

APPENDIX E

PROBATE INVENTORY RECORDING FORM

DELAWARE 1998 INVENTORY RECORDING FORM

Recorder: _____
Date: _____

Name: _____ Hundred: _____
Date: _____ Reference: _____

Total value: _____
Value of household goods: _____
Value of financial obligations: _____

Amenities Index Items

earthenware _____
fine earthenware _____
pictures _____
silver plate _____
clocks & watches _____
wigs _____

Amenities Score: _____

bed/table linen _____
table forks _____
table knives _____
spices _____
books (secular) _____
books (religious) _____

Other Consumer Items

tea ware _____
pewter dishes _____
carpets, curtains _____
candlesticks _____

looking glass _____
metal cooking pot _____
frying pan _____
glassware _____

Tools

spinning wheel _____
loom _____
blacksmith tools _____
dairy items _____
gun _____

plow _____
harrow _____
wagon _____
carriage, etc. _____
carpenters' tools _____

Furniture

beds number _____
desks number _____
dining/oval table number _____
tea table number _____

tables number _____
chairs number _____
chests number _____
cupboards number _____

Livestock & Labor

horses number _____
cattle number _____
slaves number _____
ind. servant number _____

sheep number _____
pigs number _____
chickens number _____

flax, flaxseed, flax brake, linen thread, etc. _____ wool yarn, wool cards, hackles, etc. _____

Notes _____

APPENDIX F

**RESEARCH DESIGN FOR THE
AUGUSTINE CREEK SOUTH SITE**

RESEARCH DESIGN FOR THE
PHASE III ARCHAEOLOGICAL MITIGATION
OF SITE 7NC-G-145
THE AUGUSTINE CREEK SOUTH SITE

New Castle County, Delaware

Prepared For:

THE DELAWARE DEPARTMENT OF TRANSPORTATION

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I. INTRODUCTION

The Cultural Resource Group of Louis Berger & Associates, Inc. (LBA), proposes to undertake Phase III mitigation of Site 7NC-G-145 (the Augustine Creek South Site) on behalf of the Delaware Department of Transportation (DelDOT). The historic component of the site has been determined eligible for listing in the National Register of Historic Places under Criterion D, since it has demonstrated the ability to yield information important to regional history.

The Augustine Creek South Site was identified by LBA during a Phase I survey of the proposed State Route 1 (SR 1) corridor from Scott Run to Drawyer Creek in New Castle County, Delaware (Bedell et al. 1997). SR 1 is a completely new, limited-access highway that will carry traffic from I-95 in the northern part of the state to U.S. Route 113 south of Dover, alleviating congestion on U.S. Route 13. The site lies entirely within the proposed Norvell/Coleman Wetland Mitigation Area, which will replace wetlands destroyed in the Augustine Creek drainage.

II. SITE IDENTIFICATION AND DESCRIPTION

A. SITE LOCATION

The Augustine Creek South Site (Site 7NC-G-145) has both historic and prehistoric components. The historic component, which is considered significant, consists of the remains of a small farm dating to the 1730 to 1770 period. The prehistoric component, a thin scatter consisting mostly of undated lithic debitage, is not considered significant. The site is located on the southern bank of Augustine Creek, approximately 450 meters (1,500 feet) northeast of Boyd's Corner (Figure 1). Site 7NC-G-145 measures 125 meters along an east-west axis parallel to Augustine Creek, with a maximum north-south dimension of approximately 60 meters along its eastern margin (400x200 feet). The significant component measures approximately 50x50 meters (160x160 feet).

Augustine Creek is a small, marshy stream that flows east toward the Delaware River. The Augustine Creek North Site (Site 7NC-G-144) is located directly across the stream on the northern bank. The site sits on a hill, with a steep bluff more than 10 meters (30 feet) high leading down to the stream. The historic component is concentrated at the crest of the hill, which is at the eastern end of the site, while the prehistoric component is concentrated on the lower slopes farther west. At that point the hill overlooks a manmade pond that appears to be fed by springs. The presence of these springs may have been a factor in attracting prehistoric peoples to the site. The historic occupants were probably attracted to the site by the proximity of the creek itself and by the Wilmington to Lewes Road, which was located approximately 180 meters (600 feet) to the west. The closest town in the eighteenth century was Cantwell's Bridge (Odessa), approximately 12 kilometers (7.5 miles) to the south. At the time of the testing the site was located partially in active agricultural fields and partially in an abandoned field growing up in brambles and mimosa trees.

B. PREVIOUS WORK

1. Phase I

The Augustine Creek South Site was discovered during a Phase I survey of the Scott Run to Drawyer Creek Segment of the SR 1 corridor (Bedell et al. 1997). Shovel testing located scatters of both historic and prehistoric artifacts on a high terrace south of the creek. The artifact assemblage included architectural material (brick), indicating the former presence of a structure. The associated occupation of the site possibly dated to the second half of the eighteenth century, as estimated from a preliminary evaluation of the artifacts. As a result, Phase II significance evaluation was recommended.

2. Phase II

Phase II significance evaluation of Site 7NC-G-145 was carried out by LBA in the fall of 1995 (Bedell et al. 1997). Twenty-six shovel tests were excavated at 10-meter intervals between positive Phase I shovel test pits to generate greater precision in the boundaries of artifact loci

