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Intensive Cultural Resources Survey Of The Proposed City Of Llano West Ranch Road 152 Pedestrian Sidewalk Improvement Project,Llano County, Texas

Ashely Eyeington

Mercedes C. Cody

Victoria Meyers

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INTENSIVE CULTURAL RESOURCES SURVEY OF THE PROPOSED CITY OF LLANO WEST RANCH ROAD 152 PEDESTRIAN SIDEWALK IMPROVEMENT PROJECT, LLANO COUNTY, TEXAS

TEXAS ANTIQUITIES PERMIT NO. 7989

CSJ: 0396-09-021

MARCH 2018

PREPARED FOR

Steger & Bizzell Engineering, Inc.
1978 S. Austin Avenue
Georgetown, Texas 78626

PREPARED BY

SWCA Environmental Consultants

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Prepared for

STEGER & BIZZELL ENGINEERING, INC.
1978 S. Austin Avenue
Georgetown, Texas 78626

and

City of Llano, Texas
301 West Main Street
Llano, Texas 78643

Prepared by

Ashley Eyeington, B.A., Mercedes C. Cody, B.A., and Victoria Meyers, M.A.

Principal Investigator
Brandon Young, M.A., RPA

SWCA ENVIRONMENTAL CONSULTANTS
4407 Monterey Oaks Boulevard
Building 1, Suite 110
Austin, Texas 78749

www.swca.com

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ABSTRACT

SWCA Environmental Consultants (SWCA), at the request of Steger & Bizzell Engineering, Inc. (S&B), and on behalf of the Texas Department of Transportation (TxDOT) Austin District, and the City of Llano, Texas, conducted intensive cultural resources survey of the proposed City of Llano Ranch Road (RR) 152 Pedestrian Sidewalk Improvements Project (CSJ: 0396-09-021). The proposed sidewalk would extend from approximately 0.085 mile (448.8 feet) east of Post Oak Street to 0.031 mile (163.7 feet) west of Mallone Street, just east of Flag Creek. As the project would occur on property owned by TxDOT and the City of Llano, both political subdivisions of the state, the project requires compliance with the Antiquities Code of Texas (ACT). Archaeological field investigations required a Texas Antiquities Permit be issued by the Texas Historical Commission. SWCA conducted investigations under Antiquities Permit No. 7989 issued to Principal Investigator, Brandon S. Young. In anticipation of U.S. Army Corps of Engineers permitting regulations and partial project funding provided by the Federal Highway Administration, the proposed project is also subject to review in accordance with Section 106 of the National Historic Preservation Act (16 USC 470) and its implementing regulations (36 CFR 800).

The planned 5- to 10-foot-wide concrete sidewalk would extend approximately 6,970 feet along the south side of RR 152 on the west side of the City of Llano, encompassing 5.69 acres. Construction would occur within existing RR 152 right-of-way, on City of Llano property, and within an easement on private property. A low water crossing at the proposed sidewalk's crossing of Flag Creek near the eastern terminus of the planned sidewalk is also included in the project. The width of the permanent easement and temporary work area is approximately 30 feet. In summary, the direct area of potential effect (APE) for the project is approximately 6,970 feet long, 30 feet wide, extends a maximum depth of 2 feet below ground surface, and encompasses approximately 5.69 acres.

Investigations included a background literature review and an intensive pedestrian survey with shovel testing of the APE. The background review determined that no previously conducted cultural resources surveys or archaeological sites are located within or immediately adjacent to the APE. One archaeological site, two National Register of Historic Places (NRHP) historic districts, three NRHP properties, two historical markers, and three neighborhood survey properties are within 1 kilometer (km) of the APE, but removed from any potential impacts. The review of historical maps revealed numerous potentially historic-age structures within and immediately adjacent to the APE, as well as within the 1-km study area.

Overall, the intensive pedestrian survey revealed areas of open pasture, city recreational areas, and residential housing adjacent to and traversed by the proposed sidewalk. Previous impacts to the project area include agricultural and residential activity, vegetation clearing, and the construction and maintenance of RR 152, including drainage improvements. During the intensive survey investigations, which comprised visual inspection and the excavation of 21 shovel tests within the APE, SWCA identified no surface or subsurface cultural materials.

In accordance with 33 Code of Federal Regulations 800.4, SWCA has made a reasonable and good faith effort to identify cultural resources within the APE. The field investigation discovered neither significant historic properties nor cultural resources as defined in the respective legislation; therefore, SWCA recommends that a finding of "no historic properties affected" be made for the current undertaking.

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INTRODUCTION

At the request of Steger & Bizzell Engineering, Inc. (S&B), and on behalf of the Texas Department of Transportation (TxDOT) Austin District and the City of Llano, SWCA Environmental Consultants (SWCA), conducted an intensive cultural resources survey of the proposed City of Llano Ranch Road (RR) 152 Pedestrian Sidewalk Improvements Project. The proposed sidewalk would extend from approximately 0.085 mile (448.8 feet) east of Post Oak Street to 0.031 mile (163.7 feet) west of Mallone Street just east of Flag Creek in the City of Llano (Figures 1 and 2). The project would occur on property owned by TxDOT and the City of Llano, both political subdivisions of the state; therefore, the project requires compliance with the Antiquities Code of Texas (ACT). Archaeological field investigations required a Texas Antiquities Permit issued by the Texas Historical Commission (THC). SWCA conducted investigations under Antiquities Permit No. 7989 issued to Principal Investigator Brandon S. Young. In anticipation of U.S. Army Corps of Engineers permitting regulations and partial project funding provided by the Federal Highway Administration, the proposed project is also subject to review in accordance with Section 106 of the National Historic Preservation Act (NHPA) (16 USC 470) and its implementing regulations (36 CFR 800).

The purpose of this investigation was to identify and assess any cultural resources, such as historic and prehistoric archaeological sites and historic buildings, structures, objects, and sites (such as cemeteries) that might be within the boundaries of the proposed undertaking. These investigations, were cultural resources discovered, would have evaluated the significance and eligibility of those resources for the National Register of Historic Places (NRHP) or for designation as a State Antiquities Landmark (SAL). Investigations consisted of an intensive pedestrian survey with shovel testing of the proposed project area. All investigations were conducted in accordance with the ACT and standards and guidelines established by the THC and the Council of Texas Archeologists (CTA), as well as the guidelines provided in Section 106 of the NHPA (National Park Service 2000).

