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Archeological Investigations of the Proposed Leon Creek Emergency Bank Stabilization Project San Antonio, Bexar County, Texas

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***Archeological Investigations of the
Proposed Leon Creek Emergency Bank
Stabilization Project
San Antonio, Bexar County, Texas***

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**ARCHEOLOGICAL INVESTIGATIONS OF THE
PROPOSED LEON CREEK EMERGENCY
BANK STABILIZATION PROJECT
SAN ANTONIO, BEXAR COUNTY, TEXAS**

TEXAS ANTIQUITIES PERMIT No. 6518

Prepared for:

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Abstract

On April 8, 2013, Atkins North America, Inc. (Atkins) conducted an emergency archaeological survey for the proposed City of San Antonio (COSA)-sponsored Leon Creek Emergency Bank Stabilization project in San Antonio, Bexar County, Texas. The project will include the removal of concrete that has been dumped along the north side of the Leon Creek channel as well as approximately 500 feet of immediate stabilization improvements along Leon Creek's south channel wall. The project area is defined as the footprint of the proposed stabilization improvements along the north and south channel walls of Leon Creek. The proposed project is located on COSA-owned land and is locally funded; therefore, compliance with the Antiquities Code of Texas is required. In addition, the project will require a Section 404 permit from the United States Army Corps of Engineers, and therefore, work was conducted in compliance with Section 106 of the National Historic Preservation Act. The entirety of the project area was subjected to a pedestrian survey. The lack of soil within the well-defined, entrenched channel of Leon Creek negated the need for subsurface investigations. Archeological investigations for this project were conducted under TAC Permit #6518. This report presents the results of these investigations.

No cultural resources were located or recorded during the course of the survey. Based on the results of this work, Atkins archeologists recommend no further archeological work for this project prior to its construction. All project records and photographs will be curated at the Center for Archeological Research at The University of Texas San Antonio.

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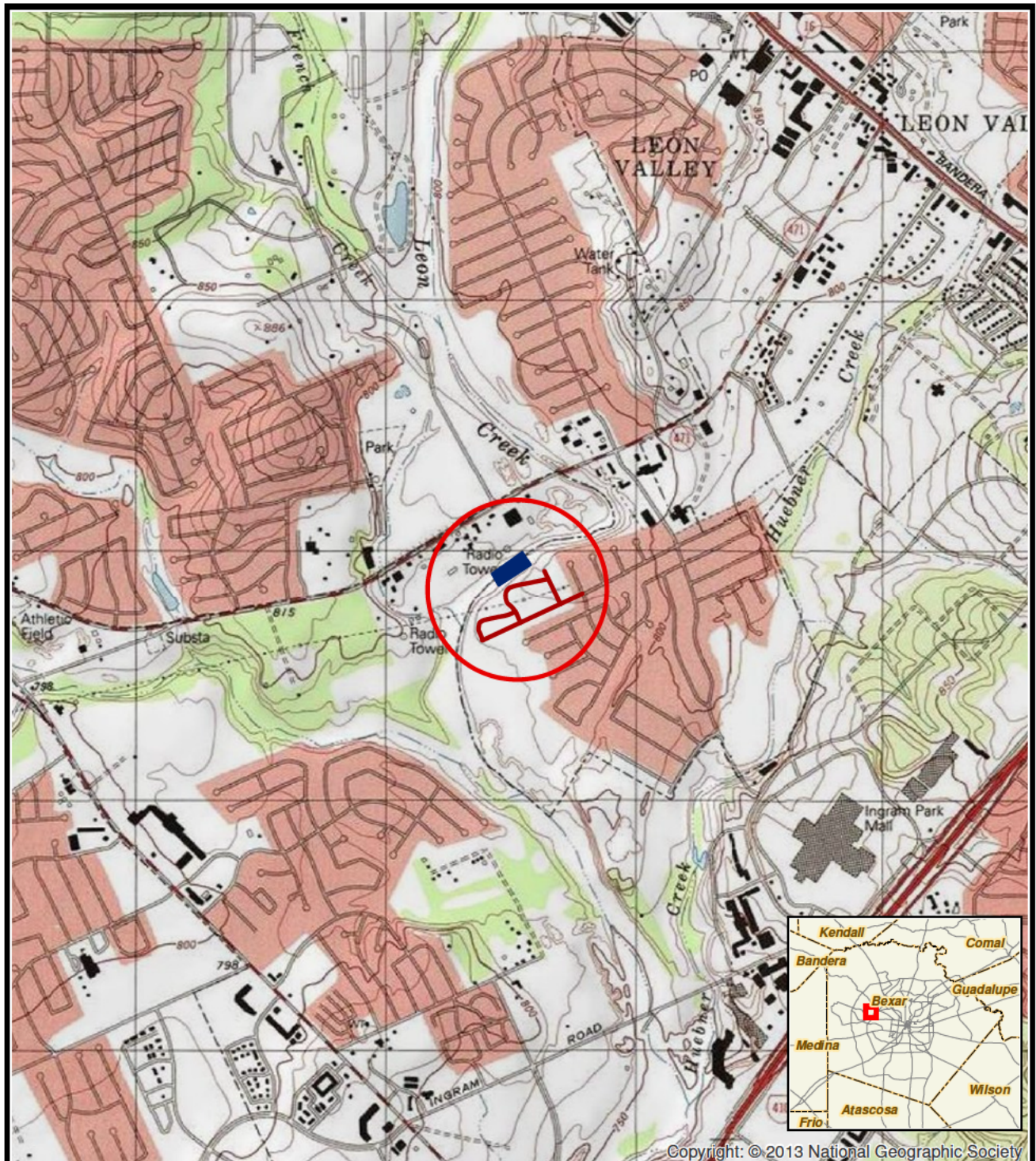
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I. INTRODUCTION

