
MANAGEMENT REPORT

PHASE I ARCHAEOLOGICAL SURVEY
OF THE
PORTER ROAD WETLAND MITIGATION AREA

New Castle County, Delaware

Parent Agreement No. 729-3
Statewide Archaeological Resource Project

Prepared For:

THE DELAWARE DEPARTMENT OF TRANSPORTATION

Prepared By:

Robert Jacoby
Eric Griffiths
Charles LeeDecker

LOUIS BERGER & ASSOCIATES, INC.
Washington, D.C.

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ABSTRACT

The Cultural Resource Group of Louis Berger & Associates, Inc., has conducted a Phase I archaeological survey at the proposed location of a wetland replacement area for the Porter Road Improvement Project, New Castle County, Delaware. These investigations were conducted for the Delaware Department of Transportation, Division of Highways, in compliance with Section 106 of the National Historic Preservation Act and other federal and state historic preservation mandates. This Phase I archaeological survey covered approximately 20 acres of agricultural fields east of State Route 896 between Porter Road and Mansion House Road. Survey work consisted of the excavation of 228 shovel tests at 60-foot (18-meter) intervals and four 1x1-meter test units in areas of artifact concentrations.

Background research indicated no direct evidence of historic settlement and found that the study area was part of large holdings through the nineteenth century. The area contains no major drainages, but some evidence of prehistoric activity was expected in the project area, reflecting transient procurement activities.

A total of 37 historic artifacts and 99 prehistoric artifacts were recovered during the archaeological fieldwork. The prehistoric artifacts were largely clustered in four concentrations, located on well-drained elevations surrounded by seasonal drainages and wetland. Diagnostic material was limited to a Late Archaic Brewerton projectile point and a Middle Woodland Hell Island ceramic sherd. A small quantity of prehistoric artifacts were retrieved from subplowzone contexts. The prehistoric artifact sample is believed to be the result of short-term site visits by small groups of hunter-gatherers.

The historic artifact sample was entirely recovered from plowed soils and was thinly distributed across a broad stretch of the project area, primarily in proximity to State Route 896 and Mansion House Road. Two eighteenth-century artifacts are included in the otherwise nineteenth-century assemblage. The assemblage is thought to represent domestic field scatter from a nearby farmstead.

The investigations did not provide evidence that significant archaeological resources are present within the area of potential effect associated with the project. Therefore no additional investigations are recommended.

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I. INTRODUCTION

This management summary presents the findings of the Phase I archaeological investigations of a wetland mitigation area at the west end of the Porter Road Improvement Project, New Castle County, Delaware (Figure 1). The Cultural Resource Group of Louis Berger & Associates, Inc. (Berger), conducted the work for the Delaware Department of Transportation (DelDOT) under Parent Agreement No. 729-3, Statewide Archaeological Resource Projects. Fieldwork was undertaken during the period January 15-30, 1998. The proposed wetland mitigation project area measures approximately 28 acres, of which approximately 8 acres had already been surveyed during Berger's previous studies of the Porter Road Improvement Project (Bedell 1995; Busby 1994). The recently completed fieldwork covered the remaining 20 acres of the project area (Figure 2).

The purpose of the archaeological survey was to locate and identify any historic or prehistoric archaeological sites within the project area. The survey was carried out by the excavation of 228 shovel tests on grid at 60-foot (18-meter) intervals, and by the excavation of four 1x1-meter test units in the vicinity of prehistoric artifact concentrations. Background research was conducted with regard to the placement of the project area within the state management plan's historical study units.

The archaeological survey was supervised by Robert Jacoby, with James Skocik serving as Crew Chief. Fieldwork was performed by Joelle Browning, Dawn Corbett, Andrea DeNight, Sara Rakus, Catherine Skocik, and Paul Stansfield. Charles H. LeeDecker served as Project Manager and Principal Investigator. Eric Griffiths authored the report section on the historic context. Production of the report was coordinated by Hope Luhman. Valerie Coleman-Moore edited the report and Linda Lipka prepared the graphics.