PROJECT PERSONNEL

Brandon Young, M.A., RPA, served as Principal Investigator for the duration of the project, overseeing overall logistics and organization, managing reporting, and agency consultation. The survey was completed by archaeologists Mary Rodriguez and Ashley Eyeington on April 26, 2017, under Antiquities Permit No. 7989. Ashley Eyeington prepared the report of investigations, while Carole Carpenter expertly produced all field and report maps for the project. Lauri Logan provided technical editing and document preparation.

AREA OF POTENTIAL EFFECT

The planned 5- to 10-foot-wide concrete sidewalk would extend approximately 6,970 feet along the south side of RR 152, encompassing 5.69 acres. Construction would occur within existing RR 152 right-of-way (ROW) (2.21 acres), on City of Llano property (3.0 acres), and within an easement on private property (0.48 acre) (see Figure 2). The western end of the project traverses property that, according to the Llano County Central Appraisal District, is owned by the Llano Economic Development Corporation; however, coordination with TxDOT indicates that the City of Llano recently purchased that property (see Figure 2). A low water crossing at the proposed sidewalk's crossing of Flag Creek near the eastern terminus of the planned sidewalk is also included in the project. The width of the permanent easement and temporary work area is approximately 30 feet. In summary, the direct area of potential effect (APE) for the project is approximately 6,970 feet long, 30 feet wide, extends a maximum depth of 2 to 3 feet below ground surface, and encompasses a maximum of approximately 5.69 acres. Detailed descriptions of the proposed project are available in the RR 152 Sidewalk Improvement Project Description Report (TxDOT 2017).

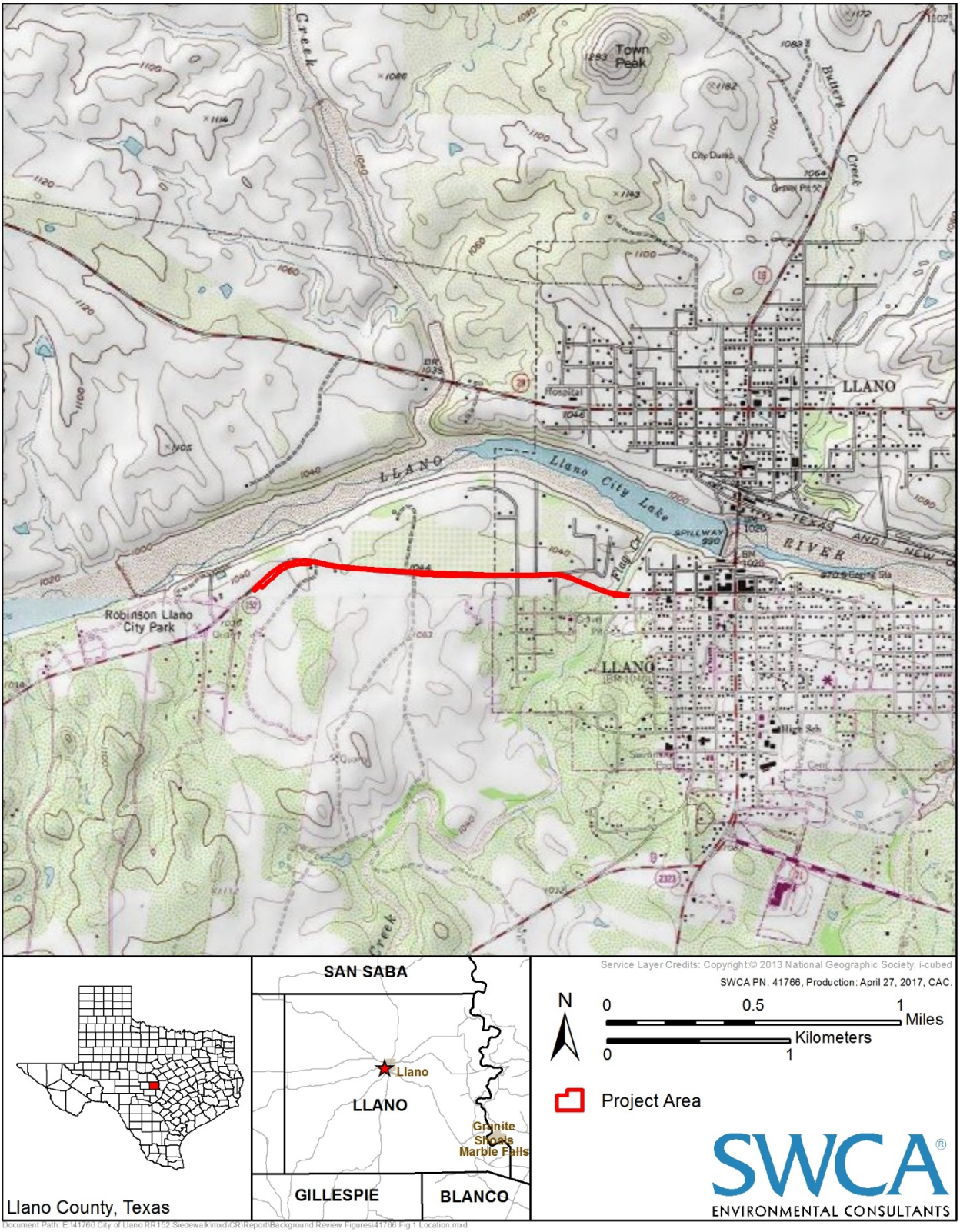

Figure 1. Project location.

