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## State Highway (SH) 317 Retention

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## State Highway (SH) 317Retention

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# Report for Archeological Survey

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State Highway (SH) 317 Retention  
Pond. CSJ: 0398-04-059

Eric R. Oksanen, Antiquities Permit No. 7149

*The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.*

## **Abstract**

On January 15, 2015, archeologists from Texas Department of Transportation (TxDOT) Environmental Affairs Division-Archeological Studies Branch conducted a reconnaissance-level survey of 3 acres of a five acre tract adjacent to State Highway 317 in Bell County, north of the City of Belton. The property will be excavated for a stormwater retention pond. The survey found shallow rocky soils and exposures of limestone bedrock throughout the project area. Historic maps indicated a house structure with the project area. No standing structures remain on the property; there is the remains of a collapsed shed-like structure measuring 5-x5 meters, a collapsed smaller pen-like structure approximately 2-x-1.5 meters, and mechanically pushed piles of the remnants of dry-laid limestone rock walls. Archival research suggests a house was built on the property between 1905 and 1915. The former house site, collapsed structures and stacked limestone piles were recorded as 41BL1379, a twentieth-century homestead site measuring approximately 2 acres, located at the west end of the tract.

The site has been extensively altered by mechanized land clearing and lacks integrity of location, design, setting, materials, and is not associated with a notable person. The site is considered ineligible for listing in the National Register of Historic Places or official designation as a State Antiquities Landmark and no further field investigations are warranted. All investigations were conducted on state-owned TxDOT controlled property under Texas State Antiquities Permit 7149 with Eric R. Oksanen as Principal Investigator. No artifacts were collected and nothing was curated. Records from the survey are maintained at TxDOT Environmental Affairs Division Cultural Resources Program.

## Project Identification

- Date: 02/12/2015
- Date(s) of Survey: 01/15/2015
- Archeological Survey Type: Reconnaissance  Intensive
- Report Version: Draft  Final
- Jurisdiction: Federal  State
- Texas Antiquities Permit Number: 7149
- District: Waco
- County or Counties: Bell
- USGS Quadrangle(s): Belton [3197-122]
- Highway: SH 317
- CSJ: 0398-04-059
- Report Author(s): Eric R. Oksanen
- Principal Investigator: Eric R. Oksanen

## Texas Historical Commission Approval

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Signature

Date

## Project Description

- **Project Type:** Retention pond for surface water management.
- **Total Project Impact Acreage:** 3.5 acres
- **New Right of Way (ROW) Acreage:** 5 acres
- **Easement Acreage:** 0.0 acres
- **Area of Pedestrian Survey:** 3 acres
- **Project Description and Impacts:** The proposed project would construct an approximately 3.5 acre retention pond adjacent to State Highway 317 on a 5-acre State-owned tract with the north of the City of Belton. The proposed pond would be constructed in the western half of the tract, The pond requires approximately 54,672 cubic yards of excavation. The estimated depth of final pond is approximately 10 ft. The east edge of the pond would be constructed of fill, and the overall embankment would require approximately 5,100 cubic yards of fill.
- **Area of Potential Effects (APE):** The APE is estimated at 5 acres, although construction is depicted on approximately 3.5 acres of the tract. The APE is bounded by Poison Oak Boulevard to the north and SH 317 to the west and the east boundary is approximately 450 feet east of the SH 317 and Poison Oak Road intersection. The south boundary is approximately 500 ft south of the intersection of SH 317 and Poison Oak Road... The proposed pond is estimated at 500 feet from north to south and 300 feet east to west. The estimated maximum depth of impact would be approximately 10 feet below existing grade.
- **Parcel Number(s):** N/A
- **Project Area Ownership:** The proposed project is on Texas Department of Transportation- (State of Texas) owned property.

## Project Setting

- **Topography:** The proposed project is located in the Cross Timbers Eco-region and the Limestone Cut-Plain sub-region (Griffith et. al 2007). The subregion is characterized by stairstep topography with mesas, eroded sideslopes and broad stream valley. Stream headwaters are in narrow, steep canyons. The elevation is greatest at the northwest adjacent to SH 317 at 560 feet above mean sea level (ft amsl) decreasing eastwards to 525 ft amsl at the east end (USGS 7.5 minute Belton [3197-122] 7.5 minute topographic quadrangle (see Figure 1). The tract is dissected by an ephemeral stream flowing southwards and dividing the property into two segments, the west segment being approximately two-thirds of the tract. The Leon River channel is approximately 300 m (1000 ft) south of the APE.