This report was prepared in accordance with Section 106 of the National Preservation Act, as amended; the procedures for the Protection of Historic Properties (36 CFR 800); and Section 4(f) of the Department of Transportation Act (23 CFR 771); and under the guidelines for archaeological survey provided by the Delaware State Preservation Office.

The wetland mitigation area of the Porter Road Improvement Project is an undulating section of the Upper Coastal Plain, characterized by well-drained higher elevations separated by poorly drained soils that often contain standing water. These lower elevations are seasonal tributaries of the Belltown Run, a second-order stream that flows northeast of the project area. According to Custer (1986) and Custer and DeSantis (1986), well-drained settings adjacent to small tributaries are often the location of small group base camps and procurement sites from the Archaic through the Woodland II periods. Because the headwaters of Belltown Run pass through the project area, providing the potential for well-drained settings, the higher elevations of the project area were considered to have high potential for prehistoric archaeological resources.

During fieldwork for the current study, the project area was covered with corn stubble and was bounded to the east by secondary forest growth. A large drainage ditch parallels the highway along the western edge of the current project area, joining two perpendicular ditches that traverse the agricultural field. It is considered likely that topographic relief within the project area has been ameliorated by the actions of agricultural plowing and erosional slopewash, resulting in a somewhat more horizontal landscape than would have been apparent during prehistoric periods.

II. CULTURAL CONTEXT

A. HISTORIC CONTEXT

The project area along Porter Road and State Route 896 is located in Pencader Hundred, within New Castle County, and is part of the Upper Peninsula Zone. Historical maps from 1849 to 1893 indicate no settlement in the project area, suggesting that it was part of larger holdings during this time. Sources utilized to acquire information about the project area include three historical maps: William G Baist's 1893 *Atlas of New Castle County, Delaware*, D.G. Beers's 1868 *Atlas of the State of Delaware*, and Samuel Rae and Jacob Price's 1849 *Map of New Castle County*. Three previous architectural survey reports prepared by Berger for DelDot were also utilized for this report. One of these was a study of the State Route 896 corridor from Summit Bridge to State Route 4, a portion of which borders the western end of the project area (Bowers 1987). Another involved a study of Porter Road between State Routes 896 and 72, a portion of which borders the northern end of the project area (Frucht 1994). Both studies also indicate that no development existed in the vicinity of the project area during the nineteenth and early twentieth century. A third architectural study of the Porter Road area covered the area from State Route 72 to U.S. Route 40 (Griffitts 1998). The following background history was compiled from the sources noted above, as well as other material about the history of New Castle County and Pencader Hundred.

The permanent settlement of the New Castle County area can be traced to William Penn's 1701 grant of 30,000 acres, south and west of Newark, to three Welsh immigrants. Upon purchase, the immigrants divided the 30,000 acres and sold large parcels to individuals who built houses and began farming the land (Scharf 1888:950).

New Castle County was originally divided into five subdivisions, or hundreds (Conrad 1908:286). In 1710, with the addition of Pencader, Red Lion, Mill Creek, and White Clay Creek hundreds, the number of hundreds in New Castle County had increased to nine (Conrad 1908:287).

The land in this region of Delaware is generally level, with some rolling hills. Major topographical features of the Upper Peninsula Zone include Garrisons Lake, Killens Pond, Lums Pond, and McCauley Pond. The Christiana River, Becks Pond, and Belltown River are water sources close to the project area. This area of New Castle County rests on sediments of sand, clay, and gravel (Herman 1987:6). The soil in the southern and southeastern parts of Pencader Hundred is Matapeake-Sassafras, which is one of the better farming soils found in the county (New Castle County, Department of Planning [NCCDP] 1994:5).

The early agricultural economy of New Castle County was based on a system of mixed farming, a combination of grain cultivation (chiefly wheat, corn, barley, and oats) and livestock raising (Bowers 1987:5). Of these products, wheat emerged early in the eighteenth century as a highly marketable commodity. Wheat proved profitable not only to regional farmers, but also to those who operated gristmills, including Thomas Cooch, who owned a mill on the Christiana River.

