Mr. Eugene T. Camoneschi
Chief, Bureau of Project Planning
State Highway Administration
P. O. Box 717
300 West Preston Street
Baltimore, Maryland 21203

Re: Maryland Route 214 (Central Avenue), from Capital Beltway to Hall, Prince George's County P732-015-018-371

Dear Mr. Camoneschi:

In reply to the review of the above report by the State Historic Preservation Office, dated 18 October 1979, we would like to offer the following comments:

We concur with the methodological goals of the SHPO office, especially regarding the need for explicit reporting of survey techniques. Figures 5 and 6 are identical in aerial coverage to Figures 2 and 3, which clearly show the intensive survey areas. Separate maps were provided to increase map legibility. We understand the need for delineation of intensively surveyed areas for compilation of "write-off" zones for future projects. However, intensive survey provides much the same end result as identifying an area which has been re-contoured and paved for a parking lot; both situations can be considered "write-off" areas. If the SHPO requires separate symbols for urban development and intensive survey, these can be provided on future reports. Artifact photos in this instance would provide only limited additional data. The three projectile points are of fairly standard types and the pottery is undecorated. A Phase II report will presumably include re-analysis and illustration of previously recovered artifacts. Future Phase I reports will include artifact illustrations as appropriate. The type names of projectile points and pottery are given in the text on pages 8-9. These can be incorporated into the catalogue listings in future reports.

Regarding the budget, we did not include overhead at the request of SHA because the budget structures of contractors vary greatly. SHA under-
stands that overhead costs will be an additional line item in all Phase II projects. The addition of two radiocarbon dates and doubling the mileage allowance will raise the total budget from $4,110.00 to $4,460.00. The assumptions should have specified three rather than four archeological assistants. We agree that the Phase II reports can contribute to our archeological knowledge and concur that selected Phase II reports should be published, especially when a Phase III study is not performed. However, SHA is under no legal constraints to publish these reports; therefore, publication is not included as a budget item.

We appreciate the opportunity to address the SHPO's review, and trust that you will be in touch if we can be of further assistance.

Sincerely,

Tyler Bastian
State Archeologist

c.c.
J. Rodney Little

TB:TWE:pdt
Maryland Historical Trust  

October 18, 1979

Mr. Richard S. Krolak, Chief  
Environmental Evaluation Section  
State Highway Administration  
P.O. Box 717  
300 West Preston Street  
Baltimore, Maryland 21203

RE: Maryland Route 214 (Central Avenue), from Capital Beltway to Hall, Prince George's County  P732-015-018-371

Dear Mr. Krolak:

Wayne Clark has provided the following review of the above referenced survey by Terry Epperson:

"Terry Epperson's report on the resurvey of the Route 214 project contains several significant improvements over previous reports. Greater detail is given to describing the field methodology and survey results as well as to assessing the effect on and significance of sites. As a goal in Maryland archeology is to record where sites are not located as well as are located, the recording of the survey boundaries, field conditions, and sampling methodology is essential to long range planning and immediate research needs.

The author has begun to deal with these issues by marking the areas intensively surveyed on the topographic maps. However, Figures 5 and 6 do not note the areas which were intensively surveyed. This should be done. Areas severely altered by urban or other forms of development should also be noted with a different symbol. Recording of survey data needs to be standardized for all contractors so that comparable information is generated and can be utilized as a planning tool. At least one plate showing the artifacts recovered during the excavations should be provided. The artifacts listings on pages 7-8 should contain type names (when identifiable) for the projectile points and pottery.

The four areas of low density artifact scatters lack sufficient density or research value to be significant and, therefore, will not require additional investigations. For sites 18 Pr 116 and 18 Pr 132, the project will not affect the sites if the zone of impact is limited to an area less than 60 feet or less of the existing highway. Additional investigations of these sites will not be warranted unless subsequent planning determines that the sites will be affected.
Site 18 Pr 174 is currently within the proposed area of impact, is potentially eligible to nomination to the National Register and does require phase II testing to determine eligibility. The budget for the phase II testing is generally acceptable although it contains several errors and oversights which need correcting. An estimate for overhead should be included in the budget as should an item for publication of results. Funds for radiocarbon dates should be included. We encourage SHA to include a publication cost item for all phase II and III surveys as these investigations should contribute significantly to our knowledge. The assumptions call for a crew of four although the cost breakdown calculates for only three positions. The mileage estimate should be doubled to more accurately reflect anticipated commuting distances.

Having discussed this review with Wayne Clark, I concur that phase II investigations of site 18 Pr 174 are necessary to determine the eligibility of the site to the National Register. Additional investigations of the four random areas are not necessary.

Sites 18 Pr 116 and 18 Pr 132 will not require additional investigations unless the engineering plans indicate that they will be affected. I would appreciate the Division of Archaeology supplying the additional information requested in Wayne Clark's review. We look forward to receiving this data.

Sincerely,

J. Rodney Little
State Historic Preservation Officer

JRL/njm

cc: Tyler Bastian
Amy Schlagel
Rita Suffness
ARCHEOLOGICAL RECONNAISSANCE OF CENTRAL AVENUE (MARYLAND ROUTE 214) FROM
THE CAPITAL BELTWAY (I-495) TO HALL, PRINCE GEORGES COUNTY, MARYLAND.

S.H.A. Contract Number  P 732-015-018-371

Report submitted to the Maryland State Highway Administration

Terrence W. Epperson
September 1979

Abstract: Further investigation is recommended for one prehistoric site
potentially eligible for the National Register and subject to
adverse impact by dualization of Md. Route 214. Two other
prehistoric sites and four areas of negligible archeological
potential are identified in or near the study area. No historic
archeological sites were identified.
Archeological Reconnaissance of Central Avenue (Maryland Route 214) from the Capital Beltway (I-495) to Hall, Prince Georges County, Maryland.

S.H.A. Contract Number

Terrence W. Epperson
Division of Archeology
Maryland Geological Survey

INTRODUCTION

The present study is an investigation of historic and prehistoric archeological resources which might be impacted by the proposed dualization of Central Avenue (Maryland Route 214). The survey tract is a corridor 5.4 miles long, running from the Capital Beltway (I-495) east to Hall. Within that area, SHA proposes to: upgrade the existing two-lane road, construct an additional two-lane thoroughfare south of the existing right-of-way, realign the 495-202 segment slightly to the north, and upgrade the 214/202 intersection at Largo.

The entire study area is in Prince Georges County and is included on the Lanham (1971 PR) and Bowie (1970 PR) 7.5' USGS topographic quadrangles as shown in figures 1 through 4 of the present report.

ENVIRONMENTAL CONTEXT

The study area is located within the Western Shore division of the Atlantic Coastal Plain physiographic province. The majority of the tract is underlain by Tertiary (Eocene) Aquia Greensand. It also traverses two areas of undifferentiated Tertiary (Miocene) Chesapeake group deposits and lies at the interface of the Cretaceous Monmouth formation to the north and the Pleistocene Wicomico deposits to the south. Except for the immediate flood plain of the Western Branch, the entire survey area is on the Collington–Adelphia–Monmouth soil association. These are moderately to well-drained soils formed from sediments containing glauconite. The Western Branch flood plain soils are of the poorly drained Bibb–Tidal Marsh association (Kirby et al 1967; 6–7, sheets 22,23). The elevation of the survey tract ranges from 80 to 200 feet A.S.L. From east to west, the road crosses three tributaries of the Patuxent River, the largest intrastate river in Maryland. The streams are: a second order tributary of the Southwest Branch, the third order Western Branch, and the third order Northeast Branch which debouches into the Western Branch a short distance south of the study area. The climate is continental (i.e., short, moderately cold winters and long, warm summers) with a median annual precipitation of 43.8 inches. The upland vegetation is primarily of the Tulip Poplar Association which also includes red maple, white oak, and beech. The flood plain vegetation is generally the River–Birch–Sycamore association. Although some forested areas survive, the area as a whole has been heavily impacted by urban and agricultural development. Except for farmland at the eastern end of the tract, most of the area, especially south of the
highway, is presently in housing and commercial developments. The Southwest Branch tributary was displaced by the construction of I-495 interchange and the I495-MD202 area has been disturbed and recontoured.