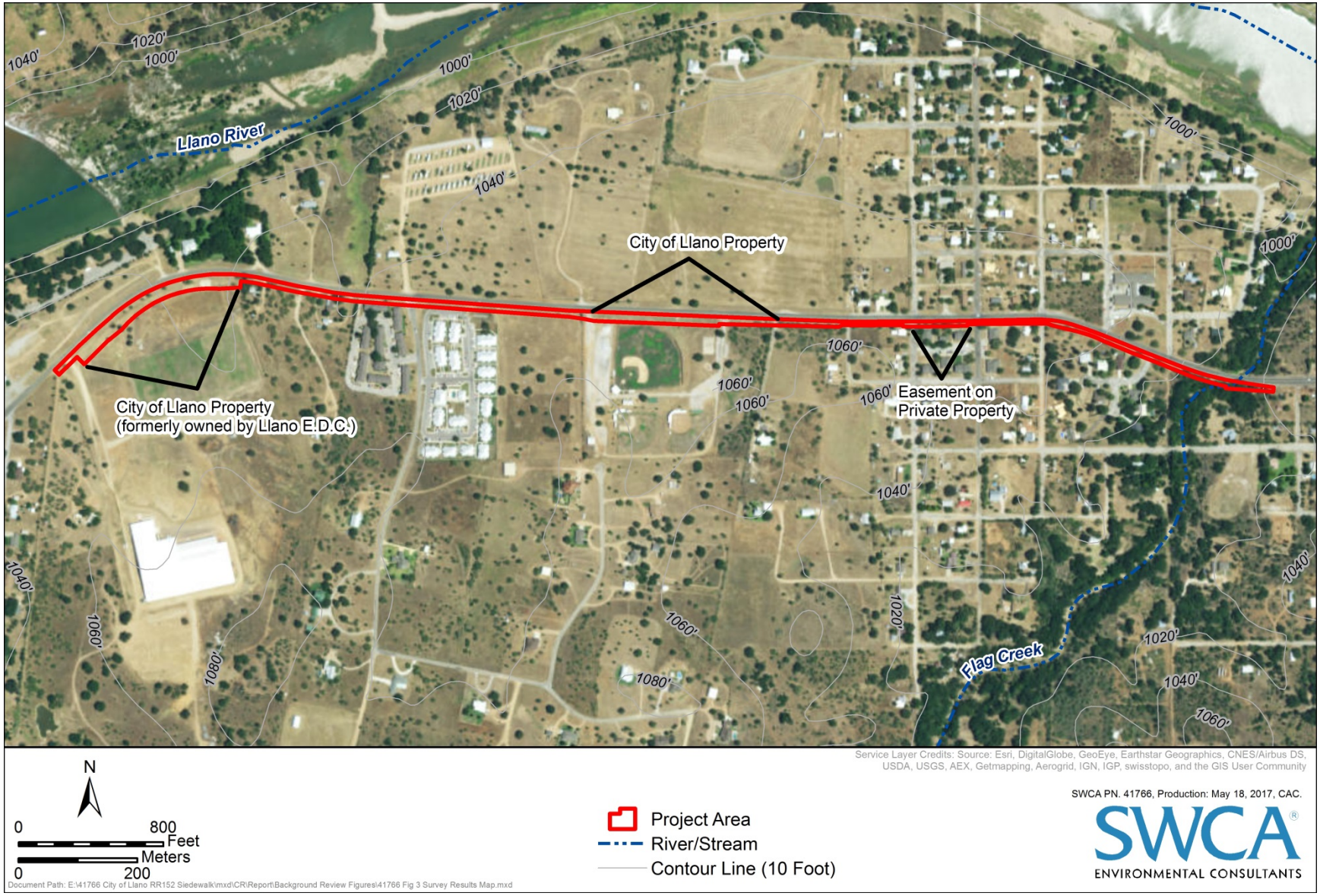

Figure 2. Project area on aerial imagery.

A review of aerial photography determined that the APE has been heavily disturbed by the construction of the existing roadway, drainage facilities, and overhead and buried utility installations. The APE is in a primarily residential area with scattered pockets of undeveloped land. Given these disturbances, there is little potential for the existing ROW component of the APE to contain intact surface or subsurface cultural deposits within the upper 3 feet of the soil column.

ENVIRONMENTAL SETTING

The project area is located in the Edwards Plateau Level III and Llano Uplift Level IV ecoregion (Griffith et al. 2007). The Edwards Plateau ecoregion is a large dissected limestone plateau. The southern and eastern portions are considerably hillier, due to a sharp fault line. The Llano Uplift subregion is distinctly different than the surrounding Edwards Plateau, as it is a basin (Griffin et al. 2007). Its name comes from a large granite batholith that is exposed within the basin. Soils are typically shallow and overlay granite, gneiss, and schist (Griffith et al. 2007). Vegetation is diverse with live oak, honey mesquite, post oak, and cedar elms occurring in some areas, with catclaw mimosa and soaptree yucca in drier area. Grasses found in the Llano Uplift ecoregion include little bluestem, switchgrass, and yellow Indiangrass. Ranching is dominant, but areas of cropland occur in the valleys and locations with deeper, sandy soils (Griffith et al. 2007).

GEOLOGY

Geology underlying the APE consists of Packsaddle Schist of Precambrian to Proterozoic-age. The Packsaddle Schist formation is characterized as a metasedimentary formation of metamorphosed shaly beds and marble that contains graphite, schist, quartzite, amphibole schist, and marble (Barnes 1986). This formation runs through the Llano River and City of Llano roughly oriented northwest to southeast, west of Buchanan Lake. Given the age, which predates known human occupation in Texas, and the bedrock nature of these formations, they have no potential to contain buried intact cultural resources. Notably, there is no Holocene-age alluvium mapped within the APE; these deposits typically have a higher likelihood of containing buried cultural deposits and are commonly mapped along major waterways.

SOILS

Project area soils are mapped, in order of prevalence, as Katemcy sandy loam, Ligon fine sandy loams (LgC); Ligon cobbly fine sandy loam (LgD); and Fieldcreek fine sandy loam (Fe) (Figure 3) (Natural Resources Conservation Service [NRCS] 2017). Katemcy soils consist of deep, well-drained, sandy loams formed from slope alluvium. The reddish brown to red (5YR 5/3 to 2.5YR 4/6) sandy loam to sandy clays typically reach a depth of 50 centimeters below surface (cmbs) before dense gravels and channery soils dominate (NRCS 2017). Katemcy soils overlay pre-Cambrian schist bedrock and are found on gently sloping to moderately sloping undulating plains or dissected plateaus. These soils are typically utilized as rangeland.