- **Geology:** The geology was mapped with the Geologic Atlas of Texas digital overlay and the Geologic Atlas of Texas –Waco Sheet (Bureau of Economic Geology 1970). The entire APE is mapped in the Lower Cretaceous age Kdfdc, Fortworth Limestone and Duck Creek Formation. The nearest Holocene-age alluvium is in the Leon River Valley, approximately 300 m (1,000 ft) to the south.
- **Soils:** Soils were mapped with the on-line Web Soil Survey (Natural Resources Conservation Service and the United States Department of Agriculture). The APE is mapped almost completely (97 %) as Eckrant-Rock outcrop complex, 1-5 percent slopes and a small area (less than 3 percent of the APE) of Real-Rock outcrop complex, 12-40 percent slopes. These soil types are shallow with moderate to steep-sloping topography. Eckrant series soils are typically very shallow (less than 30 cm to bedrock) and formed on very steep summits, shoulders, and backslopes on dissected plains. Similarly Real soils form in a similar setting and are less than 30 cm thick to bedrock.

**Land Use:** The APE was used for livestock grazing and was recently used as an informal dump for tires. An examination of historic maps shows a house site in or near the APE beginning with the 1916 Bell County Soils Map and on the 1936 and 1957 Bell County General Highway Maps through the 1990 USGS 7.5 minute Belton topographic quadrangle (see Figure 2). The APE is within the John J. Simmons Survey, a one-third league in then Milam County, granted to John Simmons in 1837 (General Land Office Bell County Patent I-242). A chain-of-title of the property was conducted at the Bell County Courthouse and on-line records. The proposed project is in a 5-acre tract that was part of a 25-acre tract. The initial title of the 5-acre tract was from two larger tracts totally 94.5 acres and sold by J.E. Mitchell to R. Miller for \$900.00 in 1912. The larger 20-acre tract was recorded in 1901, and was transferred by Ed S. Flint to I. Pruett. In 1905, Ed S. Flint repurchased the property and in the same year, sold it to Samuel Irvine Duke. In 1915, Duke sold the east half of the 20 acres (10 acres) to J.L. Wall (grandson James Leo Walls) and in 1919 the west 10 acres were sold to W.L. Sanger. An affidavit in the deed records (Volume 373, page 565) notes that Samuel Duke and wife Azelia lived on the west 10 acres. The land was sold by Samuel Duke in 1919 after the death of Azelia Duke. This tract appears to be the location of a house structure on the 1916 Bell County Soil map adjacent to SH 317.

In 1933, the 20-acre and 5-acre tracts were combined by W.H. Sagebiel who sold them in 1933 to Neal Messer. Messer in turn sold the now 25 acres to J.R. Lewis and wife Donia Lewis. In 1935, they sold to John Stefka. In 1936, approximately 0.45 acres of right of way for SH 317 was sold by John and Theresa Stefka to the State of Texas. An easement was granted to TP&L (Texas Power and Light) in 1936. The Stefkas sold the 25 acres to Ellie Wilkinson in 1938. The 20 acre tract was then sold twice. In 1938 W.H. Sagebiel and wife Clara L., sold a 230 acres tract and the 20-acre tract to T.E. Sanford, however, records show the 20 acres was not conveyed. In 1941, Ellie and J.H. Wilkinson sold the 25 acres tract to Lillian West Burnside and husband F.L. Burnside. In 1949, the

entered into an oil and gas lease for one year. In 1966, F.L. Burnside died, leaving the property to his wife. In 1985, Lillian West Burnside died. In 1992, the executors of her estate sold the tract (now 26.1 acres) to Boyd Nichols and wife Luene for \$39,450. In 1995, they sold to William Pipes and wife Barbara. In 2001, William Pipes was granted sole ownership of the now 26.3 Acres. There are no standing structures on the property.

