GENERAL INFORMATION

I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) Southwest Bypass Driveway Connections at I-35 and RM 2243
County (ies) Williamson
USGS Quadrangle Name and Number Round Rock, TX (3097-312)
UTM Coordinates

I-35 Driveway Connection: Zone 14 E 625808 N 3386706
RM 2243 Driveway Connection: Zone 14 E 623530 N 3386988

Location Interstate Highway 35 and Leander Road (RM 2243) in the City of Georgetown
Federal Involvement Yes
Name of Federal Agency NA
Agency Representative NA

II. OWNER (OR CONTROLLING AGENCY)

Owner Williamson County
Representative Judge Dan A. Gattis
Address 710 S. Main Street, Suite 101
City/State/Zip Georgetown, Texas 78626
Telephone (include area code) 512-943.1550 Email Address cityjudge@wilco.org

III. PROJECT SPONSOR (IF DIFFERENT FROM OWNER)

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

PROJECT INFORMATION

I. PRINCIPAL INVESTIGATOR (ARCHEOLOGIST)

Name Brandon S. Young
Affiliation SWCA Environmental Consultants
Address 4407 Monterey Oaks Blvd., Building 1, Suite 110
City/State/Zip Austin, Texas 78749
Telephone (include area code) 512-476-0891 Email Address byoung@swca.com

(OVER)
II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork: November 30, 2015
Requested Permit Duration: 5 Years 0 Months (1 year minimum)
Scope of Work (Provided an Outline of Proposed Work): Intensive cultural resources survey of proposed driveway connections at I-35 and RM 2243 for the proposed Southwest Bypass with subsurface investigations as necessary based on field conditions (see attached scope of work).

III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility: SWCA Environmental Consultants
Permanent Curatorial Facility: Texas Archeological Research Laboratory

IV. LAND OWNER’S CERTIFICATION

I, Judge Dan A. Gattis, 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 _______________________________ Date 12-4-2015

V. SPONSOR’S CERTIFICATION

I, _______________________________ , as legal representative of the Sponsor, 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 Sponsor, Owner, and Principal Investigator are responsible for completing the terms of this permit.

Signature _______________________________ Date __________________

VI. INVESTIGATOR’S CERTIFICATION

I, Brandon S. Young, 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 _______________________________ Date 18 November 2015

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

Texas Historical Commission
TEXAS ANTIQUITIES PERMIT APPLICATION
SCOPE OF WORK FOR AN INTENSIVE CULTURAL RESOURCES SURVEY OF PROPOSED DRIVEWAY CONNECTIONS FOR THE SOUTHWEST BYPASS AT INTERSTATE HIGHWAY 35 AND LEANDER ROAD (RM 2243), CITY OF GEORGETOWN, WILLIAMSON COUNTY, TEXAS

Project Landowner – Williamson County
Project Sponsor – Williamson County
Project Consultant – SWCA Environmental Consultants (SWCA)
Principal Investigator – Brandon S. Young, M.A.
Date – November 18, 2015

INTRODUCTION
At the request of HNTB and Prime Strategies, Inc., and on behalf of Williamson County, Texas, SWCA Environmental Consultants (SWCA) proposes to conduct an intensive cultural resources survey of driveway connections for the proposed Southwest Bypass (SWBP) at Interstate Highway 35 (I-35) and Leander Road (Ranch-to-Market [RM] Road 2243) in the City of Georgetown. The project areas are mapped on portions of the Round Rock, Texas (3097-312) U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (Figure 1).

Williamson County is proposing to install two driveways for the southernmost 1.5 miles of the SWBP in south-central Williamson County, Texas (Figure 2). The western driveway is on the south side of RM 2243 where the SWBP will cross 1.5 miles west of the RM 2243/I-35 intersection. The eastern driveway is located where the SWBP road ends at the southbound I-35 frontage road just south of the intersection of I-35 and the SE Inner Loop. Because the project involves lands owned or controlled by Williamson County (a subdivision of the state), the project is subject to review under the Antiquities Code of Texas (ACT). The proposed project area at I-35 is approximately 200 feet by 100 feet in size, while the project area at RM 2243 is roughly 200 feet by 75 feet in size. Vertical impacts at both areas will extend approximately 2 feet below the ground surface. At I-35, the proposed project will impact approximately 0.45 acre; impacts at RM 2243 will encompass approximately 0.34 acre.