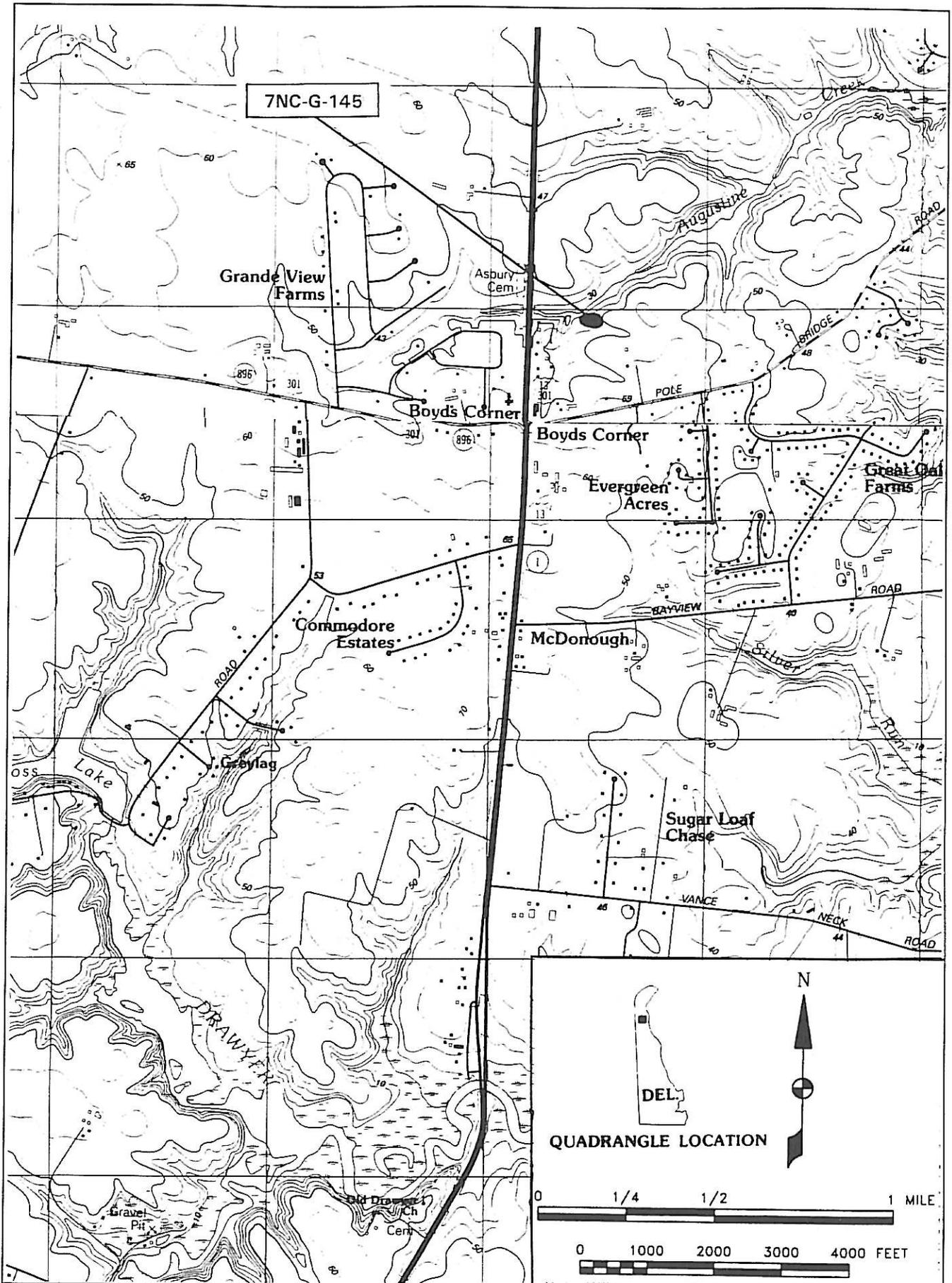


FIGURE 1: Location of 7NC-G-145, the Augustine Creek South Site

SOURCE: USGS Middletown and St. Georges Quads (1993), 1:24,000

within the site and to better define the extent of site boundaries (Figure 2). Placement of 1-meter-square test units was based on information obtained from the original series of shovel test pits and from the supplemental Phase II shovel tests. Sixteen lithic flakes were recovered from nine supplemental shovel tests. Fifty-seven historic artifacts were recovered from 16 shovel tests. Four of the shovel tests (10b, 66, 67, and 73) yielded prehistoric and historic artifacts. The entire artifact sample, including both prehistoric and historic material, was recovered from plowzone contexts.

Twelve test units were excavated at Site 7NC-G-145, yielding a total of 138 prehistoric artifacts and 607 historic artifacts (Table 1). Prehistoric artifacts consisted mostly of debitage, and the lithic raw material was composed of nearly equal quantities of quartz, chert, and jasper, with a few pieces of quartzite. The prehistoric sample included four small pottery sherds of unidentified temper, all recovered from Test Unit 10. Small brick fragments were the most common element within the historic assemblage, followed by ceramics and curved glass. The ceramic sample was dominated by glazed redware, with smaller quantities of slipware, plain and scratch-blue white salt-glazed stoneware, and single sherds of creamware and agateware (Table 2). Several fragments of tobacco pipe stems were recovered from test units. With the exception of Test Unit 7, which yielded no prehistoric artifacts, prehistoric and historic artifacts were recovered from every test unit. The density of prehistoric artifacts across the site was generally low, with the highest frequencies occurring along the western margin of the site in Test Units 4 (12 artifacts), 5 (16 artifacts), and 9 (24 artifacts). Test Unit 9 yielded four pieces of debitage from a subplowzone context, but this is attributed to disturbance of the subsoil, possibly by roots. No intact subsoil deposits were encountered (Figure 3).

Historic finds were concentrated along the eastern margin of the site, primarily from Test Units 1 (104 artifacts), 3 (133 artifacts), 7 (73 artifacts), and 8 (180 artifacts). All of the artifacts were recovered from plowzone contexts. No structural features were found. A basin-shaped pit (Feature 1) was identified within Stratum B in Test Unit 10. Feature 1 was truncated by the plowzone and consists of stream gravels within a sandy loam soil matrix. No artifacts were retrieved from the feature, and its origin and function are not known.

3. Extended Phase II

a. Methods

After discussions among LBA, DelDOT, and the DESHPO, it was agreed that insufficient information had been obtained during the Phase II testing to determine the National Register eligibility of the site. Therefore, extended Phase II testing was carried out in November 1996. The basic intent of the extended Phase II evaluation was to determine if the site contained intact, subplowzone features. Since no features had been located during hand excavation, a backhoe would be employed to remove larger amounts of plowzone from the site. Because the site was considered a possible candidate for data recovery excavation, it was important that no soils be removed by machine that might be excavated by hand during such excavations. Therefore, an agreement was reached in advance with representatives of DelDOT and the DESHPO that a Phase