- **Vegetation:** Observed vegetation included little bluestem, agave, live oak, post oak, cedar elm, Ashe juniper, tasajillo, prickly pear and mixed forbs.
- **Estimated Ground Surface Visibility:** 70 %
- **Previous Investigations and Known Archeological Sites:**  
There are eight previously recorded archeological sites within 1,000 m of the proposed APE (Figure 3). None of these sites will be affected by the proposed project. The following Table 1 lists the site trinomial information obtained through the Texas Archeological Sites Atlas, and distance, direction from the APE, a description of the site and National Register of Historic Places eligibility determinations. There are no cemeteries that will be affected by the proposed project.

There are three archeological projects depicted in the Texas Archeological Sites Atlas within 1,000 m of the APE as displayed in Table 2. The testing by TRC at site 41BL278 is within the APE of Blanton and Associates 2004 survey which was part of the same project.

- **Comments on Project Setting:** The proposed project area is in an upland setting and has thin soils and exposed Cretaceous-age bedrock. It is unlikely any intact buried archeological deposits occur in the APE. Any archeological material would be at or near the surface.

## Survey Methods

- **Surveyors:** James T. Abbott and Eric R. Oksanen, Archeologists-TxDOT Environmental Affairs Division.
- **Methodological Description:** The footprint of the pond and surrounding area within the 5-acre tract was examined by north-south transects spaced approximately 25 meters apart. Ground surface visibility was high (70 percent) in much of the APE. Digital images were used to record the APE. A Garmin eTrex handheld GPS was used to record the position of noted landscape and possible cultural features which were also plotted on high-resolution aerial imagery.
- **Subsurface Probes (N/A)**



Table 1. Texas Archeological Sites Atlas depicted sites within 1,000 m of APE.

Site	Distance (m)/(ft)/ Direction	Description	Eligibility	Company/ Affiliation- Year recorded or last investigation	Agency
41BL1218	950/3117 S	Unknown age prehistoric site-Lithic cores, debitage on surface.	Ineligible	Blanton and Associates. 2004	TxDOT
41BL1213	900/2953 S	Unknown prehistoric and historic era-early to mid-twentieth century-artifact scatter	Ineligible	Prewitt and Associates 2003	City of Belton
41BL278	850/2789 S	Late Archaic site tested by TRC in 2004. Deates approximately 3,200 years b.p. Avoided. 1984	Eligible in row	Recorded by Texas Water Development Board/ Tested by TRC. 2004	TxDOT
41BL279	900/2953 S	Unknown prehistoric age. Lithic bdebitage and burned rock. Terrace altered by mechanical excavation.	Ineligible	Texas Water Development Board 1984	Brazos River Authority
41BL12	650/2133 W	Prehistoric rockshelter with mussel shell and lithic debitage. No further work recommended.	Unknown	National Park Service 1959	National Park Service
41BL36	800/2625 NW	Unknown	No site form	Unknown	Unknown
41BL321	900/2953 W	Petroglyph on north bluff over Leon River. The petroglyph measures 15 cm by 14.5 cm (the Atlas lists dimensions as 15 mm-x-14.5 mm). No other information provided.	Unknown	Private 1988	United States Corps of Engineers (USCAE)
41BL172	850/2789 NW	Rockshelter with broken carved figurine reported in 1976 . Unknown age. Revisit in 2010 found no cultural material. Shelter was scoured of any material. AmaTerra doubts it is an archeological site.	Unknown	AmaTerra 2010	USCAE

Table 2. Archeological projects depicted within 1,000 m of the APE.

Survey/Projects	Distance (m)/(ft)	Distance/Direction	Company	Source	Year	Antiquities Permit
1	Adjacent	W	Blanton and Associates	TxDOT	2004	3212
2	500/1640	1640 S	Atkins	TxDOT	2013	5665
3	900/2953	2953 S	Unknown	EPA	1984	N/A

- **Other Methods:** None
- **Collection and Curation:** NO  YES  If yes, specify facility.
- **Comments on Methods:** Given the shallow nature of the soil and surface exposure of bedrock, no shovel tests were excavated.