The goal of SWCA’s work will be to locate any previously recorded prehistoric and historic 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 inclusion to the National Register of Historic Places (NRHP) or designation as a State Antiquities Landmark (SAL). All work will be done in accordance with the ACT.

**GEOLOGY**

The underlying geology of the project areas consist of Early Cretaceous-age Edwards and Comanche Peak Limestones, undivided, at the proposed I-35 driveway connection, and Late Cretaceous-age Del Rio Clay and Georgetown Limestone, undivided, at the RM 2243 driveway connection. The Edwards Limestone consists of fine grained, grayish to brown limestone, dolomite, and chert that forms flat areas and plateaus bordered by scarps comprising Comanche Peak Limestone, which is described as gray, fine to very fine grained and nodular with a thickness of up to 80 feet (Barnes 1974). Given the age and physical properties of the limestone formations, they have virtually no potential to contain buried archaeological resources.

Del Rio Clay is calcareous and gypsiferous gray to yellowish-gray blocky clay or mud containing common pyrite inclusions and marine megafossils with a thickness of approximately 40 to 70 feet (Barnes 1974). Georgetown Limestone consists of limestone and marl that is fine grained and light gray in color that contains marine megafossils and exhibits a thickness of approximately 30 to 80 feet (Barnes 1974). Given the age and physical properties of the limestone formations, they have virtually no potential to contain buried archaeological resources.

**SOILS**

Soils within the project area consist of Eckrant extremely stony clay, 0 to 3 percent slopes at the I-35 driveway connection and Georgetown stony clay loam, 1 to 3 percent slopes, at the RM 2243 driveway connection. Eckrant extremely stony clay, 0 to 3 percent slopes, is an upland soil found on the summits and side slopes of ridges. A typical profile exhibits 10 to 20 inches of extremely stony clay overlying limestone bedrock. This soil developed in place from residuum weathered from limestone and, as such, has little to no potential to contain buried cultural materials (Natural Resources Conservation Service [NRCS] 2015). Georgetown stony clay loam, 1 to 3 percent slopes, is found on upland plains and consists of stony clay loam grading to cobbly clay overlying limestone bedrock from 0 to 35 inches below ground surface (NRCS 2015). This soil developed in place from limestone residuum and, as such, has little to no potential to contain buried archaeological material.

**PREVIOUS INVESTIGATIONS AND RECORDED SITES**

SWCA conducted a review of records available on the Texas Archeological Sites Atlas (Atlas) online database to determine the presence/absence of known prehistoric and historic cultural resources, as well as previously conducted cultural resources surveys within 0.5 mile of the currently proposed project area. The background literature review examined each driveway location separately.
I-35 Driveway Connection

Two previously recorded archeological sites and four archeological surveys have been completed within a 0.5-mile radius of this part of the project area, while two previous survey areas overlap the project’s area of potential effects (APE) (Atlas 2015).

Site 41WM255 is approximately 180 meters west of the project area. The site was recorded in 1973 and was described as a deep cavern site containing Pleistocene age animal remains which included the bones of giant pig, ground sloth, extinct horse and jaguar, and human teeth. No recommendations regarding NRHP eligibility or research potential were made (Atlas 2015).

Recorded in 2010, the second site (41WM1257) is a prehistoric lithic procurement and scatter site roughly 690 meters northwest of the planned driveway connection at I-35. Investigators found a high density of Georgetown chert debitage spread over an area approximately 160 meters within the ROW. The site was generally in poor condition, having been impacted through land clearing resulting for the placement of a transmission line, and is not considered eligible for NRHP listing, at least within the transmission line ROW (Atlas 2015).

A small survey was conducted in 1994 that bisects the project area; no sites were recorded as result of this survey (Atlas 2015). In 2009, SWCA conducted a survey crossing the project area. The 2009 survey followed the I-35 frontage road, and did not result in the recording of any new or previously known archeological sites (Atlas 2015).

Two additional surveys outside the project area, but within 0.5 mile, include a survey conducted south of the study area for the City of Georgetown (Atlas 2015). One survey recoded two new archeological sites, but these are located more than 0.5 mile from the currently proposed project area. Finally, in 2010, a survey was completed to the west of the project area that resulted in the recording of three new archeology sites, all of which are outside the study area (Atlas 2015).

