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Remaining Two Parcels 39 and 41 Principal Investigator Waldo Troell

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Report for Archeological Survey

CSJ 2158-01-011, FM 2275, Remaining Two Parcels 39 and 41 Principal Investigator Waldo Troell, Antiquities Permit No.6665

Abstract

The project field survey took place on September 23-24, 2013. The project's area of potential effect (APE) encompasses a maximum of 122 acres including current right of way (ROW) [1.29 acres] and proposed ROW [120.71 acres]. A previous TxDOT pedestrian survey in September/October 2010 [permit # 5665] had covered approximately 117.52 acres where right of entry had been granted to TxDOT. At the time of the first survey no right of entry was granted for parcels 39 and 41. TxDOT has since purchased the entire APE and current survey covers the remaining two parcels 39 and 41 [4.48 acres]. No archeological sites were found during the survey of the remaining two parcels. One isolated lithic flake was found in shovel test #4. Whether the lithic flake was the result of natural or prehistoric/modern cultural origin could not be determined. No artifact were collected or curated from this survey.

Project Identification

- **Date:** December/3/2013
- **Date(s) of Survey:** from September/23/2013 to September/24/2013
- **Archeological Survey Type:** Reconnaissance ☐ Intensive ☒
- **Report Version:** Draft ☐ Final ☒
- **Jurisdiction:** Federal ☒ State ☒
- **Texas Antiquities Permit Number:** 6665
- **District:** Tyler District
- **County or Counties:** Gregg County
- **USGS Quadrangle(s):** Longview Heights [3294-312]
- **Highway:** FM 2275, From Airplane Road to US 259
- **CSJ:** 2158-01-011
- **Report Author(s):** Waldo Troell
- **Principal Investigator:** Waldo Troell

Texas Historical Commission Approval

Signature Date

Project Description

- **Project Type:** Divided 4 travel lane highway on new location.
- **Total Project Impact Acreage:** 122.0 acres
- **New Right of Way (ROW) Acreage:** 120.71 acres
- **Easement Acreage:** 0.0 acres
- **Area of Pedestrian Survey:** 4.48 acres
- **Project Description and Impacts:** The proposed project is a divided 4 travel lane highway and entails the extension of FM 2275 on new location with limits at SH 300 at the eastern end of the existing FM 2275 then east to US 259. Construction impacts will entail cutting, filling, and grading of the roadway and construction of bridges across a maximum of seven small upland drainages. Only one upland drainage is located in the current survey [parcel 41].
- **Area of Potential Effects (APE):** the proposed project is 6.944 kilometers (4.315 miles) long with an average right-of-way (ROW) width of 67 meters (m) (220 feet [ft]). The project's area of potential effect (APE) encompasses a maximum of 122 acres. The depth of impacts for the project will generally be less than 9.4 m (31 ft) in cut sections and 6.7 m (22 ft) in fill sections. The current area surveyed consisted of 4.48 of new ROW. The APE width ranges from 200 ft to 100 ft and maximum depth of impact is 2.5 ft, and the fill sections are up to 3 ft, within the two parcels.
- **Parcel Number(s):** Survey included remaining parcels numbers 39 and 41. See Figure 1, schematics geo-referenced cumulative map identifying parcels covered by this report. Map also identifying previously surveyed parcels.
- **Project Area Ownership:** All parcels are publicly owned by the State in the area surveyed.

Project Setting

- **Topography:** It is estimated that approximately 30 percent of the project area consists of relatively level to gently sloping uplands (2–8 percent slopes), approximately 40 percent appears to be composed of more-steeply sloping uplands (8–25 percent slopes), and only 10 percent is composed of level floodplain. See figure 2 topographic map.
- **Geology:** All of the current survey area is located on Eocene-aged Queen City Sand, consisting of quartz sand and silty clay, with common ironstone concretions and ledges (Bureau of Economic Geology 1965).
- **Soils:** Bowie fine sandy loam, 2 to 5 percent slopes (BoC) – fine-loamy, siliceous, thermic Arenic Paleudults (Ultisol) – approximately 10 percent of the current survey area located in the middle section of the survey– parent material consists of acidic loamy coastal

plain sediments (United States Department of Agriculture, Soil Conservation Service [USDA, SCS] 1983).