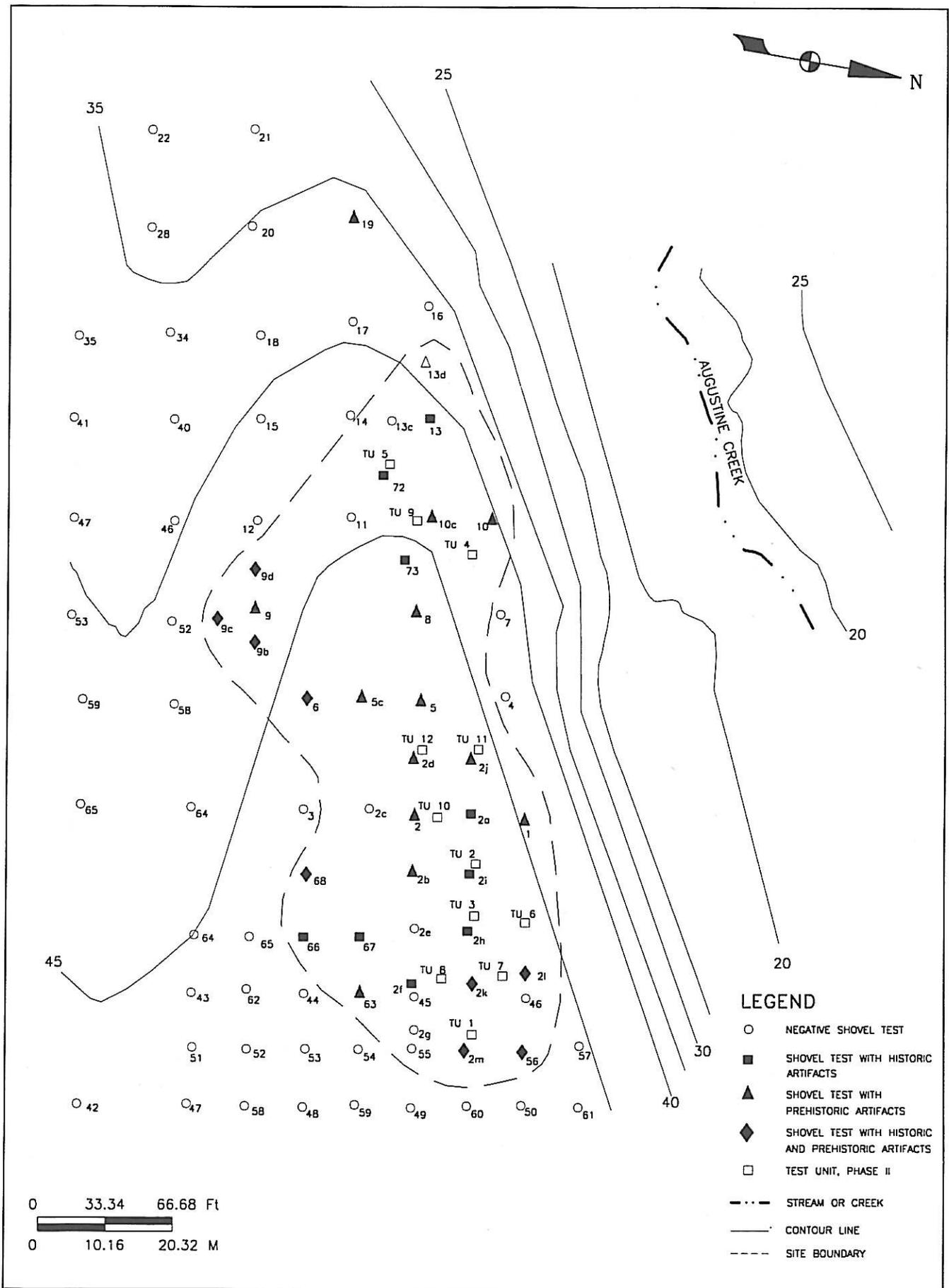


FIGURE 2: Plan of Phase I and Phase II Testing, Site 7NC-G-145

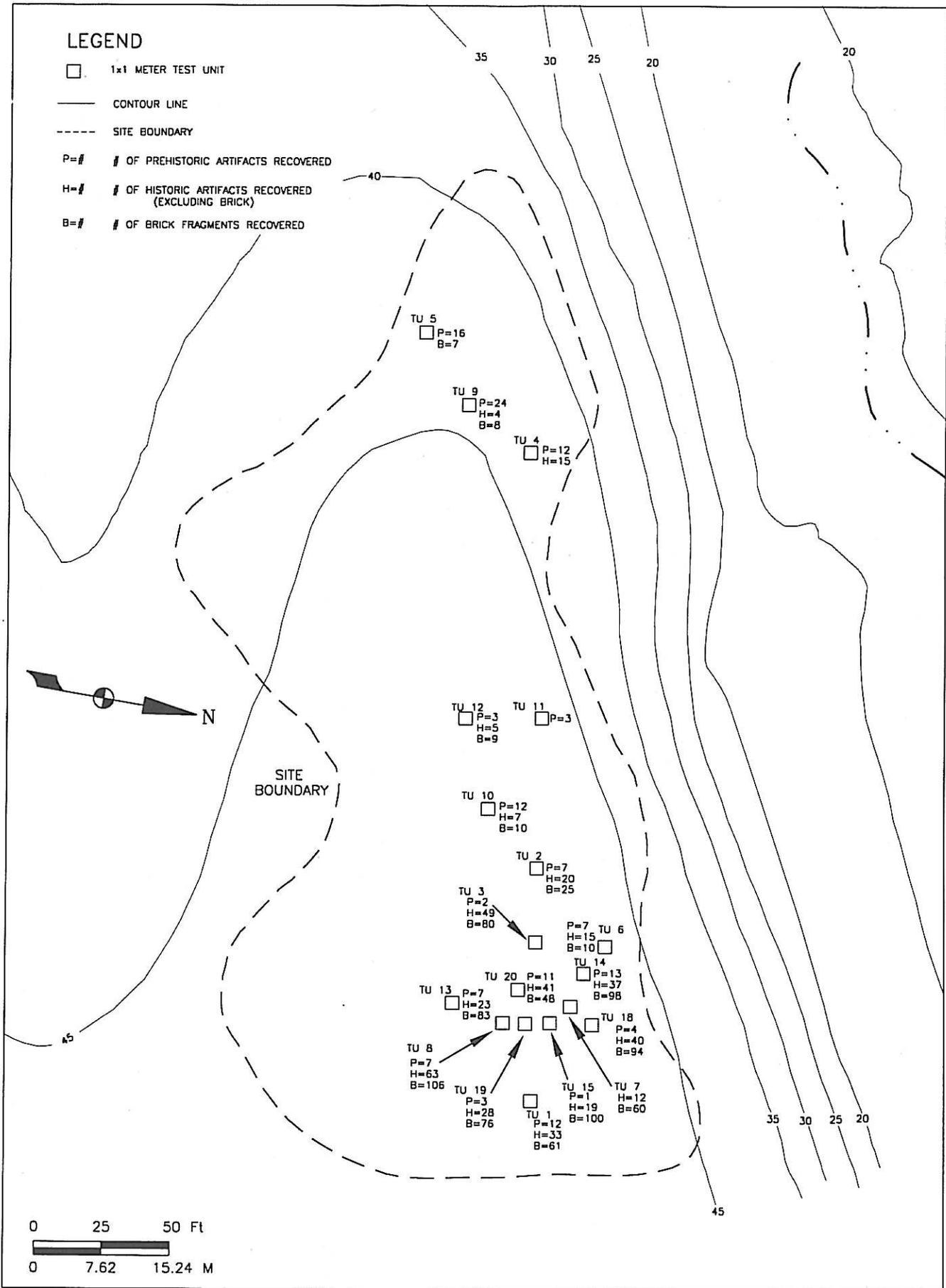


FIGURE 3: Distribution of Artifacts, Phase II and Extended Phase II Test Unit Excavations, Site 7NC-G-145

TABLE 1 **ARTIFACT PATTERN ANALYSIS, SITE 7NC-G-145**

ARTIFACT GROUP/CLASS	COUNT	PERCENTAGE
KITCHEN		
Ceramics	216	68.6%
Bottles	34	10.8%
Kitchenware (other utensils, bowls, pots, etc.)	1	0.3%
Kitchen - Other	10	3.2%
KITCHEN SUBTOTAL	261	82.9%
ARCHITECTURAL		
Window Glass	11	3.5%
Nails, Spikes, etc.	11	3.5%
ARCHITECTURAL SUBTOTAL	22	7.0%
ARMS		
Ammunition	1	0.3%
Gunflint	1	0.3%
ARMS SUBTOTAL	2	0.6%
CLOTHING		
Clothing Fasteners	1	0.3%
CLOTHING SUBTOTAL	1	0.3%
TOBACCO PIPES		
White Clay Pipes	20	6.3%
TOBACCO SUBTOTAL	20	6.3%
ACTIVITIES		
Recreation	3	1.0%
Commercial Activities/Manufacturing Byproducts	5	1.6%
Activities, Other	1	0.3%
ACTIVITIES SUBTOTAL	9	2.9%
SITE TOTAL*	315	100.0%

*Does not include unidentified (18), faunal/floral (6), or miscellaneous building materials (274)

III excavation of the site would likely involve the excavation of a five percent sample of the plowzone across the eastern portion of the site, where historic finds were concentrated. The test units that would be used to excavate this five percent sample were then plotted on the site, and the backhoe strips for the extended Phase II testing were placed so as to avoid these hypothetical future units. The resulting strategy called for the backhoe to remove the plowzone in strips no more than 3 feet (90 centimeters) wide running north to south across the site. The strips were placed 5 meters apart, in the intervals between the hypothetical Phase III units. Because the Phase II test units were not excavated at regular intervals on a grid, the first task in this phase of testing was to establish a numbered grid on the site. This grid was based on Phase II Test Units 3 and 6, which were excavated in line, 10 meters apart.

A secondary objective of the extended Phase II testing was to further test the plowzone in the eastern part of the site, where the historic finds were concentrated. Six additional 1x1-meter test units were excavated in this area. Because these units were intended only to sample the plowzone

TABLE 2 **HISTORIC CERAMICS, PHASE I AND II, SITE 7NC-G-145**

CERAMIC TYPE/VARIETY	COUNT	PERCENTAGE
COARSE EARTHENWARE		
Redware	146	73.7%
Red-bodied Slipware (1670-1850)	12	6.1%
Buff-bodied Slipware (1670-1795)	3	1.5%
COARSE EARTHENWARE SUBTOTAL	161	81.3%
WESTERWALD STONEWARE (1620-1775)	1	0.5%
WHITE SALT-GLAZED STONEWARE		
Plain (1720-1805)	9	4.5%
Scratch Blue (1744-1775)	6	3.0%
WHITE SALT-GLAZED STONEWARE SUBTOTAL	15	7.6%
MIDLANDS MOTTLED (1680-1750)	8	4.0%
REFINED REDWARE	5	2.5%
DELFTWARE		
Plain (1640-1800)	3	1.5%
Hand-painted (1680-1800)	4	2.0%
DELFTWARE SUBTOTAL	7	3.5%
CREAMWARE, CLOUDED GLAZE (1740-1770)	1	0.5%
SITE TOTAL	198	100.0%

and search for additional features, they were not excavated into the subsoil. Some were placed to further investigate features partially uncovered in the backhoe trenches, others at points on the site grid.

Apparent cultural features located during the extended Phase II testing were further investigated to determine their function, integrity, and cultural affiliation. The features were mapped and photographed, and test excavations were made in each feature.

b. Plowzone Testing

Six test units were excavated in the plowzone during the extended Phase II testing, Test Units 13 to 15 and 18 to 20 (see Figure 3). A total of 687 historic and 39 prehistoric artifacts were recovered from these units. Of the historic total, 499 were small brick fragments that were discarded in the field, leaving 188 other historic artifacts. The majority of the non-brick historic artifacts were sherds of red coarse earthenware; the remaining 77 artifacts included white salt-glazed earthenware, comb slipware, green and clear bottle glass, hand-wrought nails, fragments of white clay pipe stems and bowls, and a brass button. No creamware or pearlware was found. Most of the prehistoric artifacts were nondiagnostic lithics, although two small sherds of shell-tempered ceramic were recovered. These sherds show that the site was occupied in the later Woodland I or Woodland II period (Middle or Late Woodland), AD 200 to 1650. A few pieces of bone and oyster shell were also recovered.

c. Plowzone Stripping

Four backhoe trenches were excavated at 5-meter intervals across the site from north to south (Figure 4). These trenches were numbered 1 to 4 from west to east. Trench 1, the westernmost trench, was placed 2.5 meters west of Test Units 3 and 6. Only one feature was discovered in this trench, a small posthole, probably part of a fence. This posthole was designated Feature 9. Trench 2 was excavated 2.5 meters east of Test Units 3 and 6. This trench uncovered two very large postholes, 5.5 meters (18 feet) apart. These postholes appeared to be part of a post building that was aligned almost exactly with the site grid. In Trench 3, two more large postholes were encountered, 5.5 meters (18 feet) apart and approximately 6 meters (19.5 feet) east of the holes in Trench 2. These four postholes, Features 5, 6, 7 and 8, all appeared to be part of one building. That building would appear to have been 18 feet wide, with posts on 10-foot centers, or at least 18 by 20 feet. These are common dimensions for a colonial English house or barn.