## Survey Results

- **Project Area Description:** The proposed project area is overgrown with an understory of grasses and forbs (Figure 4). It slopes downwards to the east from the SH 317 right of way. A paved drive connects to SH 317 and terminates in a clearing approximately 50 feet (16 m) east of the roadway. The clearing appears at the mapped location for an earlier house structure, but there was no debris associated with a house. The setting is level nearest SH 317, and descends to a terrace bench approximately 60 m from SH 317 right of way (Figure 5). More than two-thirds of the project area is sloped and the terrace bench is approximately 30 m across before the terrain descends steeply to the east to an ephemeral stream channel (Figure 6). There is no standing fence along the north boundary at Poison Oak Road or along the right of way with SH 317. A drive enters property from Poison Oak Road and follows the terrace and there are several piles of brush and discarded tires (Figures 7 and 8). Mechanized land clearing is evident from piles of pushed brush and rock and the cleared drive from Poison Oak Road (Figure 9).

**Archeological Materials Identified:** Site 41BL1379 measures approximately 450 ft by 200 ft (137m-x-61 m) or 2 acres. Three stacks or piles of limestone were observed. These are interpreted as clearing or push piles and the limestone may be the remnants of a low dry-stacked stone wall. Two clusters of limestone rock and sheet metal are interpreted as outbuildings or pens. Figure 10 is a composite sketch map created using GPS data, photogrammetry, and plotted locations. Feature 1 in its collapsed state is approximately 16 feet (5 m) square (Figures 11 and 12). The structure appears to be a roofed pen with the roofing covering approximately 3 m (10 ft) square. The roofing material is soldered steel panels supported by cedar pole cross-beams 3 to 5 cm

diameter. The foundation is natural, undressed limestone tabular slabs and cobbles, which are plentiful in the surrounding area. Part of the side walls included wire fencing and at the base and sidewalls, sheet metal including what appear to be automotive parts from the hood and side panels (Figure 13). The automotive parts include a louvered hood from a 1920s to 1930s car. An example of a 1930 Nash Roadster demonstrates a louvered hood. Artifacts noted included metal paint cans and several glass bottles, including an extract bottle. Because of other areas of dumping observed in the project location, the provenience of the bottles is uncertain.

Feature 2 is a rectangular 2 m-x-1.5 m (6 ft-x-5 ft) sheet-metal lined and covered depression (Figure 14). The metal appears to be sheet steel from automotive bodies and appliances and does not appear to be a cistern. The depth is estimated at 60 cm (two feet).

The three mounded piles of limestone are the likely result of mechanized land clearing. A short segment of dry-stacked limestone may be the last remnant of a stacked limestone wall (Figure 15) and the observed mounds are the collected piles of rock from these walls. The walls do not cross the property and may have formed pens.

Archival research included the Bell County Deed and Probate Records and a search through the Texas Historical Association on-line Handbook of Texas.

**APE Integrity:** There are no standing structures in the APE. The remnants of presumed animal pen Feature 1 indicates it was constructed with a variety of materials, lacking integrity of association, materials, and location. Evidence of extensive mechanical modification is found in the push piles from land levelling and clearing that have destroyed any patterning of the stacked walls, leaving only displaced remnants.

## Recommendations

- **Archeological Site Evaluations:** Site 41BL1379 represents a twentieth-century homestead. The site lacks any standing structures and there is no debris associated with a house structure. To be eligible for listing in the National Register of Historic Places (NRHP), a resource must have a
  - quality of significance in American history, architecture, archeology, engineering, and culture [that] is present in districts sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:
  - A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
  - B. That are associated with the lives of persons significant in are past: or
  - C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic

- values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.
- (36 CFR § 60.4, US Department of the Interior, National Park Service, 1990)

- Generally, integrity must be established for a property or resource before it can be evaluated by other criteria.

An archeological reconnaissance survey was conducted within the APE and recorded historic site 41BL1379. Within the APE, site 41BL1379 does not meet the criteria for listing in the National Register of Historic Places or designation as a State Antiquities Landmark. There is little probability that archeological deposits occur in the APE with integrity sufficient to meet the criteria of eligibility (36 CFR § 60.4) for listing in the National Register of Historic Places as archeological historic properties (36 CFR § 800.16.(l)) or that would meet the criteria for designation as State Antiquities Landmarks (13 TAC 26.8). Furthermore it is also unlikely cemeteries occur in the APE and that the project will have no effect on a marked or unmarked cemetery (Health and Safety Code, Title 1, Chapter 711. 010, and Title 1, Chapter 711.035). In addition, site 41BL1379 does not constitute a 4(f) property under the Department of Transportation Act of 1966 as codified at 23 U.S.C. § 138 and 49 U.S.C. § 303, and administered under 23 CFR 774.

