TEXAS HISTORICAL COMMISSION

ANTIQUITIES PERMIT APPLICATION FORM ARCHEOLOGY

GENERAL INFORMATION

I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) Intensive Archaeological Investigation of the County Road 255 Roadway Improvement Project, Williamson County, Texas
County (ies) Williamson
USGS Quadrangle Name and Number SW portion of the Florence, Texas (3097-331) and NW portion of the Leander NE, Texas (3097-324)
UTM Coordinates Zone 14N E 610376 N 3400620
Location From CR 254, 1.5 miles SW of Andice, Texas, to Ronald Reagan Blvd.
Federal Involvement ❑ Yes ✓ No
Name of Federal Agency
Agency Representative

II. OWNER (OR CONTROLLING AGENCY)

Owner Williamson County
Representative Bill Gravell. Jr. (County Judge)
Address 710 Main Street, Suite 101
City/State/Zip Georgetown, TX 78626
Telephone (include area code) 512-943-1550 Email Address ctyjudge@wilco.org

III. PROJECT SPONSOR (IF DIFFERENT FROM OWNER)

Sponsor
Representative
Address
City/State/Zip
Telephone (include area code) Email Address

PROJECT INFORMATION

I. PRINCIPAL INVESTIGATOR (ARCHEOLOGIST)

Name John D. Lowe, M.A.
Affiliation SWCA Environmental Consultants
Address 4407 Monterey Oaks Blvd., Bldg, 1 Ste. 110
City/State/Zip Austin, TX 78749
Telephone (include area code) 512-476-0891 ext. 16801 Email Address john.lowe@swca.com

(OVER)

ANTIQUITIES PERMIT APPLICATION FORM (CONTINUED)

II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork September 1, 2022
Requested Permit Duration 5 Years 0 Months (1 year minimum)
Scope of Work (Provided an Outline of Proposed Work) SWCA will conduct an intensive pedestrian survey (see attached scope of work)

III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility SWCA-Austin
Permanent Curatorial Facility CAR-UTSA (records only)

IV. LAND OWNER'S CERTIFICATION

I, Bill Gravell Jr., as legal representative of the Land Owner, Williamson County, do certify that I have reviewed the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Owner, Sponsor, and Principal Investigator are responsible for completing the terms of the permit.
Signature Bill Gravell (Sep 16, 2022 10:52 CDT) Date Sep 16, 2022

V. SPONSOR'S CERTIFICATION

I, _____, as legal representative of the Sponsor, _____, do certify that I have review the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Sponsor, Owner, and Principal Investigator are responsible for completing the terms of this permit.
Signature _____ Date _____

VI. INVESTIGATOR'S CERTIFICATION

I, John D. Lowe, as Principal Investigator employed by SWCA Environmental Consultants (Investigative Firm), do certify that I will execute this project according to the submitted plans and research design, and will not conduct any work prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Principal Investigator (and the Investigative Firm), as well as the Owner and Sponsor, are responsible for completing the terms of this permit.

Signature John D. Lowe Date 8/19/2022

Principal Investigator must attach a research design, a copy of the USGS quadrangle showing project boundaries, and any additional pertinent information. Curriculum vita must be on file with the Archeology Division.

FOR OFFICIAL USE ONLY

Reviewer _____ Date Permit Issues _____
Permit Number _____ Permit Expiration Date _____
Type of Permit _____ Date Received for Data Entry _____

Texas Historical Commission
Archeology Division
P.O. Box 12276, Austin, TX 78711-2276
Phone 512-463-6096
the.texas.gov

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PROPOSED SCOPE OF WORK FOR AN INTENSIVE ARCHAEOLOGICAL INVESTIGATION OF THE COUNTY ROAD 255 ROADWAY IMPROVEMENT PROJECT, WILLIAMSON COUNTY, TEXAS

Project Landowner – Williamson County
Project Sponsor – Williamson County
Project Consultant – SWCA Environmental Consultants
Principal Investigator –John D. Lowe, M.A.
Date – August 18, 2022

INTRODUCTION

At the request of Williamson County, SWCA Environmental Consultants (SWCA) proposes to conduct an intensive cultural resources survey of approximately 48.0 acres (19.4 hectares [ha]) of roadway in support of the County Road (CR) 255 Roadway Improvements Project (project) in Georgetown, Texas. This project represents 2.9 miles (4.7 kilometers [km]) of roadway, beginning at CR 254 and extending south to Ronald Reagan Boulevard (Figures 1 and 2). The project consists of widening CR 255 from the existing two-lane roadway to a four-lane (two in each direction) divided roadway with a straightening component extending the existing roadway along 0.5-mile (0.8-km) to connect with Ronald Reagan Boulevard. Because the project involves lands owned or controlled by Williamson County (a subdivision of the state), the project will be subject to review under the Antiquities Code of Texas (ACT), and the archaeological field investigation will require a Texas Antiquities Permit; therefore, the investigations proposed below are designed to comply with the requirements of the ACT. Based on the current project understanding, no federal regulatory compliance is anticipated.