Trench 4, which was excavated 2.5 meters east of Test Unit 7, encountered three sizable features. The largest, designated Feature 1, was a pit 6.2 meters (20 feet) long. The western edge of the feature was in Trench 4. To determine the width of the feature, a trench, Trench 5, was dug perpendicular to the others, running east from Trench 4. Trench 5 showed that Feature 1 was 5.7 meters (19 feet) wide. Feature 2, 4 meters south of Feature 1, appeared to be a round pit about 2 meters (6.5 feet) in diameter, with the center of the feature approximately on the western edge of Trench 4. Feature 3, 7 meters south of Feature 2, appeared to be a large, structural posthole, although only a small part of the feature was within the trench.

d. Feature Testing

Feature 1 was a large pit, probably a cellar hole, encountered in Trenches 4 and 5. The edges of the feature were not entirely clear, since it had filled in with wash that closely resembled the subsoil, and the feature was not entirely exposed. However, preliminary indications are that the feature measures approximately 6.2 meters (20 feet) north to south and 5.7 meters (19 feet) east to west. Given the imprecision of current knowledge, the feature could represent a square cellar 18 or 20 feet on each side. The feature does not exactly align with the post building defined by Features 5 to 8, but is offset somewhat to the north.

One 1x1-meter test unit was excavated in Feature 1, designated Test Unit 16 (Figure 5). The unit was placed on the western edge of the feature, at the junction of Trenches 4 and 5. This test revealed that the feature is approximately 105 centimeters deep, below the plowzone. The top stratum, designated Stratum B, was filled in with wash closely resembling the natural subsoil. Stratum B was approximately 25 centimeters deep along the eastern edge of Unit 16. It contained more than 300 brick fragments and 76 other historic artifacts, including 40 redware sherds; one sherd each of gray stoneware, white salt-glazed stoneware, and comb slipware; four fragments of white clay pipes; case bottle fragments; nails; pieces of bone, including a pig tooth; and several hunks of unidentified iron. Beneath Stratum B were two strata of mixed silty wash, designated Strata C and D, with a combined depth of 40 centimeters. Artifact density was somewhat lower in these strata, but more than 200 brick fragments were found, as well as small quantities of

TEST UNIT 16
NORTH WALL PROFILE

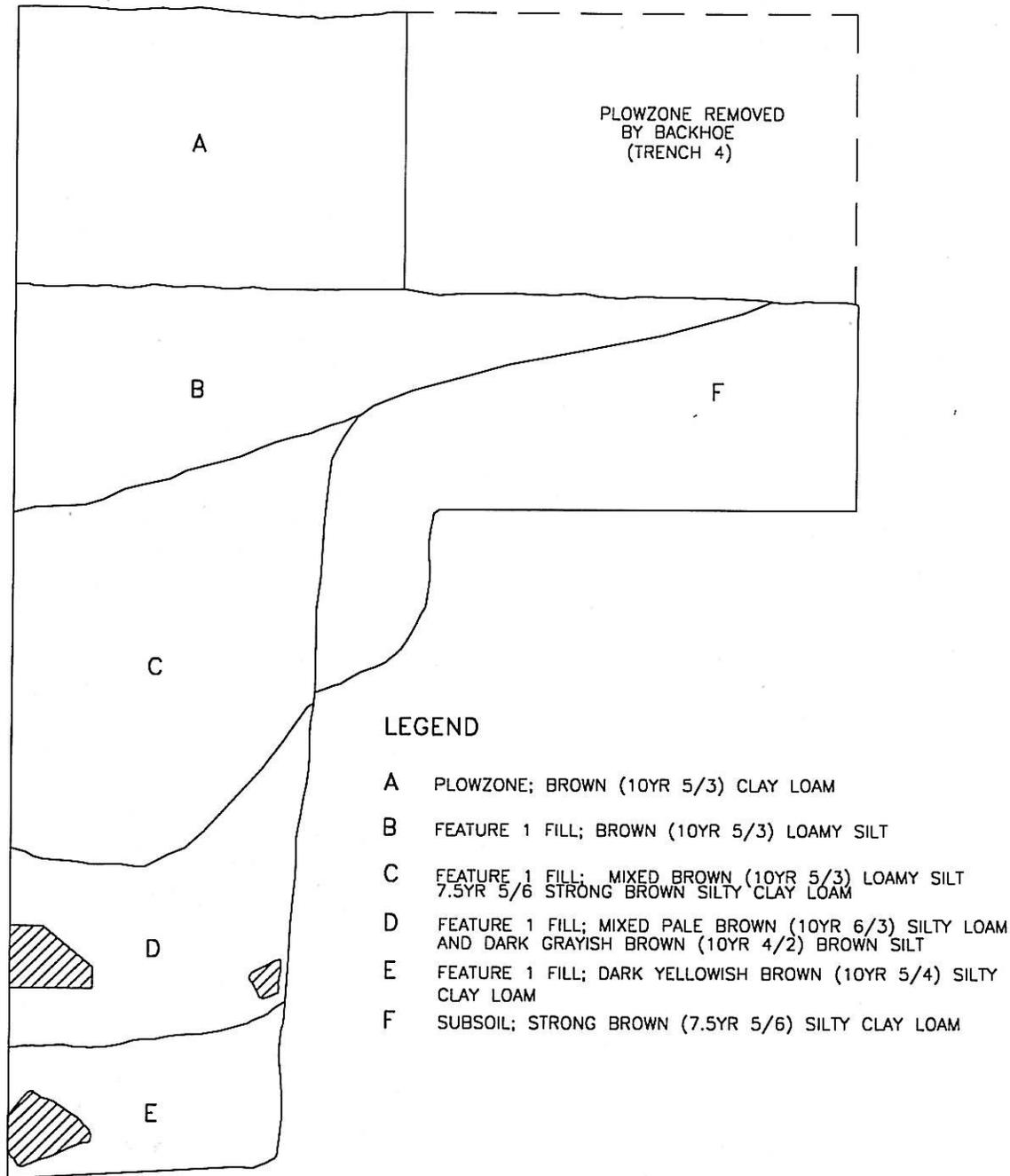


FIGURE 5: Stratigraphic Profile of Feature 1, Test Unit 16, Site 7NC-G-145

redware, salt-glazed stoneware, delftware, pipe stems, and nails. The bottom stratum, designated Stratum E, consisted of dark yellowish brown silt with larger pieces of brick, some of them with shell mortar attached, 40 centimeters deep. Artifacts recovered from this stratum included a bone comb, a brass button, one sherd of Westerwald blue and gray stoneware, and seven sherds of shell-tempered prehistoric pottery. No intact wall was present in the bottom of the unit, but the large number of half- to three-quarters-whole bricks with mortar attached suggested that the cellar had once contained brick foundations.

Feature 2 was a shallow pit containing brick pieces and ashy fill, encountered in Trench 4 about 4 meters south of Feature 1. The pit extended beyond the trench on both sides, but was much wider on the western side. Based on the portion exposed in the trench, the feature appeared to be roughly round, with the central axis approximately on the western edge of Trench 4. The feature was tested with a small unit, Test Unit 17, 160 centimeters north to south and 50 centimeters east to west, roughly the eastern half of the exposed portion of the feature. This test showed that the feature was quite shallow, approximately 16 centimeters deep at the deepest point explored. The feature contained three different fills, all of which yielded brick pieces and historic artifacts. Only 19 artifacts were recovered, including nails, redware, white clay pipe stems, and 13 bone fragments. No interpretation of the feature's function is possible at this time.