Ligon soils consist of deep, well-drained, sandy loams and clays formed from weathered schist bedrock. The reddish brown to red (2.5YR 4/4 to 2.5YR 4/6) sandy loams and clays typically reach a depth of 46 cmbs before becoming dominated by the eroding schist bedrock (NRCS 2017). Ligon soils overlay pre-Cambrian schist bedrock and are found on the backslopes and summits of hills and ridges. These soils are also typically utilized as rangeland. Flag Creek soils are very deep, well-drained, sand or loam alluvium formed from various sources. The dark grayish brown to brown (10YR 4/2 to 7.5YR 5/4) loams or fine sandy loams are found on level floodplains and occasionally become inundated for brief periods (NRCS 2017). These soils are typically utilized as rangeland.

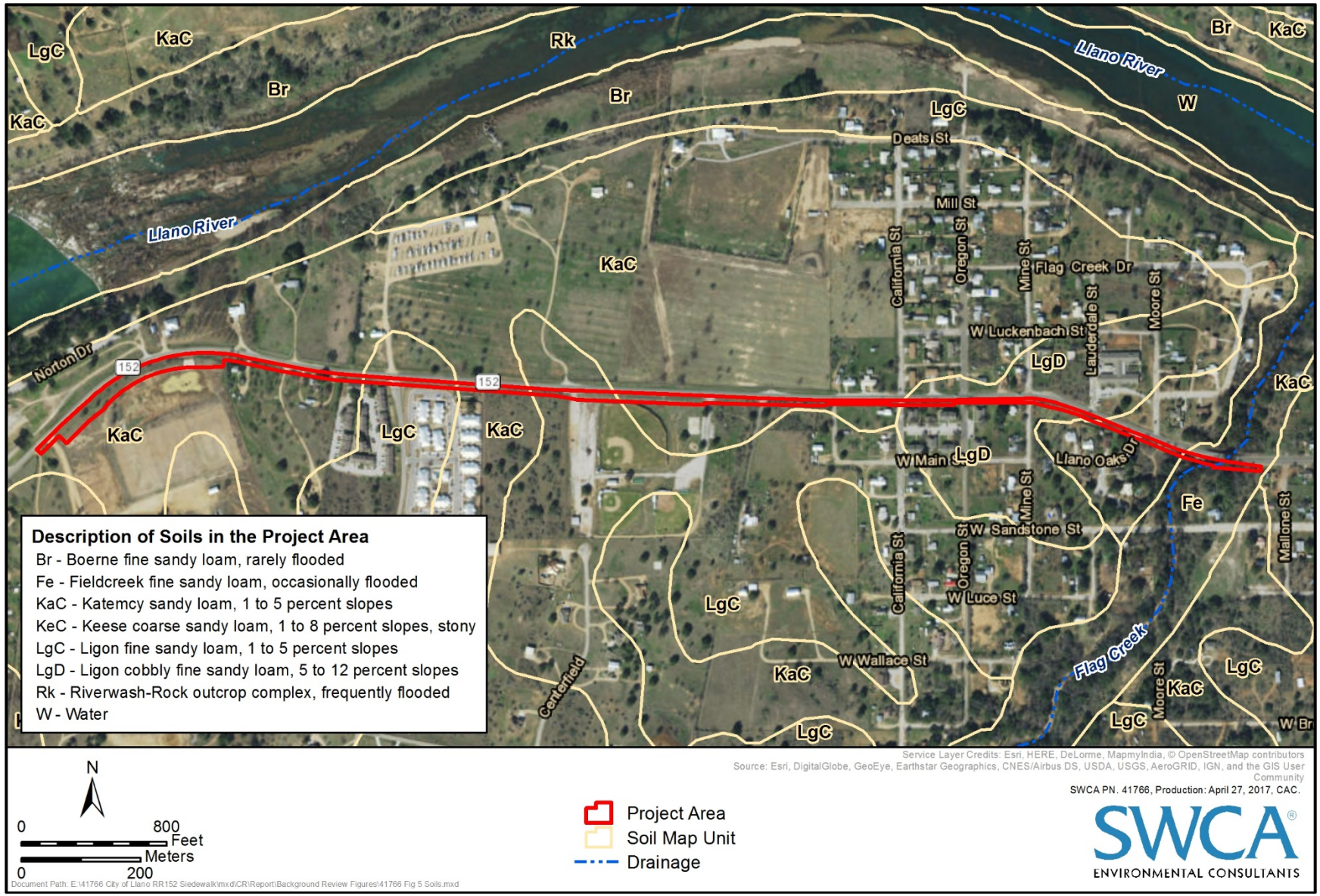

Figure 3. Soils within the APE.

BACKGROUND REVIEW

An SWCA archaeologist conducted a background review and environmental literature search of the project area to determine the locations and content of any previous archaeological surveys. SWCA recorded archaeological sites in or immediately adjacent to the APE. The review utilized the THC's Texas Archeological Sites Atlas. These sources provided information on the nature and location of previously conducted archaeological surveys, previously recorded cultural resource sites, locations of NRHP districts and properties, sites designated as SALs, Official Texas Historical Markers, Recorded Texas Historic Landmarks, cemeteries, and local neighborhood surveys. As a part of the review, an SWCA archaeologist reviewed the TxDOT Historic Overlay, a mapping/geographic information systems (GIS) database with historic maps and resource information covering most portions of the state.

RESULTS

PREVIOUSLY RECORDED SITES

One previously recorded site, 41LL438, is located approximately 0.5 kilometer (km) northeast of the APE along the Llano River. The site consists of the early-twentieth-century historic-age Llano Dam, which was rebuilt approximately 1908 and was constructed of granite boulders and cement (THC 2017). The site was recorded in 1999 by American Archaeology Group, Inc. under Antiquities Permit No. 2269 and was recommended as potentially eligible for the NRHP or for designation as an SAL.

NRHP DISTRICTS AND PROPERTIES

Two address-restricted NRHP districts and two NRHP properties are located within a 1-km radius of the project centerline, but not within or adjacent to the APE. The first district, the Llano County Courthouse Historic District, listed on February 10, 1989, is located approximately 0.4 km east of the APE (THC 2017). The Llano County Courthouse and Jail NRHP property, listed on December 2, 1997, is situated within the district, approximately 0.5 km east of the APE (THC 2017). The period of significance designated for the district and courthouse is from 1875 to 1949 (THC 2017). The second district, the Austin and Northwestern Railroad Historic District-Fairland to Llano Historic District, was listed on October 6, 1997 and is located approximately 0.75 km northeast of the APE (THC 2017). The period of significance designated for this district is 1875 to 1949.

