



introduction

ROUTES 4, 7, & 273:
AN ARCHAEOLOGICAL SURVEY

INTRODUCTION

The Location and Identification Surveys discussed in this project report were undertaken by Mid-Atlantic Archaeological Research, Inc. (MAAR) under authorization of Agreement 190 of the Delaware Department of Transportation. This agreement, dated June 6, 1979, followed the development of a Scope of Work and the submission of unpriced and priced research proposals. Work on the projects was initiated immediately upon the signing of the contract.

The surveys were necessitated due to Division of Highways (DOT) plans to widen and/or construct highway arteries located in New Castle County, Delaware. These construction projects, aided by Federal Highway Administration funding, were subject to Section 106 requirements and consequently were reviewed by the Delaware State Historic Preservation Officer. Review indicated the likelihood that cultural resources might be adversely impacted and the recommendation that location and identification surveys be conducted was made.

On January 29, 1979 a Public Announcement, Request for Consulting Services (Chapter 69, Title 29, Delaware Code) was published in Delaware newspapers. The announcement contained a brief Scope of Work and asked that letters of interest be submitted by qualified firms to the Office of Administration, Department of Transportation.

Mid-Atlantic Archaeological Research, Inc. was requested to submit an unpriced proposal on March 23, 1979. Following an oral presentation of the proposal, MAAR was, on April 24, 1979, informed that it was selected to conduct the survey project. Agreement 190 resulted.

Project Description

The three separate highway projects were combined due to their close proximity and their location within a single macro-environmental region. It was felt that similar conditions would prevail in such cultural activities as settlement location, subsistence activities, technological raw material acquisition, etc. Consequently, the Scope of Work called for the development of a unified research strategy and the submission of a single project report.

Delaware Route 4 runs from Route 896 south of Newark in the western part of the State, to the eastern border of Delaware near New Castle. The proposed highway development project involves the construction of new ROW connecting the existing Route 4 at its junction with Route 896 with Route 2 southwest of the City of Newark. The existing highway would then be widened, and in some places rerouted, from Route 896 to its junction with Route 7 near Stanton, Delaware. The Route 7 highway project involves the widening of the existing road from its crossing of Interstate 95 to its terminus in the town of Stanton. Delaware Route 273 involves the relocation of the existing road on a new ROW around the town of Christiana, creating a southwestern bypass of that community.

Figure I-1 illustrates the proximity of the three highway construction projects to one another and relates them to surrounding portions of New Castle County, Delaware. As discussed later, all projects fall within the Christina River drainage basin and represent segments of that basin from its uppermost reaches just below the fall line to the easternmost tidal stream lined with tidal marshes. The environmental parameters presented within the study area will be discussed in Section II of this report.

The research proposal submitted by Mid-Atlantic Archaeological Research, Inc. and further developed in Section II was primarily based upon the setting (within the transition from the Piedmont to the Coastal Plain) within which the study area falls. Appended to this report (Appendix C and D) is the Scope of Work and the Research Proposal under which this investigation was conducted. In brief, this project consisted of background research and archival study; the development of a predictive model of prehistoric settlement; surface survey (both vehicular and pedestrian); and subsurface testing. The report followed an analysis of data recovered and an evaluation of resource significance. As requested in the Scope of Services, the summary and recommendations section of this report includes an assessment of the potential adverse impact of the proposed construction activities upon cultural resources.

Research Activities

This brief discussion of research activities engaged in by MAAR personnel is intended to allow for an evaluation of the adequacy of the survey techniques applied to each section of the investigation and each segment of the proposed highway construction. Archival research was conducted to identify sites of archaeological resources of the historic period. Those standing historic structures previously identified by the Bureau of Archaeology and Historic Preservation as culturally significant were not subjected to further research except when it was necessary to identify periods of occupation for interpretation of recovered artifactual data. Basically, archival research can be equated with map research.

The field survey began after the completion of a background study of known archaeological resources (primarily prehistoric) and existing (and past) environmental parameters. A vehicular survey allowed the survey team to identify areas of apparent surface modification (grading, cutting and filling) as well as to become familiar with the construction plans. This was followed by a pedestrian survey in which the survey team carefully examined all exposed ground surfaces within the ROW's of each highway project (100% of all exposed ground was examined). Survey personnel recorded exact proveniences of surface finds as well as estimates of ground visibility (an indication of the need for further testing).

Subsurface testing consisted of the excavation of post-hole tests and, when appropriate, measured test units. All excavations were taken down to subsoil levels and soil removed was screened for recovery of cultural material. Profiles were drawn of each excavation and provenience of the unit was entered on the high-

way "Location and Concept" plans. Plan views, when needed, were recorded on printed unit forms and associated data included. Photographs of all significant discoveries were taken and are on file for further study as needed.

It should be noted that the project schedule called for an examination of cultivated fields during several seasons in order to allow for adequate visibility in cases when surface vegetation obscured the exposed ground. Testing of subsurface deposits was conducted in the summer of 1979 and in early 1980 when it became apparent that additional data would be needed to properly evaluate identified resources. These methods of investigation appear to be valid and useful in surveys of corridor ROW's.

Analysis, for the purpose of identification of resources and assessing or evaluating significance in terms of National Register eligibility, followed the completion of field investigations. The attached inventory (Appendix A) lists all artifacts found during the surface and subsurface investigations and identifies the general period of derivation for each (when such identity is possible). These items are generally discussed in the segment survey section of this project report (Section III).

The format used in reporting the results of the survey activities segments the three highway ROW's into workable units, each of which contains similar environmental and/or developmental parameters. Segments are identified with letter designations (sequential from west to east, or south to north) and those loci subjected to further investigation include a numerical subdesignation. Each segment of the survey is discussed separately.

Definition of Cultural Resources

The cultural resources dealt within this study are archaeological sites here defined as loci of past (and present) human activity with defineable boundaries. This includes concentrations of aboriginal materials (i.e. flakes, projectile points, broken cobbles, fire cracked rock, ceramics, etc.), concentrations of historical materials (i.e. ceramics, bricks, nails, glass fragments, metal artifacts, etc.), isolated artifact find spots, historically documented dwelling sites (no longer standing) and standing structures of an historical nature.

Those areas designated as archaeological sites in the study area are described in the Field Investigations section of this report and in Appendix H. Each area is located geographically in Appendix G as site area sketches on the Segment and Loci Location Maps.