Based on a review of the project area soils, geology, and previously recorded archaeological sites, as well as previously conducted surveys in the area, SWCA proposes to conduct an intensive pedestrian survey with subsurface testing of the project area. The goal of the work will be to locate any previously recorded prehistoric and historic-age archaeological sites in the project area, locate any previously undiscovered archaeological sites in the project area, establish vertical and horizontal site boundaries, as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded in the project area for eligibility for listing in the National Register of Historic Places (NRHP) and for designation as a State Antiquities Landmark (SAL). All work will be conducted in accordance with both the ACT and Section 106 of the National Historic Preservation Act of 1966 (NHPA).

Project Description

The project area appears on the southwestern portion of the *Florence, Texas* (3097-331) and the northwestern portion of the *Leander NE, Texas* (3097-324) U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps. The project area is located approximately 1.5 miles (2.4 km) south of Andice, Texas and approximately 6.2 miles (10.0 km) northeast of Liberty Hill, Texas. The project area consists of the existing two-lane asphalt roadway which will be expanded to a four-lane (two lanes in each direction) divided roadway with a straightening component extending the existing roadway south 0.5-mile (0.8 km) to connect with Ronald Reagan Boulevard. The project will be constructed within an

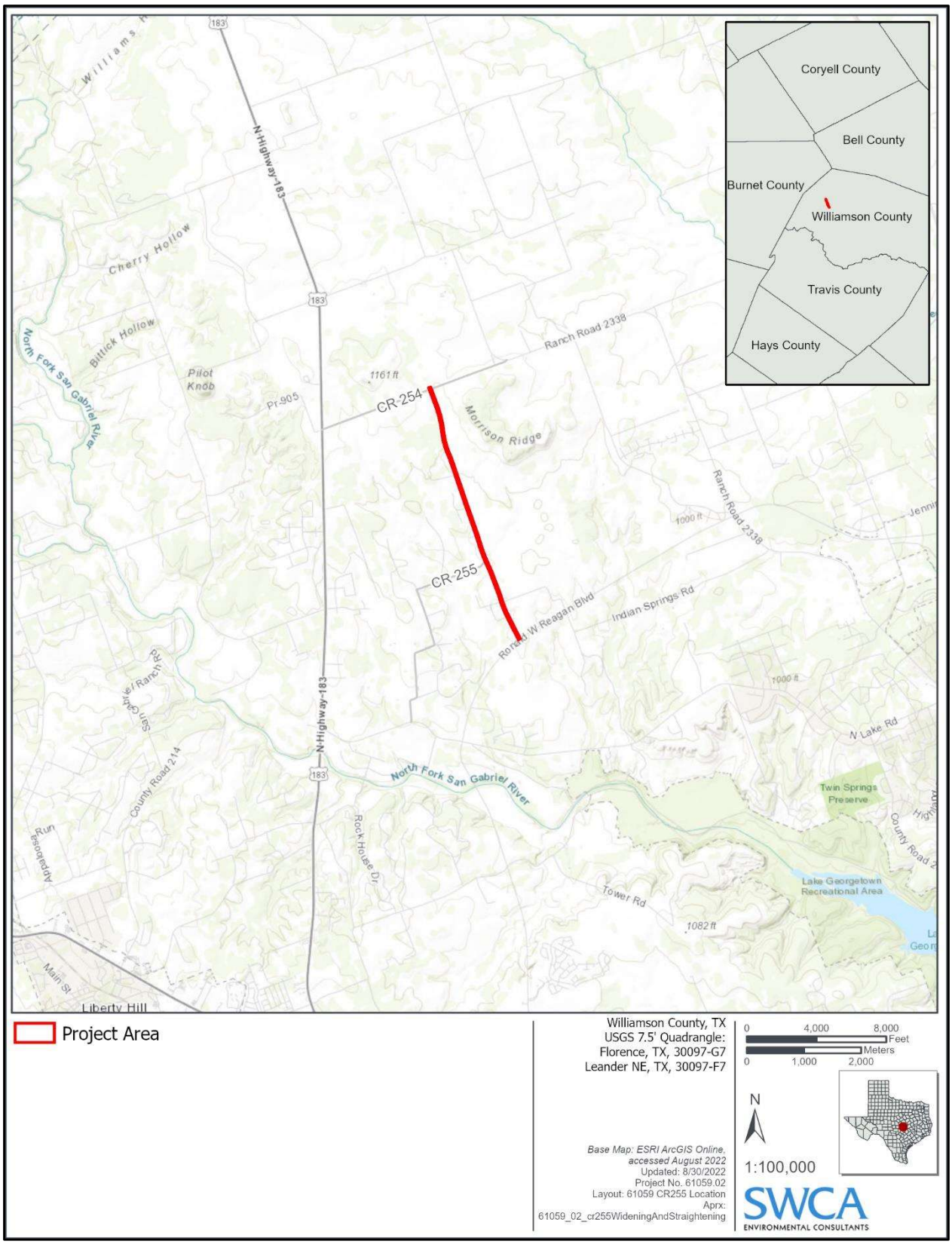

Figure 1. Project location map.