ANTHROPOLOGICAL CONTEXT

The prehistory of the study area is best understood within the context of a generalized mid-Atlantic cultural-ecological sequence which relates human behavior to the changing biophysical environment.

The Paleo-Indian period (c. 10,000 to 8,000 B.C.) is the first known human occupation of the coastal plain and, as such, represents a period of adaptation to late Pleistocene glacial climate. The region was characterized by spruce and pine boreal forest which had a relatively low carrying capacity. As a result, human population density was fairly low and the semi-nomadic Paleo-Indian bands probably lived within fairly large, moderately well-defined territories. Although some floral foods and small mammals were utilized, the subsistence emphasis was upon now-extinct Pleistocene megafauna such as mammoth and giant sloth. The most diagnostic artifact types of the period are the characteristic fluted projectile points.

During the early part of the Archaic period (8,000 to 1,000 B.C.) climatic conditions ameliorated significantly, causing the extinction or displacement of many Pleistocene mammals. The period also saw a decline in spruce and pine with a corresponding shift to Carolinian mixed deciduous broadleaf forest, and by about 7,000 B.C. the climate and vegetation had stabilized to approximately modern conditions. In part because of the greater carrying capacity of the deciduous forest ecosystem, human population increased rapidly and by 6,500 B.C. had radiated throughout the coastal plain as indicated by widespread occurrence of Le Croy and other bifurcate base projectile points. Although hunting, especially of whitetail deer, remained important, the Archaic was a period of greater reliance on vegetal, riverine, and coastal resources. Increased territorial stability and specialization of resource exploitation resulted in a greater regionalization of material culture traits. Distinctive artifacts of this period include: a wide variety of stemmed, notched, and bifurcated base projectile points; ground and polished stone tools and ornaments such as axes, bannerstones, and gorgets; and steatite (soapstone) vessels.

The Woodland Period (1,000 B.C. to A.D. 1600) was characterized by a greater measure of socio-economic cooperation and control. Kinsey (1973: 230) postulates the existence of a social or economic "kick", such as the exploitation of a new food resource, to explain the onset of this period. Woodland culture was increasingly oriented toward the coastal estuaries and the major river systems. Although horticulture was practiced during the latter part of this period and large sedentary villages developed, seasonal transhumance was practiced and smaller, more ephemeral occupations were also present. Distinctive Woodland artifacts include: a wide variety of steatite-, shell-, sand-, and crushed stone-tempered ceramics; clay pipes, bone tools such as awls, needles, and fish hooks; and triangular quartz projectile points. During most of the
The historic period (1600 to present) the study area has been characterized by limited agricultural development. The 1861 and 1878 maps of the region indicate only scattered farmsteads. The 1938 aerial photographs show about 70% of the survey tract as agricultural, with the remainder of the land area still forested. The urban and commercial development which presently dominates the landscape is primarily of post WW II origin.

PREVIOUS INVESTIGATIONS

Two published studies and two unpublished surveys provide additional information about the archeological potential of the study area. The Stephenson et al. (1963) study of Piscataway Creek (located about 18 miles south southwest of the study area) and Wright's (1978) examination of the Severn River region (located about 16 miles northeast of the study area) both examined primarily semi-permanent to permanent Woodland period sites located on estuaries. Stephenson developed a cultural sequence based mainly upon ceramics which Wright refined by the use of Carbon-14 dating and reference to nearby sites which had been tested.

In 1977 Curry examined a corridor on Route 556 from Maryland Route 214 south to Maryland Route 202 and recorded no historic or prehistoric sites. Handsman and Quinn (1974) surveyed a 1000-foot wide corridor which included the entire extent of the present study area and recorded one prehistoric site (18 PR 116). They classify the site as a late Archaic (c. 2,000 B.C.) lithic scatter and collected one quartz square-stemmed projectile point (basal fragment), assorted lithic debitage, and historic glass sherds of unspecified age. The site is described as "...a fairly dense but spatially restricted occupation perhaps a station used by hunters traveling upriver" (1974: 6). They suggest controlled surface collection and test excavation prior to construction activities on Maryland Route 214.

Communication with the State Archeologist and examination of the Maryland Archeological Site Survey files revealed only one additional site in or near the study area. Site 18 PR 132 was recorded in 1975 by Tyler Bastian. It is described as a surface lithic scatter covering several plowed acres. One quartz triangular projectile point was collected, as well as assorted lithic debitage. Tom Mayr (personal communication to Tyler Bastian 1973) has also mentioned the existence of a "former site" at the confluence of the Western and Northeast Branches believed destroyed by housing development.

No historic archaeological sites or structures are recorded in the survey area (personal communication George Andreve, office of the State Historic Preservation Officer 1979). The 1861 Martenet map of Prince Georges county indicates the area was rural with scattered farm structures. The eastern 1.25 miles of Maryland Route 214 closely follow a road shown on the map. A dwelling with the notation "Marsham Waring" is shown at the present location of Kolbes Corner, but appears to be outside of the present survey tract. In 1740 a Richard Marsham Waring of Prince Georges county was sued for medical expenses (Papenfuse 1976: 251). An 1878 atlas of the area (Hopkins 1878: 20, 21, 29) shows the same road system and settlement pattern. The previously mentioned dwelling now has the notation "Mrs. Bowie" and no other structures are shown in or near
the survey tract. The Waring-Bowie dwelling, if located in the survey tract, was in an area now heavily developed for residential use, and no evidence of it is likely to remain.

During our fieldwork both previously recorded sites were visited. Site PR 132 is well north of the construction zone and should be safe from any impact. Our reexamination of PR 116 confirmed Handsman and Quinn's evaluation of its nature, however the paucity of material and the presence of tall corn made delineation of boundaries difficult. We concentrated our efforts upon the southern boundary, intensively surveying and shovel testing the area between the highway and the cornfield. During our reevaluation of the entire site, the following materials were collected, primarily from the cornfield:

- 6 pieces of quartz debitage
- 1 piece of quartzite debitage
- 1 piece of jasper (?) debitage, possibly heat treated

FIELD INVESTIGATIONS

On 26 and 27 July 1979, Terrence W. Epperson and Spencer O. Geasey (assisted by Dennis G. Curry on 27 July) of the Maryland Geological Survey, Division of Archeology, conducted an archeological reconnaissance of the Md 214 corridor as shown in figs 1-4. The survey was restricted to: a 300 foot wide corridor south of the existing highway, a 300 foot wide corridor north of the I-495--Md 202 segment of the existing highway, and a 300 foot wide area surrounding the Largo 214/202 intersection. In addition, special attention was given to the delineation of archeological areas subject to impact on the north edge of the existing right-of-way, although no specific corridor was defined. During the reconnaissance, the study area was traversed by vehicle and examined from different viewpoints. The following types of locations were examined on foot:

1) previously recorded sites in the project area;
2) exposed surfaces (such as all plowed fields, tree falls, erosional cuts, road cuts, and areas exposed by construction activities);
3) areas near drainages or on bluffs which are ecologically favorable for prehistoric site location;
4) areas where documents, maps, or informants indicate a possibility of historic or prehistoric site occurrence.