The built environment associated with north-central New Castle County's developing eighteenth-century agricultural economy was predominantly one of wooden (usually log) structures, which were grouped on dispersed farmsteads. Situated in Delaware's "middle" vernacular building zone (which

included most of New Castle County below the fall line and northern Kent County), this area displayed forms and construction methods of architectural influences from regions to the north (particularly southeast Pennsylvania) as well as more southerly locations, which included the eastern shores of Maryland and Virginia (Herman 1989:179-181). House forms included the single-pile hall and hall-parlor. Toward the latter part of the eighteenth century, center-passage plans, as well as the three-room "double pile" plans associated with Quaker and Germanic settlement in the Delaware Valley, became very popular. Generally, log construction was dominant in the region, as few people in rural areas built with more durable materials like brick (Bowers 1987:7)

From the mid-eighteenth century, the principal north-south route through Pencader Hundred was known as Newark Road or Glasgow Road, to which present-day State Route 896 generally corresponds. The road extended from Newark to Buck Tavern in St. Georges Hundred, passing through Cooch's Bridge. Two important east-west routes extended from Christiana through Cooch's Bridge to the Elk River in Maryland, and from New Castle through the middle of Pencader Hundred to Frenchtown. In the early nineteenth century, both routes became turnpikes. The Old Baltimore Pike, completed in 1917, replaced the Elkton-Christiana Turnpike. U.S. Route 40, completed in 1815, replaced the New Castle and Frenchtown Turnpike (Bowers 1987:7, 11).

The intersection of Newark Road and the New Castle and Frenchtown Turnpike became the nucleus of a small crossroads community. The Pencader Presbyterian Church, organized by 1710, was an important early institution in this small community (Scharf 1888:995). The earliest-known hotel constructed in the town was established in 1791 by Mathew Aiken, from whom the hamlet derived its first name, Aikentown (Heite 1976; Scharf 1888:958). By 1794, the town's name had been changed to Glasgow (see Bowers 1987). During the late eighteenth and early nineteenth century, the hamlet functioned as a small service center for both the area's agricultural population and travelers, and included a hotel, a store, blacksmith and wheelwright shops, and, eventually, a post office (Beers 1868; Hopkins 1881; Scharf 1888:958).

As the eighteenth century came to a close, the agricultural economy of central New Castle County declined significantly. This decline was due primarily to the existence of too many small unproductive farms, and to farming practices that overworked the soil without incorporating "restorative actions" (Herman 1987:5). In the first two decades of the eighteenth century, a general population decline occurred in rural areas as inhabitants left the land that seemed no longer able to support them. As they left, however, those who remained quickly set about acquiring the farms of their former neighbors, thereby assembling large tracts which, to an increasing extent over the century, were placed in the hands of tenants to operate and maintain (Herman 1987:5). In 1818, the organization of the New Castle County Agricultural Society fostered improvements in agricultural practices. The practice of crop rotation and the application of lime to depleted soils was initiated (Jicha and Cesna 1986). Finally, the major improvements in transportation, represented by the canal and railroads, offered greatly improved access to regional markets (Wilmington, Philadelphia, and Baltimore) for the agricultural produce.

The middle decades of the nineteenth century were a period of rebuilding both the agricultural economy and the agricultural landscape of north-central Delaware. This rebuilding, which "left no farm untouched" (Herman 1987:5), included transformation of existing structures (where they were not completely removed) as well as erection of completely new structures, both domestic and

agricultural. This period saw the introduction of the crib barn/granary and the bank barn (the latter already well established in the Piedmont region to the north) into the architectural vocabulary of farm builders in the area. It also saw increasing use of center-passage dwelling plans, and the incorporation of areas with specific functions, such as cooking, within houses, often by locating them in rear ells (Herman 1987:6, 146, 148, 206). The predominant form, however, remained the I-house, with its two stories, single-room depth, and side-gable orientation with interior end-gable chimneys. The reconstruction also extended to houses of tenant farm managers and laborers, as earlier log and frame "tenements" were replaced with new dwellings which could, particularly for managers, resemble those of a middling farm owner in size and finish (Herman 1987:162).