- Kirvin gravelly fine sandy loam, 3 to 8 percent slopes (Kgc) – clayey, mixed, thermic Typic Hapludults (Ultisol) – approximately 65 percent of the current survey area located on the western portion of the survey area – parent material consists of stratified loamy and shaly coastal plain sediments (USDA, SCS 1983).
- Kullitt very fine sandy loam, 1 to 3 percent slopes (KtB) – fine-loamy, siliceous, thermic Aquic Paleudults (Ultisol) – approximately 25 percent of the current survey area located on the eastern end of the project area – parent material consists of stratified loamy and clayey coastal plain sediments (USDA, SCS 1983).
- **Land Use:** Between Airline Road and US Highway 259, the parcels south of Henderson Road (parcels 39 and 41) are both cleared terraced fields (see figure 3). Both parcels are adjacent to previously constructed roads and cleared fields. Multiple buried utilities corridors are located in the eastern portion of parcel 41 along with an abandoned railroad bed fill section (see figure 4).
- **Vegetation:** The proposed project is located in the Pineywoods Ecological Area (McMahan et al. 1984), and the generalized vegetation is type (42) Pine-Harwood Forest. Vegetation within the two parcels proposed ROW consists of grasses in the open fields, and shrubs along the fence line. The APE in the two parcels are pastures (ca. 100 percent).
- **Estimated Ground Surface Visibility:** 5%
- **Previous Investigations and Known Archeological Sites:** Based on the online Archeological Sites Atlas of the Texas Historical Commission (THC), there have been three previous archeological survey projects crossing the new ROW. However, there are no previously recorded archeological sites within 1 kilometer (km) of the project area. The closest recorded archeological site is 41GG108, a small historic scatter. Site 41GG108 is approximately 1.28 km west of the two parcels proposed ROW. From west to east, the previously surveyed areas include the ROW for SH 300 surveyed by the State Department of Highways and Public Transportation in 1988, an unknown pipeline survey in 1994, and the survey of the ROW of Spur 502/Judson Road sponsored by the Federal Highway Administration in both 1985 and 1991.
- **Comments on Project Setting:** Between Airline Road and US Highway 259, the parcels south of Henderson Road (parcels 39–41) consist of open fields covered in grasses.
- The current survey found heavy disturbance across much of the recommended survey area consisting of clearing, plowing, erosion, railroad construction, and buried utilities. The two parcels were found to possess a low probability of harbouring intact archeological sites. In addition, the lack of alluvial floodplains and creeks and aggrading landforms indicates a low probability for harbouring deeply buried prehistoric sites. As a

result, survey methods consisted of shovel testing within the proposed ROW in areas that looked the least disturbed. Disturbed areas were photographed.

Survey Methods

- **Surveyors:** Waldo Troell, assisted by Christine Crosby, and Jay Tullos.
- **Methodological Description:** The previous survey conducted by a consultant recommended parcels 39 and 41 to be intensively surveyed when right of entry was obtained, due to the lack of development of the parcels and being adjacent to two creeks. During the current survey the parcels were found to have been disturbed by terracing, erosion, underground utilities which included gas and water lines, and an abandon railroad bed. The two creeks were only intermittent upland tributaries. Only one of the tributaries was in the new ROW. Shovel tests were placed judgementally on the hill top and the small level area adjacent to the tributary creek within the APE. An intensive survey was performed on the two parcels using visual and judgemental placement of shovel testing in the least disturbed areas within the APE.
- **Subsurface Probes (attach map)**

Method	Quantity in Existing ROW	Quantity in Proposed New ROW	Quantity in Temporary Easements	Total Number per Acre
Shovel Test Units	0	7	0	1.56
Auger Test Units	0	0	0	0
Mechanical Trenching	0	0	0	0

- **Other Methods:** None.
- **Collection and Curation:** NO ☒ YES ☐ If yes, specify facility.
- **Comments on Methods:** Two alternating transects were used depending upon the width of the ROW. Shovel tests were spaced at 30-m intervals (ca. 98 ft) in high probability areas. Shovel tests were excavated in 10-centimeter (cm) (ca. 4-inch) levels and were about 30 cm (ca. 12 inches) in diameter. Shovel tests were terminated when pre-Holocene clays were encountered. All hand-excavated soil was screened through 6.4-millimeter (¼-inch) mesh hardware cloth. Soil texture and color were recorded systematically. Artifacts found during the survey were recorded but were not collected.