4. Summary

Extended Phase II testing at the Augustine Creek South Site showed that the site includes a number of intact historic features, including a post building and a probable cellar hole. The artifacts from the site include white salt-glazed stoneware with scratch-blue decoration (1744 to 1775), coarse agateware (1750 to 1810), and one sherd of creamware with clouded glaze (1740 to 1770). These artifacts indicate occupation in the third quarter of the eighteenth century. However, no plain creamware, introduced in 1762 and common on all sites after 1770, was found. The small number of artifacts in the plowzone suggests a rather brief occupation period for the site, no more than 25 years and possibly much less. Occupation probably took place in the 1740 to 1760 period. The historical research indicated that during this period, the site was probably occupied by Francis and Henrietta Mahoe, farmers of middling status.

The aboriginal ceramics recovered from Test Unit 10 and Feature 1 indicate a Woodland period age for the prehistoric component of Site 7NC-G-145. Although no diagnostic projectile points were recovered from the site, a Woodland II small triangular point was recovered from a Phase I shovel test pit 200 meters to the south. The low-density scatter of debitage across the site probably reflects a short-term utilization of this locale as a resource procurement station.

III. HISTORICAL BACKGROUND

The first certain mention in the records of the 100-acre parcel on which the Augustine South Site is located came in 1697, when William Patterson sold it to Thomas Rothwell (see Table 1). The property, along with most of the rest of what later became St. Georges Hundred, had figured in the land speculations of Augustine Herman of Bohemia Manor. Herman, who was born in Prague, emigrated to New Amsterdam in 1633 as an employee of the Dutch West India Company (Conrad 1908:14). In 1671, Herman obtained a grant from Lord Baltimore of all the land between St. Georges and Appoquinimink creeks, extending from the Delaware River westward to Bohemia Manor, in what is now Maryland. Herman never managed to make good on this enormous patent. He did manage to acquire some lands along the Delaware River. In the early eighteenth century, his sons, Casparus and Ephraim, were in possession of 400 acres north of the Appoquinimink River, south of Augustine Creek, and west of the Delaware River (Scharf 1888:985).

Prior to 1697, William Patterson was in possession of 100 acres of land which were bounded by a branch of Augustine Creek on the north, by land formerly belonging to Casparus Herman on the south, by other lands of William Patterson on the east, and by the Appoquemen Road [*sic*] on the west. There is no record of how William Patterson acquired the land. A 1696/1697 tax assessment for inhabitants on the northern side of "Appoquiminy" and the southern side of Georges Creek in New Castle County assessed William "Pattison" 8 shillings and 2 pence, while Thomas Rothwell was assessed 6 shillings (New Castle County [NCC] Tax Assessment 1696/1697:4-5).

In August 1697, William Patterson sold the 100-acre tract to Thomas Rothwell for "a competent sum of money" (NCC Deed Book B:125). Thomas Rothwell held the 100 acres of land for 18 years, conveying it on May 13, 1715, with his wife, Margaret Rothwell, to Robert Witherspoon for an unspecified sum of money (NCC Deed Book C:218). Robert Witherspoon, a minister in St. Georges Hundred, died in 1718, leaving his property to his wife, Mary Witherspoon (NCC Probate Records: Robert Witherspoon). In the same year, Isaac Vigoren brought suit against Mary Witherspoon, the executor of the estate of Robert Witherspoon, for a debt of £50.41.7. In order for Mary Witherspoon to repay the debt owed Vigoren, a 104-acre tract on the southern side of a branch of Augustine Creek, bounded on the west by the Appoquinimink Road and the land of William Patterson, was offered for sale at public auction by Sheriff Roland Fitzgerald on August 27, 1719. At that time the 104-acre parcel, probably the same as the original 100-acre parcel, was purchased by Hance Hanson for a sum of money not recorded in the deed (NCC Deed Book H:76).

In 1726, Hance Hanson sold the 104-acre tract, plus an 18-acre tract situated on the western side of the King's Road, to William Peterson (or Petterson) (NCC Deed Book H:76). The following year, William Peterson conveyed the same two parcels of land in St. Georges Hundred to Samuel and Henrietta Mahoe for £180 (NCC Deed Book H:76, also cited in NCC Deed Book T-1:211). Sometime between 1726 and 1733, Samuel Mahoe sold an 18-acre parcel to Jacob Read (NCC Deed Book T-1:211). Samuel and Henrietta Mahoe held the land until May 1733, when they sold

two tracts of land, one containing 104 acres, and the other 46.121 acres, to Francis and Henrietta Land (NCC Deed Book T-1:211).

At some point after the conveyance of the two parcels of land, Francis Land and Samuel and Henrietta Mahoe made a deed of defeasance. This deed required Samuel Mahoe to pay Francis Land, or his heirs, £59 by a specified date. Upon the payment of the £59 to Francis Land, or his heirs, the original deed transferring the two parcels to the Lands would become void.

In 1736, Francis Land died. At the time of Land's death, Samuel Mahoe still owed him the sum of £59 plus interest, as agreed to in the deed of defeasance. In his will, which was probated December 8, 1736, Francis Land appointed his three sons, Samuel, John, and Thomas, as his executors. Francis Land's will does not mention the money Samuel Mahoe owed him, or the parcels of land near Augustine Creek (NCC Probate File RG 2545: Francis Land-1736). Before the deed of defeasance was settled, Samuel Mahoe died intestate. After Samuel Mahoe's death, Henrietta Mahoe married Thomas Wallace. At the August term of the Court of Common Pleas in 1759, Henrietta and Thomas Wallace appeared before the court to determine whether Samuel Mahoe had, in his lifetime, repaid Francis Land or his heirs the £59 agreed to in the deed of defeasance. Once it was confirmed that the money had not been paid, it was determined that in order to repay the debt, the two tracts of land would be put up for sale at public auction. On August 23, 1759, Sheriff John McKinley sold 70 acres of the 104-acre parcel to Yeoman James Piper for £106.14. The 34-acre balance, from the first parcel, and the 46.121-acre parcel, were not sold at this time, and remained in the hands of Sheriff McKinley. After the sale of the 70 acres to James Piper, John Land, the surviving executor of his father's estate, received the £106.14, satisfying the deed of defeasance (NCC Deed Book T-1:211).

Between 1759 and 1780, James Piper must have purchased the balance of the two parcels offered at the sheriff's sale in 1759, because in March 1780, when James Piper died intestate, he was the owner of the two parcels in their entirety. The heirs of James Piper were his one son and four daughters: John, Ruth, Hannah, Mary, and Margaret. In the division of the estate of James Piper, John Piper received a 2/6 part, and each of the four daughters received a 1/6 part (NCC Deed Book N-3:128). The Orphans' Court appointed William Read the guardian of Margaret Piper on July 18, 1780 (NCC Orphans' Court Case File RG 2840: James Piper). On September 20, 1790, Ruth Piper conveyed her 1/6 part in her father's estate to Thomas Read of St. Georges Hundred, Delaware (NCC Deed Book N-3:128). By this time, the Augustine Creek South Site had been abandoned (for a description of the property's more recent history, see Bedell et al. 1997).

The implications of this complex history for the occupation of the Augustine Creek South Site are not clear. The artifact evidence suggests occupation in the 1730 to 1770 period, during most of which the property was owned by the Mahoes and the Lands. The 1733 "sale" from Samuel and Henrietta Mahoe to Francis Land appears to be a mortgage, not an actual transfer, so the Mahoes may have continued to occupy the land until Samuel's death sometime before 1759. If so, the site was occupied by farmers of middling status, with enough capital to purchase their own land but poor enough to be troubled by unpayable debts. It is also possible that the site was

occupied in the 1760s, during the ownership of James Piper. Piper almost certainly lived elsewhere, so that would mean an occupation by tenants. The site was abandoned before Piper died in 1780.

IV. RESEARCH CONTEXT

A. INTRODUCTION

The Augustine Creek South Site provides an opportunity to study the farm life of an ordinary St. Georges Hundred household in the mid-eighteenth century, and to address several questions of interest to historians and archaeologists. Archaeology is best carried out with a defined research agenda, with the aim of answering particular questions about the past. Although the excavators cannot anticipate the research interests of future scholars, it is still preferable to answer a few questions than to conduct an unplanned excavation that may answer none.