Within these areas shovel testing was done when necessitated by heavy ground cover conditions, or when we wished to further define the extent and nature of cultural material found on the surface.

As shown in Figs 1-4, approximately 60% of the survey tract was either intensively surveyed on foot, or was so heavily developed that the chances of finding either historic or prehistoric sites was nil. Survey conditions varied greatly within the tract. Several plowed fields had excellent ground visibility and good wash conditions. In
some additional areas ground cover had been removed for construction activities. Near the Patuxeny tributaries, the ground cover was generally heavy. Although the survey coverage was not total and the sample was not systematically or randomly selected, we believe it is nonetheless representative of the entire survey tract because of the wide variety of environmental contexts examined. The size of our sample and the low incidence of site occurrence revealed by our study indicate that further, more intensive survey in the study area is unnecessary.

During the 1979 field investigation one previously unrecorded site and four archeological areas were located. For the purpose of this report, an archeological area is defined as a locus which has one or more artifacts, but which appears to lack the necessary artifactual density or environmental and/or contextual integrity to warrant classification as an archeological site requiring further investigation.

Area 1 (18-PR-X/5) is located at the southeast corner of the Maryland Route 214-Church Road intersection, at the edge of a tilled cornfield. The ground visibility was about 40% with good wash conditions. We located about ten pieces of quartz debitage, but no diagnostic material. The location is in a low, saturated area with a large number of small, naturally occurring quartz cobbles. Shovel testing revealed sterile sandy clay topped by a 2-3 inch surface layer containing cobbles. No debitage or artifacts were located beneath the surface. The location of the material in a depression, the lack of diagnostics, the lack of depth, and the proximity to Church Road all indicate that the area is of negligible value for future archeological research. The material may have been redeposited; or may have resulted from, or have been disturbed by, the construction of Church Road. Two pieces of white quartz debitage were collected.

Area 2 (18-PR-X/6) is located about 150 feet south of Maryland Route 214 and consists of two widely separated, isolated artifacts in a clear, plowed field, with 100% ground visibility and good wash conditions. One large quartzite biface tip was collected and one quartzite flake was observed, but not collected. We thoroughly surveyed the area surrounding the finds, but located no other cultural material. The area overlooks a west-flowing first magnitude intermittent drainage to the south. Additional cultural material may be located closer to the drainage, but if so, the area would be safely removed from the zone of impact defined by SHA and was not surveyed.

Area 3 (18-PR-X/7) is a plowed, bare field with 100% ground visibility and good wash conditions south of Route 214, consisting of six widely scattered, isolated artifacts:

1 piece of jasper debitage
1 quartzite biface fragment
2 pieces of rhyolite debitage
2 pieces of quartz debitage (not collected)

The artifacts were scattered over an area about 300 feet in diameter and
although we thoroughly surveyed the area, no further material was located, nor could any area of concentrated artifact occurrence be defined. The environmental setting of this area is similar to that of area 2, and the material we located may be associated with possible additional material further south, but if so, any such area would be well out of the zone of impact.

Area 4 (18-PR-X/8) is a disturbed, bulldozed area about 100 feet in diameter at the southwest corner of the Route 214-Newbridge Road intersection, north of Kettering Baptist Church. Ground visibility was about 70% with good wash conditions. Five pieces of quartz debitage were observed (two collected) and one quartzite flake was collected. No other material nor any definable concentrations were observed. The location is entirely surrounded by highly developed areas.

The Kettering Park site (18 PR 174) is located on a very slight knoll a short distance east of the Western Branch of the Patuxent River, about 500 feet upstream (north) from the confluence of the Western and Northeast branches. Both branches are third order perennial streams, therefore the Western Branch becomes a fourth order stream at the confluence. Because of the proximity of the site area to those streams, the original owner-developer of the Kettering housing development could not obtain flood insurance for the area (it is classified as 100-year flood plain) and it was set aside as a private park-amenity. According to a life-long resident of the region, the site area has never been plowed, lumbered, or stripped of top soil, but it is subject to occasional severe flooding. Neither the historic maps or the 1938 aerial photos show any evidence of farming in the area. Some surface disturbance and collection have undoubtedly resulted from the use of the area as a picnic spot.

The site is lightly forested with fairly large (up to three feet in diameter) deciduous trees, primarily beech. The trees are generally on small mounds of soil with some exposed roots, factors which indicated at least moderate erosion of the site area. To the southwest of the site is a lower, swampy area, probably associated with the Northeast Branch. The surface artifact distribution measures approximately 180 feet in diameter, and although surface visibility is about 60% and wash conditions are good, the surface material is very sparse and scattered, and appears to be most concentrated on the western edge of the forested area, where the knoll begins to slope down toward the west. This may be an area where erosion has been especially severe and has uncovered a greater amount of the buried archeological component.

After gathering a thorough surface collection of diagnostic artifacts and representative debitage, we excavated six test pits as shown in figure 7. The placement of these pits was judgemental, based upon surface distribution and the desire to test different topographic settings within the site. Pit #2 was 18" by 18" by 24" deep. The remaining pits were 24" square with depths varying from 18 to 24 inches. The pits were excavated by shovel and trowel and all material was screened through ¼ inch mesh. All pits were excavated well into what appeared to be sterile soil. Most of the cultural material seemed to come from the
interface between the top, darker humus layer and the lower, more reddish
and sandy layer. The depth of the artifact bearing stratum varied from
about 7-12 inches in pit #2 to 2-4 inches in pit #6. It is a sandy loam
with the following Munsell color classifications:

Dry 5 YR 4/6 Yellowish Red
Wet 5 YR 3/4 Dark Reddish Brown

The artifact inventories for the surface and each test pit
are given below:

Surface (Catalog Lot 1)  1 fine sand-tempered body sherd
                       2 triangular quartz projectile points
                       1 expanding stem quartz projectile point
                       2 quartz biface fragments
                       6 pieces of quartz debitage
                       1 chert biface fragment
                       1 chert flake
                       2 jasper flakes
                       1 quartzite debitage
                       1 mother-of-pearl button (two-holed)

Test Pit #1 (no material recovered)

Test Pit #2
(Catalog Lot 2)  4 crushed quartz tempered sherds
                  reconstructed as one undecorated
                  rim sherd: Munsell color classification:
                  Dry 5 YR 6/8 Reddish Yellow
                  Wet 5 YR 4/8 Red
                  2 crushed quartz tempered sherds
                  reconstructed as one body sherd
                  3 crushed quartz tempered cord-marked
                  body sherds
                  1 crushed quartz tempered cord-marked
                  body sherd: with coil break
                  1 crushed quartz tempered cord-marked
                  undecorated rim sherd
                  6 shell tempered body sherds
                  1 piece rhyolite debitage
                  1 piece debitage, material unknown
                  1 piece quartzite debitage
                  8 pieces quartz debitage
                  1 piece chert debitage
                  1 quartzite spall

Test Pit #3
(Catalog Lot 3)  1 battered quartz cobble, possible
                  hammerstone
                  1 piece sandstone debitage
                  4 pieces quartz debitage
                  1 piece debitage, material unknown
Test Pit #4  
(Catalog Lot 4)  
1 piece rhyolite debitage  
3 pieces quartz debitage  
4 pieces quartzite debitage