Survey Results

- Project Area Description: Between Airline Road and US Highway 259, the parcels south of Henderson Road (parcels 39 and 41) are on upland landforms with open fields with small young trees and shrubs along the fence line. The hill was terraced in both parcels and a two tract road bisected north to south through parcel 41. Parcel 39 had some modern trash on or just below the surface on the hill top that included a car wheel rim, clear glass sherds, pieces of metal scrape and nylon rope. The eastern section of Parcel 41 contained a upland tributary, buried utilities, and an abandoned railroad bed. The soils in parcels 39 and 41 consist of sandy loam with underlying clay. Average shovel test termination depth for the parcels is approximately 37 cm (ca. 15 inches). The open pastures are eroded, with shallow, fine sandy loam soils underlain by clay. Shovel testing was conducted in two transects at 30-m (ca. 98-ft) intervals in the least disturbed areas. Seven shovel tests were excavated on these parcels.
- Archeological Materials Identified:
- No archeological sites were located, but one isolated find was recorded during the survey. The isolated find was found on private land. No materials were collected.
- An isolated find was discovered consisting of a single lithic flake fragment from the survey shovel test #4 at a depth of 20 to 28 cmbs, and located in Parcel 41. The lithic flake fragment was a tertiary flake made of an earth tone pink-brown chert. Shovel test #4 was just west of a buried utility and upland tributary. The lithic flake fragment was inconclusive to its origin, and could be the result of natural, modern mechanical, or cultural prehistoric/historic breakage. Two additional shovel tests were excavated 10 meters south (shovel test 6) and east (shovel test 7) of the positive shovel test 4, in an attempt to locate cultural remains, but both were found to be negative. No additional shovel tests could be placed in the south due to the limits of the new ROW limits and the western area was limited by a slope of the adjacent hill. No shovel tests could be excavated to the north do to the limit of the new row and buried utilities, and the west was disturbed by the buried utilities, eroded tributary, and railroad bed.

  All other shovel tests (1, 2, 3, 5, 6, and 7) were negative of cultural material or contained modern debris such as clear glass fragments and nylon rope (probably from hay bales) in the upper 0 to 20 cmbs. All of the shovel tests depths were shallow (ranged from 29 to 47 cmbs) due to encountering ancient clay bedrock.

  The only historic structure located within the two parcels was part of the ruins of an earthen fill section for a railroad bed or crown. A desk top search of the Handbook of Texas Online under the subjects Longview, and Ore City, revealed that the industrial age style of mining of iron ore deposits in Ore City began around 1910. A railroad link named the Port Bolivar Iron Ore Railway was financed in 1911 to transport the iron ore. By 1914 the approximately 30 miles long railroad connected Ore City to Longview. The railroad line was abandoned in 1927.

- **APE Integrity:** Construction, maintenance, and the associated buried utilities of Airline Road, Henderson Road, and North US Highway 259 along the western, northern and eastern boundaries of the parcels have disturbed the horizontal and vertical integrity of these portions of the APE. Other disturbances include past field clearing activity, access roads, multiple buried utilities lines, such as gas and water lines, artificial terracing of the upland rise, erosion from agricultural activities, drainages at the base of the hill, fences construction, and railroad fill sections.

  The area between Airline Road and US Highway 259, parcels 39–41, contains open fields used for grazing. All of these areas are heavily disturbed, and there is no depositional integrity. Bioturbation and erosion are widespread natural and modern human activity processes that have affected the integrity of the two parcels within the APE.

Recommendations

- **Archeological Site Evaluations:** No archeological sites were found, but one possible isolated find was recorded during survey.
- Isolated Find ST#4 is not believed to be eligible for inclusion in the NRHP or for designation as an SAL under the NRHP guidelines and the SAL guidelines. No structures or other archeological materials are present at this location, other than a single lithic flake fragment in a single shovel test. This possible artifact was identified about 25 cmbs (ca. 10 inches) in a yellowish brown silty loam. Due to the lack of association with other artifacts the lithic flake fragment could not be determined if it was the result of mechanical breakage or a prehistoric artifact. Isolated Find ST#4 does not meet the requirements of criteria A–D for inclusion in the NRHP, according to 36 CFR 60.4, or for designation as an SAL, according to 13 TAC 26.12.
- **Comments on Evaluations:** None.
- **Further Work:** No archaeological sites were located in the two parcels within the APE. The two parcels also were found to be very disturbed by natural and modern activities such as agriculture, buried utilities, and previous construction of roads and railway. No natural water source were noted in the uplands and very little level ground, which results in a less than ideal place for human cultural activity. For this reason, it is believed that the proposed road construction will not adversely affect any significant archeological deposits within the area surveyed. For these reasons, the Principal Investigator recommends that no further work be undertaken on parcels 39 and 41 and the remainder of the project APE.
- **Justification:** No archeological historic properties (36 CFR 800.16(1)) or SALs (13 TAC 26.12) are present in the remainder of the APE. In accordance with 36 CFR 800.4, TxDOT has made a reasonable and good faith effort to identify archeological historic properties within the project area, and no significant properties were identified.