**Historic Map Review**

A review of historic-age maps and serial photographs from 1893 to 1951, ranging in scale from 1:24,000 to 1:125,000, revealed that the area surrounding the eastern driveway location remained largely undeveloped until after the 1930s (Foster et al. 2006). All historic maps reviewed indicated that the International and Great Northern Railway spans roughly north–south across the western edge of the eastern driveway location, and modern aerial imagery indicates the railroad still exists in the location indicated on historic maps (Foster et al. 2006). Few structures are mapped within 0.5 mile of the eastern driveway location until 1951. The 1951 Round Rock USGS 15-minute Topographic Quadrangle map indicates a total of 15 structures within 0.5 mile of the eastern driveway location, all associated with the expansion and suburban sprawl of the city of Georgetown and surrounding urban areas (Foster et al. 2006).
RM 2243 Driveway Connection

Seven previously recorded archeological sites and one archeological survey have been recorded within a 0.5-mile radius of the project area. One site and the survey are within the current project area, and a second site is located adjacent to the project area (Atlas 2015).

Site 41WM549 is immediately adjacent to the south side of RM 2243 and intersected by the planned driveway connection. Recorded in 1984 as a prehistoric lithic procurement site containing numerous debitage scatters, quality chert cobbles, cores, bifaces, burned rock (possibly a disturbed midden), a dart point tip, historic water pipe, and fragmented glass, the site covers an area measuring approximately 22 acres in size in a lightly wooded upland pasture. Although livestock grazing and pipeline development along the road have impacted the site, 41WM549 was recommended eligible for NRHP listing and the excavation of test pits was recommended in areas where soil accumulations had occurred (Atlas 2015).

Directly across RM 2243 is site 41WM556. First documented in 1984, the site was described as a large prehistoric lithic procurement area measuring roughly 23 acres in size. The site is adjacent to an intermittent stream in an upland field. Investigators observed a small concentration of burned rock containing debitage, a disturbed, heavily looted burned rock midden, and an occupation area opposite a rock overhang. The site recorders also noticed numerous chert flakes, chips, cores, and tools spread across the site area. The site was considered eligible for NRHP listing. In 2006, the site was re-evaluated and described as a lithic scatter containing a few rough bifaces and flakes. Investigators determined that the site was no longer considered eligible for listing to the NRHP due to low density of cultural material (Atlas 2015).

Recorded in 1984, site 41WM550 is approximately 150 meters to the east of the RM 2243 driveway connection. Investigators described the site as lithic procurement/upland campsite situated in a fairly flat upland setting with nearby shallow, intermittent drainages and limestone outcrops. The site covers an area of about 30 acres and contained a surface scatter of artifacts consisting of bifacial flakes, chert nodules, cores, flakes, and a strange depression with a large amount of burned limestone. Bulldozing, livestock grazing, and a dirt road have impacted the site. Site recorders felt that the site did not contain significant research potential and is not considered eligible for NRHP listing (Atlas 2015).

Also recorded in 1984, site 41WM551 is about 300 meters southeast of the APE. Site 41WM551 was described as a lithic procurement and production area spread over approximately 17 acres. The site is located in an upland field with limestone outcrops and contained chert flakes, chips, some unifaces, and bifaces. The site was found in good condition although some cattle grazing had impacted portions of the site. Investigators concluded that the site is eligible for NRHP listing (Atlas 2015).

Farther to the southeast, approximately 700 meters from the APE, is site 41WM553. Recorded in 1984, the site is in a level upland setting with numerous limestone outcrops. Investigators described the site as a prehistoric campsite containing a dense surface scatter of small flakes,
chips, burned debitage, tool fragments, and unifacial flakes. It appears that 41WM553 is the location for more advanced stages of reduction than found at nearby 41WM550 and 551. The site is considered eligible for NRHP listing (Atlas 2015).

Site 41WM541, first recorded in 1984 and re-evaluated in 2010, is approximately 630 meters to the northeast of the APE. The initial investigation describes a lithic scatter containing burned rock and small rock shelters (possibly utilized) dispersed over a 50-acre area. The site is on an upland terrace overlooking the South Fork of the San Gabriel River. Investigators observed a cluster of burned limestone rocks, a large amount of lithic debitage, and a burned rock midden that had been looted. Despite the looting, the site was found to be in good condition and investigators suggested the site was eligible for NRHP listing. However, a subsequent eligibility determination in 2010 found the site ineligible (Atlas 2015).

