

TEXAS HISTORICAL COMMISSION

ANTIQUITIES PERMIT APPLICATION FORM  
ARCHEOLOGY

GENERAL INFORMATION

I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) Cultural Resources Deep Testing Investigations for the Proposed CR 401 Extension and Improvement Project, Williamson County, TX  
County (ies) Williamson County  
USGS Quadrangle Name and Number Taylor, TX USGS 7.5-minute quadrangle map  
UTM Coordinates Zone 14 E 648437 N 3381492  
Location 0.05 mile (0.92 km) south of CR 401 and CR 403 intersection near Taylor, Texas.  
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 South 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 Ken Lawrence  
Affiliation SWCA Environmental Consultants  
Address 4407 Monterey Oaks Blvd. Bldg 1, Ste 110  
City/State/Zip Austin, TX 78748  
Telephone (include area code) 512-476-0891 Email Address [klawrence@swca.com](mailto:klawrence@swca.com)

(OVER)

## ANTIQUITIES PERMIT APPLICATION FORM (CONTINUED)

### II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork 2/28/2022  
Requested Permit Duration 5 Years 0 Months (1 year minimum)  
Scope of Work (Provided an Outline of Proposed Work) SWCA will conduct backhoe trenching and pedestrian survey.

### III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility SWCA (Austin) lab  
Permanent Curatorial Facility CAR at UTSA

### IV. LAND OWNER'S CERTIFICATION

I, Valerie Covey Presiding Officer, 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 Valerie Covey Date Feb 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, Ken Lawrence, 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 [Signature] Date 2/9/2022

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

thc.texas.gov



TEXAS HISTORICAL COMMISSION  
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ENVIRONMENTAL CONSULTANTS

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February 10, 2022

Rebecca Shelton  
Texas Historical Commission  
P.O. Box 12276  
Austin, TX 78711-2276

**Re: Request for Antiquities Permit to Conduct Cultural Resources Deep Testing Investigations for the Proposed County Road 401 Extension and Improvement Project, Williamson County, Texas  
SWCA Project No. 59147.**

Dear Ms. Shelton:

This letter is a request for a Texas Antiquities Permit to conduct cultural resources deep testing investigations for the proposed County Road (CR) 401 Extension and Improvement Project (project), Williamson County, Texas. The proposed project for Williamson County is being completed under Work Authorization (WA) 19. The project includes mechanical investigation (i.e., backhoe trenching) of approximately 0.2 acre near an unnamed tributary of Mustang Creek and a strictly pedestrian survey and photo-documentation investigation of the 7.7-acre Immanuel Lutheran Church and Cemetery property to ensure that these features are not within 150 feet of the proposed CR 401 Extension and Improvement Project activities.

As the project is proposed to occur on easement granted to Williamson County, a political subdivision of the state of Texas, a Texas Antiquities Permit is required in accordance with the Antiquities Code of Texas (Texas Natural Resource Code, Title 9, Chapter 191) and accompanying Rules of Practice and Procedure (Texas Administrative Code, Title 13, Chapter 26). To comply with requirements of the Antiquities Code of Texas (ACT), SWCA is proposing the deep testing investigations of a portion of the project area and pedestrian survey of an adjacent parcel, as described above.

If you have any questions or concerns, please feel free to contact me at (512) 476-0891 or [klawrence@swca.com](mailto:klawrence@swca.com).

Sincerely,

A handwritten signature in dark ink, appearing to read "Ken Lawrence". The signature is fluid and cursive, with a large initial "K" and a long, sweeping underline.

Ken Lawrence, M.A.  
Principal Investigator

## **PROPOSED SCOPE OF WORK FOR THE CULTURAL RESOURCES DEEP TESTING INVESTIGATIONS FOR THE PROPOSED CR 401 EXTENSION AND IMPROVEMENT PROJECT, WILLIAMSON COUNTY, TEXAS**

*Project Landowner/Sponsor – Williamson County*

*Project Sponsor – HNTB Corporation*

*Project Consultant – SWCA Environmental Consultants*

*Principal Investigator – Ken Lawrence, M.A.*

*Date – February 10, 2022*

### **INTRODUCTION**

On behalf of Williamson County, SWCA Environmental Consultants (SWCA) will conduct cultural resources deep testing investigations for the proposed County Road (CR) 401 Extension and Improvement Project (project) located approximately 4.3 miles southwest of the City of Taylor in Williamson County, Texas (Figure 1). The proposed deep testing will consist of mechanical investigations (i.e., backhoe trenching) of approximately 0.2 acre near an unnamed tributary of Mustang Creek and a strictly pedestrian investigation and photo-documentation of the adjacent 7.7 acres of the Immanuel Lutheran Church and Cemetery. This effort is in support of the CR 401 Extension and Improvement Project which aims to improve the existing CR 401 beginning at CR 402 and proceeding southward for 0.9 mile. Improvements would include reconstruction and widening to a four-lane, undivided facility. The lanes would be 12-feet-wide, and the shoulders would be 10-feet-wide. There would be no curbs, gutters, nor sidewalks, except curb and gutter would be included at Union Pacific Railroad right-of-way. No easements would be required.