Pursuant to Stipulation VI of the PA-TU, TxDOT finds that the APE does not contain archeological historic properties (36 CFR 800.16(l)), and the proposed undertaking would not affect archeological historic properties. In addition, the project does not merit intensive survey or additional field investigations in compliance with the MOU (43 TAC 2.24(f)(1)(C)). The project will have no effect on archeological historic properties. In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area will cease and TxDOT archeological staff will be contacted to initiate post-review discovery procedures under the provisions of the PA and MOU.

- **Comments on Evaluations:** The Texas Historical Commission “Guidance for Studying Late 19<sup>th</sup>-Century and Early 20<sup>th</sup>-Century Sites:” notes that most late 19<sup>th</sup> and 20<sup>th</sup> century sites are not considered eligible for listing in the NRHP or for designation as a State Antiquities Landmark (SAL) because archival research is typically more informative than field investigations. A search of Texas on-line records of the listed property owners did not establish any historically significant residents at the project location.
- **Further Work:** No further work is recommended within the existing APE. None of the cultural material within the APE is recommended as eligible for listing in the National Register of Historic Places or designation as a State Antiquities Landmark.
- **Justification:** None

▪ **References Cited:**

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2005 *National Register Bulletin: How to apply the National Register Criteria for Evaluation*. National Register of Historic Places, National Parrk Service, Washington, D.C.

United States Geological Survey

1931 Belton 7.5 minute topographic quadrangle

1965 Belton 7.5 minute topographic quadrangle.

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Figure 5. Terrace bench clearing looking south at typical brush pile and pushed rock pile.

Figure 6. Stream channel vegetation at east end of project area.

Figure 7. Access drive from Poison Oak Road, looking north. The drive follows the terrace edge.

Figure 8. Bulldozed debris pile, looking south.

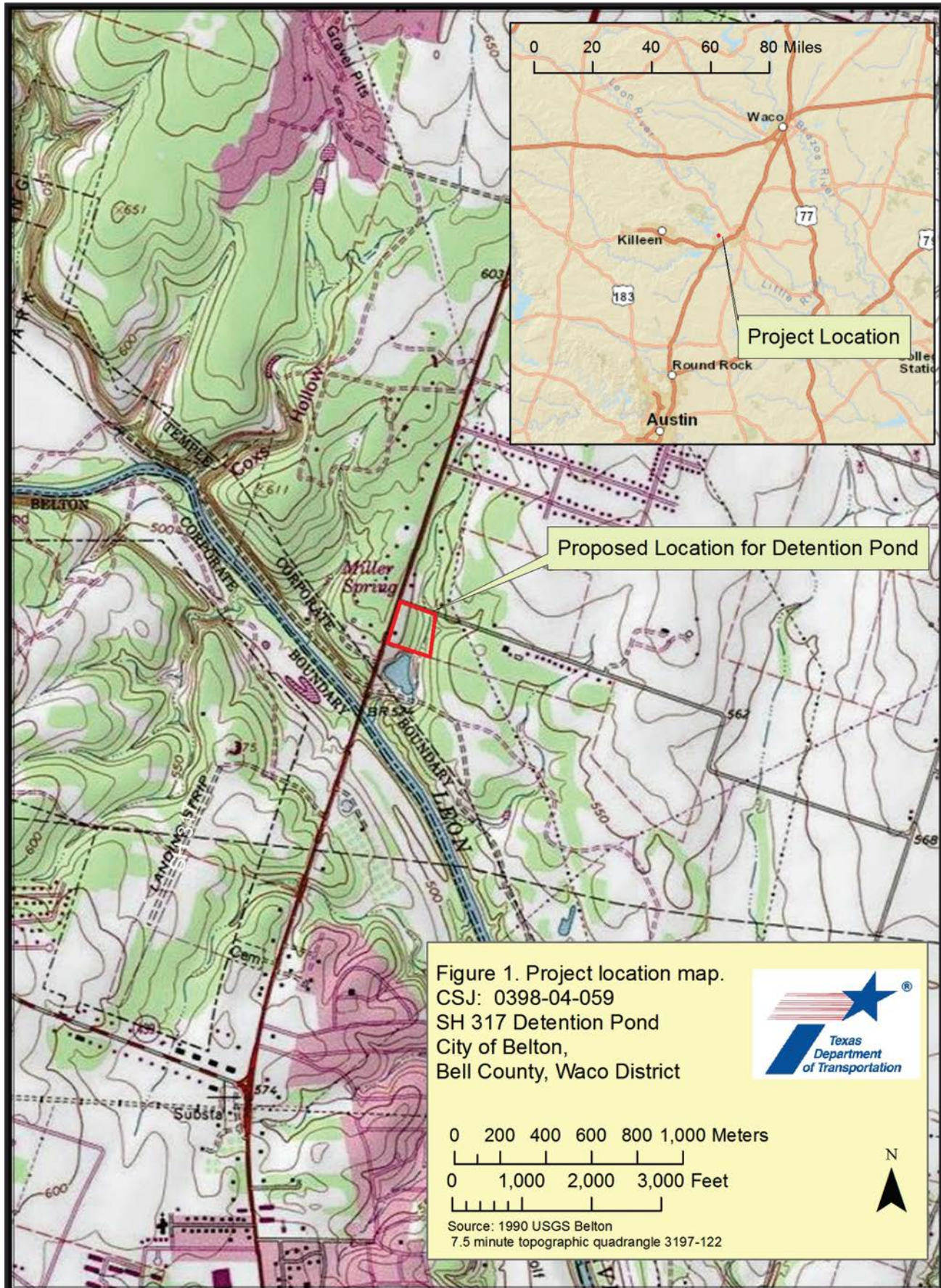
Figure 9. Mechanically cleared temporary drive into project area from Poison Oak Road.