Toward the end of the nineteenth century, competition from agricultural areas of the Midwest and Plains troubled the agrarian economy of many areas of the Northeast and Mid-Atlantic regions. North-central Delaware farmers responded with a shift toward diversification, with an increasing emphasis on fruits and vegetables. In addition, the introduction of pasteurization and the improved methods of refrigeration enabled a significant expansion of the dairy industry throughout northern Delaware (Passmore et al. 1978:41-2). In the Piedmont uplands this development was expressed, architecturally, by the expansion of existing bank barns with large hay sheds (Jicha and Cesna 1986). The expansion of the dairy industry was represented further south by the use of a "new" material (concrete), the erection of new barns, specifically for dairy activities, and the remodeling of existing structures with concrete-block ground stories and concrete floors.

Pencader Hundred saw many transportation improvements during the nineteenth century. In 1829 the Delaware and Chesapeake Canal was completed, passing near the southern border of Pencader Hundred (Reed 1947:377). This waterway was seen as a major transportation improvement for New Castle County and its farming community. The first railroad established in the region was the New Castle and Frenchtown Railroad. This railroad was located just north of the project area and was completed in 1831. It was 17 miles long extending from New Castle City to Frenchtown. In 1874, the Philadelphia, Wilmington, and Baltimore Railroad Company acquired the road, and it became part of the Delaware Road (Scharf 1888:429). The second line constructed in the project area was an extension of the Delaware Railroad, which extended its main line from Dover to a juncture with the Philadelphia, Wilmington, and Baltimore Railroad just south of Wilmington. The Delaware Railroad Company, originally chartered in 1836, was organized to construct a north-south route through the state of Delaware from the Wilmington and Susquehanna Railroad or the Frenchtown - New Castle Railroad to the Cape Charles area in southern Maryland. It took many years to gather financial backing and, after a survey was conducted, work began at the north terminus of the Frenchtown - New Castle Railroad in 1855. Construction continued for the next few years (Scharf 1888:429). In 1881, the Delaware City and Newark Railroad became the third line constructed through the area. This line was an east-west link between Delaware City and Newark, which created a juncture with the Delaware Railroad, where a small hamlet named Porter was established. The hamlet of Porter consisted of a railroad station, store, post office, and a few dwellings.

Porter Road, which was eventually named after this small town, extended from Newark Road through Porter to the New Castle Frenchtown Turnpike (current U.S. Route 40). Historical maps indicate that the portion of the road from State Route 896 to State Route 72 was established sometime between 1849 and 1868 (Beers 1868; Rea and Price 1849). The 1893 *G.W. Baist Atlas of New Castle County, Delaware* shows the name of present-day State Route 72 to be Bowersville

Road. Nineteenth-century deed references for the W.B. Calhoun House refer to State Route 72 as both "the state highway leading from Ferris' Corner to Jester's Corner," and "Nine Foot Road" (New Castle County Deed Book [NCCDP] P66:357). After the creation of the juncture between the Delaware Railroad and Delaware City and Newark Railroad during the 1880s, Porter Road was extended from State Route 72 east to the New Castle Frenchtown Turnpike (Griffitts 1998:8). Historical maps illustrate the pattern and extent of settlement along the established road network in the nineteenth century. As Figure 2 shows, in 1849 the majority of dwellings were not located in close proximity to primary transportation routes. By 1868 and 1893, more and more roads were established and a greater number of farmsteads and dwellings were located close to roadways.

Significant changes also occurred in the architectural development of New Castle County during the nineteenth century. Prior to 1850, houses built in New Castle County were usually one room or hall and parlor plan, and of frame construction (NCCDP 1994:23). The houses that were constructed of brick were usually owned by wealthy individuals. Throughout the century, New Castle County houses experienced a general rebuilding and restructuring, which was first seen in 1820 with the incorporation of service wings into the main house block (Herman 1987:2, 8).

