2.0 METHODS

2.1 Background Research

Background research, completed during the original S.R. 54 Improvements archaeological survey (Gundy and Sams 2003a) was broad enough to cover the areas proposed for the stormwater management swales. No new or updated information about the archaeology of the area was uncovered.

2.2 Geomorphology

Since the proposed stormwater management swales are located adjacent to and are on the same landform, as well as have the same basic historic land use as the previously surveyed DelDOT S.R 54 Improvements project and stormwater managernent areas, new geomorphological studies of the stormwater management swale locations were not necessary prior to the archaeological survey. Post-archaeological fieldwork geomorphological investigations included the examination of the soils/sediments profiles exposed in the shovel test pit (STP) excavations. Undisturbed soil profiles resultant from the archaeological survey excavations were examined and described in detail according to the methods and nomenclature prescribed by the United States Department of Agriculture--Natural Resources Conservation Service (Schoenenberger *et al.* 2002). Tabular descriptions of representative stratigraphic profiles are included in Appendix A.

2.3 Archaeology

Phase I archaeological field procedures consisted of the subsurface testing of the two stormwater management swale locations. Due to the presence of existing ditches within the proposed narrow footprints of the stormwater management swales, one transect of STPs was emplaced parallel to the existing ditching and long access of each proposed swale. The STPs were spaced at 15.0 m (49.2 ft) intervals along each transect and numbered sequentially. The STPs were excavated by arbitrary 10.0 cm (3.9 in) levels within natural strata to a minimum depth of 10.0 cm (3.9 in) into the culturally sterile Pleistocene subsoil below which no cultural resources would be expected. All of the sediments recovered from each STP were screened through 0.64 cm (0.25 in) mesh hardware cloth in order to recover archaeological materials. Information regarding the soil texture and color, depth of any cultural materials recovered, and any soil disturbance was recorded

on Skelly and Loy's standard excavation forms. Daily field notes and STP excavation information were kept by the field director. Field data were supplemented with notes made on the project maps, as warranted, and 35mm photography. No artifacts were recovered during the Phase I archaeological survey of the stormwater management swales; therefore, no artifact processing or analyses are necessary.