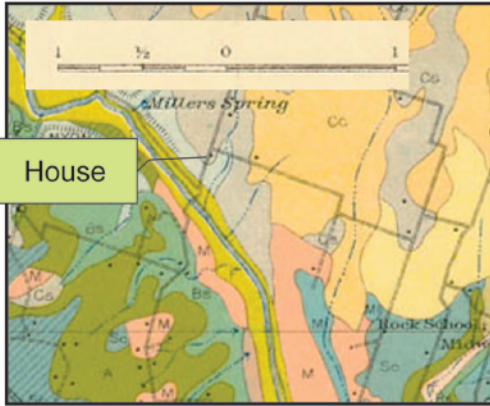
Figure 10. Sketch Map of APE and site 41BL1379 showing site features.

Figure 11. Feature 1, collapsed structure, looking north.

Figure 12. Feature 1, looking west. Note soldered panels.

Figure 13. Feature 1, looking west at louvered car hood and example from 1930 Nash Coupe.

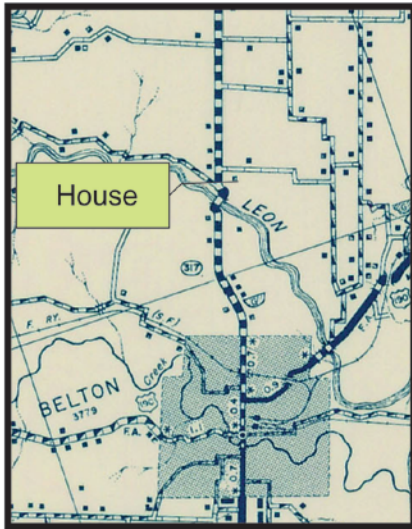




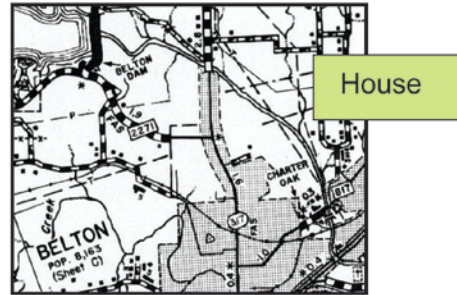
A. Bell County Soil Map 1916.  
From USDA Soil Survey of Bell County, Tx  
(1918).