Additional NRHP properties within a 1-km radius of the APE include the Southern Hotel and the Badu Building. The Southern Hotel is situated along the western margin of the Llano County Courthouse Historic District, approximately 0.4 km east of the APE and was listed on the NRHP on October 10, 1979 (THC 2017). The Badu Building is situated roughly 0.91 km northeast of the APE and was listed on the NRHP on June 6, 1980 (THC 2017).

The period of significance designated for these districts and properties is from 1875 to 1949 (THC 2017). Given the distance of the proposed sidewalk from the NRHP properties, the viewshed/indirect APE would not be impacted by the sidewalk construction.

HISTORICAL MARKERS

Two historical markers are located within a 1-km radius of the APE. The Richmond Alexander McInnis marker (Marker No. 4264) is approximately 0.8 km east-southeast of the APE and indicates that the house was built in 1882 and was inhabited by the McInnis Family for 110 years (THC 2017). A native of Mississippi, Richmond Alexander McInnis (1852–1922) moved to Llano in the 1870s and married Martha

Caroline Bozarth (1865–1949) in 1882. McInnis owned and operated the Llano Furniture Company, served as Llano County Sheriff from 1880 to 1882, was elected one of the first city alderman in 1892, and served as president of the Llano County Railroad Commission (THC 2017). The First Christian Church of Llano marker (Marker No. 12728) is approximately 0.9 km southeast of the APE (THC 2017). The congregation began in 1882 and officially became known as the First Christian Church in 1910.

NEIGHBORHOOD SURVEYS

Local and/or state historians perform neighborhood surveys to document and record structures and properties that have distinctive architectural styles. The surveys do not assess historical significance or integrity, nor do they determine NRHP eligibility. Nonetheless, neighborhood surveys identified three properties within a 1-km radius of the APE. These properties include the Llano County Courthouse and Public Square, the Southern Hotel, and the Acme Dry Goods Building, all located within or immediately adjacent to the Llano County Courthouse Historic District (THC 2017).

HISTORIC MAP REVIEW

The review of the TxDOT Historic Overlay maps revealed numerous potentially historic-age structures within or immediately adjacent to the APE, within the city of Llano (Foster et al. 2006). The project area appears to be on land titled to Daniel T. Fitchett and James C. Ragsdale on the 1890 Llano County General Land Office map, although no structures are depicted. The 1904 Llano, Texas, U.S. Geological Survey (USGS) quadrangle map depicts two structures within, and one structure immediately south of, the western half of the APE, as well as numerous structures immediately northeast, east, and southeast of APE within Llano. The 1909 Llano, Texas, USGS quadrangle map depicts four structures immediately north of the western half of APE and four structures immediately south of the eastern half of APE, as well as numerous structures northeast, east, and southeast of APE within Llano. The 1955 Llano, Texas, and the 1956 Cherokee, Texas, USGS 7.5-minute quadrangle maps depict two structures immediately south of the western half of the APE, two structures immediately north and one structure immediately south of the eastern half of the APE, and numerous structures northwest, north, northeast and east of the APE associated with the development of downtown Llano and surrounding areas. The 1960 Llano, Texas, USGS 7.5-minute quadrangle map depicts one structure immediately southeast of the eastern margin of the APE and numerous structures southeast and south of the APE toward Llano. Many of these same structures appear on current topographic maps.

SWCA also conducted a review of historic maps from Historic Aerials (2017) and the USGS TopoView (USGS 2017) to determine if any potentially historic-age built resources are located within the project area and to develop an idea of land development over time. SWCA reviewed topographic maps dated to 1909, 1918, 1954, 1955, 1956, 1960, 1962, 1974, 1982, 1985, and 1992, and aerial maps dated to 1960, 1966, 1995, 2004, 2008, 2010, and 2012. The previously mentioned structures are depicted on these maps. The city of Llano is apparent on all of the aerial maps, and the surrounding area is mostly composed of undeveloped lands with sprawling modern residential and commercial development increasing in more recent times.

POTENTIAL ARCHEOLOGICAL LIABILITY MAP ANALYSIS

The TxDOT Austin District's Potential Archeological Liability Map (PALM) data serves as a guide for assessing the potential for an APE to contain reasonably intact archaeological sites based on the soils and geomorphology of the region in relatively undisturbed settings (Abbot and Pletka 2015). According to the Austin PALM, the majority (approximately 61.1 percent) of the APE is within areas that have a high potential to contain shallow and a moderate potential to contain deep intact cultural deposits (Figure 4).

The remainder of the APE is rather evenly divided between areas with a moderate potential to contain intact cultural deposits (approximately 19.1 percent); and areas with a low potential to contain shallow cultural deposits and a moderate potential to contain deep, intact cultural deposits (approximately 13.3 percent). In addition, a small portion of the APE (approximately 5.9 percent) along Flag Creek at the eastern terminus of the APE is categorized as an area that has a moderate potential to contain shallow cultural deposits and high potential to contain deep, intact cultural deposits (see Figure 4). The remaining 0.6 percent of the APE has a negligible potential to contain intact cultural deposit; however, the APE along RR 152 exhibits extensive previous impacts and disturbances from clearing, grading, road construction, residential and commercial development, and overhead and buried utilities resulting in a diminished potential to contain intact cultural deposits.

In conclusion, the PALM data suggests that the APE is mainly composed of deposits with a high potential, surrounded by areas with a moderate potential to contain intact buried cultural deposits. Given that the APE primarily consists of existing disturbed ROW and minor adjacent residential areas, it is SWCA's opinion that there is a low potential for most of the APE to contain intact buried prehistoric cultural deposits, with the exception of the small portion along the Flat Creek crossing and small pockets along undisturbed open fields.

FIELD METHODS

SWCA conducted an intensive pedestrian survey of the 6,970-foot-long APE. The investigations were of sufficient intensity to determine the nature, extent, and, if possible, potential significance of all cultural resources located within the proposed project area. The survey met the THC's minimum survey standards, which require 16 shovel tests per mile for a project of this size, or thoroughly documenting any exceptions (e.g., disturbances).