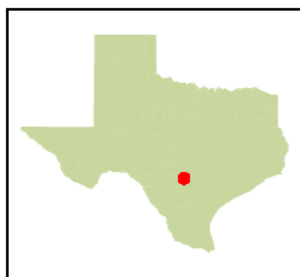
On behalf of the City of San Antonio (COSA), Atkins conducted an archeological investigation of the Leon Creek Emergency Bank Stabilization project in San Antonio, Bexar County, Texas (Figure 1). The project will include the removal of concrete that has been dumped along the north side of the Leon Creek channel as well as approximately 500 feet (ft) of immediate stabilization improvements along Leon Creek's south channel wall. The project area is defined as the footprint of the proposed stabilization improvements along the north and south channel walls of Leon Creek. Within the project area, the south wall of the Leon Creek channel ranges in height from roughly 8 to 30 ft. Apparent dumping of concrete (Figure 2) into the channel along the north bank of Leon Creek has altered the natural course of the waterway. As a result, the creek channel has shifted to the south, and the flow of water has begun to undercut the bank along the south side of Leon Creek. This severe erosional activity has led to large areas where underlying limestone cobbles and gravels have eroded out from the channel wall (Figure 3). The proposed project will entail removing some or all of the existing concrete along the north side of the channel, and installing a 6- to 7-ft-high sloped riprap embankment along the base of the south channel wall. The removed existing concrete on the north side of the channel may be used as riprap material, and a cementitious material (e.g., cement powder) may be used to help the riprap material remain intact.


As this project is located on COSA-owned land and will be locally funded, compliance with the Antiquities Code of Texas is required. Atkins applied for and received Texas Antiquities Permit #6518. Since the project requires a Section 404 permit, compliance with Section 106 of the National Historic Preservation Act is also necessary.

Fieldwork took place on April 8, 2013. Field archeologists included Melanie Nichols and Liz Sefton. Nesta Anderson served as Principal Investigator while Melanie Nichols acted as the Project Archeologist.



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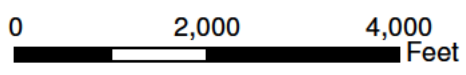


 Approximate Project Vicinity



ATKINS

Figure 1
Project Location Map
Culebra Hill Quadrangle
Bexar County, Texas



Prepared By: 22179	Scale: 1" = 2,000'
Job No.: 100034464	Date: 9 Dec 2013

File: C:\Useral\22179\Documental\Images\2013\Leon Creek\01_Project Location.mxd



Figure 2: Concrete that has been dumped along the north bank of Leon Creek, facing northwest



Figure 3: Overview of project area showing the severe erosion along the south bank of Leon Creek, facing southwest

II. SETTING

The project is situated in northwest San Antonio in an urban setting characterized by commercial and residential development. The project area is located within the entrenched channel of Leon Creek roughly 25 meters (m) north of Twin Falls Drive and approximately 630 m southwest of the intersection of Timberhill Drive and Farm to Market Road 471. While residential dwellings lie along the south bank of Leon Creek, commercial properties line the north bank adjacent to the project area.