Test Pit #5  
(Catalog Lot 5)  
1 shell-tempered body sherd  
1 crushed quartz, cord-marked body sherd  
1 piece rhyolite debitage  
1 piece quartzite debitage  
10 pieces quartz debitage  
1 quartz biface fragment  
1 soil sample

Test Pit #6  
(Catalog Lot 6)  
2 pieces quartzite debitage  
3 crushed quartz-tempered body sherds  
1 crushed quartz-tempered possible rim

The primary temporal affiliation of the Kettering Park site is probably Late Woodland (c. AD 800-AD 1600). The expanding stem projectile point collected from the surface appears to be of the Vernon type which Stephenson et al. (1963: 144, 182, 188, Plate XXIV) place in the Early and Middle Woodland periods; however, the remaining projectile points and all of the sherds appear to date from the Late Woodland period. The seven shell-tempered sherds may be of the Townsend Series (AD 900-AD 1500) (Artusy 1976: 4-5; Stephenson et al. 1963: 109-113), but the lack of rim sherds makes exact typing impossible. The single sand-tempered sherd is of the Moyaone Ware category and probably dates from AD 1300-AD 1650 (Stephenson et al. 1963: 120-123). The most numerous ceramic type in the Kettering inventory (16 of 24 sherds) is Potomac Creek Plain Ware which dates from the same period as Moyaone Ware (Clark 1976). The two quartz triangular projectile points are of the Potomac type (Stephenson et al. 1963: 145-146), which dates from the Late Woodland. These are similar to Ritchie's (1961: 33-34) Madison points.

The Moyaone and Potomac Creek Wares and the Potomac projectile points are elements of what Stephenson et al. (1963: 191-198) call the Potomac Creek Component. This was the last and best known pre-contact occupation of the Accokeek Creek site. The Potomac Creek occupation was a permanent village surrounded by a stockade of vertical posts. Human burial was in large ossuaries, each containing several hundred individuals. Corn, beans, squash, pumpkins, melons, gourds, tobacco, and other crops were probably grown, although deer, fish, shellfish, berries, roots, nuts, and seeds were also important dietary elements.

Although the Kettering Park site appears to have been contemporaneous with the Accokeek Potomac Creek component, its function was probably quite different. Whereas the Accokeek Creek site was a permanent village, the Kettering site probably represents a specialized, short-term occupation. The occurrence of natural quartz cobbles, a probable hammerstone, and a high proportion of cortical quartz flakes all suggest that one site function was the primary reduction of lithic material for the manufacturing of quartz tools, especially projectile points.
In his ecological study of early Middle Woodland sites in Delaware, Griffith (1976) posits a subsistence pattern which includes exploitation of resources in tidal marsh and/or bay areas, well-drained woodlands, and poorly-drained woodlands. The tidal marsh/estuarine area would have been used from mid-spring until mid-fall, for shellfish exploitation. From a semi-permanent fall and winter base camp in the well-drained woodlands, Griffith believes short-term hunting forays were made into the poorly-drained woodlands to obtain deer and migratory waterfowl. Because of the temporary nature of the site occupation, house structures and cooking and storage pits would probably be absent (Griffith 1976: 77-80).

The poorly drained woodlands component described by Griffith seems quite analogous to the environmental and cultural setting of the Kettering Park site. The soil at the site is mapped as Bibb silt loam which is poorly drained and remains wet for long periods. Although his model is not directly applicable to the Late Woodland period, it does demonstrate how the site could be an important element in the regional archeological record.

NATIONAL REGISTER SIGNIFICANCE

Under the criteria outlined by the Advisory Council on Historic Preservation, the three aboriginal sites in the study area (18-PR-116, 132, and 174) may be potentially eligible for inclusion on the National Register of Historic Places. Each of the sites may have the potential to yield "information important in prehistory" (1974: 3369-3370), and is deserving of either avoidance or further investigation. Because of their lack of artifactual density or environmental and/or contextual integrity, the four archeological areas outlined in this report are not eligible for National Register inclusion.

ASSESSMENT OF POSSIBLE IMPACT

Provided the zone of impact in the vicinity of sites 18-PR-116 and 132 is limited to an area 60 feet or less north of the existing highway, these sites will suffer no adverse impact as a result of the proposed construction. The Kettering Park site (18-PR-174), however, lies entirely within the 300-foot wide survey tract outlined by SHA. Until the exact construction corridor is outlined, we are unable to determine exactly what portions of the site will actually be impacted.

CONCLUSIONS AND RECOMMENDATIONS

If sites 18-PR-116 and 132 are avoided as outlined above, no further evaluation or mitigation work needs to be done in this area. Because of their non-eligibility for the National Register, no further work needs to be done at the four archeological areas. The Kettering Park site, because of its possible National Register eligibility and location within the construction area, requires further investigation.

A Phase II preliminary examination should be performed to determine more fully the nature, extent, and integrity of the site, and thereby determine its eligibility status. A tentative budget for this project is given in Appendix I.
REFERENCES CITED

Advisory Council on Historic Preservation 1974

Clark, Wayne 1976

Curry, Dennis G. 1977

Griffith, Daniel 1976

Handsman, R.G. and K. Quinn 1974

Hopkins, G.M. 1878

Kirby, Robert, et al. 1976

Papenfuse, Edward, et al. 1976

Richie, William A. 1961
Stephenson, Robert, et al.  

Wright, Henry T.  
APPENDIX I

Cost Estimate for Preliminary Site Examination
of Site 18-PR-174

In order to determine the National Register eligibility of 18-PR-174, a portion of the site area will need to be test excavated. Assuming a site area of approximately 4097m², the table below shows the area which would need to be excavated in order to obtain various sample fractions:

<table>
<thead>
<tr>
<th>Sample Fraction</th>
<th># of 2mx2m Pits</th>
<th># of 1mx2m Pits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% = 410m²</td>
<td>102.5</td>
<td>205</td>
</tr>
<tr>
<td>5% = 205m²</td>
<td>51.25</td>
<td>102.5</td>
</tr>
<tr>
<td>1% = 41m²</td>
<td>10.25</td>
<td>20.5</td>
</tr>
<tr>
<td>.5% = 20.5m²</td>
<td>5.125</td>
<td>10.25</td>
</tr>
</tbody>
</table>

We believe a 1% sample will be sufficient to define the extent and character of the site for determination of National Register eligibility and the need, if any, for a Phase III investigation. The following estimated budget is based upon a 1% sample of the site area, and further assumes:

1) a crew consisting of an archeologist/supervisor, a pedologist, and four qualified assistants;
2) a crew from the Baltimore-D.C. area so mileage, but not per diem, payments will be necessary;
3) the crew provides its own field and lab equipment.

Field
Archeologist/Supervisor @ $120/day x 5 days = $600.00
Pedologist @ $120/day x 1 day = $120.00
Three archeological assistants @ $40/day x 5 days = $600.00

Lab
One Lab Technician @ $40/day x 10 days = $400.00
Pedologist @ $120/day x 2 days = $240.00

Report Writing
Archeologist/Supervisor @ $120/day x 15 days = $1800.00
Typist/Clerk @ $40/day x 5 days = $200.00

Total Wages $3,960.00
Mileage 50.00
Supplies, duplication & report distribution 100.00
Total project expenses $4,110.00
This cost estimate and proposed timetable is provided so that the State Highway Administration may have an indication of the amount of time and money which may be needed to perform a preliminary site examination. The estimates provided are intended to represent averages which may vary depending upon the fees schedule and research strategy employed by individual investigators. Time has been budgeted consecutively, allowing for delays such as those imposed by inclement weather or other unforseen circumstances which may delay work.
APPENDIX II

Glossary

Biface: A stone tool (finished or unfinished) that has had flakes removed from two opposite sides so as to produce a roughly lenticular cross-section.