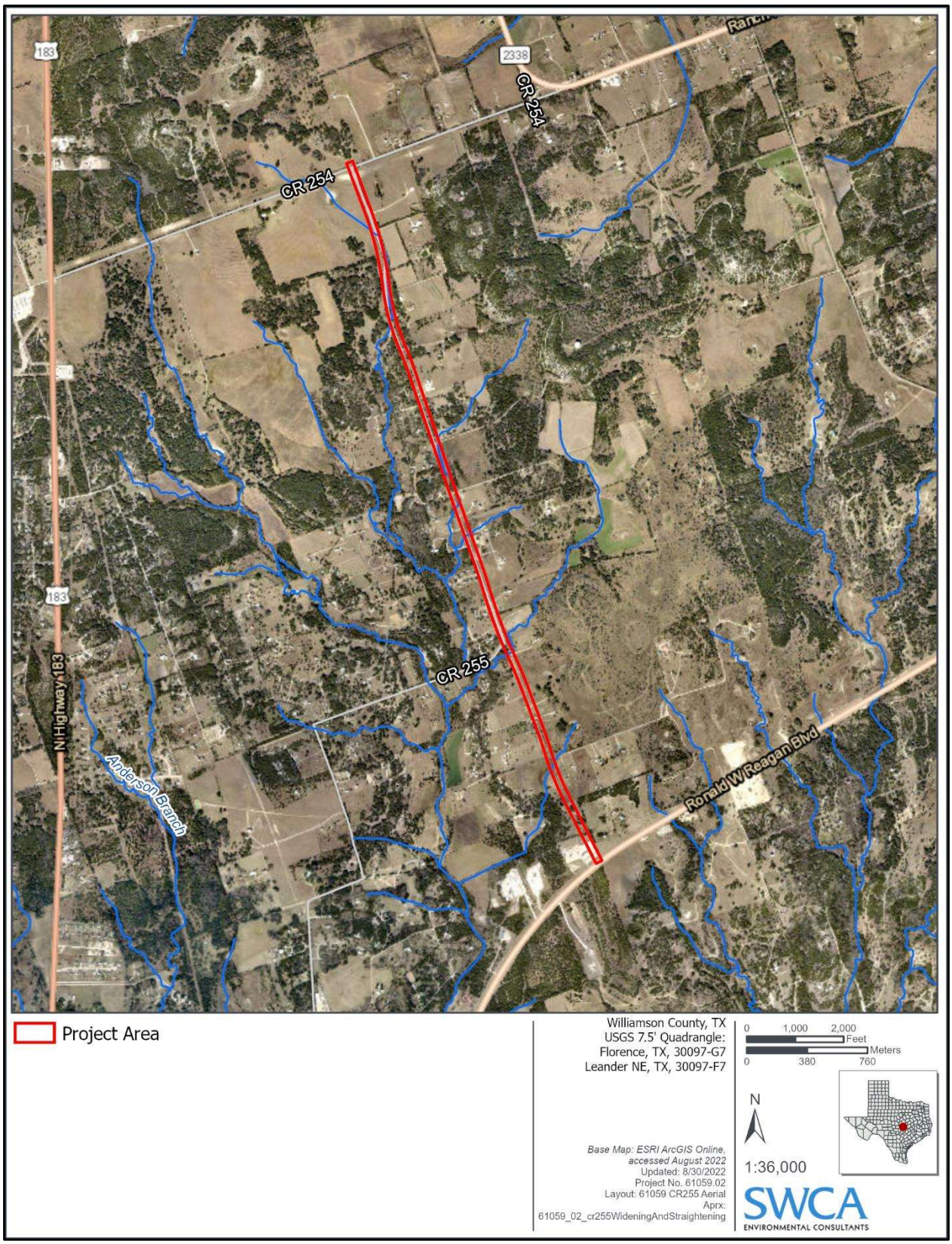

Figure 2. Project area overview map.

approximately 136-foot-wide (41.5-meter [m]-wide)-right-of-way (ROW) along approximately 2.9 miles (4.7 km) of roadway starting from CR 254 and extending south to Ronald Reagan Boulevard (Figure 2).

PROJECT SETTING

The project area crosses the Balcones Canyonlands subregion within the Edwards Plateau ecoregion (Griffith et al. 2007). The physiography of the area is described as dissected plateaus and escarpments with stair-stepped topography. Additionally, the physiography includes moderate to high gradient streams with bedrock, cobble, and gravel substrates (Griffith et al. 2007:63).