In rural areas, older frame dwellings and tenements were replaced or rebuilt on new locations (Bowers 1987:13-14). From 1820 to 1870 there was also much remodeling of existing farm structures, replacement of old buildings with new ones, and substantial remodeling of buildings only recently constructed (Herman 1987:12).

A good portion of Pencader Hundred remained agricultural well into the twentieth century. However, by mid-century, the region was quickly becoming more suburbanized. Road improvements during the early twentieth century provided the infrastructure for future industrial, commercial, and residential development. During the 1930s, the New Castle and Frenchtown Turnpike became dualized, and Newark Road was realigned to bypass Cooch's Bridge. The Frenchtown Turnpike eventually became part of U.S. Route 40, also known as the Pulaski Highway (NCCDP:1994:21-22). The establishment of U.S. Route 40 resulted in an increase of manufacturing and commercial development in the region, including the Dupont Glasgow Plant, and other light industrial complexes constructed during the 1960s (NCCDP:1994: 8-9). During the 1980s and 1990s, massive residential development occurred in Pencader Hundred in such a short time and to such a degree that the *1993 Central Pencader Land Use Study* found 86 percent of all housing units in Central Pencader to have been built after 1970 (NCCDP:1994:21).

B. PREHISTORIC CONTEXT

The prehistoric cultural chronology for the Delmarva Peninsula has been traditionally divided into Paleoindian (ca. 12,000-8000 BC), Archaic (ca. 8000-1000 BC), and Woodland (1000 BC-AD 1650) periods, each reflecting temporally and culturally distinct occupations. Further divisions within these periods are essentially based on changes in projectile point and ceramic styles, following a line of reasoning that associates changes in artifact type and style with changes in culture; the Archaic and Woodland periods have therefore been divided into early, middle, and late phases to reflect these material changes. Custer (1984, 1986) has presented an alternative view based on commonalities in ecological adaptations and subsistence strategies rather than relying on similarities based on artifact traits. Custer's chronology establishes four prehistoric periods: the Paleoindian period (ca.

12,000-6500 BC), the Archaic period (ca. 6500-3000 BC), the Woodland I period (ca. 3000 BC-AD 1000), and the Woodland II period (ca. AD 1000-1650).

Beginning at the close of the Pleistocene, the Paleoindian period marks the earliest known prehistoric occupation of North America. The entry into North America by small groups of nomadic hunters was made possible by the partial retreat of the glaciers, creating an ice-free corridor through which these groups followed migrating megafauna. The earliest documented Paleoindian site in the Northeast is the Meadowcroft Rockshelter in western Pennsylvania, where initial occupations have been dated to about 14,000 BC. In Delaware, evidence of Paleoindian occupation has been generally limited to isolated and plowzone finds of distinctive fluted projectile points (Custer 1989). Toolkits associated with recovered fluted points indicate that Paleoindian economy was largely centered on the hunting of large animals, although some gathering practices are assumed to have played a role in their subsistence base. The geographical distribution of these finds suggests that Paleoindian hunters were particularly attracted to mosaic wetland environments that supported a variety of game.

The Archaic period marked a shift to a more generalized subsistence strategy with the emergence of warmer and wetter Holocene environmental conditions. The expansion of oak and hemlock forests along with rising sea levels permitted human groups to exploit a broader spectrum of terrestrial and aquatic resources than during the preceding period. This change is reflected in site toolkits, which include grinding implements designed for processing plant resources and notched weights for net fishing. The increased diversity and productivity of plant and animal species is thought to have been the catalyst for population growth among hunter-gatherer groups during this period, and the identification of greater numbers of Late Archaic period archaeological sites in Delaware appears to confirm this hypothesis. Population growth, in turn, resulted in increased contact and trade between groups, creating more complex patterns of social networks.

The Woodland period witnessed the introduction of a new technology, ceramics, which enabled hunter-gatherers to increase their ability to store and transport foods. Nomadic hunting was replaced by a more settled way of life, with family groups converging at seasonal base camps for portions of the year to cooperate in communal subsistence tasks and to participate in ceremonial rituals. These activities, along with the increased storage capacities ensured by ceramic vessels, facilitated the accumulation of material surpluses, leading to more complex social stratification and ranking. Toward the end of this period, maize horticulture was well established, and with its more intensive labor costs came the increased nucleation of communities into villages.

