

8.0 SUMMARY AND CONCLUSIONS

8.1 SUMMARY OF FINDINGS

The Bridge 2-210A project area is located in a small strip of land that is bisected by a paved road, drainage ditches, borrow pits, and plowing and is surrounded on three sides by marshland. Four sections of the project area, as defined by the LOC and existing landmarks, were examined as part of the Phase I cultural resource survey. Two of the areas, Areas B and D, were located north and south of Shady Bridge Road (K210) as it turns eastward and crosses Culbreth Marsh Ditch at Bridge 2-210A. Both areas contained fill used to raise the road above wetlands bordering the ditch. No archaeological resources were discovered in these areas. The third area, Area A, was a very narrow strip west of K210 in the approach to the bridge from the south. Area A was 5 m wide, situated between the cut bank of the road and the western edge of the project area, or LOC. Prehistoric artifacts recovered from shovel tests in this area were limited to seven flakes and five small thermally altered stone fragments.

The final area, Area C, was the largest and widest of the four sections. It was located east of the road, opposite Area A. Most of the survey field effort was concentrated in this part of the project area. Seventeen historical artifacts, 247 prehistoric artifacts, and 3 bone fragments were recovered from 18 STPs and four 1 by 1 m test units excavated in Area C. The historical material consisted of fragments of modern bottle glass, a nail, and a piece of clinker or coal ash, debris that is typical of refuse found near the margins of well-traveled roads. Archival research indicated that no structures were known in the project area. Other than Choptank Mill, all of the structures documented within a one-mile radius of the bridge were framed residential structures from the late-nineteenth or early-twentieth centuries. Artifacts recovered from the excavations in the Bridge 2-210A project area could not be associated or linked to a specific site or structure in the vicinity.

The prehistoric artifacts from Area C included 99 pieces of flaking debris (flakes or chips), 19 ceramic vessel sherds, 1 ceramic pipe fragment, and 128 thermally altered stone fragments. With the addition of the artifacts from Area A, the totals for the entire site were 106 pieces of flaking debris and 133 fragments of thermally altered stone (ceramic totals remained the same). Horizontally, the artifacts were concentrated near the center of Area C, on the high point of the terrace. Cluster analysis of the shovel test data from both Areas A and C suggested that the artifact distribution encompassed approximately 1,650 m², extending across both sides of the road. The entire the horizontal area surveyed in Areas A and C comprised 2,450 m².

Vertically, the artifacts were concentrated at or near base of the A horizon (A_o in the woods, or A_p in the open field) and continued into the less-disturbed E horizon levels. Examination of the profile sections of test units indicated that the E horizon was well-penetrated by roots and other surface-generated biological activity, implying that vertical mixing of deposits might be expected. Artifact analyses corroborated this finding. Artifact types varied little with depth, suggesting that the material represented limited cultural deposition that had spread vertically. The artifacts were, for the most part, small—approximately 75 percent of the flaking debris were found to be size-grade 2 or below (≤ 2 mm), while the mean weight of

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thermally altered stone fragments was approximately 16 g. The sizes of the artifacts would have contributed to their ability to migrate vertically in a biologically active part of the soil column.

Diagnostic artifacts from the excavations included ceramic sherds of a single ware, Wolfe Neck, a quartz-tempered ceramic that is characteristic of Early Woodland occupation. The horizontal distribution of the sherds, including those recovered from shovel tests and test units, indicated that they were confined to a relatively small area (Figure 8-1). Given their distribution as well as similarities in paste and surface treatment, all of the sherds may have been derived from the same vessel. A ceramic pipe fragment was also recovered from the same area. While it was not diagnostic of a specific temporal period, similar pipes can be common in Early Woodland assemblages. Thus, the chronological data from the excavations implies the possibility that the deposits represented a single temporal component.

8.2 COMPARATIVE ANALYSIS: LOCUS A

On the basis of proximity and similarity of landform, the DeSHPO determined that the prehistoric cultural material in the Bridge 2-210A project area should be considered part of the existing prehistoric archaeological site, 7K-E-91, that is located approximately 100 m southeast of the bridge. The existing site was designated Locus A, and the current site, Locus B (Figure 8-2). Supplemental cultural resources forms were prepared for Locus B (Appendix D).