Geology

The underlying geology throughout the project area consists predominantly of Cretaceous-age marl formations including Cedar Park, Bee Cave Marl, Keys Valley Marl, and the Upper Glen Rose Limestone formation (Figure 3) (Barnes 1974; USGS 2022a). These marl formations are typically soft, white marls containing megafossils. The Upper Glen Rose Limestone formation consists of alternating beds of limestone, dolomite, and marl in a resistant and recessive pattern to form a stair-stepped topography. The upper part of this formation consists of thin beds with the lower part of the formation consisting of thicker fossiliferous beds (USGS 2022a). Given the age of these formations, there is virtually no potential to contain buried archaeological resources.

Soils

According to the Natural Resources Conservation Service (2022), there are five soil series mapped within the project area including: the Fairlie clay; Doss silty clay; Eckrant cobbly clay; Denton silty clay; and Brackett association (Table 1; see Figure 4). None of these soils are alluvial or aggrading, suggesting almost no potential to contain buried archaeological resources; these soils are discussed below.

- The Fairlie clay, 1 to 2 percent slopes soil series consist of deep, moderately well-drained soils that formed on nearly level to gently sloping uplands. The slope is typically 1 to 3 percent but ranges for 0 to 5 percent (NRCS 2022).

- The Doss soil series consists of shallow to weakly cemented limestone. The series is a well-drained, moderately slow permeable soil that forms in calcareous loamy and clayey residuum derived from marls and limestone. These gently to moderately sloping soils occur on hill slopes on dissected plateaus (NRCS 2022).

- The Eckrant cobbly clay, 1 to 8 percent slopes consists of a well-drained, moderately slowly permeable soils that are very shallow to shallow over indurated limestone bedrock. These soils are nearly level to very steep and form in residuum derived from limestone. These soils occur on summits, shoulders, and backslopes of ridges on dissected plateaus (NRCS 2022).

- The Denton silty clay, 1 to 3 percent slopes consists of deep, well-drained, slowly permeable soils located on gently sloping backslopes and footslopes of ridges. They formed in clayey materials derived from weathered residuum over limestone bedrock (NRCS 2022).

- Finally, the Brackett association, 1 to 8 percent slopes consists of predominantly of the Brackett soil series which consists of shallow to paralithic bedrock. The soil is well-drained and is derived from residuum from weathered Cretaceous-aged Glen Rose limestone. These soils vary from nearly level to very steep and are located on the backslopes of ridges on dissected plateaus in the Edwards Plateau physiographic region (NRCS 2022).

