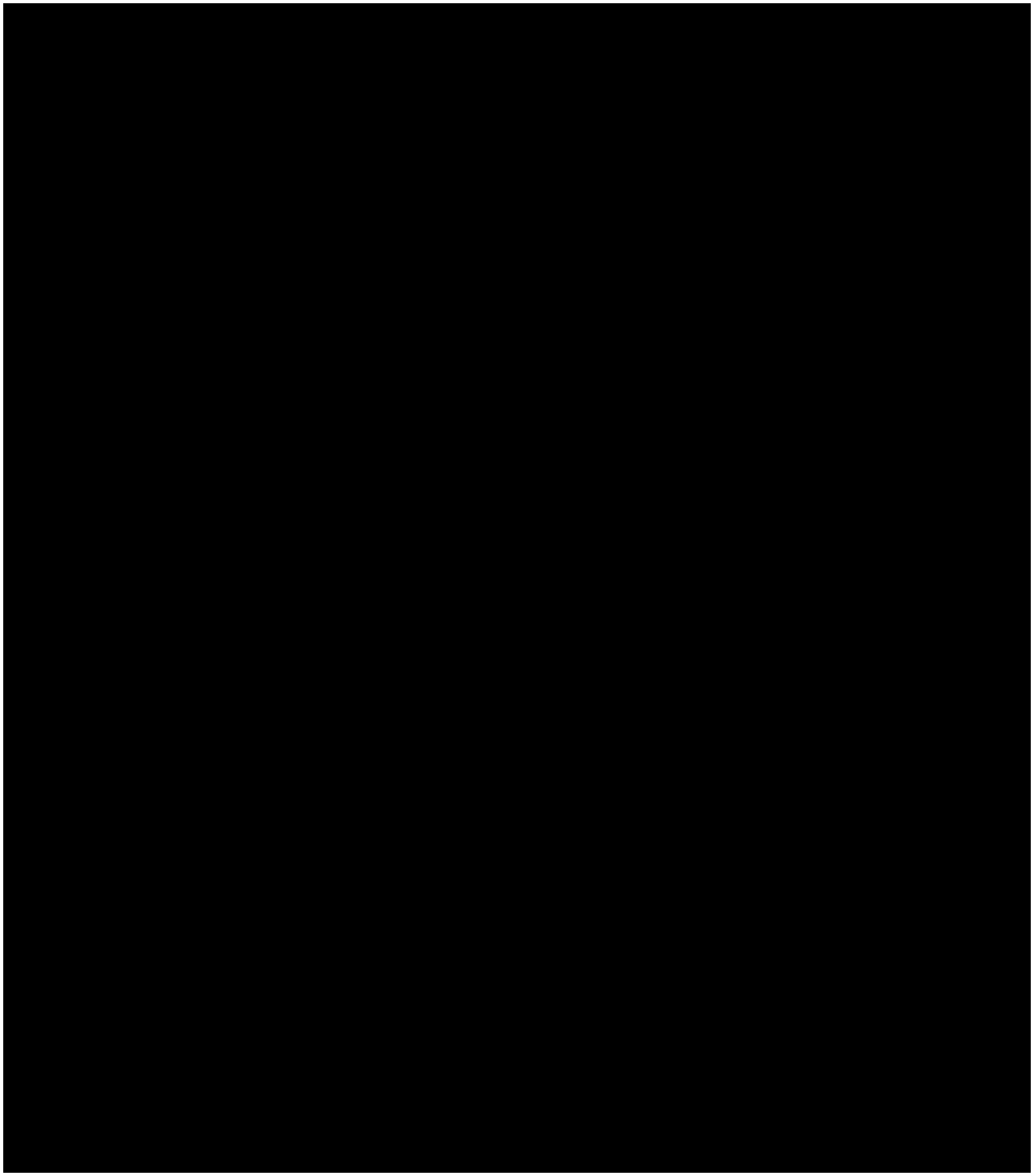

Figure 2-1. Map of previously recorded sites within 0.75 km (0.47 miles) of the APE.

