

A PHASE I ARCHAEOLOGICAL SURVEY OF THE PROPOSED AUSTIN'S
ESTATES SANITARY SEWER LINE IN CENTRAL BRAZOS COUNTY, TEXAS

Texas Antiquities Permit Number 2443

By

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A PHASE I ARCHAEOLOGICAL SURVEY OF THE PROPOSED AUSTIN'S ESTATES
SANITARY SEWER LINE IN CENTRAL BRAZOS COUNTY, TEXAS

Brazos Valley Research Associates

Project Number 00-13

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ABSTRACT

An archaeological survey of a 7000 foot sanitary sewer line in central Brazos County, Texas was conducted in August 2000 by Brazos Valley Research Associates of Bryan, Texas under Texas Antiquities Permit 2443. The area was investigated by shovel testing and probing. No archaeological sites were found in the project area, and it is recommended that the City of Bryan be allowed to proceed with construction as planned. Copies of the report are on file at the Archeology Division, Texas Historical Commission; Texas Archeological Research Laboratory in Austin, Texas; the City of Bryan; and Brazos Valley Research Associates

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ACKNOWLEDGMENTS

The contract for this project was awarded to Brazos Valley Research Associates by the City of Bryan. The cooperation of city employees Stacy B. King, Graduate Civil Engineer and Paul Kaspar, City Engineer, throughout the project is appreciated. Special thanks are extended to the landowners, Mark Carraba, Johnny Rizzo, and Theresa Rizzo for allowing the field survey crew on their property. I am also grateful to the field crew James E. Warren, Arthur Romine, and Tom McMasters for their willingness to work in the August heat. Lili Lyddon is acknowledged for preparing the figures that appear in this report. I am also grateful to Ed Baker of the Archeology Division, Texas Historical Commission, for his input during the review process and to Jean Hughes of the Texas Archeological Research Laboratory for conducting the background check.

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INTRODUCTION

Brazos Valley Research Associates was retained by the City of Bryan to conduct a 100% Phase I cultural resources survey for the proposed Austin's Estates Sanitary Sewer Line in central Brazos County (Figure 1). The project area is depicted on United States Geological Survey topographical map, Bryan East, dated 1962 and photorevised in 1980 (Figure 2). This map is out of date and does not depict many of the current improvements such as the Austin's Colony Subdivision, Harvey Mitchell Elementary School, and Austin's Colony Parkway just to the south of the current project area. The proposed sewer line is 7000 feet in length with a permanent easement of 20 feet. It begins at an existing sewer connection, travels overland, and terminates at Old Reliance Road (Figure 3). When converted to acres, the project area is 3.26 acres in size. An 18 inch pipe will be placed in a 12 foot wide trench with an average depth of 4-12 feet. No federal regulatory agency is involved in this project which was reviewed at the State level by the Archeology Division, Texas Historical Commission. Since the construction of this sewer line is being financed by a local municipality, an Antiquities Permit was required, and permit number 2443 was assigned to this project.

The project area parallels a tributary of Carters Creek to the east. Most of the route of the proposed sewer line is situated in an active floodplain adjacent to the creek. Based on an examination of the route of the sewer line as depicted on the topographic map, parts of the project area were considered to be medium to high probability areas in terms of containing significant prehistoric and/or historic sites, thereby warranting an archaeological survey.