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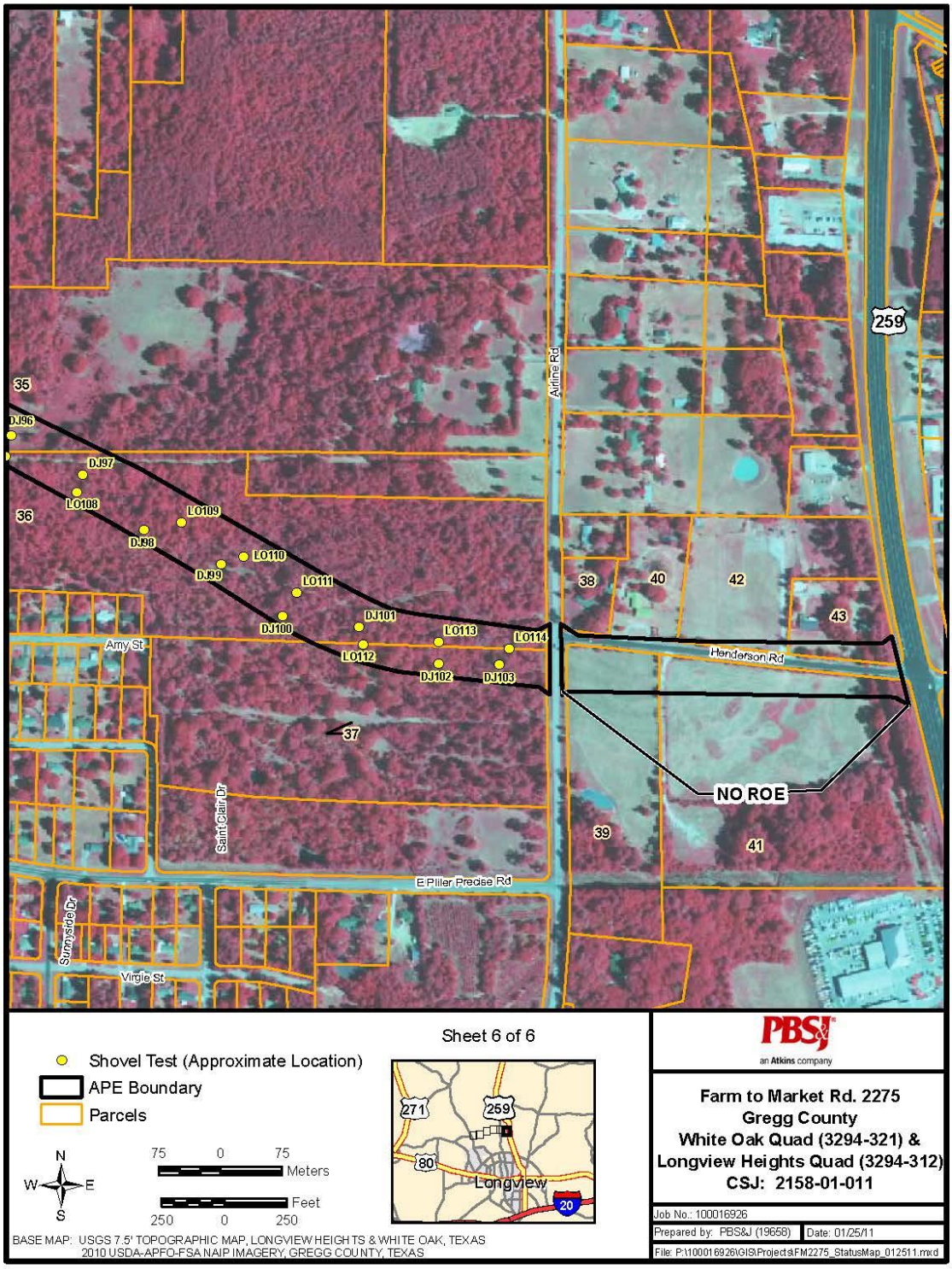

Figure 1. Aerial Photo of Parcels 39 and 41. Note terracing.