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Chapter 3: Field and Laboratory Methods

Field Methods

CAR staff monitored all below-ground disturbances associated with the utility trenching construction that had the potential to impact known or anticipated archaeological resources within the APE. The fieldwork occurred intermittently from March 2017 to February 2018. Jordan Foster Construction, the subcontractor, conducted all excavations with a backhoe or larger excavator. The bucket size for the backhoe was 0.6-m (2-ft.) wide, and large excavator buckets were 1.5-m (5-ft.) wide. Excavations ranged in depth from 1.5 m (5 ft.) to 1.82 m (6 ft.). CAR staff did not enter excavation trenches beyond a depth of 1.5 m (5 ft.) for safety reasons.

The monitor used standard forms to maintain a daily log of activities. All activities observed were documented in this log and supported by digital data, including GPS observations and photographs, where appropriate. CAR staff also maintained a photographic log.

Laboratory Methods

No archaeological materials were observed or recovered during the project. Throughout the project, the analysis and organization of records and daily logs were ongoing. 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. Field forms were printed on acid-free paper and completed with pencil.

All field notes, forms, photographs, and drawings were placed in labeled archival folders. Digital photographs were printed on acid-free paper and placed in archival-quality page protectors. All project related materials, including the final report, will be permanently stored at the CAR curation facility.

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Chapter 4: Results of the Archaeological Investigations

Below-ground excavations associated with SAWS utilities installations and COSA roadwork were conducted from March 2017 through February 2018. This chapter summarizes the archaeological monitoring, beginning with the SAWS utilities and concluding with the COSA roadwork. Figure 4-1 displays the SAWS utilities monitored by the CAR. All trenches contained old utilities and showed evidence of some disturbance. After excavations, utilities pipes and equipment were installed, trenches were filled, and asphalt was replaced.