Projectile point: A point or blade chipped from stone and attached to the tip of an arrow, spear, or dart.

Settlement pattern: The way in which members of a society distribute themselves over a landscape to exploit the resources necessary for survival; the spatial arrangement of sites of a given social group in a given locality or region.

Shovel test: Irregular holes dug to locate possible cultural material below vegetation or ground surface. Shovel tested material is not screened.

Temper: Non-plastic material such as sand, crushed stone or shell which is added to clay paste to facilitate uniform drying during the manufacturing of pottery.

Test pit: A hole excavated to determine the depth and nature of cultural material at a known or suspected site. Test pits are generally 24 inches square, one to three feet deep, and the material is generally screened for artifacts.

APPENDIX III

Notes on Site Numbers

Sites are numbered following The Smithsonian trinomial system widely used by archeologists in the United States. The first unit is a numerical prefix identifying the state (18 is the designation for Maryland); the second unit is a two-letter county abbreviation; the third unit is the inventory number of the particular site within the county. For example, 18-AG-59 refers to the 59th site recorded in Allegany County, Maryland. Isolated artifacts which are not associated with any sites are designated with an "X" rather than a site number. For example, 18-AG-X/7 refers to the seventh isolated artifact or artifact group recorded in Allegany County.

APPENDIX IV

Terrence W. Epperson, Project Archeologist
M.A. in Anthropology, (Cultural Resource Management), Idaho State University

Dennis C. Curry, SHA Liaison
M.A. in Anthropology, The Catholic University of America, Washington, D.C.
Archaeological fieldwork in Maryland, Virginia and West Virginia including numerous cultural resources surveys.
Previously employed by the Thunderbird Research Corporation.

Spencer O. Geasey, Field Assistant
Thirty years experience in Maryland archeology
Publications on Maryland archeology in regional journals.
Figure 1. Project Location Map

- intensively surveyed areas

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000  (1" = 2000')
Figure 2. Project Location Map

- Intensively surveyed areas

Reproduced from the Lanham (1971) P.R. 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Figure 3. Project Location Map

\[\text{\[ intensively surveyed areas}\]

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000  (1" = 2000')
Figure 4. Project Location Map

--- intensively surveyed areas

Reproduced from the Bowie (1970 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Figure 6. Archeological Site Location

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Abstract: Further investigation is recommended for one prehistoric site potentially eligible for the National Register and subject to adverse impact by dualization of Md. Route 214. Two other prehistoric sites and four areas of negligible archeological potential are identified in or near the study area. No historic archeological sites were identified.
Archeological Reconnaissance of Central Avenue (Maryland Route 214) from the Capital Beltway (I-495) to Hall, Prince Georges County, Maryland.

S.H.A. Contract Number

Terrence W. Epperson
Division of Archeology
Maryland Geological Survey

INTRODUCTION

The present study is an investigation of historic and prehistoric archeological resources which might be impacted by the proposed dualization of Central Avenue (Maryland Route 214). The survey tract is a corridor 5.4 miles long, running from the Capital Beltway (I-495) east to Hall. Within that area, SHA proposes to: upgrade the existing two-lane road, construct an additional two-lane thoroughfare south of the existing right-of-way, realign the 495-202 segment slightly to the north, and upgrade the 214/202 intersection at Largo.

The entire study area is in Prince Georges County and is included on the Lanham (1971 PR) and Bowie (1970 PR) 7.5' USGS topographic quadrangles as shown in figures 1 through 4 of the present report.

ENVIRONMENTAL CONTEXT

The study area is located within the Western Shore division of the Atlantic Coastal Plain physiographic province. The majority of the tract is underlain by Tertiary (Eocene) Aquia Greensand. It also traverses two areas of undifferentiated Tertiary (Miocene) Chesapeake group deposits and lies at the interface of the Cretaceous Monmouth formation to the north and the Pleistocene Wicomico deposits to the south. Except for the immediate flood plain of the Western Branch, the entire survey area is on the Collington-Adelphia-Monmouth soil association. These are moderately to well-drained soils formed from sediments containing glauconite. The Western Branch flood plain soils are of the poorly drained Bibb-Tidal Marsh association (Kirby et al 1967; 6-7, sheets 22,23). The elevation of the survey tract ranges from 80 to 200 feet A.S.L. From east to west, the road crosses three tributaries of the Patuxent River, the largest intrastate river in Maryland. The streams are: a second order tributary of the Southwest Branch, the third order Western Branch, and the third order Northeast Branch which debouches into the Western Branch a short distance south of the study area. The climate is continental (i.e., short, moderately cold winters and long, warm summers) with a median annual precipitation of 43.8 inches. The upland vegetation is primarily of the Tulip Poplar Association which also includes red maple, white oak, and beech. The flood plain vegetation is generally the River-Birch-Sycamore association. Although some forested areas survive, the area as a whole has been heavily impacted by urban and agricultural development. Except for farmland at the eastern end of the tract, most of the area, especially south of the
historic period (1600 to present) the study area has been characterized by limited agricultural development. The 1861 and 1878 maps of the region indicate only scattered farmsteads. The 1938 aerial photographs show about 70% of the survey tract as agricultural, with the remainder of the land area still forested. The urban and commercial development which presently dominates the landscape is primarily of post WW II origin.

PREVIOUS INVESTIGATIONS

Two published studies and two unpublished surveys provide additional information about the archeological potential of the study area. The Stephenson et al. (1963) study of Piscataway Creek (located about 18 miles south southwest of the study area) and Wright's (1978) examination of the Severn River region (located about 16 miles northeast of the study area) both examined primarily semi-permanent to permanent Woodland period sites located on estuaries. Stephenson developed a cultural sequence based mainly upon ceramics which Wright refined by the use of Carbon-14 dating and reference to nearby sites which had been tested.

In 1977 Curry examined a corridor on Route 556 from Maryland Route 214 south to Maryland Route 202 and recorded no historic or prehistoric sites. Handsman and Quinn (1974) surveyed a 1000-foot wide corridor which included the entire extent of the present study area and recorded one prehistoric site (18 PR 116). They classify the site as a late Archaic (c. 2,000 B.C.) lithic scatter and collected one quartz square-stemmed projectile point (basal fragment), assorted lithic debitage, and historic glass sherd of unspecified age. The site is described as "...a fairly dense but spatially restricted occupation, perhaps a station used by hunters traveling upriver" (1974: 6). They suggest controlled surface collection and test excavation prior to construction activities on Maryland Route 214.

Communication with the State Archeologist and examination of the Maryland Archeological Site Survey files revealed only one additional site in or near the study area. Site 18 PR 132 was recorded in 1975 by Tyler Bastian. It is described as a surface lithic scatter covering several plowed acres. One quartz triangular projectile point was collected, as well as assorted lithic debitage. Tom Mayr (personal communication to Tyler Bastian 1973) has also mentioned the existence of a "former site" at the confluence of the Western and Northeast Branches believed destroyed by housing development.

No historic archaeological sites or structures are recorded in the survey area (personal communication George Andreve, office of the State Historic Preservation Officer 1979). The 1861 Martenet map of Prince Georges county indicates the area was rural with scattered farm structures. The eastern 1.25 miles of Maryland Route 214 closely follow a road shown on the map. A dwelling with the notation "Marsham Waring" is shown at the present location of Kolbes Corner, but appears to be outside of the present survey tract. In 1740 a Richard Marsham Waring of Prince Georges county was sued for medical expenses (Papenfuse 1976: 251). An 1878 atlas of the area (Hopkins 1878: 20, 21, 29) shows the same road system and settlement pattern. The previously mentioned dwelling now has the notation "Mrs. Bowie" and no other structures are shown in or near
the survey tract. The Warring-Bowie dwelling, if located in the
survey tract, was in an area now heavily developed for residential
use, and no evidence of it is likely to remain.