During review of the CR 401 Extension and Improvement Project, due diligence efforts by Williamson County (reviewing the Hybrid Potential Archeological Liability Map) and coordination with the Texas Historical Commission (THC) identified one high potential area for deep intact prehistoric deposits within the project at the crossing of an unnamed tributary to Mustang Creek that may be impacted by proposed improvements (Figure 1). Mechanical excavations were recommended in this area; however, no further archaeological investigations were recommended for the remaining portions of the proposed project area. In addition, strictly pedestrian survey and photo-documentation were requested with respect to the adjacent Immanuel Lutheran Church and Cemetery to ensure that these features are located more than 150 feet away from project impacts.

The mechanical investigation component of the project is proposed to occur on easement granted to Williamson County, a political subdivision of the state of Texas, and as such will require review under the Antiquities Code of Texas (ACT). To comply with requirements of the ACT, SWCA is proposing deep testing investigations of a portion of the project area. This scope of work presents information on the project area; potential effects, known resources; and methods of the proposed survey, reporting, and curation.

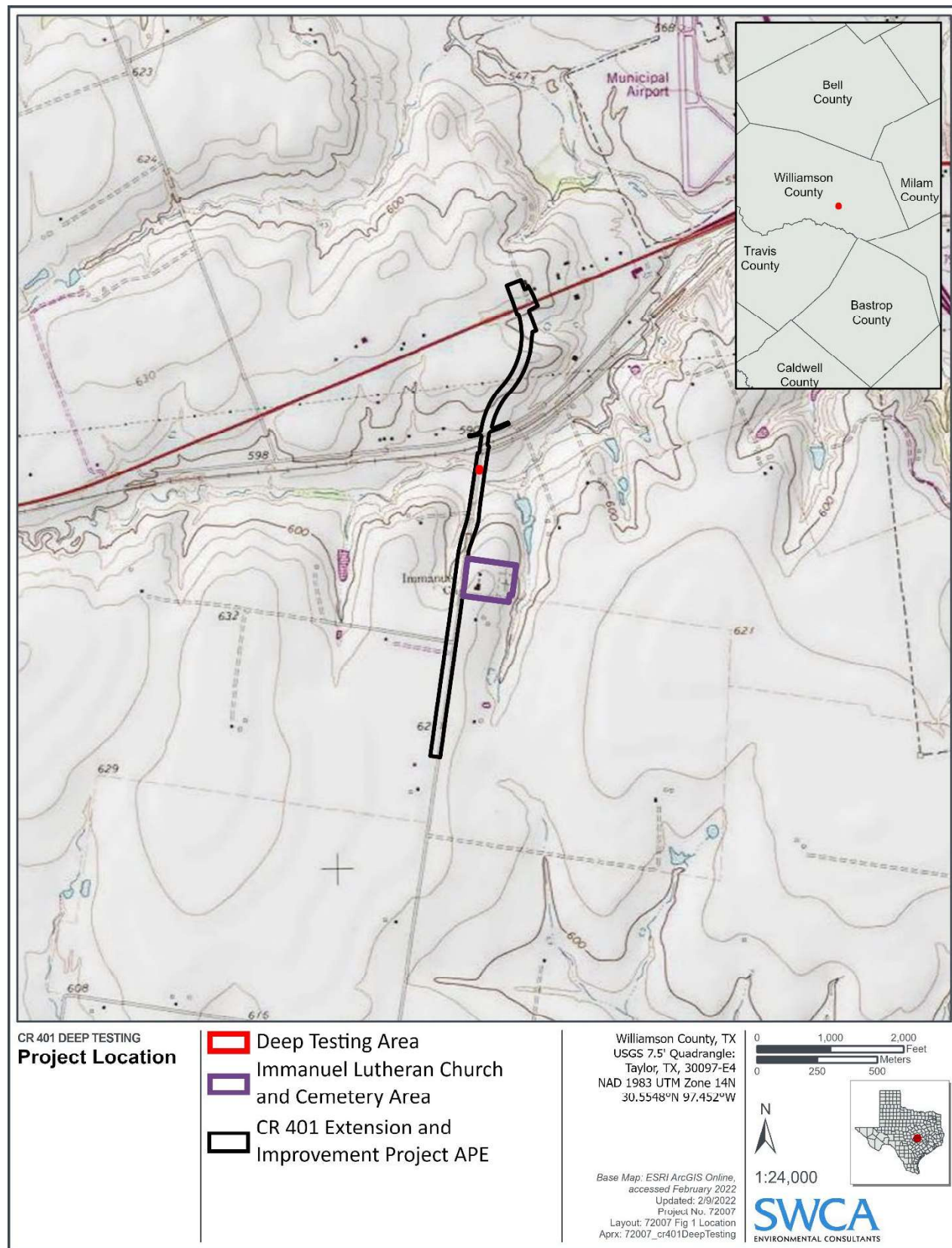


Figure 1. Project location map.