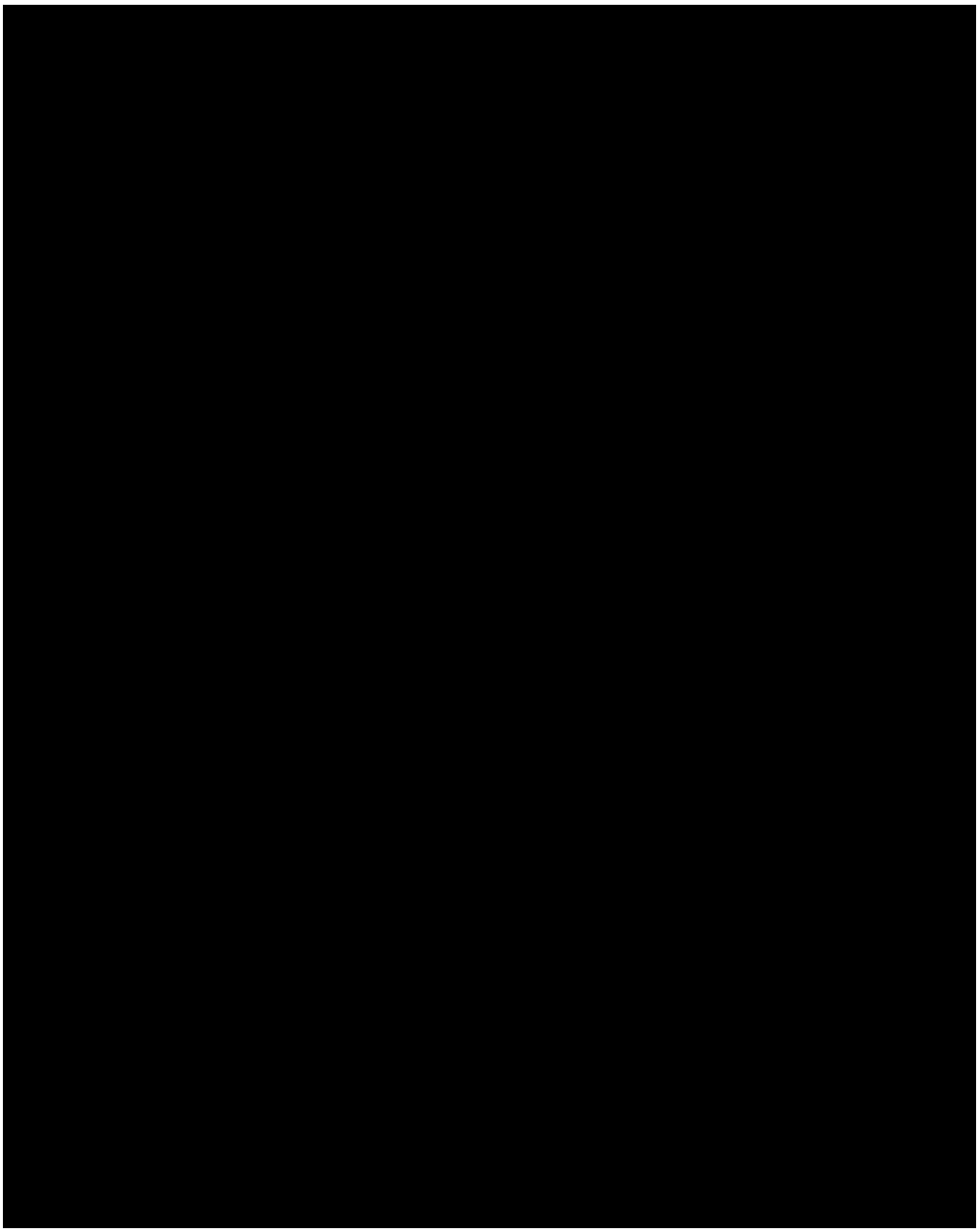

Figure 4-1. SAWS utility installations monitored by the CAR during the project.

SAWS Utilities

SAWS work consisted of a main water line and associated lateral lines. Archaeological monitoring for this portion of the project began on March 21, 2017. SAWS utility work continued intermittently until February 2018. CAR monitored the SAWS main line for which the excavations reached a depth of 1.5 m (5 ft.) below the surface (Figure 4-2). Fill material was represented by sand used to cover the previously installed utility lines. Sections of undisturbed soils were observed in some areas not impacted by utility work. These soils consisted of a dark brown (10YR 3/3) clay with few inclusions. No cultural material was observed during these excavations, and further work is not recommended. As seen in Figure 4-3, the water main excavations spanned the entirety of the APE.

Figure 4-2. Excavation of main SAWS utility prior to blacktop removal (facing south).

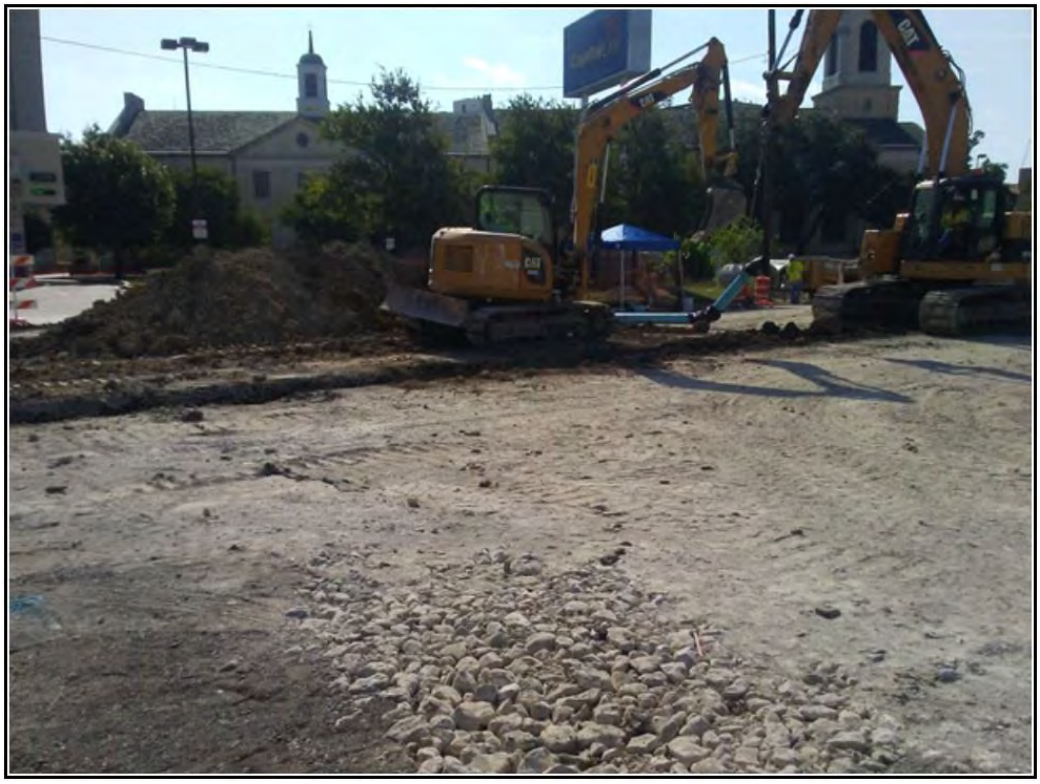

Figure 4-3. Photograph of main SAWS water utility trench and installation of pipe.