During our fieldwork both previously recorded sites were
visited. Site PR 132 is well north of the construction zone and should
be safe from any impact. Our reexamination of PR 116 confirmed Handsman
and Quinn's evaluation of its nature, however the paucity of material and
the presence of tall corn made delineation of boundaries difficult. We
concentrated our efforts upon the southern boundary, intensively surveying
and shovel testing the area between the highway and the cornfield. During
our reevaluation of the entire site, the following materials were
collected, primarily from the cornfield:

- 6 pieces of quartz debitage
- 1 piece of quartzite debitage
- 1 piece of jasper (?) debitage, possibly heat treated

FIELD INVESTIGATIONS

On 26 and 27 July 1979, Terrence W. Epperson and Spencer O.
Geasey (assisted by Dennis C. Curry on 27 July) of the Maryland
Geological Survey, Division of Archeology, conducted an archeological
reconnaissance of the Md 214 corridor as shown in figs 1-4. The
survey was restricted to: a 300 foot wide corridor south of the existing
highway, a 300 foot wide corridor north of the I-495—Md 202 segment of
the existing highway, and a 300 foot wide area surrounding the Largo
214/202 intersection. In addition, special attention was given to the
delineation of archeological areas subject to impact on the north edge
of the existing right-of-way, although no specific corridor was defined.
During the reconnaissance, the study area was traversed by vehicle and
examined from different viewpoints. The following types of locations
were examined on foot:

1) previously recorded sites in the project area;
2) exposed surfaces (such as all plowed fields, tree falls,
erosional cuts, road cuts, and areas exposed by construction
activities);
3) areas near drainages or on bluffs which are ecologically
favorable for prehistoric site location;
4) areas where documents, maps, or informants indicate a
possibility of historic or prehistoric site occurrence.

Within these areas shovel testing was done when necessitated
by heavy ground cover conditions, or when we wished to further define
the extent and nature of cultural material found on the surface.

As shown in Figs 1-4, approximately 60% of the survey tract
was either intensively surveyed on foot, or was so heavily developed
that the chances of finding either historic or prehistoric sites was
nil. Survey conditions varied greatly within the tract. Several plowed
fields had excellent ground visibility and good wash conditions. In
some additional areas ground cover had been removed for construction activities. Near the Patuxent tributaries, the ground cover was generally heavy. Although the survey coverage was not total and the sample was not systematically or randomly selected, we believe it is nonetheless representative of the entire survey tract because of the wide variety of environmental contexts examined. The size of our sample and the low incidence of site occurrence revealed by our study indicate that further, more intensive survey in the study area is unnecessary.

During the 1979 field investigation one previously unrecorded site and four archeological areas were located. For the purpose of this report, an archeological area is defined as a locus which has one or more artifacts, but which appears to lack the necessary artifactual density or environmental and/or contextual integrity to warrant classification as an archeological site requiring further investigation.

Area 1 (18-PR-X/5) is located at the southeast corner of the Maryland Route 214-Church Road intersection, at the edge of a tilled cornfield. The ground visibility was about 40% with good wash conditions. We located about ten pieces of quartz debitage, but no diagnostic material. The location is in a low, saturated area with a large number of small, naturally occurring quartz cobbles. Shovel testing revealed sterile sandy clay topped by a 2-3 inch surface layer containing cobbles. No debitage or artifacts were located beneath the surface. The location of the material in a depression, the lack of diagnostics, the lack of depth, and the proximity to Church Road all indicate that the area is of negligible value for future archeological research. The material may have been redeposited; or may have resulted from, or have been disturbed by, the construction of Church Road. Two pieces of white quartz debitage were collected.

Area 2 (18-PR-X/6) is located about 150 feet south of Maryland Route 214 and consists of two widely separated, isolated artifacts in a clear, plowed field, with 100% ground visibility and good wash conditions. One large quartzite biface tip was collected and one quartzite flake was observed, but not collected. We thoroughly surveyed the area surrounding the finds, but located no other cultural material. The area overlooks a west-flowing first magnitude intermittent drainage to the south. Additional cultural material may be located closer to the drainage, but if so, the area would be safely removed from the zone of impact defined by SHA and was not surveyed.

Area 3 (18-PR-X/7) is a plowed, bare field with 100% ground visibility and good wash conditions south of Route 214, consisting of six widely scattered, isolated artifacts:

1 piece of jasper debitage
1 quartzite biface fragment
2 pieces of rhyolite debitage
2 pieces of quartz debitage (not collected)

The artifacts were scattered over an area about 300 feet in diameter and
although we thoroughly surveyed the area, no further material was located, nor could any area of concentrated artifact occurrence be defined. The environmental setting of this area is similar to that of area 2, and the material we located may be associated with possible additional material further south, but if so, any such area would be well out of the zone of impact.

Area 4 (18-PR-X/8) is a disturbed, bulldozed area about 100 feet in diameter at the southwest corner of the Route 214-Newbridge Road intersection, north of Kettering Baptist Church. Ground visibility was about 70% with good wash conditions. Five pieces of quartz debitage were observed (two collected) and one quartzite flake was collected. No other material nor any definable concentrations were observed. The location is entirely surrounded by highly developed areas.

The Kettering Park site (18 PR 174) is located on a very slight knoll a short distance east of the Western Branch of the Patuxent River, about 500 feet upstream (north) from the confluence of the Western and Northeast branches. Both branches are third order perennial streams, therefore the Western Branch becomes a fourth order stream at the confluence. Because of the proximity of the site area to those streams, the original owner-developer of the Kettering housing development could not obtain flood insurance for the area (it is classified as 100-year flood plain) and it was set aside as a private park-amenity. According to a life-long resident of the region, the site area has never been plowed, lumbered, or stripped of top soil, but it is subject to occasional severe flooding. Neither the historic maps or the 1938 aerial photos show any evidence of farming in the area. Some surface disturbance and collection have undoubtedly resulted from the use of the area as a picnic spot.

The site is lightly forested with fairly large (up to three feet in diameter) deciduous trees, primarily beech. The trees are generally on small mounds of soil with some exposed roots, factors which indicated at least moderate erosion of the site area. To the southwest of the site is a lower, swampy area, probably associated with the Northeast Branch. The surface artifact distribution measures approximately 180 feet in diameter, and although surface visibility is about 60% and wash conditions are good, the surface material is very sparse and scattered, and appears to be most concentrated on the western edge of the forested area, where the knoll begins to slope down toward the west. This may be an area where erosion has been especially severe and has uncovered a greater amount of the buried archeological component.