The field survey consisted of a team of two SWCA archaeologists systematically walking the APE and examining the ground surface and any available erosional profiles for cultural resources. The utilization of subsurface exploration (i.e., shovel testing) was keyed to the level of disturbance and the nature of the soils, geology, and topography. Specifically, shovel tests were concentrated in the seemingly undisturbed pasture lands, as approximately 50 percent of the project area has been previously disturbed by road construction and subsurface utilities. All subsurface explorations were to a depth commensurate with the proposed level of subsurface impacts for the project. Shovel tests were approximately 30 centimeters (cm) in diameter and excavated in arbitrary 20-cm levels to 100 cmbs unless soil characteristics or bedrock precluded reaching that depth. The matrix removed from each shovel test was screened through ¼-inch mesh screen, and the location of each excavation was plotted using a sub-meter accurate hand-held Global Positioning Systems (GPS) receiver. Each shovel test was recorded on a standardized form to document the excavations.

If an archaeological site was encountered in the proposed project area during the investigations, it was to be explored as much as possible with consideration to land access constraints. All discovered sites were to be assessed in regard to potential significance so that recommendations can be made for proper management (avoidance, non-avoidance, or further work). Additional shovel tests were to be conducted per THC standards at any discovered sites to define horizontal and vertical boundaries. Appropriate State of Texas Archaeological Site Data Forms would have been completed for each site discovered during the investigations. A detailed plan map of each site was to be produced and locations were to be mapped with GPS and plotted on USGS 7.5-minute topographic maps and relevant project maps. SWCA proposed a non-collection survey. If discovered, artifacts were to be documented in the field and replaced where they were recovered.

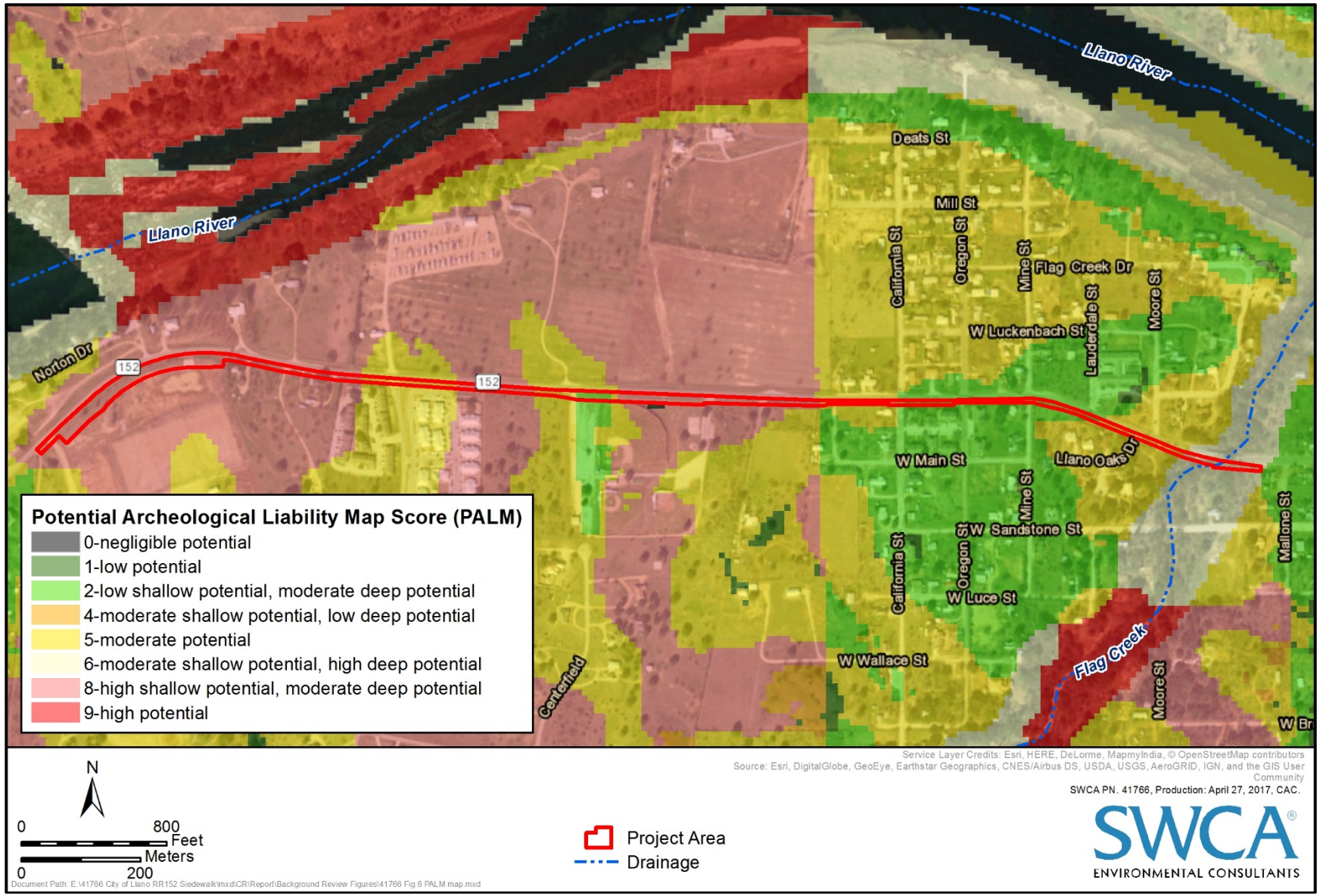

Figure 4. Potential Archeology Liability Map data for the APE.

SURVEY RESULTS

On April 26, 2017, SWCA archaeologists conducted an intensive pedestrian survey with shovel testing of the proposed approximately 6,970-foot-long (1.32-mile) alignment for the proposed City of Llano West RR 152 Pedestrian Sidewalk Improvement project (Figure 5). Survey included intensive pedestrian survey with shovel testing along the southern side of RR 152 including a low water crossing at the proposed sidewalk's crossing of Flag Creek (Figures 6 and 7).

Visual examination of the project area revealed a primarily semi-rural to residential setting at the western end of Llano city proper. Vegetation throughout the approximately 1.3-mile long project area consists predominately of manicured short gasses with areas of tall mixed grasses, which reduced the estimated ground surface visibility to between 0 and 25 percent (Figures 8 and 9). The project area has been heavily impacted by residential and city utilities, limiting the available areas for shovel test placement and greatly reducing the likelihood of intact cultural deposits (Figures 10 and 11). Shovel tests along the western-most end of the project area represent the most intact deposits, as the area is utilized as a city fair ground, city park, and recreational trail area.