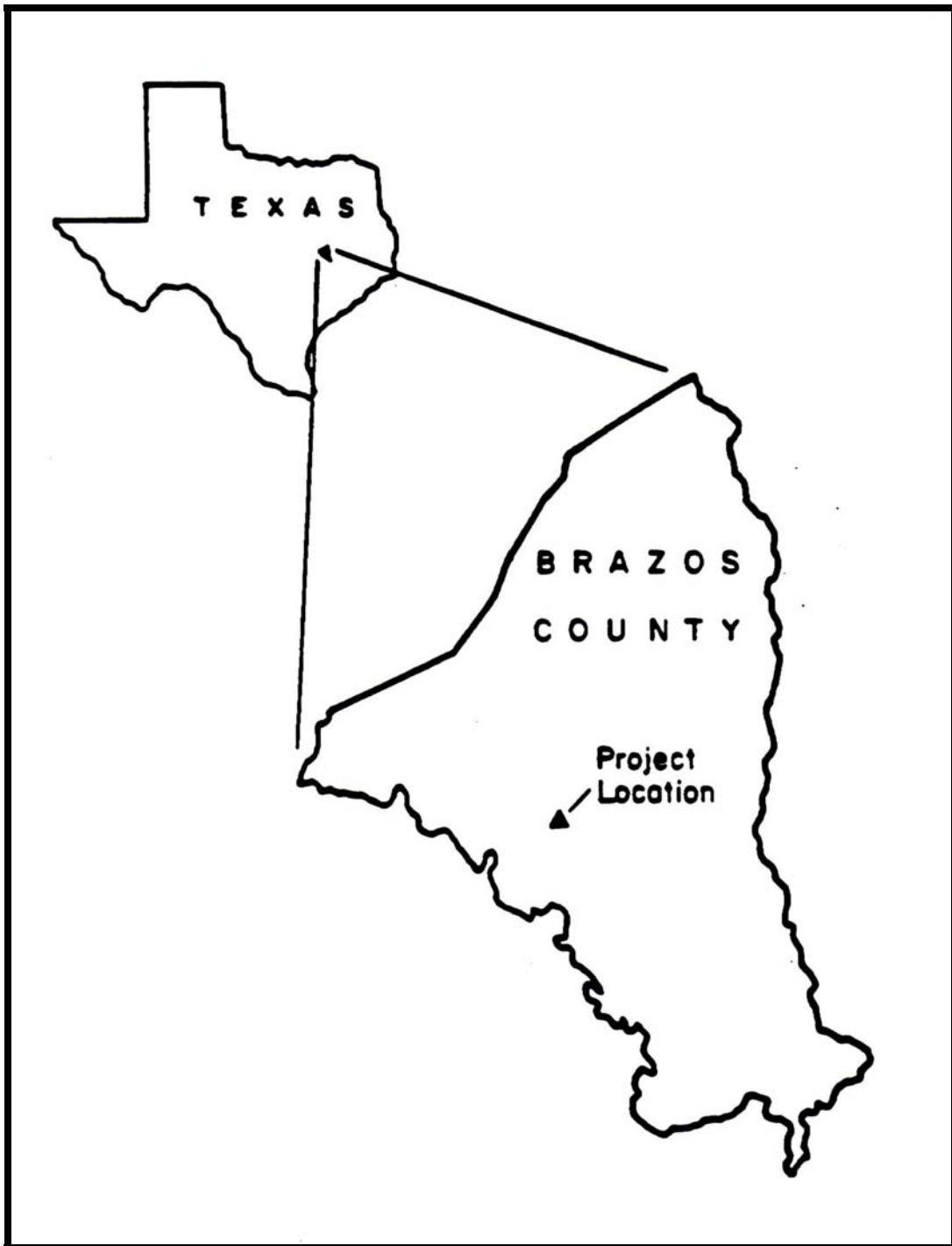


Figure 1. General Location Map

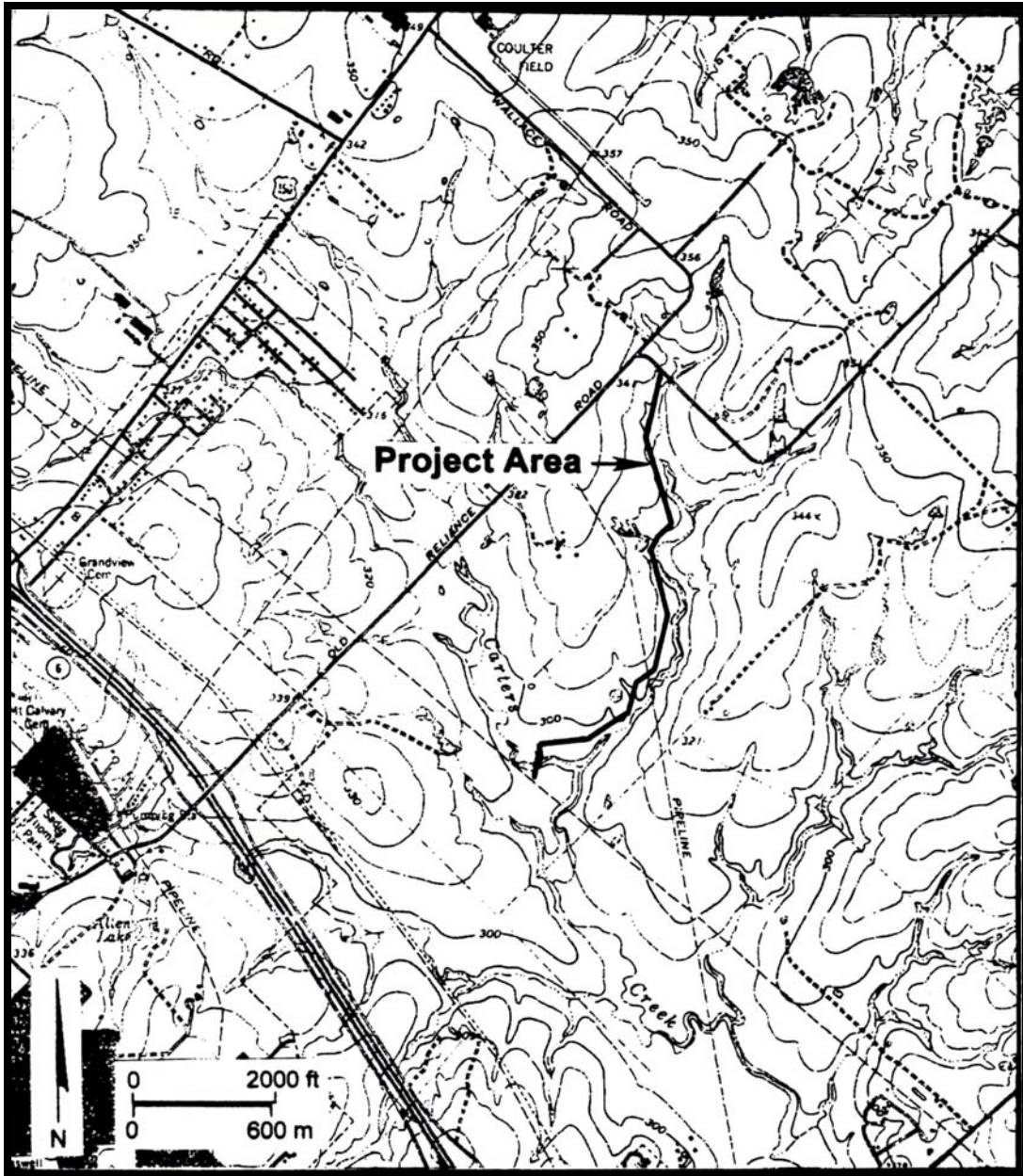


Figure 2. Project Area on Topographic Map

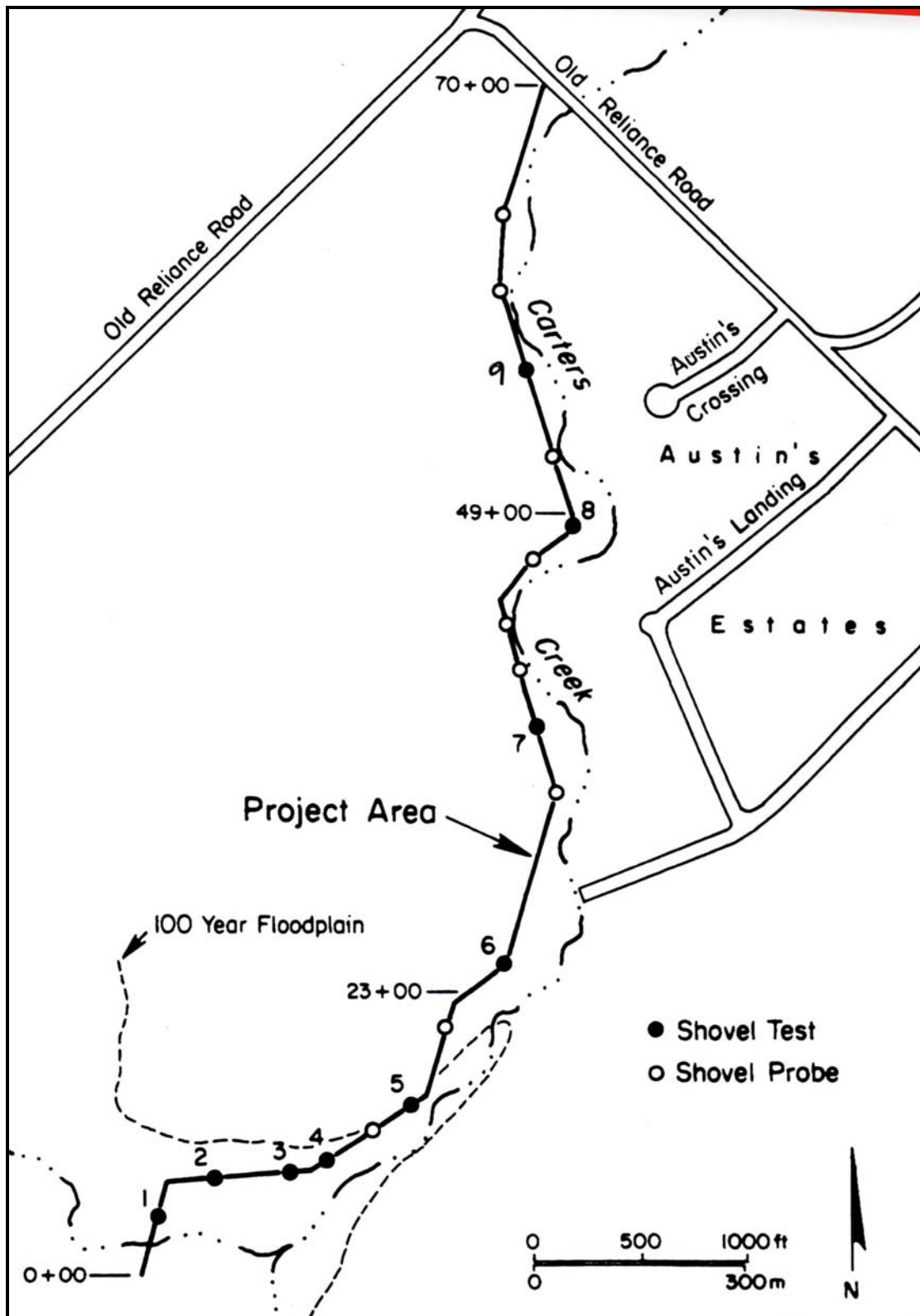


Figure 3. Project Area Map

ENVIRONMENTAL SETTING

The project area is located within the West Gulf Coastal Plain section of the Coastal Plain physiographic province as defined by Fenneman (1938:100-120). This physiographic section is subdivided according to the age of the geological formations (Gulf series) that roughly parallel the Texas coastline. The area is hilly and situated within the East Texas timber belt. Gould (1969) describes it as an area characterized by gently rolling to hilly topography with light colored soils that are acid sandy loams or sands. The climate is subhumid to humid, and the weather is considered to be predominately warm. Annual rainfall for the county is 39.21 inches. A January minimum temperature of 42 degrees and a July maximum temperature of 95 degrees combine to produce a growing season of 274 days (Kingston and Harris 1983:180). The altitude varies from 200-400 feet. No soils book is currently available for Brazos County. Soils data were obtained from the local field office of the Natural Resources Conservation Service in Bryan. Specific soil types encountered in the project area are discussed in the *Results and Conclusions* section of this report.