According to the 1996 Bureau of Economic Geology's Physiographic Map of Texas (Wermund 1996), the proposed undertaking is located on the margin of the Blackland Prairies and the Interior Coastal Plains natural regions. The project area is geologically mapped as Recent Low terrace deposits comprised of gravel, sand, silt, and clay (Brown et al. 1983). The soil within the project area is mapped as Tinn and Frio soils (0 to 1 percent slopes, frequently flooded), which are formed in calcareous clayey alluvium and are found on floodplains of streams that drain the Blackland Prairies (United States Department of Agriculture, Natural Resources Conservation 2013). However, Atkins archeologists observed little to no soil within the Leon Creek channel where the stabilization improvements are proposed to occur. Rather, the creek bed and channel walls are mostly composed of limestone gravel and cobbles. Due to the lack of soils within the project area, it was anticipated that cultural resources would likely be found above ground and would be visible to surface observation.

III. PREVIOUSLY RECORDED CULTURAL RESOURCES

A records search was conducted at the Texas Archeological Research Laboratory (TARL) and on the Texas Historical Commission's Texas Archeological Sites Atlas Online (Atlas) for the purpose of determining whether any previously recorded archeological sites, properties listed in the National Register of Historic Places (NRHP), State Antiquities Landmarks (SALs), National Historic Landmarks (NHLs), cemeteries, or Historical Markers are present within 1 kilometer (km) of the proposed project area. As a secondary source of NRHP properties and NHLs, the National Park Service's (NPS) NRHP database and GIS Spatial Data as well as the NHL Program were consulted. The NPS Geographic Resources Program National Historic Trails Map Viewer was used to identify National Historic Trails (NHT). Supplementary to the NPS Trail Map Viewer, the El Camino Real de los Tejas Comprehensive Management Plan/Environmental Assessment Maps provided additional information about the El Camino Real de los Tejas NHT. Additionally, TXDOT's database of NRHP listed and eligible bridges was reviewed. Finally, the City of San Antonio's Historic Landmark Sites and Historic Districts GeoDatabase was consulted.

The results of the cultural resources background review identified one previously recorded site (41BX1593) within 1 km of the project area. Site 41BX1593, located approximately 950 m east-southeast of the proposed project area, was originally recorded by Tierras Antiguas Archaeological Consulting in 2004. This prehistoric site of unknown age was described as a scatter of burned rocks and lithic debitage located on an upper terrace of Culebra Creek. Artifacts were recovered from the ground surface and within shovel tests up to 40 centimeters below surface (cmbs). The site size was reported to be 530 square meters (m²) (Nickels 2004). Site 41BX1593 was later revisited in 2008 by Hicks & Company during a survey of the Lower Leon Creek Greenway and again in 2011 by Atkins during a survey for the Grissom-Helotes-Bandera Transmission Line, Rebuild Project. As a result of these surveys, the site boundaries were extended further downslope to the south and west (Bradford and Cambell 2009) and further upslope to the east of the original site location, and the site size was increased to 12,000 m² (Robinson and Nash 2011). According to the Atlas, portions of site 41BX1593 were determined to be ineligible for inclusion in the NRHP in 2009 and 2011.

Based on the background research, sites most likely to be encountered within the survey areas were anticipated to be prehistoric lithic scatters observable on the ground surface. Surface inspection was considered a sufficient method to identify previously unrecorded cultural resources.

IV. METHODS AND RESULTS

The entirety of the project area was subjected to a pedestrian survey. The lack of soil within the well-defined entrenched channel of Leon Creek negated the need for subsurface investigations. All paperwork and photographs produced in the field will be curated at the Center for Archeological Research at The University of Texas San Antonio.

Atkins' archeological survey of the project area found the Leon Creek channel to have been significantly impacted by the dumping of concrete (see Figure 2) down the face of the north channel wall. As a result of the dumping, the natural course of the waterway has shifted to the south, and the flow of water has begun to undercut the south wall of the Leon Creek channel. This severe erosional activity has led to large areas where underlying limestone cobbles and gravels (Figure 4) have eroded out from the south bank. A pedestrian inspection of the project area including the large piles of loose sediment along the base of the south channel wall identified no surface remains of prehistoric or historic affiliation.



Figure 4: Large piles of loose cobbles and gravels that have eroded out from the south bank wall of Leon Creek, facing southeast

V. RECOMMENDATIONS

Atkins' archeological survey of the proposed Leon Creek Emergency Bank Stabilization project encountered no archeological artifacts or sites within the project area. It is recommended that no further archaeological investigations are necessary and that the project be allowed to proceed. However, if previously undiscovered cultural remains are encountered during construction, it is recommended that all work in the vicinity should cease immediately and COSA archaeologist Kay Hindes be contacted.

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