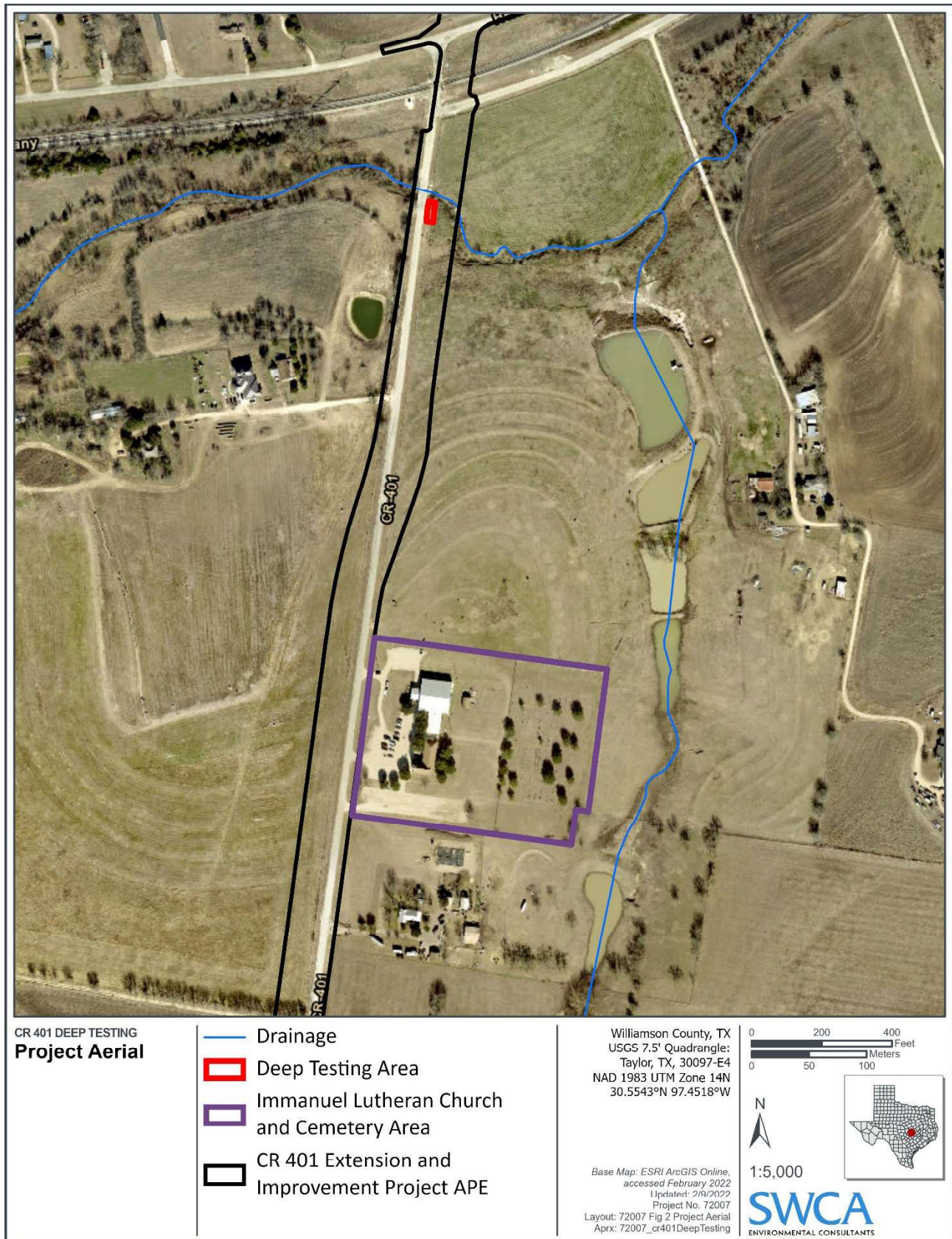


Figure 2. Aerial overview of the project area map

## PROJECT SETTING

The project is located southwest of the city of Taylor and approximately 0.05 mile south of the intersection of CR 401 and CR 403. The trenching location of the current project area lies immediately south of the unnamed tributary of Mustang Creek and is situated within the 100-year floodplain. The Immanuel Lutheran Church and Cemetery is located further south on CR 401, approximately 0.3 mile south of the intersection of CR 401 and CR 403. Aerial imagery shows the project area is currently comprised of agricultural fields and rural residential properties, and is depicted on the *Taylor, Texas* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (USGS 2022a) (see Figures 1 and 2).

## Geology

The recorded surface geology within the project area consists entirely of early Late Cretaceous-age Austin Chalk deposits, which consists of relatively thick massive chalk deposits with some interbeds of calcareous clay (Figure 3) (USGS 2022b).

## Soils

Four soil types were identified as underlying the proposed project area (Natural Resources Soil Service [NRCS] 2022) (Figure 3). These include the Branyon-Krum complex, 1 to 3 percent slopes, Ferris-Heiden complex, 5 to 15 percent slopes, Heiden clay, 2 to 5 percent slopes, and the Tinn clay series, 0 to 1 percent slopes. The Trenching location is underlain solely by the Tinn series, 0 to 1 percent slopes which consists of very deep, moderately well-drained clayey alluvium frequently formed on the floodplains of the Blackland Prairie (NRCS 2022). The Ferris-Heiden complex, 5 to 15 percent slopes and the Heiden clay, 2 to 5 percent slopes, soils consist of deep, moderately well-drained mudstones derived from clayey residuum which form on the backslopes of side slopes of ridges on dissected plains. The Branyon-Krum complex, 1 to 3 percent slopes, consists of deep, well-drained calcareous clayey alluvium derived from Pleistocene-aged mudstone and interbedded chalk and marl (NRCS 2022).

## BACKGROUND REVIEW

An SWCA archaeologist researched the Texas Archeological Sites Atlas (Atlas), a restricted, online database maintained by the 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 of the project area. In addition to identifying previously recorded archeological sites, the Atlas review includes the following types of information: National Register of Historic Places (NRHP) districts and properties, State Antiquities Landmarks (SALs), Official Texas Historical Markers (OTHM), Registered Texas Historic Landmarks, cemeteries, and local neighborhood surveys. Listings in Atlas are limited to projects under purview of the ACT or the National Historic Preservation Act (NHPA) of 1966; therefore, all previous work conducted in an area may not be available.

On February 8, 2022, SWCA completed a desktop review of the project. The review includes the approximately 0.2-acre deep testing area, the adjacent 7.7 acre church and cemetery parcel, and an additional 0.6-mile radius around the project components (i.e., study area) (Figure 4). The review used the Texas Archeological Sites Atlas (Atlas) online database (THC 2022) to identify previously conducted surveys and known sites within the study area. The review also consulted historical topographic maps available through the USGS Historical Topographic Map Explorer (USGS 2022a), the Texas Historic Overlay (Foster et al. 2006), and modern aerial imagery to identify land use practices that may indicate the potential for or presence of cultural resources within the project area.



