

I. INTRODUCTION AND PROJECT DESCRIPTION

GAI Consultants, Inc. (GAI) of Monroeville, Pennsylvania, completed Phase I archeological investigations of the proposed State Road (SR) 82 Slope Stabilization Project in New Castle County, Delaware in April 1998. This work, conducted on behalf of the Delaware Department of Transportation (DelDOT), involved background research, systematic surface survey and shovel testing of the project area, and laboratory analysis. This report presents the objectives, methods, and results of the Phase I investigations.

The project area encompasses a portion of SR 82 in northern New Castle County, immediately south of the Pennsylvania state line (Figure 1). DelDOT proposes to stabilize the slope on the western margin of SR 82 by installing a precast modular retaining wall (backed by riprap) to control erosion. Additional proposed work includes installing buried drains, establishing a new embankment grade, repaving and remarking the road, and providing new guard rails. Excavation and grading will be conducted in association with all phases of this project.

The 337-meter (1,106-foot) long survey area begins 274 meters (899 feet) north of the SR 82 and County Road 253 intersection and extends north along SR 82 to the Pennsylvania state line (Figure 1). The project right-of-way measures 7.5 meters (25-feet) in width and extends west from the SR 82 centerline to include the west bank of the existing roadway. The area of potential effect (APE) encompasses a total of 0.25 hectares (0.62 acres) and includes all areas within the ROW that may be directly impacted by the proposed construction.

Background research provided a foundation for assessing survey area sensitivity for archeological resources, and for generating appropriate environmental, prehistoric, and historic contexts for interpreting cultural resources identified during the survey. Fieldwork included a preliminary pedestrian reconnaissance and subsurface investigations. GAI conducted the pedestrian reconnaissance to modify preliminary assessments of resource sensitivity, to locate surface features and archeological deposits, and to identify locations that could be omitted from subsurface investigations owing to poor drainage, excessive slope, or disturbance. Subsurface investigations entailed systematic shovel testing along the western portion of SR 82 to locate below ground archeological deposits and features. No subsurface investigations took place east of SR 82 because of the excessive grade along the roadway edge within the construction limits.

During these investigations, GAI identified five fieldstone piers associated with a previously recorded millrace extending along the western margin of the limits of construction. These features included a group of three piers on the east margin of the millrace and two on the west margin. The piers on the east side of the millrace lay within the existing right-of-way for SR 82, but at the western margin of the project limit of construction. No artifact deposits or buried features were identified during shovel testing to suggest the chronology or function of these piers. However, they clearly relate to the millrace, which comprises a contributing element to the Auburn Mills Historic District (N-5003), located 91 meters (300 feet) south of the project area. The millrace lies within a proposed extension to the district's boundaries (Griffitts 1998), and the group of stone piers identified during this survey may also constitute a contributing element to the historic district. Discussions with Ms. Gwen Davis (personal communication 1998), of the Delaware State Historic Preservation Office, confirmed that the piers lie at the western edge of the project's limits of construction. Under current design plans, this project will not have an impact on them.

Ben Resnick served as Project Manager for this Phase I survey. Bradford Botwick was the Principal Investigator and Kimberly Parsons acted as Field Director. Field crew members included Kristen Carey, Edward Miller, Steven Sarver, and Brent Shreckengost. Geoffrey Henry performed the background research and Ms. Anne DeMucci served as Laboratory Director.

The work described in this report was performed pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR Part 800). The study conforms to standards set forth in *Guidelines for Architectural and Archeological Surveys in Delaware* (Delaware State Historic Preservation Office 1993) and those contained in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (National Park Service 1983).