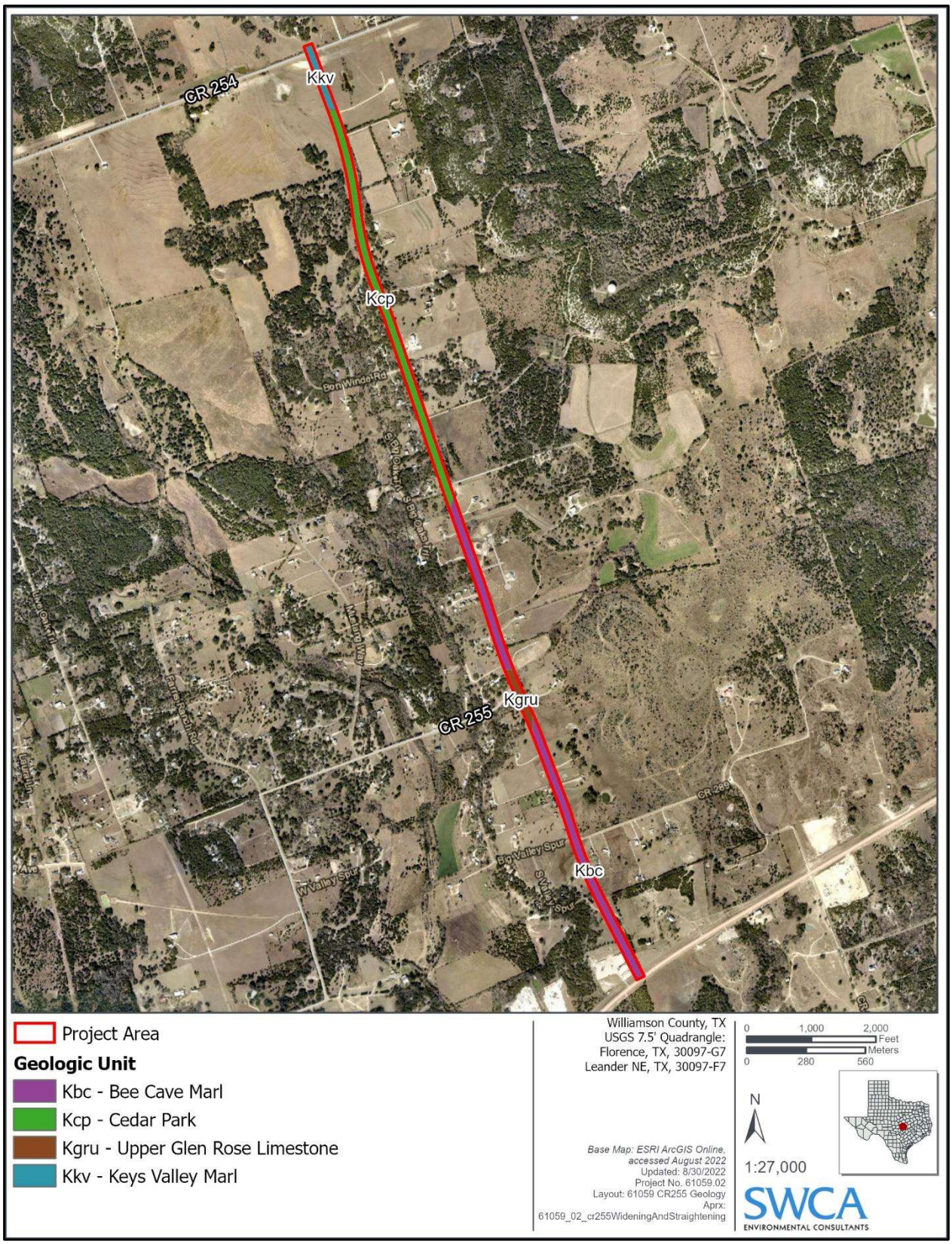

Figure 3. Project area geology map.

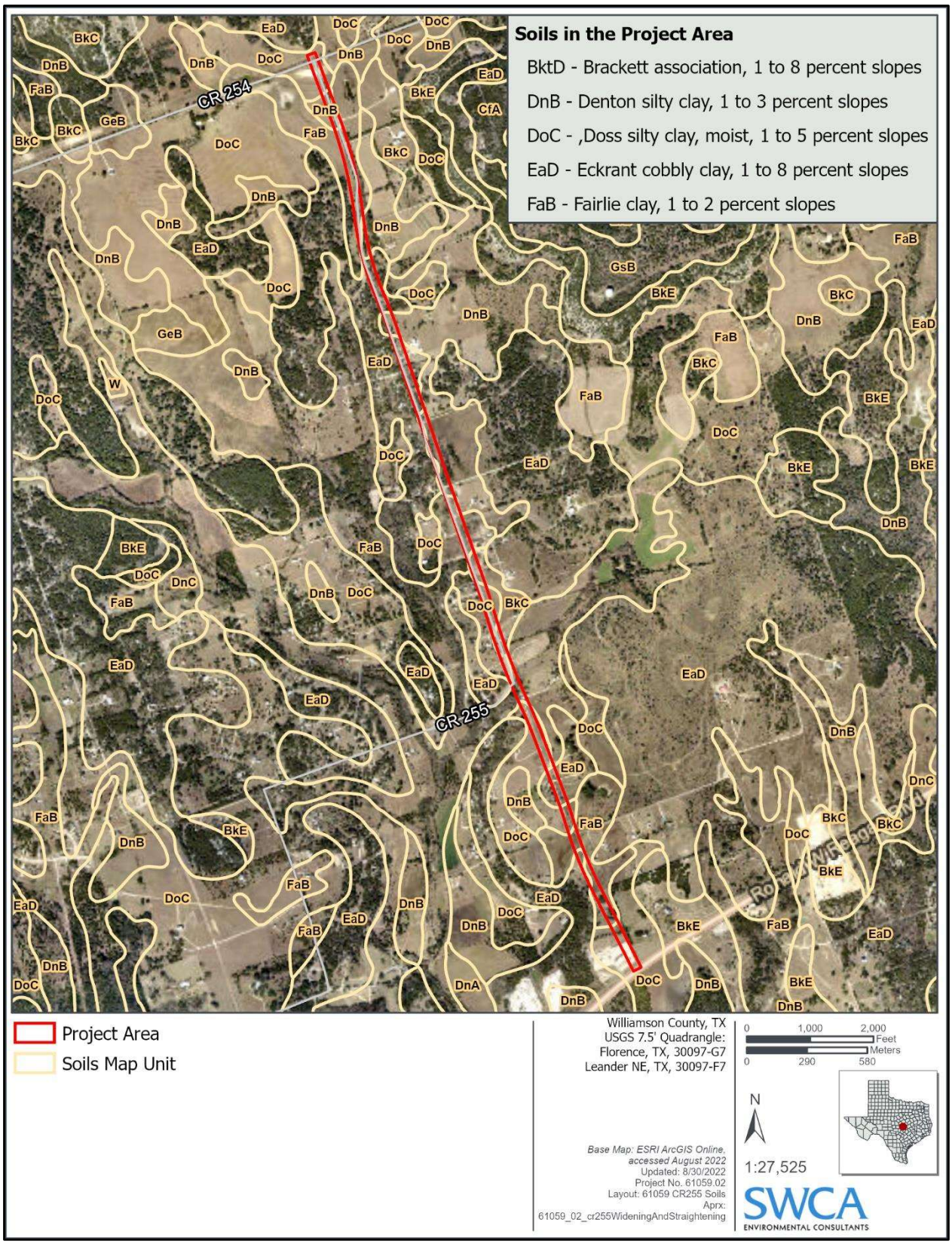

Figure 4. Project Area soils map.