The overall context for federally-funded or -permitted archaeological research is provided by the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The Secretary of the Interior's Standards were designed as a tool to be used for organizing information in such a way as to provide a sound basis for decisions concerning the identification, evaluation, and treatment of cultural resources. The process begins with the creation of historic contexts that define the conceptual framework for a set of resources, or property types, that share a thematic or topical unity, as well as relatively well-defined geographic and temporal limits. The importance of individual properties is determined within historic contexts, not in isolation; a significant archaeological site is one that can increase knowledge about a particular historic context. Historic contexts should, therefore, include research questions against which the importance of the site's information potential can be judged.

In Delaware, the first definitions of historic contexts were based on a simple grid with axes for time period, geographic region, and site type (Ames et al. 1989). Delaware history was divided into five time periods: 1630-1730, 1730-1770, 1770-1830, 1830-1880, and 1880-1940+, which correspond roughly to important stages in the history of the state. Five geographic regions were identified: Piedmont, Upper Peninsula (within which Site 7NC-G-145 is located), Lower Peninsula/Cypress Swamp, Coastal, and Urban (Wilmington). Eighteen historic themes were identified, 10 of which are economic (such as agriculture and manufacturing), and eight of which are cultural (such as settlement patterns, religion, and major families). This grid approach provides a neat way to classify sites, but the gridded historic contexts were not well developed. Attempts have since been made to develop detailed contexts, including research questions, for the most common types of sites. The most important such efforts for the excavation of Site 7NC-G-145 are *Historic Context: The Archaeology of Agriculture and Rural Life, New Castle and Kent Counties, Delaware, 1830-1940* (De Cunzo and Garcia 1992), and *"Neither a Desert nor a Paradise": Historic Context for the Archaeology of Agriculture and Rural Life in Sussex County, 1770-1940* (De Cunzo and Garcia 1993). These documents identify research questions of importance in the region and have been used in formulating specific questions for the Augustine Creek South Site.

The Augustine Creek South Site belongs to the "farm" property type, and was probably occupied by a family of middling status. Research at the site will be directed toward three research themes identified in the state planning document: architecture, landscape, and domestic economy. If the

tentative identification of the site's occupants as Samuel and Henrietta Mahoe can be confirmed, then whatever can be learned about them will further enrich the context within which the research will be conducted.

B. RESEARCH QUESTIONS

1. Rural Vernacular Architecture

The study of rural housing is dominated by standing buildings, but there are reasons for believing that standing houses are not a representative sample of the housing stock of the eighteenth and early nineteenth centuries (Carson et al. 1981). In order to obtain a balanced picture of past housing, it is necessary to study buildings that have been destroyed as well as those that survive. To this end, all building foundations discovered on the Augustine Creek South Site will be completely uncovered, and an attempt will be made to determine the nature of each structure.

Housing was, and is, one of the most important components of human material culture, and knowledge of the houses in which people lived is essential to understanding their lives. The houses and barns people built reflect not only their technology and wealth, but also their ethnic heritage, their conceptions of beauty, their notions of order, and their assumptions about private and public life (Herman 1987; Neiman 1980, 1986; Upton 1986).

During the eighteenth century, new intellectual and social norms emphasizing order, cleanliness, and the separation of public and private spheres developed in Europe; in the Anglo-American context, these ideas are called "Georgian" (Deetz 1977; Glassie 1976). Under the influence of these norms, the better-off white people of America remade their houses and farms to provide a more orderly and private existence. In traditional European houses, even those of kings, sleeping, eating, and entertaining had been conducted in the same spaces. Dissatisfied with this arrangement, the rich began constructing separate bedrooms, dining rooms, and parlors. Privies, unknown in rural contexts from the seventeenth century, were dug, and small sheds were built over them to provide privacy. While the interiors of houses were changing to provide greater privacy, the exteriors were reshaped to provide a proper presentation of the owner's wealth and status. The Georgian facade, with its perfect balance and grand scale, was an almost philosophical statement of the order of the universe and the owner's role as an upholder of that order.

In the course of the later eighteenth and nineteenth centuries, Georgian conceptions of order spread into the middle class, developing into the ideology of proper home life called "Victorian." Privacy and the separation of home life from public life and work were further emphasized, although the emphasis on public grandeur was reduced. As Georgian ideas, which derived from the Anglo-Saxon elite, spread through the rest of the population, they interacted with the value systems and architectural traditions of other ethnic and economic groups. Technological advances, such as affordable windows and new framing techniques, also influenced building techniques. Changes in housing therefore reflect profound changes in the entire intellectual structure of American civilization, and the interaction of those ideas with the many traditional

value systems already present in America. The study of vernacular housing in the eighteenth and early nineteenth centuries can help in understanding the spread and reception of new ideas and technology, the retention and modification of traditional values, and the development of the American middle-class ideal, indeed, the social and cultural history of North America.

At the Augustine Creek South Site, an attempt will be made to learn as much as possible about the house and other structures that stood on the site by a detailed study of traces surviving below the plowzone. Surviving structural elements, whether brick foundations, brick pier bases, or postholes, will be carefully mapped and fully excavated. If sufficient data can be obtained from archaeology, written records, and comparative studies, hypothetical drawings of the reconstructed house and farm will be prepared by an artist experienced in such reconstructions.

2. *Landscape*

Landscape studies, which are becoming increasingly widespread in historical archaeology (Adams 1990; Beaudry 1986; Leone 1989; Praetzellis and Praetzellis 1989), examine two related questions: where people lived, and how they modified their environments. Where people built their houses and how they arranged their farms and towns reflect not only their practical understanding of their environments, but also their conceptions of order and their relationship to the world around them.

Several factors may have influenced how the residents of the Augustine Creek South Site laid out their house and farm, including cultural traditions carried over from Europe. Henry Glassie (1972) has documented how the distribution of farm plans, such as the courtyard plan and the linear or street plan, reflects the cultural background of the immigrants who built them. It is widely known that immigrants from areas of Switzerland and southern Germany preferred to build their "bank barns" on slopes and their dairies over springs, and these inherited predilections greatly influenced the locations they chose for their farms (Long 1972).

Cultural changes underway in the eighteenth century also greatly influenced the American landscape. The development of Georgian architecture, with its emphasis on personal privacy and an orderly public facade (Deetz 1977), had its reflection in landscape planning. Farms were rearranged to separate private life from work and people from animals; for example, one traditional European house form, in which barns were attached directly to houses so that people and animals shared a single roof, was almost completely abandoned (Glassie 1982:398-404). Necessary but unattractive structures, such as chicken coops and servants' quarters, were hidden away, and the front yard of the farmhouse restructured from a working space into a formal reception area. These changes were connected to an ethic of "improvement" and the early stages of what was called "scientific agriculture," and books were published showing the proper, scientific way to build barns and lay out farms (Adams 1990). The impact of all these changes on the wealthy people of the early Republic has been well documented, but the response of poor and ordinary people has been little studied.

On a plowed site such as Site 7NC-G-145, spatial archaeology has two dimensions: the distribution of artifacts in the plowzone, and the distribution of features beneath it. The distribution of plowzone artifacts at Site 7NC-G-145 is not expected to provide much information. However, several features are known to be present, and the mapping and excavation of features provide several types of spatial data. The locations of buildings, fences, wells, privies, ditches, and other permanent structures can be determined directly. Also, the refuse deposits found in features provide further information about the location of activities and the pattern of trash disposal. In the absence of stratigraphy, it is often difficult to determine whether a series of post structures were in use at the same time or sequentially, and such indirect clues as the alignment of the structures and the quantity of artifacts in the posthole fill must be used to obtain an approximate result (Kelso 1984:56-79).

3. Material Culture Studies/Consumer Behavior

Test excavations have shown that the Augustine Creek South Site contains substantial numbers of historic artifacts and faunal specimens that can be used to study the material culture of the residents. The material culture of a farm includes both items produced on the farm and items purchased by the residents. The archaeological record is biased toward purchased items, especially ceramics, glass, and metals, and the largest component of material culture studies in archaeology is therefore the study of consumer behavior. The number of studies focusing explicitly on consumer behavior has expanded rapidly in recent years, and consumer behavior is now an issue of primary interest in historical archaeology (Henry et al. 1984; Klein and Garrow 1984; LBA 1986, 1990a, 1990b; Spencer-Wood 1987; Wise 1985). As defined by archaeologists, consumer behavior refers to the patterns of individual, household, or group expenditures, and specifically the acquisition, use, and discard of material items (Wise 1984). This definition is narrower than that employed by other social scientists, who generally include expenses on such non-material goods as charity and education (Henry 1991; Zimmerman 1936), but such items rarely leave any trace for archaeologists to uncover.