Two clusters of prehistoric archaeological sites were recorded within 2 kilometers of the project area. To the north, six small sites (7NC-D-47, 7NC-D-48, 7NC-D-61, 7NC-D-96, 7NC-D-97, and 7NC-D-113) are found occupying well-drained locales at the drainage heads of Belltown Run, a low-order tributary of the Christiana River. Most of these sites are plowed-field surface scatters. South of the project area are eight sites located between headwater tributaries of St. Georges Creek (Sites 7NC-F-2, 7NC-F-18, 7NC-F-34, 7NC-F-61A, 7NC-F-63, 7NC-F-65, 7NC-F-66, and 7NC-F-67). The Lums Pond Site (7NC-F-18) is a limited duration base camp consisting of recurring occupations throughout the Woodland I and Woodland II periods (Petraglia et al. 1997). Lithic raw material selection indicates that the site occupants practiced a high degree of residential mobility, possibly ranging as far north as the middle sections of the Delaware and Susquehanna River valleys. The Brennan Site (7NC-F-61A) is characterized as a secondary lithic reduction site dating to the Woodland I period

III. ARCHAEOLOGICAL INVESTIGATIONS

A. FIELD METHODOLOGY

Archaeological fieldwork commenced with the excavation of 228 shovel tests on grid at 60-foot (18-meter) intervals across the project area. Transects were given letter designations (A, B, C, etc.) from the north to the south, with shovel tests numbered from west to east for each transect (see Figure 2). Each shovel test was excavated by stratum to sterile subsoil levels, and all soils were screened through ¼-inch- (6-millimeter) hardware mesh cloth for the recovery of artifacts. Descriptions of recovered artifacts, soil textures, and soil hues were recorded on standardized forms developed by Berger. Recovered artifacts were provenienced according to transect, shovel test number, and stratum designation. Concentrations of positive shovel tests or individual shovel tests containing diagnostic prehistoric artifacts were supplemented with radial shovel tests at 30-foot (9-meter) intervals in the cardinal directions.

In an effort to recover additional diagnostic artifacts and obtain more information regarding the placement of artifacts in subsoil levels, four 1x1-meter test units were excavated in areas of prehistoric artifact concentrations. Test units were excavated by stratum and in 10-centimeter levels within subsoil strata. All soil from the test units was screened through ¼-inch hardware mesh cloth, and artifacts were provenienced by unit number, stratum, and level. Upon completion of each test unit, a measured scale drawing of the exposed soil stratigraphy was made.

B. RESULTS OF INVESTIGATIONS

The archaeological fieldwork resulted in the recovery of 37 historic artifacts and 99 prehistoric artifacts. Twenty-seven shovel tests yielded historic artifacts, and 40 shovel tests were positive for prehistoric material. The test unit excavations yielded 5 historic and 38 prehistoric artifacts. Table 1 presents frequency data for historic and prehistoric artifacts from plowzone and subsoil contexts from all excavations. The locations of all shovel tests and test units are illustrated in Figure 2.

The historic artifacts, in order of frequency, consisted of brick fragments, whiteware, curved glass, redware, nails, flat glass, and other artifacts. Table 2 presents a breakdown of historic artifacts by artifact type and frequency. Historic artifacts were primarily recovered from the western portion of the project area paralleling State Route 896. The plain redware and whiteware sherds recovered from the project area are poor indicators of temporal association, having been continuously produced from the early nineteenth century to the present. One sherd of scratch-blue decorated white salt-glazed stoneware was found in Test Unit 1 plowzone. This ware, decorated with a rouletted chevron motif, has a date range of 1745-1775. A shoe buckle, made from copper alloy and displaying a rosette pattern with incised lines, is also of eighteenth-century origin. Both of these older historic artifacts were recovered from the southern edge of the project area fronting Mansion House Road, and were separated by approximately 650 feet (approximately 200 meters).

