underlies surficial sediments and grades to hard rock, is referred to as saprolite (Butzer 1976). Saprolite is the characteristic substrate in the project area.

Prehistoric archaeological sites in the Piedmont uplands are typically small, short-term occupation or single-episode use sites. Archaeological evidence for these sites is usually not extensive (Custer 1988), occurring mainly in the form of scattered lithic debris resulting from *ad hoc* tool manufacture, or the chipping of tools for specific, on-site uses. Except for special cases, such as rock shelters or lithic outcrops quarried for tool-making material, prehistoric archaeological sites are not usually found on steeply inclined slopes. Estimates for an incline threshold beyond which occupation sites are typically not found lie in the neighborhood of 15 percent[1] (Kavanagh 1981; Custer 1988; Stewart and Kratzer 1989). Sites that do occur on sloping terrain may be disturbed: either moved downslope as a whole, as part of one or more episodes of mass wasting (soil slump or soil creep); or deflated, forming lag deposits as smaller sediments are transported downslope through surface erosion. In contrast, if near the toe of a slope, sites may be buried by colluvial build-up.

Given the steep slopes within the current project area, only relatively level areas, such as benches on side slopes, would be expected to contain evidence of prehistoric archaeological activity. Sites present in these locations would be expected to be small, possibly lying in secondary or disturbed contexts. Colluvial deposition may also be present, if the bench is extensive enough to form a small toe. The depth of potential cultural deposition in the area will be directly related to the vertical position of saprolitic material in the soil column. That is, because highly micaceous sediment weathering out of the schist bedrock is pre-Holocene in age, where identified, the material implies that sedimentary deposits that developed prior to the arrival of humans in the region have been reached.

Field Methodology

Field testing consisted of the excavation of shovel test pits (STPs) placed on a 15 m interval in targeted areas. Due to the variability of the terrain, a continuous, systematic transect was not practical. The locations of individual tests were left to the professional discretion of the archaeological surveyors. Shovel tests measured 50 cm in diameter and were excavated to pre-Holocene deposits or 1 m in depth. Tests were excavated by

[1] Stewart and Kratzer (1989:27) note that the 15 percent figure "is a standard feature...of archaeological modeling." Custer (1988:32) notes that piedmont uplands sites tend to be located on 3-8 percent slopes.

observed stratigraphic level, and depths were measured relative to ground surface. All excavated soils were passed through quarter-inch mesh hardware cloth to maximize artifact recovery. Stratigraphic profiles of each test were recorded on standardized forms, listing soil texture, color, and inclusions. Recovered artifacts were bagged in polyethylene bags according to provenience. Provenience information for each artifact bag was recorded on a master Bag Inventory sheet. Shovel tests were numbered consecutively in order of excavation.

Preliminary Walkover

In planning a field strategy for the project, a walkover survey was conducted in co-ordination with Kevin Cunningham, of DelDOT. Areas were sought in which small terraces or benches were present that had the potential to contain evidence of prehistoric activity. As will be described in detail in the section that follows, the most likely locations occurred along stretches of right-of-way west of the road which exhibited little slope. With little slope, stabilization measures and realignment were not required: only resurfacing of the existing roadbed was scheduled. Since there was no potential impact from construction, these areas were not tested. Other stretches bore steep slopes with no level areas near the road cut, making them unsuitable for testing. Along two stretches, that measured approximately 150 m each, moderate slopes lay west of the road, and there was some evidence of terracing between the road cut and the side slope. These portions of the alignment were targeted for shovel test survey.

Survey Results

For descriptive purposes, the project area is divided into six sections (Figure 4). The sections correspond with engineering plans that subdivide the right-of-way into map sheets, each covering approximately 200 m of right-of-way length. Present conditions are summarized for each map sheet, and the potential for impact from the proposed road improvement is noted. Shovel testing was conducted in two sections, represented by Sheets 4 and 6, and the results of the tests are presented below, with those segments. Sample shovel test profiles are illustrated in Figure 5.

Sheet 1 (Figure 6)

Sheet 1 covers a length of 90 m, beginning at the intersection of Upper Pike Creek and New Linden Hill Road. Proposed development in this section consists of pavement