What people buy, of course, reflects not only their material needs but their notions of beauty, proper behavior, the usefulness of technology, and their own status (Ferguson 1977; Meltzer 1981). Zimmerman (1936) has pointed out that values such as frugality and self-indulgence are closely related to consumption patterns. Purchasing patterns also reflect the economic world beyond the farm. Changes in the world economy, most importantly for this period the Industrial Revolution and the great increase in world trade, should lead to changes in the objects purchased, and discarded in the ground, even at the houses of ordinary farmers (Bedell et al. 1994).

A large body of recent scholarship, summarized by Carson (1994), points to the eighteenth century as the key period for development of modern consumer culture. According to this view, it was in the years between 1650 and 1800 that household objects, such as dishes and furniture, first became a key component of the average person's social status and self-definition. In traditional European society, these scholars argue, people's status was largely determined by their wealth in land and livestock, which their neighbors all knew. By 1800, status was generally judged by a new definition of proper behavior that rested largely on people's skill in using certain

household objects. The tea ceremony, and a new way of dining, around oval tables with forks and matching sets of dishes, are the best examples of this new relationship between status and household objects. The great importance attached to these simple things led to the culture of mass consumerism we live with today and sparked a demand for mass-produced goods that helped ignite the industrial revolution. This "Consumer Revolution" spread Georgian canons of order and beauty, derived from the classical revival in elite circles usually termed the Renaissance, to ordinary people, and their local artistic and craft traditions were swamped by a tide of classically-inspired, mass-produced, and internationally-recognized fashion.

Carson's thesis is controversial, and the notion that the ordinary people of eighteenth-century America eagerly became consumers of mass-produced goods has been particularly controversial. Some historians believe that most farmers were enthusiastic about "modernization" in both morals and economics, while others think many people and communities would have preferred to remain autonomous (Henretta 1978; Kulikoff 1989; Sellers 1991). Because Carson's "Consumer Revolution" and its attendant design principles should have influenced the things people bought, how houses were built, and how farms were arranged, the question can be to some extent tested archaeologically. Henry Glassie originally advanced the theory that the spread of the "I-house," a sort of vernacular Georgian form, in the 1760 to 1820 period represented the acceptance of Georgian values by ordinary farmers (Glassie 1976). Students of artifacts have suggested that the spread of tea drinking, reflected in the very large number of American homes that possessed tea-drinking equipment by 1800, also shows that these values spread rapidly among ordinary people (Bedell et al. 1994; Walsh 1992). However, Friedlander (1991) has shown that in early nineteenth-century New Jersey, most farmers continued to use their wealth in a way Carson calls traditional, preferring investment in bigger barns and more livestock over the consumption of consumer goods. Debate on these questions will no doubt continue, and information from poor, marginal sites, such as Augustine Creek South, is crucial to finding an answer.

Archaeologists have used a variety of analytical approaches in the study of consumer behavior (Spencer-Wood 1987), and several will be employed to study the Augustine Creek South Site. Information on dietary patterns and foodways will be obtained by the careful recovery of bones and the use of flotation to obtain botanical remains. Arguments about an eighteenth-century consumer revolution depend heavily on changes in ceramics and glasswares, so minimum vessel counts obtained from crossmending will be used to organize the careful study of collections from all well-preserved deposits. Ceramic vessel forms may exhibit details about food preparation and consumption patterns, and bottles may indicate the use of specific medicines, beverages, and condiments, as well as general changes in dining habits. Expenditures for ceramics may be measured by the Miller (1980, 1991) ceramic economic scale or other derivative methods. Small finds, such as furniture hardware and clothing fasteners, can reveal much about the parts of the residents' material culture that have not survived. Experience shows that the most successful studies of consumer behavior are those that integrate documentary information and various archaeological data sets such as ceramics, glass bottles and tablewares, clothing items, tobacco pipes, dietary refuse, and household furnishings (e.g., LBA 1990a; LeeDecker et al. 1987; Otto 1984), and every effort will be made to include the Augustine North Site in this tradition.

4. Culture History

The information derived from technical studies of the architecture of the house and the farm buildings, the layout of the farm, and the material culture and diet of the residents will be combined with information from documentary research, material culture studies, architectural history, and the excavations of other similar sites in the region (e.g., Catts et al. 1989; Coleman et al. 1984, 1990; Shaffer et al. 1988; Walker et al. 1992) to develop a picture of the material lives of the inhabitants. The end goal of this effort will be to understand the lives of the residents and to increase the knowledge of the overall patterns of culture and culture change in America.

V. FIELD METHODOLOGY

The Phase III excavations proposed for the Augustine Creek South Site consist of the excavation of a small sample of the plowzone across the site, the mechanical stripping of the remainder of the plowzone on the site, and the excavation or testing of any cultural features uncovered. This plan assumes that representatives of DelDOT and the DESHPO will visit the site after the plowzone stripping to discuss what has been uncovered and agree on a work plan for feature excavation, and that changes in the scope and budget may be required at that time.

A. PLOWZONE SAMPLING

It has become common in North America to begin the excavation of plowed sites by sampling the plowzone. The amount sampled is typically between 4 and 25 percent, depending on the size and importance of the site and the number of artifacts in the plowzone. LBA does not believe that such sampling at the Augustine Creek South Site would provide significant information. Sampling done to date shows that the only historic artifacts present in quantities in the plowzone are small brick pieces and redware sherds. From the 12 test units excavated in the historic portion of the site, 735 brick fragments and 378 other historic artifacts have been recovered. Of that 378, 193 are sherds of coarse redware, and all other categories total only 185 artifacts. Objects other than brick fragments and redware sherds are simply not present in sufficient numbers for their distribution patterns to be meaningful. For example, only 24 pieces of smoking pipes have been recovered, two per test unit. With numbers this small, random fluctuations can obscure culturally meaningful distinctions. The distribution of bricks is often useful in identifying the locations of brick structures whose foundations have been destroyed by plowing, but testing done to date at Site 7NC-G-145 shows that the highest brick concentrations are near structures whose foundations are still present. Therefore, the information provided by the brick distribution is redundant. Since redware vessels were used in many different activities in an eighteenth-century household, the distribution of these objects is unlikely to provide information on activity areas at the farm. Statistical analysis of the plowzone collection from this site is unlikely to prove rewarding.

The Augustine Creek South Site includes features that are known to contain artifacts. The artifacts recovered from the features tested to date (an apparent cellar and a shallow pit) appear to exactly match those in the plowzone in date and type, so that the plowzone collection will add little to what will be excavated from the features. No rare or unusual objects, such as coins, have been found in the plowzone. Also, the plowzone collection from this site is very fragmentary, even more so than usual on a plowed site, with most potsherds no larger than 1 centimeter across. For all these reasons, excavating a large sample of the plowzone at the Augustine Creek South Site is unlikely to repay the effort.

LBA therefore proposes to excavate only a one percent sample of the plowzone on the Augustine Creek South Site, using test units on a 10-meter grid. The main purpose of this testing will be to precisely define the area to be stripped by the backhoe. For this purpose, the test unit grid already established in the core of the site will be extended 10 to 20 meters in each direction, to

ensure that all areas yielding substantial numbers of artifacts are stripped. In order to carry out this task, approximately 20 test units will be excavated. Since the purpose of these units is to sample the plowzone, they will not be excavated into the subsoil, and recording will be kept to a minimum; a single sheet form will be filled out for each unit, indicating its location, depth of the plowzone, and any anomalies encountered, but no profiles will be drawn. All excavated soil will be screened through 1/4-inch mesh to recover artifacts, and recovered artifacts will be bagged with exact provenience information.

B. PLOWZONE STRIPPING

The plowzone will then be removed from the site using a backhoe with a smooth bucket (Figure 6). A dump truck will be used to transport the soil off the site. Because of the site's location on a bluff overlooking Augustine Creek, erosion control measures will have to be taken to prevent the piled soil from washing away. A grid of points at 5-meter intervals will then be laid out across the site using a transit. These points will be used to prepare a detailed map of all the features.