ARCHAEOLOGICAL BACKGROUND

A check of the records at the Texas Archeological Research Laboratory in Austin, Texas revealed no archeological sites have been recorded within the current project area. It was discovered that sites have been recorded in the region, and several significant archaeological investigations have been performed in Brazos County. Prehistoric sites in this area are typically found on sandy ridges and uplands in close proximity to dependable sources of water such as creeks and rivers. No prehistoric sites in the county have been reported on clay hills or in active floodplains. Prehistoric site 41BZ130 was found by Brazos Valley Research Associates in 1999 on the main channel of Carters Creek approximately 600 meters south of the southern end of the proposed sewer line (Moore 1999). It is a low density, buried lithic scatter on a sandy terrace that yielded only one dart point and three flakes in 14 shovel tests. This site was not considered significant, and no further work was recommended.

The project area is also in an area of historical significance. The Richard Carter site (41BZ74), about eight miles south of the project area, represents the earliest historic settlement in the county at circa 1831 (Carlson 1983, 1987). The town of Boonville (41BZ91), including Boonville Cemetery, is about 1500 meters to the south. Boonville was the first county seat of Brazos County and was established in 1841 (Webb 1952:188). These two sites are an indication of the potential of the project area for containing evidence of early historic occupation.

FIELD METHODS

The project area was examined on August 8, 2000 utilizing the pedestrian survey method. The entire route was walked by the field crew and examined by shovel tests and probes. Prior to the field survey, sections of the sewer line route were considered to be medium to high probability areas for the presence of archaeological sites. This assessment was based on the route as depicted on the topographic map. However, in the field it was discovered that the sewer line route did not cross any high probability landforms. Most of the route is in an active floodplain of the creek and along the lower slopes of ridges with a significant portion in the creek channel. Therefore, shovel tests were concentrated in areas where sandy soil was present. The shovel probes were used to identify areas where clay was at or very near the surface. Probes differ from tests in that they are not screened. Ten shovel probes were excavated. Originally, it was stated in the permit application that shovel tests would be dug at 30 meter intervals or less in high probability areas and 100 meter intervals throughout the rest of the project area route. Once in the field, however, the overall low potential for archaeological sites was identified. This changed the strategy to digging shovel tests in areas where sandy soil was observed or on potential landforms as depicted on the topographic map. Many potential shovel tests were reduced to probes once the shallow nature of the sandy soil was realized. Shovel tests were dug to clay. The size of each test was 30 x 50 centimeters and varied in depth from 30 to 50 centimeters below the existing ground surface. All excavated fill was screened through 1/4 inch hardware cloth. Shovel test data were recorded on a shovel test log (Appendix I). In all, nine shovel tests were dug, and each test was backfilled.

RESULTS AND CONCLUSIONS

Examination of the files at the Texas Archeological Research Laboratory in Austin, Texas revealed no sites have been recorded in the project area. There was also no indication that any part of the project area had been surveyed by professional archaeologists. The records search revealed the presence of prehistoric and historic utilization in the area (see *Archaeological Background* above) as evidenced by prehistoric site 41BZ130, the nearby town of Boonville (1841) and the Richard Carter homestead (circa 1830s).

The soils in the project area consisted mainly of Sandow loam, frequently flooded (Sa), Tabor fine sandy loam, 0 to 2 percent slopes (TaA), and Zulch fine sandy loam, 1 to 3 percent slopes (ZuB) as depicted on Sheet 21 for the Brazos County soil survey which is in preparation. Sandow loam is a moderately slowly permeable soil in floodplains of drainage ways. This soil formed in slightly acid to moderately alkaline stratified sandy and loamy sediments. The surface layer is dark brown clay loam about 8 inches thick. The shovel tests and probes in this soil revealed a dark gray clay at the surface.