Archaeologists excavated 21 shovel tests within the APE (Table 1; Figure 5). Excavated soils consisted of a light brown to dark reddish brown (7.5YR 4/6 to 5YR 3/4) loamy sands with dense eroding bedrock gravels. Shovel tests were typically terminated at 30 cmbs with only two reaching a maximum depth of 50 cmbs, due to a high density of gravels and eroded bedrock at depth. The density and shallowness of eroding quartz-rich schist reduced the likelihood of deeply buried archaeological deposits being represented. Archaeologists identified modern brown bottle glass and plastic trash along RR 152 and within some shovel tests. Neither the surface, nor the subsurface investigations identified any prehistoric or historic cultural materials.

Table 1. Shovel Test Data

ST No.	Level	Depth	Munsell Notation	Soil Color	Soil Texture	Inclusion Percent	Inclusions	Positive/ Negative	Comments/Reason for Termination
AE01	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE02	1	0-10	7.5YR 4/4	brown	Sand	10%-20%	Gravels, Pebbles	N	No cultural material encountered.
	2	10-30	7.5YR 2.5/3	very dark brown	Sandy Loam	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE03	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE04	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE05	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE06	1	0-40	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE07	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.

ST No.	Level	Depth	Munsell Notation	Soil Color	Soil Texture	Inclusion Percent	Inclusions	Positive/ Negative	Comments/Reason for Termination
AE08	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE09	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
AE10	1	0-30	5YR 3/4	dark reddish brown	Loamy Sand	>20%	Gravels, Pebbles	N	No cultural material encountered. Terminated at bedrock.
MR01	1	0-20	7.5YR 6/4	light brown	Sandy Loam	10%-20%	Large Rock Frags	N	No cultural material encountered. Terminated at compact soil.
MR02	1	0-30	7.5YR 4/6	strong brown	Sandy Loam	1%-5%	Large Rock Frags	N	No cultural material encountered. Terminated at bedrock.
MR03	1	0-20	7.5YR 6/4	light brown	Sandy Loam	10%-20%	Large Rock Frags	N	No cultural material encountered. Terminated at compact soil.
MR04	1	0-30	7.5YR 4/6	strong brown	Sandy Loam	>20%	Gravels	N	No cultural material encountered. Terminated at bedrock.
MR05	1	0-20	7.5YR 6/4	light brown	Sandy Loam	10%-20%	Large Rock Frags	N	No cultural material encountered. Terminated at compact soil.
MR06	1	0-50	7.5YR 4/6	strong brown	Sandy Loam	5%-10%	Gravels	N	No cultural material encountered. Terminated at dense gravels.
MR07	1	0-20	7.5YR 6/4	light brown	Sandy Loam	10%-20%	Large Rock Frags	N	No cultural material encountered. Terminated at compact soil.
MR08	1	0-20	7.5YR 6/4	light brown	Sandy Loam	10%-20%	Large Rock Frags	N	No cultural material encountered. Terminated at compact soil.
MR09	1	0-20	7.5YR 6/4	light brown	Sandy Loam	10%-20%	Large Rock Frags	N	No cultural material encountered. Terminated at compact soil.
MR10	1	0-20	7.5YR 6/4	light brown	Sandy Loam	10%-20%	Large Rock Frags	N	No cultural material encountered. Terminated at compact soil.
MR11	1	0-50	7.5YR 4/6	strong brown	Sandy Loam	10%-20%	Gravels, Large Rock Frags, Pebbles	N	No cultural material encountered. Terminated at bedrock.