After gathering a thorough surface collection of diagnostic artifacts and representative debitage, we excavated six test pits as shown in figure 7. The placement of these pits was judgemental, based upon surface distribution and the desire to test different topographic settings within the site. Pit #2 was 16" by 16" by 24" deep. The remaining pits were 24" square with depths varying from 18 to 24 inches. The pits were excavated by shovel and trowel and all material was screened through ½ inch mesh. All pits were excavated well into what appeared to be sterile soil. Most of the cultural material seemed to come from the
interface between the top, darker humus layer and the lower, more reddish and sandy layer. The depth of the artifact bearing stratum varied from about 7-12 inches in pit #2 to 2-4 inches in pit #6. It is a sandy loam with the following Munsell color classifications:

Dry 5 YR 4/6 Yellowish Red
Wet 5 YR 3/4 Dark Reddish Brown

The artifact inventories for the surface and each test pit are given below:

Surface (Catalog Lot 1) 1 fine sand-tempered body sherd
2 triangular quartz projectile points
1 expanding stem quartz projectile point
2 quartz biface fragments
6 pieces of quartz debitage
1 chert biface fragment
1 chert flake
2 jasper flakes
1 quartzite debitage
1 mother-of-pearl button (two-holed)

Test Pit #1 (no material recovered)

Test Pit #2 (Catalog Lot 2) 4 crushed quartz tempered sherds
reconstructed as one undecorated rim sherd: Munsell color classification:
Dry 5 YR 6/8 Reddish Yellow
Wet 5 YR 4/8 Red
2 crushed quartz tempered sherds
reconstructed as one body sherd
3 crushed quartz tempered cord-marked body sherds
1 crushed quartz tempered cord-marked body sherd with coil break
1 crushed quartz tempered cord-marked undecorated rim sherd
6 shell tempered body sherds
1 piece rhyolite debitage
1 piece debitage, material unknown
1 piece quartzite debitage
8 pieces quartz debitage
1 piece chert debitage
1 quartzite spall

Test Pit #3 (Catalog Lot 3) 1 battered quartz cobble, possible hammerstone
1 piece sandstone debitage
4 pieces quartz debitage
1 piece debitage, material unknown
Test Pit #4
(Catalog Lot 4)
1 piece rhyolite debitage
3 pieces quartz debitage
4 pieces quartzite debitage

Test Pit #5
(Catalog Lot 5)
1 shell-tempered body sherd
1 crushed quartz, cord-marked body sherd
1 piece rhyolite debitage
1 piece quartzite debitage
10 pieces quartz debitage
1 quartz biface fragment
1 soil sample

Test Pit #6
(Catalog Lot 6)
2 pieces quartzite debitage
3 crushed quartz-tempered body sherds
1 crushed quartz-tempered possible rim sherd

The primary temporal affiliation of the Kettering Park site is probably Late Woodland (c. AD 800-AD 1600). The expanding stem projectile point collected from the surface appears to be of the Vernon type which Stephenson et al. (1963: 144, 182, 188, Plate XXIV) place in the Early and Middle Woodland periods; however, the remaining projectile points and all of the sherds appear to date from the Late Woodland period. The seven shell-tempered sherds may be of the Townsend Series (AD 900-AD 1500) (Artusy 1976: 4-5; Stephenson et al. 1963: 109-113), but the lack of rim sherds makes exact typing impossible. The single sand-tempered sherd is of the Moyaone Ware category and probably dates from AD 1300-AD 1650 (Stephenson et al. 1963: 120-123). The most numerous ceramic type in the Kettering inventory (16 of 24 sherds) is Potomac Creek Plain Ware which dates from the same period as Moyaone Ware (Clark 1976). The two quartz triangular projectile points are of the Potomac type (Stephenson et al. 1963: 145-146), which dates from the Late Woodland. These are similar to Ritchie's (1961: 33-34) Madison points.

The Moyaone and Potomac Creek Wares and the Potomac projectile points are elements of what Stephenson et al. (1963: 191-198) call the Potomac Creek Component. This was the last and best known pre-contact occupation of the Accokeek Creek site. The Potomac Creek occupation was a permanent village surrounded by a stockade of vertical posts. Human burial was in large ossuaries, each containing several hundred individuals. Corn, beans, squash, pumpkins, melons, gourds, tobacco, and other crops were probably grown, although deer, fish, shellfish, berries, roots, nuts, and seeds were also important dietary elements.

Although the Kettering Park site appears to have been contemporaneous with the Accokeek Potomac Creek component, its function was probably quite different. Whereas the Accokeek Creek site was a permanent village, the Kettering site probably represents a specialized, short-term occupation. The occurrence of natural quartz cobbles, a probable hammerstone, and a high proportion of cortical quartz flakes all suggest that one site function was the primary reduction of lithic material for the manufacturing of quartz tools, especially projectile points.
In his ecological study of early Middle Woodland sites in Delaware, Griffith (1976) describes a subsistence pattern which includes exploitation of resources in tidal marsh and/or bay areas, well-drained woodlands, and poorly-drained woodlands. The tidal marsh/estuarine area would have been used from mid-spring until mid-fall, for shellfish exploitation. From a semi-permanent fall and winter base camp in the well-drained woodlands, Griffith believes short-term hunting forays were made into the poorly-drained woodlands to obtain deer and migratory waterfowl. Because of the temporary nature of the site occupation, house structures and cooking and storage pits would probably be absent (Griffith 1976: 77-80).

The poorly drained woodlands component described by Griffith seems quite analogous to the environmental and cultural setting of the Kettering Park site. The soil at the site is mapped as Bibb silt loam which is poorly drained and remains wet for long periods. Although his model is not directly applicable to the Late Woodland period, it does demonstrate how the site could be an important element in the regional archaeological record.

**NATIONAL REGISTER SIGNIFICANCE**

Under the criteria outlined by the Advisory Council on Historic Preservation, the three aboriginal sites in the study area (18-PR-116, 132, and 174) may be potentially eligible for inclusion on the National Register of Historic Places. Each of the sites may have the potential to yield "information important in prehistory" (1974: 3369-3370) and is deserving of either avoidance or further investigation. Because of their lack of artifactual density or environmental and/or contextual integrity, the four archeological areas outlined in this report are not eligible for National Register inclusion.

**ASSESSMENT OF POSSIBLE IMPACT**

Provided the zone of impact in the vicinity of sites 18-PR-116 and 132 is limited to an area 60 feet or less north of the existing highway, these sites will suffer no adverse impact as a result of the proposed construction. The Kettering Park site (18-PR-174) however, lies entirely within the 300-foot wide survey tract outlined by SHA. Until the exact construction corridor is outlined, we are unable to determine exactly what portions of the site will actually be impacted.

**CONCLUSIONS AND RECOMMENDATIONS**

If sites 18-PR-116 and 132 are avoided as outlined above, no further evaluation or mitigation work needs to be done in this area. Because of their non-eligibility for the National Register, no further work needs to be done at the four archeological areas. The Kettering Park site, because of its possible National Register eligibility and location within the construction area, requires further investigation.

A Phase II preliminary examination should be performed to determine more fully the nature, extent, and integrity of the site, and thereby determine its eligibility status. A tentative budget for this project is given in Appendix I.
**REFERENCES CITED**

Advisory Council on Historic Preservation  
1974  

Clark, Wayne  
1976  

Curry, Dennis  
1977  

Griffith, Daniel  
1976  

Handsman, R.G. and K. Quinn  
1974  

Hopkins, G.M.  
1878  

Kirby, Robert, et al.  
1976  
*Soil Survey of Prince Georges County, Maryland*. U.S. Department of Agriculture, Washington, D.C.

Papenfuse, Edward, et al.  
1976  

Richie, William A.  
1961  
Stephenson, Robert, et al.