Finally, site 41WM557 is approximately 630 meters northwest of the project area. Investigators described the site as a lithic scatter covering roughly 2 acres on the west bank and floodplain of a tributary of South Fork of the San Gabriel River. Investigators observed chert flakes, some burned rock fragments, and a few chert cobbles on the ground surface. The site was found in good condition and considered eligible for NRHP listing (Atlas 2015).

The only previously conducted archeological survey in the area was completed in 2004 for the proposed State Highway 29 Bypass (Bradle et al. 2008). The survey area intersects the proposed RM 2243 driveway connection at 41WM549. This survey resulted in the rerecording of several sites, including the ones discussed above (Atlas 2015).

**Historic Map Review**

A review of historic-age maps and serial photographs from 1893 to 1951, ranging in scale from 1:24,000 to 1:125,000, revealed that the area surrounding the northwestern driveway location has remained largely undeveloped until recent expansion and suburban sprawl of the city of Georgetown and surrounding urban areas (Foster et al. 2006). Historic maps did not indicate any structures within 0.5 mile of the RM 2243 driveway connection.

**PROPOSED SCOPE OF WORK**

Subsequent to the granting of a Texas Antiquities Permit, SWCA will conduct an intensive cultural resources survey of the proposed driveway connections that will be of sufficient intensity to determine the nature, extent, and, if possible, potential significance of all cultural resources discovered within the proposed project area. The scope of work for the field investigations includes an intensive pedestrian survey with subsurface investigations (e.g., shovel test excavations) and will meet minimum survey standards established by the Texas Historical Commission (THC).
The field survey will consist of a team of two SWCA archaeologists surveying the project alignment. Surface investigations will consist of a visual inspection of the proposed ROW looking for evidence of prehistoric and historic cultural material. Subsurface investigations will involve shovel tests that will be approximately 30 centimeters (cm) in diameter and excavated in arbitrary 20-cm levels to 100 cm below surface unless soil characteristics or bedrock preclude reaching that depth. Archaeologists will screen the matrix from each shovel test through ¼-inch mesh, and plot the location of each excavation using a hand-held Global Positioning System (GPS) receiver. Each shovel test will be recorded on a standardized digital form in SWCA's field tablets to document the excavations. Given the geology and soils within the upland project area, backhoe trenching is not anticipated. If shovel test excavations indicate that there is the potential for deeply buried cultural material that cannot reasonably be reached with hand excavations, then backhoe trenching would proceed as necessary.

SWCA will complete appropriate State of Texas Archaeological Site Data Forms for each site discovered during the investigations. A detailed plan map of each site will be produced and locations will be plotted on USGS 7.5-minute topographic maps 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, mapped, and photographed in the field. This policy will reduce curation costs once the fieldwork is concluded. Finally, all records, files, field notes, forms, and other required documentation will be kept at SWCA. However, as per the terms of the antiquities permit, SWCA will curate all project paperwork and photographs at the Texas Archeological Research Laboratory at The University of Texas-Austin.

**REPORTING**

Once the survey has been completed, SWCA will prepare a draft report of investigations for review by HNTB, Prime Strategies, and Williamson County. The report will document the methodology used in the investigations, background environmental and cultural information, the presence and condition of previously recorded sites and cultural resources encountered during the archaeological survey, recommendations on the need for further work, and the potential significance of all cultural resources in regards to future development and NRHP and SAL eligibility. The resulting survey report will also provide the appropriate criteria under which the sites were evaluated. Once HNTB, Prime Strategies, and Williamson County comment on the draft report, all appropriate edits will be made and the draft report will be submitted to the THC for review and comment.

The Antiquities Code of Texas requires that, upon approval of the draft report, a final report must be produced. SWCA will furnish one unbound hard copy and two electronic copies of the final report on a tagged PDF formatted CD to the THC, complete an abstract text online, furnish 12 hard copies of the report (without site information, if any) to the university-based libraries and archaeological research facilities around the state, and curate all project paperwork and photographs, as per the terms of the permit, at the Texas Archeological Research Laboratory at The University of Texas-Austin.
Figure 1. Project location.
Figure 2. Project area.
REFERENCES CITED

Barnes, Virgil E.

Bradle, Michael, Robert d’Aigle, and Gilbert Bernhardt

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

Natural Resources Conservation Service (NRCS).

Texas Archeological Sites Atlas (Atlas)