
INTRODUCTION

KCI Technologies, Inc. is providing services to complete the cultural resources studies for the Wooddale Bridge Replacement (Bridge 1-137) project at Wooddale, New Castle County (**Figure 1**). The investigations are being undertaken to facilitate compliance with Section 106 of the National Historic Preservation Act, and were conducted in accordance with *Guidelines for Architectural and Archaeological Surveys in Delaware* as published by the Delaware State Historic Preservation Office (1993).

The Wooddale Bridge project includes replacement of the bridge, which was washed away in September 2003, and work to stabilize the slope along the banks of the Red Clay Creek (**Figure 2**). As noted in the November 2004 Public Workshop notice, "The new bridge will be raised to limit flooding and will be on a new alignment that will allow for better access for large vehicles. The bridge will be a replica of the previous covered bridge but will be constructed with an increased vertical and horizontal clearance to accommodate local truck traffic. The bridge will remain one lane wide. Geometric features of both Foxhill and Rolling Mill roads will be improved to increase the safety of the roadways within the project limits." A temporary bridge currently provides access to the community of Wooddale.

KCI conducted the archaeological field investigations in late May and June of 2005. Marcia M. Kodlick, RPA, served as Project Manager and Principal Investigator. James T. Marine, MS, served as Principal Investigator/Field Director for Archaeology and Geomorphology, assisted in the field by James Skocik.

PROJECT AREA DESCRIPTION

The project area is located in the Delaware Piedmont Physiographic Province, essentially the foothills of the Appalachian Mountains, which lie to the west (Fenneman 1938). Red Clay Creek is a tributary of the Christiana River and drains an area of 54 square miles in Delaware and Pennsylvania.

The rocks of the Red Clay Valley are associated with the Wilmington Complex. The Wilmington Complex is a diverse association of metamorphic rocks that formed in an offshore volcanic setting. Although originally igneous and sedimentary, most of the exposed rocks have been buried, heated, and changed into metamorphic rocks. Mixed with the metamorphic rocks are various intrusive igneous rocks, such as gabbros, diorites, and granites. In the project area, Red Clay Creek winds through the Ordovician Barley Mill Gneiss described by Jordan (1964) as a coarse grained foliated tonalite gneiss. Major minerals include hornblende, plagioclase, biotite and quartz.

The project area is suburban in character, and land use adjacent to the roadway is predominantly residential. The Wooddale Covered Bridge, constructed circa 1850, provided access to the former Delaware Iron Works and the community of Wooddale.

Figure 2: Preliminary Engineering

(Figure contained in envelope at back of report)