Wright, Henry T.
APPENDIX I

Cost Estimate for Preliminary Site Examination
of Site 18-PR-174

In order to determine the National Register eligibility of 18-PR-174, a portion of the site area will need to be test excavated. Assuming a site area of approximately 4097m$^2$, the table below shows the area which would need to be excavated in order to obtain various sample fractions:

<table>
<thead>
<tr>
<th>Sample Fraction</th>
<th># of 2mx2m Pits</th>
<th># of 1mx2m Pits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% = 410m$^2$</td>
<td>102.5</td>
<td>205</td>
</tr>
<tr>
<td>5% = 205m$^2$</td>
<td>51.25</td>
<td>102.5</td>
</tr>
<tr>
<td>1% = 41m$^2$</td>
<td>10.25</td>
<td>20.5</td>
</tr>
<tr>
<td>.5% = 20.5m$^2$</td>
<td>5.125</td>
<td>10.25</td>
</tr>
</tbody>
</table>

We believe a 1% sample will be sufficient to define the extent and character of the site for determination of National Register eligibility and the need, if any, for a Phase III investigation. The following estimated budget is based upon a 1% sample of the site area, and further assumes:

1) a crew consisting of an archeologist/supervisor, a pedologist, and four qualified assistants;
2) a crew from the Baltimore-D.C. area so mileage, but not per diem, payments will be necessary;
3) the crew provides its own field and lab equipment.

<table>
<thead>
<tr>
<th>Field</th>
<th>Archeologist/Supervisor @$120/day x 5 days = $600.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedologist</td>
<td>@$120/day x 1 day = $120.00</td>
</tr>
<tr>
<td>Three archeological assistants</td>
<td>@$40/day x 5 days = $600.00</td>
</tr>
<tr>
<td>Lab</td>
<td>One Lab Technician @$40/day x 10 days = $400.00</td>
</tr>
<tr>
<td>Pedologist</td>
<td>@$120/day x 2 days = $240.00</td>
</tr>
</tbody>
</table>

**Report Writing**

| Archeologist/Supervisor | @$120/day x 15 days = $1800.00 |
| Typist/Clerk            | @$40/day x 5 days = $200.00    |

**Total Wages**

$3,960.00

**Mileage**

50.00

**Supplies, duplication & report distribution**

100.00

**Total project expenses**

$4,110.00
APPENDIX II

Glossary

Biface: A stone tool (finished or unfinished) that has had flakes removed from two opposite sides so as to produce a roughly lenticular cross-section.

Projectile point: A point or blade chipped from stone and attached to the tip of an arrow, spear, or dart.

Settlement pattern: The way in which members of a society distribute themselves over a landscape to exploit the resources necessary for survival; the spatial arrangement of sites of a given social group in a given locality or region.

Shovel test: Irregular holes dug to locate possible cultural material below vegetation or ground surface. Shovel tested material is not screened.

Temper: Non-plastic material such as sand, crushed stone or shell which is added to clay paste to facilitate uniform drying during the manufacturing of pottery.

Test pit: A hole excavated to determine the depth and nature of cultural material at a known or suspected site. Test pits are generally 24 inches square, one to three feet deep, and the material is generally screened for artifacts.

APPENDIX III

Notes on Site Numbers

Sites are numbered following The Smithsonian trinomial system widely used by archeologists in the United States. The first unit is a numerical prefix identifying the state (18 is the designation for Maryland); the second unit is a two-letter county abbreviation; the third unit is the inventory number of the particular site within the county. For example, 18-AG-59 refers to the 59th site recorded in Allegany County, Maryland. Isolated artifacts which are not associated with any sites are designated with an "X" rather than a site number. For example, 18-AG-X/7 refers to the seventh isolated artifact or artifact group recorded in Allegany County.

APPENDIX IV

Terrence W. Epperson, Project Archeologist
M.A. in Anthropology, (Cultural Resource Management), Idaho State University

Dennis C. Curry, SHA Liaison
M.A. in Anthropology, The Catholic University of America, Washington, D.C.
Archeological fieldwork in Maryland, Virginia and West Virginia including numerous cultural resources surveys.
Previously employed by the Thunderbird Research Corporation.

Spencer O. Geasey, Field Assistant
Thirty years experience in Maryland archeology
Publications on Maryland archeology in regional journals.
Figure 1. Project Location Map

 intensively surveyed areas

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
highway, is presently in housing and commercial developments. The Southwest Branch tributary was displaced by the construction of I-495 interchange and the I495-MD202 area has been disturbed and recontoured.

ANTHROPOLOGICAL CONTEXT

The prehistory of the study area is best understood within the context of a generalized mid-Atlantic cultural-ecological sequence which relates human behavior to the changing biophysical environment.

The Paleo-Indian period (c. 10,000 to 8,000 B.C.) is the first known human occupation of the coastal plain and, as such, represents a period of adaptation to late Pleistocene glacial climate. The region was characterized by spruce and pine boreal forest which had a relatively low carrying capacity. As a result, human population density was fairly low and the semi-nomadic Paleo-Indian bands probably lived within fairly large, moderately well-defined territories. Although some floral foods and small mammals were utilized, the subsistence emphasis was upon now-extinct Pleistocene megafauna such as mammoth and giant sloth. The most diagnostic artifact types of the period are the characteristic fluted projectile points.

During the early part of the Archaic period (8,000 to 1,000 B.C.) climatic conditions ameliorated significantly, causing the extinction or displacement of many Pleistocene mammals. The period also saw a decline in spruce and pine with a corresponding shift to Carolinian mixed deciduous broadleaf forest, and by about 7,000 B.C. the climate and vegetation had stabilized to approximately modern conditions. In part because of the greater carrying capacity of the deciduous forest ecosystem, human population increased rapidly and by 6,500 B.C. had radiated throughout the coastal plain as indicated by widespread occurrence of Le Croy and other bifurcate base projectile points. Although hunting, especially of whitetail deer, remained important, the Archaic was a period of greater reliance on vegetal, riverine, and coastal resources. Increased territorial stability and specialization of resource exploitation resulted in a greater regionalization of material culture traits. Distinctive artifacts of this period include a wide variety of stemmed, notched, and bifurcated base projectile points; ground and polished stone tools and ornaments such as axes, bannerstones, and gorgets; and steatite (soapstone) vessels.

The Woodland Period (1,000 B.C. to A.D. 1600) was characterized by a greater measure of socio-economic cooperation and control. Kinsey (1973: 230) postulates the existence of a social or economic "kick", such as the exploitation of a new food resource, to explain the onset of this period. Woodland culture was increasingly oriented toward the coastal estuaries and the major river systems. Although horticulture was practiced during the latter part of this period and large sedentary villages developed, seasonal transhumance was practiced and smaller, more ephemeral occupations were also present. Distinctive Woodland artifacts include: a wide variety of steatite-, shell-, sand-, and crushed stone-tempered ceramics; clay pipes, bone tools such as awls, needles, and fish hooks; and triangular quartz projectile points. During most of the
This cost estimate and proposed timetable is provided so that the State Highway Administration may have an indication of the amount of time and money which may be needed to perform a preliminary site examination. The estimates provided are intended to represent averages which may vary depending upon the fees schedule and research strategy employed by individual investigators. Time has been budgeted consecutively, allowing for delays such as those imposed by inclement weather or other unforseen circumstances which may delay work.
Figure 2. Project Location Map

- ■■■■ intensively surveyed areas

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Figure 3. Project Location Map

- Intensively surveyed areas

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Figure 4. Project Location Map

- intensively surveyed areas

Reproduced from the Bowie (1970 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Figure 5. Archeological Site Location

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Figure 6. Archeological Site Location

Reproduced from the Lanham (1971 P.R.) 7.5' U.S.G.S. quadrangle map

Scale 1:24,000 (1" = 2000')
Fig. 7

THE Kettering Park Site 18-PR-174

T. Epperson 27 July 1979

Scale
1 in. = 30 ft.