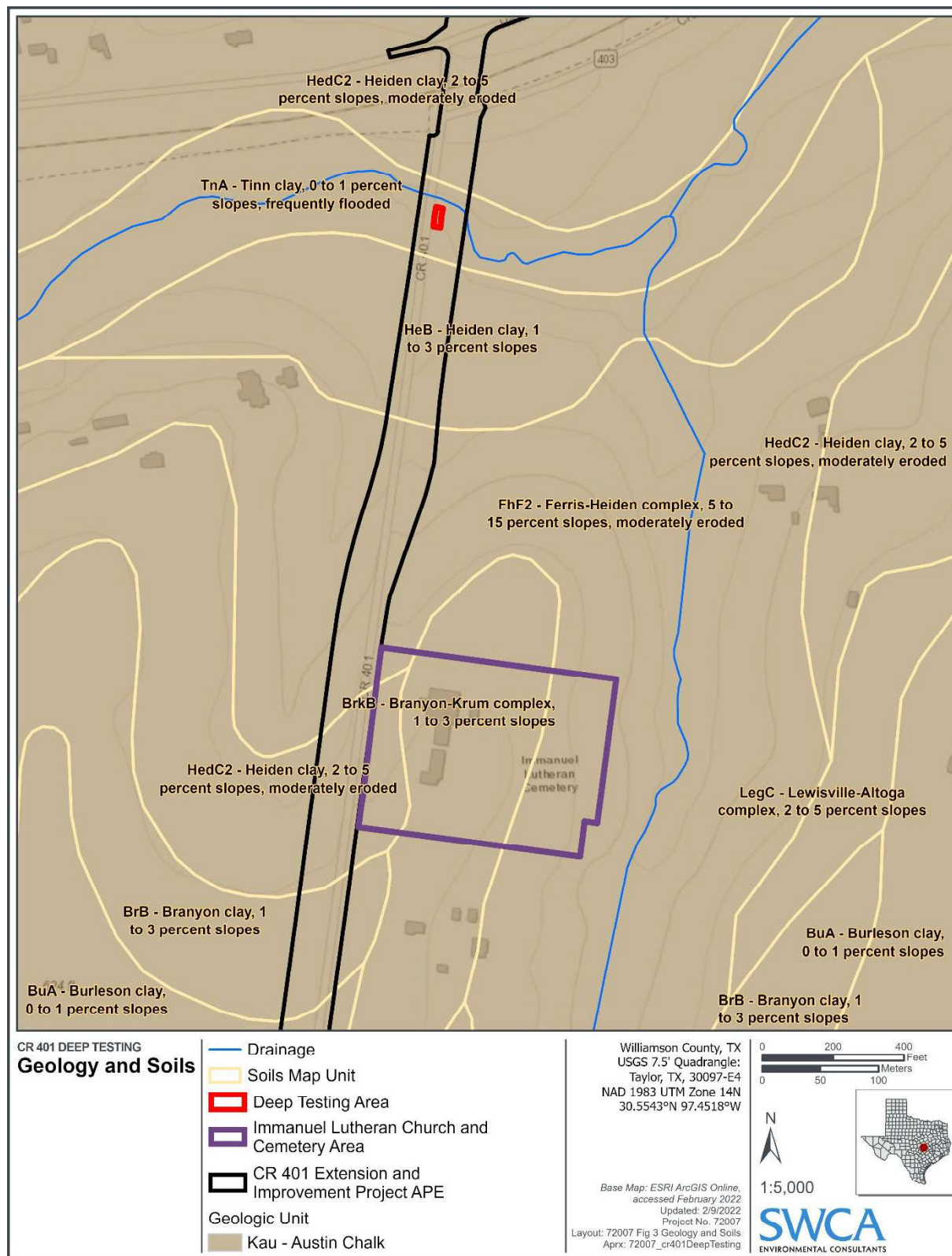


Figure 3. Project area geology and soils map.



