surface testing of wooded areas dividing plowed fields from bluffs along the major drainages. The sites are small and appear along most of the major stream headlands studied. Furthermore, they are almost all unplowed and would have been, and were, missed in previous studies which focused primarily on surface survey of cultivated fields. Thus, there really is no absence of Woodland II sites in the study area and there is no need to invent a "buffer zone."

It can be noted that Woodland II sites in the northern portions of the study area are generally smaller than the Woodland II sites found farther south on the Delmarva Peninsula (Custer 1984a:157-171; Custer and Griffith 1986). However, the Woodland II sites of the study area fall well within the range of site sizes seen among Woodland II sites of the Minguannan and Slaughter Creek complexes (Custer 1984a:155-157; Stewart et al. 1986).

There seems to be little difference in site location preferences between the Woodland I and Woodland II periods (Custer et al. 1986). This implies that there was no Woodland II shift to more agriculturally productive soils and that the Woodland I intensive gathering/hunting subsistence pattern was continued into the Woodland II Period. Comparison of Woodland II settlement/subsistence systems is an important research topic in order to understand culture change in Delaware during late prehistoric times, and was, therefore, a goal of the present survey.

FIELD, LAB, AND RESEARCH METHODS

The Phase II archaeological field methods included the excavation of a mixture of shovel test pits (STPs) and 1m x 1m test units within and around areas defined as prehistoric archaeological sites by the Phase I survey (Bachman et al. 1988). Testing was concentrated, but was not confined to the limits of the proposed right-of-way because one of the primary goals of the Phase II survey was to determine site limits.

The standard excavation procedure used to determine site limits and gather initial archaeological data was to place shovel test pits at 10 meter intervals in a grid pattern over the site. The interval was reduced to 5 meters in areas of high artifact density or areas with a high potential for prehistoric features. The goal of shovel testing was to gather data on artifact distributions, site stratigraphy, and the stratigraphic context of artifacts and features. Special emphasis was placed on the detection of cultural features and the identification of intact, artifact-bearing stratigraphic contexts.

Shovel test pits were laid out and described according to grid coordinates established by transit. All soils excavated were passed through 1/4-inch mesh and all cultural materials recovered were bagged according to the individual shovel test pits and the arbitrary or natural excavation levels. Stratigraphic soil data and a record of all cultural materials found were kept for each shovel test on standardized log sheets.

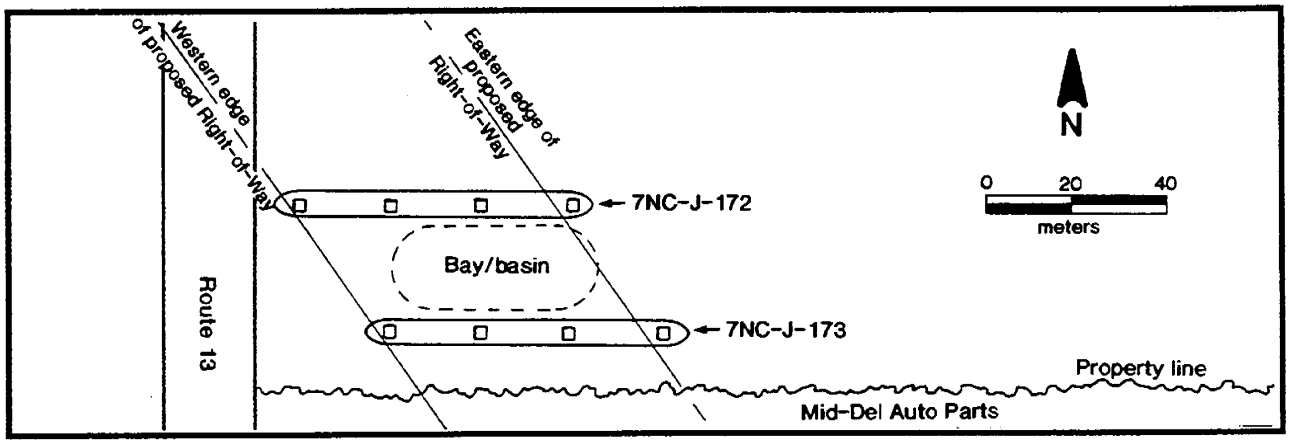
Measured 1m x 1m test units were excavated in areas of high artifact density or atop prehistoric features identified by archaeological testing. All of the test units were excavated to sterile soil unless large prehistoric features were encountered. Small prehistoric features such as hearth areas were completely excavated, while larger features such as habitation and storage pit features were sampled. All excavated soil was screened through 1/4-inch mesh and detailed stratigraphic and prehistoric feature records were kept on standardized forms. Charcoal samples were collected for radio carbon dating, soil samples were taken for chemical and flotation analysis, and drawings were made of all soil profiles. All subsurface excavations were executed according to natural soil levels or systematic arbitrary levels. All feature soils were excavated and screened separately.

Test units were located and described by the coordinates of their southwest corners as determined by the same transit grid as the Phase II shovel test pits. All subsurface tests were mapped on 1/600th scale, one-foot contour field maps (scale: 1 inch equals 50 feet) provided by the Division of Highways. These highly accurate maps were keyed to the centerline surveyors stations (STA) and allowed for the accurate placement of finds made during the Phase II survey.

Prior to a detailed artifact analysis, the standard artifact processing procedures of the Delaware Bureau of Museums were applied to all artifacts recovered from the Phase II excavations. All artifacts were cleaned in the lab

FIGURE 10

Site 7NC-J-172 and 7NC-J-173 - Site Limits and Location of all Phase II Tests



with plain water and placed in bags labeled with the site number and a three digit provenience number. Artifacts were sorted in categories for cataloging based on their raw material and morphological composition. Artifact inventories for each site are provided in Appendix I.

Because lithic resource availability and organization of lithic technologies are associated with patterns of social organization and adaptation, it is important to know how such resources were utilized during times of prehistoric occupation. One means of determining lithic resource procurement strategies and utilization is by conducting an attribute test on debitage recovered from archaeological sites designed to indicate whether that debitage originated from prepared cores or bifaces (Appendix II). An attribute test was conducted for this purpose on randomly selected samples of debitage from six of the sites in the project area which date to Woodland occupations (7NC-J-134, 7K-C-359, 7K-C-363, 7K-C-364, 7K-C-367, and 7K-D-22).

PHASE II RESULTS

Phase II testing of archaeological sites along the State Route 1 Relief Route was intended to (1) evaluate the integrity of the sites, (2) locate any prehistoric subsurface features, (3) determine the culture complexes present, (4) assess the significance of cultural resources located by the prior surveys, (5) define the limits of the sites, and (6) determine whether the sites were eligible for listing on the National Register of Historic Places.

7NC-J-172

7NC-J-172 is located within the proposed State Route 1 Relief Route right-of-way east of Route 13 and south of N.C. Road 485 (Figure 2). The site is situated in an agricultural field on a ten-foot slope of Sassafras sandy loam soil on the north rim of a bay/basin feature (Figure 10). The entire site has been plowed. One meter by one meter units were excavated in the area of highest artifact density as determined by Phase I testing. The limits of the site and the location of all Phase II test units are shown in Figure 10.

Phase I Summary

Phase I testing consisted of a pedestrian survey which identified a square-stemmed projectile point, a unifacial flake tool, and two fire-cracked rocks. Because of the presence of the point, diagnostic of the Woodland I period, and artifacts known to be associated with particular types of activities in prehistory, and because of the site's location adjacent to a bay/basin, it was determined that Phase II testing was warranted (Bachman et al. 1988).