Table 1. Project Area Soils

Name	Symbol	Acres	Percentage
Fairlie clay, 1 to 2 percent slopes	FaB	14.4	30.1
Doss silty clay, moist, 1 to 5 percent slopes	DoC	12.4	25.9
Eckrant cobbly clay, 1 to 8 percent slopes	EaD	10.1	21.0
Denton silty clay, 1 to 3 percent slopes	DnB	8.3	17.3
Brackett association, 1 to 8 percent slopes	BktD	2.8	5.7

Source: Natural Resources Conservation Service (2022).

BACKGROUND REVIEW

An SWCA archaeologist researched the Texas Archeological Sites Atlas (Atlas), a restricted, online database maintained by the Texas Historical Commission (THC) and the Texas Archeological Research Laboratory, for any previously recorded surveys and historic or prehistoric archaeological sites located in or within 0.6 mile (1.0 km) of the project area (THC 2022). In addition to identifying previously recorded archaeological sites, the Atlas review includes the following types of information: NRHP districts and properties, SALs, Official Texas Historical Markers, Registered Texas Historic Landmarks, cemeteries, and local neighborhood surveys. Listings in Atlas are limited to projects under purview of the ACT or the NHPA; therefore, the Atlas does not necessarily list all previous work conducted within a specific area. However, SWCA made a concerted effort to obtain reports for all previous cultural resources work conducted in the project area.

Two cultural resources surveys and three archaeological sites are located within a 0.6 mile (1.0 km) radius (i.e., the cultural resources study area) of the project area (THC 2022). Additionally, the historical map review revealed 28 potentially historic-age structures within cultural resources study area, none of which are within the current project area (Figure 5) (USGS 2022b).

Previous Cultural Resources Surveys

During the background review, two previously conducted cultural resources surveys were identified within the cultural resources study area, neither of which intersect with the project area. Of these two surveys, one lies perpendicular to the southern terminus of the project area along Ronald Reagan Boulevard. This survey was conducted in 2007 by SWCA under Texas Antiquities Permit No. 4381 for the purpose of widening and improving the roadway; no new cultural materials were observed. The second survey is located near the northern terminus of the project area. This survey was conducted in 2015 by ACI Consultants under Texas Antiquities Permit No. 7495 for the purposes of constructing an elevated storage tank for potable water for the city of Georgetown. No cultural resources were observed during this investigation (THC 2022).

Previously Recorded Archaeological Sites

During the background review, three archaeological sites (i.e., 41WM248, 41WM436, and 41WM1139) were identified within in the cultural resources study area, none of which intersect the project area. Among these three sites, one is a prehistoric site (i.e., 41WM436), one is a multicomponent site (41WM1139) consisting of both a prehistoric and a historic component, and one site (41WM248) is insufficiently complete on the site form and fails to provide substantive data regarding the site type.