B. USGS Belton 1931 (1924)  
7.5 minute topographic quadrangle.



C. 1936 Bell County General Highway Map.



D. 1957 Bell County General Highway Map.



E. USGS Belton 1965 7.5 minute  
topographic quadrangle.

Figure 2. Historic map excerpts depicting the same structure in the APE.



REMOVED BECAUSE OF RESTRICTED INFORMATION

Texas Natural Resource Code Title 9, Section 191.004

Texas Antiquities Code Title 13, Part 2, Chapter 24.13



Figure 4. Typical vegetation in western project area, looking north.



Figure 5. Terrace bench clearing looking south at typical brush pile and pushed rock pile.



Figure 6. Stream channel vegetation at east end of project area.



Figure 7. Access drive from Poison Oak Road, looking north. The drive follows the terrace edge.



Figure 8. Bulldozed debris pile, looking south.



Figure 9. Mechanically cleared temporary drive into project area from Poison Oak Road.

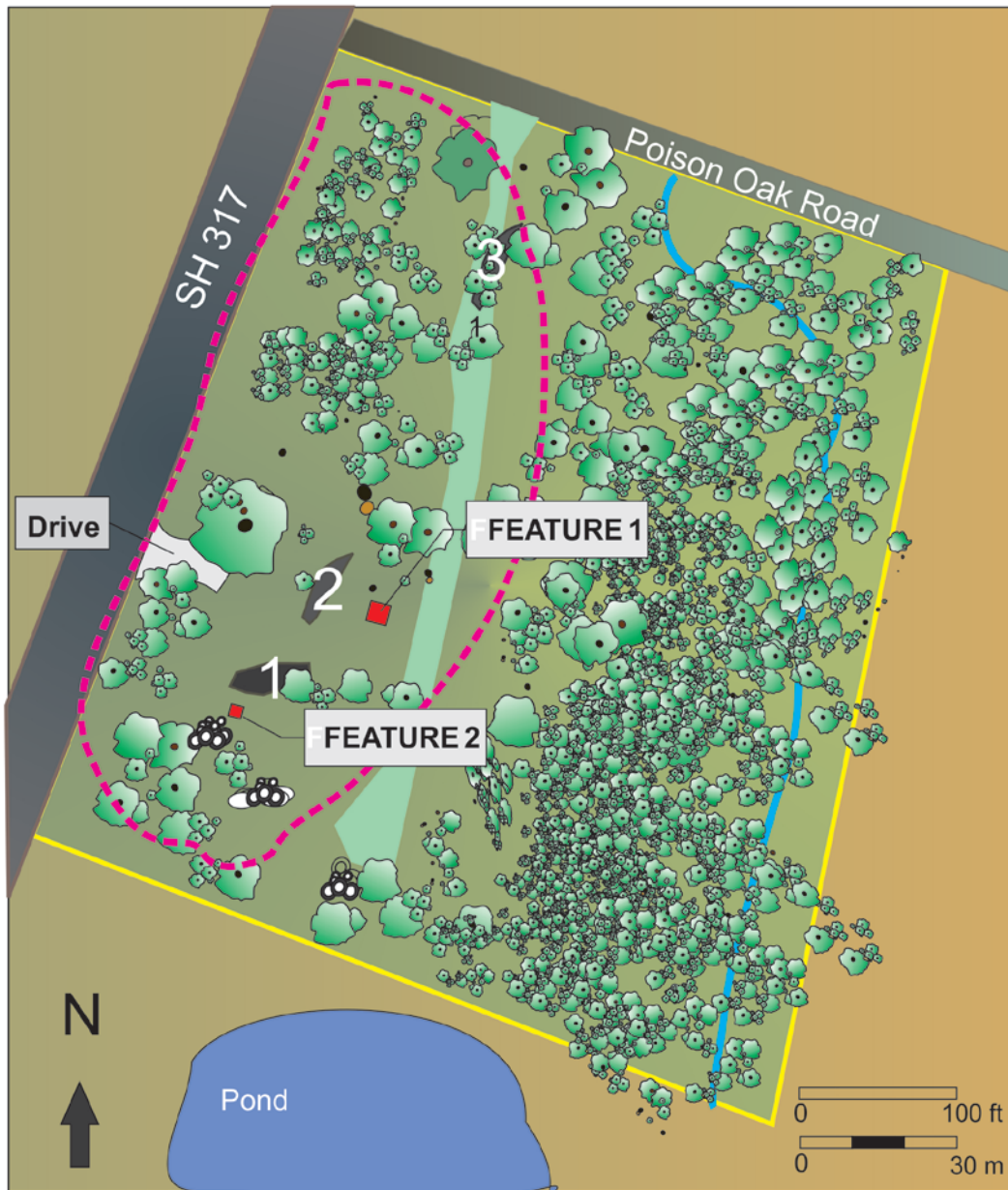


Figure 10. Sketch Map of APE and site 41BL1379 showing site features.

Antiquities Permit 7149  
 Jan 15, 2015  
 Eric Oksanen and James T. Abbott  
 TxDOT Environmental Affairs

CSJ 0389-04-059  
 SH 317  
 Bell County, Waco District

-  # Push Pile
-  Tire Pile
-  Boundary of Features
-  Stream Channel



Figure 11. Feature 1, collapsed structure, looking north.



Figure 12. Feature 1, looking west. Note soldered panels.

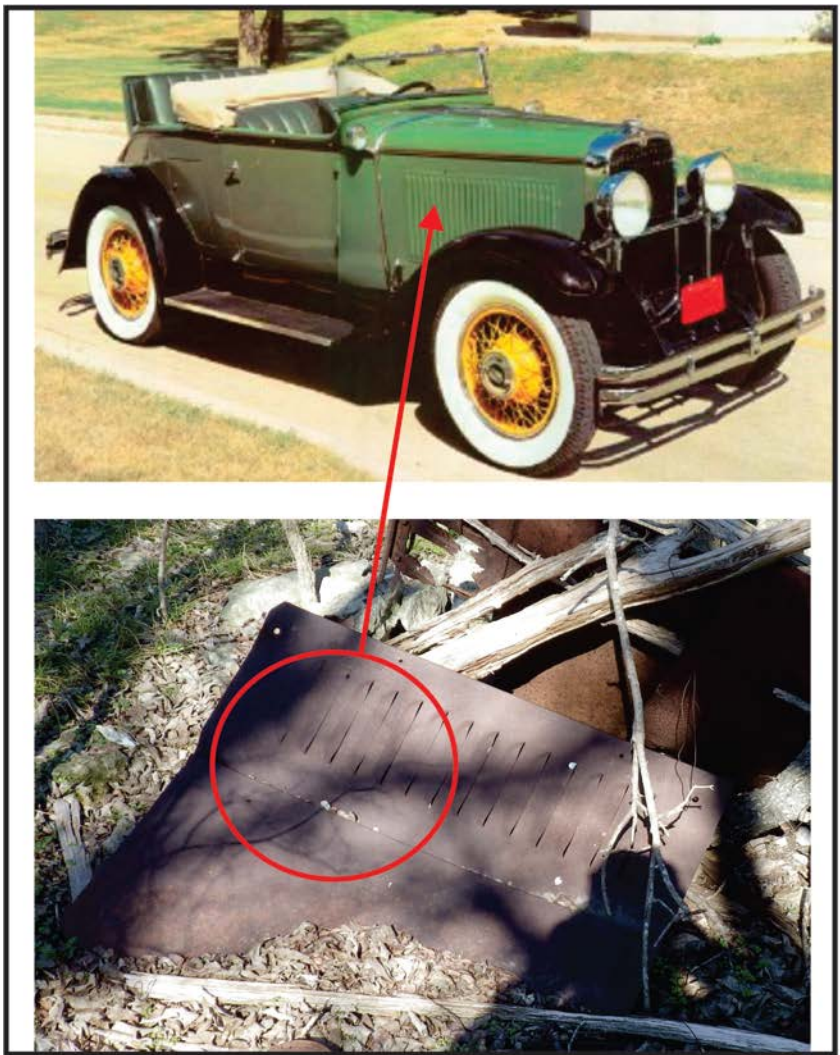


Figure 13. Feature 1, looking west at louvered car hood and example from 1930 Nash Coupe.