As noted, contractors excavated lateral lines that connected to the SAWS water main trench. These excavations were conducted and monitored intermittently by CAR staff from April 5 through May 8, 2017. The excavations ranged in depth from 1.5 m below the surface (mbs; 5 ft.) to 1.8 mbs (6 ft.). The maximum width of one lateral line excavation was 2.4-m (8-ft), while the remaining lateral trenches were a standard bucket width of 0.6 m (2 ft.). Figure 4-4 shows one of the lateral line excavations. As seen in the photo, much of the area had been disturbed by previously installed SAWS utilities. Undisturbed portions of the excavations revealed a dark brown (10YR 3/3) clay. During the lateral line excavations, no cultural material was observed or collected. Further archaeological work for these areas was not recommended.

Figure 4-4. SAWS lateral excavations, note differences in soils.

In February 2018, the COSA was notified that remnants of the historic electrical railway tracks were encountered during excavations for a SAWS sanitary sewer line just outside of the APE along Camden Street. The tracks were observed directly below the asphalt and road base. They were removed and set in the contractors work yard prior to the archaeologist arriving at the site, but CAR staff photographed the railway tracks and recorded the location of the find with GPS coordinates. The electric railway system was in use during the late nineteenth century and abandoned by around 1933 (Kemp et al. 2017). Further work was not recommended in the area and the remainder of the trench was excavated.

COSA Roadwork

COSA excavations were associated with the installation of storm sewers and road grading. Contractors conducted the road grading over the entire APE. During the grading activities, removal of the blacktop and base was conducted with only spot monitoring. Grading included the removal of about 0.16 mbs (0.5 ft.) of asphalt and gravel base. The remainder of the grading was conducted intermittently between July 31 and August 3, 2017. These excavations (Figure 4-5) were done with a larger excavator and to a depth of 0.5 mbs (1.6 ft.). Much of the area had been disturbed by previous utilities, and excavations in the northern portion of the APE revealed concrete and rebar. No cultural material was observed or collected during these excavations, and further work was not recommended.

Figure 4-5. COSA road grading with large excavator (facing south).

Excavations for storm sewer drains were also conducted on behalf of COSA. As seen in Figure 4-6, the excavations measured to a depth of 1.8 mbs (6 ft.) and were up to 4 m (14 ft.) in width. Much of the areas excavated were disturbed by previous utility work. Undisturbed soils were dark brown (10YR 3/3) in color. No cultural material was observed or collected during these excavations, and further archaeological work was not recommended.

Figure 4-6. Storm sewer excavations for COSA.

Chapter 5: Summary and Recommendations

From March 2017 to February 2018, CAR staff performed archaeological monitoring related to the installation of SAWS utility lines and COSA roadwork along San Pedro Avenue in downtown San Antonio, Bexar County, Texas. The work was in response to a request from AEI, on behalf of the COSA, to conduct archaeological monitoring for the San Pedro Avenue, Main Avenue, and Navarro Street Roundabout Project. The archaeological work consisted of monitoring below-ground construction that had the potential to impact possible archaeological resources located within the project area. The project fell under COSA's Unified Development Code (Article 6 35-630 to 35-634) as well as the Texas Antiquities Code. All work was performed under Texas Antiquities Permit No. 7906. Dr. Paul Shawn Marceaux served as Principal Investigator, and Antonia Figueroa served as the Project Archaeologist.

The CAR monitored construction work related to excavations for a SAWS main water utility and several lateral lines that bisected the APE. During these excavations, no cultural material was observed or recorded. The COSA work monitored by CAR included grading associated with the road and storm sewer installations. The northern portion of the APE contained concrete and rebar exposed during grading activities. Storm sewer excavations identified no cultural material. Since no cultural material and, hence, no archaeological sites were identified during this project, CAR does not recommend further work, and all work may proceed as planned.

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