Kettering Park Site (18PA174)

Summary of Phase II Testing and Assessment of Significance

Phase II archeological testing was undertaken at the Kettering Park site in the spring and summer of 1983. The field work consisted of a series of shovel test pits dug at five-meter intervals in order to define site limits and to assess distributions of cultural material. This was followed by the excavation of ten one-meter squares and one 1.5 m by 1.5 m unit to assess the integrity of the site.

The site was found to occupy the entire low first terrace at the confluence of the western Branch and the Northeast branch. The site area is estimated to be about 4500 m$^2$, although only about 3500 m$^2$ was systematically tested since the site extends outside the proposed right-of-way. The range of artifacts recovered indicated occupation of the site from the Late Archaic through the Late Woodland; most of the cultural material dated to the Early Woodland. Ceramics dating from the Early through Late Woodland were present, with Accokeek ceramics most numerous. The controlled test units indicated that the Accokeek/Early Woodland material came from a layer approximately 25-30 cm below surface, and that this layer was undisturbed by plowing. Although considerable recent erosion has occurred, especially along the edges of the site, due to stream channelization and construction in the area, it appears that over the long term the site has been subject to accretional flood deposits which have capped the Early Woodland component.

No features were defined in the meter squares, although remains of over one-half of a single Accokeek vessel were recovered on the eroding edge of the site. This suggests that potential for preservation is quite good.

The proposed widening of Route 214 would impact approximately 2600 m$^2$, or a little over half the site, including those areas of apparent greatest artifact concentration and best preservation.

Site Significance

The integrity of the Accokeek component at the site appears to be very good. The upper 20-25 cm of the site have been disturbed by cultivation, use as a park, and recent erosion. However, since the site received accretional flood deposits in prehistoric times, the cultural remains appear to have good stratigraphic integrity. While no features were uncovered in the Phase II testing, the presence of Accokeek material in 9 of 11 control units at ca. 25-35 cm below surface has demonstrated the stability and uniformity of this layer across the site.

The site must also be considered a scarce archeological resource. While a number of Accokeek sites are known from the inland Patuxent River drainage, there has been only one reported excavated component to date, the King site by Thomas Mayr. The majority of known Accokeek sites are represented by mixed assemblages from plowzone contexts. Only one radiocarbon date for an Accokeek component in Maryland is reported in the literature (Wright 1973). Thus, while there are a number of Early Woodland sites in the interior coastal plain, there are few which have demonstrated good integrity.
Given the nature of the archeological remains, the Kettering Park site has high research potential. Its primary value lies in the isolation of an Early Woodland component. Even if features are not located, sampling the Accokeek component would provide a representative collection of artifacts associated with the phase and would allow specific statements concerning activities at the site. For example, there is a concentration of quartz pebbles unsuitable for tool-making which appear to have been crushed for pottery temper; thus it seems that pottery-making may have been an activity at the site. Other parts of the tool kit can be associated with the Accokeek phase stratigraphically and assessed for their functions and uses. Lithic materials could provide detail on the extent, direction and nature of trade and exchange systems operating in the Early Woodland relative to earlier and later periods.

Three varieties of Accokeek ceramics were identified at the site from Phase II testing. A sampling strategy as mitigation would provide a large enough sample to formally define these varieties.

If features are determined to be present, the additional research possibilities include radiocarbon dating and the assessment of floral remains, which may be well-preserved in the acid, silty soils. However, even without these materials, the site contains important information on the material culture of the Early Woodland occupants of the interior coastal plain which can be addressed through the artifact sample alone.

In sum, this site is considered to be eligible to the National Register of Historic Places because it is a scarce resource and has high research potential. Avoidance or appropriate mitigation efforts through sampling are recommended.

Proposed Impact and Recommendations

The proposed dualization of Route 214 would encroach approximately 40 meters into the Kettering Park site (see attached map). Thus the planned roadway would impact slightly over one-half of the site (approximately 2600 m$^2$). The preferred alternative would be avoidance of the site. However, if avoidance is not feasible a mitigation strategy of intensive sampling is recommended.

The proposed mitigation would consist primarily of a 10% sampling of the area of concentration of Early Woodland material (see attached map). This sampling would entail excavating thirteen 2m by 2m units in this area. In addition, two 2m by 2m units would be reserved for excavation elsewhere within the right-of-way or to open up additional areas for features. The large unit size would combine an effective sample size with increased efficiency in excavation. The plowzone/wash layer would be sifted in one quarter of each 2m x 2m square, then removed from the remaining three quarters without screening. Below the plowzone, the A2 horizon would be troweled by quadrant and artifacts would be provenienced by meter square with exact provenience of diagnostics. Features, if present, would be exposed in plan and excavated, with flotation samples taken. Finally, one of the four squares would be excavated to sterile subsoil.

A cost and time estimate for this proposed mitigation is attached.
COST AND TIME ESTIMATE

KETTERING PARK - PHASE III
(FY 86 rates)

FIELDWORK

Archeologist #1, 12 days @ $130/day $ 1,560
Archeologist #2, 12 days @ $125/day 1,500
Assistant Archeologist, 12 days @ $100/day 1,200
Crew Chief, 12 days @ $75/day 900
6 crew members, 10 days @ $65/day 3,900 $9,060

LABORATORY WORK

Archeologist #1, 5 days @ $130/day $650
Archeologist #2, 5 days @ $125/day 625
Assistant Archeologist, 37 days @ $100/day 3,700
Crew Chief, 37 days @ $75/day 2,775
3 crew members, 19 days @ $65/day 3,705 $11,455

REPORT PREPARATION

Archeologist #1, 32 days @ $130/day $4,160
Archeologist #2, 32 days @ $125/day 4,000
Secretary, 33 days @ $85/day 2,805 $10,965

DIRECT COSTS

Mileage, 3000 miles @ $.19/mile $570
Per diem (5) 2 1/2 weeks @ $40/day (4 days) 2000
Camera (2 1/4 format) 300
Report Duplication 400
Xerox 50
Telephone 600
Field Supplies 300
Lab Supplies 200
Radiocarbon 200 $4,520

TOTAL CONTRACT: $36,000
Kettering Park Site
Distribution of Early Woodland Ceramics from Shovel Test Pits