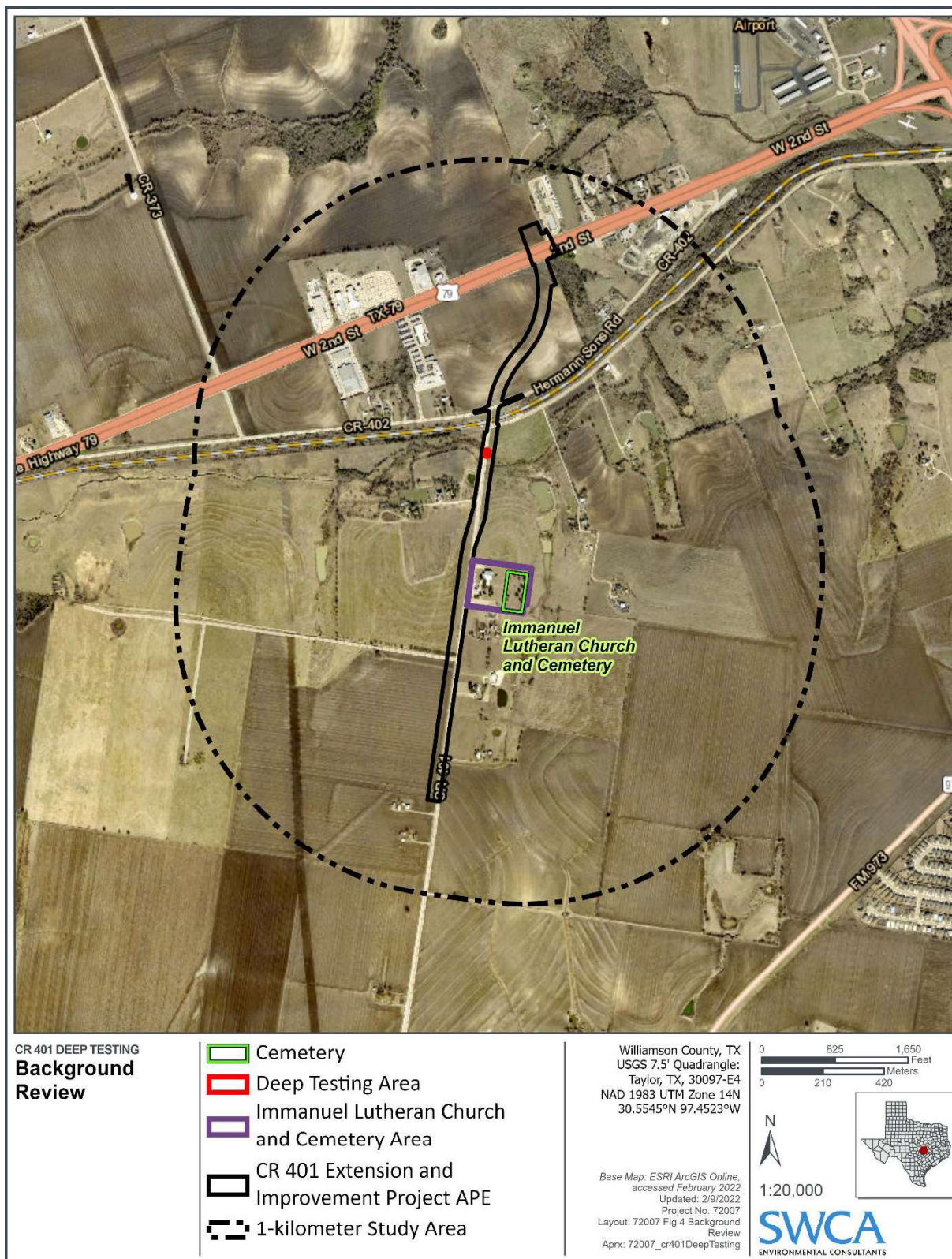


Figure 4. Background review results map

## Background Review Results

The file search and literature review identified no previous cultural resources surveys, archaeological sites, NRHP properties or districts, SALs, or historical markers within the proposed project area. One cemetery lies within the study area (Figure 4) (THC 2021). The Immanuel Lutheran Cemetery (WM-094) lies approximately 0.3 mile south of the intersection of CR 401 and CR 403. This cemetery is located behind the Immanuel Lutheran Church and is noted to be well maintained, fully fenced, and currently used by the church, which is also active. No signage is posted around the boundary of the cemetery. No further information is available regarding this cemetery (Figure 4) (THC 2022).

## Historical Map Review

The historical map review consisted of historical maps dating to 1964 (Foster et al., 2006; USGS 2021a). The review identified a total of 43 potential historical structures within the 0.6-mile study area; of those potentially historical structures, only one (the Immanuel Lutheran Church) is depicted adjacent to the project area (Foster et al. 2006; USGS 2021c) (Figure 5). The Immanuel Lutheran Church and cemetery first appear on a 1964 USGS topographic map and is extant and a fully functional church and cemetery according to modern aerial imagery (USGS 2022a). No potential historical structures are located within the vicinity of the proposed trenching location.

## PROPOSED SCOPE OF WORK

Once an Antiquities Permit has been obtained, SWCA will implement field survey methods that comply with technical standards and requirements established by the THC and the Council of Texas Archeologists (CTA). The primary method for quickly and efficiently exploring areas with the potential to contain deeply buried cultural deposits will be with mechanical investigation (i.e., backhoe trenching). In areas where the depth of proposed impacts exceeds 31 inches, trenches will be placed approximately 200 to 300 feet apart, with tighter intervals if necessary. Specific trench placement will be determined on the level of disturbance, the location of any impacted areas such as construction, and the preservation potential for archaeological sites as determined by an SWCA archaeologist. **However, SWCA understands that landowner related constraints restrict all excavation activities to the east side of the existing roadway.** When conducted, backhoe trenches will be excavated to a depth sufficient to determine the presence/absence of buried cultural materials and allow the complete recording of all features and geomorphic information to depths of project impacts. Generally, trenches will be 23 feet in length and 2.5 feet wide. The depth of the trenches will be contingent upon the depth of proposed impacts in the area or when deposits demonstrably pre-cultural (i.e., Pleistocene-aged or older soils). All trenching will be monitored by an experienced archaeologist while excavations were underway. Once the trench is excavated, an SWCA archaeologist will examine the walls of the trench for artifacts, features, or other cultural manifestations. Stratigraphic descriptions will be recorded for each trench and all features encountered during trenching were mapped and photographed.