The artifact collection from 7K-E-91, Locus A, was the result of surface collection conducted in the late 1960s in the plowed field that overlapped the southern end of the current project area (Delaware State Museum 2003). An inventory of those artifacts was compiled by personnel from the Delaware State Museum and DeSHPO. A listing of the inventory is included in Appendix E of this report. Table 8-1 contains a summary of the data.

Artifact type ratios were dissimilar between the two parts of the site (Table 8-2), although most of the variation may be attributable to differences in recovery techniques used in the two areas. The main differences were variations in the ratio of chipped stone-to-thermally altered stone fragments, variations in the ratio of ceramics-to-chipped stone, and the absence of lithic tools from Locus B. In the case of chipped versus thermally altered stone, the ratio from Locus A (1.7:1.0) was considerably higher than that from Locus B (0.8:1.0). This finding probably reflects different recovery techniques, rather than different artifact frequencies, since thermally altered stone fragments, particularly when small, are often more consistently recovered as a result of excavation and screening processes than during surface collection. The ratio of ceramic-to-chipped stone artifacts might also be influenced by the different collection procedures employed. Most of the flaking debris recovered from Locus B was small. If a similar size range of flaking debris were assumed at Locus A, artifact visibility may have been affected since small flakes can be difficult to see on the surface of a plowed field. Thus, recovery rates may have been lower in that part of the site.

The lack of tools in Locus B could be the result of a real difference in artifact distribution, indicating different activities in the two parts of the site. The variation might alternatively be a matter of sampling bias: few tools were recovered overall from Locus A, which may imply that the likelihood of recovering additional examples in other parts of the site would be low.

There were also differences in the chronological data from the two areas. While Locus B contained artifacts that were probably from a single temporal period, the Early Woodland, evidence from Locus A suggested that more than one temporal component was present there. As in Locus B, all of the diagnostic artifacts from Locus A consisted of ceramic sherds, and the majority were identified as Wolfe Neck. Yet a sherd of Middle Woodland Mockley was recovered, as well as a sherd of an unidentified ware that was mica and possibly shell-tempered.

In summary, comparative analyses of artifacts from Locus A and Locus B of 7K-E-91 suggested that there were differences between the artifact collections from the two areas. Yet

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in most instances, these differences could be attributed at least in part to aspects of the recovery techniques employed at the sites. Given this finding, the artifacts from the two areas

Table 8-1. Surface Collected Artifacts from Site 7K-E-91, Locus A
(Delaware State Museum 2003).

Artifact Type	Description	Total
Lithics:		
<i>bifacial tool fragment</i>	quartz	1
<i>cobble tool</i>	quartzite (one bifacial working edge)	1
<i>cobble</i>	jasper (tested or a tool)	1
<i>cobble, altered?</i>	hammerstone/anvil?	1
<i>flaking debris</i>	quartzite, quartz, jasper, chert/flint, chalcedony, (all derived from cobble)	64
<i>thermally altered stone</i>	quartz (some reduced & shattered cobbles, looks like pot-boiling stones)	38
Ceramics:		
<i>Wolfe Neck</i>	cord-marked (24 body sherds, 2 rim sherds)	26
<i>Mockley</i>	cord-marked	1
<i>type undetermined</i>	mica-tempered (may be mixed with shell temper)	1
<i>type undetermined</i>	cord-marked (heavily eroded)	1
<i>type undetermined</i>	(thin, smooth paste)	1
<i>body spalls</i>	(interior surface only)	3
	Total	139

**Table 8-2. Comparative Analysis: Artifact Type Distributions 7K-E-91,
Locus A and Locus B.**

artifact type	7K-E-91, Locus A	7K-E-91, Locus B (Bridge 2-210A)
<i>lithic tools</i>	4	--
<i>flaking debris</i>	64	106
<i>ceramic sherds</i>	33	20
<i>thermally altered stone fragments</i>	38	133
totals	139	259

were probably not markedly different as a group. The prehistoric activity represented in both areas appeared to be mostly Early Woodland in age, related to the Wolfe Neck Complex of the Low Coastal Plain. Locus B (Bridge 2-210A) was likely an activity area directly related to the occupation in Locus A.