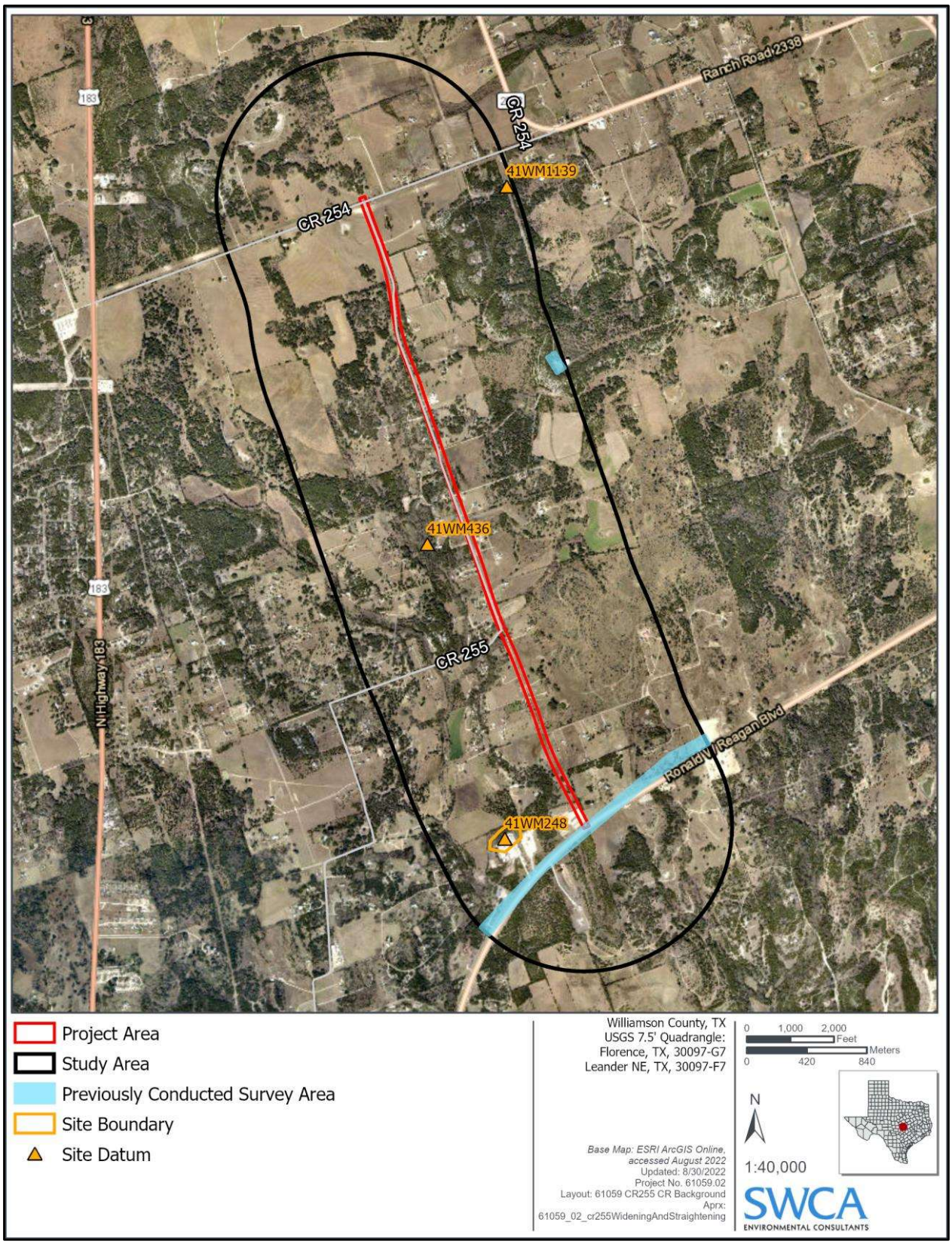

Figure 5. Background review results map.

Site 41WM248 is located approximately 0.3 miles (0.5 km) west of the southern terminus of the project area and approximately 0.2 miles (0.3 km) north of Ronald Reagan Boulevard. This site appears to lie on the northern periphery of a modern cement plant and has likely been significantly impacted by the plant's activities. The site form for site 41WM248 on the Atlas is incomplete and fails to provide any detailed information about the site. No additional information is available regarding this site (THC 2022).

Site 41WM436 is located approximately 1.4 miles (2.3 km) north of Ronald Reagan Boulevard and is situated in the central portion of the proposed project area. The site, recorded in 1980, is a large prehistoric open campsite consisting of three burned rock middens and an associated artifact scatter. The initial investigation consisted of a surface inspection only with burned rock, chert flakes, cores, and bifacial implements observed. No temporally diagnostic material is noted; however, the site form notes that the middens appeared to show signs of looting. No additional information is available regarding this site (THC 2022).

Site 41WM1139 is located approximately 0.6 miles (1.0 km) east of the northern terminus of the project area and approximately 0.2 miles (0.3 km) south of CR 254. Site 41WM1139 is a multicomponent site consisting of both a prehistoric and historic component, originally recorded in 2005 by Horizon Environmental Services during survey of a proposed Lower Colorado River Authority transmission line. The prehistoric component is recorded as a lithic quarry of unknown affiliation, while the historic-age component consists of a light twentieth century debris scatter lying on the surface. Artifacts observed include biface fragments, lithic flakes, brown crockery, English transfer ware (turn of the twentieth century), green glass, and solarized purple glass. In 2005 the THC determined that site 41WM1139 was not eligible for listing on the NRHP (THC 2022).

Historical Map Review

The historical map review identified 27 potentially historic-age structures within the cultural resources study area, none of which intersect within the project area. Current aerial imagery indicates that some of these structures are still extant. Five of these structures, however, lie immediately adjacent to (within 300 feet [107 m]) the project area. Of these five adjacent structures, four are extant (see Figure 5) (Foster et al. 2006; USGS 2022b). All structures are depicted on the 1962 *Leander* and 1964 *Florence* USGS topographic quadrangle maps, most of which are restricted to the periphery of the cultural resources study area (see Figure 5) (Foster et al. 2006; USGS 1962, 1964, 2022b).

PROPOSED SCOPE OF WORK

Once an Antiquities Permit has been obtained, SWCA will conduct an archaeological field survey of the 2.9-mile-long (4.7-km-long) project area; the total acreage of the project area is 48.0 acres (19.4 ha). The field survey will be performed by a team of two SWCA archaeologists walking the proposed project area. SWCA will incorporate approximately 100-foot-wide (30-m-wide) transects with archaeologists examining the ground surface for artifacts and features. The survey will be of sufficient intensity to determine the nature, extent, and, if possible, potential significance of any cultural resources located within the proposed project area. Subsurface explorations will be accomplished through shovel testing. The placement and quantity of these excavations will depend on the level of disturbance within the proposed project boundary and the nature of the soils, geology, and topography.