All work will be performed in accordance with the U.S. Occupational Safety and Health Administration (OSHA; 29 CFR 1926). When necessary to safely assess the potential for buried deposits deeper than 5 feet below surface, one of two approaches will be utilized. The first approach will be that backdirt from the backhoe bucket will be sifted and selectively screened to assess presence or absence of cultural materials. The second approach may be to bench back the excavations in accordance with regards to the appropriate soil type (i.e., Type A, B, or C) as indicated in OSHA regulations (29 CFR 1926.652[b][2]). The entire process will be thoroughly documented and photographed. Upon completion of excavation, all trenches will be backfilled, leveled, and returned, as much as possible, to its original state.



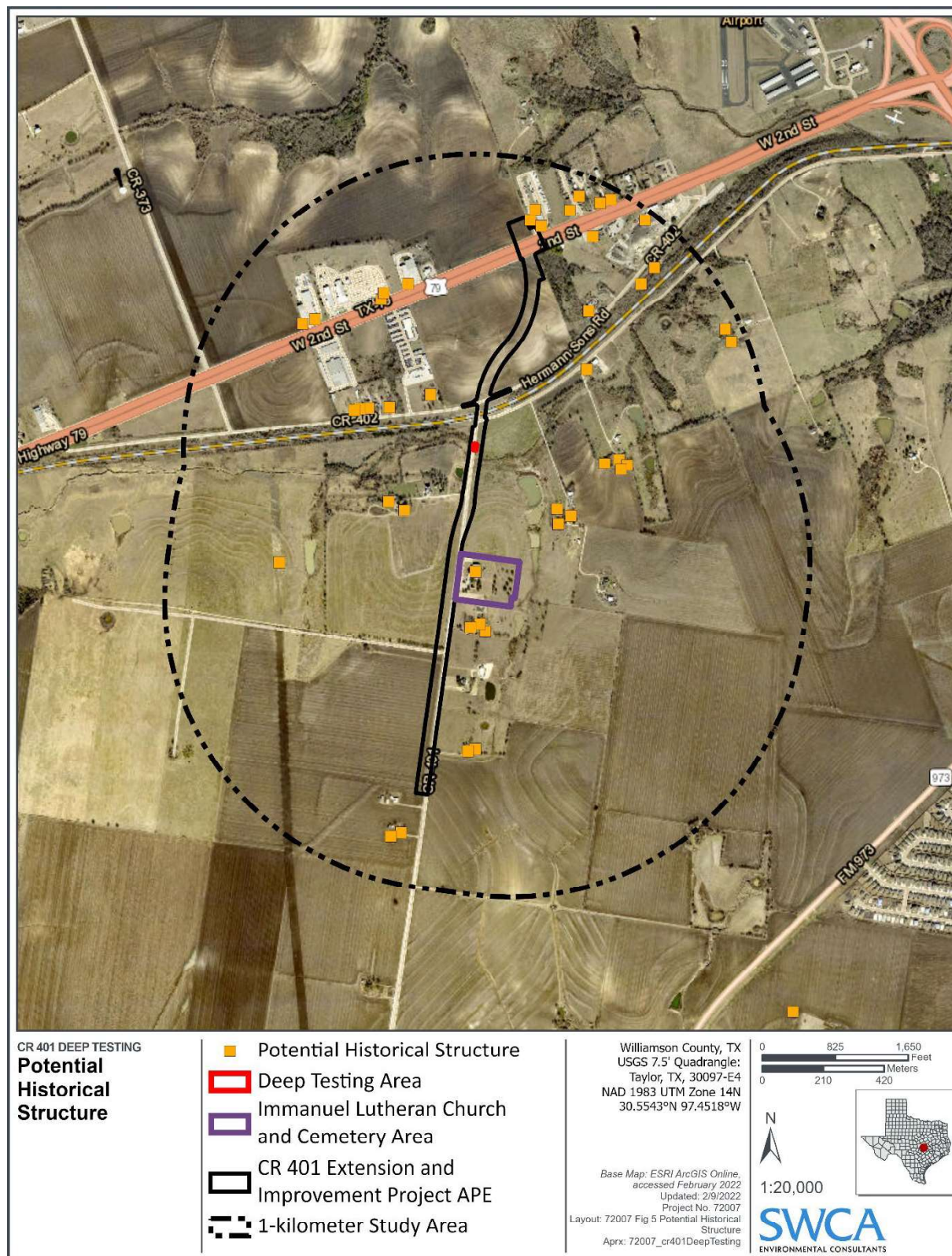


Figure 5. Potential historical structures within 0.6 mile of the project area.

Finally, a strictly pedestrian survey and photo-documentation investigation will be undertaken with respect to the Immanuel Lutheran Church and Cemetery to ensure that these features are located more than 150 feet away from project impacts. This information will be incorporated into the Draft and Final *Cultural Resources Report*.