Prehistoric material recovered from the Phase I survey was generally distributed across the well-drained higher elevations found within the project area, a result consistent with the hypothesized settlement patterns for Archaic and Woodland study units within the Mid-peninsular drainage divide zone (Custer 1986; Custer and DeSantis 1986). Concentrations of prehistoric material within these

higher elevations, or ridges, are centered on four loci and are depicted in Figure 2. The largest concentration, in area and artifact count, occupies the most extensive elevated landform within the project area (see Figure 2). The three smaller artifact loci are located on correspondingly smaller and lower ridges. Debitage, largely composed of jasper and quartz, makes up the largest class of prehistoric artifacts, followed by fire-cracked rock (FCR). Artifact types and frequencies are presented in Table 3.

Two diagnostic prehistoric artifacts were recovered from the project area in adjacent shovel tests. Shovel Test M5 yielded a chert Brewerton side-notched point (see Figure 2). Brewerton points are associated with Late Archaic period occupations. An aboriginally made ceramic sherd was found in Shovel Test L5, 60 feet to the north of the Brewerton point. This specimen has quartz and mica temper, plus cordmarked surface treatment, characteristics of Hell Island ware, which is datable to the late Middle Woodland period. Both finds are from the plowzone. Two very small ceramic sherds found in Shovel Test E-7a are too fragmentary to yield diagnostic traits.

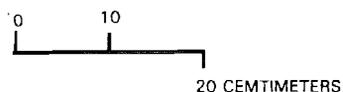
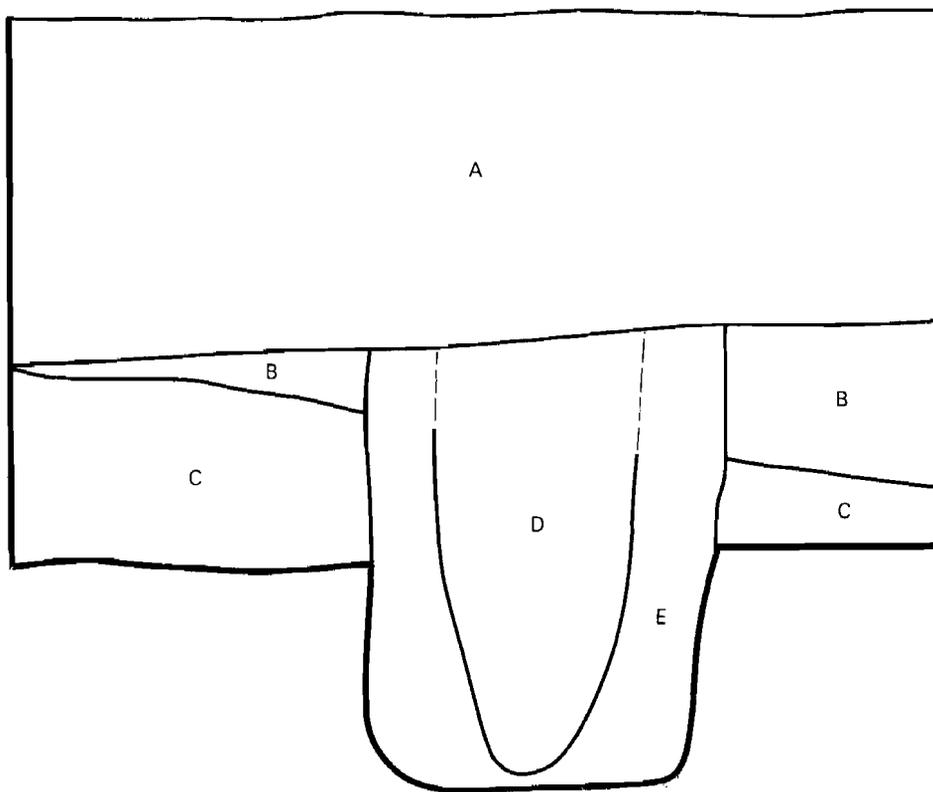
Fourteen prehistoric artifacts were recovered from subsoil contexts, with the majority (N=11) coming from the large northern locus. Subsoil in this area was generally characterized as yellowish brown sandy loam. In Test Unit 4, located adjacent to Shovel Test C-7a (Figure 3), a somewhat eluviated soil horizon was detected directly beneath the plowzone. The two subsoil finds from Test Unit 4 were recovered from this stratum, at depths of not greater than 5 centimeters below the plowzone. Cultural material found in subplowzone contexts in similar terrain and soils at the Brennan Site was interpreted as resulting from the downward movement of artifacts due to natural processes such as rodent and root activity (Watson and Riley 1994:16). It is likely that these same processes are responsible for the presence of small quantities of artifacts in subsoil levels at the Porter Road project.