Shovel tests will be approximately 12 inches (30 centimeters [cm]) in diameter and excavated in arbitrary 8-inch (20-cm) levels to 31 inches (80 cm) below surface or culturally sterile deposits, whichever comes first. The matrix will be screened through ¼-inch mesh. The location of each shovel test will be plotted using a sub-meter accurate global positioning system (GPS) receiver, and each test will be recorded on appropriate project field forms. Shovel tests will be excavated according to THC standards. For linear

Figure 6 Redacted

projects, THC standards require a minimum of 16 shovel tests per linear mile of approximately 100-foot-wide ROW. Any deviations from these standards will be clearly discussed and explained in the resulting report for the investigation. Based on these standards, a minimum of 94 shovel tests will be required for this project. Areas with previously recorded sites or other cultural resources revealed in the archival research will require additional shovel testing to explore the nature of the cultural deposits. If the shovel testing indicates the potential for cultural deposits deeper than 31 inches (80 cm) below surface, SWCA will make recommendations for any areas that would require deep testing (i.e., backhoe trenching) if future impacts from the proposed project are anticipated to be deeper than 31 inches (80 cm) below surface.

Site Documentation

If an archaeological site is encountered during the investigation, it will be explored as much as possible with consideration to land access constraints. All recorded sites will be mapped in detail and plotted on USGS 7.5-minute topographic quadrangle maps with a hand-held, sub-meter accurate GPS unit and appropriate project maps for planning purposes. All discovered sites will be assessed regarding potential significance so that recommendations can be made for property management (i.e., avoidance, non-avoidance, or further work). Additional shovel tests will be conducted per Council of Texas Archeologists (CTA) / THC standards at discovered sites to define horizontal and vertical boundaries. Positive shovel tests would be excavated in a cruciform pattern at intervals no greater than 50 feet (15 m) until two negative shovel tests are identified in each cardinal direction. Appropriate State of Texas Archaeological Site Data Forms will be filled out for each site discovered during the investigation.

SWCA proposes a non-collection survey. Artifacts will be tabulated, analyzed, and documented in the field, but not collected. Temporally diagnostic artifacts will be described in detail and photographed in the field. This policy will reduce curation costs once the fieldwork is concluded; however, as per the stipulations of the Antiquities Permit, all paperwork and photographs generated during the field investigation must be curated at an approved repository.

Reporting and Curation

SWCA will prepare a draft report of the investigation three (3) weeks of completion of the field survey. The archaeological report will conform to THC and CTA reporting standards. The report will document the general nature of the project area, the methodology used in the investigation, the presence and condition of any previously recorded sites revealed in the records review, the general nature and extent of cultural resources encountered during the archaeological survey, recommendations on the need for further work, and the potential significance of the cultural resources regarding future development and SAL status.

SWCA will submit a digital draft copy of the report to Williamson County for review and comment. Once this has been accomplished, SWCA will incorporate any appropriate edits and will submit a final draft report to the THC for review and comment. As part of completing Antiquities Permit requirements, SWCA will furnish two electronic copies of the final report on a tagged PDF formatted CD, as well as project area shapefiles, to the THC, and complete an Abstracts in Texas Contract Archeology Summary form and abstract text on-line. Field records and artifacts, if collected, will be curated at an approved curatorial facility which, in this case, is the Center for Archaeological Research at The University of Texas at San Antonio, per requirements of the ACT.

REFERENCES

Barnes, Virgil E.

1974 Geologic Atlas of Texas, Austin Sheet. Bureau of Economic Geology, The University of Texas at Austin.

Foster, T.R., T. Summerville, and T. Brown

2006 The Texas Historic Overlay: A Geographic Information System of Historic Map Images for Planning Transportation Projects in Texas. Prepared for the Texas Department of Transportation by PBS&J, Austin

Griffith, Glenn E., Sandy A. Bryce, James M. Omernik, and Ann C. Rogers

2007 *Ecoregions of Texas*. Texas Commission on Environmental Quality Surface Water Quality Monitoring Program, Austin, Texas.

Natural Resources Conservation Service (NRCS)

2022 Web Soil Survey. U.S. Department of Agriculture. Available at: http://websoilsurvey.nrcs.usda.gov. Accessed August 2022.

Texas Historical Commission (THC)

2022 Texas Archeological Site Atlas, restricted database. A joint venture of Texas Historical Commission and Texas Archeological Research Laboratory. Available at: http://atlas.thc.state.tx.us. Accessed August 2022.

U.S. Geological Survey (USGS)

1962 *Leander, TX* [map]. 1:62,500, 7.5-Minute Series topographic quadrangle. U.S. Department of the Interior, U.S. Geologic Survey, Washington D.C.

1964 *Florence, TX* [map]. 1:24,000, 7.5-Minute Series topographic quadrangle. U.S. Department of the Interior, U.S. Geologic Survey, Washington D.C.

2022a Pocket Texas Geology. Available at: https://txpub.usgs.gov/txgeology/. Accessed August 2022.

2022b The National Geologic Map Database (TopoView). Historical topographic map collection. Available at: http://ngmdb.usgs.gov/maps/TopoView/. Accessed August 2022.