C. FEATURE EXCAVATION

After consultation with DelDOT and the DESHPO, feature excavation will begin. Features likely to be encountered on the site include structural postholes, fence postholes, brick foundations, wells, small storage cellars, miscellaneous pits, and filled ditches. Depending on their nature, cultural features will be excavated completely or partially. Larger features will be excavated by natural strata. Feature forms with detailed descriptive data will be completed for all features excavated, and detailed plans and profiles will be prepared. All features will be photographed. If any large features, such as post structures, are uncovered, a bucket truck will be employed to obtain overhead photographs. Two-liter samples for flotation will be taken from all features that contain domestic refuse. Faunal materials will be carefully handled to preserve them for future analysis.

D. HISTORICAL RESEARCH

LBA prefers to employ an interdisciplinary approach to the excavation of historic sites, and it is expected that historical research will play an important role in the study of Site 7NC-G-145. The research carried out as part of the Phase III mitigation will build on that already conducted for the Phase I and II studies. The emphasis will be on discovering further details about the residents of the site and further information about developments in St. Georges Hundred that will put the lives of the residents in context. Records to be consulted include U.S. population and agricultural censuses; deed, probate, orphans' court, and tax records; newspapers; and family papers preserved at the Delaware State Library and the New Castle County Historical Society. To aid in reconstructing the house and other structures on the site from their subplowzone footprints, research will be conducted on standing structures in the region and on previous archaeological excavations.

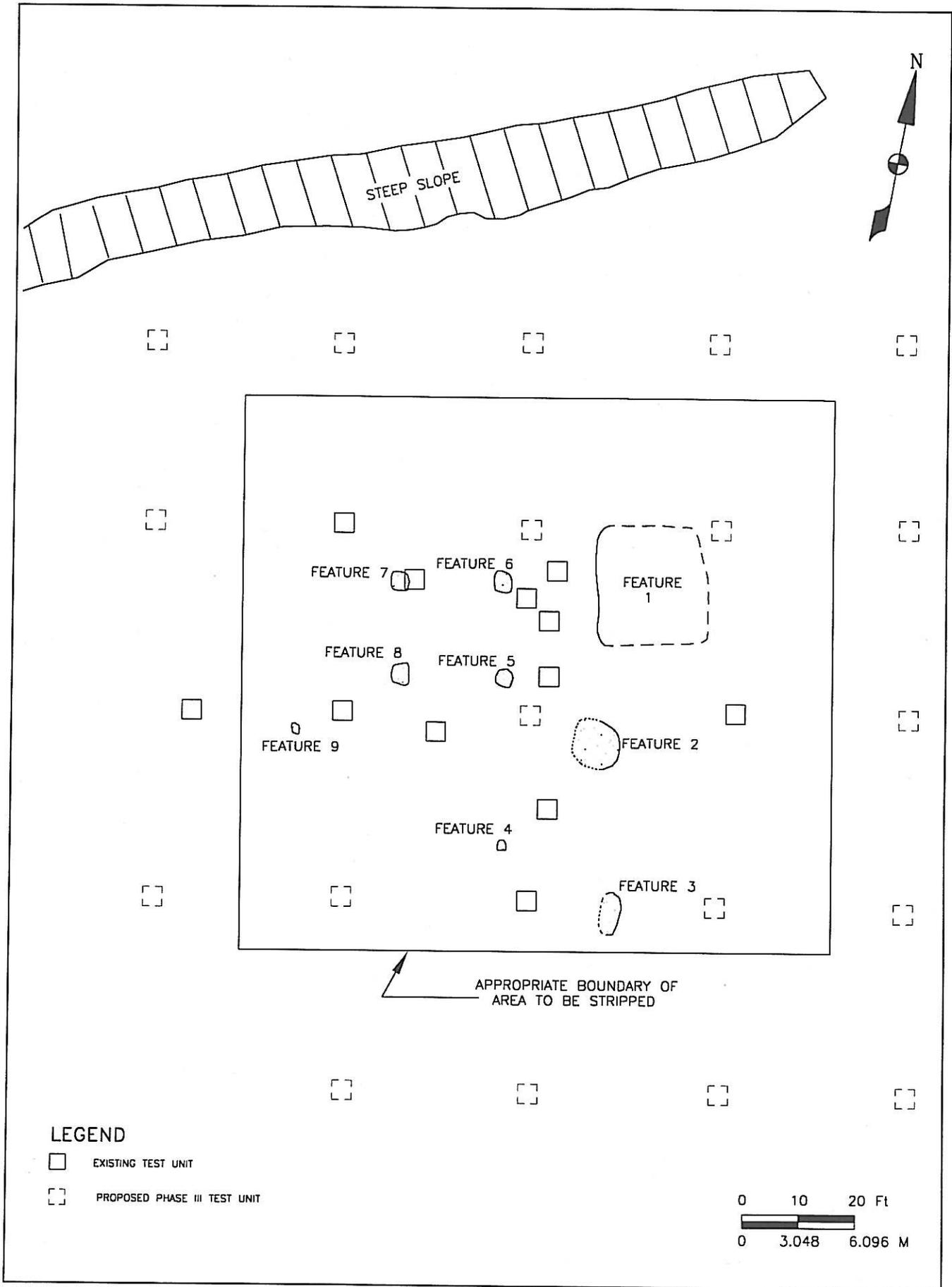


FIGURE 6: Plan of Previous Testing and Proposed Excavations, Site 7NC-G-145

VI. ANALYSIS AND DATA MANAGEMENT

A. BASIC ARTIFACT PROCESSING

Artifacts recovered from the field will be transported to the laboratory on a regular basis. Upon their arrival, they will be checked in by matching the field bag inventory against the bags received by the laboratory that day. All provenience information will be matched with the associated catalog number, which will be used as a reference number throughout processing and analysis.

Preliminary processing of the collections will include cleaning, marking, and rough sorting. All materials will be washed or dry-brushed as appropriate, then sorted according to major artifact classes and placed in separate resealable plastic bags along with cards indicating provenience. Information on the cards includes the field provenience information as well as the assigned site number and catalog numbers. Artifacts will be marked using India ink on a base of polyvinyl acetate (PVA) in Roplex. After marking, the ink is covered with a coat of PVA in AYAT to seal and protect the label. Artifacts will be marked with the Delaware State Museum accession number as well as with the catalog numbers assigned by LBA to record specific proveniences within the site.

At this time, LBA has only submitted a proposal for fieldwork and basic artifact processing on the site. Artifact cataloging and curation will be covered by a separate proposal. Detailed descriptions of the sorting techniques, cataloging methods, and computer database will be provided with that proposal.

B. ANCILLARY STUDIES

Some specialized laboratory studies may be included in the Phase III program, depending on the types of features discovered and the preservation of material within them. These studies may include specialized analyses of privy soil samples to identify intestinal parasites, pollen studies to reconstruct historical landscape development, or species identification of selected wood samples.

VII. DISSEMINATION OF FINDINGS AND DISPOSITION OF RECOVERED MATERIALS AND RECORDS

Several methods will be used to communicate the findings of the project to interested professionals and members of the local community. Prior to the commencement of fieldwork, a public handout on the excavations will be prepared, and will be distributed to interested individuals in the community and posted at the public libraries in Odessa and Middletown. Representatives of the local and statewide press will be contacted about possible stories on the excavations. The faculties of local elementary and middle schools will be contacted to arrange visits to the site by groups of students to either tour the site or actually participate in the excavations. At the conclusion of the analysis, a detailed technical report laying out the findings will be produced. This report will be written so as to be of interest to both scholars and concerned lay people, and will be distributed through the DeIDOT archaeology series. A poster board illustrating the most important finds will be prepared for DeIDOT to display around the state. The findings will be presented to other scholars at a regional archaeological conference and to members of local amateur archaeological societies. Inquiries will be made with local libraries, schools, and businesses about the possibility of mounting a small display of the more interesting artifacts recovered during the excavations.

The draft report on the excavations will be submitted to DeIDOT and the DESHPO within one year of the completion of fieldwork. A final report will be sent within two months of the receipt of all comments on the draft report. All artifacts and field records from the excavation will be prepared for permanent curation according to the standards of the Delaware State Museum.

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