## **Site Documentation**

If archaeological sites are encountered in the project area during the field investigation, they will be explored as much as possible with consideration to the boundaries of the project. Discovered sites will be assessed regarding their potential significance so that recommendations can be made for proper management (i.e., avoidance, non-avoidance, or further work) and eligibility. If features are encountered during backhoe trenching, a column of soil will be excavated and screened along one profile of select trenches. This will mainly be performed when newly identified sites or if cultural materials are noted in a trench. The column samples will be roughly 12 × 12 inches in size, extending from the ground surface to the base of the trench, or until a horizon of impassible clay is encountered. In order to maintain vertical control of any cultural materials, soil from the column will be removed in arbitrary 8-inch levels and screened through ¼-inch hardware screen mesh.

Photographs of sites within the project area will minimally include the site setting documented from a minimum of two angles, cultural features present within the site, a representative sample of non-diagnostic artifacts, all sides of diagnostic artifacts, and other representative natural features and/or disturbances within the site. Locations of sites, relevant features, and photographs will be mapped using a GPS receiver.

SWCA will complete appropriate State of Texas Archeological Site Data Forms for each site discovered and/or revisited during the field investigation. The Firm will produce a detailed plan map of each site and plot locations on USGS 7.5-minute topographic quadrangles and relevant project maps. 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, then left in place. This policy will reduce curation costs once the field investigation has concluded. However, as per the antiquities permit, original field paperwork and photographs must be curated at an approved repository. For this project, curation will be done at the Center for Archeological Research at the University of Texas at San Antonio (CAR-UTSA).

## **Reporting and Curation**

Once the cultural resources survey has been completed, SWCA will prepare a report for review by Williamson County and the THC. The report of the investigations will conform to the CTA and THC standards and guidelines. The report will include the results of the background review and the field survey. Specifically, the report will provide the methodology used in the investigations, the presence and condition of previously recorded sites located in the project area, photographs illustrating the environment and setting, a description of cultural resources encountered during the survey, recommendations for management of those cultural resources, and recommendations for additional investigations and the potential significance of the cultural resources regarding future development and SAL status, if warranted.

SWCA will submit a draft digital 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, complete an Abstracts in Texas Contract Archeology Summary form and abstract text on-line, and furnish 11 hard copies of the report (without site information, if any) to the



university-based libraries and archaeological research facilities around the state. 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.

## **UNANTICIPATED DISCOVERY OF HUMAN REMAINS**

In the event of unexpected discovery of human remains or funerary objects/contexts during the field investigation, the Firm will comply with all applicable state laws (Texas Health and Safety Code Section 711 and the Texas Administrative Code Title 13, Chapter 22, Sections 22.1 through 22.6.) and take into account the Advisory Council on Historic Preservation's 2007 Policy Statement on the Treatment of Burial Sites. Human skeletal remains that may be discovered will, at all times, be treated with dignity and respect. If human remains are uncovered during the cultural resources field investigation, the following steps will be taken:

- SWCA will halt excavation of the remains and shall notify the Williamson County sheriff and the THC. The sheriff will be requested to contact the coroner/medical examiner. After examining the human remains, if the sheriff and coroner determine the remains are modern, then the sheriff or coroner will assume responsibility for the remains.
- Appropriate measures will be taken to ensure that the remains are protected and not disturbed prior to the conclusion of investigation by law enforcement and consultation with appropriate groups to determine next steps (if needed).
- Excavations (e.g., backhoe trenching) within 328 feet of the find will be halted until the THC authorizes continued work in those areas.
- Field investigations will continue elsewhere in the project area

If the county sheriff and coroner determine that the remains are not modern or a crime scene, thereby relinquishing their jurisdiction over the remains, SWCA will coordinate with the project and THC to determine the appropriate course of action and file *Notice of the Existence of a Cemetery*.

## REFERENCES

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.

Natural Resources Soil Service (NRCS)

- 2022 Web Soil Survey. Online database available at <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed February 2022.

Texas Historical Commission

- 2022 Texas Archeological Sites Atlas restricted database, Texas Historical Commission. Available at: <http://atlas.thc.texas.gov>. Accessed February 2022.

U.S. Geological Survey (USGS)

- 2022a The National Geologic Map Database (TopoView). Historical topographic map collection. Available at: <http://ngmdb.usgs.gov/maps/TopoView/>. Accessed February 2022.
- 2022b Texas Geology Web Map Viewer. Available at: <https://txpub.usgs.gov/txgeology/>. Accessed February 2022.