A final observation regarding Locus A at 7K-E-91 concerns the surface provenience of the artifacts in the collection. An important inference that can be drawn from this finding is that the Wolfe Neck-related artifacts were originally found near enough to the modern ground surface to have been picked up and exposed by the plow. The only temporally diagnostic artifacts from the site were related to Wolfe Neck or later cultural complexes, suggesting that the main level of cultural deposition was near what is now ground surface, with no deeply buried cultural layers present. Test unit excavation in Locus B confirmed that this was indeed the case. While artifacts were discovered as deep as 60 cm below ground surface in at least one excavation unit, the material appeared to have been out of primary context, since it

consisted of small flaking debris and thermally altered stone fragments that appeared to have settled downward in the soil column through the ongoing action of root growth and decay, and small animal burrowing.

8.3 CONCLUSIONS

Systematic shovel testing and limited test unit excavation at Bridge 2-210A (7K-E-91B) recovered evidence of prehistoric use of the raised terraces along the upper reaches of the Choptank River. Data from the investigation indicated Woodland period use of the site, possibly one or more components related to the Wolfe Neck cultural complex of the Low Coastal Plain of central Delaware. The cultural deposits at the site were mixed vertically by surface-generated biological activity, but were probably not distributed to a great extent horizontally. The sample of cultural material recovered from the site was small, but was considered to be representative.

The artifacts at 7K-E-91B appeared to have been deposited relatively high in the profile, near the transition between the A and E horizons. Artifacts were recovered in lower levels of the E horizon, yet indications were that the material was not in primary context, but had migrated downward as a result of natural processes. No evidence of primary cultural deposition below the upper 10-20 cm of the E horizon occurred. Thermally altered stone fragments were recovered from the excavations in a ratio with chipped stone artifacts that suggested heat-related pursuits were an important focus of activity. Yet the individual fragments of heated stone were small and none were clustered horizontally to indicate the presence of intact thermally altered stone features. No excavated features, such as pits or basins, were observed in the excavation sample from the site. Extensive root and other biological activity was documented throughout the upper part of the E horizon, the levels within which all of the cultural deposition appeared to have occurred. In addition, evidence of initial soil development was noted throughout this portion of the profile. Taken together, the evidence suggested that the potential for the discovery of surviving features was low.

Examination of site distribution data suggests that there was Early and Middle Woodland occupation all along the margins of the wetlands in the upper reaches of the Choptank River, and that this site, 7K-E-91, was part of that activity. Locus B, at Bridge 2-210A, the portion of the site under investigation and reported herein, appeared to have been an area of limited or focused use. Locus A, located to the southeast of Locus B, may have been somewhat more extensive, although direct comparisons between the two areas were hampered by differently sampled data.

No information was recovered at Bridge 2-210A to indicate the presence of a large site in the immediate vicinity, comparable to the Dill Farm (7K-E-12), located along Cow Marsh Creek, approximately 3.5 miles to the southeast. The occupations at Bridge 2-210A were likely small limited-use areas probably related to the harvesting and possibly the processing of specific resources located in the upland marsh areas.

8.4 RECOMMENDATIONS

The research approach and field methods formulated for the Phase I archaeological survey were considered to have adequately met the goals of the investigation. The general probability model used for the investigation indicated that the study area exhibited medium-to-high potential for the presence of prehistoric sites—specifically, small procurement camps or hunting sites. Systematic, subsurface survey methods were used to investigate the study area, and evidence of non-intensive activity during the Early Woodland subperiod was discovered.

Additional investigation in the form of four 1 by 1 m test units, was included in the Phase I field program at Bridge 2-210A, supplementing the systematic shovel test grid. These units provided clear information about both sedimentary and cultural stratigraphy. The activity documented in Areas A and C at the site was potentially single component in nature, yet the data were limited in range, with artifact types consisting flaking debris, a small amount of pottery, and thermally altered stone fragments, but no formal lithic tools. The data were limited in quantity, and thus were likewise restricted overall in their analytical and interpretational potential. The site showed little potential for features. Cluster analysis of data from the 5-m shovel test grid suggested that the main artifact concentration in the project area had been sampled and its characteristics documented. Additional excavation at the site would therefore be likely to recover further data, but of the same type already documented, not adding to the information already gathered. Thus, the site's further research potential is considered limited.

On the basis of the data and analyses presented herein, the site is recommended as not eligible for listing in the National Register of Historic Places due to its limited research value. No further archaeological work is recommended.

On May 27, 2003, the DeSHPO concurred with these recommendations (Appendix F).