Tabor fine sandy loam covers about 50% of the project area. This soil consists of very deep, moderately well drained, very slowly permeable soils on uplands. Tabor soils have grayish-brown and very pale brown fine sandy loam surface layers and brownish-yellow clayey subsoil that is mottled with gray, light gray, and yellowish-red. The soils formed in acid to alkaline clays and sandy clays with sandier materials. The shovel tests in this soil revealed a fine sandy loam over dark gray clay between 30 and 50 cm.

Zulch fine sandy loam is found at the extreme northern end of the project area. This soil consists of moderately deep to weathered shale, moderately well drained, very slowly permeable, nearly level to gently sloping soils on uplands. The surface to 5 inches is a dark grayish brown fine sandy loam. From 5 to 13 inches this soil is very dark grayish-brown clay with few brownish mottles. The shovel tests and in this area revealed a fine sandy loam over dark gray clay at 30 cm.

No archaeological sites were found in the project area. There are several reasons that explain the absence of prehistoric sites. First, the route parallels a tributary of Carters Creek that diminishes in size and importance to the north. In fact, this tributary ends just a few hundred meters north of the northern end of the project area. The main channel of Carters Creek is viewed as an area more likely to contain prehistoric settlement. Second, the route of the pipeline as proposed by the City of Bryan does not cross the apex of any upland ridges or terraces. As marked in the field, this route traverses the project area very close to the channel of the tributary. In many places, the route is on the slope, within the active floodplain of the tributary, or in the actual creek channel.

Third, the few areas containing sandy soil had a clay stratum within 50 cm or less below the existing ground surface. Overall, it is estimated that 60% of the project area is in active floodplain, 20% is in low-lying areas with several creek crossings, and 20% is on the lower slopes of frequently flooded terrain.

RECOMMENDATIONS

It is the opinion of Brazos Valley Research Associates that there are no archaeological sites within the route of the proposed sanitary sewer line. Therefore, it is recommended that construction be allowed to proceed as planned. It is always possible that archaeological sites are missed during any cultural resources survey. Should areas containing prehistoric or historic artifacts not discussed in this report be discovered during construction, Archeology Division, Texas Historical Commission, must be notified immediately and all work stopped in the area of concern until the situation can be evaluated.

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APPENDIX I: SHOVEL TEST LOG

Shovel Test 1 was dug through dark gray clay (10YR 4/2) to a depth of 30 cm. This test was excavated in Sandow loam soils at the southern end of the project area overlooking the only section of the main channel of Carters Creek in the project area in an active floodplain. It was sterile.

Shovel Test 2 was dug through fine sandy loam (10YR 6/3) to a depth of 30 cm. This test was excavated in Sandow loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.

Shovel Test 3 was dug through fine sandy loam (10YR 6/3) to a depth of 40 cm. This test was excavated in Sandow loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.

Shovel Test 4 was dug through fine sandy loam (10YR 6/3) to a depth of 50 cm. This test was excavated in Sandow loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.

Shovel Test 5 was dug through fine sandy loam (10YR 6/3) to a depth of 50 cm. This test was excavated in Tabor fine sandy loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.

Shovel Test 6 was dug through fine sandy loam (10YR 6/3) to a depth of 50 cm. This test was excavated in Tabor fine sandy loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.

Shovel Test 7 was dug through a thin stratum of fine sandy loam and a lower stratum of dark clay (10YR 4/2) to a depth of 30 cm. This test was excavated in Tabor fine sandy loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.

Shovel Test 8 was dug through fine sandy loam (10YR 6/3) to a depth of 50 cm. This test was excavated in Tabor fine sandy loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.

Shovel Test 9 was dug through a thin stratum of fine sandy loam over a stratum of dark clay (10YR 4/2) to a depth of 30 cm. This test was excavated in Tabor fine sandy loam soils on a lower slope of a sandy ridge adjacent to the tributary of Carters Creek. It was sterile.