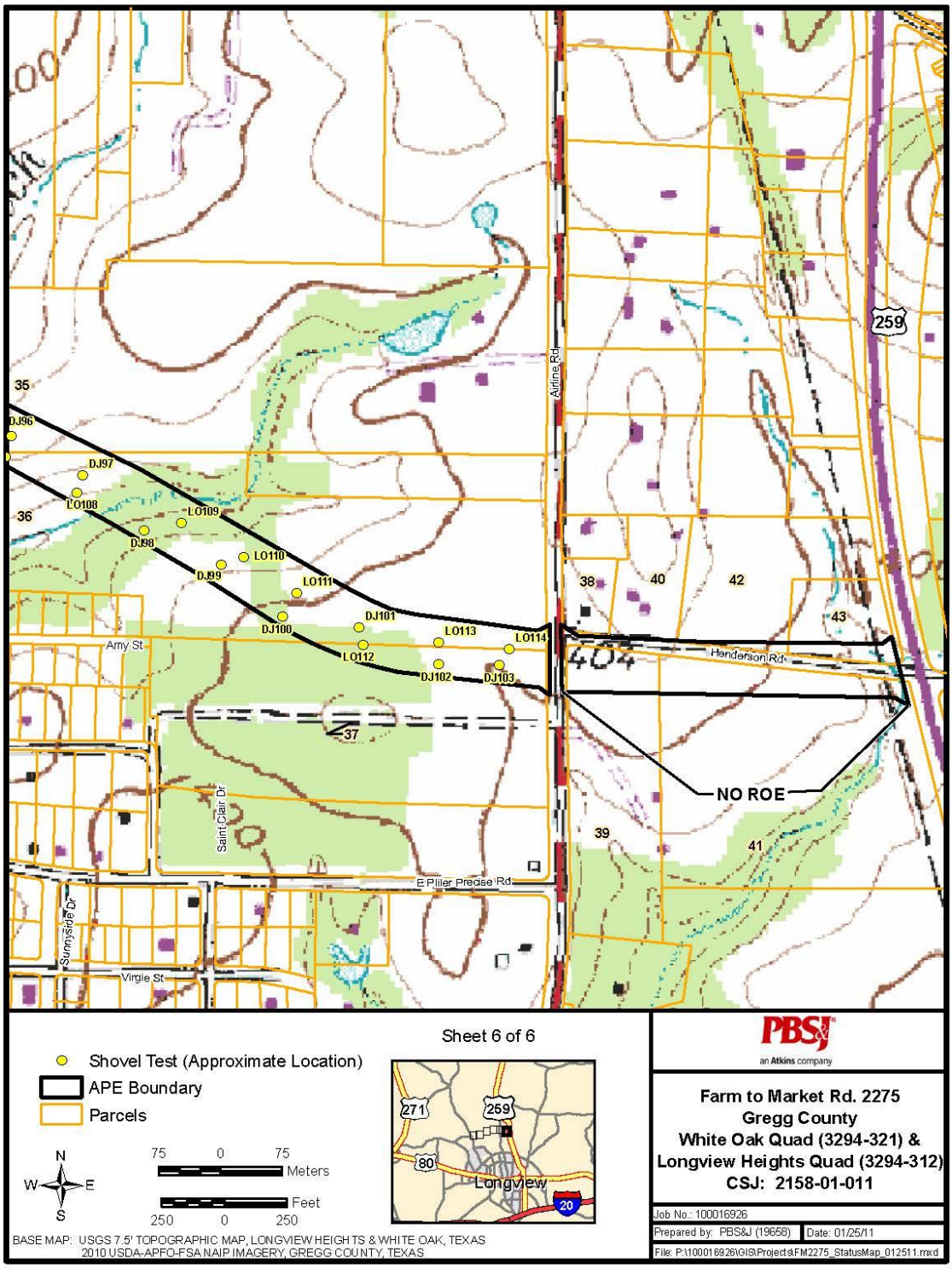

Figure 2. Topographic Map of Parcels 39 and 41.

Figure 3. Looking east at survey area, note artificial terrace to the left and right of photograph.

Figure 4. Looking north, at abandoned Railroad fill section.