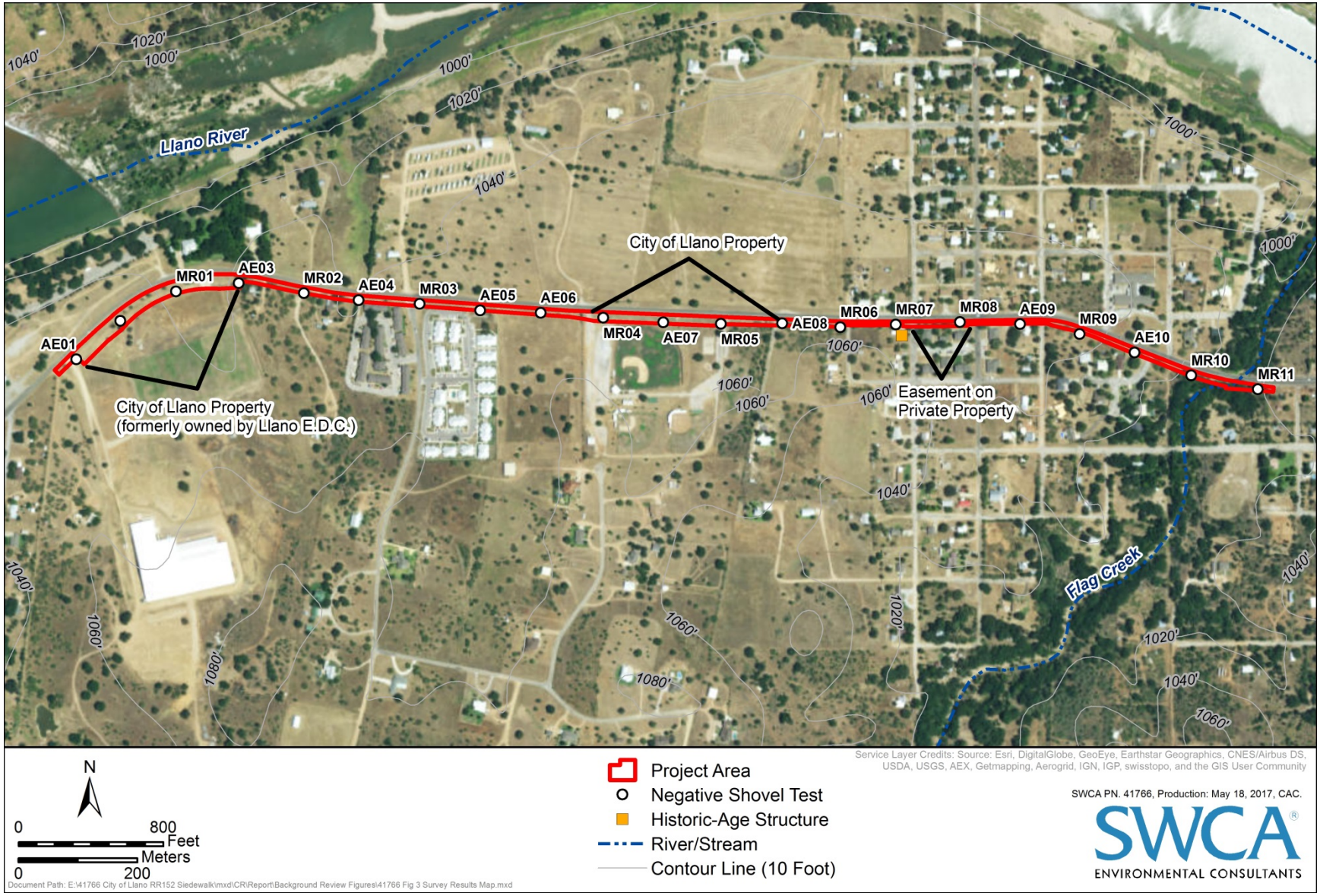

Figure 5. Survey Results.

Figure 6. Overview of bridge crossing at Flag Creek, view east.

Figure 7. View of the channel of Flag Creek and the adjacent bridge.

Figure 8. Tall grass field west of baseball field, view west.

Figure 9. Manicured grass and utilities in residential area, view east.

Figure 10. Large cement reservoir next to apartment, view southeast.

Figure 11. Utilities near housing with backpack marking the city sewage line, view east.

STANDING STRUCTURES

The proposed project incorporates existing RR 152 ROW and an easement on a single parcel with standing structures. No direct impact is planned to any structures, although the project has potential for indirect viewshed impacts. SWCA architectural historian Victoria Myers, M.A., conducted a desktop review of the structures and determined that one structure, located at 1200 RR 152 on the southwest corner of the intersection of RR 152 and California Street, is of historic age (Figure 12 and see Figure 5). The house is set back from RR 152 approximately 50 feet and will be set back from the proposed sidewalk by 40–45feet.

The structure is a one story, ca. 1940 Minimal Traditional dwelling with a moderate pitch, cross gable roof of modern standing seam metal. It is elevated approximately two feet on a concrete block foundation. Windows are vinyl sash replacements. The partial width porch is under a central front gable supported by a decorative metal post on the left and by an enclosed room on the right. The door is a modern panel replacement and the porch has concrete steps and a metal handrail leading toward the street and a concrete ramp running parallel to the house. The right elevation also has a concrete deck porch leading to a side door. There is a detached metal carport on the lot. Street view imagery from August 2013 show the house with historic metal sash windows, wood drop siding, board and batten skirting, and what appears to be a flush door. Due to the major modifications to windows, doors, and siding within the past five years, the house is not eligible for the NRHP. The remaining structures in the immediate project area are all less than 45 years of age. The one historic age structure is not eligible; therefore, there are no historic properties present or affected in the project area.

Figure 12. Historic age structure at 1200 RR 152, view south.

SUMMARY AND RECOMMENDATIONS

SWCA conducted an intensive cultural resources survey for the proposed sidewalk construction along RR 152 in western Llano, Llano County, Texas. Proposed improvements include the construction of a

sidewalk extending approximately 6,970 feet along the south side of RR 152 on the west side of the City of Llano, encompassing 5.69 acres. Portions of the project area are located within existing RR 152 ROW owned by TxDOT as well as on City of Llano property, both political subdivisions of the State of Texas. As such, the proposed undertaking is subject to review under the ACT. Archaeological field investigations required a Texas Antiquities Permit issued by the THC, and SWCA conducted the investigations under Antiquities Permit No. 7989.

During the intensive pedestrian survey with shovel testing, no new cultural resources were identified within or immediately adjacent to the APE. Overall, the intensive pedestrian survey revealed primarily semi-rural to residential setting at the western end of Llano city proper. SWCA met the THC's subsurface testing requirements through an extensive visual inspection for cultural materials and the excavation of 21 shovel tests throughout the direct APE. Shovel testing revealed light brown to dark reddish brown (7.5YR 4/6 to 5YR 3/4) loamy sands with dense eroding bedrock gravels. Shovel tests were typically terminated at 30 cmbs with only two reaching a maximum depth of 50 cmbs. The density and shallowness of eroding quartz-rich schist uncovered in shovel tests reduces the likelihood of deeply buried archaeological deposits being present. Archaeologists identified modern brown bottle glass and plastic trash along RR 152 and within some shovel tests. Neither the surface, nor the subsurface investigations identified any historical or prehistoric cultural material.

Investigations also included a background literature review, which revealed that no cultural resources surveys or archaeological sites are located within the proposed project area. However, the background literature review identified one archaeological site, two NRHP historic districts, three NRHP properties, two historical markers, and three neighborhood survey properties within 1 km of the APE, but not within the APE (THC 2017). The review of historical maps revealed numerous potentially historic-age structures within, immediately adjacent, and in the surrounding area to the APE (Foster et al. 2006). Survey efforts documented one single story, ca. 1940 Minimal Traditional dwelling with a moderate pitch, cross gable roof of modern standing seam metal at 1200 RR 152 on the southwest corner of the intersection RR 152/California Street intersection. Due to the major modifications to windows, doors, and siding within the past five years, the house is not recommended eligible for the NRHP. The remaining structures in the immediate project area are all less than 45 years of age. The one historic age structure is not recommended eligible; therefore, there are no historic properties present within or adjacent to the APE.

Based on the negative survey results, previous impacts, and soil conditions, it is the opinion of SWCA that there is little to no potential for the APE to contain previously unidentified intact surface or buried cultural resources. In accordance with 33 Code of Federal Regulations 800.4, SWCA has made a reasonable and good faith effort to identify cultural resources properties within the APE. Since no historic properties eligible for the NRHP or sites warranting SAL designation would be impacted by the proposed sidewalk construction, SWCA recommends that the no additional cultural resources investigations are warranted.

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