C. CONCLUSIONS AND RECOMMENDATIONS

The majority of the historic artifacts are small in size, no doubt reflecting the long-term effects of plowing on surface deposits. The low density of historic finds therefore appears to represent a very thin veneer of artifact deposition, and is considered to be nineteenth-century domestic refuse resulting from field dumping episodes. The concentration of historic material along the highway (Old Glasgow Road), and along Mansion House Road, is consistent with this interpretation. Some of the bottle glass may be the result of modern vehicular trash. Despite the presence of two eighteenth-century artifacts, based on the very low artifact frequency and plowzone context, the historic assemblage does not appear to contain significant potential for contributing to further knowledge.

A series of four small to moderate prehistoric artifact concentrations were identified during Phase I fieldwork. Each concentration was located on a well-drained elevation overlooking seasonal headwater tributaries of the Belltown Run, a pattern consistent with the model of Archaic and Woodland settlement systems found in northwestern Delaware. Single diagnostic artifacts attributable to the Late Archaic and Middle Woodland periods were recovered from only one of the concentrations. Limited quantities of artifacts were recovered from subplowzone contexts,

WEST PROFILE



LEGEND

- A DARK YELLOWISH BROWN (10YR 4/4) SANDY LOAM;
 Ap-HORIZON WITH PREHISTORIC ARTIFACTS
- B OLIVE YELLOW (2.5Y 6/6) SANDY SILTY LOAM;
 E-HORIZON WITH PREHISTORIC ARTIFACTS
- C YELLOWISH BROWN (10YR 5/8) CLAYEY LOAM;
 B-HORIZON
- D DARK GRAYISH BROWN (10YR 4/2) SANDY LOAM;
 HISTORIC POST MOLD
- E OLIVE YELLOW (2.5Y 6/6) SILTY LOAM MOTTLED WITH
 STRONG BROWN CLAYEY LOAM;
 HISTORIC POSTHOLE

FIGURE 3: Test Unit 4 Soil Profile

particularly in the large northern artifact concentration. The four artifact loci are interpreted as transient procurement camps for the exploitation of wetland resources and game.

Despite the recovery of some material from subplowzone levels, the prehistoric artifact assemblage does not appear to have significant information potential. The site is a light artifact scatter and has been plowed repeatedly. Vertical artifact distribution indicates that this is predominantly a plowzone site, and that the downward movement of a very few artifacts into the top of the subplowzone soil probably occurred after prehistoric site abandonment.

On the basis of these findings, the site is not considered eligible for listing in the National Register of Historic Places, and Berger recommends that no further work be undertaken.

TABLE 1

Artifact Frequencies from Shovel Tests and Test Units

Context	Historic Artifacts	Prehistoric Artifacts	Total
Plowzone	37	85	122
Subsoil	.	14	14
Totals	37	99	136

TABLE 2

Historic Artifact Types and Frequency

Artifact Type	Count
Brick fragments	11
Whiteware	8
Curved glass	6
Redware	6
Nail	2
Flat glass	2
Salt-glazed stoneware	1
Shoe buckle	1
Total	37

TABLE 3

Prehistoric Artifact Types and Frequencies

Artifact Type	Count
Debitage	74
FCR	18
Ceramic	3
Projectile point	1
Biface fragment	1
Utilized flake	1
Total	99

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