II. METHODS

HISTORICAL RESEARCH

The purpose of the background research was to (1) develop historical and archaeological context(s) for interpretation and evaluation of the cultural resources present within the project area and (2) review the results of previous archaeological work within the project area and vicinity.

URS conducted general and specific research at a number of local, regional, and university repositories, including the Delaware State Historic Preservation Office (DE SHPO), the Delaware State Archives, the Sussex County Public Library System, and local repositories. Inspection of previous cultural resource survey reports, site forms, and other archaeological references was conducted at the offices of DE SHPO and DelDOT. In addition, interviews with current landowners Ralph and Betty Warren were conducted in July 2002. In February 2004, URS conducted further interviews with Ralph, Betty, and Rowland Warren to prepare an oral history in response to a DelDOT request. Background historical research also involved examining an assortment of published works on the history of the area (Hudson 1975; Carter 1980; Griffitts 1999; etc.), as well as unpublished monographs and reports, documentary photographs, county atlases, and fire insurance maps (Beers 1868; Hancock 1976; Robinson 1976; Norton 1978; etc.). Modern and historic soil maps were also examined to reconstruct historic and modern land use within the project area.

Since the APE was for the most part contained within the footprint of the present milldam, the potential for encountering prehistoric resources was extremely low. This assessment was based on the effects of historic and recent activities upon the integrity of any site that may have once been extant within the APE. Construction of the two bridges would have severely impacted or destroyed any prehistoric sites, if formerly present. Therefore, the development of a prehistoric context for the project was unnecessary.

FIELDWORK

In order to ensure that archaeological resources were not overlooked, an archaeological monitor was onsite during the construction phase of this project. The monitor observed specific construction localities and recorded all archaeological resources, or suspected resources, uncovered during construction activities. These localities consisted of the two bridges slated for replacement, the upgrading of the pond side sluice gate area to Bridge 526, the upgrading of the spillway on the pond and downstream side to Bridge 527, and roadway improvements to State Route 326. Recordation included vertical and horizontal location of all resources encountered. The monitor also created drawings, photographs, and descriptions of all encountered resources. The monitor maintained an up-to-date log of all monitoring activities. The log includes the date, time, and duration of all monitoring episodes, accompanied with a description of the monitored activity.

Hand-excavated test units were also utilized to investigate potential intact deposits and features encountered during construction activities. Test units were excavated by natural strata to sterile subsoil. All soils were screened through ¼-inch-mesh hardware cloth. Soil descriptions conformed to standard USDA terminology, and soil colors were described using the Munsell soil color system. Recovered artifacts were bagged according to their specific provenience and transported to the URS laboratory for processing and analysis. Soil profiles, cultural features, etc., were described, photographed on black-and-white print, digital, and color-slide film, and illustrated in engineer's scale, using tenths of feet in plan or vertical perspective, as appropriate.

LABORATORY PROCESSING AND ANALYSIS

Processing of cultural material recovered from the investigation began upon completion of fieldwork. All artifacts were washed and cataloged. Historical artifacts (no prehistoric artifacts were recovered) were analyzed in terms of material type, form, function, and temporal attributes (e.g., Noël Hume 1969; South 1977; Miller 1991). Detailed analysis included the identification of the terminus post quem (TPQ) of artifacts for each context. This information was used to establish which contexts and strata came from the same periods of time, as well as which assemblages represent primary versus secondary deposits.