

## **Appendix H – Cultural Resources**

### **Summary Report of Field Investigations at Aquilla Lake, Hill County, Texas**

From November 1 through 17, 2010 fieldwork was conducted for the cultural resources survey and site assessment for the Aquilla Lake pool raise project. The archaeological survey was conducted based on a 6.5-ft raise in pool elevation, which was the proposed project alternative with the highest potential to adversely impact cultural resources. In January 2012, the U.S. Army Corps of Engineers (USACE) consulted with the Texas State Historic Preservation Officer (SHPO) regarding the findings of the archaeological survey and the SHPO expressed concern that the USACE did not sufficiently account for impacts to site number 41HI128. The SHPO stated that although the 6.5-ft pool raise may not directly impact the site, the exposure of the nearby shoreline may lead to impacts by public access and looting. Since that time, the 6.5-ft elevation alternative has been eliminated and a 4.5-ft pool raise has been selected for proposed implementation. This summary report provides a brief description of the fieldwork conducted, and the three remaining historic properties, which will be adversely impacted by the 4.5-ft pool raise, and require further testing to determine their National Register of Historic Places (NRHP) eligibility prior to any project construction.

In all, 39 of the 42 sites originally slated for revisit and assessment were visited by USACE contractor Prewitt & Associates, Inc. Several attempts were made to access sites 41HI103, 41HI163, and 41HI164 but various obstacles including multiple un-navigable and un-fordable stream channels prevented access to these areas. Assessments and recommendations of “not eligible” and/or “no further work” were made for these sites in 1982 and should be applicable today.

In addition to the site revisits and assessments, other work performed included surveys of ten previously unsurveyed areas within the boundaries of the proposed 4.5-ft pool raise. After overlaying the contour line with the existing files for areas already surveyed, and the proposed footprint for the pool raise, it was determined that ten areas of sizeable acreage (more than one acre) warranted survey. These ten areas were labeled Survey Areas (SA) 1-10, with SA-1 being the largest and SA-10 being the smallest. The ten survey areas totaled ca. 170 acres. Each of the 10 survey areas were traversed and most were found to be highly eroded with steep gradients or in wetland settings that were either under water or contained near surface water or high water table. It was determined that the survey areas with these characteristics did not warrant shovel testing and/or that their archeological potential was very low. Two of the survey areas (SA-2 and SA-4) did yield two previously unknown sites.

In SA-4, one new site, 210032-1 (temporary site number), was recorded. It is a small prehistoric lithic scatter situated on an upland ridge, just north of an unnamed drainage the

empties into the lake. Artifacts observed on the surface included, 5 flakes, 1 groundstone tool fragment, 2 cores, and 1 hammerstone. The site surface is highly eroded with bedrock exposed across many parts of the site. It is probable that years of wave action from fluctuating lake levels have taken their toll on this site and the likelihood for buried cultural deposits with good contextual integrity is very low.

The second new site, 210032-2, is another small prehistoric lithic scatter sitting on a ridge remnant in SA-2 overlooking an unnamed tributary of Aquilla Creek. Shovel testing was conducted at this site based on the apparent intact soil mantle on the landform. A total of six shovel tests were excavated. Shovel testing quickly determined that much of the soil mantle was eroded and patchy. Under the dense layers of oak leaves, large tabular fragments of sandstone bedrock littered much of the surface. In some areas, shovel tests were as shallow as 5 cm, but overall the soil mantle ranged from 5-10 cm in thickness. Artifacts were recovered from two of the six shovel tests and included 1 tested quartzite cobble, 1 tested chert cobble, 2 battered stones, and 2 chert flakes.

One other new site was recorded, though it lies outside of any of the ten survey areas. This site is located on a terrace remnant along an unnamed drainage of Hackberry Creek, and sits northeast of the FM1947 Bridge crossing on Aquilla Lake. The site measures 25 m (north to south) by 25 m (east to west) and consists of a hand-dug, stone-lined well that sits within a concrete box that was likely installed with a lid to keep debris from falling into the well. The well is ca. 5 ft. in diameter with the box measuring ca. 7x7 ft. Several iron bolts with nuts stick out of the walls of the concrete box, and a single iron pipe with an elbow joint sticks out of the ground immediately southeast of the box. A fence line runs along the tree line just east of the well and looks as if the area was originally fenced off to keep out livestock. It is not clear if this well was part of a house or larger farm complex. No shovel tests were excavated at this site, but historic materials observed on the surface include five, eight-foot sheets of corrugated sheet metal, various sizes of machine cut lumber, and wire fencing, both net and barbed wire.

None of these three new sites is recommended for additional work or recommended as eligible for listing in the National Register of Historic Places (NRHP).

Of the 39 sites that were revisited, six are recommended for testing to fully determine their eligibility for listing in the National Register of Historic Places based on the presence of intact buried cultural deposits yielding a variety of cultural materials. However, only 3 of these 6 sites, 41HI74/114, 41HI134, and 41HI146, will be adversely impacted by the proposed 4.5-ft pool raise. The remaining sites revisited and accessed are highly eroded or have been adversely impacted due to wave action, and/or yielded limited amounts of artifacts and other important data sets from contexts that would warrant additional investigations and are recommended as ineligible for listing in the

NRHP.

Site 41HI74/114 is a prehistoric lithic scatter/open campsite and historic site located on a sliver of land that remains just above the current lake level. Soil mantle appears to be intact and many of the deposits are quite deep on this landform. Ten shovel tests were excavated with all yielding both prehistoric and historic cultural materials. More than 120 flakes were recovered as well as two dart point fragments. Various historic nails, ceramics, and glass were also recovered, some of which was window glass, suggesting that an historic structure was present at the site at one time. The proposed 6.5 ft. pool raise will completely inundate this site. Test excavations are warranted to fully determine its eligibility for listing in the NRHP.

Site 41HI134 was originally recorded as buried prehistoric site along the upper reaches of Hackberry Creek. The original datum that was placed on the site was relocated, but no subsurface testing was conducted due to the nature of the clayey sediments and the reported depth of the cultural deposits. Cutbank exposures were examined but did not show any buried artifacts as was noted on the site forms from previous investigations. To fully evaluate this site, mechanical trenching and test excavations are warranted.

Site 41HI146 is a prehistoric lithic scatter/open campsite that sits on a peninsula jutting out into the lake. Four shovel tests were excavated at this site. Three were positive, yielding 11 flakes with another 10 flakes found on the surface. Deposits were relatively shallow, only 25-30 cm deep, but deeper intact deposits likely exist on the higher points of the peninsula, but serious vegetation clearing is needed in order to access those areas. Because the site yielded artifacts from a buried context testing is warranted in order to fully determine the site's eligibility for listing in NRHP.

Testing at these three sites should entail the excavation of 4 to 10 test units (1-m by 1-m) depending on overall site size, and limited mechanical trenching at site 41HI134. Required test excavations can be conducted relatively quickly given the shallow and sandy nature of the deposits at most of these sites. If it is determined that any or all of these sites are eligible for listing in the NRHP, adverse impacts will require mitigation. This may include data recovery or other measures as determined through consultation with the SHPO and federally recognized Indian Tribes.